

ଓଡ଼ିଶା ବିଦ୍ୟୁତ ଶକ୍ତି ସଂଚାରଣ ନିଗମ ଲିଃ.



ODISHA POWER TRANSMISSION CORPORATION LTD.

(A Government of Odisha Undertaking)

CIN: U40102OR2004SGC007553 /GTIN: 21AAACO7873L1Z6

REGD. OFFICE: JANPATH, BHUBANESWAR – 751 022,

OFFICE OF THE GENERAL MANAGER, (Elect)

EHT (O&M) CIRCLE: CHAINPAL, AT: MATIASAHI, PO: HAKIMPADA

PIN-759143, and DIST: ANGUL (ODISHA)

E-mail-ehm.cle.chp@optcl.co.in

e-TENDER SPECIFICATION NO. CHP-02/2025-2026

FOR

Supply of Hardware fittings, Clamp required for stringing of Earth wire in 132KV Joranda Road Traction Line and Conversion of 132KV Joranda Road Traction Line from 2-phase to 3-phase SC under EHT (O & M) Division, Dhenkanal” and Railway Diversion work of different Lines and 2-phase to 3-phase Conversion of 132KV Kharagprasad-Meramundali RTSS Line & 132 Chainpal-Talcher Road RTSS Line under EHT (O & M) Division, Chainpal.

PART-I

SECTION-I: INSTRUCTION TO BIDDERS.

SECTION-II: GENERAL CONDITIONS OF CONTRACT

SECTION-III: TECHNICAL SPECIFICATIONS

SECTION-IV: SCHEDULE OF QUANTITY

SECTION-IV: SCHEDULE OF QUANTITY

PART II

PRICE BID & TECHNO COMMERCIAL BID (IN EXCEL FORMAT)

Request for online tender documents: From dt- 02.09.2025 (10.00 Hrs) to dt-17.09.2025 (12.30 Hrs)

Issue of online tender documents: From dt- 02.09.2025 (10.01 Hrs) to dt-17.09.2025 (12.31 Hrs)

(Bid sheets)

Last date of submission of online tender: Up to dt-17.09.2025 (16.00 Hrs)

Date of opening of Techno-commercial Bid: On dt- 18.09.2025 (11.30 Hrs)

Date of Opening of Price Bid: To be intimated after Sample Selection

TELEPHONES / CONTACTS

1. General Manager: 9438907152
2. TA to General Manager: 9438907808
3. AGM(Finance):9438907651

NOTE: -

1. In case the due date for opening of tender happens to be a holiday, then tenders would be received & opened on the next working day at the same time.
2. Please note that the tenders against this tender enquiry are being invited **through e-tendering mode**. In case of any clarification the prospective bidders may contact this office as mentioned above.
3. **The prospective bidders are requested to get their digital signatures (Class-3) well in time** for participation in the tender and no request for extension on this account will be entertained.
4. **Manual tenders in any form/case will not be accepted.**

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ODISHA POWER TRANSMISSION CORPORATION LTD.

(A Government of ODISHA Under Taking)

Regd. Office: Janpath, Bhubaneswar-751022, Odisha

OFFICE OF THE GENERAL MANAGER: ELECT.

EHT (O&M) CIRCLE: CHAINPAL, AT: MATIASAHI, PO-HAKIMPADA

DIST: ANGUL (ODISHA), Pin-759143, Email-ehm.cle.chp@optcl.co.in

CIN:U40102OR2004SGC007553/ GTIN:21AAACO7873L1Z6

NOTICE INVITING E-TENDER

For and on behalf of ODISHA POWER TRANSMISSION CORPORATION LTD, General Manager, EHT (O&M) Circle, Chainpal invites Tenders from reputed bidders fulfilling the eligibility criteria and must possess valid PAN and GST certificate for the work of “**Supply of Hardware fittings, Clamp required for stringing of Earth wire in 132KV Joranda Road Traction Line and Conversion of 132KV Joranda Road Traction Line from 2-phase to 3-phase SC under EHT (O & M) Division, Dhenkanal**” and Railway Diversion work of different Lines and 2-phase to 3-phase Conversion of 132KV Kharagprasad-Meramundali RTSS Line & 132 Chainpal-Talcher Road RTSS Line under EHT (O & M) Division, Chainpal”. The interested bidders would be required to enroll themselves on the tender portal www.tenderwizard.com/OPTCL. Complete set of bidding documents shall be available at www.tenderwizard.com/OPTCL from **02.09.2025 (10.00 Hrs) up to 17.09.2025 (12.30 Hrs)**. Interested bidders may visit OPTCL’s official web site <http://www.optcl.co.in> and www.tenderwizard.com/OPTCL for detail specification.

N.B:- All subsequent addendums/corrigendum to the tender shall be hosted in the OPTCL’s official web site <http://www.optcl.co.in> and www.tenderwizard.com/OPTCL only.

The above Tender is a Two-part bidding system in e-tendering mode only as per the following details.

e-Tender Specification No: CHP-02/2025-26

Request for online tender documents: From dt- 02.09.2025 (10:00 Hrs) to dt-17.09.2025 (12:30 Hrs)

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Date of opening of Techno-commercial Bid: On dt- 18.09.2025 (11.30 Hrs)

Date of Opening of Price Bid: To be intimated after Sample Selection

Cost of Tender Spec Document : Rs.6000/ + Rs1080/- (GST@18%)= Rs 7080/-

Earnest Money Deposit: Rs. 18500.00/- (Rupees Eighteen Thousand Five Hundred)

Tender Processing Fee: Rs. 2183.00/- [1850.00+ 333.00(GST @ 18%)]

ELIGIBILITY FOR SUBMISSION OF BIDS:-

Bidders should not have any legal suit against OPTCL / GRIDCO Ltd / SLDC are only eligible for submission of Bids. Firms banned / blacklisted for business dealings by any organization are not eligible to participate in the tender. Participation in the tender by suppression of the above facts shall invite penal action, whenever detected.

The bidders must have in possession of following qualifications for participation in tender:-

- 1. Manufacturer More Than 2years/Authorized Dealer.**
- 2. GST Registration Certificate.**
- 3. Permanent Account Number (PAN) issued by Income Tax Department.**
- 4. Experience regarding supply of above material to any State/Central, GOVT./PSU organization within Last Three Years with performance of at least One Year.**

The bidders can view the tender documents from website free of cost. The bidders who want to participate in the tender shall have to pay **Rs.7080/- (Rupees Seven thousand Eighty only) non refundable** including GST @ 18%) towards the cost of tender document, in the form of Demand draft only, drawn in favour of **GM(Elect),EHT (O&M) Circle Chainpal, Payble at UCO Bank , Main Branch, Angul**(*In case the D.D made from any other nationalized bank payable at any clearing branch at Talcher/Angul will be allowed, But the bidders have to deposit the collection fee (Bank transaction fee) along with the paper cost. The collection fee & Paper cost is Nonrefundable*) and the same is to be submitted to the office of the undersigned on or before the last date & time of Opening of tender.

*** NSIC/MSME certificate holders may allow free of paper cost but 50% of EMD value have to deposit. The Firm has to submit the document proof regarding NSIC/MSME firm along with the DD of EMD to this office before opening of Tender, else bid will be rejected.**

*The bidders shall have to submit a non refundable amount of : **Rs. 2183.00/- (Rupees Two Thousand One Hundred Eighty Three)** towards the tender processing fee through e-payment gate way.*

*(NOTE: For deposit of tender processing fee to **K.S.E.D.C. Ltd. Bangalore**, the bidder can use various modes of e-payment facility available through Tender wizard Portal, i.e. by **Credit Card, Debit Card, Net Banking**)*

The payment acknowledgement slip submitted along with the EMD & tender cost at the office of the undersigned on or before the last date & time of Opening of tender.

The bidders shall scan the Demand Draft towards EMD, Tender paper Cost and acknowledgement slip for tender processing fee and upload the same in the prescribed form in **.gif** or **.jpg** format **in addition to sending the original as stated above.**

The prospective bidders are advised to register their user ID, Password, company ID from website www.tenderwizard.com/OPTCL by clicking on hyper link "Register Me".

Any clarifications regarding the scope of work and technical features of the tender can be had from the undersigned during office hours.

**GENERAL MANAGER
EHT (O&M) CIRCLE, CHAINPAL**

SECTION-I
INSTRUCTIONS TO BIDDER

1. Submission of Bids: -

The bidder shall submit the bid in Electronic Mode only i.e **www.tenderwizard.com/OPTCL**. The bidder must ensure that the bids are received in the specified website of the OPTCL by the date and time indicated in the Tender notice. Bids submitted by telex/telegram will not be accepted. No request to collect the Bids in physical form will be entertained by the OPTCL.

The OPTCL reserves the **right to reject any bid, which is not submitted documents** according to the instruction, stipulated above. The participants to the tender should be registered under GST/IT Act.

