



PREMISES & ESTATE DEPARTMENT, LHO MAHARASHTRA

LOCAL HEAD OFFICE, 3rd FLOOR, C-6, G- BLOCK,
SYNERGY BUILDING, BANDRA-KURLA COMPLEX,
BANDRA (EAST), MUMBAI-400 051

EMPANELMENT OF ELECTRICAL SAFETY AUDITORS

APPLICATION FORM

NAME : _____

ADDRESS : _____

CONTACT NO : _____

EMAIL ID : _____

A. NOTICE

State Bank of India, Local Head Office Maharashtra Circle, Mumbai intend to empanel Electrical Safety Auditors for branches/ offices under SBI's Administrative Offices located at Pune, Kolhapur, Panaji, Nashik, Aurangabad, Nanded, Nagpur & Amravati. The eligibility criteria, terms and conditions, application format and other detail/requirement are as under:

SN	Description	
1.	Name of the Work	Empanelment of Electrical Safety Auditor for branches / offices under SBI, Local Head Office, Maharashtra.
2.	Nature of Work	Empanelment
3.	Cost of Tender Documents	NIL
4.	Date of issue of application Documents Form Bank's Website	31.05.2024 to 24.06.2024 from www.sbi.co.in under Procurement News
5.	Last date & time for submission of Application	Up to 03.00 pm on 24.06.2024
6.	Address at Which Application (Hard Copy) Along With Cost of Document Has Submitted	The Assistant General Manager (P&E), LHO Maharashtra, State Bank of India, 3rd Floor, Synergy Building, Bandra Kurla Complex, Mumbai – 400 051, Ph- 022 26445645
7.	Place of opening of application	The Assistant General Manager (P&E), LHO Maharashtra, State Bank of India, 3rd Floor, Synergy Building, Bandra Kurla Complex, Mumbai – 400 051, Ph- 022 26445645
8.	Validity of Empanelment	3 years from the date of Approval

9. Application can be downloaded from the Bank's website www.sbi.co.in (Link <Procurement News>). It shall be responsibility of the tenderer to ensure that all pages of the bid are properly bound separately, tenders in loose pages may be disqualified.

10. The Tenderer shall sign and stamp each page of the tender document thereby ensuring the number and sequence of all pages.

11. No conditions other than mentioned in the tender will be considered.

12. The Bank reserve their rights to accept or reject any or all the tenders, either in whole or in part without assigning any reason(s) for doing so and no claim / correspondence shall be entertained in this regard.

13. Applicants must have its office in Maharashtra/Goa State. Proof to this effect must be enclosed.

Yours Faithfully,

Sd/-

**Asst. General Manager (P&E),
LHO Maharashtra**

APPLICATION FORM
(Please strike-off which is not applicable)

1.	Name of the Bidder	
2.	Full Postal Address of the Applicant in the state of Maharashtra / Goa (Proof must be enclosed as Flag A)	
3.	Contact Details:	
	Phone Number	
	Mobile No	
	Email Id	
4.	Year of Establishment (Proof must be enclosed as Flag B)	
5.	Status of the Firm whether company/firm / proprietary (Proof must be enclosed as Flag C)	
6.	Name of the Proprietor/ Partners / Directors of the Organization / Firm with Qualification. (Proof to be enclosed as Flag D)	
7.	Banker's Details	
	Banker's Name:	
	Full Postal Address:	
	Telephone No.:	
	Account No	
	Type of Account	
8.	If, you are registered/empanelled as Electrical Safety Auditor other organizations /statutory bodies such as CPWD, PWD, MES, Banks etc furnish their names, category and date of registration. (Proof to be enclosed as Flag E)	
9.	PAN and GST Registration Certificate Flag F	
10.	Annual turnover for the last 3 years. Enclose certificate of chartered accountant as Flag G)	
11.	Detailed description of similar works done during last 7 years as per the criteria given, for PSU/Banks/Govt	

	Organizations/reputed private sector companies by the Applicant. Details such as Name of organization, value of work done and date of completion to be furnished along with copies of work orders and Completion certificates.(Details be attached as Flag H)	
12.	Name of BEE (Bureau of Energy Efficiency), Govt. of India accredited Electrical Energy or safety Auditors (copy of accreditation for each auditor to be enclosed as Flag I)	1. 2. 3. 4.

DECLARATION:

1. All the information furnished by me/us here above is correct to the best of my knowledge and belief.
2. I/We have no objection if enquiries are made about the work listed by me/ us in the accompanying sheets/ annexures.
3. I/We agree that the decision of Bank in selection of Electrical Safety Auditors will be final and binding to me/ us.
4. I/We hereby confirm that our firm/agency/company has not been disqualified / debarred / blacklisted by any Governments, Semi-governments, PSUs, Banks including any of the Offices/Branch of State Bank of India during last 7 year from the date of application.

