



**Premises & Estate Department**  
Local Head Office,  
2<sup>nd</sup> Floor, III/1, Pandit Jawaharlal Nehru Marg,  
Bhubaneswar- 751001.

**Part – I**

**(Technical Bid)**

**TENDER FOR ELECTRICAL SAFETY AUDIT OF OFFICES/ BRANCHES (INCL. ON-SITE ATMS) UNDER BHUBANESWAR CIRCLE, ODISHA.**

(Item Rate Tender)

**Tender No. BHU/P&E/2025-26/08**

**Dated 25.07.2025**

TENDER SUBMITTED BY : \_\_\_\_\_

NAME OF THE FIRM/COMPANY : \_\_\_\_\_

ADDRESS : \_\_\_\_\_

GSTN No. : \_\_\_\_\_

DATE : \_\_\_\_\_

### **NOTICE INVITING TENDER**

State Bank of India, Premises & Estate Dept., Local Head Office, 2<sup>nd</sup> Floor, III/1 Pandit Jawaharlal Nehru Marg, Bhubaneswar- 751001 invites online tender for Electrical Safety Audit of 937 Offices/Branches (On-Site ATMs) under Bhubaneswar Circle. Bank's Empaneled Electrical Safety Auditors/ Auditing Firms under Bhubaneswar Circle are only eligible to participate in this tender. The other details of the tender are as under:

1.	Name of Work	ELECTRICAL SAFETY AUDIT OF OFFICES/ BRANCHES (INCL. ON-SITE ATMS) UNDER BHUBANESWAR CIRCLE
2.	Eligibility of criteria	Bank's Empaneled Electrical Safety Auditors/ Auditing Firms under Bhubaneswar Circle (w.e.f. 26.08.2022) are only eligible to participate in this tender. Excluding agency who are debarred for participation in the tender if any.
3.	Earnest Money Deposit (EMD)	<b>Rs.50,000/-</b> (Rupees Fifty Thousand only) in the form of Demand Draft/ Banker's Cheque issued by any Nationalized/ Scheduled Bank Drawn in favour of "State Bank of India" Payable at Bhubaneswar". <u>EMD shall be reverted for successful bidder(s) after completion of the work, whose tender is accepted. Without EMD the tender will be rejected.</u>
4.	Approx. Nos of SBI Offices / Branches (Incl. On-Site ATMs)	<b>937 No's (Category X = 767 No's, Category Y = 112 No's &amp; Category Z = 58 No's)</b>
5.	Availability of Tender document.	<b>10:00AM, 25.07.2025 to 11:00AM, 04.08.2025</b> from Bank's website <a href="https://www.sbi.co.in/portal/web/home/procurement-news">https://www.sbi.co.in/portal/web/home/procurement-news</a> and <a href="https://www.tenderwizard.com/SBIETENDER">https://www.tenderwizard.com/SBIETENDER</a> .
6	Last date, time and place for submission of Online Technical Bid.	Bank's empaneled Auditors/ Auditing Firms under Bhubaneswar Circle are required to submit/ enclose the scan copies of following documents online on or before <b>12:00PM, 04.08.2025</b> :  (i) Letter of Undertaking in company letter head duly signed and stamped by authorize representative.  (ii) Earnest Money Deposit (EMD).  However, the EMD in original to be submitted on or before 12:00PM, 04.08.2025 in sealed envelope at our Office address mentioned in Sr. No.15. Tenders received without any one or more document mentioned above shall be rejected.  After the accomplishment of tendering procedure, the successful bidder(s) shall submit the hard copy of the Technical document duly signed with seal in all pages by the authorized representative/ proprietor of the firm at the under mentioned

		office.
7.	Date & time of submission of Online Price Bid	The Price Bid to be submitted online on Bank's approved service provider portal i.e. <a href="https://www.tenderwizard.com/SBIETENDER">https://www.tenderwizard.com/SBIETENDER</a> on or before <b>12:00PM, 04.08.2025</b> .
8.	Date & time of opening of Technical Bid and Online Price Bid of qualified bidders in technical evaluation.	<b>On 04.08.2025 at 12:30PM.</b>
9.	Validity for Offer	3 (three) months from the date of opening of price-bid.
10.	Date of commencement of work	7 (Seven) days from the date of issue of work order.
11.	Time for completion of work.	4 months i.e. <b>120 days</b> from date of commencement of work.
12.	<b>Deduction of income tax and GST</b>	<p>A) Income Tax will be deducted at source as per Govt. Guidelines.</p> <p>B) Reimbursement of GST will be made only on submission of proper GST invoice as per applicable GST provision. The Electrical Safety Auditor/ Auditing Firm should comply with the following:</p> <ol style="list-style-type: none"> <li>1. Electrical Safety Auditor/ Auditing Firm should have valid GST Registration Number.</li> <li>2. Invoice should specifically/ separately disclose the amount of GST levied at applicable rate as per GST provision.</li> <li>3. In case of Correction in the bills after scrutiny, Electrical Safety Auditor/ Auditing Firm should submit fresh GST invoice/bill for processing payment by the Bank.</li> <li>4. Electrical Safety Auditor/ Auditing Firm should timely file his GST return in accordance with GST provisions to enable the Bank to claim the credit of GST paid to the Electrical Safety Auditor/ Auditing Firm.</li> </ol>
13.	<b>Terms and Mode of payment</b>	<p>i) Interim payment will be made to Electrical Safety Auditor/ Auditing Firm for <b>minimum 50 No's</b> Branches/ Offices on submission of the reports along with the Tax Invoice mentioned as under:</p> <ol style="list-style-type: none"> <li><b>1) Electrical Safety Audit Report (in Original) of audited Branches/ Offices duly signed by the Branch Manager/Officer-in-charge.</b></li> <li><b>2) Color Photographs of the electrical hazard areas.</b></li> <li><b>3) Latest Electricity Bill copy</b></li> </ol>

		<p><b>4) Thermal images (for Y-category Branches with Bank's own sub-station &amp; Z-Category Branches, wherever applicable)</b></p> <p>ii) Payment shall be made by way of Electronic fund transfer and the bill will be paid by the SBI. Firm should furnish details of the bank, A/c no, IFSC code.</p> <p>iii) Payment will be made by SBI only after attaching concerned Bank's Engineer certified Invoice along with Electrical Safety Audit report with all documents.</p> <p>Note: The GST Number of State Bank of India for Bhubaneswar is 21AAACS8577K1Z1.</p>
14.	<b>Liquidated Damages for Delay</b>	0.5% of contract amount per week subject to max. 5% of contract value or final bill value.
15.	<b>Contact Person, Phone Nos of officials &amp; Office Address.</b>	<p><b>For Technical queries, email to:</b></p> <ol style="list-style-type: none"> <li>1. Manager (Electrical) <a href="mailto:tapan.behera1@sbi.co.in">tapan.behera1@sbi.co.in</a></li> <li>2. Manager (Electrical) <a href="mailto:bodduri.pratap@sbi.co.in">bodduri.pratap@sbi.co.in</a></li> </ol> <p><b>For any other queries:</b></p> <p>AGM (P&amp;E): 0674-2600534; email id: <a href="mailto:agmpre.lhobhu@sbi.co.in">agmpre.lhobhu@sbi.co.in</a></p> <p><b>Office Address:</b></p> <p>Assistant General Manager (P&amp;E)  State Bank of India  Premises &amp; Estate Department  Local Head Office,  2<sup>nd</sup> Floor, III/1 Pandit Jawaharlal Nehru Marg,  Bhubaneswar- 751001.</p>

