



ODISHA POWER TRANSMISSION CORPORATION LIMITED

**OFFICE OF THE GENERAL MANAGER
EHT (CONST.) CIRCLE, SAMBALPUR**

At-132/33 KV Grid Sub-station, Ganesh Nagar, Bohidar Nuapali

P.O. Sankarma, Via: Remed,

PIN-768004, DIST: SAMBALPUR (ODISHA)

[CIN:U40102OR2004SGC007553](#)

Email: ehhc.cle.sbp@optcl.co.in

TEL NO. 0663-2540974

TENDER SPECIFICATION NO.- EHT(C)/03/2017-18

FOR

**PROCUREMENT OF DIFFERENT TYPE OF TOWER ACCESSORIES FOR 220 KV
BOLANGIR-KESINGA LINE**

PART-I

- | | |
|---------------------|--|
| SECTION-I- | INSTRUCTION TO TENDERERS. |
| SECTION-II- | GENERAL CONDITIONS OF CONTRACT |
| SECTION-III- | LIST OF ANNEXURE |
| SECTION-IV- | TECHNICAL SPECIFICATION AND PRICE BID |

PART-II

PRICE BID AND TECHNO COMMERCIAL BID (EXCEL SHEET)

- | | |
|---|---|
| Request for online tender documents – | From Dt. 24.01.18 (10.00 Hrs) to Dt.17.02.18 (12.30 Hrs) |
| Issue of online tender documents (bid sheets)- | From Dt.24.01.18 (10.01 Hrs) to Dt.17.02.18(12.31 Hrs) |
| Last date of submission of online tender – | up to Dt.17.02.18 (15.00 Hrs) |
| Date of opening of Tender | - on Dt.19.02.18 (11.00 Hrs) |

TELEPHONES / CONTACTS:

1. General Manager : 09438908066
2. TA To General Manager : 09438907379
3. Office Land Line : 0663-2540974
4. Office Address : OFFICE OF THE GENERAL MANAGER (ELECT.)
EHT(C) CIRCLE, SAMBALPUR
At:- 132/33 KV Grid Sub-station, Ganesh Nagar, Bohidar Nuapali
P.O. Sankarma, Via: Remed,
Sambalpur -768004 (Odisha).

NOTE:-

1. In case the due date for opening of tender happens to be a holiday, then the tenders would be 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 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.



ODISHA POWER TRANSMISSION CORPORATION LTD.

O/O : G.M. (ELECT.) E.H.T. (C) CIRCLE, SAMBALPUR,

DIST: SAMBALPUR (ODISHA) 768004

e-TENDER NOTICE NO. EHT(C)/ 03/2017-18

For and on behalf of ODISHA POWER TRANSMISSION CORPORATION LTD General Manager, EHT (C) Circle, Sambalpur, invites Tenders from reputed **Manufacturers /Authorized Dealers / registered experienced order suppliers** having valid PAN, authorised dealership Certificate, GST Registration certificate, valid GST clearance certificate in single part bidding system for “**Procurement of different types of tower accessories for 220 KV Bolangir-Kesinga Line**”. The interested bidders would be required to enroll themselves on the tender portal www.tenderwizard.com/OPTCL and must possess **Class 3 Digital Signature Certificate**. Complete set of bidding documents are available at www.tenderwizard.com/OPTCL from **24.01.18 (10.00 Hrs) up to 17.02.18 (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.

General Manager (Elect.)
E.H.T. (C) Circle, Sambalpur



NOTICE INVITING TENDER

ODISHA POWER TRANSMISSION CORPORATION LTD.,

O/O: G.M. (ELECT.) E.H.T. (C) CIRCLE, SAMBALPUR,

DIST: SAMBALPUR (ODISHA) 768004

e-TENDER NOTICE NO. EHT(C)/03/2017-18

For and on behalf of the ODISHA POWER TRANSMISSION CORPORATION LTD., the undersigned invites bids under single part bidding system in e-tendering mode only for supply of 220 KV tower Accessories for Bolangir-Kesinga Line as per the following details.

