



**EXPRESSION OF INTEREST**

**FOR**

**DIODE WHEEL ASSEMBLY**

**Issued by:**  
**TME Division,**  
**Bharat Heavy Electricals Limited,**  
**Piplani Bhopal - 462021**

## DISCLAIMER

All information contained in this EOI provided/ clarified are in good interest and faith. The information contained in this Expression of Interest document or subsequently provided to Applicant(s), whether verbally or in documentary or any other form, by or on behalf of BHEL, is provided on the terms and conditions set out in this EOI and such other terms and conditions subject to which such information is provided.

The purpose of this EOI is to provide interested parties with information that may be useful to them in the formulation of their application for qualification and subsequent selection pursuant to this EOI. This EOI is not an offer by BHEL to the prospective Applicant(s) or any other person. This EOI is neither intended nor shall it be construed as creating or requiring any ongoing or continuing relationship or commitment with any party or person. This is not an offer or invitation to enter into an agreement of any kind with any party.

Though adequate care has been taken in the preparation of this EOI document, the interested firms shall satisfy itself that the document is complete in all respects. The information is not intended to be exhaustive. Interested Agencies are required to make their own enquiries and assumptions wherever required. Intimation of discrepancy, if any, should be given to the specified office immediately. If no intimation is received by this office by the date mentioned in the document, it shall be deemed that the EOI document is complete in all respects and firms submitting their interest are satisfied with the EOI Document in all respects.

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The Applicant shall bear all its costs associated with or relating to the preparation and submission of its Application including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by BHEL or any other costs incurred in connection with or relating to its Application. All such costs and expenses will remain with the Applicant and BHEL shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by an Applicant in preparation or submission of the Application, regardless of the conduct or outcome of the EOI.

## 1. INTRODUCTION

This Expression of Interest (EOI) seeks response from Original Equipment Manufacturer (OEMs) for identification of vendors for manufacturing & supply of Diode Wheel Assembly which shall be used for manufacturing of Traction Alternators.

## 2. ABOUT BHEL

Bharat Heavy Electricals Limited (BHEL) is a Central Public Sector Enterprise, wherein Government of India is holding 63.17% of its equity. It is an integrated power plant equipment manufacturer and one of the largest engineering and manufacturing companies of its kind in India having a turnover of about USD 3 billion. The company is engaged in the design, engineering, manufacture, construction, testing, commissioning and servicing of a wide range of products and services for the core sectors of the economy, viz. Power, Transmission, Industry, Transportation, Renewable Energy, Oil & Gas and Defence with over 180 product offerings to meet the needs of these sectors.

Since its inception in 1964, BHEL has been the solid bedrock of evolution of India's Heavy Electrical Equipment industry. BHEL has a mammoth 20,000 MW per annum capability for manufacturing of power generation equipment. A widespread network of 17 manufacturing units, 2 repair units, 4 regional offices, 8 service centres, 1 subsidiary, 4 overseas offices, 6 joint ventures, 15 regional marketing centres and current project execution at more than 150 project sites across India and abroad corroborates the humongous scale and size of its operations.

With key focus on project execution, the worldwide installed base of power generating equipment supplied by BHEL has exceeded 178 GW. BHEL's equipment that account for about 60% of the country's total generation from thermal utility sets (coal based), stand a testimony to its valuable contribution towards nation building. BHEL's global competitiveness has established its footprint in all the inhabited continents with references in 82 countries.

The high level of quality & reliability of BHEL products is a testimony to its adherence to international standards by acquiring and adapting some of the best technologies from leading companies in the world including General Electric, Siemens AG, Mitsubishi Heavy Industries Ltd. etc., together with technologies developed in its own R&D centres. BHEL invests more than 2.5% of turnover on R&D and innovation.





BHEL has been designing and manufacturing rolling stock for rail and urban transportation. BHEL has also been manufacturing Motors, Power electronics and Controllers for various transportation applications at its various factories. BHEL also has a Battery Packaging facility for space applications. In transportation sector, BHEL is into the manufacture of complete electric and diesel electric locomotives and electrical assemblies/components including traction motors, traction transformers, power & auxiliary converters and controls, gear wheels etc. At our Jhansi plant, we manufacture complete Electric Locomotives upto 6000 HP rating for mainline application of Indian Railways, Diesel Electric Locomotives from 350 HP to 3100 HP rating. Till date, we have supplied more than 370 nos. of main line electric locomotives Indian Railways and more than 250 nos. of diesel electric locomotives for shunting operations to different industries. We are currently executing an order for manufacture of complete Electric Locomotive of 6000 HP. Our Jhansi plant with an installed capacity of 75 nos. locomotives per year. At Jhansi, we have complete state-of-the-art facilities for manufacturing, fabrication and testing of bogies, loco shells, under frames and other mechanical components of locomotives. We have recently developed India's first state-of-the-art WAG7 Electric Locomotive with regenerative capabilities. We have also developed India's first Traction Motor for 9000HP Electric Locomotives.

Among electrical propulsion equipment, we manufacture and supply traction motors, traction transformers, power converters(IGBT/GTO) & controls, auxiliary converters (IGBT/GTO) and vehicle control units for electric locomotives, diesel electric locomotives, EMUs, DEMUs & and metros trains of Indian Railways. Our manufacturing range includes conventional DC drive, IGBT based 3-phase drive equipment up to 9000HP rating. BHEL has also been in the forefront of providing maintenance and spares/replacement support to Indian Railways for their locomotive fleet. We have full-fledged service department located at major centres in the country.

