



**BHARAT HEAVY ELECTRICALS LIMITED  
RAMACHANDRAPURAM: HYDERABAD – 32  
POWER DISTRIBUTION, M&S (350-0)**

**SUB: Consultancy services for the implementation of ISO 50001 EnMs (Energy Management System) certification**

Relevant details of BHEL Hyderabad for consultancy services for above subject:

**Nature of Business activity of unit:** Manufacturing of Power Plant Equipment, Heavy Electric equipment/ Machines.

**No. of Working Hours/day:** 16 Hrs(8 hrs/shift) and few places 3shift basis.

**No. of Working days in a week:** 6

**Scope and Boundaries for ISO 50001:** Complete factory includes Admin Building (5 floors), IT dept. , DR site, ALL production Blocks (01, 02, 03, 04, 05, 06, 07, 08, 09, 51, 70, Services), Stores, Fire station, Factory Medical center ( small facility), Canteens, Instrumentation, and Annexes. (Township not considered)

**No. of Manpower:** Managerial Cadre: 1389, Officer Cadre: 897, worker level: 2456 and contract workers: 3380 (Total: 8122).

**Local Language used by worker level staff:** Telugu

**SCOPE OF WORK:**

BHEL Hyderabad has planned for ISO 50001-2011 EnMs (Energy Management System) certification. The Consultant has to help to prepare documentation operational control, communication, design, checking, monitoring, training etc. for implementation of ISO 50001 till certification in accordance with the requirement of ISO 50001 standards. Anything which is not covered but essentially required for certification shall also be in the scope of the consultant.

**Detailed scope of work is given below:**

1. To train and guide staff of BHEL, Hyderabad for getting certified as ISO 50001:2011.
2. Consultant shall help to
  - Define Energy Objective.
  - Review Energy of existing system.
  - Identification of significant Energy users (SEU).
  - Fixing of Energy performance Indicators (EnPIs)
  - Fixing of Energy target.
  - Fixing of base line for the EnPI's.
  - Identify, prioritize and record opportunities for improving Energy performance.
  - Preparation of procedure manuals.
  - Preparation of operational control.

- Valuation of compliance with legal other requirement.
  - Help in developing action plan.
  - Training to the employees on ISO 50001.
  - Documentation related to ISO 50001:2011 EnMS.
  - Internal audit: Training and help in internal audit, trained internal auditors of BHEL Hyderabad will participate in this to get on hand experience of conducting audit. Consultant will provide guidance for initiating corrective action for the reported audit findings.
  - Management review meeting: Training and help in management review meeting.
  - Helping till certification.
3. Consultant shall develop templates which will be filled by BHEL, Hyderabad for all documentation and help BHEL, Hyderabad to get documentation completed in all respect.
  4. Training to be given to BHEL Hyderabad Staff for following scope:
    - Training should be given by consultant staff who are certified ISO 50001 auditors.
    - **2 days training programme:** - This should be for implementation in the 1<sup>st</sup> month for senior officers. In the 2nd month there should be another 2 days programme on internal audit. During training programme on each day, there should be 4 sessions of minimum 1.5 hours each. There should be quizzes/group exercises at the end of each session. All the training programmes should be highly interactive. Mock audit should be performed during training on internal audit.
    - **1 day introductory programme:** - For middle level officers and people connected with significant energy use.
    - **Half day Introductory Programme:** - For top level officers who are involved in decision making.
    - **2 Hrs awareness programme:** - For lower level staff and contractor workers.
    - Training should be given to selected staff for internal audit.
    - **Total no of man days for training and other activities mentioned above should be minimum 50 days.**
    - Training modules should be appropriate & class lecture type and selected films/videos to be shown.

**Special Conditions:**

1. Consultant has to submit road map /detailed activity chart along with tender for implementation of energy management system toward certification of ISO 50001.
2. On award of work road map /activity chart will be reviewed and can be re scheduled by BHEL Hyderabad.
3. **Following facilities shall be provided by BHEL:-**
  - Working lunch for the consultant team.
  - Hall / LCD Projector etc. for training program.
4. Consultant has to provide soft copies of reading/training material to BHEL.
5. **Payment Terms: As per Annexure II.**
6. Commencement of work shall be the date (preferably Monday) within 15 days from the date of placement of work order.
7. **Completion period:** Total duration for implementation of ISO 50001 till certification through external agency is 6 months from date of start of work.