16.	<b>For details of e-tendering</b>	<p><u>Service provider:</u></p> <p><b>M/s Antares Systems Limited</b>  Registered Office at:  #24, Sudha Complex,  3rd Stage, 4th Block,  Bangalore – 560079.  Ph: - 080-49352000 / 40482000  Fax: - 080-49352034</p> <p><u>Help Desk:</u>  9073677150/ 151/ 152/ 9674758506/ 9674758723/ 26/ 033  4604 6611</p> <p>Contact Person: Mr. Kushal Bose / Mr. Biswajith  Mobile no. 09674758719 / 09674758723 (On working days-9 hours–18 hours)</p> <p>e-mail: <a href="mailto:kushal.b@antaressystems.com">kushal.b@antaressystems.com</a> / <a href="mailto:biswajit.c@antaressystems.com">biswajit.c@antaressystems.com</a></p>
17.	<b>Work distribution</b>	<p>i) <b>Work will be distributed equally amongst the bidder(s) for the bidder(s) who matches with the L-1 rate for X, Y &amp; Z category Branches/ Offices respectively.</b></p> <p>ii) However, after allotment of the work, if any vendor fails to execute the work within the stipulated time, SBI reserves the right to cancel those orders partially/fully and <b>forfeit their EMD</b> and award the work to bidders on L-1 rate as per the requirement and discretion of the Bank.</p>
18.	<b>Scope of work</b>	Detailed scope of work is mentioned at Page No.17, Sl. No.3.

**Note:**

- i. In case the date of opening of tenders is declared as a holiday, the tenders will be opened on the next working day at the same time.
- ii. The bidder, who is the authorized representative and participating on behalf of company/ Dealer/vendor, should have a valid digital signature certificate (DSC) for this e tender. The validity of the DSC should be at least 3 months.
- iii. SBI reserves its rights to accept/reject any/all tender without assigning any reasons whatsoever and to increase or decrease the quantities of any item and auditor has to execute the same at the rate quoted and no correspondence shall be entertained in this regard.

- iv. The successful bidder(s) shall sign and stamp each page of the tender document thereby ensuring the number and sequence of all pages after completion of the tendering procedures.
- v. Conditional tenders are liable for rejection.
- vi. \*SBI reserves the right to increase or decrease the no. of Branches/Offices (incl. On-site ATMs) and assign the Branches/Offices located at any part of Odisha at its own discretion.
- vii. **After awarding the work, if any Auditor/ Auditing firm fails to conduct the audit as per the above-mentioned scope of work (\* inappropriate auditing), penalty of Rs.2,000/- will be imposed per audit up to ten (10) audits. If any Auditor/ Auditing firm continues inappropriate auditing, the work order will be cancelled immediately and Bank may award the work to the bidder whoever is willing to execute the audit at L-1 rate. Further, Bank may initiate suitable action on such Auditor(s)/ Auditing firm(s) deemed fit for inappropriate auditing of the Branches/ Offices.**
- viii. **Before commencement of audit, a training session shall be conducted by the technical team at our Office (SBI, LHO, Bhubaneswar, Odisha). Therefore, successful bidder(s) should attend the training session with all the auditors & team without fail.**

\* **Inappropriate auditing:** It refers to conducting assessments without proper rigor, expertise, or scope, leading to overlooked hazards. It may be briefed as follows:

- a) **Improper documentation** (half/ partially filled audit report or incorrect data)
- b) **Not conducting Thermographic Imaging** (applicable for Y-category branches having own sub-station and Z-category branches)
- c) **Not mentioning proper recommendations and actions**
- d) **Not using specialized testing and measurements** (earth tester, megger etc.)

Sd/-

**Assistant General Manager (P & E)**  
**State Bank of India,**  
**Local Head Office, Bhubaneswar.**

## **BUSINESS RULES FOR ONLINE TENDER**

### **TENDER FOR ELECTRICAL SAFETY AUDIT OF OFFICES/BRANCHES (Incl. ON-SITE ATMS) UNDER BHUBANESWAR CIRCLE, ODISHA.**

Against this Enquiry for the subject item/system with detailed scope of auditing as per our specification, SBI to conduct ON-LINE BIDDING on INTERNET.

1. For the proposed online bidding, already empaneled vendors for the said purpose who fulfill all terms and conditions including deposit of earnest money only shall be eligible to participate.
1. SBI will engage the services of a service provider who will provide all necessary training and assistance before commencement of on line bidding on Internet.
2. SBI will inform the vendor in writing in case of online bidding, the details of service provider to enable them to contact and get trained.
3. Business rules like event date, time, start price, bid decrement, extensions, etc. also will be communicated through service provider for compliance.
4. Vendors have to fax the compliance form in the prescribed format (provided by service provider) before start of online bidding. Without this the vendor will not be eligible to participate in the event.
5. Opening of online bids will be conducted on schedule date & time.
6. At the end of online bidding event, the lowest bidder value will be known on the network.
7. The lowest bidder has to fax the duly signed filled-in prescribed format as provided on case-to-case basis to SBI through service provider within 24 hours of completion of auction without fail.
8. Any variation between the on-line bid value and signed document will be considered as sabotaging the tender process and will invite disqualification of vendor to conduct business with SBI as per prevailing procedure.
9. In case SBI decides not to go for online bidding on procedure for this tender enquiry, the price bids and price impacts, if any already submitted and available with SBI shall be opened as per SBI standard practice.

### **Business Rule for Finalization of the Tender**

SBI shall finalize the tendering process of the item through online bidding mode. SBI has made arrangement with M/s Antares Systems Limited (ASL), Bangalore who shall be SBI's authorized service provider for the same. Please go through the guidelines given below and submit your acceptance to the same along with your Commercial Bid.

1. Computerized online tendering shall be conducted by SBI, on pre-specified date, while the vendors shall be quoting from their own offices/ place of their choice. Internet connectivity and other paraphernalia requirements shall have to be ensured by vendors themselves. In the event of failure of their Internet connectivity, (due to any reason whatsoever it may be) it is the bidders responsibility / decision to send fax communication, immediately to ASL furnishing the price, the bidder wants to bid online, with a request to ASL to upload the faxed price on line so that the service provider will up load that price on line on behalf of the Bidder. It shall be noted clearly that the concerned bidder communicating this price to service provider has to solely ensure that the fax message is received by ASL in a readable / legible form and also the Bidder should simultaneously check up with ASL over phone about the clear receipt of the price faxed. It shall also be clearly understood that the bidder shall be at liberty to send such fax communications of prices to be up loaded by ASL only before the closure of Bid time and under no circumstances it shall be allowed beyond the closure of bid time. Such bidders have to ensure that the service provider is given a reasonable required time by the bidders, to upload such faxed prices online

and if such required time is not available at the disposal of ASL at the time of receipt of the fax message from the bidders, ASL will not be uploading the prices. It is to be noted that either SBI or ASL are not responsible for these unforeseen circumstances. In order to ward-off such contingent situation, bidders are requested to make all the necessary arrangements / alternatives whatever required so that they are able to circumvent such situation and still be able to participate in the online bidding successfully. However, the vendors are requested not to wait till the last moment to quote their bids to avoid any such complex situations.