- i. For all the users it is mandatory to procure the Class 3 Digital Signatures.**
- ii. The bidders are requested to follow the below steps for Registration:**
 - a. Click “Register”, fill the online registration form.
 - b. Pay the amount of **Rs.2360/-** for registration fee through **e-payment gateway**.
 - c. This registration is valid for one year.
 - d. Send the acknowledgment copy for verification.
 - e. As soon as the verification is being done, the e-tender user id will be enabled.
- iii. After viewing Tender Notification, if bidder intends to participate in tender, he has to use his e-tendering User Id and Password which has been received after registration and acquisition of DSCs.**
- iv. If any Bidder wants to participate in the tender he will have to follow the instructions given below:**
 - a. Insert the PKI (which consist of your Digital Signature Certificate – Class 3) in your System.
(Note:
Make sure that necessary software of PKI be installed in your system).
 - b. Click / Double Click to open the Microsoft Internet Explorer (This icon will be located on the Desktop of the computer).
 - c. Go to Start > Programs > Internet Explorer.
 - d. Type **www.tenderwizard.com/OPTCL** in the address bar, to access the Login Screen.
 - e. Enter e-tender User Id and Password, click on “Go”.
 - f. Click on “Click here to login” for selecting the Digital Signature Certificate (DSC).
 - Select the Certificate and enter DSC Password.
 - Re-enter the e-Procurement User Id Password
- v. To make a request for Tender Document, Bidders will have to follow below mentioned steps.**
 - Click “Un Applied” to view / apply for new tenders.

- Click on Request icon for online request.
- Enter the required fields including details of D.D for tender Processing fee.
- vi. After making the request Bidders will receive the Bid Documents which can be checked and downloaded by following the below steps:
 - Click to view the tender documents which are received by the user.
 - Tender document screen appears.
 - Click “Click here to download” to download the documents.
- vii. After completing all the formalities Bidders will have to submit the tender and they must take care of following instructions.
 - Prior to submission, verify whether all the required documents have been attached and uploaded to the particular tender or not.
 - Note down / take a print of bid control number once it displayed on the screen
- viii. Tender Opening event can be viewed online.
- ix. Competitors bid sheets are available in the website for all.
- x. For any e-tendering assistant contact help desk number mentioned below.
 - Bangalore- 080-40482000
 - Mr. Satyamanyu- mob: 09937140591

2. Division of Specification.

The specification is mainly divided into two parts viz. Part-I & Part-II.

Part-I Consists of

- SECTION-I- INSTRUCTION TO BIDDERS.
- SECTION-II- GENERAL CONDITIONS OF CONTRACT
- SECTION-III- LIST OF ANNEXURE
- SECTION-IV- TECHNICAL SPECIFICATION.

Part-II Consists of

- 1) PRICEBID
- 2) TECHNO COMMERCIAL BID (excel sheet)

- 3. Purchaser’s Right Regarding Alteration of Quantities Tendered.** The Purchaser may alter the quantities of materials /equipment at the time of placing orders. Initially the purchaser may place orders for lesser quantity with full freedom to place extension orders for further quantity under similar terms and conditions of the original orders. Orders may also be split among more than one bidder for any particular item, if considered necessary in the interest of the Purchaser to get the goods/equipment earlier.

4. Purchaser’s right to accept/reject bids:

The purchaser reserves the right to reject any or all the tenders without assigning any reasons what so ever if it is in the interest of OPTCL, under the existing circumstances

5. Mode of submission of Tenders.

[A] Tenders shall be submitted in electronic mode only. (www.tenderwizard.com/OPTCL)

[B] **Telegraphic or FAX tenders** shall not be accepted under any circumstances.

6. Earnest money deposit:

- i) The tenderers are required to **deposit EMD of Rs.18, 500.00**, in shape of Demand Draft in **favour of GM, EHT (O&M) Circle Chainpal, Payable at UCO Bank, Main Branch, Angul** (*In case the D.D made from any other nationalized bank payable at any clearing branch at Talcher/Angul is allowed, the bidders however have to deposit the collection fee (Bank transaction fee) along with the paper cost. The collection fee & Paper cost is Nonrefundable*).
- ii) No interest shall be paid on earnest money deposit.
- iii) No adjustment towards EMD shall be permitted against any outstanding amount if any remained with this Office. In case of less deposit of EMD, the tender shall be liable for rejection.
- iv) The EMD of successful bidders can be refunded on written request after deposit of Security deposit.

7. Validity of the Bids: -

The tenders should be kept valid for a period of **180** days from the date of opening of the tender, failing which the tenders will be rejected.

8. PRICE: -

- (a) The price quoted should be firm, F.O.R. destination inclusive of freight, Insurance, Packing, Forwarding charges inclusive discount if any.
- (b) Taxes, if any shall be mentioned extra. The tender may quote rate in respect of different make of Materials as per scheduled

9. Bidders to be fully conversant with the clauses of the Specification:

Bidders are expected to be fully conversant with the meaning of all the clauses of the specification before submitting their tenders. In case of doubt regarding the meaning of any clause, the bidder may seek clarification in writing from the **GM, EHT (O&M) Circle, Chainpal**. This however does not entitle the Bidder to ask for time beyond due date, fixed for receipt of tender.

9. Documents to Accompany Bids.

- a) Bidders are required to submit tenders in the following manner:
- b) Declaration Form as per **Annexure-I** (duly signed) to be uploaded in ***.pdf** format.
- c) Earnest Money (scanned copy is to be uploaded)
- d) Abstract of Terms & conditions in prescribed proforma as per **Annexure-II**. To be keyed in the bid sheets provided.
- e) General Terms & Conditions of contract as per Section-II of the Specification. (All the required documents are to be uploaded.)
- f) Data on past experience if any **as per** the Specification.(Scanned copy to be uploaded)
- g) Proof of Manufacturer, Supplier, Authorised dealer, permanent account number [PAN] of the firm is required under Income tax Act., GST Certificate (Scanned copy to be uploaded).
- h) Any other document required, is to be uploaded.

- i) Schedule of prices in the prescribed proforma in the price bid sheet provided in *.xls format.
- j) Photostat copies of type test certificates of materials/equipments offered as stipulated in the Technical Specification

10. Conditional Offer:

Conditional offer shall not be accepted.

11. General Instruction to the Bidders : -

- i) The bidder must get him registered in tender portal by paying an amount of **mentioned in website, through e-payment gate way**. This registration is valid for one year.
- ii) The tender paper cost (Form fee non refundable) for an amount of **Rs.7080/- to be deposited in shape of DD.**
- iii) The tender processing fee for an amount of **Rs.2183/- (Non-refundable) is to be paid to KSEDCLimited, Bangalore through e-payment gateway.**
- iv) The EMD amount as specified is to be paid in shape of DD.
- v) In the event of discrepancy or arithmetical error in the schedule of price, the decision of the purchaser shall be final and binding on the Bidder.
- vi) Notice inviting tender shall form part of this specification.
- vii) The EMD shall be returned to the unsuccessful bidders after finalization of tender on written request.
- viii) It should be distinctly understood that the price bid and techno-commercial bid shall contain only details/documents relating to price and technical details, as mentioned herein above.
- ix) **The Bidder must submit the EMD amount, cost of tender document in shape of draft and proof of Tender processing fee in a sealed cover envelope super scribing the Tender Notice No & Date of opening of tender. The said envelope is to be submitted in the office of the purchaser on or before the last date and time of Opening of tender.**

PART-I

SECTION-II

GENERAL TERMS AND CONDITIONS OF CONTRACT [G.T.C.C.]

1. SCOPE OF THE CONTRACT:

The scope of contract shall be to **Supply Hardware fittings, Clamp required for stringing of Earth wire in 132KV Joranda Road Traction Line and Conversion of 132KV Joranda Road Traction Line from 2-phase to 3-phase SC under EHT (O & M) Division, Dhenkanal” and Railway Diversion work of different Lines and 2-phase to 3-phase Conversion of 132KV Kharagprasad-Meramundali RTSS Line & 132 Chainpal-Talcher Road RTSS Line under EHT (O & M) Division, Chainpalas** per technical requirement mentioned in the tender specification on Rail/Road transport at destination of OPTCL as specified in the schedule of quantity. **The materials so supplied shall be conforming to the relevant IS.**

2. DEFINATION OF TERMS:

For the purpose of this specification and General Terms and Conditions of contract [GTCC], the following words shall have the meanings hereby indicated, except where otherwise described or defined.

- 2.1 “The Purchaser” shall mean the **General Manager, EHT (O&M) Circle, Chainpal** for and on behalf of ODISHA POWER TRANSMISSION CORPORATION LTD., Bhubaneswar.
- 2.2 “The Engineer” shall mean the Engineer appointed by the Purchaser for the purpose of this contract.
- 2.3 “Purchaser’s Representative” shall mean any person or persons or consulting firm appointed and remunerated by the Purchaser to supervise, inspect, test and examine workmanship and materials of the equipment to be supplied.
- 2.4 “The supplier” shall mean the bidder whose bid has been accepted by the purchaser and shall include the bidder’s executives, administrators, successors and permitted assignees.
- 2.5 “Equipment” shall mean and include all machinery, apparatus, materials, and articles to be provided under the contract by the suppliers.
- 2.6 “Contract Price” shall mean the sum named in or calculated the bid.
- 2.7 “General Condition” shall mean these General Terms and Conditions of Contract.
- 2.8 The Specification” shall mean both the technical as well as commercial parts of the specification annexed to or issued with GTCC and shall include the **schedules** and drawings, attached thereto as well as all samples and pattern, if any.
- 2.9 “Month” shall mean “Calendar month”.
- 2.10 Writing” shall include any manuscript, type written, printed or other statement reproduction in any visible form and whether under seal or under hand.

- 2.11 “FOR Destination costs” shall mean the cost of equipment and material at the consignee’s store/site. The cost is inclusive of all taxes, packing, forwarding and insurance and freight charges.
- 2.12 The term “Contract document” shall mean and include GTCC, specifications, schedules, drawings, form of tender, Notice Inviting Tender, covering letter, schedule of prices or the final General Conditions, any special conditions, applicable to the particular contract.
- 2.13 Terms and conditions not herein defined shall have the same meaning as are assigned to them in the Indian Contract Act, failing that in the ODISHA General Clauses Act.

