

**BHARAT HEAVY ELECTRICALS LIMITED  
BHEL ESTATE OFFICE**

**BHEL- TOWNSHIP, SECTOR-17  
NOIDA- 201301**



**TENDER DOCUMENT**

**FOR**

**Supply, Installation, Testing & Commissioning of 02 nos. 500 Liter Capacity ETC based Solar Water Heater in BHEL Township, Sector-17, Noida.**

**NIT No.-12:AA:NOI:ADMN.:SWH: 112:2015-16  
Dated :14/10/2015**

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**Last date for Submission: 28/10/2015 at 1500 hrs.**



भारत हेवी इलेक्ट्रिकल्स लिमिटेड

**Bharat Heavy Electricals Ltd.**

सम्पदा कार्यालय, सेक्टर -१७, नोएडा – २०१ ३०१ (यू.पी.), भारत

BHEL Township: Estate Office, Sector-17, Noida-201 301 (UP) INDIA

फ़ोन (का.) 6740983 फ़ैक्स: 6740994 Tel: 6740983 (Fax) 6740994

**NOTICE FOR INVITING OPEN TENDER**

Sealed tenders are invited in two part bids for the procurement of following item in BHEL Township, Sector-17, Noida.

**Title** : Supply, Installation, Testing & Commissioning of 02 nos. 500 Liter Capacity ETC based Solar Water Heater in BHEL Township, Sector-17, Noida.

**NIT NO.** : 12:AA:NOI:ADMN.: Solar Water Heater: 112:2015-16 Dated: 14/10/2015

**EMD** : Nil

**Tender Cost** : Nil

**Total Quantity** : 02 Nos.

**Delivery Schedule :**

Sl. No.	Solar Water Heater	Delivery and Installation
1	First Unit	Within <b>30 days</b> of placement of Purchase Order.
2	Second Unit	Within <b>30 days</b> after three months of satisfactory performance of First plant.

**DATE OF SUBMISSION & OPENING OF TENDER**

**Last date for submission of sealed tender at** : 28/10/2015 at 1500 Hrs.  
**Estate Office, BHEL Township, Sector-17, Noida**

**Date of opening the Tender (Techno- commercial Bid)** : 28/10/2015 at 1530 Hrs.

**Venue for opening of Tender** : Estate Office, BHEL  
Township, Sector-17, Noida

The hard copy of tender document may be obtained from this office. The sealed tenders may be sent either by registered post, speed post, courier or by hand in the Office of Engineer (HR-TAX), Estate Office, BHEL Township, Sector – 17, NOIDA – 201301(U.P.) between 9.00 AM to 5.30 PM on any working day till the due date and time i.e. up to 28/10/2015 at 3:00 PM .

**(Omender Singh)**  
Engineer (HR-TAX)  
On behalf of “BHEL”

# **PART 'A' – TECHNO- COMMERCIAL BID**

## **A. INSTRUCTIONS FOR TENDERER:**

1. The offer shall be submitted as per the instructions of tender document. Only one set of tender document duly signed by authorized representative of tenderer and signed & stamped on each page shall be submitted as detailed further. Tenderer should note specifically that all pages of tender document, including the NIT page for this particular tender shall be submitted by them (after signing/ stamping on each page) as a part of their offer. **Price shall not be mentioned by them anywhere in the techno-commercial portion of offer. Price shall be mentioned in the relevant price bid only and submitted in separate sealed envelope.** In case of any clarification, bidder may contact this office.
2. No overwriting / correction in tender documents by tenderer shall be allowed. However if correction is unavoidable, the same must be signed by authorized signatory.
3. Tender must be submitted in two parts, i.e., (i) Techno-Commercial Bid along with un-price bid and (ii) Price Bid. The tenderer must submit their tenders in two separate sealed envelopes prominently super scribed as Part – A ‘Techno- commercial bid’ and Part-B ‘Price Bid’, and the NIT No. & due date on each of the envelope. These two separate envelopes shall together be kept in third envelope super scribed with NIT No. & due date of opening.
4. Techno-commercial bid should contain all the documents like, signed tender document having NIT page, Instructions for tenderer, Pre-qualifying requirement, technical specifications, General terms & conditions, un-price bid, all the annexure duly filled & signed by the tenderer.
5. Price Bid should contain only the “Part-B, Price Bid Format” after quoting the rates as specified in the price bid format.
6. Rates must be quoted in figures as well as in words.
7. On the date of opening of tender, only Techno-Commercial Bid shall be opened.
8. Opening of Price bids will be done for the offers of only those tenderers, whose bids are found technically acceptable.
9. Tender documents are also available on BHEL web site i.e. [www.bhel.com](http://www.bhel.com) and on CPP portal (<http://eprocure.gov.in/cppp/>) and the same can be downloaded and used as tender document for submission of bids.
10. BHEL reserves the right to accept or reject any or all offers without assigning any reason thereof. Also BHEL shall not entertain any correspondence from bidders in this matter.
11. In case any typing error/other clerical errors is noticed by the tenderer, in the tender documents, the same must be pointed out and got clarified before submission of offer, or else, BHEL’s interpretation shall prevail & shall be binding on the tenderer.
12. **Any queries regarding this tender may be clarified from Engineer (HR-TAX), on Mobile No. -8800957694 / e-mail : [omender@bhel.in](mailto:omender@bhel.in)**
13. Techno-commercial bids will be opened on the due date and time as mentioned above, in the presence of tenderers or their representatives who would like to be present.
14. The tenderers or their representative may attend the opening of both the Bids (Part A & B).

