

Open Tender Notification

For

RATE CONTRACT FOR SUPPLY OF LT AB CABLE (4x70+1x50+1x16 sq.mm) & COVERED CONDUCTOR (232 & 100 sq.mm) AAAC

Tender Enquiry No.: TPNODL/OT/2021-22/086 Dt. 08.10.2021

Due Date for Tender Fee: 18.10.2021 [15:00 Hrs.]

Due Date for Bid Submission: 25.10.2021 [15:00 Hrs.]

TP NORTHERN ODISHA DISTRIBUTION LIMITED (A TATA Power and Odisha Government Joint Venture) Contracts & Material Management Department, Corporate Office, Januganj, Balasore-756019



Procedure to Participate in Tender

Tender Enquiry No- TPNODL/OT/2021-22/086

Group	Work Description	Description EMD (Rs.)		Last Date and Time for payment of Tender Fee
Group-A	RATE CONTRACT FOR SUPPLY OF LT AB CABLE(4x70+1x50+1x16 sq.mm)	13,00,000.00/-	5,000	18.10.2021,
Group-B	RATE CONTRACT FOR SUPPLY OF COVERED CONDUCTOR (232 & 100 sq.mm) AAAC	7,60,000.00/-	5,000	15:00 Hrs

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

Procedure to Participate in Tender.

Following steps to be done before "Last date and time for Payment of Tender Fee" as mentioned above:

- 1. Eligible and Interested Bidders to submit duly signed and stamped letter on Bidder's letter head indicating
 - a. a. Tender Enquiry number
 - b. Description of materials / Works Tendered
 - c. Name of the bidding company
 - d. Place & Detail Address of the Company
 - e. Postal Code (PIN Code)
 - f. Name of authorized person
 - g. Contact number
 - h. E-mail id
 - i. Details of submission of Tender Fee (Bank Name / Amount / NEFT-RTGS UTR No / Date)
 - (E Receipt also to be furnished)
 - j. GST Registration No

Non-Refundable Tender Fee, as indicated in table above, to be submitted in the form of Direct Deposit in the following bank account and submit the receipt along with a covering letter clearly indicating the Tender Reference/ Enquiry Number –

Beneficiary Name – TP Northern Odisha Distribution Limited Bank Name – Union Bank of India Branch Name – Balasore Branch Account No – 500601010280332 IFSC Code – UBIN0550060



E-mail with necessary attachment to be sent to <u>jitendra.mishra@tpnodl.com</u> with copy to <u>vipin.Chauhan@tpnodl.com</u> before last date and time for payment of Tender Fee.

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

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

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

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

Any payment of Tender Fee / EMD by Bidder who have not done the prerequisite will not be refunded.

Also all future corrigendum to the said tender will be informed on Tender section on website <u>https://www.tpnodl.com</u>



OPEN TENDER NOTIFICATION

FOR

RATE CONTRACT FOR LT AB CABLE (4x70+1x50+1x16 sq.mm) & COVERED CONDUCTOR (232 & 100 sq.mm) AAAC

Tender Enquiry No.: TPNODL/OT/2021-22/086 Dtd.08.10.2021

Due Date for Bid Submission: 25.10.2021 [15.00 Hrs.]

TP NORTHERN ODISHA DISTRIBUTION LIMITED (A Tata Power and Odisha Government Joint Venture)

Contracts & Material Management Department Corporate office: Januganj, Balasore, Odisha-756019

TPNØDL

NIT No.: TPNODL/OT/2021-22/086 Dtd.08.10.2021

CONTENTS OF THE ENQUIRY

S. NO.	PARTICULARS
1.	Event Information
2.	Evaluation Criteria
3.	Submission of Bid Documents
4.	Bid Opening & Evaluation process
5.	Award Decision
6.	Order of Preference/Contradiction
7.	Post Award Contract Administration
8.	Specifications and Standards
9.	General Conditions of Contract
10.	Safety
Annexure	es
Ι.	Annexure I – Schedule of Items
П.	Annexure II – Technical Specifications
III.	Annexure III – Schedule of Deviations
IV.	Annexure IV – Schedule of Commercial Specifications
٧.	Annexure V – Document Check List
VI.	Annexure VI – Acceptance Form for Participation in Reverse Auction Event
VII.	Annexure VII – General Condition of Contract



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:

Group	Line Item Sl. No.	Item Description	Qty. in Km	EMD Amount (Rs.)	Tender Fee (Rs.)
Group-A	1	LT AB CABLE (4x70+1x50+1x16 Sq.mm)	430	13,00,000	5,000
Group-B	2	COVERED CONDUCTOR 232 Sq.mm AAAC	132	7 60 000	5000
	3	COVERED CONDUCTOR 100 Sq.mm AAAC	210	7,60,000	5000

1.2 Availability of Tender Documents

Please refer "Procedure to participate in the e-tender".

1.3 Calendar of Events

(a)	Last Date of receipt of Tender Fee	18.10.2021 ; 15:00 Hrs
(b)	Date & Time of Pre-Bid Meeting (If any)	Not Applicable due to COVID-19, Queries to be answered through e-mail/TPNODL Tender website.
(c)	Last Date of receipt of pre-bid queries, if any	18.10.2021 up to 18:00 Hrs
(d)	Last Date of Posting Consolidated replies to all the pre-bid queries as received	22.10.2021 up to 18:00 Hrs
(e)	Last date and time of receipt of Bids	25.10.2021 up to 15:00 Hrs
(f)	Date & Time of opening technical bids & EMD	25.10.2021 up to 15:30 Hrs
(g)	Date & Time of opening of Price of qualified bids	Will be notified to the successful bidders through our website / e-mail.

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

1.4 Mandatory documents required along with the Bid

- 1.4.1 EMD of requisite value and validity
- 1.4.2 Tender Fee in case the tender is downloaded from website
- 1.4.3 Requisite Documents for compliance to Qualification Criteria mentioned in Clause 1.7.
- 1.4.4 Drawing, Type Test details along with a sample of each item as specified at Annexure I (as applicable)
- 1.4.5 Duly signed and stamped 'Schedule of Deviations' as per Annexure III on bidder's letter head.
- 1.4.6 Duly signed and stamped 'Schedule of Commercial Specifications' as per Annexure IV on bidder's letter head.
- 1.4.7 Proper authorization letter/ Power of Attorney to sign the tender on the behalf of bidder.



- 1.4.8 Copy of PAN & GST (In case any of these documents is not available with the bidder, same to be explicitly mentioned in the 'Schedule of Deviations')
- 1.4.9 Sample Submission/Demonstration: TPNODL Reserves the right to seek samples and/or demonstration of offered items during Technical Evaluation. Samples/demonstration will be sought by Technical team doing Technical Evaluation. The same may have to submitted/arranged on urgent basis at Central Store, TPNODL, Sovarampur, Balasore, Odisha-756001. Bidder not able to submit sample/perform demonstration in time, may get Technically rejected.

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

1.5 Deviation from Tender

Normally, the deviations to tender terms are not admissible and the bids with deviation are liable for rejection. Hence, the bidders are advised to refrain from taking any deviations on this Tender. Still in case of any deviations, all such deviations shall be set out by the Bidders, clause by clause in the 'Annexure III - Schedule of Deviations' and same shall be submitted as a part of the Technical Bid.

1.6 Right of Acceptance/ Rejection

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

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

TPNODL 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 its own production facility to manufacture the materials of same or higher grade level for which he submits his offer with furnishing the poof of documents. Bidder must submit undertaking in this regard.
- b) The bidder should have supplied the AB Cable of 500km quantity of similar or higher rating during immediate last 3 financial years for Group-A and Covered conductor AAAC of 200 Km quantity of similar or higher rating during immediate last 5 financial years for Group-B. Copy of work order / completion certificate to be submitted in this regard.
- c) The bidder should have performance certificates from at least 2 reputed companies for similar or higher voltage rating of similar supply. The supply against these issued certificates should be completed in last five years from the date of bid submission. In case the bidder has a previous association with TPNODL for similar products and services, the performance feedback for that bidder by TPNODL's User Group shall only be considered irrespective of performance certificates issued by any third organization. Copy of performance certificates to be submitted in this regard.



- d) The offered materials should have been Type Tested at certified test laboratories which are CPRI/ ERDA only. The type test report should have same rating or higher rating of similar category of quoted materials. The bid shall be accompanied with such Test Reports which should be conducted within five years before the date of opening of the tender.
- e) The bidder should have average annual turnover of Rs. 12 Crore for Group-A and Rs. 8 Crore for Group-B or above for last consecutive Three Finance Year. If the bidder shall be quoted for multiple group, the turnover will be calculated cumulatively. Bidders have to submit copy of audited Balance Sheet and P&L Account in this regard.
- f) The bidder should have in-house facilities for acceptance tests as per TPNODL specifications. Selfundertaking to be submitted in this regard. TPNODL reserves the right to inspect the said manufacturing facility as a proof of compliance to this parameter. Bidder must submit undertaking in this regard.
- g) The bidder should have valid ISI certification for all the sizes of the cables.

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

2.0 Evaluation Criteria

- The bids will be evaluated technically on the compliance to tender terms and conditions.
- The bids will be evaluated commercially on the overall all-inclusive lowest cost for the individual line items under mentioned Group-A/B as defined in tender BOQ as calculated in Schedule of Items [Annexure IA/IB]. TPNODL 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 against each line item.
- Bidder has to mandatorily quote of each line item as per schedule of item [Annexure-IA/IB].
 Failing to do so TPNODL may reject the bid.

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

Bids shall be submitted in 3 (Three) parts:

FIRST PART: <u>"EMD" as applicable</u> shall be submitted. The EMD shall be <u>valid for 210 days</u> from the due date of bid submission in the form of BG / Bankers Pay Order favoring 'TP NORTHERN ODISHA DISTRIBUTION LIMITED", payable at Balasore only. The EMD has to be strictly in the format as mentioned in General Condition of Contract, failing which it shall not be accepted and the bid as submitted shall be liable for rejection. A separate non-refundable tender fee of stipulated amount also needs to be transferred online through NEFT/ RTGS in case the tender document is downloaded from our website.

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

Beneficiary Name – TP Northern Odisha Distri	bution Limited
beneficiary wante in worthern outside bistri	

Bank Name –	Union Bank of India
Branch Name –	Balasore Branch
Account No –	500601010280332
IFSC Code –	UBIN0550060

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 TPNODL E-tender platform (Ariba) only. <u>Hard Copy of Technical Bids need not be submitted</u>.

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

FOR BIDS INVITED THROUGH E-PROCUREMENT PORTAL:

The interested bidders are requested to obtain user name and password for purpose of bid submission through e-procurement portal of TPNODL.



Bids have to be mandatorily submitted only through e-procurement portal of TPNODL. Bids submitted through any other form/ route shall not be admissible

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

EMD for Line items under Group-A/B "Rate Contract for Supply of LT AB CABLE (4x70+1x50+1x16 sq.mm)" "Rate Contract for Supply of COVERED CONDUCTOR (232 & 100 sq.mm) AAAC"

Please mention our Enquiry Number:- TPNODL/OT/2021-22/086 Dtd.08.10.2021 on the Tender and drop the same at TP NORTHERN ODISHA DISTRIBUTION LIMITED, (A Tata Power and Odisha Government Joint Venture), HOD (Contracts), Corporate office: Januganj, Balasore, Odisha-756019.

The envelope shall be addressed to:

HOD (Contracts) TP NORTHERN ODISHA DISTRIBUTION LIMITED (A Tata Power and Odisha Government Joint Venture) Corporate office: Januganj, Balasore, Odisha-756019

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

SIGNING OF BID DOCUMENTS:

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

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

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

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

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

3.2 Contact Information

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 TPNODL website by the stipulated timelines as detailed in calendar of events.

Communication Details:

Package Owner: Contracts & Material Management

Name: Mr. Jitendra Kumar Mishra

Contact No: 9451391583/7355476767



E-Mail ID: jitendra.mishra@tpnodl.com

HOD: Contracts

Name:	Mr. Vipin Chauhan
Contact No:	9717393121

E-Mail ID: vipin.chauhan@tpnodl.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 TPNODL. The all-inclusive prices offered shall be inclusive of all costs as well as Duties, Taxes and Levies paid or payable during the execution of the supply work, breakup of price constituents.

The quantity break up shown else-where other than Price Schedule is tentative. The bidder shall ascertain himself regarding material required for completeness of the entire work. Any items not indicated in the price schedule but which are required to complete the job as per the Technical Specifications / Scope of Work mentioned in the tender, shall be deemed to be included in prices quoted.

3.4 Bid Currencies

Prices shall be quoted in Indian Rupees Only.

3.5 Period of Validity of Bids

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

Not with standing clause above, the TPNODL 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

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

3.7 Modifications and Withdrawal of Bids

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

3.8 Earnest Money Deposit (EMD)

The bidder shall furnish, as part of its bid, an EMD amounting as specified in the tender. The EMD is required to protect the TPNODL against the risk of bidder's conduct which would warrant forfeiture. The EMD shall be denominate in any of the following form:

 Banker's Cheque/ Demand Draft/ Pay order drawn in favour of 'TP NORTHERN ODISHA DISTRIBUTION LIMITED", payable at Balasore only



- Online transfer of requisite amount through NEFT/ RTGS.
- Bank Guarantee valid for 210 days after due date of submission.

The EMD shall be forfeited in case of:

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

Or

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

3.9 Type Tests (if applicable)

The type tests specified in TPNODL 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 TPNODL.

4.0 Bid Opening & Evaluation process 4.1 Process to be confidential

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

4.2 Technical Bid Opening

Bids shall be opened as per the schedule mentioned in Calendar of Events. In case of limited tenders, the bids shall be opened internally by TPNODL. Owing to COVID Scenario, in case of Open Tenders also, the bids shall be opened internally by TPNODL. Technical bid must not contain any cost information whatsoever.

