

ODISHA POWER TRANSMISSION CORPORATION LIMITED



OFFICE OF THE
GENERAL MANAGER (ELECTRICAL)
E.H.T. CONSTRUCTION CIRCLE , SAMBALPUR
AT: 132/33 KV GRID SUB-STATION
GANESH NAGAR, BOHIDAR NUAPALI
P.O. SANKARMA, VIA : REMED
DIST. SAMBALPUR, PIN – 768 006 (ORISSA)
FAX : 0663 – 2540974

TENDER SPECIFICATION NO. EHT (C) / T / 02 / 2020-21

FOR

BID DOCUMENT FOR

**(Procurement of 7/3.15mm GI earth wire / ground wire for 132 KV Padampur-
Nuapada DC Line)**

START OF SALE OF TENDER SPECIFICATION : 18.01.2021
LAST DATE OF SALE OF TENDER SPECIFICATION : Up to 1.00 P.M. of 01.02.2021
LAST DATE OF SUBMISSION OF TENDER : Up to 3.00 P.M. of 01.02.2021
DATE & TIME OF OPENING OF TENDER : At 3.30 P.M. of 01.02.2021

PRICE : Rs.4,480/- inclusive of GST 12%



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ODISHA POWER TRANSMISSION CORPORATION LIMITED

(A Government of Odisha Undertaking)
E.H.T. CONSTRUCTION CIRCLE, SAMBALPUR
At: 132/33 KV Grid Sub-station, Ganesh Nagar, BohidarNuapali
P.O. Sankarma, Via: Remed, Dist. Sambalpur-768006
Telephone: : (0663) 2540974E-mail:ehc.cle.sbp@optcl.co.in
CIN: U4102OR2004SGC007553

TENDER CALL NOTICE No. EHT(C) / T / 02 / 2020-21

For and on behalf of the Odisha Power Transmission Corporation Limited the undersigned invites sealed tenders from the eligible suppliers / registered firms / manufacturers having valid GST registration certificate, authorized dealership certificate and PAN required to be produced at the time of sale of tender specification / documents and furnish the same with the tender for "**supply of 7/3.15mm GI earth wire /ground wire for 132 KV Padampur-Nuapada DC Line**" in the prescribed format of tender specification, which can be obtained from the office of the undersigned during working hours from dt.**18.01.2021** to 1.00 P.M. of dt. **01.02.2021** on payment of non-refundable cost of tender specification amounting to Rs.4000.00 + 12% GST = Rs.4480.00 (Rupees Four Thousand Four Hundred Eighty) only in shape of Cash / Bank Draft drawn on any Nationalized Bank payable at Sambalpur in favour of "**EHT(Construction) Circle, OPTCL, Sambalpur**". The complete tender along with E.M.D. @ 1% of their total quoted amount in shape of Bank Draft drawn in the manner prescribed above will be received up to 3.00 P.M. of **01.02.2021** and the tender will be opened at 3.30 P.M. on the same day in presence of the bidders or their authorized representatives if any. The undersigned reserves the right to accept or reject any or all tenders without assigning any reason thereof, if the situation so warrants and OPTCL shall not be responsible for any postal delay at any stage. For more details please visit our website www.optcl.co.in.

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

Memo No: / Dated, Sambalpur

Sr. General Manager (Constn.), Zone-II, OPTCL, Sambalpur / Chief General Manager (Constn.), OPTCL, Bhubaneswar for kind information.

Dy. General Manager, EHT (Constn.) Division Jharsuguda / Bolangir / Dy. General Manager, EHT (O&M) Division, Burla / General Manager, EHT(Constn.) Circle, Bhubaneswar / General Manager, EHT (O & M) Circle, Burla for information. They are requested to display the Tender Notice in their Notice Board.

Copy to Notice Board / Cashier, EHT (Constn.) Circle, Sambalpur for information.

Sr. General Manager (Elect.)