## **B. PRE- QUALIFYING REQUIREMENT:**

Each tender shall be accompanied by the following information/ documents with sufficient details to enable the purchaser to make an appraisal of the quality and suitability of the material offered.

1. The offers received from **manufacturers or their authorized distributors** shall only be considered. In case of authorized distributor of a manufacturer, the bidder shall submit a certificate issued from the manufacturer to certify that the bidder is an authorized distributor of the manufacturer.

2. Acceptance to supply the materials as per the technical specifications and the terms of tender by signing the full tender document.
3. The Manufacture should be registered at MNRE for ETC based Solar Water Heater with date of validity not less than the date of opening of tender. The copy of certificate of registration having date of validity must be submitted.
4. Self-attested copies of Purchase orders/ Bills in support of proof of experience for the purchases executed by the bidders during last 02 years ending on 30/09/2015. The numbers of Evacuated Tube Collector (ETC) based Solar Water Heater (SWH) System supplied should be not less than 02 units in last two years ending on 30.09.2015.
5. The bidder's average annual financial turnover should be Rs. **2.43 lakhs** or above for the last 03 Financial Years (i.e. **2012-13, 2013-14 & 2014-15 ending 31<sup>st</sup> Mar 2015**). Self-attested copies of Balance Sheet, Profit & Loss Account Certified by CA along with copies of Income Tax return of last three financial years ending **31<sup>st</sup> Mar 2015** to be submitted. The letter having provisional annual financial turnover of last financial year i.e. 2014-15 duly certify by CA may be submitted.
6. Bidder should have VAT & TIN No. The copy of certificates in proof of same must be submitted.
7. Bidder shall specify manufacturer's name, trademark, brand name and furnish illustrative leaflets, brochures, catalogues etc. giving technical particulars about the product for which the rates are quoted in price bid.
8. The manufacturer should have their local service center in Delhi/ NCR as per Annexure-IV.
9. Un-Price Bid duly signed & stamped as enclosed at Annexure-I
10. Declaration certificate as enclosed at Annexure-II
11. No deviation certificate as enclosed at Annexure-III
12. Bidder's details as per Annexure-IV

C. **TECHNICAL SPECIFICATIONS:** The Evacuated Tube Collector (ETC) based Solar Water Heater (SWH) System shall be as per specification and guidelines laid down by MNRE for ETC based systems which are available at MNRE website. The major technical specification are as follows:

Sl. No.	Features	Minimum Technical Requirements
1	Type	Evacuated Tube Collector (ETC)
2	Capacity	500 LPD (Liter per Day), the storage tank capacity should not less than the system capacity, volume of tubes & manifold not to be included in tank capacity.
3	Inner tank Material	SS-304 food grade
4	Inner Tank thickness	For SS minimum thickness will be 0.5 mm.
5	Hot water tank insulation density	Minimum 50mm thick with CFC free High Density injected PUF (poly urethane foam) insulation having density of 28-32 kg per Cu.mtr between inner and outer tank
6	Type of tubes	3 layer solar selective (Inner layer of copper coating should be visible).
7	Solar Evacuated tube dimension	Double walled glass Outer Tube Dia 58mm, Tube leangth-1800. Thickness of tube at least 1.60 mm.
8	Glass	3.3 Borosilicate Glass

9	INSTRUMENTATION	Temperature gauge: 1 No. (for Hot Water Storage Tank/Outlet) Water meter -1no each at the inlet of cold water tank.
10	Solar Absorption	0.92
11	Solar Emittance	0.08
12	Evacuated Tubes	50 nos.

