

**BHARAT HEAVY ELECTRICALS LIMITED  
BHEL ESTATE OFFICE**

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



**TENDER DOCUMENT**

**FOR**

**PROCUREMENT OF PORTLAND POZZOLANA CEMENT (PPC)  
IN BHEL TOWNSHIP, SECTOR-17, NOIDA.**

**NIT NO.-10:AA:NOI:ADMN.: Cement: 112:2012-13  
Dated :26/06/2012**

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**Last date for Submission: 11/07/2012 at 1500**



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

फोन (का.) 2515429, 2517488 फैक्स- 2510271 Tel : 2515429, 2517488 (Fax) 2510271

**NOTICE FOR INVITING OPEN TENDER**

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

**Title** : Procurement of Portland Pozzolana Cement (PPC) in BHEL Township, Sector-17, Noida.

**NIT NO.** : 10:AA:NOI:ADMN.: Cement: 112:2012-13 **Dated:** 26/06/2012

**EMD** : Nil

**Tender Cost** : Nil

**Total Quantity** : 1800 Bags

**Delivery Schedule** : In twelve (12) lots delivery @ 150 bags per month.

**DATE OF SUBMISSION & OPENING OF TENDER**

**Last date for submission of sealed tender at** : 11/07/2012 at 1500 Hrs.  
**Estate Office, BHEL Township, Sector-17, Noida**

**Date of opening the Tender (Techno- commercial Bid)** : 11/07/2012 at 1530 Hrs.

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

The sealed tenders may be sent either by registered post or by hand in the office of Manager (HR-TAX), Estate Office, Sector – 17, NOIDA – 201301(U.P.) between 9.00 AM to 5.30 PM on any working day till the due date and time latest by 11/07/2012 at 3:00 PM.

**(Farrukh Jamal)**

Manager (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 envelop 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, technical requirement, 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. BHEL may finalize successful tenderer by either **opening of sealed price bid** or conducting **online Reverse Auction**. Date of opening of sealed Price Bid / conducting of online Reverse Auction will be intimated, by post or e-mail separately to the Tenderers who qualify in the Techno-Commercial bid
9. Opening of Price bids/ Reverse Auction will be done for the offers of only those tenderers, whose bids are found technically acceptable.
10. 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.
11. BHEL reserves the right to accept or reject any or all offer without assigning any reason thereof. Also BHEL shall not entertain any correspondence from bidders in this matter.
12. 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.
13. Any queries regarding this tender may be clarified from Manager (HR-TAX), on Mobil No. - 9958253366 / e-mail : [farrukh@bhel.in](mailto:farrukh@bhel.in)
14. The tenderers or their representative may attend the opening of both the Bids (Part A & B).
15. In case you are not submitting your offer against this enquiry, we request you to send a regret letter.

## **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. Acceptance to supply the materials as per the technical specification enclosed with the tender document by signing the documents.
2. Bidder should have VAT & TIN No. The copy of certificates in proof of same must be submitted.
3. Manufacturer's literature, brochures, catalogues etc.
4. Type test certificates and results as per IS 1489 (Part-I):1991 for the cement offered. The type test certificate shall be from a Govt. recognized laboratory or from the tenderer's own laboratory.
5. Declaration certificate as enclosed at annexure-F
6. No deviation certificate as enclosed at annexure-G

## **C. TECHNICAL SPECIFICATIONS:**

### **1. RAW MATERIALS:**

- i. **Pozzolana:** Fly ash used in the manufacture of Portland-pozzolana cement shall conform to IS 3812 (Part 1).
    - a) Fineness and average compressive strength in lime reactivity of fly ash that is to be blended with finished Portland Cement to produce Portland-pozzolana cement, when tested in accordance with the procedure specified in IS 1727: 1967, shall not be less than 320 m<sup>2</sup>/kg and 4.5 MPa respectively. Average compressive strength in lime reactivity test of such fly ash shall be carried out at the fineness at which pozzolana has been received for blending.
    - b) Average compressive strength in lime reactivity of fly ash that is to be interground with Portland cement clinker for manufacture of Portland-pozzolana cement shall not be less than 4.5 MPa when tested at the fineness of Portland-pozzolana cement manufactured out of it or at the fineness in 'as-received' condition, whichever is greater, in accordance with the procedure specified in IS 1727 : 1967. Fly ash of fineness 250 m<sup>2</sup>/kg, *Min* is also permitted to be used in the manufacture of Portland pozzolana cement by intergrinding it with Portland cement clinker if the fly ash when ground to fineness of 320 m<sup>2</sup>/kg or to the fineness of the resultant Portland pozzolana cement whichever is lower, meets all the requirements specified in 6 and 7 of IS 3812 (Part 1).
  - ii. **Portland Cement Clinker:** The Portland cement clinker used in the manufacture of Portland-pozzolana cement shall comply in all respects with the chemical requirements of IS 269 : 1989 and the purchaser have the right, if he so desires to obtain sample of the clinker used in the manufacture for purposes of checking its conformity to IS 269 : 1989.
  - iii. **Portland Cements:** Portland cement for blending with fly ash shall conform to IS 269 : 1989.
  - iv. **Other Admixtures:** When Portland-pozzolana cement is obtained by grinding fly ash with Portland cement clinker, no material other than gypsum (natural or chemical) or water or both, shall be added. Such air-entraining agents or surfactants which have been proved harmless may be added in quantities not exceeding one percent.
2. **MANUFACTURE:** Portland-pozzolana cement shall be manufactured either by intimately intergrinding Portland cement clinker and fly ash or by intimately and uniformly blending Portland cement and fine fly ash. For blending of Portland cement and fly ash, the method and equipment used shall be the one well accepted for achieving a complete uniform and intimate blending. The blending operation shall be a properly designed and well defined unit operation in approved blenders. Gypsum (natural or chemical) may be added if the Portland-pozzolana cement is made by intergrinding Portland cement clinker with fly ash. The fly ash constituent shall be not less than