PLACE :

SIGNATURE OF APPLICANT

NAME & DESIGNATION

DATE:

SEAL OF ORGANISATION

B. MINIMUM ELIGIBILITY CRITERIA

1. Qualification of Electrical Auditors

- a. Should have graduation in Electrical Engineering with 03 years of experience in electrical installation and safety audit or safety related works.
OR
- b. Should have Electrical supervising license from concerned licensing authority of the state or central governments with minimum 05 years' experience in electrical installation and safety related works.
OR
Retired electrical engineer from SBI group, PSUs, Central and State governments, employed as electrical engineers who dealt with electrical installations and safety related work and not banned from re-employment.
- c. Should be less than 65 years of age.
- d. BEE accredited Electrical Energy/Safety Auditor will be an added advantage for empanelment.

2. Qualification for Electrical Consultants

- a. Should have an average annual turnover of not less than Rs. 30 Lakhs during past 3 years as on 31.03.2024, for electrical installation and safety related consultancy and advisory services and not from sale of electrical equipment, verifiable from audited balances sheet, if otherwise CA certificate to this effect shall be submitted with balance sheet.
- b. Should be in electrical engineering / Electrical consultancy business for minimum 3 years.
- c. Electrical auditor detailed by the firm for audit in SBI should have qualification as mentioned at para 1 above "Qualification of Electrical Auditors". The firm should give a certificate to this effect to auditors detailed by them, on their letter pad, duly countersigned by the designated electrical engineer at LHO. This certificate should be produced to SBI Branch Manager before commencing electrical audit of the Bank.

C. SPECIAL TERMS AND CONDITIONS

I. OBJECTIVE

The objective of conducting Electrical safety is to review the condition of the existing electrical installation and to recommend measures for further strengthening the system in order to eliminate/reduce the electrical/fire hazards and to improve the safety of the personnel. The audit shall mainly focus on:

1. Identifying the potential electrical/fire hazards
2. Boosting employee morale by providing safe working environment.
3. Smoothing the operation and maintenance of electrical installation.
4. Avoiding loss of properties, human life and costly equipment.
5. Ensuring the compliance with relevant codes and practice, statutory rules and regulations.
6. Establishing procedures and process of safe working in electrical installation.

II. INSTRUCTIONS

1. The work shall be considered as complete only after submission of hard copy of the Electrical Safety Audit Report (as per Annexure I & II) to the respective Branches/Offices & RBO's and submission of soft copy of the Electrical safety Audit report at P&E Department at LHO Maharashtra. The Electrical safety Audit report has to be entered in Bank's online portal by the respective Electrical Safety Auditors within the given time period.
2. The Fee quoted by the applicant for conducting the electrical safety audit should include all expenses for the satisfactory conduct of the electrical safety audit including transportation, lodging and TA / DA of their own representatives and Bank will not entertain any additional claim whatsoever in this respect.
3. The Safety Auditor must get prior permission from the concerned Branch Manager and RBO for conducting audit of the Branch / Office.
4. The Safety Auditor must interact with the concerned Branch Manager / In charge for obtaining data (electricity bill copy, AMC details of equipment, inspection report by statutory agencies etc.), problems/issues faced etc for conducting audit of the Branch.
5. The duration of electrical safety audit should be minimum 2 hrs. for small sized branches, 3 hrs for medium sized branches, 4 hrs. for Main / Big sized Branches and minimum 8 hrs for multistoried buildings with more than 3 main offices/branches and more than 3 floors.

