

Bharat Heavy Electricals Limited
Ramachandrapuram : : Hyderabad – 502032
M&S – DIVISION
SCOPE OF WORK (ANNEXURE-I)

Tender No.: M&S/P&S/2021/77, Dt.: 03.02.2022

Name of Work: Certification and in-house training of ISO 50001:2018 (Energy Management System).

DESCRIPTION OF WORK:

1. To train and guide staff of BHEL, Hyderabad for being certified as ISO 50001:2018 in two sessions. The BHEL selected staff needs to be trained as Internal auditor for ISO 50001:2018. Each session the duration is for 3 days. A total of 50-60 BHEL Staff needs to be trained as internal auditor in two sessions.
2. This includes the following
 - Define Energy Objective.
 - Energy Review 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. After Training BHEL trained auditees shall be able to develop templates for ISO 50001 2018 implementation, All documentation and implementation of the same should be clearly told to all the BHEL trainees.
4. Training to be given to BHEL Hyderabad Staff for following scope:
 - Training should be given by Training staff who are certified ISO 50001 auditors.

- 3 days training program: During training program 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 programs should be highly interactive. Mock audit should be performed during training on internal audit.
 - Total no of man days for training and other activities mentioned above should be minimum 150-180 days.
 - Training modules should be appropriate & class lecture type and selected films/videos to be shown.
5. The preliminary audit may be carried out if required by the Auditor to discuss any areas of concern related to the Energy Management system and the audit itself.
 6. Carrying out initial system audit (certification audit) in order to verify conformance between the system as documented and its implementation. The certification audit will cover minimum following activities:
 - Review of Documents like System Manual and Procedure manual etc.
 - To verify the compliance for effective implementation of the Energy Management system.
 - Any other documents, systems, procedures etc. as applicable as per the requirement of proposed ISO system standard.
 7. Issue of the Certificate of Conformity, including Registration.
 8. Conducting two surveillance audits in an interval of one year from the date of issue of the certificate within 3 of years duration i.e. validity of the ISO certification. The successful bidder will perform the surveillance audits of certified management system according to the periodic audit plan to verify that the system and its implementation is being maintained and improved consciously. Periodical audits are to be performed once a year. Auditor will issue an audit report along with Corrective Action Request upon completion of each periodical audit.
 9. The certification activities shall be executed as per dates to be given by BHEL and issue the 'Certificate of Compliance' within four weeks from the date of successful completion of the Initial audit. Auditor will advise BHEL for intimation towards the certification audit well in advance with at least one or two weeks advance intimation.
 10. Initial system audits & surveillance system audits are to be planned and performed by a qualified lead auditor & If necessary he may be assisted by one or more auditors. In case of a periodical audit, the lead auditor may appoint an auditor to execute the audit on his own, under the supervision of the lead auditor. The audit team shall be composed in such a way that the necessary expertise is available in the team to cover the specific line of business of the Auditee.

Special Conditions:

1. Audit and audit duration shall be in accordance with ISO 50003:2014. Bidder has to estimate audit duration as per ISO 50003. Any data required for the audit duration estimation shall be provided.
2. Following facilities shall be provided by BHEL:
 - Working lunch for the consultant team.
 - Hall, Projector etc. for audit program if required.
3. All expenses towards mobilization at site work force/travel expenses etc. shall be deemed to be included in the prices quoted and no separate payment on account of such expenses shall be entertained.
4. The certifying agency team working in the plant premises shall have to maintain and observe safety instructions/general safety rules and security requirements.
5. The team for certification auditors must include certified auditors.
6. Start of work shall be the date (preferably Monday) within 15 days from the date of placement of work order.

Relevant details of BHEL Hyderabad for the subject work:

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

No. of working hours /day: 16 (8 hrs. /shift), few areas run 3 shifts and some process plants run 24x7.

No. of working days in a week: 6.

Scope and boundaries for ISO 50001 certification:

Design, Operation and Maintenance of Facilities for manufacture of Turbines, Compressors, Generators, Pumps, Oil Rigs, Pulverizers, Heat Exchangers, Switchgear and other Power Plant Equipment and Components.

No. of employees: Managerial Cadre: 959, Officer Cadre: 599, worker level: 1521.

Form of Energy being use: Electricity, Furnace oil, LPG, steam & compressed air, Diesel Oil, HFO, etc.

Local language: Telugu