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

Next, the technical bid of the bidders who have furnished the requisite EMD will be opened, one by one. The salient particulars of the techno commercial bid will be read out at the sole discretion of TPNODL

4.3 Preliminary Examination of Bids/ Responsiveness

TPNODL 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. TPNODL 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, TPNODL 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 TPNODL and/or the TPNODL 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, TPNODL may, at its discretion, ask the Bidder for a clarification on its Bid for any deviations with respect to the TPNODL 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 TPNODL. After all techno commercial issues are clarified, the date of price bid opening will be intimated to the technically accepted bidders and same shall also be notified at TPNODL website.

4.5 Price Bid Opening

Price bids will be opened at the stipulated date and time. 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 TPNODL without any further correspondence in this regard.

4.7 Reverse Auctions

TPNODL 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 and reserves the rights to conduct the manual negotiation with the BA who is declared L1 after Reverse Auction. 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.

5.0 Award Decision

TPNODL will award the contract to the successful bidder whose bid has been determined to be the lowest-evaluated responsive bid as per the Evaluation Criterion mentioned at Clause 2.0. The Cost for the said calculation shall be taken as the all-inclusive cost quoted by bidder in Annexure I (Schedule of Items) subject to any corrections required in line with Clause 4.3 above. The decision to place rate contract / purchase order / LOI solely depends on TPNODL on the cost competitiveness across multiple lots, quality, delivery and bidder's capacity, in addition to other factors that TPNODL may deem relevant.

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

In case any supplier's services or quality of material is / are found unsatisfactory during the delivery process, the award will be cancelled and TPNODL reserves the right to award other suppliers who are found fit.

6.0 Order of Preference/Contradiction:

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

- 1. Schedule of Items (Annexure IA/IB)
- 2. Post Award Contract Administration (Clause 7.0)
- 3. Submission of Bid Documents (Clause 3.0)
- 4. Scope of Work and SLA (if any)



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

7.0 Post Award Contract Administration

7.1 Special Conditions of Contract

- 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 TPNODL. Rate shall remain FIRM till the validity of Rate Contract.
- Post award of rate contract, Business Associate (BA) shall submit applicable Performance Bank Guarantee as per GCC within 15 days. PBG applicable shall be 5% of Rate contract Value. PBG submitted, shall be released after completion of applicable guarantee period plus one month.
- Within 15 days of Rate Contract issuance by TPNODL, it is the responsibility of BA to get manufacturing clearance and CAT-A issued from TPNODL. In case BA does not get necessary approvals for issuance of CAT-A within mentioned timelines, then TPNODL 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 TPNODL. However, in case of delay in work execution owing to reasons not attributable to TPNODL, 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 TPNODL.
- BA will ensure & co-ordinate with TPNODL team for approval of CAT-A / drawing / GTP within 15days from issue of RC.
- Delivery period shall be 6-8 weeks + 15 days (considering the approval of CAT-A / drawing / GTP) from date of receipt of release order for the first lot however for remaining lots the delivery period will be 6-8 weeks from RO date.
- 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 price bid.
- Guarantee applicable shall be as per technical specifications
- TPNODL shall short close the issued Release Order / Rate contract, in case of any quality issues
- All other terms and conditions of TPNODL General Conditions of Contract shall be applicable.

7.2 Drawing Submission & Approval

The relevant drawings and GTPs need to be submitted as per special condition of contract mentioned in point no. 7.1.



7.3 Delivery Terms

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

7.4 Warranty Period

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

7.5 Payment Terms

On delivery of the materials in good condition and certification of acceptance by certified official, Associate shall submit the Bills/ Invoices in original in the name of TP NORTHERN ODISHA DISTRIBUTION LIMITED to AGM (Elect.) / Executive Engineer (Elect.), ESD, TPNODL, Balasore. The payment shall be released within 45 days from the date of submission of certified bills/ invoices.

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.

7.7 Ethics

- TPNODL is an ethical organization and as a policy TPNODL 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.
- TPNODL work practices are governed by the Tata Code of Conduct which emphasizes on the following:
- We shall select our suppliers and service providers fairly and transparently.
- We seek to work with suppliers and service providers who can demonstrate that they share similar values. We expect them to adopt ethical standards comparable to our own.
- Our suppliers and service providers shall represent our company only with duly authorized written permission from our company. They are expected to abide by the Code in their interactions with, and on behalf of us, including respecting the confidentiality of information shared with them.
- We shall ensure that any gifts or hospitality received from, or given to, our suppliers or service providers comply with our company's gifts and hospitality policy.
- We respect our obligations on the use of third party intellectual property and data.

Bidder is advised to refer GCC attached at Annexure IX for more information.

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

8.0 Specification and standards:

Attached with tender.



9.0 General Condition of Contract

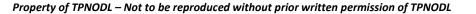
Any condition not mentioned above shall be applicable as per GCC for Supply attached along with this tender.

10.0 Safety

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

http://www.tpnodl.com

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





ANNEXURE IA Group-A Schedule for Items

SI. No.	Item Description	Qty.	Unit	HSN /SAC Code	Unit Ex- Work Price (Rs./Unit)	GST (Rs/ Unit)	All Inclusive Unit Rate (Rs.)	Total All Inclusive Value (Rs.)
1	2	3	4	5	6	7	8=(6+7)	9=(3x8)
1	LT AB CABLE (4x70+1x50+1x16 sq.mm)	430	Km					
	TOTAL AMOUNT							

Signature & Seal of the Bidder

NOTE:

- The quantity mentioned above is for evaluation purpose only and may vary during the execution. Release Orders against this Rate Contract shall be issued by TPNODL as per actual requirement.
- The overall period of <u>01 year</u> and price shall be firm till the validity of contract.
- All inclusive unit rate in column no. 8, is landed price FOR TPNODL Odisha Locations. Exact delivery location shall be specified in the Release Order.
- The bidders are advised to quote prices strictly in the above format. Failing to do so, bids are liable for rejection.
- The bidder must fill each and every column of the above format. *Mentioning "extra/inclusive" in any of the column may lead for rejection of the price bid.*
- No cutting/ overwriting in the prices is permissible.



ANNEXURE IB Group-B Schedule for Items

SI. No.	Item Description	Qty.	Unit	HSN /SAC Code	Unit Ex- Work Price (Rs./Unit)	GST (Rs/ Unit)	All Inclusive Unit Rate (Rs.)	Total All Inclusive Value (Rs.)
1	2	3	4	5	6	7	8=(6+7)	9=(3x8)
1	COVERED CONDUCTOR 232 Sq.mm AAAC	132	Km					
2	COVERED CONDUCTOR 100 Sq.mm AAAC	210	Km					
TOTAL AMOUNT								

Signature & Seal of the Bidder

NOTE:

- The quantity mentioned above is for evaluation purpose only and may vary during the execution. Release Orders against this Rate Contract shall be issued by TPNODL as per actual requirement.
- The overall period of **01 year** and price shall be firm till the validity of contract.
- All inclusive unit rate in column no. 8, is landed price FOR TPNODL Odisha Locations. Exact delivery location shall be specified in the Release Order.
- The bidders are advised to quote prices strictly in the above format. Failing to do so, bids are liable for rejection.
- The bidder must fill each and every column of the above format. *Mentioning "extra/inclusive" in any of the column may lead for rejection of the price bid.*
- No cutting/ overwriting in the prices is permissible.



ANNEXURE II

Technical Specifications attached after GCC.

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 TPNODL's specifications:

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

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

Seal of the Bidder:

Signature:

Name:



ANNEXURE IV

Schedule of Commercial Specifications

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

S. No. Particulars

Remarks

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



ANNEXURE V

Checklist of all the documents to be submitted with the Bid

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

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



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, TPNODL 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. TPNODL 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. TPNODL will make every effort to make the bid process transparent. However, the award decision by TPNODL would be final and binding on the supplier.
- 3. The bidder agrees to non-disclosure of trade information regarding the purchase, identity of TPNODL, 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 TPNODL.
- 6. In case of intranet medium, TPNODL shall provide the infrastructure to bidders. Further, TPNODL 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 TPNODL.
- 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 TPNODL 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 TPNODL.
- 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

TPNØDL	TP NORTHERN ODISHA DISTRIBUTION LTD	
IPNOL	WORK INSTRUCTION /OPERATING	G GUIDELINES
Doc. Title	GENERAL CONDITIONS OF CONTRACT –SUPPLY ORDERS	
Rev. No	0 Page 1 of 47	
Prepared By	Reviewed By	Approved By
Imran Ahmad/ Swetaraj Parida	Vipin Chauhan	Sunil Bhattar

CONTENTS		
CLAUSE NO.	DESCRIPTION	
1.0	ORGANIZATIONAL VALUES	
2.0	ETHICS	
2.1	Tata Code of Conduct	
3.0	CONTRACT PARAMETERS	
3.1	Issue/Award of Contract	
3.2	Contract Commencement Date	
3.3	Contract Completion Date	
3.4	Contract Period/ Time	
3.5	Contract Execution Completion Date	
3.6	Contract Price /Value	
3.7	Contract Document	
3.8	Contract Language	
3.9	Reverse Auction	
4.0	SCOPE OF WORK	
4.1	Bid Evaluation- Commercial & Technical	
5.0	PRICES/RATES/TAXES	
5.1	Changes in statutory Tax Structure	
6.0	TERMS OF PAYMENT	
6.1	Quantity Variation	
6.2	Full and Final Payment	
7.0	MODE OF PAYMENT	
8.0	SECURITY CUM PERFORMANCE DEPOSIT	
9.0	STATUTORY COMPLIANCE	
9.1	Compliance to Various Acts	
9.2	SA 8000	
9.3	Affirmative Action	
9.4	MSME Development Act 2006	
9.5	ISO 14001	
10.0	QUALITY	
10.1	Knowledge of Requirements	
10.2	Material/Equipment/Works Quality	
10.3	Adherence to Rules & Regulations	
10.4	Specifications and Standards	
11.0	INSPECTION/PARTICIPATION	

Approved Copy of GCC (TPNODL)

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS	
Rev. No	0	Page 2 of 47

CONTENTS		
CLAUSE NO.	DESCRIPTION	
11.1	Right to Carry Out Inspection	
11.2	Facilitating Inspection	
11.3	Third Party Nomination	
11.4	Waiver of Inspections	
11.5	Incorrect Inspection Call	
12.0	MDCC & DELIVERY OF MATERIALS	
12.1	Material Dispatch Clearance Certificate	
12.2	Right to Rejection on Receipt	
12.3	Consignee	
12.4	Submission of Mandatory Documents on Delivery	
12.5	Dispatch and Delivery Instructions	
13.0	GUARANTEE	
13.1	Guarantee of Performance	
13.2	Guarantee period	
13.3	Failure in Guarantee period (GP)	
13.4	Cost of repairs on failure in GP	
13.5	Guarantee Period for Goods Outsourced	
13.6	Latent Defect	
13.7	Support beyond the Guarantee Period	
14.0	LIQUIDATED DAMAGES	
14.1	LD Waiver Request	
15.0	UNLAWFUL ACTIVITIES	
16.0	CONFIDENTIALITY	
16.1	Documents	
16.2	Geographical Data	
16.3	Associate's Processes	
16.4	Exclusions	
16.5	Violation	
17.0	INTELLECTUAL PROPERTY RIGHTS	
18.0	INDEMNITY	
19.0	LIABILITY & LIMITATIONS	
19.1	Liability	
19.2	Limitation of Liability	
20.0	FORCE MAJEURE	
21.0	SUSPENSION OF CONTRACT	
21.1	Suspension for Convenience	

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS	
Rev. No	0	Page 3 of 47

CONTENTS		
CLAUSE NO.	DESCRIPTION	
21.2	Suspension for Breach of Contract Conditions	
21.3	Compensation in lieu of Suspension	
22.0	TERMINATION OF CONTRACT	
22.1	Termination for Default/Breach of Contract	
22.2	Termination for Convenience of Associate	
22.3	Termination for Convenience of TPNODL	
23.0	DISPUTE RESOLUTION AND ARBITRATION	
23.1	Governing Laws and jurisdiction	
24.0	ATTRIBUTES OF GCC	
24.1	Cancellation	
24.2	Severability	
24.3	Order of Priority	
25.0	ERRORS AND OMISSIONS	
26.0	TRANSFER OF TITLES	
27.0	INSURANCE	
28.0	SUGGESTIONS & FEEDBACK	
29.0	CONTACT POINTS	
30.0	LIST OF ANNEXURES	

CERMINEAURES

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS	
Rev. No	0	Page 4 of 47

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 Tata Code of Conduct

The Business Associate and TPNODL shall be bound by the provisions/ clauses mentioned in Tata Code of Conduct (TCoC) in all their dealings with stakeholders. The Associate is advised to go through the TCoC document available as Annexure-J.

3.0 CONTRACT PARAMETERS

3.1 Issue/Award of Contract

TPNODL 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.

On receipt of the contract, the associate shall return to TPNODL 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.

Note- In case of RC though, further Release Orders (RO) shall be issued by TPNODL on RC rates and terms & Conditions as per the requirement of TPNODL.

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS	
Rev. No	0	Page 5 of 47

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 TPNODL, 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.

3.9 Reverse Auction

TPNODL 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. The

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Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS	
Rev. No	0	Page 6 of 47

bidders along with the tender document shall mandatorily submit a duly signed copy of the Acceptance Form as mentioned in the Annexure J as a token of acceptance for the same.

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 TPNODL'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.

TPNODL 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 TPNODL, provide Purchaser with a reasonably detailed estimate of the cost of the change outlined in the request.

In the event, TPNODL 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 TPNODL.

4.1 Bid Evaluation- Commercial & Technical

TPNODL reserves the right to evaluate the bid on below parameters as per the requirement:

Commercial Evaluation: The bid shall be evaluated on the basis of Qualifying Requirement parameters and other commercial parameters as mentioned in tender.

Technical Evaluation: The bid shall be evaluated on the parameters and not limited to Bidder Experience, Bidder Performance with other utility/company, internal performance feedback, Technical Specification, General Technical Parameters (GTP), Layout, Drawings etc.

TPNODL reserves the right to carry out Factory Evaluation of Manufacturer along with the Visit to executed Sites for further evaluation to ascertain bidder's manufacturing capability, quality procedures & Performance of executed works.

