

**Subject:- Inviting Expression of Interest (Eoi) for Services / repair work of traction M/c at railway shed/site.**

**Objective:** To identify and engage (through tender) a suitable service provider to attend under warranty complaint raised against BHEL supplied traction machines (TM & TA) by different LOCO sheds & Production unit and liaising work as required.

**Description:**

BHEL Bhopal manufactures and supplies variety of AC / DC traction machines (upto 2 MW rating) to Indian Railway production units for application in WAP7 / WAG9 locos, Diesel Electric tower car and EMUs.

After commissioning at Production units, the locos/ EMUs are handed over to different loco sheds and are maintained by ELECTRIC loco sheds located at different part of India. The scope of work for the Traction machine services will be Pan-India i.e. service is required to be provided in all India Railway sheds / workshops. The major type of motor failures encountered are as follows:-

1. Drive end/non-drive end bearing temperature rise
2. Bearing seizure
3. Mechanical problems in suspension tube unit.
4. Failures due to damage of any mechanical component except main stator and rotor.
5. Stator flashover/coil burnt/IR zero.
6. Defective temperature sensor.
7. Variation in Stator Inductance value in AC motor.
8. Rotor flashover/ IR zero for DC traction Motor
9. Voltage loss / Field or Stator failure of Traction Alternator.

**Scope of work**

1. Joint inspection and failure diagnosis of motor/alternator at loco shed.
2. Dismantling, repair and assembly of motors at site as per BHEL standard operating procedure. The dimension and weight of machines shall be as follows :-
  - a. Weight of AC traction machine is from 1500 kg to 2300 kg (Squirrel cage induction Motor or alternator). Length- 1000 mm to 1500 mm, width- 700 mm to 1000 mm, Height- 800mm to 1000 mm.
  - b. Weight of DC traction machine is from 1500 kg to 3500 kg (DC series Motor) Length- 1000 mm to 1700 mm, width- 700 mm to 1200 mm, Height- 800mm to 1100 mm .
3. To provide qualified staff at shed to supervise and monitor repair work preferably retired railway staff not below (JE) from the same shed.
4. To provide semiskilled manpower at shed as per requirement.

5. To arrange tools, plant and machinery to carry out repair work (motor dismantling, and assembly, job handling) at shed and nearby location.

**Qualification requirements: -**

1. The contractor must have executed service repairs of Traction / Electrical machines of power rating in range of 120kW to 2000 kW. Relevant work experience and PO copy is to be shared with EOI.
2. The contractor must be able to execute work in all over India - same to be confirmed.
3. The contractor's firm has to be at least 3 years old – to be confirmed with EOI, and has to submit copy of financial statement i.e. Balance sheet for last 3 years while actual tendering stage.

Interested parties may please submit their response latest by 15/09/2022 at [amittiple@bhel.in](mailto:amittiple@bhel.in), [lchat@bhel.in](mailto:lchat@bhel.in); [mkbhagat@bhel.in](mailto:mkbhagat@bhel.in) along with proposed model for engagement and supporting document.

**Note: - Scope of work and qualification requirements are only indicative and are subject to change during final tendering.**

**In case any clarification is needed, parties may contact as the following**

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