3. MANNER OF EXECUTION:

All materials to be supplied under the contract shall conform to the latest publication of relevant IS.

- 4. SUBMISSION OF SAMPLE:** The bidders are requested to submit the sample of each item quoted by them to this office before opening of Techno-commercial bid. The samples of all bidders shall be scrutinized by a sample scrutiny committee to be constituted by the purchaser. If required, the bidder or their authorized representatives may be informed to remain present during scrutiny of samples. The date of sample scrutiny will be intimated to the bidders in due course. The bidders, whose samples are approved by the committee, shall be considered for price comparison. *In no case, the bidders shall be allowed for change of sample.*

5. REJECTION OF MATERIALS.

In the event any of the equipments /material supplied by the manufacturer is found defective due to faulty design, bad workmanship, bad materials used or otherwise not in conformity with the requirements of the Specification, the Purchaser shall either reject the equipment /material or ask the supplier in writing to rectify or replace the defective equipment /material free of cost to the purchaser. The Supplier on receipt of such notification shall either rectify or replace the defective equipment /material free of cost to the purchaser within 15 days from the date of issue of such notification by the purchaser.

6. LANGUAGE and MEASURES:

All documents pertaining to the contract including specifications, schedule, notices, correspondence, operating and maintenance instructions, drawings or any other writing shall be written in English language. The metric system of measurement shall be used exclusively in this contract.

7. DELIVERY:-

The desired delivery period shall be within 30 days of placing purchase order.

8. DESPATCH INSTRUCTIONS:

- a) The materials should be securely packed and dispatched with E-Way bill by Rail/Road transport. Detailed instruction regarding dispatch of materials to OPTCL store will be indicated at the time of placing order.

b) Loading & unloading of Ordered Materials.

It will be the sole responsibility of the supplier for loading and unloading of materials both at the factory site and at the destination site/store. The Purchaser shall have no responsibility on this account.

- 9. DESTINATION:-**Grid S/S Dhenkanal and Grid S/S Chainpal.
- 10. FREE REPLACEMENT:** Free replacement of materials lost / damaged during transit shall be made immediately on receipt of the intimation from the consignee /Paying Officer without waiting for settlement of the claim of bidders with Railway/Lorry/Insurance Company etc.
- 11. STANDARDS:** The equipments shall strictly comply with relevant IS (Latest edition along with amendments if any) or equivalent standard as regards material, design, manufacture and testing etc.
- 12. QUANTITY VARIATION:** The quantity to be ordered may undergo revision at the time of placement of orders.
- 13. TERMS OF PAYMENT:**
 - a. 90% value of the consignment / purchase order with GST as applicable (including freight & Insurance charges) will be paid on receipt of materials in good condition at stores / desired site and satisfactory material verification . Balance 10% shall be paid on submission of performance Bank guarantee of equivalent amount with validity of two months more than the guarantee period. Performance Bank guarantee shall be released after successful completion of Guarantee Period. The Bill payment along with full taxes & duties (if any) shall be made after successful completion of the work in all respect as per JMC and verification thereof subject to approval of guarantee certificate & performance BG. Taxes and duties will be deducted from the bill as per statutory norm.
 - b. In the event of any breach or default in all or any condition of the contract, the contract Security-cum- performance guarantee shall be forfeited.
 - c. No interest shall be payable on contract Security-cum-Performance Guarantee.

14. PRICE REDUCTION FOR DELAY IN COMPLETION OF CONTRACT:

If the supplier shall fail to deliver the materials within the delivery period as stipulated under clause No.7 (Section-II) of this Tender document or any extension granted there to, the purchaser shall recover from the supplier penalty for a sum of half percent (i.e. 0.5 percent) of the contract price for each calendar week or part thereof of delay. However the total amount of penalty shall not exceed 5% (five percent) of the contract/ undelivered items price. Materials will be deemed to have been delivered only when all the component parts are also delivered. If certain components are not delivered in time, the supply will be treated as delayed until such time the missing/undelivered parts are delivered.

15. SECURITY-CUM-PERFORMANCE DEPOSIT:

The successful tenderers will be required to deposit a Security Deposit-cum-Performance Guarantee amounting to 10% of the contract value **valid up to two months after the guarantee period** shall be deposited within 10 days (Ten) days of placement of the Work order in the shape of DD/Composite B.G. from a Nationalized Bank, drawn in favour of **GM,EHT (O&M) Circle, Chainpal** which will be refunded after two months of completion of the Guarantee period on written request subject to approval of guarantee certificate. The B.G. format will be issued by OPTCL during the placement of the work order. In the event of any breach or default in all or any condition of Work Order, security deposit will be forfeited. In case the security amount is not deposited, the same shall be deducted from the bill of the supplier. **Security Deposit not claimed for refund within three years from the date of expiry of Guarantee period shall be forfeited**

16. Insurance

The Supplier shall undertake insurance of stores covered by this Specification unless otherwise stated. The responsibility of delivery of the stores at destination in good condition rests with the Supplier. Any claim with the Insurance Company or transport agency arising due to loss or damage in transit has to be settled by the supplier. The Supplier shall undertake free replacement of materials damaged or lost, which will be reported by the consignee within 30 days of receipt of the materials at destination without waiting for the settlement of their claims with the carriers and underwriters.

17. Payment Due from the Supplier

All costs and damages, for which the supplier is liable to the purchaser, will be deducted by the purchaser from any money, due to the supplier, under any of the contract (s), executed with OPTCL.

18. Supplier's Responsibility.

Notwithstanding anything mentioned in the Specification or subsequent approval or acceptance by the Purchaser, the ultimate responsibility for design, manufacture, materials used and satisfactory performance shall rest with the Bidders. The Supplier(s) shall be responsible for any discrepancy noticed in the documents, submitted by them along with the bid(s)

19. Jurisdiction of the High Court of ODISHA.

20. Suits, if any, arising out of this contract shall be filed by either Party in a court of Law to which the jurisdiction of High court of ODISHA extends.

21. CONSIGNEE: SDO, 132/33 KV Grid S/S, Chainpal for EHT (O & M) Division, Chainpal. SDO, 132/33 KV Grid S/S, Dhenkanal for EHT (O & M) Division, Dhenkanal

22. PAYING OFFICER: GM(Elect), EHT (O & M) Circle, Chainpal

23. JURISDICTION OF HIGH COURT OF ODISHA.

Suits, if any, arising out of this contract shall be filed by either Party in a court of Law to which the jurisdiction of High court of ODISHA extends.

24. CORRESPONDENCES.

- i) Any notice to the supplier under the terms of the contract shall be served by Registered Post or by hand at the Supplier's Principal Place of Business.
- ii) Any notice to the Purchaser shall be served at the Purchaser's Principal Office in the same manner.

iii)

Official Address of the Parties to the Contract

The address of the parties to the contract shall be specified:-

Purchaser: General Manager,
EHT (O&M) Circle, OPTCL, Chainpal,
OPTCL
AT: MATIASAHI, PO-HAKIMPADA
DIST: ANGUL (ODISHA), Pin-759143,
Email-ehm.cle.chp@optcl.co.in

Supplier: Address
Telephone No.
Fax No.

25. Outright Rejection of Tenders

Tenders shall be out rightly rejected if the followings are not complied with:

- a) The bidder shall submit the bid in electronic mode only and shall submit the cost of tender document, EMD and Tender processing fee on or before the date and time of opening of the bid.
- b) The Tender shall not be submitted telegraphically or by FAX.
- c) The Tender shall be kept valid for a minimum period of 180 days from the date of opening of tender.
- d) The schedule of prices should be filled up fully to indicate the break-up of the prices including taxes and duties. Incomplete submission of this schedule will make the tender liable for rejection.
- e) The Bidder should quote '**FIRM**' price only and the price should be kept valid for a minimum period of 180 days from the date of opening of the tender.
- f) The prescribed EMD shall be submitted on or before the date and time of opening of the bid.
- g) The tenders not accompanied with the required test certificates.**
- h) The tender shall not be conditional.
- i) There must not be any violation to the terms & conditions set forth and provided in the tender specification.
- j) Attested copies of I.T. Pan card and GST registration certificate shall be submitted along with the tender.
- k) The bidder must submit sample of the item quoted along with the tender documents on or before tender opening time for sample scrutiny by the purchaser.**
- l) **Authorized dealership certificate** issued by the manufacturers (**In case of authorized dealer**), valid on the date of opening of the tender shall be submitted along with the tender.
- m) There must not be any deviation to the delivery schedule as specified in tender specification.
- n) All the necessary excel sheets like techno-commercial bid sheet etc. attached with the tender should be duly filled up without any empty cells.

