SCOPE OF WORK

1. THE ELECTRIC SAFTEY AUDIT SHALL BE CARRIED OUT TO SPECIFICALLY COVER THE FOLLOWING ASPECTS.

- Physical inspection of the office premises with reference to applicable Indian standards, Indian Electricity Rules and other relevant codes of Practice & identifying electrical hazards (shocks, fires, etc.).
- Review of protection devices / system of the electrical installation including fuses, ELCB, MCB, MCCB, master electrical switch, etc.
- Review of adequacy of cables, motors, etc. based on actual load current measurements and cable current carrying capacities.
- Review the EPM (Electrical Preventive Maintenance) programme and to examine documentation, checklists, test records, etc. and to suggest recommendations as per applicable standards.
- To evaluate the earthing system (installation and maintenance) based on IS 3043 (or latest available IS standards)including availability, upkeep and testing of earth pits and to suggest recommendations
- Display of danger signboard
- Use of electrical rubber mats, rubber gloves, etc.
- Provision of identification tag of cables, cable glands, sealing of cable entry and unused holes
- Upkeep and housekeeping of electrical installations
- Provision of indicating lamps on the control panels
- Use of 3-pin plug and socket
- Fire protection of electrical installations
- Arrangement for repair and maintenance of electrical installations, equipment and appliances including qualified maintenance personnel, accessibility, and maintenance practices, etc.
- Adequacy of rating of electrical equipment and installation
- Adequacy of isolation of current carrying parts
- Lightening protection
- Weather protection of outdoor electrical equipment and fittings
- Cables – dressing, routing, identification tags, glands, lugs, armoured earthing, sealing of cable entry and used holes, adequacy for current carrying capacity, colour coding
- DG Set – emergency switch, oil leakage, stack and noise monitoring,
- UPS and battery room
- Review of the following test records, (if any) evaluating the test results and to suggest recommendations as per applicable standards.
    - o Insulation resistance tests o Earth resistance tests.

2. ACTUAL TESTS/ANALYSIS TO BE PERFORMED DURING THE AUDIT:

- Infrared Thermography: HT/LT panels where applicable, DBs, MCBs, SMDB (Light & Power), MDB (Light & Power), Wall & Floor Sockets, Stabilizers, UPS, A/C Units, Exposed Terminations of Cables, exposed cables/wiring, etc.
- Earth pit Resistance tests
- Actual Load Measurements at Normal & Full load including Total Voltage & Total Current Harmonics.

3. AUDIT METHODOLOGY:

- Development of audit checklist based on the preliminary information provided by Bank of Baroda.
- Carry out inspection of electrical installations in the office premises
- Discussions with key personnel to verify existence of the systems/procedures.
- Review of key documents and records.
- Submission of the electrical audit report.

4. AUDIT CRITERIA:

- Applicable safety-related statutes including the Electricity Act and Indian Electrical Rules
- National Building Code (Electrical Installations)
- National Electrical Code
- Other relevant Indian standards & codes of practice.

5. DELIVERABLES:

The audit team will prepare and submit the electrical audit report as per the methodology. The report shall contain objectives, methodology, executive summary and observations and recommendations.

6. SCOPE:

Scope of work includes Comprehensive Electrical Audit on the following measures:

a) Visiting each and every branch / offices and verifying the installation (AS DETAILED IN THE FORMATS ENCLOSED).
b) Electrical Audit
c) Suggestion and corrective measures necessary towards electrical fire and safety measures, Upgradation in the electrical system, electrical load, connected load, sanctioned load, enhancement of load etc.
d) Submission of Comprehensive Report as per Annexure enclosed, observed/verified during Branch/office inspection. Triplicate report to be prepared. one for Branch, one from Regional office and one for Zonal office.

e) The scope includes arranging all required tools, measuring instruments and technicians required for completion of the scope of work. It also includes work instructions from Bank, visiting site, and preparing reports so as to enable the Bank to take a decision for improvement.

f) The agency shall maintain following registers on daily basis i.e. Daily progress report and hindrance register.The agency have to submit PERTCHART incorporating all activities required for the completion of the work in time to Regional office/Zonal office.