



ಭಾರತ್ ಹೆವಿ ಎಲೆಕ್ಟ್ರಿಕಲ್ಸ್ ಲಿಮಿಟೆಡ್  
भारत हेवी इलेक्ट्रिकल्स लिमिटेड

**Bharat Heavy Electricals Limited**

( A Government of India Undertaking)

**ELECTRONICS DIVISION**

**P.B.No 2606, Mysore Road, Bangalore - 560 026**

Phone : 080 – 26998469, Fax : 080 – 26989217 / 26989222, email id : extservices@bheledn.co.in

Dear Sir,

**Sub : Tender enquiry for sub-contract work of Erection & providing Commissioning support for 800 MW Operator Training Simulator package at National Power Training Institute (NPTI), Faridabad, Haryana State.**

**Tender Enquiry Number : CE/ES/2016-17/15/NPTI FBD/BSR**  
**Tender date : 18.01.2017**  
**Tender due Date and Time : 03.02.2017 1300 Hrs.**

Sealed tenders in single part are invited for taking up the subject contract work of Erection and Providing Commissioning support for 800 MW Operator Training Simulator package. 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, NEB 5<sup>th</sup> Floor, BHEL-EDN, P.B.No.2606, Mysore Road, Bangalore-560 026 so as to reach us before the due date and time.
4. Offers will be opened at Tender opening room situated near **Reception, BHEL-EDN, Bangalore on 03.02.2017 at 1330 hours** in the presence of bidder who wish to be present.



5. The validity of offer shall be for 45 days from the date of opening.
6. The prices quoted shall be FIRM. No escalation in price/s will be allowed.
7. Service tax and Cess, as applicable, shall be paid extra.
8. The tender is likely to be finalized in a very short time.
9. The bidder is advised to visit the project site to familiarize themselves with the project site conditions.
10. Estimated value of work : Rs.1,60,000/- (Rupees One lakh sixty Thousand only) exclusive of service tax and cess, as applicable.
11. The estimated time for completion of work is 25 days
12. Advance payment and interim payment will **not** be paid to the Contractor.
13. For any clarification on this tender, Addl. General Manager / External Services may please be contacted on phone no. 080-26989080 / 9945530203, Fax no. 080-26989222 / 26989217, email id: extservices@bheledn.co.in

Enquiry comprising of following documents are issued herewith.:

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

The contractors should have the similar experience of installations of panels, Computers etc in thermal power plants / NPTI.

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

Bidder is advised to return one set duly signed in all the pages along with the offer.

Thanking you,

Yours Faithfully,  
For & On behalf of BHEL-EDN

SENIOR MANAGER  
EXTERNAL SERVICES



**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 DEPOSIT ( EMD):**
  - a. EMD for Rs. 3200/- (Rupees Three Thousand two hundred only) in the form of crossed Demand Draft drawn in favor of BHEL- Electronics Division Bangalore payable at Bangalore shall be sent along with the bid. 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 tenderer revokes his tender within the validity period or increases the rates w.r.t. earlier quoted rates.
  - d. EMD by the tenderer will be forfeited if the tenderer does not commence the work within the period as per LOI/ contract.
  - e. EMD given by all unsuccessful tenderers shall be refunded normally within thirty days of acceptance of award of work by the successful tenderer
5. Security deposit @ 5% of the work order value including service tax shall be paid by the successful bidder. The successful bidder has to pay the SD amount by pay order or demand draft in favour of BHEL, payable at Bangalore before start of work .
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 and ESI during the execution period of the contract.
8. Security Deposit amount will be returned after 90 days from the date of successful completion of work as per the contract after duly certified by BHEL Site Engineer and on receipt of compliance certificate ( as per Sl. No. 7 above).
9. Workmanship guarantee is applicable for a period of 90 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 within 7 (seven) days 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. One set of tender documents should be returned with each page duly signed & stamped by them to BHEL along with their offer.
14. The work will be taken up within SEVEN days from the date of issue of LOI / WO by BHEL and completed as per the BHEL's/ NPTI FARIDABAD requirement within 25 days.
15. **Payment terms:** 100% payment will be released on submission of invoice and certified by BHEL site Engineer or BHEL-Customer. Bill shall be forwarded to BHEL-EDN, Bangalore for process and release of payment will be from Bangalore.
16. **Mode of payment :** Payment will be made by EFT and the charges if any shall be borne by the Contractor. The Contractor will be required to submit required formats for EFT mode of payment.
17. Service tax, if applicable, shall be paid extra. A copy of service tax registration certificate shall be enclosed with the offer.
18. Income tax plus surcharge as applicable will be deducted from the gross amount of each bill. Please indicate the IT PAN.