2. ASL shall arrange to train your nominated person(s), without any cost to you. They shall also explain you, all the Rules related to the Tendering/ Business Rules Document to be adopted along with bid manual. You are required to give your compliance on it before start of bid process.

3. **BIDDING CURRENCY AND UNIT OF MEASUREMENT:** Bidding will be conducted in Indian Rupees (INR) per -one- (Unit) of the items.

4. **BID PRICE:** The Bidder has to quote the total cost to SBI of the items specified inclusive of all duties, freight, service tax, overhead, Electrical Safety Auditor/ Auditing Firm's profit etc. and exclusive of G.S.T. GST will be paid as per Govt. rules.

5. **VALIDITY OF BIDS:** The Bid price shall be firm for a period of three calendar months from the date of acceptance of tender which may be extended for a further period subject to mutual agreement.

6. The bidder has to provide a detail break up for his commercial offer in the prescribed format as given by the Bank.

7. Your bid will be taken as an offer to supply. Bids once made by you, cannot be cancelled / withdrawn and you shall be bound to supply as mentioned above at your final bid price. Should you back out and not execute the work as per the rates quoted, the earnest money deposited by you with us in this regard shall be forfeited without further reference to you.

8. You shall be assigned a Unique User Name & Password by ASL. You are advised to change the Password after the receipt of initial Password from ASL to ensure confidentiality. All bids made from the Login ID given to you will be deemed to have been made by your company.

9. At the end of the online Tendering process, SBI will decide upon the winner. SBI's decision on award of Contract shall be final and binding on all the Bidders.

10. SBI shall be at liberty to cancel the tender at any time, before ordering, without assigning any reason.

11. SBI shall not have any liability to bidders for any interruption or delay in access to the site irrespective of the cause.

12. Other terms and conditions shall be as per your techno-commercial offers and other correspondences till date.

13. You are required to submit your acceptance to the terms / conditions / modality given above before participating in the online bidding.

14. Successful bidder shall enter into a contract with the bank to carry out the work as per Bank's



standard format.

**15. OTHER TERMS & CONDITIONS:**

- The Bidder shall not involve himself or any of his representatives in Price manipulation of any kind directly or indirectly by communicating with other suppliers / bidders.
- The Bidder shall not divulge either his Bids or any other exclusive details of SBI to any other party.
- SBI's decision on award of Contract shall be final and binding on all the Bidders.
- SBI along with ASL can decide to extend, reschedule or cancel any Auction. Any changes made by SBI and / or ASL, after the first posting will have to be accepted if the Bidder continues to access the site after that time.
- ASL shall not have any liability to Bidders for any interruption or delay in access to the site irrespective of the cause.
- ASL is not responsible for any damages, including consequential damages, including but not limited to systems problems, inability to use the system, loss of electronic information etc.
- All the bidders are requested to ensure that they have a valid digital certificate well in advance to participate in the online event.
- All the Bidders are required to submit the Agreement Form (Annexure- I) duly signed to M/s Antares Systems Limited (ASL), Bangalore before due date.
- After the completion of the Auction event, all the Bidders have to submit the Price Breakup immediately to M/s Antares Systems Limited (ASL), Bangalore for further proceedings.

**Sd/-**

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

## LETTER OF UNDERTAKING

To,

The Assistant General Manager  
State Bank of India,  
Premises & Estate Department,  
Local Head Office,  
2<sup>nd</sup> Floor, III/1 Pandit Jawaharlal Nehru Marg,  
Bhubaneswar- 751001.

Dear Sir,

Having examined the detailed scope of works and schedule of quantities relating to the works specified in the memorandum hereinafter set out and having visited and examined the site of the works specified in the said memorandum and having acquired the requisite information relating thereto as affecting the tender, I/We hereby offer to execute the works specified in the said memorandum at the rates mentioned in the attached Schedule of Quantities and in accordance in all respects with the specifications and instructions in writing referred to in conditions of tender, the Articles of Agreement, Special Conditions, Schedule of Quantities and Conditions of Contract and with such materials as are provided for by, and in all other respects in accordance with such conditions so far as they may be applicable.

## MEMORANDUM

Description of work	<b>Electrical Safety Audit of Offices / Branches (Incl. ATMs under Bhubaneswar Circle, Odisha.</b>
EMD	<b>Rs.50,000/-</b> (Rupees Fifty Thousand only) in the Form of Demand Draft/Banker's Cheque issued by any Nationalized/Scheduled Bank Drawn in favour of "State Bank of India" Payable at Bhubaneswar". <u>EMD shall be reverted for successful bidder after completion of the work, whose tender is accepted.</u> Without EMD the tender will be rejected.
Date of commencement of work	Seven (7) days from the date of issue of work order
Time allowed for completion of the Works from the date of commencement of work	4 months i.e. <b>120 days</b> from the date of commencement of work.

2. We understand that as per terms of this tender, the SBI may consider accepting our tender in part or whole or may entrust the work of various buildings/branches/items proposed Electrical Safety Audit. We, therefore, undertake that we shall not raise any claim / compensation in the eventuality of Bank deciding to drop any of the Branch /items from the scope of work of this tender at any stage during the contract/execution period. Further, we also undertake to execute the work entrusted to us on our approved rates and within the stipulated time limit without any extra claim for price escalation. As and when ask by the Bank, I/we shall submit the supporting technical data sheet, estimates, specification and make of the items for compliance.

3. We, hereby, also undertake that, we will not raise any claim for any escalation in the prices

during the currency of contract/execution/completion period.

4. I / We have not made any modification / corrections / additions /deletions etc. in the PQ/Tender documents downloaded from website by me / us. In case at any stage later, it is found there is difference in our downloaded PQ/Tender documents from the original and / or any documentation, of SBI shall have the absolute right to disqualify / reject our Tender and also debar me / us in participating in any future tenders of SBI without any prior intimation to me / us.

5. I/We hereby undertake and confirm that all the information furnished in this tender is correct and true to the best of our knowledge and belief and we own full responsibility for its correctness and authenticity

7. I / We hereby understood and accordingly confirm that all Tender documents along supporting documents/annexures etc. are required to be submitted by us strictly in the prescribed format & time only. In case, the Bid/documents submitted by us along with this tender is found in any other formats and not complying this condition, we hereby authorize the SBI to summarily reject our tender for which we shall not make any protest.

