



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

**Advt. No. CE-03/2025**

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 **One Position of Consultant, One Position of Sr. Additional Consultant and One Position of Dy. Assistant Consultant** in different functions for BHEL, EDN, Bangalore. The position shall be based Pan India as per requirement of EDN Bangalore.

The details of Function wise vacancies are as below:

Sr. No	Function	Position	Vacancy
1	Generator Controls	Consultant	1
2	Hydro Control Engineering	Sr. Additional Consultant	1
3	Sub-Assembly (Traction Power Module)	Dy. Assistant Consultant	1
<b>Total</b>			<b>3</b>

**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 (Consultant):**

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

- Based on CERC guidelines and to meet Grid India requirement of dynamic simulation of Generator, Governor and AVR models to evaluate responses of a Generator vis a vis Grid Disturbances. To validate the same with actual machine response by conducting step test. To formulate dynamic model matching to one of IEEE 421 model. Work along with R&D for development of dynamic model.
- Support during evaluating offers received from prospective technology collaborators for Technology tie up with reputed Excitation Equipment manufacturer.
- Providing solution in Brushless Excitation System to overcome Pulse Intermediate stage - PIS failure causing unit outage and providing redundancy at PIS module level for Unitrol based AVRs.

**Job Description (Sr. Additional Consultant):**

The Sr. Additional Consultant should provide Professional Advice/Assistance to BHEL, EDN Bangalore in the following areas:

- Design and Implementation of hardware and software for Black-start up and Line Charging mode for Impulse Turbine (Pelton, Wheel Turbine) & Reaction Turbines (Francis & Kaplan Turbine) for Hydro Projects.
- Design and Implementation of various hardware and software sequences scheme for PSP like Pumping mode, Generation mode and Synchronous condenser mode of machine.

- Guidance for Implementation of Grid Code-Free governing mode (FGMO) and Restricted Free governing (RGMO) as per latest guide lines of CEA.
- Site Support for commissioning / troubleshooting on C&M Systems for Various Hydro Projects.

**Job Description (Dy. Assistant Consultant):**

The Dy. Assistant Consultant should provide Professional Advice/Assistance to BHEL, EDN Bangalore in the following areas:

- Testing and repair of Traction Power Module.
- Training and guiding manpower at Traction sites in repair of Traction Power Modules in order to bring down the cycle time for repair and control of bill deductions by customer.

**Eligibility Criteria:**

Any retired executives (BHEL equivalent grade of E7 level for Consultant, E6A for Sr. Additional Consultant and E1 level for Dy. Assistant Consultant) from PSUs/Autonomous Organizations /Central/State Government / Statutory Bodies meeting following eligibility criteria can apply:

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

**Note:** Applicants retired under VRS Scheme shall be considered only after attaining 60 years of age\*.

\* Exception for Ex-Servicemen for the lower age, however duration of engagement for Ex-Servicemen shall be 05 years or till 65 years of age, whichever is earlier.

- (ii) **Qualification Requirements:**

<u>Consultant/ Sr. Additional Consultant</u>	<u>Dy. Assistant Consultant</u>
The applicant must possess BE/B Tech/M-Tech in Electrical/ Electrical & Electronics, Engineering and relevant specialization	The applicant must possess Graduate/Diploma in Electrical or Electronics Engineering

- (iii) **Experience (as on 01<sup>st</sup> January, 2025):**

<u>Consultant</u>	<u>Sr. Additional Consultant</u>	<u>Dy. Assistant Consultant</u>
<p><b><u>Essential:</u></b> The applicant should have at least 20 years work experience post Qualification in following areas:</p> <ul style="list-style-type: none"> <li>•Dynamic simulation of Generator, Governor and AVR models to evaluate responses of a Generator vis a vis Grid Disturbances</li> <li>•Brushless Excitation Systems</li> <li>•PSS Tuning</li> </ul> <p><b><u>Desirable:</u></b> •Working experience to formulate dynamic model matching to one of IEEE 421 model for Generator, Governor and AVRs. Validate the same with actual machine response by conducting step test.</p>	<p><b><u>Essential:</u></b> The applicant should have at least 20 years work experience post Qualification in following areas:</p> <ul style="list-style-type: none"> <li>•Design and Implementation of hardware and software for Black-start up and Line Charging mode for Impulse Turbine (Pelton, Wheel Turbine) &amp; Reaction Turbines (Franchis &amp; Kaplan Turbine) for Hydro Projects</li> <li>•Implementation of Grid Code-Free governing mode (FGMO) and Restricted Free governing (RGMO) as per latest guide lines of CEA</li> <li>•Experience in Commissioning / troubleshooting on C&amp;M Systems</li> </ul>	<p><b><u>Essential:</u></b> •The applicant should have at least 20 years work experience post Qualification in Traction Power Module Testing and Repair</p> <p><b><u>Desirable:</u></b> •Experience in BHEL make Traction Power Module repairs at sites</p>

•Working on ABB-Unitrol based AVR	<b>Desirable:</b> •Experience in Design, Implementation, testing and commissioning of control system for Pump storage schemes •Control function for Speed control, Load control, Flow control, Level control, Island operation, Synchronous M/c during Island operation, Guide Vane Position for synchronous pump	
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### 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:

Consultant will be paid a Consolidated Consultancy fee of Rs 105,000/- (Rupees One Lac and Five Thousand only). Sr. Additional Consultant will be paid Consolidated Consultancy fee of Rs 100,000/- (Rupees One Lac only). Dy. Assistant Consultant will be paid a Consolidated Consultancy fee of Rs 50,000/- (Rupees Fifty Thousand only). In addition, mobile phone charges (Upto Rs 2000) for one connection, House Rent Allowance as per applicable rates and Transport allowance at 10% of consultancy fee shall be admissible as per the policy.

Further, they shall be eligible for TA/DA on official tours, as per rules.

### 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](http://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 Consultant/Sr. Additional Consultant/Dy. Assistant Consultant 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.

**IMPORTANT DATES:**

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