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भारत हेवी इलेक्ट्रिकल्स लिमिटेड  
**BHARAT HEAVY ELECTRICALS LIMITED**  
(A GOVERNMENT OF INDIA UNDERTAKING)

ELECTRONICS DIVISION  
P.B. NO.: 2606, MYSORE ROAD, BANGALORE-560 026.

Dear Sir / Madam,

**Sub : Tender enquiry for Sub-contract work of Cable Laying of CCTV System**  
**Project: NTPC Tanda STPP (2 x 660MW).**

<b>Tender Enquiry Number</b>	<b>: CE/ES/2020-21/NTPC-TANDA/CCTV/SJDB</b>
<b>Tender date</b>	<b>: 16.04.2021</b>
<b>Tender due Date and Time</b>	<b>: 23.04.2021 13:30 Hrs.</b>

Sealed tenders in single part are invited for taking up the subject contract work cable laying involving trenching and road cutting. The following details may be carefully studied and considered in responding to the enquiry.

1. No extension of time will be given for submission of offer under any circumstances.
2. Offer cover shall be **super scribed** with the “**Tender Enquiry number, due date and time**”.
3. Offer can be sent by post/courier addressed to the **Addl. General Manager/ External Services Department, BHEL-EDN, P.B.No.2606, Mysore Road, Bangalore - 560 026** so as to reach us before the due date and time.
4. Tender Document can also be electronically submitted in the form of pdf format protected by Password of bidder's choice and the same shall be shared with BHEL on the day of Opening of the bid.
5. Offers will be opened at Tender opening room situated near Reception Or Any Other Convenient Location at BHEL- EDN, Bangalore on **23.04.2021 at 13:30 hours** in the presence of bidder who wish to be present.
6. The validity of offer shall be for 90 days from the date of opening.
7. The prices quoted shall be FIRM. No escalation in price/s will be allowed.
8. GST, if applicable, will be paid extra only if it is matching with data uploaded by the Bidder in GST portal. The Bidder shall mention Bidder's GSTIN number in all quotation submitted.



9. The bidder shall submit a **copy Income Tax PAN Number, ESI & EPF registration (if applicable) & GST registration document (if registered)** along with the offer.
10. The tender is likely to be finalized in a very short time.
11. The bidder is advised to visit the project site to familiarize themselves with the project site conditions.
12. The total value of work is **₹ Rs 34, 76,700/-** (Rupees Thirty Four Lac Seventy Six Thousand Seven hundred Only) exclusive of GST for Cable Laying work.
13. The estimated time for completion of work is 90 days or in line with NTPC Tanda erection schedule whichever is later.
14. Advance payment and interim payment will **not** be paid to the Contractor.
15. For any clarification on this tender, DGM / External Services OR Sr. DGM/ External Services may please be contacted on phone no. 080-2699 8949/8605, email id: [sdbarman@bhel.in](mailto:sdbarman@bhel.in) / [gopal.maurya@bhel.in](mailto:gopal.maurya@bhel.in)

Enquiry comprising of following documents are issued herewith:

- a) Section 1: Special Instructions
- b) Section 2: Scope of Work
- c) Section 3: Schedule of price
- d) Section 4: Special conditions of contract.
- e) Section 5: No deviation certificate.

BHEL reserves the right to cancel or reject the offer either partly or in full without assigning any reasons thereof.

Thanking you,

Yours Faithfully,  
For & On behalf of BHEL-EDN

**-Sd/-**

(S DEBBARMAN)  
DGM / CE-EXT. SERV.