Approved Copy of GCC (TPNODL)

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS	
Rev. No	0	Page 7 of 47

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 TPNODL, packaging and forwarding charges, freight and transit insurance charges covering loading at Associate's works, transportation to TPNODL store/site & unloading & delivery at TPNODL stores/TPNODL site, cost of documentation including all the relevant test certificates and other supportive documents to be furnished.

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

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 TPNODL 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 TPNODL 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 TPNODL.

6.0 TERMS OF PAYMENT

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

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

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS	
Rev. No	0	Page 8 of 47

• E-Way challan (if applicable)

Bills/ invoices shall mention Supplier's GST Number. TPNODL 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 TPNODL and not on the basis of contract quantity.

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 RTGS/ NEFT/ Online Net banking mode whichever of the two modes chosen by the Associate, in favour of Associate's Bank Account on TPNODL 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, TPNODL 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 TPNODL 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 TPNODL 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

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS	
Rev. No	0	Page 9 of 47

the new SPBG to TPNODL. 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.

9.2 SA 8000

As TPNODL is SA 8000 compliant, it expects its Associates to follow guidelines of SA 8000:2014 on the following aspects

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

9.3 Affirmative Action

TPNODL 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**

TPNODL 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 TPNODL 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

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS	
Rev. No	0	Page 10 of 47

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

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

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.

9.4 MSME Development ACT 2006

Provisions for Firms falling in The Micro, Small and Medium Enterprise Development Act 2006:-

- Business Associate is requested to inform the TPNODL if they fall under provisions of The Micro, Small and Medium Enterprises Development Act, 2006 legislation, and provide necessary documents to TPNODL. The Associate also needs to mention the relevant details on their invoice/ bill.
- Business Associate shall submit the self-undertaking of registration in MSME category at the time of bidding as well as on an annual basis to TPNODL, enabling them to avail the consequent benefits, failing which TPNODL may take appropriate action against such defaults.
- Business Associates falling in MSME category shall submit the Tender Fee when participating in TPNODL tenders. However, they are eligible to submit concessional EMD at 50% of the EMD otherwise applicable.

9.5 ISO 14001

The vendor to confirm whether their organization is ISO 14001 certified. If not, the Vendor must certify that the handling, use and disposal of their product/ by-products conform to practices consistent with sound environment management and local statues. The Vendor shall ensure that all the wastes are disposal in environmental friendly way with strict compliance to applicable laws including adherence to MoEF guidelines with respect to the disposal of batteries, lead waste, copper cables, ash, waste oil, e-waste etc. which shall be disposed through MoEF approved parties only. The vendor shall also dispose off the e-waste generated at the end of the product life cycle at its own costs and risk as per the MoEF guidelines/ Orders

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 Approved Copy of GCC (TPNODL)

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS	
Rev. No	0	Page 11 of 47

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 TPNODL/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 TPNODL.

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 TPNODL 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 TPNODL. 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 TPNODL, provided materials, supplies and equipment according to the standard are equal to or better than the corresponding standards specified in the Contract.

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

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

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS	
Rev. No	0	Page 12 of 47

- 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 TPNODL during contract execution time.

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

MDCC request shall be submitted by BA to TPNODL at least 7 days before inspection date.

11.2 Facilitating Inspection

The Associate shall provide all opportunities and information to TPNODL'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 TPNODL'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 TPNODL'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 TPNODL/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 TPNODL inspectors are not satisfied with the safety arrangements at the plant, TPNODL 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 TPNODL along with the inspection call, for scrutiny of TPNODL.

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

11.3 Third Party Nomination

TPNODL 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 TPNODL as far as conducting the inspection.

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS	
Rev. No	0	Page 13 of 47

11.4 Waiver of Inspections

TPNODL 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 TPNODL 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 TPNODL. Material delivered at TPNODL stores or at project site without a valid MDCC issued by the designated official of TPNODL 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 TPNODL, then, MDCC shall be issued on receiving all the test reports-routine& type-from the Associate and finding them in order.

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

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

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

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

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

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

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

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.

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS	
Rev. No	0	Page 14 of 47

Timelines for inspection and MDCC is as below:

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

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

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 TPNODL and have to supply back the material within next 30 days or within the timeframe mutually decided by Associate and TPNODL.

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", TPNODL, Bhubaneswar.

12.4 Submission of mandatory documents on Delivery

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

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

12.5 Dispatch and Delivery Instructions

S. No.	Instructions
1	Purchase order/ Release order no. shall be mentioned on invoice and on material
2	TPNODL material code and material description shall be mentioned in invoice and on material.

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS	
Rev. No	0	Page 15 of 47

3	"Property of TPNODL" 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 TPNODL, Bhubaneswar", Guarantee period and Associate's name.
8	In case of manual unloading, supplier / transporter shall deploy sufficient Labour for unloading the material at TPNODL central store. For heavy item(s), crane will be provided by TPNODL [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.
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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 TPNODL for the equipment/material/service/work and where standard specifications are not part of contract documents or guarantee period is not specified in the standard specifications, the guarantee period shall be as per the Special Terms and Conditions of the Contract. In case of no mention of the guarantee period in standard specifications or SCC Guarantee Period will be 12 Months from the Date of Commissioning or 24 months from the date of delivery of final lot of supplies made, whichever is earlier.

13.3 Failure in Guarantee Period (GP)

If the equipment and material supplied under the contract fails to perform its due, rated & intended quality performance, during the Guarantee period, the associate is liable to undertake repair/rectify/replace the equipment and material supplied within time frame specified in the SCC or elsewhere in the contract documents at associate's cost to make the equipment and material supplied/service or work rendered under the contract of performing its due, rated and intended quality performance. If Associate fails to repair/rectify/replace the equipment or material supplied rendered under the contract, failed in Guarantee Period, TPNODL will be at liberty to get the same done at Associate's risks and costs and recover all such expenses plus the TPNODL's own charges (@ 20% of expenses incurred), from the Associate or from the "Security cum Performance Deposit" as the case may be.

Approved Copy of GCC (TPNODL)

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS	
Rev. No	0	Page 16 of 47

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 TPNODL. However, if replacement of the Equipment is required, Associate shall notify the same to TPNODL within 7 days of reporting the issue by TPNODL. 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, TPNODL 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 TPNODL, as described below:

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

Approved Copy of GCC (TPNODL)

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS	
Rev. No	0	Page 17 of 47

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 TPNODL, 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, TPNODL has the right to levy LD on the entire contract value, subject to a maximum of 10% of the total contract value, subject to a maximum of 10% of the total 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 TPNODL 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 TPNODL's interest failing which appropriate action (legal or otherwise) may be taken against the Associate by the TPNODL, 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 TPNODL in connection with the performance of the contract shall be held confidential by the Associate and shall remain the property of the TPNODL 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 TPNODL.

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 TPNODL shall not be published or disclosed to the third parties or taken out of the country without prior written approval of the TPNODL and upon execution of confidentiality agreements satisfactory to the TPNODL with such third parties prior to disclosure.

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS	
Rev. No	0	Page 18 of 47

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. TPNODL 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 TPNODL. 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 TPNODL under the Contract shall be passed on to the TPNODL. The TPNODL 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 TPNODL.

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 TPNODL. All rights, with respect to, or arising from such intellectual property, as afore mentioned, shall solely vest in TPNODL.

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 TPNODL shall arise in this respect, and any costs, damages, expenses, compensation payable by TPNODL in this regard to a third party/parties, arising from a legal proceeding/s or otherwise, shall be recoverable from the Associate.

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS	
Rev. No	0	Page 19 of 47

18.0 INDEMNITY

The Associate shall at all times indemnify, keep indemnified and hold harmless the TPNODL 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 TPNODL is held liable for by any court judgement. In this connection, the TPNODL 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 TPNODL 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 TPNODL 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 TPNODL.

The TPNODL 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 TPNODL 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 TPNODL. The constituents & leader of the consortium or joint venture shall not be changed without the prior consent of TPNODL.

TPNODL 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.

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS	
Rev. No	0	Page 20 of 47

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

TPNODL 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

Approved Copy of GCC (TPNODL)

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS	
Rev. No	0	Page 21 of 47

- 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 TPNODL, 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 TPNODL, 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.

TPNODL 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 TPNODL and not due to any breach of contract conditions by the associate, TPNODL 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 TPNODL.

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 TPNODL 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 TPNODL 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 TPNODL 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.

Approved Copy of GCC (TPNODL)

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS	
Rev. No	0	Page 22 of 47

- 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 TPNODL 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 TPNODL.

If the default or breach as specified under clause 22 (except sub clause g thereof) be committed by the associate for the first time, TPNODL 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 TPNODL then TPNODL 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, TPNODL shall have the right to terminate all the contracts TPNODL is having with the Associate by issuing termination notice which shall be without prejudice to the other rights of TPNODL available to it under law.

Without prejudice to its right to terminate for breach of contract, TPNODL 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 TPNODL 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 TPNODL.
- 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 TPNODL sites or in transit thereto. However the associate shall

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS	
Rev. No	0	Page 23 of 47

continue to fulfill its contractual obligations with regard to the part of contract not terminated.

- d) It shall be open for TPNODL 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 TPNODL 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 TPNODL 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 TPNODL 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, TPNODL 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 TPNODL 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 TPNODL 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 TPNODL against the amount recoverable from him on this ground. The same shall be without prejudice to other rights available to TPNODL 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, TPNODL shall be entitled to bar the associates its agents, affiliates from undertaking any negotiation / tendering, bidding, participation activities concerning TPNODL for a period of two years from date of such termination. The same shall be without prejudice to other rights available to TPNODL.

22.2 Termination for Convenience of Associate

Associate at its convenience may request for termination of contract, clearly assigning the reason for such request. TPNODL 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 TPNODL

TPNODL at its sole discretion may terminate the contract by giving 30 days prior notice in writing or through email to the Associate. TPNODL shall pay the Associate for all the supplies/

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS	
Rev. No	0	Page 24 of 47

services rendered till the actual date of contract termination against submission of invoice by the Associate to that effect.

23.0 DISPUTE RESOLUTION & ARBITRATION

In case of any dispute or difference the parties shall endeavour to resolve the same through conciliatory and amicable measures within 15 Days failing which the matter may be referred by either party for resolution by the sole arbitrator to be appointed mutually by both the parties. The arbitral proceedings shall be conducted in accordance with Arbitration and Conciliation Act 1996 and the place of arbitration shall be Bhubaneswar. The language to be used at proceedings shall be English and the award of the arbitrator shall be final and binding on the parties. The parties shall bear their respective costs of arbitration. The associate shall continue to discharge its obligations towards due performance of the works as per the terms of the contract during the arbitrator. Further, TPNODL 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 TPNODL or not. However any error in design/drawing arising out of any incorrect data/written information from TPNODL 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 TPNODL on acceptance of material by store/site after Inspection.

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS	
Rev. No	0	Page 25 of 47

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

27.0 INSURANCE

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

- a) The value of the policy shall cover the total value of all the items till they are handed over to TPNODL.
- b) TPNODL 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. TPNODL 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 TPNODL 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) TPNODL 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 TPNODL'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 TPNODL 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. TPNODL, 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 TPNODL and without affecting the completion time.

28.0 SUGGESTIONS & FEEDBACK

We welcome all our Business Associates to write to us about their experience with TPNODL; 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-I*. You can also log on to our website <u>www.tpnodl.com</u> to provide your feedback.

Approved Copy of GCC (TPNODL)

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS		
Rev. No	0	Page 26 of 47	

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

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 <u>www.tpnodl.com</u>

30.0 LIST OF ANNEXURES

S. No.	Subject	Annexure
1.	Performa for Bid Security Bank Guarantee	А
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
10.	Tata Code of Conduct	

ANNEXURE-A

PROFORMA FOR BID SECURITY BANK GUARANTEE

TP Northern Odisha Distribution Limited Balasore

WHEREAS, (Name of the Bidder) _____ (hereinafter called "the BIDDER") has submitted his bid dated for the (Tender No. & Name of Contract) _____ (hereinafter called "the BID"). KNOW ALL men by these presents we (Name of the Bank) of (Name of the Country) _____ having our registered (hereinafter called "the BANK) are bound unto office at

Approved Copy of GCC (TPNODL)

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS		
Rev. No	0	Page 27 of 47	

TPNODL Limited (TPNODL) in the sum of ______ for which payment well and truly to be made to the TPNODL the Bank binds himself, his successors and assigns by these presents.

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

The CONDITIONS of this obligation are:

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

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

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

DATE		SIGNATURE OF THE BANK	
WITNESS		SEAL	
(Signature, Nam	ne & Address) (At lea	ast 2 witnesses)	

ANNEXURE- B

PROFORMA FOR PERFORMANCE BANK GUARANTEE (CP cum EP)

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

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

TP Northern Odisha Distribution Ltd.

Mumbai

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS		
Rev. No	0	Page 28 of 47	

CP cum EP BG No.....

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

- 1. You have entered into a Contract No ______ with M/s._____
- (hereinafter referred to as "the Vendor") for the supply cum erection / civil work of ______ (hereinafter referred to as" the said Equipment") for the price and on the terms and conditions contained in the said contract.
- 2. In accordance with the terms of the said contract, "the Vendor" agreed to furnish you with an irrevocable, unconditional and acceptable bank guarantee for 10% of the value of contract and to be valid till the end of Guarantee period plus one month towards "Contract cum Equipment performance". For this purpose you have agreed to accept the guarantee.

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

Vendor" has not fulfilled his contractual obligations. You shall be the sole judge for such non-fulfillment and "the Vendor" shall have no right to question such judgment.

- 4. You shall have the right to file / make your claim on us under the guarantee for a **further period of one month** from the date of expiry.
- 5. This guarantee shall not be revoked without express consent and shall not be affected by your granting time or any other indulgence to "the Vendor", which shall include but not be limited to, postponement from time to time of the exercise the same in you or any right which you may have against "the Vendor" and to exercise the same in any covenant contained or implied in the said contract or any other course or remedy or security available to you, and our Bank shall not be released from its obligations under this guarantee by

FAFRA

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS	
Rev. No	0	Page 29 of 47

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 Mumbai branch and claim will also be payable at Mumbai Branch (to be confirmed by Mumbai Branch by a letter to that effect in case BG is from the branch outside Mumbai).
- Notwithstanding anything herein contained, our liability under this guarantee is limited to Rs.______ (Rupees______ only and the guarantee will remain in force upto and including ______ (Date) and shall be extended from time to time for such period or period as may be desired by "the Vendor".
- 10. Unless a demand or claim under this guarantee is received by us in writing within one months from_____ (expiry date) i.e. on or before ______ (claim period end date), we shall be discharged from all liabilities under this guarantee thereafter.