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ODISHA POWER TRANSMISSION CORPORATION LIMITED

(A Government of Odisha Undertaking)

OFFICE OF THE GENERAL MANAGER, ELECTRICAL
E.H.T. CONSTRUCTION CIRCLE, SAMBALPUR

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

P.O. Sankarma, Via: Remed, Dist. Sambalpur-768006

Phone / Fax : 0663 - 2540974

TENDER SPECIFICATION

NO. EHT (C) / T / 02 / 2020-21 Dated 18.01.2021

Contents:

1. SECTION – I : Instructions to Tenderers.
2. SECTION – II : General Conditions of Contract.
3. SECTION –III : Technical Specification
4. ANNEXURES : I to IX

No. _____ / dated, Sambalpur the

Issued to:

M/s.....

**Sr. General Manager, Elec.
EHT (Constn.) Circle, Sambalpur**

SECTION – I

INSTRUCTIONS TO TENDERERS

1. Sealed Tenders in duplicate (each complete with all details in the manner here-in-after specified) together with the declaration form duly signed by the tenderer are to be submitted in the office of the Sr.General Manager, EHT (Construction) Circle, OPTCL, Sambalpur in sealed covers superscribed with the relevant tender specification number and due date of opening as indicated in the tender notice as well as on the cover page of this specification .
2. The specification is divided into four sections : -
 - (i) Section – I – Instruction to Tenderers.
 - (ii) Section – II – General Conditions of Contract.
 - (iii) Section – III – Technical Specifications.
 - (iv) Section – IV – Schedules and Forms, Annexure etc.
3. The Authority may alter the quantities of material at the time of placing Work Orders. Work Orders may also be split up among more than one bidder.
4. Tenders will be opened in the office of the General Manager, EHT Construction Circle, At: 132/33 KV Grid Sub-station, Ganesh Nagar, Bohidar Nuapali, P.O.: Sankarma, Via: Remed, Dist.: Sambalpur-6 at 3.30 PM on date prescribed in the Tender Call Notice in the presence of the tenderers or their authorized representatives who may be required to produce their letter of Authorization, failing which they may not be allowed.
5. Only those who have purchased the copy of relevant “Specification No.EHT(C)/T/02/2020-21 dated 18.01.2021 can only submit their tender. Tenders submitted by others will be rejected.
6. The Authority reserves the right to reject the lowest or any other tenders or all the tenders without assigning any reason what so-ever if it is considered expedient in the overall interest of OPTCL.
7. The tender should be submitted in person or by Registered post with A.D. Any other means of delivery shall not be accepted. When submitted by post, postal delay shall not be entertained. When delivered in person, the tenders shall be received by a responsible officer of the office of the tender issuing Authority who shall officially acknowledge the receipt of the same.
8. Tenders received after due date and time shall be returned un-opened. Telegraphic or Fax Tenders shall not be accepted under any circumstances.
9. 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 (Construction) Circle, OPTCL, 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.

10. Validity :

The tenders should be kept valid for a period of 180 days from the date of opening of the tenders as notified in the tender notice and subsequent amendment thereof, failing which the tenders will be rejected .

11. Tenderers are required to submit tenders in the following manner. All documents/ informations as described below shall be placed in each sealed cover.

- (i) General Information - Annexure - I
- (ii) Declaration Form - Annexure - II
- (iii) Abstract of Terms & Conditions - Annexure - III
- (iv) Experience Record - Annexure - IV
- (v) Litigation History - Annexure - V
- (vi) Schedule of prices - Annexure - VI
- (Vii) Performa of security deposit - Annexure - VII
- (Viii) Deviation from specification (technical and commercial) - Annexure- VIII
- (IX) GTP of the galvanised Steel G.I. - Annexure - IX

- a) The tenderer must fulfill the following requirements and submit copies of the documents in support of the same along with their Tender.
- b) Adequate experience in the similar field is required failing of which the price bid will not open and tender likely to be rejected.
- c) Valid GST & PAN No. on favour of the tenderer.
- d) The Tender should be accompanied By Earnest Money Deposit as per Clause-9 of this Section. Tenders not accompanied by Earnest Money Deposit shall be disqualified.
- e) Bidders must quote their price in line with the specification and conditions. Any deviations from the above shall be considered as an alternate bid. Bids will be evaluated based on the main offer only.

