



BHARAT HEAVY ELECTRICALS LIMITED  
HEEP: HARDWAR-249 403 (UA)  
Fax: 01334-226462, Phone: 284047  
E-mail: skdeo@bhelhwr.co.in

Due Date: 20/05/2015

Ref: PPX/EM/EOI/15-16/Permanent Magnet

**Notice Inviting Expression of Interest for empanelment of New Vendors**

The Heavy Electrical Equipment Plant (HEEP) located in Haridwar, is one of the major manufacturing plants of BHEL. The core business of HEEP includes design and manufacture of large steam and gas turbines, turbo generators, hydro turbines and generators and so on. **We are looking for reputed Vendors having capability to supply Permanent Magnets of "Sintered AlNiCo 30/10 grade of DIN 17410".**

**The specification of these items may be obtained from BHEL after submission of Ink Signed Non-Disclosure Agreement (Annexure-2 for Indigenous vendors, Annexure-3 for Foreign vendors). The Non-Disclosure Agreement is to be submitted to the following person (s) for obtaining Specifications:**

**Contact Person 1:**

Mr. Amit Tiwari  
Designation: Sr. Manager (PPX/EM)  
Email ID: [@bhelhwr.co](mailto:@bhelhwr.co).  
Tel: +91 1334 28 4047

**Contact Person 2:**

Mr. Sachin Kumar Deo  
Designation: Sr. Engineer (PPX/EM)  
Email ID: [@bhelhwr.co](mailto:@bhelhwr.co).  
Tel: +91 1334 28 4047

The offers received will be technically evaluated by BHEL & successful short listed parties will be asked to submit their detailed Techno-Commercial offers through formal NIT/Enquiry, for our future requirements. Vendors shall confirm that there is no deviation with respect to BHEL Specifications & drawings. However, deviations, if any, are to be listed as a separate attachment. The offers that do not meet the substantial requirements of our specifications are liable to be ignored. **Following documents are to be necessarily filled and submitted along with the technical offer:**

1. Details/ Documents in support of Pre-Qualification Requirement
2. Supplier/Vendor Registration Form. (Indigenous/Foreign as applicable)
3. Non-Disclosure Agreement
4. Quality control documents / procedure.
5. Details of Manufacturing Facility
6. Company Profile.
7. Financial report of the company.
8. Past experience along with documentary proof.

Only Technical BID along with the documents mentioned above should be sent & the envelope containing the offer shall be duly sealed and super scribed as "**Technical Offer for (ITEM NAME) AGAINST Reference No. PPX/EM/EOI/15-16/Permanent Magnet, SUBMITTED BY (Name of company)**"

**The last date for submission of Technical offers is 15.07.2015.**

- This notification shall be published in National Dailies (Name with date of publication will be mentioned on BHEL Haridwar portal). Last date for downloading tender documents shall be **14.07.2015** till 1700 Hrs (IST). The Technical Offers complete in all respect must be addressed to "Shri M K Sardana, AGM (PPX/EM)" **and should reach before 13:45 Hrs (IST) on 15.07.2015**. Tenders will be **opened on the same day at 1400Hrs (IST)** in the Tender Room BHEL HEEP Haridwar.
- Late offers will not be considered in any case. BHEL will not be responsible for any type of postal delay / incomplete information from vendor.



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- EMD & Tender fee are not applicable.
- The Quotation should be from the Principle / Original Manufacturer, falling which the Quotation is likely to be ignored. In case the quotation is submitted through agent, the quotation must accompany original authorization letter from Principle / Original Manufacturer.
- Amendments / Corrigendum, if any, will be hosted on our website only.
- For any further clarifications, feel free to contact the undersigned or log on to [.bhel](http://.bhel) or [.bhelhwr.co](http://.bhelhwr.co) or [.tenders.gov](http://.tenders.gov).

**(Sachin Kumar Deo)**  
**Sr. Engineer (PPX-EM)**



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**ANNEXURE-1**

**Due Date: 20/05/2015**

REF. NO. EME-B/PQR8

PPX File No. EE211/2014/0012/H

**PRE-QUALIFICATION REQUIREMENTS (TECHNICAL) FOR  
ROTOR SLOT WEDGES**

**1. EXPERIENCE:**

1.1. The vendor should have manufactured and supplied COLD DRAWN & HEAT TREATED ROTOR COPPER WEDGE profiles of material grade CuCo2BeZr having 0.2% Proof Strength of 550 N/mm<sup>2</sup> min. for large size Turbo-generators (rating > 210 MW) to reputed power equipment manufacturers world-wide for at least last 3 years. Vendor to furnish copies of Purchase Orders executed for copper wedges. Also vendor to provide documentary evidence of the acceptance of material like Acceptance Certificate or letter from customer.