Dated at _____ this _____ day of _____ 20__

Bank's rubber stamp

1. Banks full address

Designation of Signatory

2. Bank official number

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUP	PPLY ORDERS
Rev. No 0		Page 30 of 47

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 TPNODL Accounts Department at the time of receipt of full and final payment)

(Certificate No. CCP/002)

Name of the Project Order/

Contract No.

Dated

Name of the Associate Scheme

No. / Job No.

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

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

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

Place

Name

(Company Seal)

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUP	PLY ORDERS	
Rev. No	0	Page 31 of 47	

ANNEXURE-D

PROFORMA FOR APPLICATION FOR ISSUANCE OF CONSOLIDATED TDS CERTIFICATE

To be printed on the letterhead

Τo,

TPNODL 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

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS	
Rev. No	0	Page 32 of 47

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 "TPNODL addressed - attached envelop"

You are associated with us as

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

You are associated with us for

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

Your office is located at

□ Bhubaneswar □ Within 200 kms from Bhubaneswar

☐ More than 200 kms from Bhubaneswar

□ More than 1 Cr.

Your nearly turnover with TPNODL

□ Less than 25 Lacs □ 25 Lacs to 1 Crore Additional Information

Your NameYour DesignationYour OrganizationContact 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)

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUP	PPLY ORDERS
Rev. No	0	Page 33 of 47

<u>SECTION – A</u>

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

		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.				C	6	
4	All following elements of our contract / purchase order are rational :		1				
4.1	Scope of Work			\bigcirc			
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	TPNODL demonstrate willingness to be flexible in administration of Contract / Purchase Order						
7	We provide timely responses / clarifications to your queries						
8	TPNODL representative you interact / coordinate with is adequately empowered to support you in meeting contractual obligations						
9	TPNODL provide you all necessary infrastructure support for timely and quality completion of work (including AMC)						
10	TPNODL Engineer-in-Charge timely certifies the jobs executed/ material supplied						
11	TPNODL 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						

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUP	PPLY ORDERS
Rev. No	0	Page 34 of 47

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS		
Rev. No	0	Page 35 of 47	

<u>SECTION – B</u>

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 TPNODL employees you interact with from following team?						
1.1	Project Engineering						~
1.2	District / Zones						\mathcal{O}
1.3	Projects/HOG (TS &P)						
1.4	Inspection & Quality Assurance						
1.5	Stores						
1.6	Metering & Billing			(Č,	÷	
1.7	Accounts / Finance						
1.8	Administration			5			
1.9	IT & Automation	, C					
2	How would you rate TPNODL in comparison to your other clients in terms of fairness of treatment and transparency with its Business Associates?	5					
3	How would you rate TPNODL in comparison to your other clients in terms of processes and systems to manage partnership with its Business Associates						
4	How would you rate TPNODL in comparison to your other clients in terms of building long term & mutually relations hip with its Business Associates						

<u>SECTION – C</u>

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 TPNODL, would you like to continue your relationship with TPNODL?					
2	If someone asks you about TPNODL, would you talk "positively" about					

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS		
Rev. No	0	Page 36 of 47	

	TPNODL?			
3	Would you refer TPNODL 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 TPNODL, that truly represents your overall satisfaction with us (please tick appropriate box) -

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

<u>SECTION – E</u>

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

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

Please spare your thoughts for TPNODL'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 (\checkmark) your top 5 expectations out o listed below -	f the following 10 points
(Please list down improvement you expect from TPNODL)	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	

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS		
Rev. No	0	Page 37 of 47	

5	Inspection & quality assurance support for
5	timely job completion

We thank you for your time and courtesy!! <u>ANNEXURE-F</u>

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, TPNODL 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. TPNODL 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. TPNODL will make every effort to make the bid process transparent. However, the award decision by TPNODL would be final and binding on the supplier.
- 3. The bidder agrees to non-disclosure of trade information regarding the purchase, identity of TPNODL, 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 TPNODL.
- 6. In case of intranet medium, TPNODL shall provide the infrastructure to bidders. Further, TPNODL 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 TPNODL.
- 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 TPNODL 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 TPNODL.
- 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

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUP	PPLY ORDERS
Rev. No		Page 38 of 47

ANNEXURE-G

To,

DGM (Finance) TPNODL Limited Bhubaneswar

Sub: e-Payments through National Electronic Fund Transfer (NEFT) OR Real Time Gross Settlement System (RTGS)

Dear Sir,

We request and authorize you to affect e-payment through NEFT/RTGS to our Bank Account as per the details given below:-

2

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

Bank Branch IFSC Code

(Please enclose a Xerox a copy of a cheque.

This cheque should not be a payable at par cheque)



(You can obtain this from branch where you have your account)

Email Address of accounts person: : (to send payment information)

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDER	
Rev. No		Page 39 of 47

1

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 TPNODL well in time at our own. Further, we kept TPNODL indemnified for any loss incurred due to wrong furnishing of above information.

Thanking you,

For _____

(Authorised Signatory)

(Signature with Rubber Stamp)

Certification from Bank:

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

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

(Manager's/ Officers Signature under Bank Stamp)

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS	
Rev. No		Page 40 of 47

ANNEXURE-H

VENDOR APPRAISAL FORM

TO BE S	UBMITTED	BY VENDOR (To be filled as applicable)	
		Part A	
1.0	DETAII	LS OF THE FIRM	
	1.1	NAME (IN CAPITAL LETTERS)	. 6
	1.2	TYPE OF CONCERN (PROPRIETORY) PARTNERSHIP PVT.LTD., PUBLIC LTD. ETC.	R-P
	1.3	YEAR OF ESTABLISHMENT	
	1.4	LOCATION OF OFFICE POSTAL ADRESS	
	1.5	CONTACT DETAIL OF BA'S REPRESENTATIVE NAME E-MAIL ID CELL NO.	
	1.6	LOCATION OF MANUFACTURING UNITS	:
		i) UNITS 1	:
		ii) OTHER UNITS	:
2.0	PRODU	JCTS / SERVICES BEING OFFERED	:
3.0	TURNO VERIFI STATE		:
4.0		BILITY OF STATUTORY DOCUMENTS I.E. COPY N CARD	:
5.0		BILITY OF STATUTORY DOCUMENTS I.E. COPY OF EGISTRATION	÷
6.0	APPLIC	CABILITY UNDER MSME CERTIFICATION	÷
7.0	BA BE	LONGS TO AA COMMUNITY (SC/ST)	÷
8.0		MENTS VERIFYING ADDRESS PROOF ORTED BY ANY GOVT. ISSUED DOCUMENT)	÷

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS	
Rev. No		Page 41 of 47

9.0	TECHN	NICAL	
	9.1	NO.OF DESIGN ENGINEERS (INDICATE NO.OF YEARS EXPERIENCE IN RELATED FIELDS)	:
	9.2	NO.OF DRAUGHTSMEN	:
	9.3	COLLABORATION DETAILS (IF ANY)	:
		9.3.1 DATE OF COLLABORATION	:
		9.3.2 NAME OF COLLABORATOR	:
		9.3.3 RBI APPROVAL DETAILS	
		9.3.4 EXPERIENCE LIST OF COLLABORATOR	
		9.3.5 DURATION OF AGREEMENT	:
	9.4	AVAILABILITY OF STANDAR0DS / DESIGN PROCEDURES / COLLA-BORATOR'S / DOCUMENTS (CHECK WHETHER THESE ARE LATEST/CURRENT	:
	9.5	TECHNICAL SUPPORT, BACK-UP GUARANTEE, SUPERVISION, QUALITY CONTROL BY COLLABORATOR (WHEREVER ESSENTIAL). (THIS CLAUSE IS RELEVANT WHEN VENDOR'S EXPERIENCE IS INADEQUATE)	:
	9.6	QUALITY OF DRAWINGS	:
10.0	MANU	FACTURE	1
	10.1	SHOP SPACE, LAYOUT LIGHTING, VENTILATION, ETC.	:
	10.2	POWER (KVA)	:
		MAINS INSTALLED	:
	N	UTILISED	:
C		STANDBY POWER SOURCE	:
	10.3	MANUFACTURING FACILITIES (ATTACH LIST OF EQUIPMENTS AS APPLICABLE)	:
		10.3.1 MATERIAL HANDLING	:
		10.3.2 MACHINING	:
		10.3.3 FABRICATION	:

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS	
Rev. No		Page 42 of 47

		10.3.4 HEAT TREATMENT	:
		10.3.5 BALANCING FACILITY	:
		10.3.6 SURFACE TREATMENT PRIOR TO PAINTING/ COATING, POLISHING, PICKLING, PASSIVATION, PAINTING, ETC.	:
	10.4	SUPERVISORY STAFF	:
	10.5	ADEQUACY OF SKILLED LABOURS (MACHINISTS, WELDERS, ETC.)	
	10.6	NO. OF SHIFTS	5
	10.7	TYPE OF MATERIAL HANDLED (SUCH AS CS, SS, ETC.)	
	10.8	WORKMANSHIP	:
	10.9	MATERIAL IN STOCK AND VALUE	•
	10.10	TRANSPORT FACILITIES	:
	10.11	CARE IN HANDLING	:
11.0	INSPE	CTION / QC / QA / TESTING	
	11.1	NUMBER OF PERSONNEL (INDICATE NO.OF YEARS OF EXPERIENCE)	:
	11.2	INDEPENDENCE FROM PRODUCTION	:
	11.3	AVAILABILITY OF PROCEDURAL WRITE UP/QUALITY PLAN	:
	11.4	INCOMING MATERIAL CONTROL AND DOCUMENTATION	:
	11.5	RELIABILITY/REPUTATION OF SUPPLY SOURCES	:
<	11.6	STAGE INSPECTION AND DOCUMENTATION	:
G	11.7	SUB-ASSEMBLY & DOCUMENTATION	:
	11.8	FINAL INSPECTION AND DOCUMENTATION	:
	11.9	PREPARATION OF FINAL DOCUMENTATION PACKAGE	:
	11.10	TYPE TEST FACILITIES	:
	11.11	ACCEPTANCE TEST FACILITIES	:

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS	
Rev. No		Page 43 of 47

	11.12	CALIBRATION OF INSTRUMENTS AND GAUGES (WITH TRACEABILITY TO NATIONAL STANDARDS) (ATTACH LIST)	:
	11.13	STATUTORY APPROVALS LIKE BIS, IBR, ETC.(AS APPLICABLE)	:
	11.14	SUB-VENDOR APPROVAL SYSTEM AND QUALITY CONTROL	:
	11.15	DETAILS OF TESTS CARRIED OUT AT INDEPENDENT RECOGNISED LABORATORIES	
		i) FURNISH LIST OF TESTS CARRIED OUT AND THE NAME OF THE LABORATORY WHERE THE TESTS WERE CONDUCTED	R
		ii) CHECK AVAILABILITY OF CERTIFICATES AND REVIEW THESE WHEREVER POSSIBLE	:
12.0	COMM	IENCE (INCLUDING CONSTRUCTION / ERECTION / ISSIONING) TO BE FURNISHED IN THE FORMAT ATED IN APPENDIX)	:
13.0	SALES	, SERVICE AND SITE ORGANISATIONAL DETAILS	:
14.0		FICATE FROM CUSTOMERS (ATTACH COPIES OF MENTS)	:
15.0	POWE	R SITUATION	:
16.0	LABOU	JR SITUATION	:
17.0		CABILITY OF SC/ST RELAXATION (Y/N) , SUPPORTING DOCUMENTS TO BE ATTACHED	
I		Part C Supporting Documents	
Ś	R		

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS	
Rev. No		Page 44 of 47

 Factory License ISO Certificate Registration of Central Excise Income Tax Clearance. 	
 5. PF Registration 6. ESI Registration 7. Insurance for Workman Compensation Act No. 8. Electrical Contract LIC No. 9. PAN No. 10. GST Registration 11. MSME Certification 12. WC Tax Registration 13. Organogram of Co. having organogram of Design, safety, quality, production and other teams. 14. Details of subscription of BIS, IEC, IEE, ASTM or other. 15. Details of the team in Design, Quality, Safety, Production. 16. List of manufacturing equipment as per Part C. 17. List of calibrated equipment as per Part C. 18. List of clients and order executed in past two years. 19. Complaint escalation matrix. 20. Performance Certificates of same product from Minimum two utilities. 21. e-Payment Form as per enclosed Annexure-G 	

* 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).
- The relaxation available for BAs under SC / STs shall be as per GCC for Tender Fees, EMD, PBG and Turnover criteria.

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

Annexure-G (e-Payment detail form) must be filled by Associate along with this form.

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUPPLY ORDERS	
Rev. No		Page 45 of 47

ANNEXURE-I

MANUFACTURER AUTHORIZATION FORM

(To be submitted on OEM's Letter Head)

Date:

To,

Chief (Procurement & Stores)

TPNODL Limited, Mumbai

Sir,

.....and

to subsequently negotiate and sign the Contract.

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

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

Yours Sincerely,

For

Authorized Signatory

Annexure-J

TATA CODE OF CONDUCT (TCoC)

Introducing Tata Code of Conduct (TCoC) in GCC, the following clause is proposed for inclusion as per suggestions from Chief Ethics Counsellor -

"TCoC is the overarching policy framework that applies to all TATA Group companies including TPNODL. TCoC provides for stakeholder-wise approach in each of the seven chapters.

The chapter "Our Value Chain Partners" states the policy as follows:

- 1. 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.
- 3. 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.
- 4. We shall ensure that any gifts or hospitality received from, or given to, our suppliers or service providers comply with our company's gifts and hospitality policy.
- 5. We respect our obligations on the use of third party intellectual property and data.