- f) (i) Overwriting shall be avoided.
(ii) Overwriting, erasures and other changes shall bear the dated initial of the person signing the tender.
- g) In the event of discrepancy or arithmetical error in the schedule of price the unit price shall prevail and the purchaser shall accordingly correct the total price. The above arithmetical correction shall be accepted but the decision of the OPTCL shall be final and binding on the tender.
- h) For evaluation, the price mentioned in word shall be taken if there is any difference in figures and words in the price bid.
- i) The quoted price should be kept valid for 120 days from the date of opening of the tender. Bidders are requested to quote Firm price only.
- j) Each page of the tender document shall be signed and sealed with official rubber stamp by the tenderer.
- k) Price quoted should be inclusive of all taxes and duties.

12. Conditional Offer:

Conditional offer shall not be accepted.

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 and cost of tender document 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 CONDITIONS OF CONTRACT.

1. **Scope:** - This Specification covers supply of 7/3.15mm GI earth wire / ground wire for 132 KV Padampur-Nuapada 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. **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. The break-up of FOR destination price as per schedule of prices at Annexure-VI must be submitted along with the tender. Any price other than FOR destination price as mentioned above shall not be considered.
3. **Samples and Test Certificates:** - One set of Type Test Certificate of the materials to be supplied has to be submitted by the tenderer along with the tender documents for ready reference. The test certificate from ISI approved testing laboratory will also be accepted as and where applicable, otherwise the tender will liable for rejection.

No sample is to be supplied along with the tender documents during the opening of the tender. The successful bidder is to submit the test report of the materials to be supplied for approval within 7 days of issue of the purchase order failing which the order is liable for cancellation. For that, the following arrangement will be made by the L1 bidder for verifying the materials.

A) 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 relevant latest IS 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 by its own cost.

Or

B) OPTCL representative will visit the manufacturing site to access the quality of material and dimension as per relevant IS. 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.

4. **Standards:** - The materials should confirm to the latest publications of relevant I.S.S.

5. **Guarantee:** - The materials should be guaranteed for satisfactory operation for a period of at least 18 months from the last date of supply or 12 months from the date of use whichever is earlier. Any defect noticed during the period should be rectified by the supplier free of cost provided such defects are found to be due to faulty design, bad workmanship or bad materials used. Otherwise the security deposit shall be forfeited.

The tenders should guarantee the following among other things.

- i) Quality and strength of materials used.
- ii) Safe mechanical strength of all parts of materials as required under relevant I.S.S.
- iii) Satisfactory operation during guarantee period.

6. **Terms of Payment:**

The terms of payment for the stores covered by the specification are:- 100% of the total contract value of the material delivered with the GST shall be paid within one month subject to funds received from Hqrs. Office after receipt of materials with relevant documents at site in good condition after due approval of Guarantee Certificate and Test Certificates.

8. **Delivery and Penalty:**

Delivery of the materials covered under this specification shall commence within 10 (ten) days and shall be completed within 15(fifteen) days from the date of issue of Purchase Order. The detail delivery program shall be mentioned in the purchase order.

If the delivery is delayed beyond the stipulated delivery period, penalty @ half percent of the contract value of the undelivered materials per week subject to a maximum of 5% of the contract price of the same shall be levied.

9. **Security Deposit:**

The successful tenderers will be required to deposit a sum amounting to 10% of the contract value in any of the approved forms viz: Cash / Bank Draft / Bank Guarantee / State Government Securities, Security Deposit offered in shape of Bank Draft should be made payable to the “Dy.General Manager, EHT Construction Division, OPTCL, Bolangir” and Security Deposit offered in cash and other forms of securities should be paid in favour of E.H.T. Construction Division, OPTCL, Bolangir otherwise the same will be deducted from the bill.

Small scale Industries of Orissa registered with the Director of E.P.M. Orissa shall be exempted from payment of Security Deposit.

All Government undertakings whether of Central or State shall be exempted from Security Deposit.