## **SECTION 2**

### **ERECTION & PROVIDING COMMISSIONING ASSISTANCE FOR 800 MW OPERATOR TRAINING SIMULATOR PACKAGE AT NPTI, FARIDABAD**

=====

#### **Project Information:**

NPTI's Corporate Centre Campus is spread over a picturesque landscape of about 15 acres in Faridabad in the Suburbs of New Delhi in the National Capital Region (NCR). The Campus is located, just about 5 kms. From New Delhi Haryana border, about 30 kms from the International Airport and 25 kms from New Delhi Railway station.

#### **A) SCOPE OF WORK.**

1. SHIFTING TO PLACE OF ERECTION & ERECTION OF UPS SYSTEM CONSISTING OF SEVEN PANELS  
WORK INCLUDES MINOR CIVIL WORK FOR ERECTION OF PANELS & MODIFICATION OF BASE FRAME (IF REQUIRED).
2. ERECTION OF BATTERY BANK FOR UPS CONSISTING OF 291 CELLS ON A STEEL STAND
3. INSTALLATION OF HMI ITEMS LIKE, PCs, 20" TFT MONITORS, PRINTERS, MINI UPS, ETC.
4. INSTALLATION OF LARGE VIDEO SCREENS (70")
5. INSTALLATION OF FURNITURE ITEMS LIKE, ALMIRAHs, WORK STATIONS, TABLE, CHAIRS, PROJECTOR, ETC.
6. INTERCONNECTION OF ALL CABLES (POWER, CONTROL & INSTRUMENTATION) INCLUDING GLANDS, LUGS & NEW FERRULES SUPPLY AS REQUIRED, CABLE LAYING (INCLUDING UTP CABLE TO CONTROL ROOM FROM PANEL) & TERMINATION WORK AT NEW PANELS, CONTROL DESK.
7. UPS PANEL EARTHING
8. CONSTRUCTION OF EARTH PIT (OPTIONAL, IF REQUIRED ONLY)  
Supply of all associated materials and Construction of Earth Pit with 40 mm Dia. 2.5 Mtr. Length G.I. pipe along with funnel, charcoal, salt etc. with complete brick work for chamber, G.I. strip for connecting earthing cable and closing the earth pit with Cast Iron cover.



## **B) OTHER WORKS:**

- Assistance for verification of materials at site.
- Minor civil works for erection of panels including base frame fabrication/ modification as required. Fixing of foundation bolts and welding of base frame as required.
- Cable dressing / tagging etc.,
- Panel earthing including laying of cable up to Earth pit
- Removal of related debris and cleaning of area
- Any other minor work for completion of contract

## **C) MAN POWER:**

Supervisor, Electricians/Technicians and Helpers are to be provided to assist BHEL site engineer during basic commissioning of the system.

## **D) SUPPLY OF MATERIALS:**

Consumables for cable laying & termination such as, ferrules, lugs for cables, ties, tags, clamps, etc. as per the requirement to be procured and used by the Contractor at no extra cost to BHEL.

**E) All tools & tackles** required for carrying out the erection and commissioning work to be arranged by the Contractor at his own cost.

Security of all the materials during erection of the equipment till the commissioning is in the scope of Contractor.

Any other associated minor works required for the satisfactory completion of erection and commissioning of the system is in the scope of the Contractor even if it is not exclusively mentioned in the scope of work.

**F) FOR UPS PANELS, Battery bank & LVS the commissioning will be carried out by respective vendor. The bidder shall provide manpower assistance to the respective vendor. Similarly the furniture assembly will be carried out by the vendor. Manpower assistance is to be provided by the bidder within the lumpsum amount quoted for the works listed in the schedule of price.**

### SECTION - 3

#### PRICE SCHEDULE

LUMPSUM AMOUNT FOR THE ENTIRE WORK OF ERECTION & PROVIDING COMMISSIONING ASSISTANCE AS DESCRIBED BELOW FOR 800 MW OPERATOR TRAINING SIMULATOR PACKAGE AT NATIONAL POWER TRAINING INSTITUTE (NPTI), FARIDABAD, HARYANA STATE.