To effectively implement TCoC, there is a 3-tier framework comprising of Ethics Management Apex Team headed by the CEO, who is also the Principal Ethics Officer (PEO), TPNODL; Locational Ethics Counsellors (LECs) who cover various locations/offices of TPNODL; and LECs are assisted by 4-5 Ethics Champions (ECs).

In case any Ethical Concern is faced during the course of your business dealings with TPNODL, one may utilize any one or more of the following avenues:

- 1. Ethics Portal on website <u>www.tpnodl.com</u>
- 2. Ethics Box
- 3. IVRS No. 19124
- 4. Locational Ethics Counsellor (LEC)
- 5. Third Party Ethics Helpline 1800-22-7697 (Toll Free) *
- 6. Chief Ethics Counsellor

TPNODL is committed to follow Core Values and Core Principles mentioned in TCoC, cited below, in carrying out various activities as well as in discharge of bi-lateral and multi-lateral obligations involving other entities/organizations:

Core Values:

All six core values are already mentioned in GCC.

Core Principles:

1. Zero tolerance to bribery or corruption in any form.

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR SUP	PPLY ORDERS
Rev. No		Page 47 of 47

- 2. Committed to good corporate citizenship
- 3. Contribute to the **economic development of the communities** of the countries & regions we operate in.
- 4. No compromise on Safety
- 5. Our conduct shall be fair & transparent
- 6. Respect the human rights & dignity of our stakeholders
- 7. No unfair discrimination of any kind
- 8. Statements made to stakeholders shall be truthful & made in good faith
- 9. Not engage in any restrictive or unfair trade practice
- 10. Provide avenues for our stakeholders to raise concerns in good faith
- 11. Environment free from fear of retribution to deal with concerns that are raised
- 12. Expect the leaders to be **role model**
- 13. Comply with the laws of the countries in which we operate

Gift Policy:

Principles for acceptance of gifts/benefits -

A gift or benefit may be accepted only if it complies with all of the following principles:

- ✓ it does not influence,
- ✓ does not have the potential to influence, an employee in such a way as to compromise or appear to compromise integrity and impartiality
- ✓ does not create a conflict of interest or perception of conflict of interest;

Principles for non-acceptance of gifts/benefits -

The gift or benefit may not be accepted or given if any of the following principles apply:

- ✓ causes the recipient or donor to act in partial manner in the course of duty
- ✓ apprehension of the recipient becoming **obligated to the donor**
- ✓ it is not offered openly
- ✓ if is an offer of money or something readily convertible to money (e.g. Shares)

Violation –

- 1. Not abiding with this policy would constitute violation of "Our Employees" Stakeholder group Clause "Gifts and Hospitality" of the Tata Code of Conduct (TCoC) 2015. Prompt action will be taken against violations.
- 2. Any deviation from this policy must be supported by appropriate rationale and must be duly approved by CEO who is also the Principal Ethics Officer. In any case, in dealing with such deviations, the spirit of the TCoC should in no case be compromised.

2. If it is determined that an employee / associate has violated this policy, appropriate action including termination of the employee's / associate's employment or association with TPNODL may be decided upon.

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Doc. Title	SPECFICATION	FOR 4Cx70+1x50+1Cx16 SQ.I	MM AB CABLE
Doc. No	ENG-LV-001		Eff. Date: 13.09.2021
Rev No.	00		Page 1 of 16
Prepared by: Engineering Department	Reviewed by:	Approved by:	Issued by:

CO	NT	'EN	TS

- 1. SCOPE
- 2. APPLICABLE STANDARDS
- 3. CLIMATIC CONDITIONS OF THE INSTALLATION
- 4. GENERAL TECHNICAL REQUIREMENTS
- 5. GENERAL CONSTRUCTION
- 6. MARKING
- 7. TESTS
- 8. TYPE TEST CERTIFICATES
- 9. PRE-DISPATCH INSPECTION
- **10. INSPECTION AFTER RECEIPT AT STORES**
- 11. GUARANTEE
- **12. PACKING AND TRANSPORT**
- 13. TENDER SAMPLE
- 14. QUALITY CONTROL
- **15. MINIMUM TESTING FACILITIES**
- **16. MANUFACTURING ACTIVITIES**
- 17. SPARES, ACCESSORIES, AND TOOLS
- **18. DRAWINGS AND DOCUMENTS**
- **19. GUARANTEED TECHNICAL PARTICULARS**
- 20. SCHEDULE OF DEVIATIONS

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Doc. Title	SPECFICATION	FOR 4Cx70+1x50+1Cx16 SQ.	MM AB CABLE
Doc. No	ENG-LV-001		Eff. Date: 13.09.2021
Rev No.	00		Page 2 of 16
Prepared by: Engineering Department	Reviewed by:	Approved by:	Issued by:

1. <u>SCOPE</u>

This specification covers the technical requirements of design, manufacture, test at manufacturer's works, packing & forwarding, supply and unloading at store/ site and performance of LT AB cables for trouble free and efficient operation. The specific requirements are covered in the enclosed technical datasheet

2. APPLICABLE STANDARDS:

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

- IS 398 (Part IV): 1994 Aluminum conductor for overhead transmission purposes Part IV Aluminum Alloy Stranded conductor
- IS 5216 Guide for safety procedures and practices in electrical works.
- IS 5831: 1984 Specification for PVC insulation and sheath of electric cables
- IS 7098 (Part I):1988 Specification for cross linked polyethylene insulated PVC sheathed cables Part I for working voltage up to and including 1100 volts
- IS 8130 :1984 Specification for conductor for insulated electric cables & flexible cords
- IS 10418: 1982 Specifications for drums for electric cables
- BS 5468 Cross-linked polyethylene insulation of electric cables
- IEC 540 Test methods for insulations and sheaths of electric cables and cords
- IEC 60228-3/2004 Conductor for insulated cables
- IEC 60502-1/2004 Power cables with extruded insulation and their accessories for rated voltage from 1kV (Um =1.2kV), up to 30kV (Um = 36kV)- Part I: Cables for rated voltages of 1kV (Um =1.2kV), up to 3kV (Um = 3.6kV)
- ASTM G -53 /DIN56687 UV Testing of XLPE insulation
- SANS 1713:2004 South African Standard for Aerial Bunched Conductor
- IS14255: 1995 Aerial Bunched Conductors for working voltages up to and including 1100 volts

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Doc. Title	SPECF	CATION FOR 4Cx70+1x50+1C	x16 SQ.MM AB CABLE
Doc. No	ENG-LV-001		Eff. Date: 13.09.2021
Rev No.	00		Page 3 of 16
Prepared by: Engineering Department	Reviewed by:	Approved by:	Issued by:

a)	Maximum Ambient Temperature	50 °C
b)	Maximum Daily Average Ambient Temperature	40 °C
c)	Minimum Ambient Temperature	2 °C
d)	Maximum Humidity	99.7 %
e)	Minimum Humidity	15 %
f)	Average Annual Rainfall	1800 mm
g)	Average Wind Speed prevailing in the area	200 km/hr.
h)	Average Thunderstorms prevailing in the area	70 days per annum
i)	Average dust storms prevailing in the area	20 days per annum
j)	Average number of rainy days per annum	160
k)	Maximum Altitude above sea level	1200 m
I)	Seismic Level	0.24g to 0.48g

Note: The atmosphere across coastal divisions of TPNODL is very saline, laden with salt, acid anddust suspended during dry months and subjected to fog in cold months.

SL.NO.	DESCRIPTIONS	UNITS	REQ. PARAMETERS
1	Type of Cable		LT AB Cable with cross linked polyethylene insulated Phase & Neutral and street lighting core twisted around the bare earth cum messenger wire
2	Size of Aerial Bundled Cables		4C x 70 + 1C x 50 + 1C x 16
3	Rated Voltage	kV	1.1
4	System Voltage	kV	0.415
5	Nominal Area of Phase conductor	mm²	50
6	Nominal Area of Messenger	mm²	35
7	Phase Core & Neutral		Stranded compacted circular aluminium conductor, extruded XLPE insulated
8	Messenger Wire		Stranded compacted circular aluminium alloy conductor, bare
9	Maximum conductor temperature during continuous operation	°C	90
10	Maximum conductor temperature during short circuit	°C	250
11	Phase Core RYBN insulated		

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a)	Conductor		
i	Material		EC Grade Aluminium of H4 grade to IS:8130:1984
ii	No. of Cores & Nominal Size	No. / mm²	4C x 70
iii	Minimum no. of Wires		12/2.24
iv	Diameter		Shall be suitably selected to meet conductor DC resistance as per IS 8130
v	Max. DC Resistance of phase conductor at 20°C	Ω/km	0.641
vi	Shape of Conductor		Stranded compacted circular
vii	Short circuit current rating of conductor for 1 sec	kA	6.58
viii	Continuous current rating in air at 40°C	A	200
b)	Insulation		
i	Material		XLPE insulation as per IS 14255:1995
ii	Nominal Thickness	mm	1.5
iii	Tolerance in Insulation thickness	mm	XLPE insulation as per IS 14255:1995
12	Street Light Core		
a)	Conductor		
i	Material		EC Grade Aluminium of H4 grade to IS:8130:1984
ii	Nominal Size	mm²	16
iii	Nominal no. of wire		7
iv	Maximum DC Resistance at 20°C	Ω/km	1.91 (As per IS 8130:1984)
v	Shape of Conductor		Stranded compacted circular
b)	Insulation		
i	Material		XLPE insulation as per IS 14255:1995
ii	Nominal Thickness	mm	1.2
iii	Tolerance in Insulation thickness	mm	XLPE insulation as per IS 14255:1995
13	Messenger Wire		
i	Material		Aluminium Alloy Wire
ii	Nominal Size	mm²	50
iii	No. & Nominal Dia of each strand	No/mm	7/3.02
iv	Calculated Maximum resistance at 20°C	Ω/km	0.689
v	Shape of Conductor		Stranded Circular compacted
vi	Short circuit current rating for 1 sec	kA	4.7
vii	Material of Insulation		NA
viii	Thickness of Insulation	mm	NA
ix	Min Breaking Load of Messenger Wire	KN	14

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TECHNICAL SPECIFICATIONS

Doc. Title	SPECFICATION FOR 4Cx70+1x50+1Cx16 SQ.MM AB CABLE			
Doc. No	ENG-LV-001		Eff. Date: 13.09.2021	
Rev No.	00		Page 5 of 16	
Prepared by: Engineering Department	Reviewed by:	Approved by:	Issued by:	

14	Core Identification		RIDGES for phase identification: 1 ridge for R Phase, 2 Ridges for Y Phase, 3 ridges for B phase. For Neutral core identification non - contact type laser printing or ink jet printing to be provided with 'N' printed on it at every span of 1 ft.
15	Formation of Cable		4 phases cores & 1 street lighting core XLPE insulated are laid up over bare messenger with R-H direction of lay
16	Continuous current rating in air at 40°C of phase conductor	A	200
17	Maximum conductor temperature during continuous operation (RYBN)	°C	90
18	Maximum conductor temperature during short circuit operation (RYBN)		250
19	Standard Drum Length	mtr	500
20	Tolerance in Drum Length	%	± 5%
21	Reference Standard		IS 14255
22	Embossing on XLPE Cable		Embossing on phase insulation of the cable, manufacturer name, 1100 V, Size of Cable, ISI, month & year of manufacturing, Property of TPNODL,PO number & Date
23	Marking on Drum		The Cable shall carry the following information either stencilled on the drum or contained in a label attached to it: a) Referenced to the standards b)Manufacturer's name c)Type of Cable d) Voltage grade e)Number of Cores f)Nominal Cross section area of the conductor g) Length of the cable on the drum h) Length of the cable per m i) Marking of PO j) Direction of Rotation of the drum k) Gross Mass l) Country of manufacturer m) Year of manufacturer n) ISI certification mark
24	Order Quantity Tolerance		To be mentioned by bidder
25	Multiplying factor considering lay ratio of cable to measure the length of cable		To be mentioned by bidder

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Doc. Title	SPECFIC	SPECFICATION FOR 4Cx70+1x50+1Cx16 SQ.MM AB CABLE			
Doc. No	ENG-LV-001		Eff. Date: 13.09.2021		
Rev No.	00		Page 6 of 16		
Prepared by: Engineering Department	Reviewed by:	Approved by:	Issued by:		

26 Cable end sealing

To be mentioned by bidder

4. **GENRERAL CONSTRUCTION**

5.1 CONDUCTORS

- All the conductors shall be Class 2, stranded compacted circular, high electrical conductivity, aluminum grade H2/H4 as per IS 8130: 1984
- Before stranding the conductor shall be circular in cross section, uniform in quality, solid, smooth and free from scale, sharp edges and other defects
- Conductor shall conform to the standards for permissible number of joints in any one of the single wires forming every complete length of conductor, for location of joints in same layer of conductors and for method of making such joints. No joint shall be made in any conductor after it is stranded.
- All conductors shall be of high electrical conductivity Aluminum as specified, conforming to requirement of relevant standards

5.2 INSULATION

- The insulating material shall be Cross Linked Polyethylene (XLPE) applied by extrusion as per IS7098 (Part I): 1988 and its latest amendments clause no. 4.1.
- The insulation shall be both heat and moisture resistant and shall be suitable for continuous operation at conductor temperature of 90 Degree Centigrade, rising momentarily to 250 Degree Centigrade under short circuit conditions.
- It shall be free from any foreign material or porosity visible to unaided eye. The insulation shall be so applied that it fits closely to the conductor and it shall be possible to remove insulation without damaging the conductor. The XLPE insulation shall be ultraviolet protected for operation in direct sunlight.
- It shall be free from any foreign material or porosity visible to unaided eye. The insulation shall be so applied that it fits closely to the conductor and it shall be possible to remove insulation without damaging the conductor. Average thickness of the insulation shall not be less than nominal value specified in IS- 7098 (Part-I) with latest amendments. The tolerance on the thickness shall be as specified in IS-7098 (Part-I):1988.
- The insulating material shall have excellent electrical properties with regard to resistivity, dielectric constant and loss factor and shall have high tensile strength and resistance to abrasion. This shall not deteriorate at elevated temperatures or when immersed in water. The insulation shall be preferably fire resistant and resistant to chemicals like acids, alkalis, oils and ozone.