**D. GENERAL TERMS AND CONDITIONS:**

1. The NIT No. & due date of opening must be legibly super scribed on the envelopes.
2. BHEL takes no responsibility for any delay/ loss of documents or correspondences sent by courier/ post.
3. The quoted rate should be inclusive of all taxes, duties and F.O.R. BHEL Township Sector-17, Noida, Gautambudh Nagar, UP.
4. Late tenders or delayed Tenders (received after Due Date & time) will be rejected.
5. Price quoted shall be valid for **90 days** from the date of opening of techno-commercial bid.
6. Price shall be quoted as per enclosed 'Price Format' only. Quotations not filled in Price Format' are likely to be rejected.
7. The rate should be indicated both in words and figures. All entries in the Tenders must be written in ink or typewritten. Over-writing should be avoided. Corrections, if any, should be attested with signature by the bidder.
8. **EVALUATION CRITERIA:** The criteria of evaluation of techno-commercial bids will be on the basis of documents submitted by the bidders. The Price Bids of techno-commercially qualified offers shall only be opened. Date of opening of sealed Price Bid will be intimated, by post or e-mail separately to the Tenderers who qualify in the Techno-Commercial bid. The decision of BHEL will be final in this regard. After opening of Price Bid, the order will be placed on over all L-1 bidder. Evaluation of bid will be done on total cost to 'BHEL' (i.e. at Sl. No. 8 of Price Bid).
9. Breakup details of taxes, duties and other applicable charges for F.O.R. destination delivery should be mentioned specifically in the price bid, failing which the bidder will not be liable for payment of the same.
10. Price quoted should be inclusive of all the applicable charges, taxes and duties. However rates of Sale Tax/ VAT, Excise Duty and other statutory levies should be indicated separately. Variation in Excise Duty, Sale Tax/ VAT or any other statutory levies during contractual delivery period shall be to BHEL's account.
11. Quoted rates shall remain firm during the supply period except for variation in duties/ taxes as mentioned at Sl. No.-10 above. No price variation and escalation due to increase in labour / material cost will be allowed.
12. BHEL shall issue road permit on request of the party against the Performa Invoice submitted by the party. The party should demand Road Permit well in advance of due date of delivery. No excuse for delay in delivery due to Road Permit shall be entertained.
13. Form 'C' will not be issued.
14. If any information/documents submitted by the contractor are found false/fake at any stage, the tender will be cancelled.
15. **CORRECTION OF ARITHMETIC ERRORS:** Provided that the bid is substantially responsive, BHEL shall correct arithmetical errors on the following basis:
  - a) If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected, unless in the opinion of the BHEL there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected.

- b) If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected.
- c) If there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.
- d) In case, total price indicated in price bid does not match with the total of item wise breakup, the highest price so calculated shall be considered for evaluation but in case of order, the same shall be placed at the lowest price.
- e) If any bidder does not accept the correction of errors, their bids will be disqualified.

16. **DELIVERY SCHEDULE:** Initially the order will be placed for 1 unit only for EPC based Solar Water Heater. Based on the satisfactory performance of the first unit, the order for second unit will be placed. If the performance of the first unit is not found satisfactory, the order of second unit may be cancelled. The performance of the first unit will be decided by BHEL Engineer In Charge. The delivery schedule is as per table given below:

Sl. No.	Solar Water Heater	Delivery and Installation
1	First Unit	Within <b>30 days</b> of placement of Purchase Order.
2	Second Unit	Within <b>30 days</b> after three months of satisfactorily performance of First plant.