10. No interest is payable either in the case of Earnest money or Security Deposit. Security Deposit will be forfeited if the successful, tenderer fails to execute the order placed on him.
11. **Inspection:** - The stores will be inspected by the Inspecting Officer authorised by this office from time to time prior to their dispatch to destinations or the materials will be verified at the destination by OPTCL Authority. Intimation about readiness of materials for inspection and dispatch should be intimated at least 5 days in advance. The Supplier shall offer all facilities to the Inspecting Officer for such inspection at their works. If the Purchaser has reasons to doubt the adequacy of the Suppliers testing facilities, the tests may be conducted at any other test house approved by the Purchaser. Cost of such testing shall be borne by the Supplier.
12. **Jurisdiction of Court:** - 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 Orissa extends.
13. **GST & PAN No:** - **GST** registration certificate & PAN No should be enclosed with the tender.
14. **Right to Reject / Accept any Tender:** -The purchaser reserves the right either to reject or accept any or all tenders. Orders may also be split up between different tenderers in individual merit of the tenders. The purchaser has exclusive right to alter the quantities of materials 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 the above sections.
15. **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.

9. a) Dispatch instructions:-
The equipments/ materials should be securely packed, insured and dispatched directly to the specified site at the supplier's risk by Road Transport only.
- 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.
10. **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.
11. **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.
12. **Contractors/Suppliers responsibility:** - Non-withstanding anything mentioned in the specification or subsequent approval or acceptance of the purchase, the ultimate responsibility of the design, materials used and satisfactory performance shall rest with the tenderer.
13. **Cancellation:** - In case the supply is delayed partly or fully by more than 3 (three) weeks, the purchaser shall have the right to cancel the purchase order without further notice to the supplier and the supplier shall have no claim to compensation in any ground.
14. **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.
15. **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.

16. **Experience of Bidders:**

The bidders should furnish information regarding experience particularly on the following points:

- [i] Name of the manufacturer:
 - [ii] Standing of the firm and experience in manufacture of equipment/material quoted:
 - [iii] Description of equipment/material similar to that quoted, supplied and installed during the last three years with the name(s) of the Organisations to whom supplies were made wherein, at least one (1) certificate shall be from a state/central P.S.U.
 - [iv] Details as to where installed etc.
 - [v] Testing facilities at manufacturer's works.
 - [vi] If the manufacturer is having collaboration with another firm [s], details regarding the same.
 - [vii] A list of purchase orders of identical material/equipments offered as per technical specification executed during the last three years alongwith users certificate. User's certificate shall be legible and must indicate, user's name, address, designation, place of use, and satisfactory performance of the equipment/materials for at least three years from the date of commissioning. Wherein at least one (1) certificate shall be from a State/Central or P.S.U.
- Bids will not be considered if the past manufacturing experience is found to be un-satisfactory or is of less than 3 three years on the date of opening of the bid and bids not accompanying user's certificate will be rejected.

17. **Basis of Evaluation:**

- (i) Evaluation of bids will be on the basis of the FOR DESTINATION PRICE (By Road Transport) including
- (ii) Weightage shall be given to the Following factors in the Evaluation & Comparison of Bids.
 - [a] Early delivery.
 - [b] Past track record in delivery of similar items to OPTCL/GRIDCO
 - [c] Track record in manufacture & supply of similar items to utilities other than OPTCL/GRIDCO.
 - [d] Deviation in the bid vis-à-vis in the stipulation in the Bid Specification both in Technical and commercial.
 - [e] In comparing bids and in making awards, the Purchaser will consider other factors such as compliance with Specification, minimum qualification criteria as per clause-18, outright rejection of tenders clause of this tender, relative quality, adaptability of Supplies or services, experience, financial

soundness, record of integrity in dealings, performance of materials/equipments earlier supplied, ability to furnish repairs and maintenance services, the time of delivery, capability to perform including available facilities such as adequate shops, plants, equipment and technical organisation.

18. **Minimum Qualification Criteria of Bidders.**

All the prospective bidders are requested to note that their bids for tendered equipment can only be considered for evaluation if:

- i) The bidder should be a manufacturer of the G.I Ground wire described above and should have earlier supplied at least equal quantity tendered for, during the last two year to reputed electricity Boards and must submit performance certificate from them with the tender.
- ii) The bidder should have conducted type tests on the tendered equipment in Government approved laboratory within last five years from the date of opening of the tender..