5.3 MESSENGER WIRE

The bare messenger wire shall be of 35 mm² (nominal cross section area) for 4C x 50 mm² + 35 mm² + 16 mm² ABC respectively and shall be made of aluminum alloy, generally conforming to IS: 398(Part-IV):1994. The conductor shall be of heated aluminum-magnesium-silicon alloy wires containing approximate 0.5% magnesium and approximately 0.5% silicon conforming to IS 398(Part 4).

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TECHNICAL SPECIFICATIONS SPECFICATION FOR 4Cx70+1x50+1Cx16 SQ.MM AB CABLE

Doc. Title Doc. No Rev No. Prepared by: Engineering Department

TPNODL TP NORTHERN ODISHA DISTRIBUTION LIMITED

Reviewed by:

ENG-LV-001

00

Approved by:

Eff. Date: 13.09.2021

5.4 CORE IDENTIFICATION

The following shall be embossed on the one side of the core: RIDGES REQUIRED for Phase identification:

- 1 ridge for D phase
- 1 ridge for R phase
- 2 ridges for Y phase
- 3 ridges for B phase

For neutral core identification non-contact type laser printing or ink jet printing to be provided with 'N' printed on it at every span of 1 ft.

5.5 LAYING OF CORES

Cores shall be laid up with a right-hand lay, and shall have a lay length not exceeding 28(d1+d2), where; d1 is the core diameter, including sheath, in mm. d2 is the diameter of the messenger, including the outer protective covering where applicable, in mm.

5.6 STRANDING

The wire used in the construction of a stranded conductor shall, before and after stranding, satisfy all the relevant requirements of IS 398(Part-IV): 1994. The lay ratio of the different layers shall be within the limits given in IS 398(Part-IV): 1994. The successive layers shall have opposite directions of lay, the outermost layer being right - handed. The wires in each layer shall be evenly and closely stranded. The lay ratio of any layer shall not be greater than the lay ratio of layer immediately beneath it.

5.7 CABLE DRUM

Cables shall be furnished in the specified reels or coil lengths of 500 meters. Drums shall be of nonreturnable wooden drums as per IS 10418:1982 and the drums should be free from defects such as through cracks, knots, warps and split. The ends of the cables shall be suitably sealed by means of nonhygroscopic sealing. The tolerance on the Drum length shall be +/- 5%.

6. MARKING

The cable shall carry the following information either stenciled on the drum or contained in a label attached to it:

- a) Reference to the Standards.
- b) Manufacturer's name
- c) Type of cable.
- d) Voltage grade.
- e) Number of cores.
- f) Nominal cross-section area of the conductor.
- g) Length of the cable on the drum.
- h) Length of the cable per m.
- i) Marking of PO
- j) Direction of rotation of the drum.

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Doc. Title	SPECFICATION FOR 4Cx70+1x50+1Cx16 SQ.MM AB CABLE			
Doc. No	ENG-LV-001		Eff. Date: 13.09.2021	
Rev No.	00		Page 8 of 16	
Prepared by: Engineering Department	Reviewed by:	Approved by:	Issued by:	

k) Gross mass.

I) Country of manufacture.

m) Year of manufacture.

n) ISI Certification mark.

7. TESTS :

All routine, acceptance & type tests shall be carried out in accordance with the relevant IS/IEC. All Routine/acceptance tests shall be witnessed by the purchaser/his authorized representative. All the components shall also be type tested as per the relevant standards. Following tests shall be necessarily conducted on the LT AB cables in additions to others specified in the IS/IEC/SANS Standards. Bidder shall furnish the type test report of LT AB cable for the tests as mentioned below and as per reference standards. Complete set of Type Tests shall be conducted at certified test laboratories, which are CPRI / ERDA only. Type test should have been conducted in certified test laboratories during the period not exceeding 5 years from the date of Permission.

• Tests for Phase Core are as follows:

Type tests

a) Tests on phase/street light Conductor

- i) Tensile test
- ii) Wrapping test
- iii) Resistance test

b) Tests on messenger Conductor

- i) Breaking load test
- ii) Elongation test.
- iii) Resistance test.
- c) Physical Test for XLPE Insulation:
 - i) Tensile strength and elongation at break
 - ii) Ageing in air oven
 - iii) Hot test
 - iv) Shrinkage test
 - v) Water absorption (gravimetric)
 - vi) Carbon black: 1) Content. 2) Dispersion.
 - vii) Insulation resistance (Volume resistivity) test.
- d) Test for thickness insulation.
- e) High voltage test.

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Doc. Title	SPECFICATION FOR 4Cx70+1x50+1Cx16 SQ.MM AB CABLE				
Doc. No	ENG-LV-001	ENG-LV-001			
Rev No.	00		Page 9 of 16		
Prepared by: Engineering Department	Reviewed by:	Approved by:	Issued by:		

- Acceptance Tests
 - i) Tensile Test (for phase/street light conductor).
 - ii) Wrapping Test (for phase/street light conductor).
 - iii) Breaking load test for messenger conductor.
 - iv) Elongation test for messenger conductor.
 - v) Conductor Resistance Test for messenger and phase conductor.
 - vi) Test for thickness of insulation.
 - vii) Hot set test for XLPE insulation.
 - viii) Tensile strength and elongation at break test for insulation.
 - ix) High Voltage test
 - x) Insulation resistance (Volume resistivity) test.
 - xi) UV test for XLPE Insulation (black carbon content and dispersion test).
- Tests for the Messenger wire:
 - xii) Breaking load Test
 - xiii) Elongation test
 - xiv) Resistance test
- Routine Tests
 - i) Conductor Resistance test
 - ii) High Voltage test
- Optional Test
 - i) Bending test.

8. **<u>TYPE TEST CERTIFICATES:</u>**

The bidder shall furnish the type test certificates of the cable for the tests as mentioned as above as per the corresponding standards. All the tests shall be conducted by CPRI/ERDA as per the relevant standards. Type test should have been conducted in certified Test Laboratories during the period not exceeding 5 years from the date of opening the bid. In the event of any discrepancy in the test reports i.e., any test report not acceptable or any/all type tests (including additional type tests, if any) not carried out, same shall be carried out without any cost implication to TPNODL.

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Doc. Title	SPECFICATION FOR 4Cx70+1x50+1Cx16 SQ.MM AB CABLE			
Doc. No	ENG-LV-001	Eff. Date: 13.09.2021		
Rev No.	00		Page 10 of 16	
Prepared by: Engineering Department	Reviewed by:	Approved by:	Issued by:	

9. **PRE-DISPATCH INSPECTION:**

• The Material shall be subject to inspection by a duly authorized representative of the TPNODL. Inspection may be made at any stage of manufacture at the discretion of the purchaser and the equipment, if found unsatisfactory as to workmanship or material, the same is liable to rejection. Bidder shall grant free access to the places of manufacture to TPNODL's representatives at all times when the work is in progress. Inspection by the TPNODL or its authorized representatives shall not relieve the bidder of his obligation of furnishing equipment in accordance with the specifications. Material shall be dispatched after specific MDCC (Material Dispatch Clearance Certificate) is issued by TPNODL.

Following documents shall be sent along with material

- a) Test reports
- b) MDCC issued by TPNODL
- c) Invoice in duplicate
- d) Packing list
- e) Drawings & catalogue
- f) Guarantee / Warrantee card
- g) Delivery Challan
- h) h) Other Documents (as applicable).

10. INSPECTION AFTER RECEIPT AT STORE:

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

11. <u>GUARANTEE:</u>

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 12 months from the date of commissioning or 24 months from the date of last supplies made under the contract whichever is later, (the time scale of 12/24 months could be enhanced subject to mutual agreements). Bidder shall be liable to undertake to replace/rectify such defects at its own costs, within mutually agreed time frame, and to the entire satisfaction of 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.

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Doc. Title	SPECFICATION FOR 4Cx70+1x50+1Cx16 SQ.MM AB CABLE		
Doc. No	ENG-LV-001		Eff. Date: 13.09.2021
Rev No.	00		Page 11 of 16
Prepared by: Engineering Department	Reviewed by:	Approved by:	Issued by:

12. PACKING AND TRANSPORT:

The cable shall be wound on wooden drums and packed in line with requirements of IS 10418-1982. The ends of the cable shall be sealed by means of non-hygroscopic sealing material. Bidder shall ensure that all the equipment covered under this specification shall be prepared for rail/road transport in a manner so as to protect the equipment from damage in transit.

13. TENDER SAMPLE:

Bidder shall submit the sample of material with the offer (in case of first supply to TPNODL).

14. QUALITY CONTROL:

The bidder shall submit with the offer Quality assurance plan indicating the various stages of inspection, the tests and checks which will be carried out on the material of construction, components during manufacture and bought out items and fully assembled component and equipment after finishing. As part of the plan, a schedule for stage and final inspection within the parameters of the delivery schedule shall be furnished. The Purchaser's engineer or its nominated representative shall have free access to the manufacturer's/sub-supplier's works to carry out inspections.

15. TESTING FACILITIES:

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

16. TESTING FACILITIES:

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

17. SPARES, ACCESSORIES & TOOLS:

The bidder shall provide a list of complete set of accessories and tools required for erection and maintenance of LT ABC along with the installation procedure.

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(A Tata Power and Odisha Government Joint Venture)	TECHNICAL SPECIFICATIONS		
Doc. Title	SPECFICATION FOR 4Cx70+1x50+1Cx16 SQ.MM AB CABLE		
Doc. No	ENG-LV-001		Eff. Date: 13.09.2021
Rev No.	00		Page 12 of 16
Prepared by: Engineering Department	Reviewed by:	Approved by:	Issued by:

18. DRAWINGS AND DOCUMENTS:

Following drawings and documents shall be prepared based on TPNODL specifications and statutory requirements with complete BOM 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) Experience List
- d) Type test certificates.

After the contract, four (4) copies of the drawings, drawn to scale, describing the equipment in detail shall be forwarded for approval and shall subsequently provide four (4) complete sets of final drawings, one of which shall be auto positive suitable for reproduction, before the dispatch of the equipment. Soft copy (Compact Disk CD) of all the drawing, GTP, test certificates shall be submitted after the final approval of the same to the purchaser. All the Documents and Drawings shall be in English Language.

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

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

Sl. No.	Description	For Approval	For Review Information	Final Submission
1.	Technical Parameters	✓		~
2.	Manual / Catalogues / Drawings for all components		 ✓ 	
3.	Technical Details and test certificates of XLPE compound		 ✓ 	✓
4.	Cross – sectional area of the cable		\checkmark	~
5.	Installation Instructions		✓	~
6.	Instructions for use		✓	~
7.	Transport / Shipping dimension drawing		✓	✓
8.	QA & QC Plan	✓	✓	~
9.	Routine, Acceptance and Type test certificates	✓	 ✓ 	✓
10.	Fault Level calculation for armor and manual	✓	✓	✓

Initiator	

TPNØDL	TP NORTHERN ODISHA DISTRIBUTION LIMITED		
(A Tata Power and Odisha Government Joint Venture)	TECHNICAL SPECIFICATIONS		
Doc. Title	SPECFICATION FOR 4Cx70+1x50+1Cx16 SQ.MM AB CABLE		
Doc. No	ENG-LV-001		Eff. Date: 13.09.2021
Rev No.	00		Page 13 of 16
Prepared by: Engineering Department	Reviewed by:	Approved by:	Issued by:

19. GUARANTEED TECHNICAL PARTICULARS

Bidder shall submit guaranteed technical particulars in the attached format:

NO.	DESCRIPTIONS	UNITS	REQ. PARAMETERS	
1	Type of Cable		LT AB Cable with cross linked polyethylene insulated Phase & Neutral and street lighting core twisted around the bare earth cum messenger wire	
2	Size of Aerial Bundled Cables		4C x 70 + 1C x 50 + 1C x 16	
3	Rated Voltage	kV	1.1	
4	System Voltage	kV	0.415	
5	Nominal Area of Phase conductor	mm²	50	
6	Nominal Area of Messenger	mm²	35	
7	Phase Core & Neutral		Stranded compacted circular aluminium conductor, extruded XLPE insulated	
8	Messenger Wire		Stranded compacted circular aluminium alloy conductor, bare	
9	Maximum conductor temperature during continuous operation	°C	90	
10	Maximum conductor temperature during short circuit	°C	250	
11	Phase Core RYBN insulated			
a)	Conductor			
i	Material		EC Grade Aluminium of H4 grade to IS:8130:1984	
ii	No. of Cores & Nominal Size	No. / mm²	4C x 70	
iii	Minimum no. of Wires		12/2.24	
iv	Diameter		Shall be suitably selected to meet conductor DC resistance as per IS 8130	
v	Max. DC Resistance of phase conductor at 20°C	Ω/km	0.641	
vi	Shape of Conductor		Stranded compacted circular	
vii	Short circuit current rating of conductor for 1 sec	kA	6.58	
viii	Continuous current rating in air at 40°C	A	200	
b)	Insulation			
i	Material		XLPE insulation as per IS 14255:1995	
ii	Nominal Thickness	mm	1.5	
1	aitiator			
Ir	nitiator		HOG (Engineering)	

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iii	Tolerance in Insulation thickness	mm	XLPE insulation as per IS 14255:1995
12	Street Light Core		
a)	Conductor		
i	Material		EC Grade Aluminium of H4 grade to IS:8130:1984
ii	Nominal Size	mm²	16
iii	Nominal no. of wire		7
iv	Maximum DC Resistance at 20°C	Ω/km	1.91 (As per IS 8130:1984)
v	Shape of Conductor		Stranded compacted circular
b)	Insulation		
i	Material		XLPE insulation as per IS 14255:1995
ii	Nominal Thickness	mm	1.2
iii	Tolerance in Insulation thickness	mm	XLPE insulation as per IS 14255:1995
13	Messenger Wire		
i	Material		Aluminium Alloy Wire
ii	Nominal Size	mm²	50
iii	No. & Nominal Dia of each strand	No/mm	7/3.02
iv	Calculated Maximum resistance at 20°C	Ω/km	0.689
v	Shape of Conductor		Stranded Circular compacted
vi	Short circuit current rating for 1 sec	kA	4.7
vii	Material of Insulation		NA
viii	Thickness of Insulation	mm	NA
ix	Min Breaking Load of Messenger Wire	KN	14
14	Core Identification		RIDGES for phase identification: 1 ridge for R Phase, 2 Ridges for Y Phase, 3 ridges for B phase. For Neutral core identification non - contact type laser printing or ink jet printing to be provided with 'N' printed on it at every span of 1 ft.
15	Formation of Cable		4 phases cores & 1 street lighting core XLPE insulated are laid up over bare messenger with R- H direction of lay
16	Continuous current rating in air at 40°C of phase conductor	A	200
17	Maximum conductor temperature during continuous operation (RYBN)	°C	90