- 17. **INSURANCE:** The vendor will insure the items for all transit risks up to supply of the item at the final destination at its own cost.
- 18. **INSPECTION:** The inspection of EPC based Solar Water Heater will be carried out at the destination/ BHEL's works by the BHEL inspecting Officer.
- 19. **REJECTION:** On inspection, if the material or workmanship is not found as per the specification or any item of any unit is found damaged the same shall be rejected. In case of rejection of materials, no payment will be made for the full unit. It will be the responsibility of vendor to dispose off the rejected items at its own cost from BHEL's works within one month after rejection of item. After the expiry of one month no claim/ correspondence will be entertain for the rejected items.
- 20. **GUARANTEE CERTIFICATE:** The material shall be guaranteed for design, material and workmanship and also for performance. The period of performance guarantee shall be **24 months** or as offered by the manufacturer whichever is higher. The performance guarantee means free servicing and replacement of all faulty parts etc. The vendor shall submit a guarantee certificate for the same.
- 21. **TERMS OF PAYMENT:** Payment will normally be made by NEFT/ RTGS within three weeks of receipt of item & the invoice. All payment will be subject to deduction of taxes at source as per applicable rules. No advance payment shall be made by BHEL. **The party will submit the bank details along with the cancelled cheque for NEFT/RTGS.**
- 22. **L.D. FOR DELAY IN SUPPLY & INSTALLATION:** In case the full or part quantity is not supplied and installed as per the delivery schedule, a penalty of 1/2% of value per week of delay subject to maximum of 10% of the total order value will be deducted as L.D. Date of Installation of complete set of EPC based Solar Water Heater will be considered for L. D. purpose. However the extension of time for supply of item may be granted by BHEL where delay is not attributable to the vendor.
- 23. **RISK PURCHASE:** In the event the supplier has failed to deliver or dispatch whole of the materials or any part within the time stipulated or if the same were not available in his stock, the best and the nearest available substitute thereof may be purchased/arranged by BHEL from elsewhere at the risk and the cost of the vendor. The purchaser at his option will be entitled to terminate the contract and vendor shall be liable for any loss which the BHEL may sustain by reason of such risk purchases.
- 24. **RECOVERY FROM THE VENDOR:** Whenever under the contract, any sum of money shall be recoverable from or payable by the vendor, the same may be deducted from any sum then due or

which at any time thereafter may become due to the contractor under the contract or under any other contract with BHEL or from his security deposit, or he shall pay the claim on demand without any terms & conditions.

25. **POST TECHNICAL AUDIT OF SUPPLY AND BILLS:** BHEL reserves the right to carry out a post payment audit and technical examination of the supply and the bills including all supporting vouchers, abstracts etc. and to enforce recovery of any sums becoming due as a result thereof in the manner provided into the proceeding sub-paragraph provided however, that no such recovery shall be enforced after three years of passing the bill.
26. **ARBITRATION / CONCILIATION:** In the event of any dispute arising between the parties hereafter referred as BHEL and contractor in respect of or connected with this contract, General terms & conditions of tender, then the same shall be referred to Arbitration and arbitrator will be nominated by the Head of Administration of BHEL Corp. Office, New Delhi, whose decision shall be final and binding on both the parties. However, any differences or doubt pertaining to meaning/ interpretation of any phrase word used in terms or in the schedule of services, their nature and manner of rendering of such services shall be the excepted matter and be referred to the Head of Administration of BHEL Corp. Office, New Delhi, whose decision shall be the final and binding. The provisions of Arbitration and Conciliation Act, 1996 or any statutory modification and re-enactment thereof will apply to such arbitration provided however, in all matters the venue of proceedings will be Delhi and only Delhi or appropriate Courts will have jurisdiction over the same.

**(Omender Singh)**  
Engineer (HR-TAX)  
On behalf of "BHEL"



**Note:**

1. **Price should not be mentioned anywhere in Un-Price Bid.**
2. Bidders are required to quote all the applicable charges **OR** clearly mention **N.A.** against the items which are not applicable.
3. For the charges quoted in percentage, bidder must specify the price component on which it is chargeable.
4. In case, gross total price indicated in above price bid does not match with the total of item wise breakup, the highest price so calculated shall be considered for evaluation but in case of order, the same shall be placed at the lowest price.
5. Form 'C' will not be issued.