- o) Bidders not fulfilling the qualifying criteria as mentioned in **ELIGIBILITY FOR SUBMISSION OF BIDS.**

26. E- REVERSE AUCTION PROCESS SHALL BE RESORTED TO IN THE TENDER AS FOLLOWS.:

Business Rule of e-Reverse Auction (e-RA)

- (A) Based on “Evaluated Bid Price” determined pursuant to **ITB Sub Clause 27.6**, the Bids shall be ranked in ascending order as L1, L2, L3-----Ln,
- (B) The Indicative Estimated Cost for e-RA for the package(s) is as indicated at **ITB 29.1** in BDS.
- (C) The e-RA shall be conducted, if the variation of lowest evaluated bidder’s price (L1) is more than +5% (+five percent) of the Indicative Estimated Cost.
- (D) The Applicable Ceiling Price for e-RA for bidders shall be their “Evaluated Bid Price” determined in accordance with **ITB Sub Clause 27.6**. During e-RA, the bidders shortlisted for participation in e-RA shall be permitted to place their prices lower than their Applicable Ceiling Price.
- (E) The e-RA shall be conducted on a designated electronic platform of any Application Service Provider (hereinafter referred to as “ASP”), for and on behalf of the Employer.
- (F) The ASP, as and when authorized by the Employer, will intimate the bidders regarding the details of electronic platform, procedure/ modality of e-RA process and other details, prior to e-RA.
- (G) Notwithstanding above, the bidder(s) who either do not submit the requisite compliances for e- RA or do not participate in e-RA, their original price bid as opened, if valid, shall be considered for evaluation.
- (H) Notwithstanding the e-RA conducted as aforesaid, OPTCL reserves the right to hold negotiations with the bidder with lowest evaluated price after e-RA (L1 bidder).
- (I) The Employer shall be the sole judge in this regard.

(j) Procedure for Reverse Auction (e-Reverse Auction (e-RA) shall be resorted to as follows:

STRATEGY FOR E-REVERSE AUCTION	
1	Bidders are required to go through the guide lines given below and submit their acceptance to the same.
2	e-Reverse Auction (RA) will be conducted in e-tender portal of OPTCL on specified date and time, while bidders shall quote from their own offices/places of their choice. Internet connectivity shall be ensured by the respective agencies/bidders themselves.
3	Demonstration/ training (if not trained earlier) of bidder’s nominated person(s), shall be done by KEONICS to explain all the rules related to e-Reverse Auction/ Business Rule document to be adopted.
4	The strategy to be used for reverse auction shall be “DYNAMIC TEMPLATE BIDDING”
Procedure for electronic Reverse Auctioning (e-RA):	

5	<p>a. The e-RA shall be conducted on www.tenderwizard.com/OPTCL only.</p> <p>Bidder has to submit letter towards agreement to the Process related Terms & Conditions for e- Reverse Auction, as per (Reverse Auction Process Compliance Form at Annexure-VI). In non-receipt of the same, vendors will not be allowed to participate in e-RA.</p> <p>e-RA shall be carried out after opening of Price bids and completion of Price bid evaluation, which will be intimated only to the techno-commercially qualified bidders by OPTCL as per procedure given below.</p>
	<p>d. OPTCL reserves the right to conduct e-RA and it is obligatory on part of bidder(s) invited to participate in e-RA process once they have responded to the techno-commercial bid.</p>
6	<p>Prior intimation/ Notice for RA invitation will be given to techno-commercially qualified bidders regarding the date & time of opening of the e-RA.</p> <p>The start bid price (SBP) for e-Reverse Auction of each bidder under a particular package shall be the L1 evaluated price for the subject package including Taxes & Duties for the total scope for subject Package. Taking the above discovered L1 price as the upper limit e-RA will be conducted to determine the lowest possible price.</p> <p>Reverse Auction will be conducted amongst first 50% of the technically qualified bidders arranged in order of prices from lowest to highest, as L1, L2, L3 ----- Ln, and L1 price will be discovered. Minimum of 3 bidders shall be eligible for e RA. (eg. If 4 bidders are financially evaluated then the L1, L2 and L3 bidders shall be eligible for e-RA). Number of bidders eligible for participating in RA would be rounded off to next higher integer value if number of technically qualified bidders is odd (e.g. if 7 bids are technically qualified, then RA will be conducted amongst L1 to L4).</p> <p>However, in case only two bidders are found to be responsive, e-RA would be carried out with both the parties without any elimination. However, OPTCL reserves the right to invite the evaluated L1 bidder for negotiation without conducting the e-RA.</p> <p>In case of price submitted by any bidder is found to be abnormal, OPTCL reserves the right to reject the bid of the bidder(s).</p> <p>Rank of bidders would be displayed as per the total cost to OPTCL, i.e including Taxes and Duties payable by OPTCL as per the provisions of the bidding document & after e-RA process is over.</p>

7	<p>Names of bidders/ vendors shall not be disclosed during the e-RA process. Names of bidders/ vendors shall be anonymously masked in the e-RA process.</p> <p>In case of RA, start/ reference price and step value of decrement shall be indicated to the bidders at the start of the auction. Any participating bidder can bid one or multiple step decrement lower than the prevailing lowest bid at that time. The Bidder shall be able to view Bid Start Price, Bid Decrement Value, Prevailing Lowest Bid value, last Bid Placed by him and time left for bidding.</p> <p>The step value of decrement in a package to be offered by bidder (the minimum amount of reduction in the total bid price including all taxes & duties during auction), shall be kept at 0.15% of L1 bidder's final evaluated price (or) at approved amount as decided by OPTCL.</p> <p>Bidders can only quote any value lower than their previous quoted price. However, at no stage, increase in Price will be permissible.</p> <p>(iv) At any point during Reverse Auction, bidding Price field shall remain enabled for the bidders. The reverse auction period shall be unlimited and the initial auction period (1st slot) will be of thirty (30) minutes with provision of auto extension by (10) ten minutes from the schedule/ extended closing time. If any fresh lower bid is received in last ten minutes of initial auction period or extended auction period, the auction shall get extended automatically for another 10 minutes. In case, there is no bid received during schedule/extended slot, the auction shall get closed automatically without further extension.</p> <p>(v) However, bidders are advised not to wait till the last minute or last few seconds to enter their bid during the period of e-reverse auction to avoid complication related with internet connectivity, network problem, system crash down, power failure etc.</p>
8	<p>After conclusion of e-Reverse Auction i.e (Closing Price in Reverse Auction will be taken as offered price by the L1 bidder), decrease in price of individual head of the template shall be considered proportionately on all individual line items of the respective head of the price schedule of the successful L1 bidder.</p> <p>Any bid received at the tender wizard server end subsequent to closure of the e-RA shall be summarily rejected and shall not be considered as a valid bid under whatsoever circumstances. For this purpose, tender wizard server log shall prevail.</p> <p>The bidder shall not involve himself or any of his representatives in price manipulation of any kind directly or indirectly by communicating with other bidders.</p> <p>During Reverse Auction, If no bid is received within the specified time, OPTCL, at its discretion, may decide to close the reverse auction process/ proceed with conventional mode of tendering [Evaluation of Part-II (price bid) submitted by bidders earlier].</p>
9	<p>Consequent upon completion of e-Reverse Auction, OPTCL's decision on award of contract shall be final and binding on the bidders.</p> <p>OPTCL shall be at liberty to call the L1 bidder for further process/ negotiation and also at liberty to cancel the e-reverse auction process/ re-tender at any time, without assigning any reason thereof. OPTCL can decide to reschedule or cancel any reverse auction: the bidders shall be informed accordingly.</p> <p>OPTCL/ Service Provider shall not have any liability to bidders for any interruption or delay in access to the e-Tender site/ Reverse Auction link irrespective of the cause.</p>

**GENERAL MANAGER
EHT (O&M) CIRCLE, CHAINPAL**

SECTION – III

(A) TECHNICAL SPECIFICATION FOR HARDWARE FITTINGS & ACCESSORIES SUITABLE FOR FOR ACSR PANTHER CONDUCTOR

1.0 SCOPE

This Specification covers design, manufacture, assembly, testing at manufacturer's Works, supply and delivery of Hardware fittings, Clamp required for stringing of Earth wire in 132KV Joranda Road Traction Line and Conversion of 132KV Joranda Road Traction Line from 2-phase to 3-phase SC under EHT (O & M) Division, Dhenkanal" and Railway Diversion work of different Lines and 2-phase to 3-phase Conversion of 132KV Kharagprasad-Meramundali RTSS Line & 132 Chainpal-Talcher Road RTSS Line under EHT (O & M) Division, Chainpa.". The hardware to be supplied shall be as per drawings to be approved by OPTCL **AND CONFIRMING TO ISS AND IEC**. The firm shall submit his drawings in line with the Specification of OPTCL indicating clearly all dimensions on the body of the drawing for approval of OPTCL and only after which the manufacturing shall be started.

The hardware offered, shall be complete with all components, which are necessary or usual for the efficient performance and satisfactory maintenance. Such part shall be deemed to be within the scope of contract. The AGS type clamps shall have inbuilt AGS clamps/PA Rods.

2.0 STANDARDS

The materials covered under this Specification shall comply with the requirement of the latest version of the following standards as amended up to date, except where specified otherwise.

1)	IS:2486 Part-II & III	Insulator fitting for overhead power lines with a nominal voltage greater than 1,000 volts.
2)	IS:2121 Part I & II	Conductor & earth wire accessories for overhead power lines.
3)	IS:9708	Stock Bridge Vibration Dampers on overhead power lines.
4)	IS:2633	Method of testing of uniformity of coating on zinc coated articles
5)	IS:209	Specification for Zinc.
6)	BS:916	Specification for Hexagonal bolts and nuts.

3.0 MATERIALS AND DESIGN

Aluminum and aluminum alloys, malleable iron and forged steel, having required mechanical strength, corrosion resistance and machinability depending on the types of application for which accessories / fittings are needed, shall be employed. In manufacturer of the accessories / fittings, the composition of the aluminum alloys used shall be made available to Employer if required for verification.

The materials offered shall be of first class quality, workmanship, well finished and approved design. All castings shall be free from blow-holes, flaws, cracks of other defects and shall be smooth, close grained and true forms and dimensions. All machined surfaces should be free, smooth and well finished.