6. While conducting the safety audit, the Electrical Safety Auditor and accompanying person/s should take all standard safety precautions such as safety shoes, safety gloves, proper tools and tackles etc for self protection and for the safe conduction of the audit. Bank will not be responsible for any electrical or other accidents happened to the auditor/s due to their negligence and non compliance to safety precautions.
7. The Safety Auditor shall submit the Progress report on weekly basis to the P&E Department at LHO & Concerned RBO. The work should be completed in all aspects within the given time period.
8. The audit report must consist of all connected equipment details as per Annexure-I & II, Layout drawing (Not To Scale) of the branch premises showing the bifurcation of the areas such as BM cabin, banking hall, UPS Room, Locker Room, Strong Room, Dining hall etc along with location of major electrical equipment, MSB, DBs, UPS, ATM etc, Single Line Diagram (SLD) of existing electrical system (from Energy meter to sub DBs such as LDB, PDB etc. and the position of critical faults which need immediate attention / rectification should be clearly marked in the SLD.
9. Inspection/recommendation report of existing electrical system of the Branches/Offices and connected ATM with your observations and remarks.
10. To obtain photo copy of last three months electricity bill of the branch/office/ATM and submit the same along with final audit report including marking any discrepancy, if any.
11. The Safety Auditor have to submit the "PROFORMA OF ELECTRICAL AUDIT" enclosed herewith as Annexure-I & Annexure-II duly completed and signed by Auditor and concerned Branch Manager / Administrative Officer.
12. **The Safety Auditor is required to submit the Final Audit Report along with required data in Excel format contains all Equipment details, highlighting of Risk categories, softcopy of report etc within the given time period after issue of the work order.**
13. The Safety Auditor has to check the earth resistance, checking the terminals for any loose connection/over heating, checking of proper rating of protective devices, checking of all distribution boards etc.
14. The Safety Auditor has to check and submit the details of all the Electrical Installations/ UPS/DG SET/ AC (Conventional/ Inverter/ VRF/ Ductable) / Lights (CFL/ LED) / APFC Panel connected in the Branch
15. The Auditor has arranged to enter Electrical Audit report of all branches / offices allotted to them on our online portal at LHO at no additional cost.

16. The Auditor should not alter this document as well as Audit report.
17. **A copy of the handwritten report to be submitted to the Branch at the time of inspection and acknowledgement to be obtained from Branch Manager with sign and seal.**

III. SCOPE OF WORK FOR ELECTRICAL FIRE SAFETY AUDIT

1. Physical inspection of the SBI branches/Offices and attached ATMs with reference to applicable Indian standards, Indian Electricity Rules and other relevant codes of Practice & identifying electrical fire hazards (shocks, fires, etc.).
2. Calculation of actual Electrical Connected load at the Branch / Office and to report if it is less than sanctioned load by the DISCOM.
3. Whether APFC panels are in working condition and maintaining power factor within the required range.
4. Whether penalty is imposed in electricity bill on account of excess connected load or poor power factor and if yes, it should be clearly mentioned in the report.
5. Whether APFC panel needs to be installed for the Branch / Office.
6. Review of protection devices such as LBS/ACB/MCCB/MCB/ELCB system of the electrical installation and whether the performance is satisfactory or not Review of adequacy of Wires/Cable sizes based on actual load current measurements, insulation resistance, tightness of terminations.
7. Review of electrical accidents to identify root cause of the accidents, if happened any, review the EPM (Electrical Preventive Maintenance) program if any, in the branch to suggest recommendations as per applicable standards.
8. To evaluate the earthing system (installation and maintenance) in the plant based on IS 3043 and to suggest recommendations including the measurement of Earth resistance.
9. Opening and checking for any loose contacts at the mains switches, DB, Switch boards etc. Inspection of UPS and batteries for its adequacy in the capacity for the load requirement of the branch.
10. Reliability of the electrical distribution system with the equipment's like air conditioners, UPS's, Generators etc. Checking whether the AMC of these items are in place.

11. Evaluating whether the demand load is within the sanctioned load with proper load balancing.
12. Verification of the operation of ATM & UPS/System room Air conditioners with timer mechanism.
13. Report must consist of your Observations on account of the Electrical fire safety and various measures suggesting for the improvement of the safety existing systems.
14. The audit report must consist of all connected equipment details as per Annexure-I & II, Layout drawing (Not To Scale) of the branch premises showing the bifurcation of the areas such as BM cabin, banking hall, UPS Room, Locker Room, Strong Room, Dining hall etc along with location of major electrical equipment, MSB, DBs, UPS, ATM etc, Single Line Diagram (SLD) of existing electrical system (from Energy meter to sub DBs such as LDB, PDB etc. and the position of critical faults which need immediate attention / rectification should be clearly marked in the SLD.
15. Review of the Existing condition of the HT Transformer, Substation, Main panels, Load break switch, DG sets, elevators, UPS if any.
16. Auditor has to submit a copy of photo taken in front of the name of the Branch.
17. For the purpose of audit fee billing and submission of reports,
 - i. If different electrical meters are available for different offices in the same building, then treat each consumer as separate entity as per electrical load and report should be submitted separately to each Office with separate audit fee bills for each office.
 - ii. If Single meter (HT or LT) is there for different Branches/ Offices in the same building, then separate audit reports should be prepared and submitted for each office in that building having an area of 2000 Sq.Ft or more and according to their connected load. For offices like CAC (Currency Administration) cell etc., which are occupying less than 2000 Sq. ft but under the common connection, separate audit report has to be submitted..

But for Audit fee billing purpose, the billing is to be done for all offices above 2000 Sq.ft separately as per their actual connected load. For small offices like CAC, it will be part of the Branch/Office in that floor and no separate bill for audit fee needs to be raised.