<i>Tender Specification No</i>	<i>EHT(C)/03/2017-18</i>	
<i>Earnest Money Deposit</i>	<i>Rs. 19,087/-</i>	
<i>Cost of Tender Spec. Document</i>	<i>Rs.6,720/- (including GST @ 12%)</i>	
<i>Tender Processing Fee</i>	<i>Rs.2,253/-(including GST @ 18%)</i>	
<i>Request for online tender documents</i>	<i>From Dt. 24.01.18 (10.00 Hrs) to Dt.17.02.18 (12.30 Hrs)</i>	
<i>Issue of online tender documents (Bid sheet)</i>	<i>From Dt. 24.01.18 (10.01 Hrs) to Dt.17.02.18 (12.31Hrs)</i>	
<i>Last date of submission</i>	<i>up to Dt. 17.02.18 (15.00 Hrs)</i>	
<i>Date of opening of Tender</i>	<i>On Dt. 19.02.18 at 11.00 hr</i>	
Sl.No	DESCRIPTION OF MATERIAL	QUANTITY
1	EARTHING DEVICE	46
2	DANGER BOARD	317
3	NUMBER PLATE	317
4	PHASE PLATE	1902
5	BIRD GUARD	1314
6	ANTICLIMBING DEVICE	317
7	CIRCUIT PLATE	634

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 the **tender cost as mentioned above (Non-refundable) including GST @12% in the form of Demand draft/Cash only, drawn in favour of EHT (C) Circle, OPTCL, Sambalpur** and the same is to be submitted to the office of the undersigned on or before the last date & time of submission of tender.

The bidders shall have to submit non refundable tender processing fee as mentioned above **through e-payment mode only in favour of K.S.E.D.C. Ltd.** The copy of e-payment is to be submitted along with the EMD & tender paper cost at the office of the undersigned on or before the last date & time of submission of tender.

The bidder shall have to submit a non-refundable amount of Rs.2253/-(Rupees Two Thousand Two Hundred Fifty Three) only 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 and Net Banking.)

The bidders shall scan the Demand Draft/Pay order towards EMD, Tender Cost and e-payment receipt towards 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.

Minimum qualification criteria of bidders: AS STIPULATED IN SECTION-II, PART-I (G.T.C.C) OF THE TENDER SPECIFICATION.

**GENERAL MANAGER
EHT (C) CIRCLE, SAMBALPUR**

COMMERCIAL SPECIFICATION.
PART-I
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 according to the instruction, stipulated above. **The participants to the tender should be registered under GST.**

1. For all the users it is mandatory to procure the Digital Signatures.
2. Contractors / Vendors / Bidders / Suppliers are requested to follow the below steps for **Registration:**
 - a. Click “Register”, fill the online registration form.
 - b. Pay the amount of Rs. **2360/-** through **e-payment gateway** only in Favour of **K.S.E.D.C. Ltd.**.
This registration is valid for one year.
 - c. Send the acknowledgment copy for verification.
 - d. As soon as the verification is being done the e-tender user id will be enabled.
3. 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.
4. 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) 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.
 - g. Select the Certificate and enter DSC Password.
 - h. Re-enter the e-Procurement User Id Password

5. 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.
6. 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.
7. 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
8. Tender Opening event can be viewed online.
9. Competitors bid sheets are available in the website for all.
10. **For any e-tendering assistant contact help desk number mentioned below.**
 - **Bangalore – 080- 40482000.**

2. Division of Specification.

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

PART-I

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

PART-II

TECHNO COMMERCIAL AND PRICE BID (Excel sheet Format)

NOTE: The Tenderers are required to submit the tenders in single part along with the Annexures (Section-III) and Techno-Commercial & Price Bid (PART-II).

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 tenderer 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:

The tender shall be accompanied by **Earnest Money Deposit** of value specified in the notice inviting tenders against the bid. Tenders without the required EMD will be rejected out rightly.

The earnest money deposit shall be furnished in shape of **Bank Draft**: -To be drawn in favour of **EHT (C) Circle, Sambalpur, payable at Sambalpur.**

NOTE:-

- (i) No adjustment towards EMD shall be permitted against any outstanding amount with the **ODISHA POWER TRANSMISSION CORPORATION LTD.**
- (ii) In the case of un- successful tenderer, the EMD will be refunded after the tender is decided. In the case of successful Tenderer, this will be refunded only after award of contract and on submission of BG/DD as security deposit. No interest will be paid on the EMD value.
- (iii) Suits, if any, arising out of this clause shall be filed in a Court of law to which the jurisdiction of High Court of ODISHA extends.
- (iv) EMD will be forfeited if the tenderer fails to accept the purchase order issued in his favour or to execute the order, placed on them.
- (v) Tenders **not accompanied** by Earnest Money shall be disqualified.
- (vi) The EMD not claimed for refund within a period of one year from the date of issue of purchase/work orders and the security deposit not claimed for refund within a period of three years after completion of contract, will be forfeited.

7. Validity of the Bids: -

The tenders are requested to keep the validity of their offer for a period of **180** days from the date of opening of the tender, failing which the tenders will be rejected.

8. PRICE: -

i) The bidders are advised to quote their rate as per the price schedule attached with this specification and shall remain firm inclusive of all taxes and duties, labour charges etc. irrespective of deviation in the specification, within the validity of the tender paper. The tenders may be rejected if the schedule of price is submitted in incomplete form.