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TP NORTHERN ODISHA DISTRIBUTION LIMITED (A Tata Power and Odisha Government Joint Venture)			
Doc. Title	SPECFICATION FOR 4Cx70+1x50+1Cx16 SQ.MM AB CABLE		
Doc. No	ENG-LV-001		Eff. Date: 13.09.2021
Rev No.	00		Page 15 of 16
Prepared by: Engineering Department	Reviewed by:	Approved by:	Issued by:

-	Maximum conductor		250
	temperature during short		
	circuit operation (RYBN)		
19 9	Standard Drum Length	mtr	500
20	Tolerance in Drum Length	%	± 5%
21 I	Reference Standard		IS 14255
22	Embossing on XLPE Cable		Embossing on phase insulation of the cable, manufacturer name, 1100 V, Size of Cable, ISI, month & year of manufacturing, Property of TPNODL,PO number & Date
23 1	Marking on Drum		The Cable shall carry the following information either stencilled on the drum or contained in a label attached to it: a) Referenced to the standards b)Manufacturer's name c)Type of Cable d) Voltage grade e)Number of Cores f)Nominal Cross section area of the conductor g) Length of the cable on the drum h) Length of the cable per m i) Marking of PO j) Direction of Rotation of the drum k) Gross Mass l) Country of manufacturer m) Year of manufacturer n) ISI certification mark
24 (Order Quantity Tolerance		To be mentioned by bidder
25 I	Multiplying factor considering lay ratio of cable to measure the length of cable in drum		To be mentioned by bidder
26 (Cable end sealing		To be mentioned by bidder

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TP NORTHERN ODISHA DISTRIBUTION LIMITED (A Tata Power and Odisha Government Joint Venture)	TECHNICAL SPECIFICATIONS		
Doc. Title	SPECFICATION FOR 4Cx70+1x50+1Cx16 SQ.MM AB CABLE		MM AB CABLE
Doc. No	ENG-LV-001 Eff. Date: 13.09.2021		Eff. Date: 13.09.2021
Rev No.	00 Page 16 of 16		Page 16 of 16
Prepared by: Engineering Department	Reviewed by:	Approved by:	Issued by:

20. 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:

SI. No.	Clause No.	Details of deviation with justifications
We confirm that there are no devia	ations apart from those mentioned	above.
Seal of the Company		Designation
		Signature

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Doc. Title	SPECFICATION FOR AAAC 33kV (241mm ²) & 11kV (99 mm ²) (COVERED TYPE)		mm ²) (COVERED TYPE)
Doc. No	ENG-EHV-001 Eff. Date: 13.09.2021		Eff. Date: 13.09.2021
Rev No.	00		Page 1 of 14
Prepared by: Engineering Department	Reviewed by:	Approved by:	Issued by:

	CONTENTS
1.	SCOPE
2.	APPLICABLE STANDARDS
3.	CLIMATIC CONDITIONS OF THE INSTALLATION
4.	GENERAL TECHNICAL REQUIREMENTS
5.	GENERAL CONSTRUCTION
6.	MARKING
7.	TESTS
8.	TYPE TEST CERTIFICATES
9.	PRE-DISPATCH INSPECTION
10.	INSPECTION AFTER RECEIPT AT STORES

11. GUARANTEE

- **12. PACKING AND TRANSPORT**
- **13. TENDER SAMPLE**
- 14. QUALITY CONTROL
- **15. MINIMUM TESTING FACILITIES**
- **16. MANUFACTURING ACTIVITIES**
- 17. SPARES, ACCESSORIES, AND TOOLS
- **18. DRAWINGS AND DOCUMENTS**
- **19. GUARANTEED TECHNICAL PARTICULARS**
- 20. SCHEDULE OF DEVIATIONS

Initiator		HOG (Engineering)	
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TP NORTHERN ODISHA DISTRIBUTION LIMITED (A Tata Power and Odisha Government Joint Venture)	TECHNICAL SPECIFICATIONS		
Doc. Title	SPECFICATION FOR AAAC 33kV (241mm ²) & 11kV (99 mm ²) (COVERED TYPE)		
Doc. No	ENG-EHV-001 Eff		Eff. Date: 13.09.2021
Rev No.	00		Page 2 of 14
Prepared by: Engineering Department	Reviewed by:	Approved by:	Issued by:

1. <u>SCOPE</u>

This specification covers the technical requirements of design, manufacture, test at manufacturer's works, packing & forwarding, supply and unloading at store/ site and performance of 33kV 241 sq.mm covered AAAC for trouble free and efficient operation. The specific requirements are covered in the enclosed technical datasheet

2. APPLICABLE STANDARDS:

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

• IS 398 (Part – IV): 1994 – Aluminum conductor for overhead transmission purposes – Part IV Aluminum Alloy Stranded conductor

• IS 5216 – Guide for safety procedures and practices in electrical works.

• IS 5831: 1984 – Specification for PVC insulation and sheath of electric cables

• IS 7098 (Part I):1988 – Specification for cross – linked polyethylene insulated PVC sheathed cables – Part I for working voltage up to and including 1100 volts

• IS 8130 :1984 – Specification for conductor for insulated electric cables & flexible cords

• IS 10418: 1982 – Specifications for drums for electric cables

• BS 5468 – Cross-linked polyethylene insulation of electric cables

• IEC 540 – Test methods for insulations and sheaths of electric cables and cords

• IEC 60228-3/2004 – Conductor for insulated cables

• EN50937 – 1:2006 – Testing & Specifications of Covered Conductor for voltage 1kV to 33kV

• ASTM G -53 /DIN56687 – UV Testing of XLPE insulation

• IEEE-383:1974 Standard for type test of class IE electric cables, field splices, and connections for nuclear power generating stations.

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TP NORTHERN ODISHA DISTRIBUTION LIMITED (A Tata Power and Odisha Government Joint Venture)	TECHNICAL SPECIFICATIONS		
Doc. Title	SPECFICATION FOR AAAC 33kV (241mm ²) & 11kV (99 mm ²) (COVERED TYPE)		
Doc. No	ENG-EHV-001 Eff. Date: 1		Eff. Date: 13.09.2021
Rev No.	00 Page		Page 3 of 14
Prepared by: Engineering Department	Reviewed by:	Approved by:	Issued by:

3. <u>C</u>	LIMATIC CONDITIONS:	
a)	Maximum Ambient Temperature	50 °C
b)	Maximum Daily Average Ambient Temperature	40 °C
c)	Minimum Ambient Temperature	2 °C
d)	Maximum Humidity	99.7 %
e)	Minimum Humidity	15 %
f)	Average Annual Rainfall	1800 mm
g)	Average Wind Speed prevailing in the area	200 km/hr.
h)	Average Thunderstorms prevailing in the area	70 days per annum
i)	Average dust storms prevailing in the area	20 days per annum
j)	Average number of rainy days per annum	160
k)	Maximum Altitude above sea level	1200 m
I)	Seismic Level	0.24g to 0.48g

Note: The atmosphere across coastal divisions of TPNODL is very saline, laden with salt, acid and dust suspended during dry months and subjected to fog in cold months.

4. GENERAL TECHNICAL REQUIREMENTS				
<u>SI.</u>	Particulars	<u>UoM</u>	<u>Requirements</u>	
<u>No.</u>			<u>33kV / 241</u>	<u>11kV / 99</u>
1	Type of conductor		HT, AAAC Cov	ered Conductor
2	Type of Insulation		Track resistant, UV- resis	tant, & corrosion resistant
3	Insulation Layers		Extruded Longitudinal water blocking layer, semiconductor compound by extrusion	
4	Applicable Standards		IS 398 - PT	- IV, & EN 50397 - L
5	Cross-sectional area	mm ²	241	99
6	Layup of conductor	No. / mm	19/4.02	7/4.26
7	Conductor diameter, bare conductor, nominal	mm	20.1	12.75
8	Form of Conductor		Stranded circular	Stranded circular
9	Inner semi-conductor layer, thickness, nominal	mm	0.3	0.3
10	Inner XLPE covering, thickness, nominal	mm	2.43	1.1
	Outer UV - resistance XLPE covering, thickness, nominal	mm	1.2	1.2

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TP NORTHERN ODISHA DISTRIBUTION LIMITED (A Tata Power and Odisha Government Joint Venture)	TECHNICAL SPECIFICATIONS			
Doc. Title	SPECFICATION FOR AAAC 33kV (241mm ²) & 11kV (99 mm ²) (COVERED TYPE)			
Doc. No	ENG-EHV-001		Eff. Date: 13.09.2021	
Rev No.	00	00		
Prepared by: Engineering Department	Reviewed by:	Approved by:	Issued by:	

11	Diameter over covering, min - max	mm	26.8 - 29.3	17.1 – 19.1
12	Weight, nominal	kg/KM	1023	450
13	Rated Operating Voltage Uo/U(Um)	kV	19/33(36)	6.35/11(12)
14	DC resistance at 20°C, maximum	Ω/km	0.132	0.318
15	Resistance temperature co- efficient	/°C	0.004	0.004
16	Operating temperature, maximum	°C	90°C	90°C
17	Maximum allowable Temperature during short circuit		250°C	250°C
18	Maximum Load (IEC 61597), cond. Temp. 90°C, air temp. 50°C, Solar radiation 1000W/m ² , wind speed 1m/s, α =0.9, ϵ = 0.15 approximate value	Amps	520	320
19	Maximum Short circuit current, 1 sec. 80 -250 °C	kA	24.1	10
20	Tensile Strength of conductor, minimum	kN	To be provided by bidder	To be provided by bidder
21	Type of Aluminium Alloy	-	To be provided by bidder	To be provided by bidder
22	Insulation Resistance (Volume	Ω-cm	To be provided by bidder	To be provided by bidder
	Resistivity) (Min)	Ω-cm	To be provided by bidder	To be provided by bidder

5. GENRERAL CONSTRUCTION

These Specifications lay down the Constructional, Dimensional and Performance Requirements for Covered Conductors which consist of a Conductor surrounded by a Covering made of Insulating Material (as described hereunder) as protection against Accidental Contacts with other Covered Conductors and with Grounded Parts such as Tree Branches, etc.

5.1 CONDUCTORS

CONDUCTOR MATERIAL: Aluminum Alloy (AAAC)

NOMINAL CROSS SECTION: To be specified as per requirement

CONDUCTOR DESIGN: The Conductor shall be stranded, round and should be Non-Compacted. Non-Compacted Conductors shall comply with all the requirements of EN 50397-1-2006. The D.C. Resistance of the conductor shall not exceed that given in EN 50397-1-2006 by more than 5%.

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	TECHNICAL SPECIFICATIONS		
Doc. Title	SPECFICATION FOR AAAC 33kV (241mm ²) & 11kV (99 mm ²) (COVERED TYPE)		
Doc. No	ENG-EHV-001		Eff. Date: 13.09.2021
Rev No.	00	Page 5 of 14	
Prepared by: Engineering Department	Reviewed by:	Approved by:	Issued by:

5.2 FILLING (WATER BLOCKING)

• The Stranded Conductor shall be longitudinally water tight by means of a water blocking material incorporated during the extrusion process. The use of grease / water swellable tape / water swellable powder etc. is not permitted. The water blocking material shall be stable at maximum operating conductor temperature of 90 Deg. Cent. The water blocking compound shall be compatible with the conductor material as well as the semi conducting polymer screen layer above it and not adversely affect its electrical or mechanical properties.

5.3 SEMICONDUCTOR SCREEN

• A semi conductive polymeric screen should be applied over the filled stranded conductor to ensure a lower voltage stress on the Insulation applied over the screen. The thickness of the semi conductive polymeric screen should be between 0.2 mm and 0.4 mm.

5.4 INSULATION

- The Insulation should be dual layered with the Inner Layer being XLPE with a nominal thickness of 1.2 mm for Voltages up to11 KV and the Outer Layer being a suitable Polymer which is UV Resistant, Non Tracking and Erosion Resistant with a nominal wall thickness of 1.1 mm for Voltages up to 11 KV. The nominal combined Insulation Thickness of both Layers should be 2.3 mm for 11 KV.
- Nominal thickness of 2.4 mm for Voltages for 33 KV and the Outer Layer being a suitable Polymer which is UV Resistant, Non Tracking and Erosion Resistant with a nominal wall thickness of 1.1 mm for Voltages 33 KV. The nominal combined Insulation Thickness of both Layers should be 3.6 mm for 33 KV.
- The conductor manufacturing and stranding process shall incorporate the longitudinal water blocking also.
- The Semi Conducting Screen, Inner Insulation and Outer Insulation should be extruded in one step i.e. triple extrusion to ensure a good, permanent bond between the three layers and also with the conductor.
- It shall be possible to remove the Semi Conducting Screen, Inner and Outer Insulation Layers without damage to the conductor.
- Figure 1 shows the Cross Section of a Covered Conductor with AAAC Conductor

Aluminium alloy wires
Extruded, longitudinal water blocking layer
Extruded, semi conductive layer
Covering (insulation) of XLPE, without carbon black
UV-resistant XLPE

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Doc. Title	SPECFICATION FOR AAAC 33kV (241mm ²) & 11kV (99 mm ²) (COVERED TYPE)			
Doc. No	ENG-EHV-001		Eff. Date: 13.09.2021	
Rev No.	00		Page 6 of 14	
Prepared by: Engineering Department	Reviewed by:	Approved by:	Issued by:	

5.5 LAYING OF CORES

Cores shall be laid up with a right-hand lay, and shall have a lay length not exceeding 28(d1+d2), where; d1 is the core diameter, including sheath, in mm. d2 is the diameter of the messenger, including the outer protective covering where applicable, in mm.