8. I/ We, hereby, also undertake that, we will complete the audit work within timeline of 120 days from date of commencement and also conduct Electrical audits meticulously as per Bank's guidelines and standard Format with all supporting documents ( such as Copy of the bill, Color Photographs of the electrical hazard areas, Thermal images (wherever applicable). Failing to submit proper audit reports or complete the audit work within allotted timeline by us, The Bank has right to debar us from participation in future tender and or Delist from the empaneled list at its own discretion without assigning any reason for which we shall not raise any objection.

9. We, hereby, also undertake that, if I/We fail to complete the audit work within timeline or delayed without any valid reasons. The Bank has right to allot the remaining pending Branches other auditors at its own discretion and we shall not raise any objection.

Yours faithfully,

Signature & Seal of Electrical Auditor/ Auditing Firm.

**Annexure-I**

**ARTICLES OF AGREEMENT**

(On non-judicial Stamp Paper of Rs.100/- or as per latest Govt. Rules)

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ARTICLES OF AGREEMENT made the \_\_\_\_\_ date of \_\_\_\_\_ between SBI herein after called "Principle Employer" of the One Part and WHEREAS the SBI is desirous of the work '**Electrical Safety Audit of Offices / Branches (incl. ATMs (On-Site)) under Bhubaneswar Circle, Odisha**' and has caused Specifications describing the work to be done to be prepared by the **SBI, BHUBANESWAR**.

AND WHERE AS the said Specifications and the Schedule of Quantities have been signed by or on behalf of the parties hereto.

AND WHEREAS the Electrical Safety Auditor/ Auditing Firm has agreed to execute upon and subject to the Conditions set forth herein and to the Conditions set forth herein in the Special Conditions and in the Schedule of Quantities and Conditions of Contract (all of which are collectively hereinafter referred to as "the said conditions") the works shown upon the said Drawings and / or described in the said Specifications and included in the Schedule of Quantities at the respective rates therein set forth amounting to the sum as therein arrived at our such other sum as shall become payable there under (hereinafter referred to as "the said Contract Amount.)

NOW IT IS HEREBY AGREED AS FOLLOWS:

- 1) In consideration of the said Contract Amount to be paid at the times and in the manner set forth in the said Conditions, the Electrical Safety Auditor/ Auditing Firm shall upon and subject to the said Conditions execute and complete the work shown upon the said Drawings and described in the said Specifications and the priced Schedule of Quantities.

- 2) The Employer shall pay to the Electrical Safety Auditor/ Auditing Firm, the said Contract Amount, or such other sum as shall become payable, at the times and in the manner specified in the said Conditions.

The term "the Architects" in the said Conditions shall mean the SBI, Bhubaneswar or in the event of their ceasing to be the Architects for the purpose of this Contract for whatever reason, such other person or persons as shall be nominated for that purpose by the Employer, not being a person to whom the Electrical Safety Auditor/ Auditing Firm shall object for reasons considered to be sufficient by the Employer, PROVIDED ALWAYS that no person or persons subsequently appointed to be Architects under this Contract shall be entitled to disregard or overrule any previous decisions or approval or direction given or expressed in writing by the outgoing Architects for the time being.

- 3) The said Conditions and Appendix thereto shall be read and construed as forming part of this Agreement, and the parties hereto shall respectively abide by submit themselves to the said Conditions and perform the Agreements on their part respectively In the said Conditions

contained.

- 4) The Plans, Agreements and Documents mentioned herein shall form the basis of this Contract.
- 5) This Contract is neither a fixed lump-sum contract nor a piece work contract but a contract to carry out the electrical safety audit work in respect of the entire building complex to be paid for according to Rates or as provided in the said Conditions. Bank reserve its right to distribute the work at lowest rate to the remaining consultants as per ration mentioned in the tender document, if they are willing to work.
- 6) The SBI reserves to itself the right of altering the drawings and nature of the work by adding to or omitting any items of work or having portions of the same carried out without prejudice to this Contract.
- 7) Time shall be considered as the essence of this Contract and the Electrical Safety Auditor/ Auditing Firm here by agrees to commence the work soon after the Site is handed over to him or from the date of issue of formal work order as provided for in the said Conditions whichever is later and to complete the entire work within **120 days** from the date of commencement subject to nevertheless the provisions for extension of time.
- 8) All payments by the SBI under this contract will be made at RBO/AO/LHO.
- 9) All disputes arising out of or in any way connected with this agreement shall be deemed to have arisen at Bhubaneswar and only the courts in Bhubaneswar shall have jurisdiction to determine the same.
- 10) That the several parts of this Contract have been read by the Electrical Safety Auditor/ Auditing Firm and fully understood by the Electrical Safety Auditor/ Auditing Firm.

IN WITNESS WHEREOF THE SBI and the Electrical Safety Auditor/ Auditing Firm have set their respective hands to these presents and two duplicates hereof the day and year first hereinabove written.

### **SIGNATURE CLAUSE**

SIGNED AND DELIVERED by the

\_\_\_\_\_ By the (Employer) hand of Shri \_\_\_\_\_

(Signature of Employer)

\_\_\_\_\_  
(Name and Designation) In presence of:

- 1) Shri /Smt. \_

(Signature of Witness)



Address \_\_\_\_\_

\_\_\_\_\_

(Witness)

SIGNED AND DELIVERED by the

\_\_\_\_\_ By the (Electrical Safety Auditor/ Auditing Firm)

(Signature of Electrical Safety Auditor/ Auditing Firms) in presence of:

Shri/ Smt. \_\_\_\_\_

(Signature of Witness)

Address \_\_\_\_\_(Witness)

## **TERMS & CONDITIONS AND SCOPE OF WORK**

### **Introduction**

SBI is desirous of undertaking Electrical Safety Audit of the Electrical/ Electromechanical installations provided in the Office/ Branch building of captioned place. The Office/ Branch building receives power supply from the Electricity supply authorities, Odisha. In addition, Diesel Generator sets of suitable capacities have been installed to meet critical applications during power outages.

### **Objective**

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

#### **1. 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), PD Manual (Para 4.11), 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-

- 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].

- 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.
- 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.
  - I. Subs. by GSR 358, dt. 30.4.1987, w.e.f. 9.5.1987.
  - II. Subs. by GSR 45, dt. 1.1.1993, w.e.f. 23.1.1993.
  - III. Subs. by GR. 466, dt. 18.7.1991, w.e.f. 17.8.1991.
  - IV. Ins. by GSR 358, dt. 30.4.1987, w.e.f. 5.9.1987.

#### **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.
  - i) IS: 5216 (Part-II) Recommendations on Safety Procedures and practices in Electrical Work.
  - ii) IS: 1646-1961 Code of Practice for fire safety (General) : Electrical works
  - iii) IS: 4770: 1968 – Specifications for Rubber gloves for Electrical Purpose
  - iv) IS: 2309 Protection of Buildings and Allied Structures against Lightning
  - v) Gazette Notification dated 20th September 2010 issued by Central Electricity Authority regarding Regulations for measures relating to safety and Electric Supply.
  - vi) National Building Code, 2005 (as amended up to date)
  - vii) Para 4.11 of PD Manual “Guidelines for operations and maintenance of various installations in the Bank’s properties
  - viii) Any other local guidelines / bylaws as applicable.