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

Tenderers 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 tenderer may **seek clarification in writing from the GM EHT (C) Circle, Sambalpur.** This, however, does not entitle the Tenderer to ask for time beyond due date, fixed for receipt of tender.

10. Documents to Accompany Bids.

Tenderers are required to submit tenders in the following manner:

- [i] Declaration Form. [**As per Annexure-I**] (duly signed) to be uploaded in .pdf format

- [ii] Earnest Money, tender cost and e-payment receipt towards tender processing fee (**scanned copy** is to be uploaded)
- [iii] Abstract of Terms & conditions in prescribed Proforma as per **Annexure-II**. To be keyed in, in the bid sheets provided.
- [iv] General Terms & Conditions of supply offer as per Section-II of the Specification. (All the required documents are to be uploaded.)
- [v] Data on past experience as per the Specification. (Scanned copy to be uploaded)
- [vi] GST Regd. Certificate, PAN No. of the firm is required under Income tax Act. (Scanned copy to be uploaded)
- [vii] Any other documents required is to be uploaded.
- [viii] Schedule of prices in the prescribed proforma in the price bid sheet provided in .xls format.
- [ix] Proof of Manufacturers, Authorised dealer or supplier. (Scanned copy to be uploaded)

11. Conditional Offer:

Conditional offer shall not be accepted.

12. Submission of Samples:

1. **No sample will be submitted by the bidders for the above tender. The following arrangement will be made by the L1 bidder for verifying the materials.**

The L1 bidder will supply the materials to the site after getting the purchase order. Site engineers or his authorized representative will verify the materials as per the sample drawing provided for the tender. If any abnormalities i.e. quality, dimension, thickness etc. found in the materials, then that material will be replaced by the bidder with in stipulated time frame.

Or

OPTCL representative will visit the manufacturing site to access the quality of material and dimension as per sample drawing. Bidder will extend necessary help for witnessing the materials. If any correction required as per instruction of OPTCL representative then that will be incorporated. All expenses for the above inspection will borne by the bidder including to and fro journey of OPTCL representative.

13. General: -

- (i) 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 Tenderer.
- (ii) For evaluation, the price mentioned in words shall be taken if there is any difference in figures and words in the price bid.
- (iii) Notice inviting tender shall form part of this specification.
- (iv) The EMD, if any, shall be returned to the unsuccessful bidders after finalization of tender on written request.
- (vi) It should be distinctly understood that the price bid shall contain only details/documents relating to price, as mentioned herein above. Inclusion of any of the documents/information etc. shall render the bid liable for rejection.

- (vii) **The tenderer must submit the EMD amount, cost of tender document and proof of Tender processing fee in a sealed cover envelope super scribing the tender specification number, Tender Notice No & Date of opening of tender clearly on the envelope cover. The said envelope is to be submitted in the office of the purchaser on or before the last date and time of submission of tender otherwise the bid will be rejected.**

SECTION-II

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

- 1.0 **Scope of the contract:** This Specification covers supply of different type of tower accessories for 220 KV Bolangir-Kesinga line as per technical specification mentioned in Section-III and/or as per sample provided / sample drawing. The scope of the contract shall be to deliver the material on Road transport at the destination site of OPTCL, without which their tender will not be entertained. For the efficient performance and satisfactory maintenance of the above material, it shall confirm to relevant BIS and IEC and such part shall be deemed to be within the scope of the contract.
- 2.0 **Definition 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, E.H.T. (C) Circle, Sambalpur 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 in 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 GST, 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 supplied under the contract shall be manufactured in the manner, set out in the specification or as per sample drawing or where not set out, to the reasonable satisfaction of the Purchaser’s representative.

4. **PRICE:** The price should be firm and FOR destination. The price should be inclusive of packing, forwarding, freight, insurance charges and other taxes if any. The amount & nature of taxes should be clearly specified in the price schedule.

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. If the supplier fails to do so, the Purchaser may:-

- [a] At its option replace or rectify such defective equipments/materials and recover the extra costs so involved from the supplier plus fifteen percent and/or.
- [b] Terminate the contract for balance work/supplies, with enforcement of penalty Clause as per contract for the un-delivered goods and with forfeiture of Performance Guarantee/ Composite Bank guarantee.
- [c] Acquire the defective equipment/materials at reduced price, considered equitable under the circumstances.