5.6 STRANDING

The wire used in the construction of a stranded conductor shall, before and after stranding, satisfy all the relevant requirements of IS 398(Part-IV): 1994. The lay ratio of the different layers shall be within the limits given in IS 398(Part-IV): 1994. The successive layers shall have opposite directions of lay, the outermost layer being right - handed. The wires in each layer shall be evenly and closely stranded. The lay ratio of any layer shall not be greater than the lay ratio of layer immediately beneath it.

5.7 CABLE DRUM

Cables shall be furnished in the specified reels or coil lengths of 500 meters. Drums shall be of nonreturnable wooden drums as per IS 10418:1982 and the drums should be free from defects such as through cracks, knots, warps and split. The ends of the cables shall be suitably sealed by means of nonhygroscopic sealing. The tolerance on the Drum length shall be +/- 5%.

6. MARKING

The cable shall carry the following information either stenciled on the drum or contained in a label attached to it:

a) Reference to the Standards.

- b) Manufacturer's name
- c) Type of cable.
- d) Voltage grade.
- e) Number of cores.
- f) Nominal cross-section area of the conductor.
- g) Length of the cable on the drum.
- h) Length of the cable per m.
- i) Marking of PO
- j) Direction of rotation of the drum.
- k) Gross mass.
- I) Country of manufacture.
- m) Year of manufacture.
- n) ISI Certification mark.

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Doc. Title	SPECFICATION FOR AAAC 33kV (241mm ²) & 11kV (99 mm ²) (COVERED TYPE)		
Doc. No	ENG-EHV-001		Eff. Date: 13.09.2021
Rev No.	00	00	
Prepared by: Engineering Department	Reviewed by:	Approved by:	Issued by:

7. **TESTS :**

All routine, acceptance & type tests shall be carried out in accordance with the relevant IS/IEC. All Routine/acceptance tests shall be witnessed by the purchaser/his authorized representative. All the test shall be carried out as per EN50397 – 1:2006

<u>TYPE TESTS :</u>

Conductor Resistance Test

Thickness of Insulation & Covering

Tensile strength

%age Elongation at break of Insulation before ageing, after ageing & Completed Cable ageing

Carbon black content test on outer covering

Shrinkage test on outer covering

Shrinkage test on Insulation

Hot set test on Insulation

Water Absorption test on Insulation

Test for longitudinal water tightness

AC High Voltage test

Leakage Current Measurement

Tracking Resistance test

ELECTRICAL TESTS:

A) Conductor Resistance Test: To be done as a Routine as well as Type Test as per EN 50397-1-2006.

B) High Voltage Test as per EN 50397-1-2006. – Type test

Test Voltage --- Phase to Phase Voltage of the System for which the Covered Conductor is used.

No. of Specimens --- One

Length of Specimen (minimum) ---- 5 metres

Duration of Immersion in Water (minimum) ---- 1 Hour

Temperature of Water ---- (20 +/- 5) Degrees Centigrade

Test Duration ------ 4 Hours for Routine Test

48 Hours for Type Test

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Doc. Title Doc. No	ENG-EHV-001	N FOR AAAC 33kV (241mm ²) & 11	Eff. Date: 13.09.2021
Rev No.	00		Page 8 of 14
Prepared by: Engineering Department	Reviewed by:	Approved by:	Issued by:
Requirement: No	Breakdown		
C) Spark Test on C	overing: Routine tes	st	
Test Voltage 0.7 X	Phase to Phase Volt	tage of System (A, C,) or	
Phase to Phase Vo	ltage of System (D.	C.)	
Requirement: No	Breakdown		
D) Leakage Curren	t Test - Type test		
Test Voltage 0.7 X	Phase to Phase Volt	tage of System (A. C.)	
Requirement: Max	kimum Leakage Curr	rent 1mA	
E) Tracking Resista	ance: - Type test		
	L TESTS ON COVERIN	NC: Type tests	
A) Mechanical Pro		vo. Type tests	
		ble 1 (as per EN 50397-1-2006)	
		le 1 (as per EN 50397-1-2006)	
		e: As per Table 1 (as per EN 5039)	7-1-2006)
		accordance to (as per EN 50397-	
			e with EN 60811-3-1, Sub Clause
6.1.	0		
f) Water Absorptic	on: As per Table 1 ar	nd in accordance with EN 50397-	1-2006
TEST FOR LONGIT	JDINAL WATER TIGH	HTNESS	
As Type Test with	Heat Cycle and in ac	ccordance with 50397-1-2006.	
No of Specimen –	1		
Length of Specime	en – 3 meters		
Test Duration 24	l hours		
Bending Radius – 2	20 X Diameter of Co	vered Conductor	
Requirement – No	Leakage		
As Routine Test w	ithout Heat Cycle an	nd in accordance with IEC 60502 -	-2
No of Specimen –	1		
Length of Specime	en – 1 meter		
Test Duration – 1	Hour		
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Doc. Title	SPECFICATION FOR AAAC 33kV (241mm ²) & 11kV (99 mm ²) (COVERED TYPE)			
Doc. No	ENG-EHV-001		Eff. Date: 13.09.2021	
Rev No.	00	Page 9 of 14		
Prepared by: Engineering Department	Reviewed by:	Approved by:	Issued by:	

8. TYPE TEST CERTIFICATES:

The bidder shall furnish the type test certificates of the cable for the tests as mentioned as above as per the corresponding standards. All the tests shall be conducted by CPRI/ERDA as per the relevant standards. Type test should have been conducted in certified Test Laboratories during the period not exceeding 5 years from the date of opening the bid. In the event of any discrepancy in the test reports i.e., any test report not acceptable or any/all type tests (including additional type tests, if any) not carried out, same shall be carried out without any cost implication to TPNODL.

9. **PRE-DISPATCH INSPECTION:**

• The Material shall be subject to inspection by a duly authorized representative of the TPNODL. Inspection may be made at any stage of manufacture at the discretion of the purchaser and the equipment, if found unsatisfactory as to workmanship or material, the same is liable to rejection. Bidder shall grant free access to the places of manufacture to TPNODL's representatives at all times when the work is in progress. Inspection by the TPNODL or its authorized representatives shall not relieve the bidder of his obligation of furnishing equipment in accordance with the specifications. Material shall be dispatched after specific MDCC (Material Dispatch Clearance Certificate) is issued by TPNODL.

Following documents shall be sent along with material

- a) Test reports
- b) MDCC issued by TPNODL
- c) Invoice in duplicate
- d) Packing list
- e) Drawings & catalogue
- f) Guarantee / Warrantee card
- g) Delivery Challan
- h) h) Other Documents (as applicable).

10. INSPECTION AFTER RECEIPT AT STORE:

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

11. <u>GUARANTEE:</u>

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

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Doc. Title	SPECFICATION FOR AAAC 33kV (241mm ²) & 11kV (99 mm ²) (COVERED TYPE)			
Doc. No	ENG-EHV-001		Eff. Date: 13.09.2021	
Rev No.	00	00		
Prepared by: Engineering Department	Reviewed by:	Approved by:	Issued by:	

integrated product delivered under this contract. In the event any defect is found by the Purchaser up to a period of at least 12 months from the date of commissioning or 24 months from the date of last supplies made under the contract whichever is later, (the time scale of 12/24 months could be enhanced subject to mutual agreements). Bidder shall be liable to undertake to replace/rectify such defects at its own costs, within mutually agreed time frame, and to the entire satisfaction of 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. PACKING AND TRANSPORT:

The cable shall be wound on wooden drums and packed in line with requirements of IS 10418-1982. The ends of the cable shall be sealed by means of non-hygroscopic sealing material. Bidder shall ensure that all the equipment covered under this specification shall be prepared for rail/road transport in a manner so as to protect the equipment from damage in transit.

13. TENDER SAMPLE:

Bidder shall submit the sample of material with the offer (in case of first supply to TPNODL).

14. QUALITY CONTROL:

The bidder shall submit with the offer Quality assurance plan indicating the various stages of inspection, the tests and checks which will be carried out on the material of construction, components during manufacture and bought out items and fully assembled component and equipment after finishing. As part of the plan, a schedule for stage and final inspection within the parameters of the delivery schedule shall be furnished. The Purchaser's engineer or its nominated representative shall have free access to the manufacturer's/sub-supplier's works to carry out inspections.

15. TESTING FACILITIES:

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

16. TESTING FACILITIES:

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

17. SPARES, ACCESSORIES & TOOLS:

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Doc. Title	SPECFICATION FOR AAAC 33kV (241mm ²) & 11kV (99 mm ²) (COVERED TYPE)			
Doc. No	ENG-EHV-001	Eff. Date: 13.09.2021		
Rev No.	00	Page 11 of 14		
Prepared by: Engineering Department	Reviewed by:	Approved by:	Issued by:	

The bidder shall provide a list of complete set of accessories and tools required for erection and maintenance of XPE along with the installation procedure.

18. DRAWINGS AND DOCUMENTS:

Following drawings and documents shall be prepared based on TPNODL specifications and statutory requirements with complete BOM 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) Experience List
- d) Type test certificates.

After the contract, four (4) copies of the drawings, drawn to scale, describing the equipment in detail shall be forwarded for approval and shall subsequently provide four (4) complete sets of final drawings, one of which shall be auto positive suitable for reproduction, before the dispatch of the equipment. Soft copy (Compact Disk CD) of all the drawing, GTP, test certificates shall be submitted after the final approval of the same to the purchaser. All the Documents and Drawings shall be in English Language.

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

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

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Doc. Title	SPECFICATION FOR AAAC 33kV (241mm ²) & 11kV (99 mm ²) (COVERED TYPE)			
Doc. No	ENG-EHV-001	Eff. Date: 13.09.2021		
Rev No.	00	00		
Prepared by: Engineering Department	Reviewed by:	Approved by:	Issued by:	

Sl. No.	Description	For Approval	For Review Information	Final Submission	
1.	Technical Parameters	√		 ✓ 	
2.	Manual / Catalogues / Drawings for all components		✓		
3.	Technical Details and test certificates of XLPE compound		 ✓ 	✓	
4.	Cross – sectional area of the cable		✓	 ✓ 	
5.	Installation Instructions		 ✓ 	\checkmark	
6.	Instructions for use		 ✓ 	 ✓ 	
7.	Transport / Shipping dimension drawing		✓	✓	
8.	QA & QC Plan	✓	✓	\checkmark	
9.	Routine, Acceptance and Type test certificates	\checkmark	✓	\checkmark	
10.	Fault Level calculation for armor and manual	✓	✓	×	

19. GUARANTEED TECHNICAL PARTICULARS

Bidder shall submit guaranteed technical particulars in the attached format:

<u>SI.</u>	Particulars	<u>UoM</u>	<u>Requirements</u>	
<u>No.</u>			<u>33kV / 241</u>	<u>11kV / 99</u>
1	Type of conductor		To be provided	d by the bidder
2	Type of Insulation		To be provide	d by the bidder
3	Insulation Layers		To be provided by the bidder	
4	Applicable Standards			
5	Cross-sectional area	mm²	To be provided by the bidder	
6	Layup of conductor	No. / mm	To be provided by the bidder	To be provided by the bidder
7	Conductor diameter, bare conductor, nominal	mm	To be provided by the bidder	To be provided by the bidder
8	Form of Conductor		To be provided by the bidder	To be provided by the bidder
9	Inner semi-conductor layer, thickness, nominal	mm	To be provided by the bidder	To be provided by the bidder

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TP NORTHERN ODISHA DISTRIBUTION LIMITED (A Tata Power and Odisha Government Joint Venture)				
Doc. Title	SPECFICATION FOR AAAC 33kV (241mm ²) & 11kV (99 mm ²) (COVERED TYPE)			
Doc. No	ENG-EHV-001		Eff. Date: 13.09.2021	
Rev No.	00	00		
Prepared by: Engineering Department	Reviewed by:	Approved by:	Issued by:	

10	Inner XLPE covering, thickness, nominal	mm	To be provided by bidder
	Outer UV - resistance XLPE covering, thickness, nominal	mm	To be provided by bidder
11	Diameter over covering, min - max	mm	To be provided by bidder
12	Weight, nominal	kg/KM	To be provided by bidder
13	Rated Operating Voltage Uo/U(Um)	kV	To be provided by bidder
14	DC resistance at 20°C, maximum	Ω/km	To be provided by bidder
15	Resistance temperature co- efficient	/°C	To be provided by bidder
16	Operating temperature, maximum	°C	To be provided by bidder
17	Maximum allowable Temperature during short circuit		To be provided by bidder
18	Maximum Load (IEC 61597), cond. Temp. 90°C, air temp. 50°C, Solar radiation 1000W/m ² , wind speed 1m/s, α =0.9, ϵ = 0.15 approximate value	Amps	To be provided by bidder
19	Maximum Short circuit current, 1 sec. 80 -250 °C	kA	To be provided by bidder
20	Tensile Strength of conductor, minimum	kN	To be provided by bidder
21	Type of Aluminium Alloy	-	To be provided by bidder
22	Insulation Resistance (Volume	Ω-cm	To be provided by bidder
	Resistivity) (Min)	Ω-cm	To be provided by bidder

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TP NORTHERN ODISHA DISTRIBUTION LIMITED (A Tata Power and Odisha Government Joint Venture)	TECHNICAL SPECIFICATIONS				
Doc. Title	SPECFICATION FOR AAAC 33kV (241mm ²) & 11kV (99 mm ²) (COVERED TYPE)				
Doc. No	ENG-EHV-001 Eff. Date: 13.09.2021				
Rev No.	00 Page 14 of 14				
Prepared by: Engineering Department	Reviewed by:	Approved by:	Issued by:		

20. 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:

SI. No.	Clause No.	Details of deviation with justifications
We confirm that there are no devia	ations apart from those mentioned	above.
Seal of the Company		Designation
		Signature

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