## **2. 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.

### 3. Scope of work:

The scope of work for the electrical safety audit shall include but not limited to:

- a. **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.
- b. **Preparation of single line diagram (SLD) of Electrical Installation** from HT panel to Floor panels, covering transformers, main LT panel, capacitor panel, DG set, UPS Panel etc. The SLD should indicate the ratings of the equipment, feeders (wherever possible) etc.
- c. **Earth Resistance Testing:**
  - 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.
  - The continuity of earth strip/conductor from the earth pit the earth terminal of the respective electrical equipment shall be checked and verified.
- d. **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.
- e. **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 and submit photographs along with the audit report.
- f. **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
- g. **Checking of Elevators** for passenger and freight/bullion movement and passenger safety testing including testing of door safeties, alarms, overload protection and Automatic rescue devices, firemen control/switch, wiring in shaft and machine room etc. provided in the lift installations and gaps if any shall be identified and indicated in the audit report.
- h. **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.

- i. Checking provisions and sufficiency of AC services comprising AC units/ PAC systems and ventilation systems in areas housing electrical/IT equipment in 24 x 7 x 365 operations namely UPS systems, battery rooms, server rooms etc. as per existing circulars and guidelines issued by the Bank. **Checking of the alternate operation** of the standby fans/AC units through timers or any OEM installed logic circuits etc. for proper operation.
- j. Verification of circulars, Records of Preventive maintenance of electrical installation and equipment maintenance, practices & documentations and compliance thereof as per SBI instructions.
- k. Identification of Electrical hazards such as loose wire hanging, cables not dressed properly, broken switches, plugs and sockets etc. shall be done.
- l. 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.
- m. Checking 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.
- n. 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.
- o. Checking the log of electrical accidents maintained.
- p. Checking of the provision of Danger sign Boards indicating the voltage at a prominent location of electrical installation.
- q. Checking of the cable terminations at various panel and distribution boards to avoid phase and earth fault.

- r. Checking of the provision of protective guards and belt covers for all the rotating electrical equipment.
- s. 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.
- t. Verifying that all the workmen engaged on electrical installation work has been provided Personal Protective Equipment (PPE) i.e. insulated gloves, safety shoes and insulated tools etc., and the same are being used. These equipment should be periodically checked for their proper functioning.
- u. Verifying provision of First Aid boxes and their periodic replacement of expired medicines.
- v. To check the provision of insulated mats of ISI mark in front of all the electrical panels.
- w. To check the provision and use of proper height, strong and properly insulated ladders for the maintenance work.
- x. To check the provision of proper ventilation of substation, transformer rooms, electrical panel rooms and battery rooms etc.
- y. In addition to above, checking for any shortfalls in the existing electrical systems which impact on human and fire safety.

#### **4. 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.

#### **5. 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.

## **6. Submission of Electrical Safety Audit 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.

## **7. Tender documents**

- a. The work has to be carried out strictly according to the conditions stipulated in the tender consisting of the following documents and the most workmen like manner.
- b. The above documents shall be taken as complementary and mutually explanatory of one another but in case of ambiguities or discrepancies, shall take precedence in the order given below;
  - i. Price Bid
  - ii. General conditions of contract
  - iii. Instructions to Tenderers
- c. Complete set of tender documents can be downloaded from the website [www.sbi.co.in](http://www.sbi.co.in) under "Procurement News" Section and [www.tenderwizard.com/SBIETENDER](http://www.tenderwizard.com/SBIETENDER)
- d. The tender documents are not transferable.

## **8. Site Visit:**

The tenderer must obtain himself on his own responsibility and his own expenses all information and data that may be required for the purpose of filling this tender document

and enter into a contract for the satisfactory performance of the work. The tenderer is requested satisfy himself regarding the availability of water, power, transport and communication facilities, the character quality and quantity of the materials, labour, the law and order situation, climatic conditions local authorities requirement, traffic regulations etc; The tenderer will be fully responsible for considering the financial effect of any or all the factors while submitting his tender.

#### **9. Signing of contract Documents:**

The successful tenderer shall be bound to implement the contract by signing an agreement and conditions of contract attached herewith within 15 days from the receipt of intimation of acceptance of the tender by the Bank. However, the written acceptance of the tenders by the Bank will constitute a binding agreement between the Bank and successful tenderer whether such formal agreement is subsequently entered in to or not.

#### **10. Completion Period:**

Time is essence of the contract. The work should be completed in all respect accordance with the terms of contract within a period of **120 days from** the date of commencement.

#### **11. Validity of tender:**

Tenders shall remain valid and open for acceptance for a period of 90 days from the date of e-reverse auction. If the tenderer withdraws his/her offer during the value period or makes modifications in his/her original offer which are not acceptable to Bank without prejudice to any other right or remedy the Bank shall be at liberty forfeit the SD.

#### **12. Liquidated Damages:**

The liquidated damages shall be 0.50% per week subject to a maximum of 5% of contract value.

**SIGNATURE OF THE ELECTRICAL AUDITOR/ AUDITING FIRM WITH SEAL**

## **GENERAL CONDITIONS OF CONTRACT**

### **A. Definitions:-**

“Contract means the documents forming the tender and the acceptance there of and the formal agreement executed between SBI (client) and the Electrical Safety Auditor/ Auditing Firm, together with the documents referred there in including these conditions, the specifications, designs, drawings and instructions issued from time to time by the Architects / Bank and all these documents taken together shall be deemed to form one contract and shall be complementary to one another.

In the contract the following expressions shall, unless the context otherwise requires, have the meaning hereby respectively assigned to them.

1.0.1 ‘Architects/ Consultants’ shall mean SBI, Bhubaneswar.

1.0.2 ‘Site Engineer’ shall mean an Engineer appointed by the SBI at site as their representative for day-to-day supervision of work and to give instructions to the Electrical Safety Auditor/ Auditing Firms.

1.0.3 ‘The Electrical Safety Auditor/ Auditing Firm’ shall mean the individual or firm or company whether incorporate not, undertaking the works and shall include legal personal representative of individual or the composing the firm or company and the permitted assignees of individual or firms of company.

The expression ‘works’ or ‘work’ shall mean the permanent or temporary work description in the “Scope of work” and/or to be executed in accordance with the contract includes materials, apparatus, equipment, temporary supports, fittings and things of kinds to be provided, the obligations of the Electrical Safety Auditor/ Auditing Firm hereunder and work to be done by the Electrical Safety Auditor/ Auditing Firm under the contract.

1.0.4 ‘Engineer’ shall mean the representative of the Architect/consultant.

1.0.5 ‘Specifications’ shall mean the specifications referred to in the tender and modifications thereof as may time to time be furnished or approved by the Architect/Consultant.

1.0.6 “Month” means calendar month.

1.0.7 “Week” means seven consecutive days.

1.0.8 “Day” means a calendar day beginning and ending at 00 Hrs and 24 Hrs respectively.

1.1.11 “SBI’s Engineer” shall mean The Electrical Engineer in-charge of the Project, as nominated by the SBI LHO Bhubaneswar.