If the common connection is HT connection having own substation, then electrical safety audit of the substation has to be included in the Audit report for the Main Office/Branches only. But billing for audit fee shall be for category as per connected load for each office

For Branches having on site ATMs, the electrical safety audit of the ATM Kiosk also has to be conducted at no extra fee or cost for any number of such attached onsite ATMs for the Branch/Office. Observations regarding the ATMs has to be included in the electrical safety audit of the concerned Branch / Office as per given format.

- iii. If single establishment in different locations may treat as single only though you have conducted audit in different locations. You are also advised to consider the same as a single unit. Single report to be submitted by mentioned the comments properly by which area to be addressed.
18. **Study of existing safety measures**, procedures and system for controlling electrical hazards being followed in the office with respect to statutory and regulatory requirements, electricity rules etc. and suggest for further measures in case of any gap.
19. **Preparation of Lay out drawing and single line diagram (SLD) of Electrical Installation** from HT panel to Floor panels / DBs, covering transformers, main LT panel, capacitor panel, DG set, UPS Panel, LDb, PDB etc. The SLD should indicate the ratings of the equipment, switch gears, cables (wherever possible) etc.
20. **Earth Resistance Testing**
 - I. The earth resistance testing shall be carried out to measure the earth resistance on all the earth pits and its compliance with respect to Indian Electricity Rules may be verified.
 - II. The continuity of earth strip/conductor from the earth pit the earth terminal of the respective electrical equipment shall be checked and verified.
21. **Identification of any unbalancing of loads.** The unbalancing/overloading, if any, in the electrical installation viz. transformers, LT panels, Emergency panel, Floor Distribution Panels, Distribution Boards etc shall be identified with the help of measuring equipment.
22. **Identification of Hot Spots using thermal camera:** The hot spots, if any, in the electrical installation panels and distribution boards shall be identified with the help of thermal imaging/thermography.
23. **Checking Record of test reports** carried out by the OEMs or their authorized representatives for proper functioning of transformers, HT/LT switchgear and proper functioning of their protective relays, failsafe interlocking of Circuit breakers.
24. **Physical inspection of the sources of power supply** viz Transformers, substation equipment, DG set , UPS installations and associated power distribution electrical installations including power supply systems & wirings for

server rooms, IT equipment etc shall be done with reference to applicable Indian standards, Indian Electricity Rules and other relevant codes of practice. Any leakage of oil in transformer, capacitor banks, and diesel/water/oil in DG sets, leakage of oil/refrigerant in AC plant, leakage of water in lift shaft, leakage of water over any electrical equipment etc to be checked.

25. Identification of Electrical hazards such as loose wire hanging, cables not dressed properly, broken switches, plugs and sockets etc. shall be done.
26. Checking of the protection devices in upstream and downstream switchgears and their settings to ensure that the same are in the desired graded manner as designed as per the requirements of existing standards including setting/adequacy of ELCB and their ratings for earth leakage protection.
27. Inspection of the Lightning protection system of the building and ensuring that lightning arrestors are connected to two isolated earth pits. These pits should not be connected to electrical system earth.
28. Checking of the provision of electrical shock treatment chart in Hindi and local language near electrical equipment and substation. Checking the record of the training provided to the electrical staff on electrical safety, shock treatment and to handle emergencies and artificial respiration.
29. Checking the log of electrical accidents maintained.
30. Checking of the provision of Danger sign Boards indicating the voltage at a prominent location of electrical installation.
31. Checking of the cable terminations at various panel and distribution boards to avoid phase and earth fault.
32. Checking of the provision of protective guards and belt covers for all the rotating electrical equipment.
33. Checking the provision of firefighting equipment and fire alarm system detectors near all the electrical installations. It is to be ensured that Fire buckets filled with free flowing sand and DCP/CO2 fire extinguishers are provided near electrical substation and electrical panel locations.
34. Verifying provision of First Aid boxes and their periodic replacement of expired medicines.
35. To check the provision of insulated mats of ISI mark in front of all the electrical panels.

36. To check the provision of proper ventilation of substation, transformer rooms, electrical panel rooms and battery rooms etc.
37. In addition to above, checking for any shortfalls in the existing electrical systems which impact on human and fire safety.

IV. STATUTORY REQUIREMENTS:

Electrical Safety Audit (ESA) of the Building and Electrical Installations shall be carried out with reference to applicable Indian Standard, Indian Electricity Rules(IE) and other relevant codes of Practice to identify potential electrical hazards to prevent or minimize accidents. The Audit should be carried out using calibrated instruments and personal protective equipment during field visits for inspection and data collection.