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. **Right to reject/accept any tender:**

The purchaser reserves the right either to reject or to accept any or all tenders if the situation so warrants in the interest of the purchaser. Orders may also be split up between different Tenderers on individual merits of the Tenderer. The purchaser has exclusive right to alter the quantities of materials/ equipment at the time of placing final purchase order. After placing of the order, the purchaser may defer the delivery of the materials. It may be clearly understood by the Tenderer that the purchaser need not assign any reason for any of the above action [s].

8. **Delivery:-**

- [i] Time being the essence of the contract; the material shall be supplied within the delivery period, specified in the contract. The Purchaser, however, reserves the right to reschedule the delivery and change the destination if required. The delivery period shall be reckoned from the date of placing the Letter of Intent/Purchase order, as may be specified in LOI/Purchase order.
- [ii] The material should be delivered within **35 days** from the date of issue of purchase order. The purchaser however reserves the right to reschedule the delivery, change of destination.

9. **Dispatch instructions.**

I] The equipments/ materials should be securely packed and dispatched directly to the specified site at the supplier's risk by Road Transport only.

II] **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.

10. **Supplier's Default Liability.**

- [i] The Purchaser may, upon written notice of default to the supplier, terminate the contract in circumstances detailed here under.
- [a] If in the judgment of the Purchaser, the supplier fails to make delivery of equipment/material within the time specified in the contract or within the period for which if extension has been granted by the Purchaser in writing in response to written request of the supplier.
- [b] If in the judgment of the Purchaser, the supplier fails to comply with any of the provisions of this contract.
- [ii] In the event, Purchaser terminates the contract in whole or in part as provided in Clause-8(i) of this section, the Purchaser reserves the right to purchase upon such terms and in such a manner as he may deem appropriate in relation to the equipment/material similar to that terminated and the supplier will be liable to the Purchaser for any additional costs for such similar equipment/material and/or for penalty for delay as defined in clause-21 of this section until such reasonable time as may be required for the final supply of equipment.
- [iii] In the event the Purchaser does not terminate the contract as provided in clause 8(i) of this Section, supplier shall be liable to the Purchaser for penalty for delay as set out in Clause-21 of this section until the equipment is accepted. This shall be based only on written request of the supplier and written willingness of the Purchaser.

11. **Force Majeure:**

The supplier shall not be liable for any penalty for delay or for failure to perform the contract for reasons of force majeure such as acts of God, acts of the public enemy, acts of Govt., Fires, floods, epidemics, Quarantine restrictions, strikes, Freight Embargo and provided that the supplier shall within Ten (10)days from the beginning of delay on such account notify the purchaser in writing of the cause of delay. The purchaser shall verify the facts and grant such extension, if facts justify .

12. **Extension of time:-**

If the delivery of equipment/material is delayed due to reasons beyond the control of the supplier, the supplier shall, without delay, give notice to the purchaser in writing of his claim for an extension of time. The purchaser, on receipt of such notice, may or may not agree to extend the contract delivery date as may be reasonable but without prejudice to other terms and conditions of the contract.

13. **Guarantee period: -**

The materials covered under this contract should be guaranteed for trouble free and satisfactory performance against any defect in design, materials and workmanship for a Period of 18 month from the date of dispatch or 12 month from the date of installation which is earlier and the Manufacturer warranty as provided, which is more will be acceptable (In addition to above warranty) equal or more than above is acceptable. So the Firm has to submit Guarantee Certificate in triplicate to the undersigned for approval before release of payment. Any defect noticed during this period should be rectified / replaced by the firm free of cost provided such defects are due to faulty design, bad workmanship or bad materials used. *The replaced materials should also have similar guarantee.*

14. **GST REGISTRATION, GST CELARANCE CERTIFICATION, PAN CARD & AUTHORIZED DEALERSHIP CERTIFICATE :** Legible Xerox copies of PAN Card, GST Registration & clearance Certificate & authorized dealership certificates (if applicable) valid on the date of opening of the tender should be submitted along with tenders without which tender will be rejected at the time of opening. If required, the tenders shall have to produce original documents for verification any time after the opening of tender. Those who fail to produce the same and found not to be valid on the date of opening of the tender, their tenders will be rejected.