### **1.0 CLAUSE**

#### **a. Language:**

The language in which the contract documents shall be drawn shall be in English.

#### **b. Errors, omissions and discrepancies:**

In case of errors, omissions and/ or disagreement between written and scaled dimensions on the drawings or between the drawings and specifications etc., the following order shall apply.

- i) Between scaled and written dimension (or description) on a drawing, the latter shall be adopted.
- ii) Between the written or shown description or dimensions in the drawings and the corresponding one in the specification the former shall be taken as correct.
- iii) Between written description of the item in the specifications and descriptions in bills of quantities of the same item, the former shall be adopted:
  - In case of difference between rates written in figures and words, the rate in words shall prevail.
  - Between the duplicate / subsequent copies of the tender, the original tender shall be taken as correct.

## **2.0 Scope of Work:**

i) Electrical Auditor/ Auditing Firm shall inspect all the installations like LT Panel, switchgears, DBs, DG Set, wiring & switches, Earthing, loose wiring/ cabling, inspection of UPS System room, Server room etc. and carry out necessary testing as per enclosed proforma for electrical safety audit (Annexure-II & III) along with photographs of electrical hazard areas of main panel board/ DBs/ UPS Room/ Server Room etc.

ii) The Electrical Auditor/ Auditing Firm should submit the duly signed Audit Report in triplicate (copy to Branch, AO & LHO) along with the requisite documents mentioned in the Annexure-II & III, on Bank's standard format mentioning the condition of existing electrical system and suggesting remedial measures in case of any fault/ shortcoming with supporting photographs.

## **3.0**

### **i) Letter of Acceptance:**

Within the validity period of the tender the SBI shall issue a letter of acceptance directly or through the architect by registered post or otherwise depositing at the of the contract or as given in the tender to enter in to a Contract for the execution of the work as per the terms of the tender. The letter of acceptance shall constitute a bind contract between the SBI and the Electrical Safety Auditor/ Auditing Firm.

### **ii) Contract Agreement:**

On receipt of intimation of the acceptance of tender from the SBI the successful tenderer shall be bound to implement the contract and within fifteen days there of shall sign an agreement in a non-judicial stamp paper of appropriate value.

## **4.0 Protection of works and property:**

The Electrical Safety Auditor/ Auditing Firm shall continuously maintain adequate protection of all his work from damage and shall protect the SBI's properties from injury or loss arising in connection with contract. He shall make good any such damage, injury, loss, except due to causes beyond his control and due to his fault or negligence.

He shall take adequate care and steps for protection of the adjacent properties. The Electrical Safety Auditor/ Auditing Firm shall take all precautions for safety and protections of his employees

on the works and shall comply with all applicable provisions of Govt. and local bodies' safety laws and building codes to prevent accidents, or injuries to persons or property on about or adjacent to his place of work. The Electrical Safety Auditor/ Auditing Firm shall take insurance covers as per clause at his own cost. The policy may be taken in joint names of the Electrical Safety Auditor/ Auditing Firm and the SBI and the original policy may be lodged with the SBI

#### **5.0 Assignment and subletting:**

The whole of work included in the contract shall be executed the Electrical Safety Auditor/ Auditing Firm and he shall not directly entrust and engage or indirectly transfer, assign or underlet the contract or any part or share there of or interest therein without the written consent of the SBI through the Architect and no undertaking shall relieve the Electrical Safety Auditor/ Auditing Firm from the responsibility of the Electrical Safety Auditor/ Auditing Firm from active & superintendence of the work during its progress.

#### **6.0 Insurance of works:**

Without limiting his obligations and responsibilities under the contract the Electrical Safety Auditor/ Auditing Firm shall insure in the joint names of the SBI And the Electrical Safety Auditor/ Auditing Firm against all loss of damages from whatever cause arising other than the excepted risks, for which he is responsible under the terms of contract and in such a manner that the SBI and Electrical Safety Auditor/ Auditing Firm are covered for the period stipulated I clause of GCC and are also covered during the period of maintenance for loss or damage arising from a cause, occurring prior to the commencement of the period of maintenance and for any loss or damage occasioned by the Electrical Safety Auditor/ Auditing Firm in the course of any operations carried out by him for the purpose of complying with his obligations under clause.

The Works for the time being executed to the estimated current Contract value thereof, or such additional sum as may be specified together with the materials for incorporation in the works at their replacement value.

Such insurance shall be effected with an insurer and in terms approved by the SBI which approval shall not be unreasonably withheld and the Electrical Safety Auditor/ Auditing Firm shall whenever required produce to the Architect / consultant the policy if insurance and the receipts for payment of the current premiums.

#### **7.0 Damage to persons and property:**

The Electrical Safety Auditor/ Auditing Firm shall, except if and so far as the contract provides otherwise indemnify the SBI against all losses and claims in respect of injuries or damages to any person or material or physical damage to any property whatsoever which may arise out of or in consequence of the execution and maintenance of the works and against all claims proceedings, damages, costs, charges and expenses whatsoever in respect of or in relation thereto except any compensation of damages for or with respect to:

- a) The permanent use or occupation of land by or any part thereof.
- b) The right of SBI to execute the works or any part thereof on, over, under, in or through any lands.
- c) Injuries or damages to persons or properties which are unavoidable result of the execution or



maintenance of the works in accordance with the contract.

d) Injuries or damage to persons or property resulting from any act or neglect of the SBI their agents, employees or other electrical safety Electrical Safety Auditor/ Auditing Firms not being employed by the Electrical Safety Auditor/ Auditing Firm or for or in respect of any claims, proceedings, damages, costs, charges and expenses in respect thereof or in relation thereto or where the injury or damage was contributed to by the Electrical Safety Auditor/ Auditing Firm, his servants or agents such part of the compensation as may be just and equitable having regard to the extent of the responsibility of the SBI, their employees, or agents or other employees, or agents or other Electrical Safety Auditor/ Auditing Firms for the damage or injury.

#### **8.0 Electrical Safety Auditor/ Auditing Firm to indemnify SBI:**

The Electrical Safety Auditor/ Auditing Firm shall indemnify the SBI against all claims, proceedings, damages, costs, charges and expenses in respect of the matters referred to in the provision sub-clause 7.0 of this clause.

#### **9.0 Suspension of work:**

The Electrical Safety Auditor/ Auditing Firm shall, on receipt of the order in writing of the Architect / consultant (whose decision shall be final and binding on the Electrical Safety Auditor/ Auditing Firm) suspend the progress of works or any part the offer such time and in such manner as Architect/consultant may consider necessary so as not to cause any damage or injury to the work already done or endanger the safety thereof for any of following reasons:

- a) On account of any default on the part of the Electrical Safety Auditor/ Auditing Firm, or
- b) For proper execution of the works or part thereof for reasons other than the default the Electrical Safety Auditor/ Auditing Firm, or
- c) For safety of the works or part thereof.