(Engineer-in-charge)

(Signature & seal of the bidder)

**DECLARATION**

I / We, do hereby declare that there is no case with the Police/Court/Regulatory authorities against the proprietor/firm/partner. Also I/We have not been suspended / delisted / blacklisted by any other Govt. Ministry / Department/Public Sector Undertaking/ Autonomous Body/Financial institution/Court. We also certify that either our firm or any of the partners are not involved in any scam or disciplinary proceedings settled or pending adjudication

**(Signature & seal of the bidder)**

Place:

Date:

**ANNEXURE-III**

**ESTATE OFFICE: BHEL TOWNSHIP: NOIDA**

NIT No. :12:AA:NOI:ADMN.:SWH: 112:2015-16

Date: 14.10.2015

**No Deviation Certificate**

Notwithstanding anything mentioned in our bid, we hereby accept all the terms and conditions of the above tender and there is no deviation in the terms & conditions of tender. We confirm that the offer submitted by is confirming to all the terms and conditions mentioned in the tender document. We hereby undertake and confirm that we have understood the specifications properly and shall be supplied the material mentioned in this tender enquiry.

**(Signature & seal of the bidder)**

**BIDDER'S DETAILS**

Name of the Supplier /Party/ Firm	
Name of Authorized Representative	
Postal Address	
Phone/ Landline Nos.	
Mobile Nos.	
Fax No.	
E-Mail Address	
Web Site Address ( If Any)	
Details/ Address of Local Service Centre:-	
Bank details for payment through NEFT/RTGS	Name of Bank: Branch: Account No.: IFSC No.: MICR No.:

**Note:** Submit a canceled cheque for verification of above bank details.

**(Signature & seal of the contractor)**

## PRICE BID - Part 'B'

**Title** : Supply, Installation, Testing & Commissioning of 02 nos. 500 Liter Capacity ETC based Solar Water Heater in BHEL Township, Sector-17, Noida.  
**NIT NO.** : 12:AA:NOI:ADMN.: SWH: 112:2015-16 **Dated:** 14/10/2015  
**Delivery Schedule** : As per tender document.

Sl. No.	Description of Material	Qty/ Nos.	Per Unit Rate in Figure (Rs)	Per Unit Rate in Words (Rs)	Amount (Rs)
1	Supply, installation, testing and commissioning of 500 LPD (Liter per Day) capacity at Evacuated Tube Collector (ETC) based Solar Water Heating systems, with 50 Tubes of Dia 58mm and 1800mm length with SS tank minimum thickness will be 0.5 mm when using argon arc or metal inert gas for welding and 0.8 mm with insulated storage tank, support stands for both collectors and storage tanks, gate valves, NRV, temperature gauges, strainer, Air vent, including system internal piping, with GI pipes B class with insulation and other accessories. (ETC Collector and SS Tank should be as per MNRE specification)	02 Nos.			
2	Hot water Outlet 1" Pipe with thermal Insulation of hot water line 50 mm thick Rockwool insulation of 48kg/cu.m. density, retaining material like chicken mesh etc. 26 SWG thick aluminium sheet shall be used for cladding the insulated pipe. The pipe line should be properly supported and fixed with clamp with the help of suitable size stand (the quantity of pipe may vary upto 20% depending upon the actual layout of piping. However payment will be done on actual measurement).	50 mtrs.			
3	Total Price (Rs)				
4	E.D. on Sl. No. 3 ( .....% on Ex Works) (Rs)				
5	CST/ VAT on Sl. No. 3 and 4 ( .....% ) (Rs)				
6	Any other tax like Service Tax/ Statutory Duty/ Toll Tax/ State Entry Tax,/Levies/ Octroi ( ..... ) (Rs)				
7	Freight/ Cartage (Rs)				
8	Gross Total Price (Rs)				
<b>Total in Words: Rupees</b>					

(Engineer-in-charge)

(Signature & seal of the bidder)

**Note:**

1. Submit the Price Bid in separate sealed envelope.
2. Bidders are required to quote all the applicable charges **OR** clearly mention **N.A.** against the items which are not applicable.
3. For the charges quoted in percentage, bidder must specify the price component on which it is chargeable.
4. In case, gross total price indicated in above price bid does not match with the total of item wise breakup, the highest price so calculated shall be considered for evaluation but in case of order, the same shall be placed at the lowest price.
5. Form 'C' will not be issued.

(Engineer-in-charge)

(Signature & seal of the bidder)