## **SECTION 1** **SPECIAL INSTRUCTIONS**

1. The offer shall be submitted in a single part in a sealed envelope prominently **super scribing** the “**Tender Enquiry Number and due date**” as mentioned in the covering letter.
2. The bidder is requested to carefully and thoroughly read the instructions/ documents sent to them. For any further clarifications BHEL may be contacted.
3. The bidder is advised to visit project site to familiarize themselves with the site conditions before preparing the offer.
4. **EARNEST MONEY DEPOST (EMD):**
  - a. EMD of **₹69,534.00** (Rupees Sixty Nine Thousand Five Hundred Thirty Four ONLY) in the form of **Banker's cheque / Pay order/crossed DEMAND DRAFT** drawn in favor of “**BHEL-Electronics Division, Bangalore**” payable at Bangalore shall be send along with the bid **(or)** Payment thro' SBI Collect portal (No charges for transaction unlike in DD) **(or)** Cash deposit as permissible under the extant Income Tax Act. EMD in any other form will not be accepted.
  - b. EMD shall not carry any interest.
  - c. EMD by the tenderer will be forfeited if after opening the tender, the tendered revokes his tender within the validity period or increases the rates w.r.t earliest quoted rates.
  - d. EMD by tenderer will be forfeited if the tenderer fail to deposit the required security deposit or does not commence the work within the period as per LOI / contract.
  - e. EMD given by all unsuccessful tender shall be refunded normally within thirty days of acceptance of award of work by the successful tenderer & tenderer should have submitted required formats (NEFT form certified by Bank Manager in original) for EFT mode of payment along with a crossed cancelled Cheque.
  - f. EMD of successful tenderer will be retained as part of Security Deposit with their Consent via e-Mail.
5. Security Deposit (SD) @ 5% of the contract value (including GST) shall be paid by the successful bidder. The successful bidder has option to pay a minimum of 50% of the SD amount by pay order or demand draft in favor of BHEL, payable at Bangalore before start of work and balance 50% can be recovered while releasing the payment for work carried out.
6. The security deposit shall not carry any interest.
7. The Contractor will have to submit a certificate to BHEL declaring that the Contractor has complied with all the statutory provisions including and pertaining to Provident fund during the execution period of the contract.



8. Security Deposit amount will be returned after 60 days from the date of successful completion of work as per the contract after duly certified by BHEL Site Engineer on **WAM-10** format along with compliance certificate (as per Sl. No. 7 above).
9. Workmanship guarantee is applicable for a period of 60 days from the date of successful completion of work. Any rectification work to be carried out during the guarantee period shall be carried out at free of cost.
10. The Contractor shall mobilize his men, materials, tools & tackles to site immediately from the date of intimation from BHEL (or) release of LOI / WO.
11. In addition to the local laws and regulations the bidder shall also comply with the Minimum Wages Act. The Payment of Wages Act and the rules made there under in respect of labour currently employed on or connected with the contract shall be followed.
12. A declaration indicating that there is no deviation from the conditions mentioned in tender documents should be given in the format as per section 5.
13. Bidder shall return this tender document with each page duly signed & stamped by them to BHEL along with their offer.
14. The work will be taken up immediately and the work shall be completed as per the BHEL's / NTPC-TANDA erection schedule requirement.
15. Payment term: 100% payment (less 50% of SD amount, as applicable if the total SD amount is not received) will be released within 30 days from the date of receipt of bill at BHEL-EDN, Bangalore on completion of work and actual cable laid bill of quantities certification by BHEL site Engineer or BHEL-Customer. Bill shall be forwarded to BHEL-EDN, Bangalore for process and release of payment.
16. Mode of payment: Payment will be made by EFT and the transaction charges (if any) shall be borne by the Contractor. The Contractor will be required to submit NEFT mandate form duly certified by bank for EFT mode of payment along with a crossed cancelled Cheque. If already a registered vendor with BHEL EDN Unit, EFT form will not be required.
17. No claim & No demand certificate to be submitted along with the invoice for payment.
18. GST, if applicable, shall be paid extra. A copy of GST registration certificate shall be enclosed with the offer. The changes in GST rates due to statutory amendment of GST Act during the course of contract will be paid as applicable.
19. Income tax as per Section 194 of IT Rules plus surcharge as applicable will be deducted from the gross amount of each bill. Please indicate the IT PAN and a copy of PAN Card be submitted with the offer.
20. Goods and Services Tax (GST):