**More details about the entire range of BHEL's products and operations can be obtained by visiting our web site: <https://www.bhel.com/>**



### 3. PURPOSE

- BHEL is a regularly supplying Traction Alternators to Indian Railways for manufacturing of Diesel Locomotives & Diesel Electrical Multiple Units.
- Diode wheel assembly is used during manufacturing of Traction Alternators.
- **Annual requirement shall be around 300 nos.**
- The intent of this Expression of Interest hereinafter referred to as the "EOI" is to:
  - Solicit applications from organizations/vendors interested to manufacture & supply of Diode Wheel Assembly manufactured as per drawing no. 04303581001 & specification no. TM02356.

### 4. INSTRUCTION TO APPLICANTS

- Supplier may submit their application as per Annexure - 1 (along with supporting documents for PQR) by post/ e-mail so as to reach us on or before 21st Dec 2024 at the following address:

The Sr. Deputy General Manager

Block-9 Annexe, First Floor

Traction Machines Engg. (TME) Division

Bharat Heavy Electricals Limited

Piplani, Bhopal - 462021

Email: vrawtiya@bhel.in, ptelang@bhel.in

Phone: +917552503081/ +9175525023790

- The details submitted by the applicant(s) shall be complete in all respects and BHEL may seek clarifications/additional information as considered necessary.
- Any request for further information or clarification on the EOI document may be submitted to Sr. Deputy General Manager, Bharat Heavy Electricals Limited – TME Division within 07 days from date of issue of EOI.
- Responses to EOI are to be submitted in English only. Supporting documents, as required, should also be in English language. In case of some documents being available in languages other than English, the applicant shall necessarily provide duly authenticated translated version of the same in English.
- Notwithstanding anything contained in this EOI, BHEL reserves the right to accept or reject any application and to annul the EOI process in whole or part, at any time without any liability or any obligation for such acceptance, rejection or annulment, and without assigning any reasons thereof.



- BHEL reserves the right to verify all statements, information and documents submitted by the Applicant in response to the EOI. Any such verification or lack of such verification by BHEL shall not relieve the applicant of his obligations or liabilities hereunder nor will it affect any rights of BHEL.
- The EOI process shall be governed by, and construed in accordance with, the laws of India and the Courts at New Delhi shall have exclusive jurisdiction over all disputes arising under, pursuant to and/ or in connection with the EOI process.
- All costs incurred for participation in the EOI shall be borne by the applicant (s).
- It is envisaged that the selected partner shall fulfil the requirement of manufacturing and supply of Diode wheel assembly as per BHEL drawing no. 04303581001 & specification no. TM02356.

## 5. Pre-Qualifying Criteria (PQR):

The prospective partner/ respondent must meet all the following pre-qualification requirement supported with relevant documents/ credentials/ certificates for further consideration.

### 5.1. Be an OEM of Diode Wheel Assembly.

Applicant's Response (meeting the above criteria): Yes/ No.

Supporting document attached: Yes/ No

### 5.2. Must have past experience of manufacturing and supply of Diode Wheel Assembly/ Rotating Rectifier Assembly to Indian Railways or any other Traction Machine Manufacturer, in the last ten (10) years from the date preceding submission of this EOI. Vendor to submit Unpriced PO copy & Supply proof (tax invoice)

Applicant's Response (meeting the above criteria): Yes/ No.

Supporting document attached: Yes/ No

### 5.3. Shall comply and offer clause by clause compliance comments of specification no. TM02356 for Diode Wheel Assembly. .

Applicant's Response (meeting the above criteria): Yes/ No.

Supporting document attached: Yes/ No

### 5.4. Shall carry out routine & type testing as per BHEL specification TM02356.

Applicant's Response (meeting the above criteria): Yes/ No.

Supporting document attached: Yes/ No

### 5.5. Vendor have requisite facility for carrying routine & type testing as per specification TM02356.





Applicant's Response (meeting the above criteria): Details of testing facility to be submitted. In case testing facility is outsourced details of same to be informed.

5.6. Has not been blacklisted / banned business dealings for Ministry of Railways/ Ministry of Heavy Industries or any Government Department of India.

Applicant's Response (meeting the above criteria): Yes/ No.

Supporting document attached: Yes/ No

5.7. No previous contract has been terminated or part terminated due to bidder's failure.

Applicant's Response (meeting the above criteria): Yes/ No.

Supporting document attached: Yes/ No

**Based on the information & document submitted by potential vendors technical capability assessment shall be done for vendor development at BHEL.**



**Annexure – 1**

1. Name of the Company:
2. Legal status of the Company:
3. Brief description of the Company including details of its business groups/subsidiaries/affiliates:
4. Date of Incorporation
5. Date of Commencement of Business
6. Full address including Email address, Telephone nos. Fax no.

Registered Office:

Head Office:

Address for communication:

Contact Details:

Email address:

Office Address in India, if any:

7. Documents to be enclosed
  - Technical Credentials – Relevant Product/System catalogues, Experience /Reference List, Copies of Customer Certificates, quality accreditations, etc.
  - Other documents considered relevant to meet PQR and support evaluation criteria.

(Sign & Company Seal)  
Authorized signatory