1.2. Vendor to give annual production capacity and output in MT for the last 3 years along with customer-wise break-up for Rotor Copper Wedges.

2. **MANUFACTURING FACILITIES:** The vendor should have facilities for manufacturing rotor copper wedges like bar casting, extrusion, heat treatment, cold drawing, etc. Vendor to furnish details (including make, model and year of manufacture) and technical specifications of the manufacturing facilities available at their works along with photographs.

3. **MANUFACTURING PLAN:** Vendor to provide detailed Manufacturing Plan of wedges giving particulars of the manufacturing processes including heat-treatment cycle.

**4. TESTING FACILITIES:**

4.1. The vendor should have facilities for carrying out the following tests and provide details (including make and year of manufacture) of test equipment available at their works:

- Chemical Composition
- Mechanical Testing
- Electrical Conductivity
- Dimensional measurement & straightness checking

The testing facilities should be duly calibrated against measurement standards traceable to national or international measurement standards.

4.2. The vendor should have facilities and qualified personnel for carrying out Non-Destructive Tests such as Ultrasonic Testing and Dye Penetrant testing and should provide details of the same.


5. The vendor should furnish copies of Test Certificates of previously supplied material.

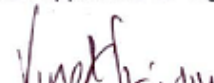
6. The vendor shall source the raw material from reputed suppliers and shall furnish details of the same to BHEL along with Mill Test Certificate.


7. If the vendor plans to outsource any activity/testing, particulars of the same along with details of the sub-vendor/laboratory to be furnished to BHEL.

8. BHEL reserves the right to verify the information submitted by the vendor. In case the information is found to be false or incorrect, the offer shall be rejected.

9. These pre-qualification requirements are not applicable for registered vendors of BHEL for this item.

  
(RC Sharma)  
SDGM (EME)  
6-5-14

  
(Vivek Kumar)  
AGM (EME)  
6/5/14

  
(AK Malhotra)  
AGM (EME)  
12/5/14


**Mandatory Pre-Qualification Requirements for Permanent Magnets (code W96414600016)**


The Permanent Magnets are used for high speed rotating application in magnetic poles of Exciters for Power plant. Vendors not meeting **Pre-Qualification Requirements (Points 1,2 & 3)** shall be disqualified.


1. Vendor must confirm their process capability for manufacturer of Permanent magnets of **sintered AlNiCo 30/10 grade of DIN 17410**. To support this, vendor to provide-
  - i. Details of manufacturing facility for sintering process
  - ii. Details of facility for machining / grinding
  - iii. Details of facility for magnetizing / de-magnetizing
  - iv. Details of inspection / testing facilities available in-house with vendor
  
2. Vendor must confirm their manufacturing capability as below-
  - i. The vendor should have manufactured and supplied the **AlNiCo** grade Permanent magnets (manufactured with **Sintered** process) of size minimum 60mm x 50mm x 25mm (LxBxH) OR weighing minimum 0.5 Kg/piece. List of Purchase orders (conforming to above requirement) with Date, Customer name, Dimensions, Quantity, Weight per piece, Total weight and Material grade of past supplies during last four years to be submitted. The total quantity of each Purchase order should be approx. 100 Kg or more.
  - ii. Vendor should attach un-priced copies of at least three (03) purchase orders listed against point 2(i) above (of Sintered AlNiCo grade magnets), along with detailed test certificates for tests conducted on Magnets (in-process, final stage inspection and type tests if any).
  - iii. Vendor to confirm that they will meet all the requirements of BHEL specification TG60016 and drawing 31460101000 Rev-02.
  
3. Vendor should confirm that, in case of placement of order by BHEL, the magnets shall be supplied in De-magnetized condition and shall be suitably packed to prevent any transit damage. Following documents shall be provided with the dispatch documents
  - i. Test certificates
  - ii. Guarantee certificates
  - iii. Dimension reports

**Notes:**

1. BHEL reserves the right to verify the information submitted by the vendor. In case the information is found to be false or incorrect, the offer shall be rejected.
2. All the documents and correspondences should be in English language.
3. These pre-qualification requirements are not applicable for registered vendors of BHEL Haridwar for this item.

  
SS Meena  
(Manager/EME)

  
Anupam Sharma  
(SrDGM/EME)

  
AK Malhotra  
(AGM/EME)