Metal fittings of specified material for conductor and string insulator fittings are required to have excellent mechanical properties such as strength, toughness and high resistance against corrosion. All current carrying parts shall be so designed and manufactured that contact resistance is reduced to the minimum.

All bolts, nuts, bolt-heads shall be the white worth's standard thread. Bolt heads and nuts shall be hexagonal. Nuts shall be locked in an approved manner. The treads in nuts and tapped holes shall be cut after galvanising and shall be well fabricated and greased. All other treads shall be cut before galvanising. The bolt treads shall be undercut to take care of increase in diameter due to galvanising.

All nuts shall be made of materials to Clause 4.8 of IS: 1367 (latest edition) with regard to its mechanical properties.

The general design of conductor and insulator fittings shall be such as to ensure uniformity, high strength, free from corona formation and high resistance against corrosion even in case of high level of atmosphere pollution.

All hooks, eyes, pins, bolts, suspension clamps and other fittings for attaching to the tower or to the line conductor shall be so designed that the effects of vibration, both on the conductor and the fittings itself, are minimized.

Special attention must be given to ensure smooth finished surface throughout. Adequate bearing area between fittings shall be provided and point or line contacts shall be avoided.

All accessories, clamps and hardware shall be free from cracks, shrinks, slender air holes, burrs or rough edges.

The design of the accessories, clamps and hardware shall be such as to avoid local corona formation or discharge likely to cause interference to Tele-transmission signals of any kind.

4.0 GALVANISING:

All ferrous parts of conductor accessories and insulator hardware shall be galvanized in accordance with IS: 2629-Recommended Practice for hot dip galvanizing of iron and steel or any other equivalent authorities' standards. The weight of zinc coating shall be determined as per method stipulated in IS: 2633 for testing weights, thickness and uniformity of coating of hot dip galvanized articles or as per any other equivalent authoritative standards. The zinc used or galvanization shall conform to grade Zn 98 of IS: 209. The galvanized parts shall withstand four (4) dips of 1 minute each time while testing uniformity of zinc coating as per IS: 2633.

Spring washers shall be electro galvanized.

ACCESSORIES FOR CONDUCTOR & GROUNDWIRE

5.0 VIBRATION DAMPER (FOR ACSR PANTHER CONDUCTOR)

Vibration Damper having 4 resonance frequency characteristic commonly called 4R Damper shall be offered. The Damper shall eliminate fatigue on the conductor due to vibration and damp out the vibration effectively so that no damage due to vibration is caused to conductor / ground wire/ string.

The dampers are proposed to be used at all tension locations and also at suspension locations. One or more dampers are proposed to be used on tension/suspension locations depending upon the span.

Bidder shall also recommend the number of damper required to effectively damp out conductor or ground wire vibration for different values of span lengths and the distance of fixation.

Vibration dampers shall be of approved design. The clamps of the vibration dampers shall be made of aluminum alloy, so designed as to prevent any damage while fixing on the conductor during erection or in continued operation. The fastening bolts should be approved by the Employer. The spring washers should be electro galvanized and of minimum 2 mm thickness. The messenger cable shall be made from high tensile strength steel strands in order to prevent subsequent drop of weight in service.

Clamping bolts shall be provided with self locking nuts as designed to prevent corrosion of the threads. All ferrous parts including the messenger cable shall be hot dip galvanized. The end of the messenger cable shall be effectively sealed to prevent corrosion.

The vibration dampers and its attachment shall have smooth surface so that no corona occurs on them.

The clamps of the stock bridge vibration dampers shall be so designed that in case of loosening of the bolt or changing free parts of the clamp, it does not allow the damper to disengage from the conductor.

6.0 TENSION CLAMPS (DEAD AND ASSEMBLY) FOR GROUND WIRE)

Compression type dead end assembly of G.S.S ground wire shall be required for use on the tension towers. The dead end assembly shall be supplied with complete jumper terminals, nuts and bolts suitable link pieces between the steel clevis and tower strain plates so as to provide sufficient flexibility not less than that of G.S.S ground wire and the tensile strength not less than 90% of that of the G.S.S ground wire. The assemblies shall comprise of compression type dead end clamps and one anchor shackle made of forged steel. The entire assembly shall be hot dip galvanized. Instead of welding 2 separate aluminum materials as shown in the drawing, the entire jumper cone (pad and conduction holding portion) should be extruded from a single aluminum pipe.

One of bolt holding joint per terminal of dead end assemblies shall be kept sufficiently long and threaded and shall be provided with nuts, washers and locking nuts for fixing the flexible earthing bond between the dead-end clamp and tower structures.

7.0 INSULATOR HARDWARES

The insulator disc hardware and string assemblies to be offered by the tenderer shall be suitable to meet the requirement given in the specific technical particulars as detailed hereinafter.

Hardware for suspension and tension insulator shall be suitable for insulator with normal pin shank diameter of 20 mm. in case of tension string unit and 16mm for suspension string unit.

Each insulator string shall generally include the following hardware component

Single Tension Set :	Double Tension Set :
a) Anchor Shackle.	a)Anchor Shackle.
b) Ball Eye.	b)Chain Link.
c) Tower side arcing horn.	c)Yoke Plate – 2 Nos. (Tower side-01 No. & Line Side-01 No.)
d) Socket Clevis with R-Type security clip.	d)Tower side arching horn.
e) Line side arcing horn	e)Ball Clevis – 2 Nos.
f) Compression type dead end clamp.	f)Socket Clevis with R-Type security clip – 2 Nos.
	g) Line side arcing horns.
	h) Compression type dead end clamps.
	i) Clevis

10.0 CLAMP

10.1 TENSION CLAMPS

The Tension Clamps shall be made out of aluminum alloy and of compression type suitable for ACSR PANTHER conductor. The tension clamps shall not permit slipping or damage to failure of the complete conductor or any part thereof at a load less than 90% of the ultimate strength of conductor. The mechanical efficiency of tension / clamps shall not be affected by method of erection involving come / along or similar clamps or tension stringing operation during or after assembly and erection of tension clamp itself. The tension clamp shall be of a design that will ensure unrestricted flow of current without use of parallel groove clamps. The clamps shall be as light as possible.

10.2 ARCING HORNS

Each hardware assembly shall have provision for attaching arcing horns of both adjustable and non/adjustable type across the suspension and tension strings or tower side. However each hardware assembly shall be provided with arching horn of fixed type on line side only.

10.3 UNIVERSAL JOINTING COMPOUND

BENDEX-HV' Universal jointing compound which is a chemically inert compound to be used as filler for the compression joints and dead end clamps to be supplied.

11.0 TESTS, TEST CERTIFICATE AND PERFORMANCE REPORTS

The fittings and accessories for the power conductor, insulator and hardware shall be tested in accordance with IS: 2121, IS: 2486, IS: 9708 (For Vibration Dampers), BS: 916 for hexagonal bolts and nuts or any other authoritative equivalent standards. Type test, routine test certificates and performance reports are to be submitted by the bidder.

The Employer however, reserves the right to get all the tests performed in accordance with the relevant I.S. Specification as Acceptance Test in presence of Employer-s representatives.

The tenderer shall clearly state the testing facilities available in the laboratory at his Works and his ability to carry out the tests in accordance with this Specification. **All the specified tests shall be carried out without any extra cost.**

11.ACCEPTANCE TEST FOR POWER CONDUCTOR AND G.S.S. GROUND WIRE ACCESSORIES.

11.1 ACCEPTANCE TEST FOR POWER CONDUCTOR AND GROUND WIRE ACCESSORIES

- a) Visual & Dimensional verification.
- b) Failing load test.
- c) Slip strength test. (For clamps & vibration damper)
- d) Electrical resistance test.
- e) Resonance Frequency test (for vibration dampers)
- f) Fatigue test (for vibration damper)
- g) Mass pull off test (Slipping strength of messenger cable for vibration damper)
- h) Clamp bolt torque test (For vibration damper)
- i) Galvanizing test.
- j) Tests on P.A. Rod
- k) Tests on Locking Devices.

11.2 ACCEPTANCE TEST FOR HARDWARES

- l) Visual & Dimensional verification.
- m) Ultimate tensile/Mechanical strength test.
- n) Slip strength test. (For clamps)
- o) Electrical resistance test.
- p) Heating cycle test
- q) Breaking strength of full string assembly.
- r) Galvanizing test.
- s) Tests on P.A. Rod
- t) Tests on Locking Devices.
- u)

11.3 SPECIFIC TECHNICAL REQUIREMENTS FOR CONDUCTOR ACCESSORIES AND INSULATOR HARDWARES

CONDUCTOR	Panther/Zebra/Moose	G.S.S Ground wire
a) Type	ACSR Panther/Zebra/Moose	Ground wire
b) Material	Aluminum conductor steel reinforced	Ground stranded steel wire
c) Strand & Wire diameter.	Panther/Aluminium 30/3mm Zebra/all 54/3.18mm steel-7/3.18mm Moose/ all 54/3.53mm steel-7/3.53mm	7/3.15mm
d) Weight per Km.	974/1622/2004 Kg per Km	426 kg per km
e) Overall diameter	21/28.62/ 31.7mm	9.4mm
f) D.C. Resistance at 20°C when corrected to standard weight	0.13750/ 0.06915 / 0.05552 Ohm/KM	3.375 Ohms/km
g) Minimum breaking load/ Ultimate tensile strength.	144/ 13289 / 16120 Kg	5710 kg
h) Maximum working tension at minimum temperature & 2/3 full wind.	3806/ 4325 Kg	1393kg
i) Maximum Sag at maximum temperature & no wind.	6120/ 9240mm	5150mm