15 percent and not more than 35 percent by mass Portland-pozzolana cement. The homogeneity of the mixture shall be guaranteed within  $\pm 3$  percent in the same consignment.

3. **CHEMICAL REQUIREMENTS:** Portland-pozzolana cement, shall comply with the chemical requirements given in following Table.

| Sl. No. | Characteristic  | Requirement   | Method of Test Ref. to IS |
|---------|---|---|---------------------------|
| 1       | Loss on ignition, percent by mass, <i>Max</i>                       | 5.0   | 4032 : 1985               |
| 2       | Magnesia (MgO), percent by mass, <i>Max</i>                         | 6.0   | 4032 : 1985               |
| 3       | Sulphuric anhydride (SO <sub>3</sub> ), percent by mass, <i>Max</i> | 3.0   | 4032 : 1985               |
| 4       | Insoluble material, percent by mass, <i>Max</i>                     | $x + 4.0 (100-x)/100$<br>where x is the declared percentage of fly ash in the given Portland-Pozzolana cement | 4032 : 1985               |

4. **PHYSICAL REQUIREMENTS:**

- i. **Fineness:** When tested by the air permeability method described in IS 4031 (Part 2) : 1988, the specific surface of Portland-pozzolana cement shall be not less than 300 m<sup>2</sup>/kg.
- ii. **Soundness:** When tested by 'Le Chatelier' method and autoclave test described in IS 4031 (Part 3) : 1988, un-aerated Portland-pozzolana cement shall not have an expansion of more than 10 mm and 0.8 percent respectively. In the event of cement failing to comply with any or both the requirements specified as above, further tests in respect of each failure shall be made as described in IS 4031 (Part 3) : 1988 from another portion of the same sample after aeration. The aeration shall be done by spreading out the sample to a depth of 75 mm at a relative humidity of 50 to 80 percent for a total period of 7-days. The expansion of cement so aerated shall be not more than 5 mm and 0.6 percent when tested by 'Le-Chatelier' method and autoclave test respectively as described in IS 4031 (Part 3) : 1988.
- iii. **Setting Time:** The setting time of Portland-pozzolana cement, when tested by the Vicat apparatus method described in IS 4031 (Part 5) : 1988, shall be as follows:

Initial setting time - 30 min, *Min*

Final setting time - 600 min, *Max*

If cement exhibits false set, the ratio of final penetration measured after 5 min of completion of mixing period to the initial penetration measured exactly after 20 s of completion of mixing period, expressed as percent, shall be not less than 50 when tested by the method described in IS 4031 (Part 14) : 1989. In the event of cement exhibiting false set, the initial and final setting time of cement when tested by the method described in IS 4031 (Part 5) : 1988, after breaking the false set, shall conform to above.

- iv. **Compressing Strength:** The average compressive strength of not less than three mortar cubes (area of face 50 cm<sup>2</sup>) composed of one part of cement, three parts of standard sand (conforming to IS 650:1966) by mass, and  $P/4 + 3.0$  percent (of combined mass of cement and sand) water ( P is the percent of water required to produce a paste of standard consistency), and prepared, stored and tested in the manner described in IS 4031 (Part 6) : 1988 shall be as follows:

- |    |              |             |
|----|--------------|-------------|
| a) | At 72 ± 1 h  | 16 MPa, Min |
| b) | At 168 ± 1 h | 22 MPa, Min |
| c) | At 672 ± 1 h | 33 MPa, Min |

Notwithstanding the cubes satisfying the strength requirements specified as above, they shall also show a progressive increase in strength from the strength at 72 h.

- v. **Drying Shrinkage** The average drying shrinkage of mortar bars prepared and tested in accordance with IS 4031 (Part 10) : 1988 shall not be more than 0.15 percent.