15. **TEST CERTIFICATE:** Necessary manufacturer certificate/test certificate in respect of materials/spares covered under the purchase order shall be submitted to this office. Test certificate in respect of materials should confirm to relevant ISS.
16. **SUBMISSION OF PROOF REGARDING MANUFACTURER'S CERTIFICATE/AUTHORISED DEALERSHIP CERTIFICATE, PRICE LIST OF THE MANUFACTURER, PAST EXPERIENCE OF EXECUTION OF ORDER PERFORMANCE CERTIFICATE, TECHNICAL LITERATURE AND DRAWING:**
Legible Xerox copies of necessary Manufacturer's certificate, valid authorized dealer certificate, Manufacturer's Price list and technical literature etc. should be furnished along with the tender. If required, the firms may be requested to produce such original certificates for verification. Past experience of execution of Purchase Orders needs to be furnished by the bidders. The tender shall be accompanied with dimensional drawing and technical literature, leaflets, manuals if any.
17. **FREE REPLACEMENT:** Free replacement of materials lost/damaged due to transit shall be made immediately on receipt of the intimation from the consignee/Paying Officer without awaiting for settlement of the claim of bidders with Railway/Lorry/Insurance Company.
18. (a) **STANDARDS:** The materials offered shall confirm to relevant ISS.
(b) **QUANTITY VARIATION:** The quantity to be ordered may undergo revision at the time of placement of orders.

19. B.G. towards security deposit, 100% payment and performance guarantee:

- [i] For manufacturers situated Inside & out side the state of ODISHA.

A Composite Bank Guarantee as per the Proforma enclosed at Annexure-III of the specification for 10% [ten percent] of the total FORD cost of the purchase order, shall be furnished from any nationalized/scheduled bank having a place of business at Sambalpur to the office of General Manager EHT (C) Circle, Sambalpur within 15 days from the date of issue of the purchase order,. The BG shall be executed on non judicial stamp paper worth of Rs.500.00 [Rupees twenty nine] only or as per the prevalent rules, valid for a period of 20 months from the last date of stipulated delivery period, for scrutiny and acceptance, failing which the supply order will be liable for cancellation without any further written notices. The BG should be accompanied by a confirmation letter from the concerned bank and should have provision for encashment at Sambalpur, before the Bank Guarantee is accepted and all concerned intimated. The B.G should be revalidated as and when intimated to you to cover the entire guarantee period.

- [ii] No interest is payable on any kind of Bank Guarantee.
- [iii] In case of non-fulfillment of contractual obligation, as required in the detailed purchase order/Specification, the composite Bank guarantee shall be forfeited.

20. (A) Terms of Payment.

- (i) 100% value of each consignment with 100% GST in full as applicable along with freight & Insurance charges will be paid on receipt of materials in good condition at stores/desired site and verification thereof, subject to furnishing and approval of Composite Bank Guarantee at the rate of 10% (Ten percent) of the cost of supplied materials, as stipulated under clause-19 of this specification & on prior approval of guarantee certificate & Test certificate by the Purchaser.
- (ii) **Payment of Freight & Insurance charges.**

Freight & Insurance Charges, incorporated in the Purchase contract shall be paid after receipt of materials at stores/desired site in good condition and on production of authenticated documentary evidence, otherwise no Freight, Insurance charges shall be payable.

[B] The supplier shall furnish Composite Bank Guarantee of appropriate amount to OPTCL covering 10% of F.O.R. Destination cost of the purchase order well in advance (within 10 days from the date of issue of the purchase order) before despatch of materials.

21. Penalty for Delay in Completion of Contract:

- I) If the Supplier fails to deliver the materials/equipments within the delivery schedule, specified in the contract including delivery time extension, if any, granted thereto, the Purchaser shall recover from the Supplier, penalty for a sum of half percent (0.5 percent) of the Ex-works price of the un-delivered equipment for each calendar week of delay or part thereof. For this purpose, the date of receipted challan shall be reckoned as the date of delivery. The total amount of penalty shall not exceed five percent (5%) of the ex-works price of the unit or units so delayed. Equipment will be deemed to have been delivered only when all its components and accessories as per technical Specification are also delivered. If certain components & accessories are not delivered in time, the equipment will be considered delayed until such time as the missing parts are delivered.
- II) If the Supplier fails to rectify /replace the equipment/material within 30 days from the date of intimation of the defect, so noticed by the purchaser within the guarantee period then the penalty for sum of one half of the one percent (0.5%) of the total Purchase order amount for each calendar week of delay shall be recovered by the purchaser within the guarantee period. For this purpose, penalty date will start from the 30th. day from the date of issue of letter on defectiveness of equipment/material, so supplied, by the purchaser. The total amount of penalty in this case shall not exceed 10% (TEN PERCENT) of the purchase order amount. The purchase order amount shall mean ex-works price + freight & insurance and all taxes & duties. If the defects so intimated within the guarantee period will not be rectified by the Supplier within the stipulated period as per clause 19 (i), then whole of the B.G. will be forfeited by the purchaser, without any intimation to the Supplier.

22. 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 awaiting for the settlement of their claims with the carriers and underwriters.

- 23. GENERAL REQUIREMENT:** The 220 KV tower accessories must to be suitable for the purpose of 220 KV transmission line tower.
- 24. 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.