Sl. No.	Description	Unit of Measurement	Qty.
1	<p>UPS, RATING 45 KVA, Approximate weight of all panels together-3000 Kgs. TOTAL NO. OF PANELS – 7 (SEVEN)</p> <p>A) Input Transformer Panel-1 (Delta-Star), Size: Size: L x B x H - 600 x 900 x 2110 mm, Qty. 1 no. B) Input Transformer Panel-1 (Delta-Delta), Size: Size: L x B x H - 600 x 900 x 2110 mm, Qty. 1 no. C) UPS-1 panel, Qty. 1 no. Size: L x B x H - 880 x 900 x 2110 mm D) UPS-2 panel, Qty. 1 no. Size: L x B x H - 900 x 900 x 2110 mm E) Bypass SCVS panel with Input isolation Transformer - qty.1 No. of Size: L x B x H - 600 x 900 x 2110 F) ACDB Panel (qty.2 No.) of Size: L x W x H - 1000 x 400 x 2135mm</p> <p>The work includes Minor Civil works for Erection of Panels (if required) &amp; Fabrication of base frame</p>	SET	01
2	Battery bank for UPS consisting of (Nickel Cadmium ) 291 Cells, Model KPH 213P, Size: L x W x H - 156 x 165 x 361 mm and Approximate Weight of each Cell = 16.7 Kg.		
	<b>INSTALLATION OF HMI ITEMS</b>		
3	Personal Computers at various locations inside Control Room consisting of CPU, Monitor, Key board and Mouse	No.	19
4	20" TFT Monitors	No.	14
5	Printers	No.	3
6	Mini UPS, Rating 1 KVA with Battery for Servers	No.	4
7	LARGE VIDEO SCREENS (65 to 70")	No.	5
	<b>FURNITURE ITEMS</b>		
8	Installation of Furniture Items- The work consist of Installation		



	of Work Station furniture, Almirahs, Tables, Chairs, Conference desk, Panel for LVS, PC Rack for mounting PCs, LCS Projector with intelligent screen	Lumpsum	01
9	Control Desk, 5 Mtr. Length	Set	01
10	Instructor's Desk, 2 Mtr. Length	Set	01
11	INTERCONNECTION OF ALL CABLES (POWER, CONTROL & INSTRUMENTATION) INCLUDING GLANDS, LUGS & NEW FERRULES SUPPLY AS REQUIRED, CABLE LAYING (INCLUDING UTP CABLE TO CONTROL ROOM FROM UPS PANEL) & TERMINATION WORK AT NEW PANELS, (IF ANY), CONTROL DESK (For REMOTE OPERATION).Approx. qty. 1000 Mtr.	Lot	01
12	G.I. Perforated Cable sub trays ( Size: 50mm / 100mm Width x 2mm Thick) installation AND laying of Flexible Conduit of Size: 3/4" dia. / 1" dia. Approx. total qty. 100 Mtr.	Lumpsum	01
13	<b>TOTAL LUMP SUM AMOUNT FOR WORKS 1 TO 12 AS ABOVE IN FIGURES</b>		
14.1	<b>TOTAL LUMP SUM AMOUNT FOR WORKS 1 TO 12 AS ABOVE IN WORDS</b>		
14.2	<b>SERVICE TAX ON SL. NO. 13 ABOVE</b>		
14.3	<b>GRAND TOTAL TOTAL OF 14.1 + 14.2</b>		
15	<b>CONSTRUCTION OF EARTH PIT - OPTIONAL (IF REQUIRED ONLY)</b>		
	Construction of ONE NUMBER Earth Pit including Supply of all associated materials. The scope of work includes Civil works along with supply of 40 mm dia. X 2.5 Mtr. Length GI pipe along with funnel, charcoal, salt etc. and complete with brick work for chamber, GI strip for connecting earthing cable and closing the earth pit with Cast Iron (CI) cover	Lumpsum	01
	<b>PRICE FOR THE WORK MENTIONED IN SL. NO. 15</b>		