#### **10.0 Settlement of Disputes and Arbitration:**

- i) Except where otherwise provided in the contract all questions and disputes to the meaning of the specifications, design, drawings and instructions herein before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings specifications, estimates, instructions orders or these conditions or otherwise concerning the work or the execution or failure to execute the same whether arising during the progress of the work or after the cancellation, termination, completion or abandonment thereof shall be dealt with as mentioned hereinafter:
- ii) If the Electrical Safety Auditor/ Auditing Firm considers that he is entitled to any extra payment or compensation in respect of the works over and above the amounts admitted as payable by the Architect or in case the Electrical Safety Auditor/ Auditing Firm wants to dispute the validity of any deductions or recoveries made or proposed to be made from the contract or raise any dispute, the Electrical Safety Auditor/ Auditing Firm shall forthwith give notice in writing of his claim, or dispute to The Assistant General Manager (P&E), within 30 days from the date of disallowance thereof or the date of deduction or recovery. The said notice shall give full particulars of the claim, grounds on which it is based and detailed calculations of the amount claimed and the Electrical Safety Auditor/ Auditing Firm shall not be entitled to raise any claim nor shall the SBI be in anyway liable in respect

of any claim by the Electrical Safety Auditor/ Auditing Firm unless notice of such claim shall have been given by the Electrical Safety Auditor/ Auditing Firm to the AGM (P&E) in the manner and within the time as aforesaid. The Electrical Safety Auditor/ Auditing Firm shall be deemed to have waived and extinguished all his rights in respect of any claim not notified to the AGM (P&E) in writing in the manner and within the time aforesaid.

- iii) It is a term of this contract that the party invoking arbitration shall give a list of disputes with amounts claimed in respect of each dispute along with the notice for appointment of arbitrator.
- iv) It is also a term of this contract that no person other than a person appointed by such Chief General Manager as aforesaid should act as arbitrator. The conciliation and arbitration shall be conducted in accordance with the provisions of the Arbitration & Conciliation Act 1996 or any or any accordance modification or reenactment thereof and the rules made there under.
- v) It is also a term of the contract that if any fees are payable to the Arbitrator these shall be paid equally by both the parties. However, no fees will be payable to the arbitrator if he is a SBI Officer.
- vi) It is also a term of the contract that the Arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the parties calling them to submit their statement of claims and counter statement of claims. The venue of the arbitration shall be such place as may be fixed by the arbitrator in his sole discretion. The fees, if any of the arbitrators shall, if required to be paid before the award is made and published, be paid half and half by each of the parties. The Cost of the reference and of the award (including the fees, if any of the arbitrator) shall be in the discretion of the arbitrator who may direct to any by whom and in what manner, such costs or any part thereof, shall be paid and fix or settle the amount of costs to be so paid.

#### **B. Safety Codes:**

- i. First aid appliances including adequate supply of sterilized dressing and cotton wool shall be kept in a readily accessible place.
- ii. An injured person shall be taken to a public hospital without loss of time, in cases when the injury necessitates hospitalization.
- iii. Suitable and strong scaffolds should be provided for workmen for all works that cannot safely be done from the ground.
- iv. No portable single ladder shall be over 8 meters in length. The width between the side rails shall not be less than 30 cm. (clear) and the distance between two adjacent running's shall not be more than 30 cm. When a ladder is used an extra labour shall be engaged for holding ladder.
- v. The excavated material shall not be placed within 1.5 meters of the edge of the trench half of the depth of trench whichever is more. All trenches and excavations shall be provided with necessary fencing and lighting.
- vi. Every opening in the floor of a building or in a working platform be provided with suitable

means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be one meter.

## ANNEXURE-II

### ELECTRICAL SAFETY AUDIT FOR OFFICE/ BRANCH (INCL. ON-SITE ATM)

<b>BRANCH RISK CATEGORY#</b>	<b>HIGH RISK</b>		<b>MEDIUM RISK</b>		<b>LOW RISK</b>	
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Branch Code and Name	
Address	
BM PF NO and Name	
Sanctioned load	-----KW/KVA
Connected load	-----KW/KVA
Monthly amount of energy bill (Approx.)	Rs. /-per Month
Total tonnage of Air Conditioners in branch	-----TR (Tonnage of Refrigeration)
Area of the Branch	-----Sq. Feet/Sq. Meter

Sr. 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 Panels, Distribution Boards, Electrical equipments etc?	YES/NO	
5	Whether Earthing pits are provided and connected to the equipment Body and neutral are also properly earthed?	YES/NO	
a)	Whether the Earthing Pits are maintained properly?	YES/NO	
6	Whether proper exhaust fan 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	
7	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)?	YES/NO	
a)	Additional electrical load required if any (from Power Distribution company) (in KW)	YES/NO -----KW	
8	Whether Load is distributed in all three phases to avoid unbalancing of phases and no loose electrical connections/ haphazard wiring is observed in the Branch/ office premises?	YES/NO	
9	Whether isolating switches are provided for the switching off of then on essential loads premises during night and main switch to switch off the power supply to the Branch in case of fire/ emergency?	YES/NO	

10	Whether electrical equipments of Pantry etc. are properly connected to Iron socket box with MCBs. MCBs or latest type switches are provided to switch on/ off the ACs and protect them from Overload?		
11	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	
12	Whether Appropriate timers used in the changeover of Air conditioners, for Server Room ACs 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 ACs during the night)?	YES/NO	
13	Whether Preventive Maintenance of electric installation and equipment is carried out by skilled license holder electricians / skilled technician?	YES/NO	
14	General Condition of electrical control panels, main switch, electric Meter board and change over switch, ACs, water cooler, water filter, wiring, cables etc. is good and all DB'S, Panels, switch boards are Properly covered?	YES/NO	
15	Whether the contact numbers of persons, electricians, power distribution company, Generator service provider, vendor, UPS vendors, ACs etc. are available with Accountant/ Security guard and other staff and they are displayed in Electric room/ UPS room?	YES/NO	
16	Whether the Power Factor Panel of appropriate rating is installed?	YES/NO	
<b>17</b>	<b>FIRE PREVENTION MEASURES</b>		
(i)	All old disposable records, broken furniture etc. accumulated at the premises have been cleared.	YES/NO	
(ii)	Combustible leaf, litter/ waste papers etc., in and around the branch is removed/cleaned periodically	YES/NO	
(iii)	No stationary/ Records/ old obsolete items are stored/ kept in the system /UPS room	YES/NO	
(iv)	Storage racks in Stationery/Record room kept at a safe distance of at least 3ft from electrical points /switch/junction boxes	YES/NO	
(v)	In the pantry/canteen LPG is used (YES/NO)	YES/NO	
<b>18</b>	<b>SERVER AND UPS ROOM</b>		
(i)	Server room has dual AC units having timer circuit device with independent circuit.	YES/NO	
(ii)	Whether Exhaust fan installed in UPS room	YES/NO	
(iii)	Whether UPS AMC renewed or not	YES/NO	
<b>19</b>	<b>ELECTRICAL SAFETY</b>		
(i)	Power Supply to record/Stationary room is made through plug and socket arrangement?	YES/NO	
(ii)	Whether LED lights have been installed, if not then number of 2x2, down lights, 4 feet LED lights required in the branch/office ➤ 2X2 ➤ Down light		