25. 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 Tenderers. The Supplier(s) shall be responsible for any discrepancy noticed in the documents, submitted by them along with the bid(s)

26. Validity.

Prices and conditions contained in the offer should be kept valid for a minimum period of **180** days from the date of opening of the tender, failing which the tender shall be rejected.

27. EVALUATION.

(i) Evaluation of bids will be on the basis of the FOR DESTINATION PRICE (By Road Transport) including GST & other levies as may be applicable. The FORD PRICE shall consist of the following components

- a) Ex-works price.
- b) Packing & Forwarding charges.
- c) Freight
- d) Insurance.
- e) GST
- f) Other levies.

28. **Jurisdiction of the 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.

29. **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.

Official Address of the Parties to the Contract

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

- [i] **Purchaser:** General Manager EHT (C), Circle, OPTCL, Sambalpur, Odisha.

Telephone No. : 0663-2540974

e-mail id: ehtc.cle.sbp@optcl.co.in

- [ii] **Supplier:** Address

Telephone No.

Fax No.

30. **Outright Rejection of Tenders**

Tenders shall be outright rejected if the followings are not complied with.

- [i] The tenderer shall submit the bid in electronic mode only and shall submit the cost of tender document and Tender processing fee on or before the date and time of opening of the bid.
- [ii] The Tender shall not be submitted telegraphically or by FAX.
- [iii] The prescribed EMD shall be submitted on or before the date and time of opening of the bid.
- [iv] The Tender shall be kept valid for a minimum period of 180 days from the date of opening of tender.
- [v] 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.
- [vi] The Tenderer 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.
- (vii) **All the necessary excel sheet like techno-commercial bid sheet, price bid sheet etc attached with the tender should be duly filled up without any empty cells.**

GENERAL MANAGER
EHT(C) CIRCLE, SAMBALPUR

SECTION-III
[LIST OF ANNEXURES]

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

1	Declaration form	ANNEXURE-I
2	Abstract of terms and conditions to accompany section I & II	ANNEXURE-II
3	Bidders information	ANNEXURE-III
4	Abstract of price component	ANNEXURE – IV
5	Schedule of price	ANNEXURE-V
6	Chart showing particulars of earnest money deposit furnishable by tenderers	ANNEXURE – VI
7	PROFORMA FOR COMPOSITE BANK GUARANTEE	ANNEXURE – VII

ANNEXURE - I
DECLARATION FORM

To
The General Manager (Elect:)
EHT Const. Circle, OPTCL, Sambalpur

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 *cash/money order /D.D./ remitting the cost of tender, herewith and this has been acknowledged by your letter/ money 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 ORISSA POWER TRANSMISSION CORPORATION LTD., and for the sum as applicable to *me/us as per clause-19 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 _____ 2018

Yours faithfully

Signature of the Tenderer
with seal of the company

[This form should be dully filled in by the tenderer 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]

1(a)	Cost of Tender Document: D.D No / M.R. No. & Date.	
1(b)	Earnest money furnished. D.D No. & Date.	
1(c)	Tender Processing Fee: D.D No. & Date.	
2	Bidder's supply experience including user's certificate furnished or not. [As per clause No.16 of Section-II.]	<i>Yes/No</i>
3	Whether agreeable to OPTCL's terms and condition of specification	<i>Yes/No</i>
4	Whether agreeable to furnish Security Deposit / BG in case his tender be successful	<i>Yes/No</i>
5	Terms of Payment : Whether agreeable to OPTCL's standard terms of payment or not	<i>Yes/No</i>
6.	Nature of Price Quoted : FIRM	<i>Yes/No</i>
7.	Penalty & Recovery : Whether agreeable to OPTCL's terms or not	<i>Yes/No</i>
8.	Insurance: Whether agreeable to OPTCL's terms or not	<i>Yes/No</i>
9.	Validity: - Whether agreeable to OPTCL's terms or not	<i>Yes/No</i>
10	Delivery: - Whether agreeable to OPTCL's terms or not	<i>Yes/No</i>
11.	Guarantee: - Whether agreeable to OPTCL's terms or not	<i>Yes/No</i>
12.	Xerox copy of PAN card (submitted or not).	<i>Yes/No</i>
13.	Xerox copy of GST Registration Certificate (submitted or not)	<i>Yes/No</i>
14	Xerox copy of valid GST clearance certificate (submitted or not)	<i>Yes/No</i>
15	Xerox copy of Manufacturer's/ Authorised dealer / Supplier (submitted or not)	<i>Yes/No</i>
16.	Whether declaration form duly filled in furnished or not.	<i>Yes/No</i>

Place: -

Date: -

Signature of the Tenderer
With seal of the company

ANNEXURE-III

BIDDER'S INFORMATION

SL. No.	The bidder shall furnish general information in the following format	
1	NAME OF THE BIDDER	
2	Address:-	
3	City	
4	Pin Code	
5	Contact person's Name :-	
6	Telephone No. office & Residence:-	
7	FAX No:-	
8	EMAIL:-	
9	GST REGD. CERTIFICATE	
10	GST CLEARANCE CERTIFICATE (if any)	
11	Manufacturer / Authorised Dealer certificate	
12	PAN NO.	