19. **Consignee:** -The Consignee for the materials detail of which shall be confirmed through Purchase Order.

20. **Paying Officer:** - Bills in triplicate clearly marked as “Original”, “Duplicate”, “Triplicate”, shall be furnished to the paying officer. The name of the Paying Officer shall be confirmed through Purchase Order.

SECTION - III

TECHNICAL SPECIFICATION
FOR
G.I. GROUND WIRE.

(7/3.15 MM)

A. TECHNICAL SPECIFICATION OF 7/ 3.15 mm G.I. EARTH WIRE (Hot Dip Galvanised)

1. **SCOPE :**

1.1 This specification provides for the manufacture, testing before despatch, supply and delivery of Hot Dip Galvanised Ground wire for the purpose of earthing and protection of power transmission line, as per the particulars given in Appendix-I attached. The ground wire shall consist of standard Hot Dip galvanized steel wire.

2. **STANDARDS :**

2.1 The ground wire shall comply in all respect with the Indian Standard (IS) 2141-1979

3. **MATERIALS :**

3.1 The material offered shall be of best quality and workmanship. The steel wires (Strands) shall be manufactured from steel produced by any suitable process. The steel wire shall not contain sulphur and phosphorous exceeding 0.060 percent each as per IS : 2141-1971.

3.2 The steel wires shall be evenly and uniformity coated with zinc complying with IS: 209-1965 specification for zinc (Retired). Only virgin zinc shall be used and reclaimed zinc is not permitted. **The virgin zinc shall be of zn 99.95 quality.**

4. **SIZE AND CONSTRUCTION :**

4.1 The size of ground wire shall be as given in Appendix-I. The physical properties have been given in the same Appendix. The lay of the strands shall be of lengths as given in the Appendices. The wires shall be so stranded together that when any evenly distributed pulls applied at the end of the completed strands each wire will take on equal share of the pull.

5. **LENGTH OF JOINING:**

5.1 The ground wire may be supplied in the standard length as per manufacturers standard practice and such length will be specifically indicated in the tender. However random length of ground wire upto a maximum of 10 (Ten) percent may be allowed.

5.2 The length of strand which may be supplied without joints in the individual wires comprising it depends on the length of wire which may be carried by the bobbin in a normal stranding machine. The normal lengths of strand which shall be supplied without joints in individual wires, excluding welds made in the rod before drawing shall be as given in Appendix – I.

5.3 Each coil shall be warranted to contain no weld joints or splice other than in the rod before it is drawn and those permitted in 5.3 above. The wire shall be circular and shall be free from scale or irregularities, imperfections, flow spite and other defects. The zinc coating shall be smooth even and bright.

6. **TESTS AND TEST CERTIFICATES:**

6.1 Ground wire shall be subjected to the tests as specified in the IS:2141-1979 before despatch.

6.2 All the coils of the galvanized strand shall be of the same grade, diameter and construction manufactured under similar condition shall be grounded to constitute one lot.