- a) BHEL GSTIN number is **23AAACB4146P1ZN**. All invoices to contain BHEL GSTIN No.
- b) The Bidder shall mention Bidder's GSTIN number in all quotations and Invoices submitted.
- c) The Bidder shall also mention SAC (Services Accounting Code) mandatorily in all quotations and invoices submitted.
- d) Invoice submitted should be in the format as specified under GST Laws viz. all details as mentioned in Invoice Rules like GSTN registration number, invoice number, quantity, rate, value, taxes with nomenclature – CGST, SGST, UGST,IGST mentioned separately, HSN Code / SAC Code etc. Invoice should be submitted in original for buyer plus duplicate for credit availing.
- e) Payment of GST to Bidder will be made only if it is matching with data uploaded by the Bidder.
- f) Bidders to give undertaking that GST as mentioned in the Invoice has been paid either through cash or admissible input credit and also filed the returns at the time of submission of invoice.
- g) For invoices paid on Reverse charge basis – "Tax payable on reverse charge basis" to be mentioned on the invoice.
- h) In case GST credit is delayed/denied to BHEL due to non/delayed receipt of goods and/or tax invoice or expiry of timeline prescribed in GST law for availing such ITC, or any other reasons not attributable to BHEL, GST amount will be recoverable from vendor along with interest levied on BHEL.
- i) In case vendor delays declaring such invoice in his return and GST credit availed by BHEL is denied or reversed subsequently as per GST law, GST amount paid by BHEL towards such ITC reversal as per GST law will be recoverable from vendor/contractor along with interest levied/leviable on BHEL.
- j) Penalty if any, charged to successful bidder during execution of the job, GST as applicable will be recovered along with penalty amount.
- k) As per GOI, Ministry of Finance - 1st day of October, 2018, as the date on which the provisions of section 51 GST Act shall have come into force. If applicable for this contract to be acceptable to contractor for deduction of GST TDS @1% on taxable value excluding GST.



## **SECTION-2**

### **LAYING OF CABLE (CORE and UTP), OPTICAL FIBRE , ERECTION OF CABLE TRAY LAYING OF FLEXIBLE CONDUIT & I&C OF MEDIA CONVERTERS AND FO ACCESSORIES**

#### **INCLUDING SPLICING. AT NTPC- TANDA STPP (2 X 660MW)**

##### **A) SCOPE OF WORK:**

Laying, dressing and clamping (by Nylon / PVC ties or Aluminum strips or any other method specified by BHEL Engineer) of the cables in the cable trays / angles. The final dressing of all cables laid by the contractor shall also be done with Nylon cord / Aluminum strip. Cost of cable laying as per BOQ shall include the cost of Nylon / PVC tied and Aluminum strip required for dressing / clamping.

The cables shall be laid in the cable trays and the route as per cable Schedule. Cable Schedule shall be provided which will define the two end points of the cable and type of cable. However, it shall be bidder's responsibility to make a survey of site and lay Cable through the shortest existing cable tray route available at site. While most of the cable will be laid in existing cable trays of the power plant, certain quantity of cable are to be laid in flexible GI conduits (approx.. 1500mtrs). 3000mtrs of cable tray (50x25x2mm with cover) is also to be erected by the bidder as per site requirements. The contractor shall intimate the engineer in charge whenever the cable tray is filled. Extra cables if laid by the contractor due to mistake, the same shall be removed at no extra cost to BHEL.

The cable run number shall be provided by punching Aluminum Tag plates and tying suitably with nylon ties (at both ends and regular intervals of 5 meters as advised by BHEL Engineer) which shall be arranged by contractor at his cost. Indelible tags to be provided at all terminations, on both sides of the wall or floor crossing, on each conduit / Duct / Pipe entry /exit and at every 20 mtr. In cable tray/trench.

While laying cables, existing cable tray covers and false flooring may be required removing and re-fixing. The same has to be done at no extra cost to BHEL.

Cable clamping: All cables laid on trays shall be neatly dressed up & suitably clamped/ tied to the tray.

Road crossing: Cables to pass through buried high density PE pipes encased in PCC. At least 300 mm clearance shall be provided between

- LT power & LT control cable
- LT control & Instrumentation cables.

Power cables and instrumentation cables are to be segregated and laid separately.

In vertically stacked cable trays, the higher voltage cable shall be in higher position and instrumentation cable shall be in bottom tier of the tray stack. The distance between instrumentation cables and those of the other system shall be as follows:

From 415V tray system	: 610 mm
From control cable tray system	: 305 mm



The civil works including excavation, covering with bricks, road cutting etc. wherever required shall be carried out by the contractor. After cable laying the excavated area / roads shall be refilled and restored by the contractor. Supply of all materials for civil works like bricks, sand, cable route markers, preparation of pits etc. shall be carried out by the contractor including within the quoted rate.