ANNEXURE-IV

ABSTRACT OF PRICE COMPONENT [TO ACCOMPANY PRICEBID]

1	Price basis	F.O.R. Purchaser's destination Stores/sites.
2	Packing & forwarding	
3	Rate of Insurance charges	
4	Rate of Freight charges	
5	Rate of GST	
6	Nature of price.	
7	Whether Input Tax Credit (ITC) benefit if any, has been fully passed on to the purchaser.	<i>Yes / No.</i>

Place

Date:

Signature of Tenderer
With seal of company

NB:- Abstract of price component shall be done for equipment/material offered, for testing & commissioning charges, if any. All the above prices will be taken during bid price evaluation.

ANNEXURE-V.

SCHEDULE OF PRICES TENDER SPECIFICATION No.

Sl No.	Description.	Unit	Qty	Unit Ex-factory Price in Rs.	Unit Packing & Forwarding in Rs.	Unit Freight Charges in Rs.	Unit Insurance Charges in Rs.	Unit landing cost at destination store/site excluding GST in Rs.
1.	2.	3.	4.	5.	6.	7.	8.	9=(5+6+7+8)

Unit GST in Rs.	Unit landing Cost including All taxes & Duties in Rs..	Total landing cost Including all taxes & duties in Rs.
10.	11= (9+10)	12= (4X11)

Signature of Tenderer
Name, Designation and Seal

NB: -

1. The tenderer should fill up the schedule properly and in full. The tender will be rejected, if the schedule of price is submitted in incomplete form. No post tender correspondence will be entertained on break-up of prices. Also, the supplier should agree for delivery at site store.
2. The Tenderer shall certify in the price bid that ITC benefit, if any, has been fully passed on to the purchaser while quoting the tender price.
3. Conditional offers will not be acceptable.
4. The bidder is to clearly indicate the period up to which the tax holidays are available to them.
5. Price bid in any other format will not be acceptable and the offer will be rejected.
6. All the above charges will be taken into account, during bid price evaluation.

ANNEXURE-VI

CHART SHOWING PARTICULARS OF EARNEST MONEY DEPOSIT FURNISHABLE BY TENDERERS

1.	Central and State Government Undertakings	Exempted
2.	All other inside & outside state units.	The amount of EMD as specified in the specification /Tender Notice in shape of bank guarantee /DD.

NB: - REFUND OF E.M.D.

[a] In case of unsuccessful tenderers, the EMD will be refunded immediately after the tender is decided. In case of successful tenderer, this will be refunded only after furnishing of Composite Bank Guarantee referred to in clause No.19 of Section-II of this specification.

Suits, if any, arising out of EMD shall be filed in a court of law to which the jurisdiction of High Court of ODISHA extends.

[b] Earnest Money will be forfeited if the tenderer fails to accept the letter of intent/purchase order, issued in his favour or revises the bid price[s] within the validity period of Bid.

SECTION – VII

PROFORMA FOR COMPOSITE BANK GUARANTEE FOR SECURITY DEPOSIT PAYMENT

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

P.O. _____ P.S. _____

District _____ State _____

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 Supplier”] which shall include its successors & assigns for supply of materials.

AND WHERE AS the supplier has agreed to supply materials to the OPTCL in terms of the said agreement

AND WHEREAS the OPTCL has agreed [1] to exempt the supplier from making payment of Security [2] to release 100% payment of the cost of materials as per the said agreement and [3] to exempt from performance guarantee on furnishing by the Supplier to the 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 Supplier from making payment of Security [2] releasing 100% payment to the Supplier 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 Supplier [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 supplier“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 notwithstanding any dispute or disputes raised by the supplier [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 Supplier [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 Managing Director, ODISHA POWER TRANSMISSION CORPORATION LTD. certifies that the terms and conditions of the said agreement have been fully and properly carried out by the said Supplier [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 Supplier [s] and we shall not be relieved from our liability by reason of any such variations or extension being granted to the said supplier [s] or for any forbearance, act or omission on the part of the OPTCL or any indulgence by the OPTCL to the said Supplier [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 supplier [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 invocable at our place of business at _____(indicate the name of the branch) in the state of ODISHA.