- 6.3 Samples from each lot shall be tested for ascertaining the conformity to the requirements of the ground wire specified herein. The coils selected shall be tested for length of the lay and joints. The lot shall be declared conforming to the requirements of these characteristics if all the coils are found satisfactory. One test specimen from each wire of the strand shall be drawn, from every selected coil and subjected to tensile tests, ductility test and coating test. One specimen of the completed strand from each coil shall be subjected to tensile strength. The lot shall be declared conforming to the requirements of these characteristics if the entire best specimen satisfy the relevant requirements.
- 6.4 **Chemical Analysis** : One sample shall be drawn from the lot for chemical analysis. Unless otherwise agreed to between the purchase and supplier the chemical analysis shall be carried out.
- 6.5 **Tensile Test** : The wire when tested in accordance with IS : 1521-1960 shall have minimum tensile strength specified in the Appendix – I. The tensile strength of the finished strand shall not be less than 95% of the aggregate of the single wires.
- 6.6 **Ductility test** : The wire shall be subjected to wrapping test in accordance with IS : 1755-1961. When wrapped eight times round its own diameter and on being subsequently straightened the wire shall not break or split.
- 6.7 **Coating test** : The uniformity of zinc coating shall be tested as per IS: 2633-1964. The wire shall withstand the number of dips specified in Appendix – I.
- 6.8 Three copies of manufacturers test certificate shall be submitted by the contractor to the purchaser for approval immediately after such tests have been conducted on the strands and the wire.
- 6.9 The purchaser reserves the right to inspect the material at Manufacturer’s works before despatch.
7. **PACKING AND MARKING** :
- 7.1 The ground wire shall be supplied in non-returnable reels or drums of non-perishable or treated wood conforming to IS: 1778-1991 specifications for Reels and Drums for Bare wire. Each coil shall be provided with a level fixed firmly on the inner part of the coil, bearing the following information.
- (a) Trade name, if any.
 - (b) Name of manufacturer
 - (c) Type of wire, size and length of wire.
 - (d) Net weight of the wire.
 - (e) Total weight, and
 - (f) Number of lengths on the reel or drum unless otherwise agreed to between the purchaser and the supplier, the stranded wire shall be supplied in 50 Kg. coil.
8. **SAG AND TENSION CHARTS AND SAG TEMPLATE** :
- 8.1 The successful tenderer shall be required to submit six copies of sag templates and strings charts for different temperatures and spans, One set of charts shall be ink on tracing cloth. The design date of the lines on which the ground wire will be used are given in Appendix – II.

B. GUARANTEED TECHNICAL PARTICULARS EARTH WIRE (7/3.15 mm):-

TECHNICAL SPECIFICATION OF GROUND WIRE

(i)	Material	:	Steel
(ii)	Purity of material	:	Sulphur and phosphorous contents not exceeding 0.045 percent each. Carbon content not exceeding 0.55 percent. Total sulphur and phosphorous content not to exceed 0.085 percent.
(iii)	Stranding and wire diameter	:	7/3.15 mm
(iv)	Weight	:	428 Kg / Km.
(v)	Single wire before stranding		
	Diameter of wire	:	3.15 mm
	Tolerance	:	+ 0.060 mm - 0.030 mm
	Minimum elongation in 100 mm.	:	4 mm.
	Minimum breaking strength	:	857 kg.
	Minimum tensile strength	:	85.7 kgf / mm ²
(vi)	Stranded wire length of lay		
	Maximum	:	175 mm
	Minimum	:	145 mm
	Minimum breaking load	:	5810 kg
	Over all diameter	:	9.45 mm
	Modulus of elasticity	:	1.938 x 10 ⁶ Kg/Cm ²
	Co-efficient of linear expansion	:	11.50 x 10 ⁻⁶ per deg. C.
	D.C. resistance at 20 ⁰ C	:	3.375 Ohms/Km.
(vii)	Zinc coating :		
	Number of one minute dips	:	Three

- Number of half-minute dips : One
- Quality of zinc : Zn 98 IS:209/1966
- Weight of coating on wire : 275 g/m²
- process of galvanising
- Process of galvanising : Hot-dip.
- (viii) **Joints** : There shall be no joint in any of the wires constituting the ground wire.
- (ix) **Lengths -**
- Standard length** : 1500 metres.
- Tolerance on standard length : ± 5 percent
- Random lengths : Not more than 5 percent of the lengths ordered.
- (x) **Tests :-** : A sample of the finished ground wire when tested in tensile testing machine shall not fail at a stress less than 100% of UTS value of the ground wire. The length of the test sample shall be not less than 5 meters.
- Type tests Ultimate tensile strength test.
- Electrical Tests : As per BS : 182/1972 and BS : 3229/1960
- Routine Tests : As per clause No. 6 of IS: 2141 1968. In addition to these tests, the weight and adherence of Zinc coating tests shall be conducted as per clause 4 and 5 of IS : 4826/1968.
- (xi) **Test Reports** : Three copies of manufacturer test certificates shall be submitted by the Contracts to the purchaser for approve immediately after such test have been conducted on the galvanised steel strand and the wire.