5. **STORAGE:** The Portland-pozzolana cement shall be stored in such a manner as to permit easy access for proper inspection and identification, and in a suitable weather-proof building to protect the cement from dampness and to minimize warehouse deterioration.
6. **DELIVERY:** The cement shall be packed in bags [jute sacking bag conforming to IS 2580 : 1982; double hessian bituminized (CRI type), multi-wall paper conforming to IS 11761 : 1986, polyethylene lined (CRI type) jute, light-weight jute conforming to IS 12154 : 1987, woven HDPE conforming to IS 11652 : 1986, woven polypropylene conforming to IS 11653 : 1986, jute synthetic union conforming to IS 12174 : 1987 or any other approved composite bags] bearing the manufacturer's name or his registered trade-mark, if any. The words 'Portland pozzolana cement - fly ash based' or a bright colour band to distinguish Portland fly ash pozzolana cement from other cements, the net mass in kg of the cement shall be legibly and indelibly marked on each bag. Bags shall be in good condition at the time of inspection. Similar information shall be provided in the delivery advices accompanying the shipment of packed or bulk cement. The net mass of cement per bag shall be 50 kg

**D. GENERAL TERMS AND CONDITIONS:**

1. The NIT No. & due date must be legibly super scribed on the envelopes.
2. The quoted rate should be inclusive of all taxes, duties and F.O.R. BHEL Township Store Sector-17, Noida.
3. Late tenders or delayed Tenders (received after Due Date & time) will be rejected.
4. Price quoted shall be valid for **90 days** from the date of opening of techno-commercial bid.
5. Price shall be quoted as per enclosed 'Price Format' only. Quotations not filled in Price Format' are likely to be rejected.
6. 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.
7. **EVALUATION CRITERIA:** The criteria of evaluation of techno-commercial bids will be on the basis of documents submitted by the bidders. BHEL may finalize successful tenderer by either **opening of sealed price bid** or conducting **online Reverse Auction**. Date of opening of sealed Price Bid / conducting of online Reverse Auction 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. In case of opening of Price Bid, the order will be placed on over all L-1 bidder. Evaluation of bid will be on total cost to 'BHEL'.
8. The rates quoted by the vendor shall be firm. No price variation and escalation due to increase in labour / material cost will be allowed.
9. If any information/documents submitted by the contractor are found false/fake at any stage, the tender will be cancelled.
10. **CORRECTION OF ARITHMETIC ERRORS:** Provided that the bid is substantially responsive, BHEL shall correct arithmetical errors on the following basis:
  1. 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.

2. 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.
  3. 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.
  4. If any bidder does not accept the correction of errors, their bids will be disqualified.
11. **INSPECTION:** The inspection of materials will be carried out at the destination/ BHEL's works by the authorized inspecting Officer.
  12. **QUANTITY VARIATION:** Quantity may vary  $\pm 20\%$  in each individual lot and  $\pm 10\%$  in over all order value. However the quantity of material may be reduced up to any extent as per the decision of BHEL.
  13. **DELIVERY SCHEDULE:** The total 1800 bags of cement shall be supplied in twelve (12) nos of lots @ 150 bags per month. The delivery of first lot shall be within one month from the date of placement of PO. The delivery of subsequent lots shall be on the 15<sup>th</sup> day of next calendar month.
  14. **TERMS OF PAYMENT:** Payment will normally be made within 15 days of receipt of materials & the bill by NEFT/ RTGS . 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.**
  15. **L.D. FOR DELAY IN SUPPLY:** In case any lot of the material is not supplied as per the delivery schedule, a penalty of 1/2% of value of undelivered portion, per week of delay or part thereof subject to maximum of 10% of the total order value will be deducted as L.D. However the extension of time for supply of a lot of material may be granted by BHEL where delay is not attributable to the vendor.
  16. **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.
  17. **TEST CERTIFICATES:** The materials shall be supplied as per the type Test Certificate submitted by the vendor. The vendor shall submit a test certificate along with delivery of each lot of material. BHEL shall reserve the rights to test the material supplied by vendor to check the test results.
  18. **GUARANTEE CERTIFICATE:** The vendor shall submit a guarantee certificate that if the actual test results are not conforming to the Test Certificates submitted along with any particular lot of material, the full lot of material shall be rejected by BHEL.
  19. **REJECTION:** In case of rejection of materials, no payment will be made for the rejected materials. It will be the responsibility of vendor to dispose off the rejected materials at its own cost from BHEL's works within one month after rejection of materials. After the expiry of one month no claim/ correspondence will be entertain for the rejected materials
  20. **INSURANCE:** The vendor will insure the materials for all transit risks upto supply of the materials at the final destination at its own cost.
  21. **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.

22. **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 final bill.
23. **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.



**DECLARATION**

I / We hereby declare that no case is pending with the police/ court against the bidder/ firm/ company (Agency). Also I /We have not been suspended / blacklisted by any PSU / Government Department / Financial Institution / Court etc.

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

Place:

Date:

**ESTATE OFFICE: BHEL TOWNSHIP: NOIDA**

NIT No. 10: AA:NOI:ADMN.: Cement:112:2012-13

Date: 26.06.2012

**No Deviation Certificate**

Notwithstanding anything mentioned in our bid, we hereby accept all the terms and conditions of this tender. 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)**