During the Audit, the audit team should ensure that in addition to other provisions of the IE rules as per IE Act, the provisions contained in Para 29 of the IE act specifically listed as under are complied with:

Para 29:- Construction, installation, protection, operation and maintenance of electric Supply lines and apparatus-

1. All electric supply lines and apparatus shall be of sufficient ratings for power, insulation and estimated fault current and of sufficient mechanical strength, for the duty which they may be required to perform under the environmental conditions of installation, and shall be constructed, installed, protected, worked and maintained in such a manner as to ensure safety of 2 [human beings, animals and property].
2. Save as otherwise provided in these rules, the relevant code of practice of the 3[Bureau of Indian Standards] 4[including National Electrical Code] if any may be followed to carry out the purposes of this rule and in the event of any inconsistency, the provision of these rules shall prevail.
3. The material and apparatus used shall conform to the relevant specifications of the 3[Bureau of Indian Standards] where such specifications have already been laid down.
 - a) Subs. by GSR 358, dt. 30.4.1987, w.e.f. 9.5.1987.
 - b) Subs. by GSR 45, dt. 1.1.1993, w.e.f. 23.1.1993.
 - c) Subs. by GR. 466, dt. 18.7.1991, w.e.f. 17.8.1991.

Relevant Codes of Practices:

Some of the relevant codes of practice are enumerated below:

- a. Indian Electricity Rules, 1956 (as amended up to date)

- b. IS: 5216 (Part-I) Recommendations on Safety Procedures and practices in Electrical Work.
- c. IS: 5216 (Part-II) Recommendations on Safety Procedures and practices in Electrical Work.
- d. IS: 1646-1961 Code of Practice for fire safety (General) : Electrical works
- e. IS: 4770: 1968 – Specifications for Rubber gloves for Electrical Purpose
- f. IS: 2309 Protection of Buildings and Allied Structures against Lightning
- g. Gazette Notification dated 20th September 2010 issued by Central Electricity Authority regarding Regulations for measures relating to safety and Electric Supply.
- h. National Building Code, 2005 (as amended up to date)
- i. Any other local guidelines / bylaws as applicable.

Details of Electrical Installations in Bank's office building:

Substation, Transformers, Switchgear, Electrical Panels, Capacitor Panels, Distribution Board, Distribution circuits, Electrical wiring consisting of power, lighting and fan circuits including earthing, Building and Equipment Earthing, Various types of motors, DG set, UPS, Central Air-conditioning Plant, Room Air conditioner, Air Handling Units, Lifts, Lightning Arrester, Kitchen Equipment, Water Pumps, Servers, switches, PCs, printers and other IT equipment and any other equipment and gadgets connected to power supply prone to fire hazards

Equipment/measuring instruments

All the equipment/instruments required for carrying out the Electrical Safety Audit will have to be arranged by the firm without any extra payment to the Bank. The firm should have the following minimum equipment/instruments for Electrical Safety Audit:

- Three-phase Power analyzer
- Thermography camera
- Earth tester
- Megger
- Any other equipment/instrument

Please note that the Bank will not provide any kind of assistance in the form of men/material and the firm will have to make their own arrangement for all assistance.

Work at site

The firm may visit the premises and ascertain site conditions. The work has to be carried out in a working office building without causing inconvenience to the normal working of the Bank. No power shut down will be provided during office hours. Power shut down required for the work will be given on holidays and after office hours at the discretion of the Bank. No extra claims will be admissible later on these grounds.

The firm should deploy only qualified and experienced Engineers/Technician having requisite licenses to carry out such works. Utmost care shall be exercised by the firm in carrying out the work to ensure that no damage is caused to persons and properties. The Bank will not be liable for any injury or damage to persons and any such happening will be entirely the responsibility of the firm. The persons carrying out the Electrical safety audit shall also use all the required Personnel protective equipment for their own protection.

Submission of Report

After completion of the audit, post audit review meeting shall be held with the Bank's engineers detailing about their observations. The audit report shall include the status of the entire electrical installation observed by the audit team during the safety audit. The report shall also include the recommendations of the audit team for improvement in the electrical installations.

ANNEXURE –I

Electrical Safety Audit Report

Risk category of the Branch: (High/ Low/ Medium)

Branch Name					
Branch Code					
Electricity Consumer No.					
RBO					
UPS Capacity		Make		Year	
Electrical Installation/ Wiring				Year	
Lights Provided	LED/ CFL :				
AC Installed	VRF/Ductable/ Cassette/ Split :				
DG Set Capacity		Make		Year	
Earthing (Ohm)	Body (GI)		UPS (Copper) (ohm)		
Electrical Load					
Power factor					
Type of consumer	(HT/LT) : Category/ Commercial / Industry				
Irregularity Photos	Yes/ No				
Electricity Bills	Three Months:				
Load Calculation	Sheet attached: (Yes/ No)				
UPS/DG set/ AC/ Lights Details in given format	Sheet attached : (Yes/ No)				

PROFORMA FOR ELECTRICAL AUDIT

Branch Name & Code		
Address		
BM PF No. and Name		
Electricity Consumer No.		
Sanctioned Load		
Connected Load		
Monthly bill of energy bill (Approx.)		
Total tonnage of Air Conditioners in Branch (TR)		Year of Installation:
Area of the Branch (Sq feet / sq. meter)		
Date of Audit		

S.No	Description	Details	Remarks
1	Whether MCCBs/MCBs/ELCBs are provided with proper rating to cater the load	YES / NO	
2	Whether light and emergency light are provided in electrical rooms/operating areas for easy operation & maintenance works	YES / NO	
3	Whether Pump room, DG set room, UPS room, electrical room. etc. are maintained dry and in good condition and obsolete/hazardous/old items are not dumped there.	YES / NO	
4	Whether water seepage is observed near any of the Electrical Panel, Distribution Boards, Electrical equipment etc.	YES / NO	
5	Whether Earthing pits are provided and connected to the equipment, Body of the connected equipment	YES / NO	
6	Whether the earthing pits are properly maintained	YES / NO	
	Earth Pit Resistance Values GI Earthing: _____ ohm Copper Earthing: _____ ohm		
7	Whether proper exhaust fan/AC for Ventilation of panel room/electrical room/UPS room is provided and paper, old material or any other scrap kept near DB/Panels/UPS/Batteries etc. are not kept there.	YES / NO	

8	Whether penalty is being imposed in electricity bills on account of higher load/poor power factor etc. (It may be ascertained from the electricity bill of April / May / June / July). Additional electrical load required if any (from power Distribution company)	YES / NO	
Penalty for Maximum Demand/ Load Amount Rs: Month of : _____ Contract Demand:_____ Recording Maximum Demand:_____			
9	Whether Load is Distributed in all 3 phases to avoid unbalancing of phases and no loose electrical connection /haphazard wiring observed in the branch/office /premises	YES / NO	
Per Phase Voltage & Current Readings RY: RN: R: YB: YN: Y: BR: BN: B:			
10	Whether isolating switches are provided for the switching off of the nonessential loads premises during night and main switch to switch off the power supply to the branch in case of fire/ Emergency	YES / NO	
11	Whether electrical equipment of Pantry etc. are properly connected to Iron socket box/ 16A Socket with MCBs. MCB s or latest type switches are provided to switch on/off the AC s and protect them from overload.	YES / NO	
12	Whether Proper preventive maintenance after opening of Panel boards and distribution Boards are carried out by the license holder Electrician or skilled technicians of Equipment manufacturers / Service providers.	YES / NO	
Last date of when it is conducted:			
13	Whether Appropriate timers used in the changeover of Air conditioners for server room Ac's and for signage Boards to make auto ON/OFF (for schedule timings). The thermostat of Ac's at server rooms should be set to say 30 degree centigrade so they are not run only when the temperature is too high (to minimize chances of fire due to idle running of Ac's during the nights)	YES / NO	
14	Whether preventive maintenance of electric installation and equipment is carried out by skilled license holder electricians / skilled technician/ Empanelled Contractor	YES / NO	
15	General Condition of electrical control panels, Main switch, electric meter board and change over switch, Ac's, Water coolers, water filter, wiring cables etc. is good and all DBs, Panels, Switch boards are properly covered.	YES / NO	

16	Whether the contact numbers of persons, electricians, power distribution company, Generator service provider, Vendor UPS vendor, Ac's etc. are available with Accountant / Security guard and other staff and they are displayed in Electric Room / UPS room.	YES / NO	AC Vendor: Electrical Vendor: UPS Vendor:
17	Whether the power factor panel of appropriate rating is installed	YES / NO	
	Weather Fixed Capacitor/ APFC Panel Installed: Working Status of Capacitor Panel: (Yes/ No): Capacity of Capacitor panel Installed:_____KVAR Present PF Value: : _____ Any Penalty imposed (Yes/No) : _____ If Yes amount of Penalty: _____ Month:_____		
18	FIRE PREVENTION MEASURES	YES / NO	
a	All old disposable records, broken furniture etc. accumulated at the premises have been cleared.	YES / NO	
b	Combustible leaf, litter / waste papers etc. in and around the branch is removed / cleaned periodically	YES / NO	
c	No stationery / records / old obsolete items are stored / kept in the system / UPS room	YES / NO	
d	Storage racks in stationery / record room kept at a safe distance of at least 3 ft from electrical points / switch / junction boxes.	YES / NO	
e	In the pantry / canteen LPG is used	YES / NO	
19	SERVER AND UPS ROOM	YES / NO	
a	Whether Timer is provided for Server/UPS room ACs for its alternate operation.	YES / NO	
b	Whether the Server Room/UPS Room Air conditioners are more than 5 years old and needs replacement?	YES / NO	
c	Whether any water leakage is observed from server/ups room ACs?	YES / NO	
d	Whether Exhaust fan installed in UPS room, where no ACs are provided?	YES / NO	
20	ELECTRICAL SAFETY IN RECORD/STATIONERY ROOMS	YES / NO	
	Power supply to record / stationery room is made through plug and socket arrangement	YES / NO	
21	FIRE PROTECTION / FIRE CONTROL EXTINGUISHERS AND FIRE ALARM SYSTEM	YES / NO	
	Are fire extinguishers available in the following work area and clearly marked and accessible A. Systems/UPS Room: CO2(3kg/4.5kg) x 2 B. Banking Hall: Water CO2 type C. Stationery Room: Water CO2 type	YES / NO	

22	DG SET / GENERATOR	YES / NO	
	At least two 6 kg ABC capacity fire extinguishers are placed near the DG	YES / NO	
23	ATM KIOSK (Onsite)	YES / NO	
a	Whether ATM Kiosk Doors are getting closed automatically and properly?	YES / NO	
b	Whether any Water Seepage observed from ATM Air conditioners?	YES / NO	
c	Whether the ATM Air conditioners are more than 5 years old and needs replacement?	YES / NO	
d	Whether timers are provided for alternate operation of ATM Air conditioners and in working condition?	YES / NO	
e	Whether any waste materials, paper cartons, furniture etc. in ATM Ante-Room (back side room) housing UPS, batteries?	YES / NO	
f	Whether any electric shock is experienced on touching the ATM Machine/s	YES / NO	
g	Whether the Electrical Wiring, DBs, etc in ATM Kiosk/Ante room are in good condition	YES / NO	
h	Whether separate UPS is provided for ATM ? If 'Yes' mention the ups make, capacity, battery capacity and quantity. UPS Make:.....Capacity.....kVA Battery make.....Capacity.....Ah, Qty.....Nos.	YES / NO	
i	Any other important observations in ATM kiosk that needs to be addressed urgently? Details:	YES / NO	

1. Summary of Observations:

S.no	Observations and Measures Suggested	Priority

2. Single Line Diagram

3. Approximate Branch Layout (Not to Scale)

4. Irregular Photos of the Branch

5. Three months Electricity Bills

6. AGE of Air conditioning:

7. AGE of Electrical Works:

NAME OF THE BRANCH:		DATE OF VISIT:		
CONNECTED ELECTRICAL LOAD SHEET				
S.N.	PARTICULARS	NO.	EACH WATT	TOTAL WATT
A	LIGHTING LOAD			
1	Tube Light			
2	Spot light			
3	2'x2' LED Square Fitting			
4	Other Load			
5	48" Ceiling Fan			
6	Wall Fans			
7	Exhaust Fan			
8	Signage / Other Load			
9	Street Light Fitting			
	TOTAL of (A)			
B	COMPUTER / UPS / MIC'S LOAD			
1	UPS			
2	Other Power Load (Xerox machine, other machine etc)			
	TOTAL of (B)			
C	POWER LOAD			
1	Aqua Guard			
2	Tea Coffee Machine			
3	Refrigerator / Water Cooler			
4	Pantry / Other Raw Power Load			
	TOTAL of (C)			
D	A.C. LOAD (TR)			
1	VRF AC			
2	Split AC (1.0 TR)		1200 W	
3	Split AC (1.5 TR)		1600 W	
4	Split AC (2.0 TR)		2200 W	
5	Cassette AC			
6	Other Air-conditioning Load			
	TOTAL of (D)			
TOTAL CONNECTED LOAD (Watt)				
TOTAL CONNECTED LOAD (KW)				

S. No.	UPS Make	Capacity	Date of Installation	Under AMC Yes/No	Name of AMC holder	Period of AMC	Battery Rating & Qty	Date of Installation

		Qty	Year	Inverter/ Non inverter	AMC status	Remarks
Split AC	1 TR					
	1.5 TR					
	2 TR					
Cassette A/C	2 TR					
	3TR					
	4TR					
Dutcable AC	5.5 TR					
	8.5 TR					
	11 TR					
	14 TR					

DG Set Make	DG set Capacity	Year of Purchase	Sound proof (Yes/ No)	Own/ Hiring	if Hiring charges per month\ (Rs)

LED LIGHTS (Yes/ No)	CFL			LED		
	2'X2' (Square)	Down Lights (Round)	Tube Lights	2'X2' (Square)	Down Lights (Round)	Tube Lights

8. Measured Values of the voltage, current, frequency and power factor in Electrical Meter

Parameter	Test Point	Reading at EB Meter	Reading at main Panel	Reading at AC Panel	Standard	Observations
Voltage at Incoming point (Volts)	Between phases					
	R-Y				415-440V	
	Y-B				415-440V	
	B-R				415-440V	
	Between Phase & neutral				210-240V	
	N-E				3V	
Current at incoming point (Amps)	R phase				--	
	Y phase				--	
	B phase				--	
	Neutral				--	
Frequency(Hz)						
Power factor						
Leakage Current						

Remarks/ Suggestions:

This is to certify that Mr _____ from M/s _____ has conducted Electrical safety Audit. The above details are correct.

**Branch Head
Signature & Seal
Date:**

**Electrical Auditor
Seal of Company**

Signature

Name of Electrical Auditor Supervisor's valid license No.
(In case of Electrical Contractor) Contractor's license

ANNEXURE-II

**ADDITIONAL POINTS FOR BUILDINGS HAVING OWN HT CONNECTION/
SUBSTATION**

Billing Demand	
Maximum Demand (MD) of (preferably April / May / June months)	
Power factor and peak load as mentioned in the electricity bill (preferably April / May / June months)	
Capacity of substation and voltage	

S, No	Description	Details	Remarks
1	Whether the permission for substation and DG sets, Electric shock treatment chart, Electrical & fire safety charts, Single line Diagram etc. are displayed in substation.	YES/NO	
2	Whether emergency contact numbers of fire station, Health center, Power distribution Co., Main contractor etc. are displayed at substation and control room.	YES/NO	
2.1	Whether electrical danger plate (fig of skull & cross bones, 11KV/33KV/440V/230V) is provided on Main Electrical Panel / electrical room / Operating Areas.	YES/NO	
3	Safety Materials like Fire extinguishers, Sand Buckets, Rubber Mats, Hand gloves, First Aid box etc. are available in substation.	YES/NO	
4	Whether the inspection of substation/DG set / Lift is done by the concerned Electrical Inspector at least once in a year and the required inspection fees paid well in time.	YES/NO	
5	Whether the observations by Electrical Inspector during his last visit have been attended. Date of his compliance report	YES/NO	Copy of letters should be enclosed
6	Whether Preventive Maintenance of Breakers, Transformers, H.T and LT panels etc. is carried out as per schedule and the contract for maintenance of Transformer / Breaker / Panels etc. are given to respective manufacturer / service Providers.	YES/NO	Attach the report
7	i. The maintenance contractor has A class Electrical contractor license and comply the requirement of the guidelines of the concerned Sate / Central Govt.	YES/NO	Copies should Available with concerned official
	ii. The workmen / Technicians possess the wire men / electricians license License Details :	YES/NO	

8	In case of outdoor substation, i. Whether the stone grits provided in substation yard.	YES/NO	
	ii. Whether the substation structure fencing boundary is provided, painted and well maintained.		
9	Whether Earthing test reports are provided by the Electrical contractor / Maintenance contractor?	YES/NO	
10	Whether proper nomenclature and painting is done on Electric Panels and Earthing Pits.	YES/NO	
11	Whether Transformer oil level and breather condition is checked at least once in a week	YES/NO	
12	Check last date of Transformer oil BDV test and confirm the BDV value whether it is permissible or not	YES/NO	
13	Whether mechanical and electrical interlocks of critical equipment are provided and maintained in working condition. (Operational manuals for all critical equipments should available at site)	YES/NO	
14	Whether APFC panel is provided and power factor value is maintained higher than prescribed value say 0.9	YES/NO	Confirmed / verified from electricity bill & APFC panel meter
15	Whether Lightning Arrestor and aviation light is provided (In case of Multi storied Building).	YES/NO	
16	Whether the maintenance staff wear shoes and they are well mannered and well dressed.	YES/NO	
17	Whether some training / Meeting with maintenance staff is conducted for discussion on energy conservation opportunities, challenges in Electrical safety etc.	YES/NO	
18	Thermography: observations on thermographic images at Electric Panels, Distribution Boards.		Upload the thermos graphic images on the system

Remarks/ Suggestions:

Signature

Name of Consultant / Auditor Name of the Agency Supervisor's Valid License No. (In case of Electrical Contractor) Contractor's license

Date :

Note: The Bank reserves the right to make any amendments (addition or deletion) of Annexure-I & II at its sole discretion, during the empanelment validity period of 3 years.