LONG ROD INSULATOR

(For suspension & tension Insulator strings of 132 KV) accordingly hard ware fittings to be designed)

FOR 132KV PORCELAIN LONG ROD INSULATORS

Sl. No	DESCRIPTION	Suspension	Tension	
1	Type of Insulator	Ball & socket	Ball & socket	
2	Size & designation of ball & socket and standard to which it will conform (mm)	16 mm, Alt-B IS-2486-II	20 mm, Alt-B IS-2486-II	
3	No of insulator per string	One	One	
4	Outside dia of the LRI (mm)	200	205	
5	Creepage distance of insulator (mm)	4000	4300	
6	Mechanical strength of single LRI (KN)	90 KN	120 KN	

132 KV Long Rod insulator				
Type of string	Size of long rod (mm)/ Unit	Minimum creepage distance (mm)	No. of unit	Electromechanical strength of insulator (KN)
Single Suspension	180x1450	3625	1	90 KN
Double Suspension			2	2x90 KN
Single Tension	205x1450	4300	1	120 KN
Double Tension			2	2x120 KN

**GENERAL REQUIREMENT FOR HARD WARE FITTINGS FOR
POWER CONDUCTOR & GROUND WIRE:**

1) ACCESSORIES

(A) VIBRATION DAMPERS

(SUITABLE FOR ACSR PANTHER CONDUCTOR)

- i) Type: 4R Stock Bridge Type
- ii) Distance between conductors: 74.5 mm. & axis of the Vibration Damper.
- iii) Messenger Cable : 130 Kg/mm sq. quality (19 strands)
- iv) Bolt size : 16 mm. (dia.)
- v) Slip strength of messenger Cable: 500 Kg
- vi) Mass pull-of: As per I.S.S.

B) INSULATOR HARDWARES (BOTH TENSION)

String Hardware: Material and strength

Description of item	Material	UTS
i) Bolt hook	Forged Steel	9,000/ 11,500/16,500 Kgs (90 KN/120KN/160KN)
ii) Anchor Shackle		11,500/16,500 Kgs (120 KN/160 KN)
iii) Socket Eye Horn Holder.		9,000/11,500 /16500Kgs (90 KN/120 KN/160 KN)
iv) Socket Clevis		9,000/11,500/16,500 Kgs
v) Ball Clevis		9,000/11,500/16,500 Kgs
vi) Clevis Eye		9,000/11,500/16,500 Kgs
vii) Socket Eye		9,000/11,500/16,500 Kgs
viii) Bottom / Top Yoke plate		
Double Suspension	Mild steel	9,000/11,500/16,500 Kgs
Double Tension	Mild steel	16, 500 Kgs
ix) Arcing Horn	Mild steel	-----
x) Tension Clamp	All alloy & Steel	11,500/16,500 kgs
xi) Ball Pin	High tensile forged steel (HDG)	90 % of UTS of conductor
xii) Security clip	Brass (R-Type)	

Minimum failing load String (KN)

Single Tension	11,500/16,500 kgs
Double Tension	11,500/16,500 kgs

B) HARDWARE FITTINGS SUITABLE FOR AAAC CONDUCTOR

The Hardware should be suitable for above type of conductor and as per drawing & specification marked on the body of the drawing.

All 'D' shackles should be perfect in manufacturing and shall be subjected to "X-Ray test at the time of inspection. All the hardware & fittings should be manufactured strictly in accordance with ISS.

1. Dimensions of insulator string along with hardware fitting.

The various limiting dimensions of the single suspension / double suspension and single/double tension hardware fittings shall be as per the sketches.

2. Interchangeability.

2.1 The hardware for insulator strings with disc insulators together with ball and socket fittings shall be standard design, so that this hardware are interchangeability with each other and suitable for use with disc insulators of any make conforming to relevant Indian/International standard.

2.2 The hardware fittings offered shall be suitable for employment of hot line maintenance techniques so that usual hot line operations can be carried out with ease, speed and safety. The technique adopted for hot line maintenance shall be generally bare hand method and hot stick method. The Bidder should clearly establish in the bid, the suitability of his fittings for hot line maintenance.

2.3 The line side yoke plate shall have a notch and a working hole of suitable size to facilitate the hot line working. The design of corona control ring or grading ring shall be such that it can be easily replaced by employing hot line maintenance technique.

2.4 Ball and socket designation.

The dimensions of the ball and socket shall be 20mm wherever 120 and 160 KN insulators are used and 16 mm when 90 KN insulators are used. The designation should be in accordance with the standard dimensions stated in IS-2486(Part-II)/ IEC 120. The dimensions shall be checked by appropriate gang after galvanizing only.

3. Security clips and split pins.

3.1 Security clips for use with ball and socket coupling shall be R-shaped, hump type which provides positive locking of the coupling as per IS-2486 (Part-III)/IEC-372. The legs of the security clips shall be spread after assembly in the works to prevent complete withdrawal from the socket. The locking device shall be resilient, corrosion resistant and of suitable mechanical strength. There shall be no risk of the locking device being displaced accidentally or being rotated when in position. Under no circumstances shall the locking devices allow separation of fittings.

3.2 The hole for the security clip shall be countersunk and the clip shall be of such design that the eye of clip may be engaged by a hot line clip puller to provide for disengagement under energised conditions. The force required to pull the security clip into its unlocked position shall not be less than 50 N (5 Kg.) or more than 500 N (50 Kg.)

3.3 Split pins shall be used with bolts and nuts. The Bidder must note that 2.5% extra fasteners are to be supplied without any extra cost to the Employer, to deal with losses during erection.

4. Arcing horn.

4.1 The arcing horn shall be either ball ended rod type or tubular type and shall be formed from galvanized mild steel and of approved types. The arcing horns shall be attached in an approved manner to all suspensions and tension insulator sets. The horns shall be attached to the insulator fittings, but not directly to conductor clamps or to the caps of insulator units. The design of the arcing horns shall be such as to reduce as far as reasonably possible, damage to the line conductors, clamps, insulators strings and arcing horns themselves under all flashover conditions. The general shape and method of attachment of the live end arcing horn shall also not restrict the replacement of insulators under live line condition.

4.2 The total effective arcing distance shall be 2130 mm 220 kV.

II) CLAMPS

	SINGLE TENSION STRING	DOUBLE TENSION STRING
i) Type	Compression Type	<u>Compression Type</u>
ii) Material	Aluminum Alloy and Steel	Aluminum Alloy and Steel
ii) Minimum slip strength	90% of UTS of conductor	90% of UTS of conductor
iv) Minimum failing load (kg)	90% of UTS of conductor	90% of UTS of conductor

III)

V) Fasteners: (Bolts, Nuts & Washers)

1. All bolts and nuts shall conform to IS-6639 – 1972. All bolts and nuts shall be Hot DIP galvanized. All bolts and nuts shall have hexagonal heads, the heads being truly concentric, and square with the shank, which must be perfectly straight.
2. Bolts up to M16 and having length up to ten times the diameter of the bolt should be manufactured by cold forging and thread rolling process to obtain good and reliable mechanical properties and effective dimensional control. The shear strength of bolt for 5.6 grade should be 310 Mpa minimum as per IS-12427. Bolts should be provided with washer face in accordance with IS-1363 Part-I to ensure proper bearing.
3. Fully threaded bolts shall not be used. The length of the bolt shall be such that the threaded portion shall not extend into the place of contact of the component parts.
4. All bolts shall be threaded to take the full depth of the nuts and threaded enough to permit the firm gripping of the component parts but not further. It shall be ensured that the threaded portion of the bolt protrudes not less than 3 mm and not more than 8 mm when fully tightened. All nuts shall fit and be tight to the point where shank of the bolt connects to the head.
5. Flat washers and spring washers shall be provided wherever necessary and shall be of positive lock type. Spring washers shall be electro-galvanized. The thickness of washers shall conform to IS-2016-1967.
6. The bidder shall furnish bolt schedules giving thickness of components connected, the nut and the washer and the length of shank and the threaded portion of the bolts and size of holes and any other special details of this nature.
7. To obviate bending stress in bolt, it shall not connect aggregate thickness more than three time its diameter.
8. Bolts at the joints shall be so staggered that nuts may be tightened with spanners without fouling.
9. Fasteners of grade higher than 8.8 are not to be used and minimum grade for bolts shall be 5.6.

GENERAL:

1. All ferrous parts including fasteners shall be hot dip galvanized, after all machining has been completed. Nuts may however be tapped (threaded) after galvanizing and the threads oiled. Spring washers shall be electro-galvanized. The bolt threads shall be undercut to take care of the increase in

diameter due to galvanizing. Galvanizing shall be done in accordance with IS-2629-1985 and shall satisfy the tests mentioned in are 2633-1986. Fasteners shall withstand four dips while spring washers shall withstand three dips of one-minute duration in the standard Preece test. Other galvanized materials shall be guaranteed to withstand at least six successive dips each lasting one minute under the Standard Preece test for galvanizing.