Notwithstanding 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 _____ written claim or demand on or before dt.-----.

Dated _____ Day of _____

For _____

[Indicate the name of Bank]

Witness ((Signature, names & address)

1.

2.

SECTION-IV

TECHNICAL SPECIFICATION

TECHNICAL SPECIFICATION:-

1.0 All materials supplied by the bidder should be as per the sample / sample drawing provided with the tender, otherwise the bid will be rejected.

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:2633	Method of testing of uniformity of coating on zinc coated articles
2	IS:2551(1982)	Danger Notice Plates
3	IS:5613	Anti climbing device, phase plate etc.

3.0 MATERIALS AND DESIGN

Aluminium and aluminium alloys, malleable iron and forged steel, having required mechanical strength, corrosion resistance and mach inability 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 aluminium 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.

Clamping bolts shall be provided with self locking nuts as designed to prevent corrosion of the threads. All ferrous parts shall be hot dip galvanised.

04. TESTS, TEST CERTIFICATE AND PERFORMANCE REPORTS

One sets of type and routine test certificates and performance reports are to be submitted by the bidder.

05. TOWER ACCESSORIES-

05.1 SCOPE:

This specification covers the design, manufacture, assembly, inspection, testing, packing and delivery of 220 kv transmission line tower accessories. The material offered shall be complete with all components that are necessary for efficient operation. Such parts shall be deemed to be within scope of the supply whether specifically mentioned or not. Fittings shall confirm in all respect to the highest standard of engineering, design, and workmanship and shall be

capable of performing trouble free continuous operation. Also it is manufactured as per sample / sample drawing.

05.2 CLIMATIC CONDITIONS:

The overall climate is moderate hot, humid, tropical, highly polluted and conducive to rust and fungus growth. The materials shall be given tropical and fungicidal treatment and shall be capable of satisfactory operation under the hot and humid climatic conditions that would prevail at sites. The climatic conditions are prone to wide range of variation in ambient conditions. The materials offered shall be suitable for installation at any of the switchyards in Odisha.

5.2 All casting shall be free from shrinking, blow holes, surface blisters, cavities, cracks, other defects and quality of product shall be uniform throughout. All sharp edges and corners shall be blurred and rounded off.

5.3 Assembly shall be designed and manufactured in such a way so as to have minimum contact resistance.

5.4 The fittings offered shall be inherently resistive to atmospheric corrosion or be suitable to protect against corrosion both during storage as well as in service.

5.5 All bolts, clamps, etc. shall have suitable locking arrangements to safe guard against vibration and loosening.

5.6 All ferrous parts shall be hot dip galvanized confirming to IS:2633.

5.7 The required bolts and nuts for terminal connector must be hot dip galvanized/stainless steel with suitable check nut.

6. MATERIAL: All material should be as per the sample / sample drawing. The thickness and dimension should be as per sample / sample drawing.

7.0 TEST:

Individual fittings shall be subjected to following Type test

- a) Visual inspection of materials as per drawing provided
- b) Tensile test:
- c) Dimensional check:
- d) Galvanizing test:

8.0 INTERCHANGEABILITY:

All fittings shall be of standard design and made to gauge or jig and shall be interchangeable in all respects with similar items.

9.0 (a) True copies of all the Type Test Certificates of Govt. recognized

Laboratory in respect of the offered items only shall be furnished.

(b) Descriptive literature, dimensional drawings catalogues, etc. shall be submitted for the offered items.

10. 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 upto M16 and having length upto 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 IS 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 adherent 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. All current carrying parts shall be so designed and manufactured that contact resistance is reduced to minimum.

Note : Besides the above specification, the tenderer are requested to follow the corrected instruction/specification provided with the sample drawing. The IS provided with the drawing should be strictly followed. In case of any deviation of the above specification and the sample drawing, the specification of sample drawing will be prevailed.

PART-II:

PRICE BID:-

1. PRICE:

- (i) Bidders are required to quote their price(s) as 'FIRM'.
- (ii) The prices quoted shall be unit price for work including supply of required materials as per the tender specification at the consignee's site/store inclusive of all taxes and duties.

2. PROPER FILLING UP OF THE PRICE SCHEDULE:

The tenderer should fill up the price schedule properly and in full in the bid sheets provided in .xls format and up-load the same without changing the file name. The tender may be rejected if the schedule of price is submitted in incomplete form. N.B-The Bidder must fill the price bid along with the technical specification for complete contract; no partial bid or incomplete of excel sheet will be accepted.

N.B-All the materials will be supplied as per sample / sample drawing. So the bidder may visit the office of under signed for sample / sample drawing before quoting price.