**Sr. General Manager, Elec.
EHT (Constn.) Circle, Sambalpur**

ANNEXURE - I
GENERAL INFORMATION

The bidder shall furnish general information in the following format.

1. Name of the Firm :

2. Head Office address :

3. Contact persons:

Telephone No.

Office:

Residence:

Fax No.

Telex.

4. Place of incorporation / Regn.

5. Year of incorporation / Regn.

SIGNATURE OF TENDERER

NAME:

DESIGNATION (SEAL):

ANNEXURE - II
DECLARATION FORM

SPECIFICATION No. EHT (C)/ T / 02 / 2020-21 Date: 18.01.2021

To

The Sr. General Manager,
E.H.T. Construction Circle,
OPTC Ltd., Sambalpur.

Sir,

1. After careful examination of the above specification together with tender conditions referred to therein, I / we undersigned hereby offer to execute the work contract covered therein complete in all respect as per the specification and general conditions, at the rates quoted in attached contract schedule of prices in the tender. Our offer is valid upto 180 days from the date of opening of tender and the prices, which are on firm basis, will remain valid for two years from the date of opening of tender.
2. I / We hereby undertake to have the works completed within the time specified in the tender.
3. I / We certify to have purchased a copy of the specification by remitting cash/ demand draft of Rs 4,480/- (Rupees Four Thousand Four Hundred Eighty) only inclusive of GST @ 12% and this has been acknowledged by you in your receipt No..... Dated
4. In the event of work order being decided in my / our favour, I / We agree to furnish the security deposit in the manner acceptable to Orissa Power Transmission Corporation Limited and for the sum as applicable to me / us as provided in the general conditions of contract (Section-II) of this specification within 10 days of issue of Work Order, failing which I / We clearly understand that the said work order will be liable to be withdrawn by OPTCL.
5. I/We certify that we are having valid labour license for engagement of labours for the referred work duly insured to cover all fatal & non-fatal accidental dues or any mishap happening during execution of work.

Signed this day of
2020/21.

Yours faithfully,

Signature with
designation & Seal of
Tenderer

Note: This form should be duly filled by the tenderer and returned to the General Manager, E.H.T. Construction Circle, OPTC Ltd., Sambalpur alongwith tender.

ANNEXURE - III

ABSTRACT OF TERMS & CONDITIONS

(This proforma should be filled in with all information by the tenderer and should be furnished alongwith the Tender)

1. i) Name & address of the firm

ii) Earnest Money Furnished

a) Cash

b) Bank Guarantee

c) Bank Draft

d) Validity(EMD)

2. Validity: (Tender)

3. Nature of Price: Firm / Variable

4. Rate of Sales Tax

5. Rate of other taxes/ levies / duties

6. Terms of Payment : Whether agreeable to OPTCL Yes / No
terms or not ?
7. Schedule of Completion : Whether agreeable to OPTCL Yes / No
of work. terms or not ?
8. Guarantee : Whether agreeable to OPTCL Yes / No
terms or not ?
9. Penalty : Whether agreeable to OPTCL Yes / No
terms or not ?
10. Whether agreed to Technical Specifications and drawings : Yes / No

Signature of Tenderer

Name :

Designation (Seal)

ANNEXURE – IV

EXPERIENCE RECORD

The bidder shall furnish details of Work Order for similar nature of work received during last three years and already completed and under execution.

Sl. No.	Work Order No. & Date	Name & address of the authority placing order.	Value of contract	Scheduled date of completion of work	Lapses if any in executing the Work Order	Remarks
1	2	3	4	5	6	7

SIGNATURE OF TENDERER:

NAME :

DESIGNATION (SEAL):

ANNEXURE – V
LITIGATION HISTORY

Name of the Applicant

Bidder should provide information on any history of litigation or arbitration resulting from contracts executed in the last five years or currently under execution.

Year	Award for or against bidder	Name of client, cause of litigation and matter in dispute	Disputed amount (Current value in Rs.)
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Signature of Tenderer

Name :

Designation (Seal)

**ANNEXURE-V1
PRICE SCHEDULE**

SCHEDULE OF PRICES

TENDER

SPECIFICATION No.