	➤ 4 Feet		
20	FIRE PROTECTION /FIRE CONTROL EXTINGUISHERS AND FIRE ALARM SYSTEM		
	Are fire extinguishers available in the following work area and clearly marked and accessible? A. System/UPS Room: CO2 (3Kg. /4.5Kg)X2 B. Banking Hall : Water CO2 type C. Stationery Room : Water CO2 type	YES/NO	
21	DG SET/ GENERATOR 1-ph/3-Ph	YES/NO	kVA =
22	At least two 6 Kg. ABC Capacity fire extinguishers are placed near the diesel generator	YES/NO NA	
23	Whether electrical safety and energy saving awareness meeting with the staff members conducted after electrical safety audit of the branch/office by the Electrical Safety Auditor/ Auditing Firm.	YES/NO	
24	Whether power supply to Fire panel and CCTV are given from UPS supply.	YES/NO	
25	Whether NOMENCLATURE is given for Main Panel Board and distribution boards	YES/NO	
26	Whether <b>MASTER Switch</b> is provided for Light/Fan and Air-Conditioning Circuit	YES/NO	
27	Whether <b>running earth</b> for <b>MASTER SWITCH Circuit</b> is provided	YES/NO	
28	<b>Whether Rooftop Solar Power System (if any), in working condition or not</b> (supporting photographs/documents must be attached with the report)	YES/NO	
29	If Sr. No 28 is "YES", The total unit generated by solar shown in the inverter along with photograph.		kWh/MWh

#### LIST OF MAJOR EQUIPMENTS & DEVICES:

SL.NO	LOAD DESCRIPTION	INVENTORY FLOOR WISE			TOTAL WATTAGE(kW)
		Ground Floor	First Floor	Second Floor	
1	Light				
2	UPS				
3	Air-conditioning				
4	Printer				
5	Miscellaneous				
<b>TOTAL LOAD(KW)</b>					

**Voltage & Current readings measured during inspection/audit:**

Parameter	Test Point	Reading	Standard range	Observation
Voltage at Incoming panel point	• Between phases,	Volt		
	• Between Phase and neutral,	Volt		
	• N-E	Volt		
Voltage profile at UPS output Section	• Between Phase and neutral,	Volt		
	• N-E	Volt		
Current at Incoming point	• R phase	Amp		
	• Y phase	Amp		
	• B phase	Amp		
	• Neutral	Amp		
Frequency				
Power factor				

**Note: Following details to be furnished by the Electrical Safety Auditor/ Auditing Firm:**

- i. **Electrical Audit Report in triplicate (Branch Copy, AO Copy and LHO Copy)**
- ii. **Xerox copy of the Electricity bill**
- iii. **Colour Photographs of main electrical panel/ DBs and Branch electrical wiring highlighting prone to fire hazard areas.**

# Based on the condition of Electrical system like very old wiring, old equipment (i.e. old ACs, Panels, DBs, Light Fitting etc.) requiring replacement etc., the audit may be categorized as **High risk, Medium risk** and **Low risk**. Pls. put Tick Mark in appropriate Box.

Name of Electrical Engineer/Electrical Safety Auditor/ Auditing Firm

Supervisor's Valid License No. (In case of Electrical Safety Auditor/ Auditing Firm):

Date:

Place:

Name of the Branch Manager/Officer-in-charge:

Signature with seal:

### ANNEXURE-III

#### ELECTRICAL SAFETY AUDIT FOR OFFICE/ BRANCH HAVING OWN SUB-STATION

Billing Demand	Kw	KVA
Maximum Demand (MD) of (preferably April/May/June months)	Kw	KVA
Power factor and Peak Loads mentioned in the electricity bill (preferably April/May/June months)	Leading	Lagging
Capacity of sub-station and Voltage	KVA	KV

Sl. No	Description	Present Status	Observations/ Comments
1	Whether the permission for Sub-Station 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 Electrical Safety Auditor/ Auditing Firm etc. are displayed at substation and control room?	Yes/No	
3	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	
4	Safety Materials like Fire extinguishers, Sand buckets, Rubber Mats, Hand Gloves, First aid box etc. are available in substation?	Yes/No	
5	Whether the inspection of substation/DG Set/Lifts is done by the Concerned Electrical Inspector at least once in a year and the required inspection fees paid well in time?	Yes/No	
6	Whether the observations by Electrical Inspector during his last visit have been attended? Date of his compliance report?	Yes/No	
7	Whether Preventive Maintenance of Breakers, Transformer, H.T. & L.T., Panels etc. is carried out as per schedule and the contract for maintenance of Transformer/Breakers/ Panels etc. are given to respective manufacturer/ service Providers?	Yes/No	
8	Whether the maintenance Contractor has "A" Class Electrical contractors license and comply the requirement of the guidelines of the Concerned State/ Central Govt.?	Yes/No	
9	Whether the Workmen/ Technicians possess the wireman/ electrician/s license?	Yes/No	
10	In case of outdoor substation, Whether the stone gaities provided in substation yard?	Yes/No	
11	In case of outdoor substation, Whether the Substation structure fencing boundary is provided, painted and well maintained?	Yes/No	



12	Whether Earthing Test reports are provided by the Electrical Contractor / Maintenance contractor?	Yes/No	
13	Whether Proper nomenclature and painting is done on Electric Panels and Earthing pits?	Yes/No	
14	Whether Transformer oil level and breather condition is checked at least once in a week?	Yes/No	
15	Check last date of transformer oil BDV test and confirm the BDV value whether it is permissible or not?	Yes/No	
16	Whether mechanical and electrical interlocks of critical equipment are provided and maintained in working condition?	Yes/No	
17	Operating manuals for critical equipment like transformer, breakers should be available at site?	Yes/No	
18	Whether Automatic Power Factor Control (APFC) Panel is provided and Power Factor value is maintained higher than prescribed value (say 0.90. It may be confirmed / verified from the electricity bill & APFC Panel meter)?	Yes/No	
19	Whether Lightning Arrestor and Aviation light is provided (Applicable only in case of Multi storied Building)?	Yes/No	
20	Whether the Maintenance staff wear shoes and they are well mannered and well dressed?	Yes/No	
21	Whether Some training/ Meeting with Maintenance Staff is conducted for discussion on energy conservation opportunities, challenges in Electrical safety etc.?	Yes/No	

**Note: Thermography observation on thermo graphic images at Electric Panels Distribution Boards/armored cables are be submitted along with the audit report.**

**Note: Following details to be furnished by the Electrical Safety Auditor/ Auditing Firm:**

- i) **Electrical Audit Report in triplicate (Branch Copy, AO Copy and LHO Copy)**
- ii) **Xerox copy of the Electricity bill**
- iii) **Colour Photographs of main electrical panel/ DBs and branch electrical wiring highlighting prone to fire hazard areas.**

Signature:

Name of the Electrical Safety Auditor/ Auditing Firm:

Supervisor's valid license No.:

Date:

Place:

Name of the Branch Manager/Officer-in-charge:

Signature with seal: