



PREMISES & ESTATE DEPARTMENT, LHO MAHARASHTRA

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

**TENDERS FOR CONDUCTING ELECTRICAL SAFETY AUDIT OF
BRANCHES / OFFICES UNDER SBI LHO MAHARASHTRA COVERING
MAHARASHTRA AND GOA STATES.**

TENDER SUBMITTED BY:

NAME : _____

ADDRESS : _____

CONTACT NO : _____

EMAIL ID : _____

A. NOTICE OF INVITING TENDERS

State Bank of India, Local Head Office, Maharashtra invites sealed tenders from the Empanelled Electrical Safety Auditors for Maharashtra Circle for the period from year 2024 to 2027 for conducting the Electrical Safety Audit (ESA) of SBI Branches & Offices in the state of Maharashtra (excluding Mumbai Metro Region) & Goa states. The details are as under:

1	NIT No.	MAH/2024/08/001	
2	TYPE OF TENDER	ONLINE E-TENDERING	
3	BIDDING SYSTEM	TWO BID SYSTEM	
4	WEBSITE FOR DOWNLOADING TENDER DOCUMENTS	https://sbi.co.in under the link "SBI in the News" → "Procurement News"	
5	WEBSITE FOR ONLINE SUBMISSION OF BIDS	https://etender.sbi	
6	METHOD OF SUBMISSION	EMD (DD)	COPY TO BE SUBMITTED ONLINE & ORIGINAL TO BE SUBMITTED OFFLINE
		TECHNICAL BID & PRICE BID	TO BE SUBMITTED ONLINE ONLY
7	NAME OF WORK	Electrical Safety Audit of SBI Branches & Offices under the control of SBI Maharashtra Circle.	
8.	TIME FOR COMPLETION OF WORK	90 Days from the date of commencement for L1 bidder and 60 days from the date of commencement for L2 to L7 bidders, who will be agreeing to conduct the ESA at L1 quoted rates.	
9.	ELIGIBILITY OF THE BIDDER	Electrical Safety Auditors empanelled with SBI LHO Maharashtra Circle for the period from 2024 to 2027.	
10.	PRE-BID MEETING	20.08.2024 at 11:00AM	
11.	ADDRESS TO WHICH THE EMD IN PHYSICAL FORM (ORIGINAL) TO BE SUBMITTED.	Assistant General Manager (P&E), Premises & Estate Department, State Bank of India, 3rd Floor, LHO, C-6, G-Block, Bandra- Kurla Complex, Bandra (East), Mumbai- 51 Email Id agmpe.lhomah@sbi.co.in	

12.	LAST DATE & TIME FOR SUBMISSION OF EMD IN PHYSICALFORM	29.08.2023 by 3.00 P.M. Note: It is sole responsibility of the bidder to ensure submission of their Tender documents in the following manner.
13.	LAST DATE & TIME FOR SUBMISSION OF ONINE TECHNICAL BID (all Pages) & PRICE BID	<ol style="list-style-type: none"> 1. Uploading of scanned copy of all pages of the technical bid duly signed and sealed. 2. Uploading scanned copy of EMD. 3. Submission of online Price Bid. 4. Submission of EMD in Original to the address mentioned. <p>The bidder to ensure submission of EMD in physical form as well as the Technical and Price bids by online mode by stipulated last date and time and at specified address, failing which they will be rejected from the tendering process.</p>
14.	EARNEST MONEY DEPOSIT (EMD)	<p>Rs 25,000/- (Rupees Twenty five thousand only) by way of Demand Draft favouring AGM (P & E), State Bank of India payable at Mumbai.</p> <p><i>Note:</i></p> <p><i>i)The EMD submitted by the unsuccessful bidders will be released on finalisation of the tender.</i></p> <p><i>ii)The EMD submitted by the successful bidder(to whom the ESA will be awarded) will be released on successful completion of the Electrical Safety Audit (ESA)</i></p> <p><i>iii) The EMD submitted by those successful vendors, who fails to complete the ESA awarded to them will be forfeited and no claim for EMD will be entertained in this regard.</i></p> <p><i>iv) The EMD submitted by those bidders who fails to submit duly filled and satisfactory audit reports as per Bank's format, scope of works, terms and conditios as per the tender will be forfeited and no claim for EMD will be entertained in this regard.</i></p>
15.	PAYMENT TERMS & CONDITIONS	<ol style="list-style-type: none"> i) No advance payment. ii) 100% payment after successful completion of the Electrical Safety Audit, submission of final audit report and updating of same in Bank's online portal subject to deductions as applicable against GST TAX Invoice.
16.	DEDUCTIONS FROM BILL	<ol style="list-style-type: none"> 1. TDS at applicable rates for professional Services (presently 10%). 2. TDS on GST at applicable rates (presently 2%) 3. Any other Taxes if applicable.

17.	LIQUIDATED DAMAGES FOR DELAY IN WORK	i) If the work is delayed beyond the scheduled completion date, then 0.50% of the total value of the bill amount per week (or part thereof) of delay will be deducted from the final bill value subject to max 5% of the value of work
18.	VALIDITY OF THE TENDER & PRICE QUOTED FOR ACCEPTANCE	90 days from the last date of submission of sealed bids / online bids.
19.	VALIDITY OF THE L1 RATE	For conducting the ESA for the FY 2024-25, for all Branches / Offices under LHO Maharashtra with a rate validity period of one year from last date of submission of Price Bids.
20.	TENTATIVE NUMBER OF BRANCHES & OFFICES TO BE AUDITED	Administrative Offices- 8 Nos. Direct Branches / CPCs / SBILDs- 44 Regional Offices – 30 Nos. Branches-1480 Total No. of Branches & Offices: 1562
21.	a. Tentative Number of branches having connected load up to and including 60 kW (as per sanctioned load in Electricity Bill) (Category-X) b. Tentative number of branches having connected load above 60 kW (both LT and HT connections) (Category-Y)	a. 1482 nos. b. 80 Nos. Note: <i>1. For billing purpose the connected load will be taken as the sanctioned load as per MSEDCL monthly electricity bill for that particular Branch / Office.</i> <i>2. Captive Branches having no separate and independent electricity connection should have to be billed under Category-X only.</i>

22.	PRICE BID EVALUATION MATRIX																
	<p>➤ Weightage for Category-X : 85%</p> <p>➤ Weightage for Category-Y : 15%</p> <p>The L1 Bidder will be selected based on the following.</p> <table border="1" data-bbox="240 499 1465 864"> <thead> <tr> <th data-bbox="240 499 320 584">SN</th> <th data-bbox="320 499 967 584">Category of Branches / Offices</th> <th data-bbox="967 499 1465 584">Quoted rate per Branch/Office excluding GST</th> </tr> </thead> <tbody> <tr> <td data-bbox="240 584 320 656">1</td> <td data-bbox="320 584 967 656">Category-X</td> <td data-bbox="967 584 1465 656">(A) in (Rs)</td> </tr> <tr> <td data-bbox="240 656 320 728">2</td> <td data-bbox="320 656 967 728">Category Y</td> <td data-bbox="967 656 1465 728">(B) in (Rs)</td> </tr> <tr> <td data-bbox="240 728 320 790">3</td> <td data-bbox="320 728 967 790">Total Amount</td> <td data-bbox="967 728 1465 790">(A+ B) in (Rs)</td> </tr> <tr> <td data-bbox="240 790 320 864">4</td> <td data-bbox="320 790 967 864">Formula for selecting L1 bidder</td> <td data-bbox="967 790 1465 864">$(A*0.85) + (B*0.15)$</td> </tr> </tbody> </table>		SN	Category of Branches / Offices	Quoted rate per Branch/Office excluding GST	1	Category-X	(A) in (Rs)	2	Category Y	(B) in (Rs)	3	Total Amount	(A+ B) in (Rs)	4	Formula for selecting L1 bidder	$(A*0.85) + (B*0.15)$
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3	Total Amount	(A+ B) in (Rs)															
4	Formula for selecting L1 bidder	$(A*0.85) + (B*0.15)$															
23.	DISTRIBUTION OF AUDIT AMONG BIDDERS																
	<p>The work will be distributed among eligible bidders as follows.</p> <p>Out of the 30 Regional Business Offices (RBOs) under LHO Maharashtra with the branches under their control & Bank's other branches / offices in that geographical area , the work will be distributed RBO wise with Bank's all branches/offices in that geographical area to maximum seven bidders who are agreeing to match their rates with the rates quoted by the L1 bidder in the ratios mentioned below. If any bidder in the sequence is not willing, the next bidder will be approached for their willingness.</p> <ul style="list-style-type: none"> ➤ If L1, L2, L3, L4, L5, L6 & L7 or next willing agree- 8:5:4:4:3:3:3* ➤ If L1, L2, L3, L4, L5 & L6 or next willing agree- 10:6:4:4:3:3* ➤ If L1, L2, L3, L4 & L5 or next willing agree- 11:7:5:4:3* ➤ L1, L2, L3 & L4 or next willing agree- 12:8:6:4* ➤ If L1, L2 & L3 or next willing agree-15:9:6* ➤ If L1 & L2 or next willing agree-18:12* ➤ If L1 only agree – All Branches &Offices under LHO Maharashtra <p><i>*which includes RBOs, Branches under RBOs and other Branches/Offices in that geographical area.</i></p>																
24.	Audit fee billing and submission of reports.	Please refer Clause No.17 under "Scope of Work for Electrical Safety Audit"															
25.	Rates quoted by bidder	1. The quoted rate should be inclusive of all required for the completion of audit and exclusive of GST.															

		<p>2. Any additional claims other than the quoted amount will not be entertained.</p> <p>3. The quoted rates shall be firm throughout the financial year 2024-25</p>
26.	Special Terms & Conditions regarding scope, conduction of Electrical Safety Audit, safety aspects etc	Refer page No. 7 to 27 of this Tender Document.
27.	<p>For any queries or support in connection with the online tendering process, please contact our E-procurement solutions agency</p> <p>(FOR ONLINE SUBMISSION OF TECHNICAL & PRICE BIDS ONLY)</p>	<p>M/s. e-Procurement technologies Limited, B704, Wall Street 2, Ahmedabad, Gujarat - 380006.</p> <p>Primary Contact: Sri. Udit Kumar Yadav, Account Manager - BFSI Ph: +91 79 9033 4985, +91 79 6813 6815, Mail: udit@auctiontiger.net, Web: www.auctiontiger.net Smt. Khushboo - 079-68136814/ 9510813528</p> <p>Ms. Priyanka, Buisness Developmment Executive Phone: 079-40016815/24/26/14, Cell 079 68136856, Email: priyanka@auctiontiger.net, Website : https://etender.sbi</p>
28.	For any clarifications, pl contact	<p>Assistant General Manager (P&E), Premises & Estate Department, State Bank of India, 3rd Floor, LHO, C-6, G-Block, Bandra- Kurla Complex, Bandra (East), Mumbai- 51 Email: agmpe.lhomah@sbi.co.in</p> <p>Ph. 022 2644 5639/5637</p>

14. The bidder shall sign and stamp each page of the document thereby ensuring the number and sequence of all pages.

15. No conditions other than mentioned in the tender will be considered, and if given they will have to be withdrawn before opening of the price-bid.

17. The SBI reserve their rights to accept or reject any or all tenders, either in whole or in part without assigning any reason for doing so and any claim / correspondence shall be entertained in this regard.

19 In case the date of opening of quotations is declared as a holiday, the same will be opened on the next working day at the same time.

20. SBI has the right to accept / reject any / all tenders without assigning any reasons and no correspondence shall be entertained in this regard.

Yours Faithfully,

Sd/-

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

B.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. **A separate list of high risk category branches/offices along with hard copy of the ESA Report should also be submitted to P&E Department, Maharashtra.**
14. 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.
15. 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

16. 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.
17. The Auditor should not alter this document as well as Audit report.
18. **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.

4. 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.

5. 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

6. 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.

7. 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.

8. 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.

V. INVOICE, PAYMENT TERMS & CONDITIONS

1. Billing address should be;
 - "The Regional Manager, State Bank of India, RBO(Name of RBO)" for RBO & Branches under RBO (single Invoice for each RBO & its branches and fee calculation details to be attached).
 - "The Director, SBILD.....(Location of SBILD)" for SBILDs (separate Invoice for each SBILD)
 - "The Deputy General Manager (B &O), SBI Administrative Office,(Location)" for AO & its Direct Branches/CPCs (single invoice for each AO & its direct Branches CPCs and fee calculation sheet to be attached).
 - The Deputy General Manager / General Manager, SBI, (Name of Branch / Office & Place) for other establishments separate Invoices)

2. Original of all invoices should be submitted to Assistant General Manager, Premises & Estate Department, LHO Maharashtra, 3rd Floor Synergy building, BKC, Mumbai-400051 along with following documents for scrutiny, recommendation and for onward transmission to respective billing address.
 - a) Proof of submission of hard copy of audit report to branches.
 - b) Soft copy of audit report as per Annexure I & II.
 - c) Submission of audit report to banks electrical safety audit portal.
3. Payment will be released from respective billing addresses (Offices).
4. Successful bidders who are awarded with multiple RBOs/AOs and its Branches should submit the ESA Reports in a phased manner after completion of ESA for each RBO/AO and its Branches, submission of their reports and uploading in Bank's portal. A proforma invoice along with split up details of branches should be submitted for scrutiny and the Final Invoice to be raised only after getting concurrence from Bank regarding revisions if any to be made.
5. Bank will not be responsible for corrections / revisions if any required in the invoice submitted by successful Bidders.

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	Quantity	Wattage	Total Wattage
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	Whether 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

	ii. The workmen / Technicians possess the wire men / electricians license License Details :	YES/NO	official
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.

PRICE BID

(to be submitted online only, by the Bidder)

Charges for conducting the Electrical Safety Audit (ESA) of SBI Branches/Offices in the state of Maharashtra (excluding Mumbai Metro Region) and Goa states under SBI Local Head Office, Maharashtra strictly as per the format, terms and conditions and scope of work as per this tender document under the following categories

S No	Description	Qty	Unit	Rate per Branch / Office in Rs (Excluding GST)
1	Charges for conducting ESA of SBI Branches & Offices having a Electrical connected load up to 60 kW (Category-X).	1	No	Rs+ GST (A)
2	Charges for conducting ESA of SBI Branches & Offices having a Electrical connected load above 60kW (LT or HT connections) (Category-Y).	1	No	Rs+ GST (B)
3	Evaluation Matrix for deciding the L1 bidder			(A)X 0.85 + (B) x 0.15

Note: The Bidders are advised to read carefully all pages of the tender document (Technical Bid & Price Bid) before submitting / quoting the Price bid. The quoted price should be in accordance with the technical bid (guidelines, terms and conditions, scope of work)