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

GST@ ----%	Unit landing Cost including GST	Total landing cost Including all taxes & duties.
9	10= (8+9)	11= (3 X 10)

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 sub-station site.
2. In case, where F&I components are not specifically indicated in this schedule, 5% of the ex-works price shall be taken towards F&I components for the purpose of comparison of price.
3. The Tenderer shall certify in the price bid that MODVAT benefit, if any, has been fully passed on to the purchaser while quoting the tender price.
4. Conditional offers will not be acceptable.
5. The bidder is to clearly indicate the period up to which the tax holidays are available to them.
6. Price bid in any other format will not be acceptable and the offer will be rejected.
7. Test charges (Routine/type) if any, mandatory spares, maintenance equipment charges as per Technical Specification supervisory charges (in case of equipments by taking 30 Man days) shall be indicated separately, row-wise.
8. All the above charges will be taken into account, during bid price evaluation.

ANNEXURE-VII

PROFORMA FOR COMPOSITE BANK GUARANTEE FOR SECURITY DEPOSIT PAYMENT AND PERFORMANCE

This Guarantee Bond is executed
this _____ day of _____ 2011 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 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 invokable at our place of business at_____ of Bhubaneswar in the state of Odisha. [Indicate the name of the Bank]

‘Notwithstanding anything contained herein above’

a)Our liability under the bank guarantee shall not exceed Rs._____(In words Rupees_____).

b)This bank Guarantee shall be valid up to_____ .

c)We are liable to pay guaranteed amount or any part thereof under this bank guarantee only if you serve upon us at _____branch of Bhubaneswar in the state of Odisha a written claim or demand on or before _____ (date of expiry of guarantee).

Date at _____the, _____day of 201_____

For_____

[Indicate the name of Bank]

Witness (Name, Signature & Address)

- 1.
- 2.

ANNEXURE-VIII

DEVIATION FROM SPECIFICATION (TECHNICAL & COMMERCIAL)

(A) Deviation from the condition of contract (Technical)

Sl. No.	Clause No. of Specification	Particulars of deviation	Price
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Date:
Place:

SIGNATURE OF TENDERER
NAME:
DESIGNATION:
(SEAL)

(B) Departure from the condition of contract (commercial)

The tenderer shall enter below, departure if any, from the conditions of contract as herein.

Date:
Place:

SIGNATURE OF TENDERER
NAME:
DESIGNATION:
(SEAL)

Annexure-IX

GUARANTEED TECHNICAL PARTICULARS OF THE GALVANIZED STEEL G.I. TO BE FURNISHED BY THE BIDDER

1.	Maker's name, address and country	:	
2.	Percentage of carbon content of the steel wire.	:	
3.	Particular of steel strands a) Number of strands. b) Diameter c) Standard sectional area d) Minimum ultimate tensile strength. e) Minimum breaking land f) Final stress in steel wires	:	Mm Sq.mm N/mm ² N/mm ² KN/mm ²
4.	(a) Uniformity of coating of number and duration of dips.	:	Minutes Number of dips.
	1. 2.		
	b) Minimum weight of coating	:	GM/m ²
5.	Standard overall diameter of ground wire.	:	Sq.mm
6.	Area of cross section of ground wire.	:	Mm
7.	Guaranteed ultimate tensile strength of ground wire.	:	N/mm ²
8.	Maximum working tension	:	N/mm ²
9.	Resistance in ohms per KM at 20 ⁰ C.	:	
10.	Standard length of ground wire.	:	Km.
11.	Modulus of elasticity of ground wire.	:	Kg / cm ² Final Initial
12.	Co-efficient of linear expansion.	:	
13.	Zinc coating :-		
	a) Number of one minute dip	:	

	b) Number of half minute dip.		
	c) Quality of zinc	:	
14.	Weight of coating on wire	:	
15.	Process of galvanising	:	

Date:

Place:

SIGNATURE OF TENDERER

NAME:

DESIGNATION:

(SEAL)