2. The zinc coating shall be perfectly adherence of uniform thickness, smooth, reasonably bright, continuous and free from imperfections such as flux, ash, rust stains, bulky white deposits and blisters. The zinc used for galvanizing shall be of grade Zn 99.95 as per IS 209-1979.
3. Pin balls shall be checked with the applicable “G)” gauges in at least two directions, one of which shall be across the line of die flashing and the other 90 deg. to this line. ‘NO GO’ gauges shall not pass in any direction.
4. Socket ends, before galvanizing shall be of uniform contour. The bearing surface of socket ends shall be uniform about the entire circumference without depressions or high spots. The internal contours of socket ends shall be concentric with the axis of the fittings as per IS 2486/IEC-120. The axis of the bearing surfaces of socket ends shall be coaxial with the axis of the fittings. There shall be no noticeable tilting of the bearing surfaces with the axis of the fittings.
5. All current carrying parts shall be so designed and manufactured that contact resistance is reduced to minimum.
6. Welding of aluminum shall be by inert gas shielded tungsten are or inert gas, shielded metal arc process. Welds shall be clean, sound, smooth, and uniform without overlaps, properly fused and completely sealed. There shall be no cracks, voids incomplete penetration, incomplete fusion, under-cutting or inclusions Porosity shall be minimized so that mechanical properties of the aluminum alloys are not affected. All welds shall be properly finished as per good engineering practices.

Electrical Design:

The heavy duty suspension, and heavy duty tension insulator sets shall all comply with the technical requirements of schedule C and ISS and IEC and satisfy the test requirements stated in Section-7.

Mechanical design:

The mechanical strength of the insulators and insulator fittings shall be as stated in Schedule-C

The design shall be such that stresses due to expansion and contraction in any part of the insulator shall not lead to the development of defects.

Insulating material shall not engage directly with hard metal. All fixing materials shall be of approved quality, shall be applied in an approved manner and shall not enter into chemical action with the metal parts or cause fracture by expansion in service. Where cement is used as a fixing medium, cement thickness shall be as small and even as possible and proper care shall be taken to correctly center and locate the individual parts during cementing.

TECHNICAL SPECIFICATION FOR DESIGN, SUPPLY AND TESTING OF HARD WARE FITTINGS

Type tests:

The following type tests shall be conducted on hardware fittings.

A .On Tension hard ware fittings only.

- (a) Electrical resistance test for Dead end assembly IS 2486 (Part-I) 1971
- (b)Heating cycle test for dead end assembly. -do-
- (c)Slip strength test for dead end assembly. IS 2486 (Part-I)
- (c)Mechanical strength test.

B.On both suspension and tension hardware fittings.

- (a) Visual examination. IS-2486
(Part-I) 1971
- (b) Verification of dimension. -do-
- (c) Galvanizing / electroplating test. -do-

- (d) Mechanical strength test of each component
(Including corona control ring/grading ring and arcing horn)
- (e) Mechanical strength test of welded joint.
- (f) Mechanical strength test for corona control ring/Grading ring and arcing horn. BS-3288 (Part-I)
- (g) Test on locking device for ball and socket coupling. IEC – 3721984
- (h) Chemical analysis, hardness tests, grain size, inclusion rating and magnetic particle inspection for forging/casting.

All the acceptance tests stated at clause shall also be carried out on composite insulator unit, except the eccentricity test at clause. In addition to these, all the acceptance tests indicated in IEC 1109 shall also be carried out without any extra cost to the employer.

C. For hardware fittings.

- (a) Visual examination. IS-2121 (Part-I)
- (b) Proof & test.

D. Tests on Conductor Accessories

H. Type tests

- 1) **Vibration Damper for Conductor.** (IS 9708-1993, IS 2633-1986)
 - (a) Visual Examination
 - (b) Verification of Dimensions
 - (c) Resonance Frequency test
 - (d) Dynamic Characteristics test
 - (e) Damper efficiency test
 - (f) Clamp slip test (Before Fatigue test)
 - (g) Fatigue test (for 10 million cycle)
 - (h) Mass pull off test
 - (i) Clamp bolt torque test
 - (j) Galvanising test (Uniformity of Zinc coating)
 - (k) Magnetic power loss test

Characteristics as per IS:398 Part II/1976

ACSR Panther 30+7/3.00 mm

Area-212.1 Sq.mm

Outer Diameter-21mm

Weight in Kg-973.1 Kg per Km

Brkd – 9241.9 Kg

SCHEDULE OF GUARANTEED TECHNICAL PARTICULARS

<u>GUARENTEED TECHNICAL PERTICULARS OF DOUBLE TENSION FITTINGS SUITABLE FOR ACSR PANTHER CONDUCTOR</u>		
1	Makers Name and address	
2	Type of Tension Clamp	Compression Type
3	Drawing Number	KTHL/132KV/DTN/ACSR/OPTCL
4	Size & Designation of ball & socket and standard to which conform	Ball & Socket size 20mm confirm to IS: 2486 Part-II
5	Hardware component Description	Material
	Anchor Shackle	Forged Steel, HDG
	Chain Link	Forged Steel, HDG
	Yoke Plate (T/S)	Mild Steel, HDG
	Ball Clevis	Forged Steel, HDG
	Socket Clevis	Forged Steel, HDG
	Yoke Plate (L/S)	Mild Steel, HDG
	Arching horn (T/S & L/S)	Mild Steel Rod, HDG
	Clevis Eye	Forged Steel, HDG
	Steel Dead End	Forged Steel, HDG
	Compression Dead End	Ext. Aluminium Alloy
	'R' Security Clips	Stainless Steel
	Split Pin	Stainless Steel
	Nuts & Bolts	Mild Steel, HDG
	Plain Washer	Mild Steel, HDG
	Spring Washer	Spring Steel, EG
6	Standard Specification to which the Material Confirms	As per IS: 2486 Part-I

7	Standard Specification to which the Galvanizing Confirms	As per IS: 2629 & 2633 (H.D.G) and IS: 1573 (E.G)
8	UTS of Hardware Fittings	120 KN Except Tension Clamp
9	Slipping Strength	Min 95% of UTS of the Conductor
10	Packing Details	Double Gunny Bag

**GUARENTEED TECHNICAL PERTICULARS OF SINGLE TENSION FITTINGS SUITABLE FOR ACSR
PANTHER CONDUCTOR**

1	Makers Name and address	
2	Type of Tension Clamp	Compression Type
3	Drawing Number	KTHL/132KV/STN/ACSR/OPTCL
4	Size & Designation of ball & socket and standard to which conform	Ball & Socket size 20mm confirm to IS: 2486 Part-II
5	Hardware component Description	Material
	Anchor Shackle	Forged Steel, HDG
	Chain Link	Forged Steel, HDG
	Yoke Plate (T/S)	Mild Steel, HDG
	Ball Clevis	Forged Steel, HDG
	Socket Clevis	Forged Steel, HDG
	Yoke Plate (L/S)	Mild Steel, HDG
	Arching horn (T/S & L/S)	Mild Steel Rod, HDG
	Clevis Eye	Forged Steel, HDG
	Steel Dead End	Forged Steel, HDG
	Compression Dead End	Ext. Aluminium Alloy
	'R' Security Clips	Stainless Steel
	Split Pin	Stainless Steel
	Nuts & Bolts	Mild Steel, HDG
	Plain Washer	Mild Steel, HDG
	Spring Washer	Spring Steel, EG

6	Standard Specification to which the Material Confirms	As per IS: 2486 Part-I
7	Standard Specification to which the Galvanizing Confirms	As per IS: 2629 & 2633 (H.D.G) and IS: 1573 (E.G)
8	UTS of Hardware Fittings	120 KN Except Tension Clamp
9	Slipping Strength	Min 95% of UTS of the Conductor
10	Packing Details	Double Gunny Bag

GUARENTEED TECHNICAL PERTICULARS OF VIBRATION DAMPER SUITABLE FOR ACSR PANTHER CONDUCTOR

F	Vibration Damper	For ACSR PANTHER	
i	Type of Vibration Damper	4R Type	
		Left	Right
ii	Weigh of each Damper mass (kg)	1(approx.)	0.85(approx.)
iii	Diameter of each Damper Mass	44mm	42mm
iv	Length of each Damper Mass	140mm	138mm
v	Resonance frequencies	As per IS:9708-1993	
vi	Material of :		
	1. Damper mass	Cast iron hot dips Galvanized.	
	2. Messenger cable.	19/2 standard High Tensile steel IS:4826	
vii	Galvanising		
a	Ferrous parts	Hot Dip Galvanized	
b	Spring washers	Electro Galvanized	
c	Quality of zinc used	99.5%	
d	Number of dips which the clamp can withstand	4/ 1 minute dips	
viii	Standard to which conforming	IS 2486 and IS 2633	
ix	No of strands in messenger cable strands	19	
x	Lay ratio of messenger cable strands	9- 11	
xi	Min tensile strength of messenger cable (kg /sq. mm)	135 Kg/mm ² (Min)	
xii	Slipping strength of Standard Messenger	5 KN	

xiii	Clamping torque (KGM)	4
xiv	Magnetic power loss per vibration damper (Watts)	Less than 1 watt per Damper
xv	Material of AD Clamp	Alluminium Alloy
xvi	Packing Details	Double Gunny Bag

SECTION-IV

SCHEDULE OF QUANTITY

Sl No	Description of Material	unit	TL S/D Chainpal	132/33KV GSS Chainpal	132/33KV GSS Dhenkanal	Total
1	Single Tension Hard Ware fittings suitable for 120 KN Long Rod Porcelain insulator and Panther Conductor.	No	42	85	25	152
2	Double Tension Hard Ware fittings suitable for 120 KN Long Rod Porcelain insulator and for Panther Conductor.	No	2	47	25	74
3	T- Clamp single ACSR Panther run to single ACSR Zebra Drop 12 bolted	No	0	4	4	8
4	132kV Bimetallic CT Straight through clamp for ACSR Zebra conductor, 12 bolted	No	0	2	2	4
5	Vibration Damper for Panther	No	40	138	250	428
6	PG clamp, 2-bolted, Earthwire to copper bond	No	0	0	45	45
7	Flexible Earth Bond (Copper) for Earth Wire 500mm	No	10	40	125	175
8	Singe Tension Compression type HWF for Earth wire(7/3.15 mm size)	No	8	34	85	127
9	U- Clamp (D- Shackle) for Earth wire(7/3.15 mm size)	No	0	0	45	45

SECTION-V
[LIST OF ANNEXURES]

The following schedules and Performa are annexed to this specification and contained in Section-V as referred to in the relevant clauses.

