



BHARAT HEAVY ELECTRICALS LIMITED
(A Govt. Of India Undertaking)

Advt. No. CE-02/2025

Bharat Heavy Electricals Limited (BHEL), is India's premier engineering and manufacturing enterprise since 1964, providing world class products and services, and catering to the core sectors of the Indian economy viz., Power (Thermal, Nuclear, Hydro & Solar) Generation, Power Transmission, Defence, Aerospace, Rail Transportation, Oil & Gas, e-mobility, with over 180 product offerings. Leveraging its extensive network of 16 Manufacturing Facilities, 08 Service Centres, 15 Regional Marketing Centres, 04 Regional Offices, 02 Repair Units, 3 active joint ventures, and more than 150 current project sites across India and abroad, BHEL delivers a wide range of high quality & reliable products adhering to national and international standards. The company achieved a turnover in excess of Rs 23,893 Crores in 2023-24. The Company has its footprint in all the inhabited 6 continents of the world with references in 89 countries.

BHEL invites applications for **Two Positions of Lead Expert & Two Positions of Associate Expert** for Traction Engineering at BHEL, EDN, Bangalore. The positions shall be based Pan India as per requirement of EDN Bangalore.

Period of Engagement:

The period of engagement shall be for two years which can be further extended by a period of upto one year at a time or till the completion of assignment (whichever is earlier). However, the maximum tenure shall be limited to five years or upto 65 years of age. (whichever is earlier).

Job Description:

The Lead Expert/Associate Expert should provide Professional Advice/Assistance to BHEL, EDN Bangalore in the following areas:

- Arriving at rating estimates for all major propulsion equipment based on customer specification.
- Finalization /Vetting of the optimal network architecture considering sufficient headroom for integration of additional sub-systems in future.
- Development of requisite software validation tools to validate propulsion & TCMS design.
- Technical /Intellectual support for finalizing the specifications of all critical high voltage components in propulsion equipment.
- Technical /Intellectual support on finalization of control hardware for propulsion systems & TCMS. With focus on vendor agnostic components for TCMS
- Development of procedure, test software for routine & type testing of all propulsion equipment.

Eligibility Criteria:

Any professional meeting the following eligibility criteria can apply:

(i) **Age (as on 01st of January,2025):** The applicant should not be more than 63 years.

(ii) **Qualification Requirements:**

The applicant must possess BE/B Tech/ME/M-Tech/PhD in Electrical/ Electronics Engineering with specialization in Power Electronics and Controls

(iii) **Experience (as on 01st January,2025):** The Lead Expert/Associate Expert should possess the following experience:

- Work Experience of minimum 30 years post Qualification for Lead Expert and work experience of 13-18 years post qualification for Associate Expert in the field of Power Electronics especially in Traction Drives and its application in locomotive and Electrical Multiple Units (EMU).
- System level engineering knowledge at Train Level for Electrical Multiple Unit/Locomotive
- Applicant should have involved in the design of Propulsion System using IGBT/SiC for EMU and High-Power Locomotive.
- Applicant should have the knowledge of design of application software using model based tools for Line Converter and Motor Converter
- Experience in the design of Train Control Management Systems for EMU and Vehicle Control Unit in locomotives

Desirable Experience for Lead Expert/Associate Expert:

- Knowledge of embedded application software, RTOS and hardware interfacing.
- Applicant may have developed Simulation models as part of validation of system design for Locomotive and EMU preferably in MATLAB.
- Hands-on experience in the implementation of industry standard modulation techniques for traction drives.
- Knowledge in selection of components used in Propulsion Systems
- Knowledge of design and implementation of SIL compliant hardware for TCMS and Propulsion Systems

Selection Process:

The applications, received against the notification, will be scrutinized by a committee and the shortlisted candidates may be then called for an interaction, if required, by a duly constituted Selection Board.

The outside candidates called for the interaction shall be reimbursed the travel expenses as given below:

By Rail: AC-First Class or **By Air:** By Economy Class Air fare or **By Road:** Actuals, limited to train fare

Emoluments:

The Lead Expert will be paid a consolidated fee of Rs. 2,34,000/- per month. Company transport will be provided to Lead Expert. Associate Expert will be paid a consolidated fee of Rs. 1,56,000/- per month. In addition to the monthly compensation, reimbursement of mediclaim policy, joining time expenses etc. shall also be admissible to Lead Expert/Associate Expert as per the laid down guidelines.

General Instructions:

1. Applications that are not in conformity with requirements indicated in the advertisement/incomplete applications will not be entertained.
2. The candidature of applicants at all stages of selection process will be provisional and is subject to satisfying the prescribed eligibility conditions.
3. Candidates/Applicants, who have undergone any major punishment shall not be eligible.
4. BHEL reserves the right to cancel/restrict/reopen/increase the number of vacancies for the engagement, if the need so arises, without issuing any further notice or assigning any reason thereof.
5. Applicants should only apply online at www.careers.bhel.in. The application submission is in two stages. In the first stage, applicant has to fill in the required details as per form. Thereafter, a

private login on the link “Latest Status” would be created, wherein the applicant would be required to upload the necessary documents.

The complete application form should comprise of the following:

- a. Letter of Interest (LoI) for the said position.
 - b. Necessary documents to substantiate Eligibility details as referred in Application form, including DOB Proof, Graduation & PG Qualification, Comprehensive Biodata and Service certificate/ Experience Certificate(s).
6. The applicant must ensure that the status of both the stages of application form is reflected as “COMPLETED”. Only then, the application form will be considered for candidature.
 7. Responsibility of uploading the necessary documents shall be with the Applicant. The applicant can view the documents uploaded in their login. Maximum Size of the document to be uploaded has been described against the upload link. BHEL does not take responsibility of attaching the documents separately or receiving them in any subsequent mail.
 8. The uploaded documents shall be in legible form- i.e. the contents should be readable. Upload of blurred/edited images will lead to disqualification of the candidature.
 9. No hard copy application shall be entertained.
 10. Applicants must keep their E-mail ID (from which the applicant is submitted at BHEL) active for at least 6 months as any important intimation/notice with regards to this notification shall be provided by BHEL through e-Mail. They are further requested to check their e-mail for any communication from BHEL in this regard.
 11. Vigilance clearance shall be obtained in respect of Lead Expert/Associate Expert before issue of Offer of Engagement for the applicant retired from Central / State PSUs, Autonomous Organizations of Central / State PSUs and retired officers belonging to All India Services, Group “A” officers of Central/State Govt or their equivalent in other organizations owned or controlled by Central/State Government. In respect of officials who have served in private sector, a self-declaration towards character/antecedents shall be obtained wherever vigilance clearance is not available.

IMPORTANT DATES:

Milestones	Scheduled Date
Opening date of Online Application	11/01/2025
Last date of submission of Complete Application with uploaded documents	15/02/2025