**PLEASE REFER NOTES ON NEXT PAGE**

(SIGNATURE WITH SEAL OF THE CONTRACTOR)





**NOTES :**

- 1) In case of any discrepancy in Figures and Words of the mentioned price, the lesser of the two will be considered for evaluation purpose**
- 2) All the items have to be installed in Main Control Room located at 12 Mtr. Elevation on 3<sup>Rd</sup> Floor**
- 3) UPS and computer furniture are unloaded and kept near the place of installation**
- 4) Batteries are also stored very near the 12 Mtr. level. These have to be installed at ground floor**
- 5) Computer boxes are stored in first floor and are to be shifted to 3<sup>rd</sup> floor for actual installation**
- 6) The accommodation for workmen, supervisors etc. at site and local conveyance is to be taken care of by the bidder at their own cost.**



## **SECTION 4**

### **SPECIAL CONDITIONS OF CONTRACT**

The work is to be executed at NPTI, Faridabad, Haryana.

1. The Contractors shall get themselves familiar with the site and nature of job in advance where the works is to be executed before quoting their rates.
2. Apart from Service tax any other govt. taxes as applicable from time to time shall be borne by the Contractor.
3. The Contractor shall arrange to obtain valid gate passes for his men and equipment's from the concerned authorities.
4. No man / material / equipment not covered by valid gate pass shall be permitted within the power station area and no material / equipment shall be permitted to be taken out of the power station unless authorized by concerned authority. The Contractor shall be held fully responsible for any delays / losses / damages that may result consequent on any lapses that may occur on the part of his employees in this regard.
5. Carrying / striking of matches, lighters or smoking or other acts which may cause fire hazards in the restricted area of power training Institute is strictly prohibited.
6. In the prescribed areas of power training institute no hot work such as welding, gas cutting etc, which may cause fire hazards shall be carried out unless valid gas safety / fire permit is obtained from the BHEL site Engineer and necessary precautions are taken to avoid any risk of fire hazards.
7. The Contractor shall compulsorily provide personal protective equipment's to his employees & in the event of his not providing the same by date specified by Customer or as mentioned in contract, it will be provided by BHEL/NPTI at Contractor's risk and cost of the same will be recovered from the bill/s.
8. All necessary personal safety equipment as considered adequate by the BHEL site Engineer or the safety officer of NPTI Faridabad, should be made available at Contractor's cost for use by the persons employed at the site and be maintained in a condition suitable for immediate use. The Contractor should also give sufficient safety training and instructions to his workmen and ensure proper use of safety equipment by those concerned.
9. The Contractor shall obtain permission from appropriate authority / license if required under any applicable law regulations for engaging labourers for execution of the work and observe all terms and conditions of the said authorization / license.



10. The Contractor shall comply with the provision of all applicable labour legislation / Acts pertaining to payment of wages and shall pay his workers wages not less than minimum as applicable in NPTI premises.
11. The Contractor has to make his own arrangement for T&P safety appliances and consumables required for the above job.
12. 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.
13. Any person below the age of 18 years shall not be deployed for the work.
14. The Contractor shall be required to pay full wages to the workers as per prevailing rules.
15. If the Contractor fails to deploy required numbers of labourers as per the terms of contract, then recovery @ double the minimum wages of unskilled labour shall be effected for number of labourers less than the specified requirement, if not specially mentioned otherwise.
16. The Contractor has to comply with the safety requirement of the NPTI Faridabad premises.
17. The Contractor shall possess independent PF code & ESI code and has to observe all formalities as per PF & ESI act or Workmen Compensation Insurance, as applicable.
18. 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 BHEL / NPTI Faridabad against all claims, damages and compensations on account of his failure to comply with statutory provisions.
19. The Contractor shall not subcontract, transfer or assign any part or full work of this award without prior written permission from BHEL.
20. 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.



21. 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.

22. 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 (NPTI Faridabad).
23. As per NPTI 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.
24. No complaints from Contractor's workmen with regard to nature of work entrusted or place of work will be entertained.
25. 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.
26. 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.
27. 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.

Note : The term 'Company' means BHEL and Customer means NPTI-FARIDABAD.



**Section 5**

**NO DEVIATION CERTIFICATE**

**( TO BE GIVEN ON BIDDER'S LETTER HEAD)**

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 :