The quantities as mentioned in BOQ are tentative only. The actual / final quantities of cable laid, trench digging & Road / RCC cutting shall be frozen after a joint measurement by BHEL EDN Site In-charge & Contractor Site In-charge. The joint protocol signed in original should be furnished along with bill.

The cables being laid under this tender shall be terminated by bidder as per cable Schedule. Necessary splicing work for the FO cable are also in bidder scope. All cores Of FO cables are to be terminated in LIU at both ends.

While buried - in separate trench approx. 1.6 meter depth, to be laid in 2" rodent Proof HDPE conduits covered with sand, brick and soil along the pipe line route. Route markers at every 20 Meters along the route 8 at every bend.

While crossing roads - to be laid in rodent proof HDPE conduits with sand filling at Bottom and sand, soil filling at top with cement concrete.

The media converters are to be installed in JB/network rack in field end and in CCTV 42U panel in other end. Necessary channels and other hardware required For Installing these media converter shall be supplied by bidder on as required basis. The required 3 pin power sockets are also to be supplied and installed in the JB's / Rack / panel for powering the media converters on as required basis.

Flexible conduit are to be used for connecting cable between cameras to its JB. Necessary fitting to entire quantity of conduit to be laid under this tender shall be in bidder's scope on as required basis.

The above defined scope of work will have to be carried in a period of around 6months from placement of order and shall be done in phases as per availability of Fronts at site. On completion of cable laying and termination, BHEL's other Contractor will install and commission the cameras / Ethernet switches etc. In case of any fault in availability of signal in the cables, bidder shall perform necessary Troubleshooting / fault finding and establish the connectivity. This shall require Deputation of bidder's personnel at site during installation and commissioning of the system components.

## **B) OTHER WORKS:**

- Removal of related debris and cleaning of area
- Any other minor work for satisfactory completion of contract

## **C) MAN POWER:**

Supervisors & Helpers required for the job are to be mobilized in adequate numbers to complete the job as per the time schedule mentioned.





**D) SUPPLY OF MATERIALS:**

All types of consumables like clamps, cable ties, bricks, sand, conduit etc. required for this cable laying, trenching & dressing job are included in bidder scope.

**E) ALL TOOLS & TACKLES:** required for carrying out the cable laying, trenching & Road / RCC Cutting work to be arranged by the Contractor.

Any other associated minor works required for the satisfactory completion of cable laying, trenching & Road / RCC Cutting work is in the scope of the Contractor even if it is not exclusively mentioned in the scope of work.

As customer is insisting BHEL for early completion of this cable laying work, the same has to be completed within 60 days as said in point 12 (page 2 of 12) and shall be carried out immediately upon issue of LOI / WO.

The Contractor should be able to depute required manpower as desired by BHEL Site Engineer intimation.



### SECTION – 3 SCHEDULE OF PRICE

#### BILL OF QUANTITIES FOR CABLE LAYING INVOLVING laying in metal conduits at NTPC- Tanda STPP (2 X 660MW)

SL. NO	SCOPE OF WORK / Description	QTY	Unit of Measurement	RATE in ₹	Total in ₹ (Figures)
1	Laying of 4 CORE FIBER OPTIC CABLE (ARMORED)	50000	Mtr		
2	Laying of 3 Core 1.5 Sq.mm Power Cable	20000	Mtr		
3	Laying of UTP(CAT-5e) cable	5000	Mtr		
4	Laying of 1" flexible metal conduit	1500	Mtr		
5	Cable Tray (50x25x2mm)	3000	Mtr		
6	Installation and commissioning of media converters and FO accessories (Including splicing)	1	Set		
<b>A.</b>	SUB-TOTAL IN ₹:				
<b>B.</b>	(if applicable) GST _____% on (A) IN ₹:				
<b>C.</b>	<b>Total Quoted Price inclusive of taxes (A+B):</b>				