1	Declaration form	ANNEXURE-I
2	Abstract of terms and conditions to accompany Section-II of Part-I	ANNEXURE-II
3	Bidders information	ANNEXURE-III
4	Composite Bank Guarantee form for security deposit, payment and performance	ANNEXURE-IV
5	Reverse Auction Process Compliance Form	ANNEXURE-V
6	Schedule of Quantity	ANNEXURE-VI

ANNEXURE - I
DECLARATION FORM

To

The General Manager (Elect)
EHT O&M Circle, OPTCL, Chainpal

Sub:- Tender Specification No-_____

Sir,

1. Having examined the above specification together with terms & conditions referred to therein * I/We the undersigned hereby offer to supply the materials/equipments covered therein complete in all respects as per the specification and General conditions, at the rates, entered in the attached contract schedule of prices in the Tender.
2. * I / We hereby undertake to have the materials/equipments delivered within the time specified in the Tender.
3. * I / We hereby guarantee the technical particulars given in the Tender supported with necessary reports from concerned authorities.
4. * I/We certify to have submitted the bid electronically by remitting *online payment /D.D./ remitting the cost of tender, herewith and this has been acknowledged by your letter / receipt No. _____ Dated _____
5. In the event of Tender, being decided in *my/our favour, * I/We agree to furnish the Composite B.G. in the manner, acceptable to ODISHA POWER TRANSMISSION CORPORATION LTD., and for the sum as applicable to *me/us as per clause-15 of section-II of this specification within 15 days of issue of letter of intent/purchase order failing which *I/We clearly understand that the said letter of Intent/Purchase order will be liable to be withdrawn by the purchaser, and the EMD deposited by us shall be forfeited by OPTCL.

Signed this day of 20____

Yours faithfully

Signature of the Bidder
with seal of the company

[This form should be dully filled in by the bidder and uploaded at the time of submission of tender.]

* (Strikeout whichever is not applicable).

ANNEXURE-II

ABSTRACT OF GENERAL TERMS AND CONDITIONS OF CONTRACT [COMMERCIAL] TO ACCOMPANY PART-I

1(a)	Cost of Tender Document: OPTCL Money Receipt No. & Date / D.D No & Date.	
1(b)	Earnest money furnished. Bank Guarantee No. & Date / D.D No. & Date.	
1(c)	Tender Processing Fee: e-payment confirmation	
2	Manufacturer's supply experience including user's certificate furnished or not.	<i>Yes/No</i>
3	Delivery :- Whether agreeable to OPTCL's desired delivery period as indicated at in the specification	<i>Yes/No</i>
4	Guarantee:- Whether agreeable to OPTCL's terms.	Yes/No
5	Whether agreeable to furnish Composite B.G. in case his tender be successful	Yes/No
6.	Terms of payment:- Whether agreeable to OPTCL's terms or not	Yes/No.
7.	Nature of price:- FIRM	Yes/No
8.	Penalty:- Whether agreeable to OPTCL's terms or not	Yes/No
9.	Validity:- Whether agreeable to OPTCL's terms or not	Yes/No
10.	Whether recent type test certificates from any Government approved laboratory are furnished or not.	Yes/No
11.	Whether materials are ISI/ISO marked.	Yes/No
12.	Furnished Manufacturer's name and its trademark.	Yes/No
13.	Whether registered under ODISHA/India GST Act	Yes/No
14.	Whether declaration form duly filled in furnished or not.	Yes/No.

Place: -

Date: -

Signature of the Bidder
with seal of the company

ANNEXURE-III
BIDDER'S INFORMATION

SL NO	The bidder shall furnish general information in the following format	
NAME OF THE BIDDER		
1	Address:-	
2	City	
3	Pin Code	
4	Contact person's Name :-	
5	Telephone No. office & Residence:-	
6	FAX No:-	
7	EMAIL:-	
9	GST REGISTRATION NO.	
10	PAN NO.	

Place: -

Date: -

Signature of the Bidder
with seal of the company

ANNEXURE-IV

**PROFORMA FOR COMPOSITE BANK GUARANTEE FOR SECURITY DEPOSIT PAYMENT
AND PERFORMANCE**

This Guarantee Bond is executed this _____ day
of _____ 2024 by us the _____ Bank at

P.O. _____ P.S. _____

District _____ State _____

1. WHEREAS the ODISHA POWER TRANSMISSION CORPORATION LTD., a body corporate constituted under the Electricity Act, 2003 [hereinafter called “the OPTCL” which shall include its successors and assigns has placed orders No. _____ Date _____ [hereinafter called “The Agreement”] on M/s. _____
[Hereinafter called “The Contractor”] which shall include its successors & assigns for execution of the work.

AND WHERE AS the bidder has agreed to execute the work for OPTCL in terms of the said agreement AND

WHEREAS the OPTCL has agreed [1] to exempt the bidder from making payment of Security [2] to release 100% payment of the cost as per the said agreement and [3] to exempt from performance guarantee on furnishing by the bidder to OPTCL, a Composite bank Guarantee of the value of 10 % [ten percent] of the contract price of the said agreement.

NOW THEREFORE, in consideration of the OPTCL having agreed [1] to exempt the bidder from making payment of Security [2] releasing 100% payment to the bidder and [3] to exempt from furnishing performance guarantee in terms of the said agreement as aforesaid, we, the _____ [Bank][hereinafter referred to as ‘the Bank’] do hereby undertake to pay to the OPTCL an amount not exceeding Rs. _____ [Rupees _____] against any loss or damage caused to or suffered by or would be caused to or suffered by the OPTCL by reason of any breach by the said Bidder [s] of any of the terms or conditions contained, in the said agreement.

2. We the (_____ Bank) do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on demand from the OPTCL stating that the amount claimed is due by way of loss or damage caused to or suffered by the OPTCL by reason of any breach by the said Supplier [s] of any of the terms or conditions, contained in the said agreement or by reason of the bidder’s failure to perform the said agreement. Any such demand made on the bank shall be conclusive as regards the amount due

and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. _____
[Rupees_____]

3. We the _____ Bank} also undertake to pay to the OPTCL any money so demanded not withstanding any dispute or disputes raised by the Contractor [s] in any suit or proceeding instituted/pending before any Court or Tribunal relating thereto our liability under this present being absolute and unequivocal.

The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the Contractor [s] shall have no claim against us for making such payment.

- 4 We, (_____ Bank) further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to do so enforceable till all the dues of the OPTCL under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till Sr. General Manager, EHT (O&M) Circle, OPTCL, Chainpal certifies that the terms and conditions of the said agreement have been fully and properly carried out by the said Contractor [s] and accordingly discharges this Guarantee.

Unless a demand or claim under this guarantee is made on us in writing on or before the [Date _____], we shall be discharged from all liability under this guarantee thereafter.

5. We,(_____ Bank) further agree that the OPTCL shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor [s] and we shall not be relieved from our liability by reason of any such variations or extension being granted to the said Contractor [s] or for any forbearance, act or omission on the part of the OPTCL or any indulgence by the OPTCL to the said Contractor [s] or by any such matter or thing whatsoever which under the law relating to sureties would but these provisions have effect of so relieving us.
6. This guarantee will not be discharged due to the change in the name, style and constitution of the Bank and Contractor [s].
7. We,[_____ Bank] lastly undertake not to revoke this guarantee during its currency except with the previous consent of the OPTCL in writing.

8. We the _____ Bank further agree that this guarantee shall also be invoked at our place of business at Angul (indicate the name of the branch) in the state of ODISHA.

Not with standing anything contained herein.

- 1) Our liability under this bank guarantee shall not exceed Rs. _____
(Rupees_____).
- 2) The bank guarantee shall be valid up to dt._____
- 3) We are liable to pay the guaranteed amount or any part thereof under this bank guarantee only & only if you serve upon us at _____branch at Angul written claim or demand on or before Dt._____.

Dated _____ Day of _____

For_____

[Indicate the name of Bank]

Witness(Signature, names & address)

1.

2

ANNEXURE-V

REVERSE AUCTION PROCESS COMPLIANCE FORM

To,

The General Manager (Elect)

EHT (O&M) Circle, Chainpal

Sub:- Agreement to the process related Terms & Conditions for e-Reverse Auction.

Ref:- Tender Specification No.:_____

Dear Sir,

This letter is to confirm that:

- The under signed is authorized representative of the company.
- We have studied the Commercial Terms and the Business rules governing the Reverse Auction as mentioned in your tender and confirm our agreement to that.
- We also confirm that we have gone through the auction manual and have understood the functionality of the same thoroughly.
- We, hereby, confirm that we will honour the Bids placed by us during the tendering / e-Reverse auction process as called as e-RA.
- We also confirm that we will accept our Rank / Position that will be displayed when the Bidding Time for the Online Reverse Auction is over.

With regards,

Signature with Designation with company seal name &
address (Person having power of attorney for the
subject package)

**[To be submitted on Letter Head of the bidding firm/company with sign & stamp and along with
Technical Bid]**