**Total amount in words:** \_\_\_\_\_

(SIGNATURE WITH SEAL OF THE CONTRACTOR)

Regd. Office: BHEL House, Siri Fort, NEW DELHI – 110049

Website: [www.bhel.in](http://www.bhel.in)



1. The Contractor has to make his own arrangement for T&P safety appliances and consumables required for the above job.
2. The work shall be executed as per the direction and to the satisfaction of BHEL site Engineer. Decision of BHEL site Engineer will be firm and binding on all matters.
3. Any person below the age of 18 years shall not be deployed for the work.
4. The Contractor shall be required to pay full wages to the workers as per prevailing rules.
5. If the Contractor fails to deploy required numbers of labors as per the terms of contract, then recovery @ double the minimum wages of unskilled labour shall be effected for number of labour less than the specified requirement, if not specially mentioned otherwise.
6. The Contractor has to comply fully with the safety requirement of the NTPC-TANDA premises.
7. The Contractor shall possess **“Independent PF code”**. Contractor has to observe all formalities as per PF act or Workmen Compensation Insurance, as applicable.
8. The Contractor shall furnish a copy of Labour license from the Dy. Commissioner of Labour, if applicable.
9. The Contractor shall be liable to comply with provisions under the various labour legislations. Besides other obligations under the labour legislations he is required to ensure payment of minimum wages as per Minimum Wages Act, grant of leaves, as per the notification of Chief labour commissioner, Provident fund under the Provident Fund Act, compensation under the workmen compensation Act, Retrenchment compensation etc. The Contractor shall indemnify NTPC-TANDA against all claims, damages and compensations on account of his failure to comply with statutory provisions.
10. The Contractor shall not subcontract, transfer or assign any part or full work of this award without prior written permission from BHEL.
11. In case of any conflict amongst the various drawings and other tender documents, the decision of the BHEL site Engineer shall be final and binding.
12. If any dispute or difference of any kind whatsoever shall arise between BHEL-EDN and the Contractor arising out of the contract or with respect to its interpretation, whether during or after its completion or whether before or after its termination, abandonment or breach of the contract, it shall be referred to the sole arbitration of the Unit head of BHEL-EDN or any Officer duly authorized by him in this behalf and the decision of the Arbitrator shall be final and binding on the parties.
13. It would be the responsibility of the Contractor to give weekly off and other holidays to their employees as applicable at the place of working (NTPC-TANDA).
14. As per NTPC-TANDA statutory requirement, the Contractor and their workers shall Follow all safety rules while working so that there should not be any accident, which may cause loss of life and damage to Customer's property. Contractor shall also take



Insurance cover for workmen compensation for the workers employed by him at his own cost.

15. No complaints from Contractor's workmen with regard to nature of work entrusted or place of work will be entertained.
16. The Contractor or his authorized representative shall be available at plant site daily for receiving necessary instructions from Engineer-In-Charge, BHEL and to carry out the work accordingly.
17. The Contractor should note that the labour under their contract will be working in the vicinity of running equipment's and they should give proper instructions to all the workers under their control to be careful so as to avoid any accidents.
18. The Contractor is required to carry out the work in controlled conditions so as to contain air pollution, water/land contamination within relevant legislative and statutory requirements.
19. Quantities likes cable laying & removal will be paid to contractor on actual laid / removal quantity after measurement only. Similarly for other BOQ also any addition in quantities will be paid on pro-rata basis as per quoted rates.
20. LD / Penalty Clause – Delay attributable to contractor with proper intimation will be recovered at ½ % of the contract value per week of delay & maximum limited to 10% of the contract value.

Note: The term 'Company' means BHEL and 'Customer' means NTPC Tanda STPP.



**Sub-contract work of CABLE and conduit laying work at NTPC Tanda 2x660MW**

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*(PREFERABLY TO BE GIVEN ON SUB CONTRACTORS LETTER HEAD)*

**Section 5**

**CERTIFICATE FOR NO DEVIATION**

I/We,.....

of M/s.....

Hereby certify that there is no deviation from the tender specifications and conditions either technical or commercial and I/We agree to all the terms and conditions mentioned in the tender specification.

Signature of the Contractor  
With seal

Place:

Date: