

STATE BANK OF INDIA THIRUVANANTHAPURAM CIRCLE

INVITES TENDERS IN TWO BID SYSTEM FOR

ELECTRICAL SAFETY AUDIT FOR OFFICES/BRANCHES OF ADMINISTRATIVE OFFICE TRIVANDRUM, SBILD TRIVANDRUM, LOCAL HEAD OFFICE TRIVANDRUM CC AND LHO ESTABLISHMENTS UNDER THIRUVANANTHAPURAM

Last date for submission of Tender: 3.00 P.M. (IST) on 15/09/2023.

Opening of Tender: 03:30 P.M. (IST) on 15/09/2023.

NIT NO: THI/2023/AO-TVM/5

| Name & Address of Contractor | | | | |
|------------------------------|--|--|--|--|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

The Deputy General Manager,
SBI Administrative Office.
Sangamam Building,
Palayam,
Thiruvananthapuram- 695001

NOTICE INVITING TENDER (NIT): THI/2023/AO-TVM/5

Tenders are invited by State Bank of India, from **SBI Empanelled Electrical Auditors for Thiruvananthapuram Circle** for conducting Electrical Safety Audit for its branches and office under Administrative Office Thiruvananthapuram/SBILD & LHO Thiruvananthapuram.

All Empaneled Electrical Auditors can apply for Category X & Category Y.
For Category Z, only Empaneled Electrical Auditor with accreditation for Energy Auditing shall be only be eligible. Proof for the same shall be enclosed as documentary proof

The total no of branches/offices at Trivandrum are detailed as per Annexure C. The figure is tentative.

| 1. | Name of Work | ELECTRICAL SAFETY AUDIT FOR OFFICES/BRANCHES OF ADMINISTRATIVE OFFICE TRIVANDRUM,SBILD TRIVANDRUM & LOCAL HEAD OFFICE TRIVANDRUM |
|----|---|--|
| 2. | Issue of the document in SBI website- | www.sbi.co.in -> SBI in the news-> Procurement news from 25.08.2023 to 15.09.2023 |
| 3. | Last date and time of receipt of application | On or Before 15.09.2023 by 3.00PM |
| 4. | Address at which the applications are to be submitted | DGM(B&O),SBI Administrative Office, Third Floor, Sangamam Building, Palayam, Thiruvanathapuram -695001 |
| 5. | Date ,place ,Time of opening of Application | 15.09.2023 by 3.30 PM SBI Administrative Office, Third Floor, Sangamam Building, Palayam, Thiruvanathapuram -695001 |
| 6. | Validity of rate contract | Six months from the date of approval |
| 7. | For clarification and other details | Please contact : Electrical Engineer:- 0471-2192410/9497178965 |

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.

SBI has the right to accept/reject any/all tenders without assigning any reasons.

GENERAL TERMS & CONDITIONS OF CONTRACT

- a. Sealed and duly acknowledged tenders in the prescribed form (pages 1-26), in sealed envelopes with necessary certificate and documents should be addressed to the Deputy General Manager, State Bank Of India Administrative Office Thiruvananthapuram, Third Floor, Sangamam Building, Palayam, Thiruvananthapuram-695001 and super scribed on the Outer Cover "RATE CONTRACT TENDER FOR ELECTRICAL SAFETY AUDITORS FOR VARIOUS OFFICES/BRANCHES OF SBI UNDER AO THIRUVANANTHAPURAM". Applicant must mention the quote separately for each category for which they wish to apply.
- b. SBI is not responsible for the late receipt due to postal delay, strikes or any other reasons. The incomplete application is liable to be rejected summarily and Bank reserves the right to accept or reject any or all applications without assigning any reasons.
- c. Electrical Auditor must complete the safety audit as per the L1 rate during the 2.5 months' time duration. Bank reserves the right to reduce the completion time if the number of allotted branches is less.
- d. The Auditor requires to furnish their GST no.

DEPUTY GENERAL MANAGER (B&O)

TERMS AND CONDITIONS

- 1. The number of branches mentioned below is tentative.
- 2. After rate standardization the lowest rates will be advised to SBI RBO & Branches other outfits under the geographical area of Administrative Office Thiruvananthapuram and work orders will be issued from AO/RBO as per the predefined ratio mentioned in the tender.
- 3. Successful vendors should be prepared to execute the Electrical audit at the agreed rates as and when orders are placed during the validity period of the tender
- 4. The tender rates shall be valid for a period of 6 months from the date of opening of the tenders.
- 5. In the event of a discrepancy between the rates quoted in words and the rates in figures, the rates quoted in figures shall be taken into consideration.
- 6. All pages of the tender document shall be signed by authorized signatory and stamped.
- 7. All corrections shall be duly signed and stamped. Bids received after the above date/time will not be considered.
- 8. SBI reserves the right to reject the offer without assigning reason or whatsoever.
- 9. SBI reserves the right to distribute and execute the work at the L1 rate through the L2, L3 & L4 vendors upon their willingness. The ratio of work distribution among L1, L2, L3, L4 vendors are in the ratio 50:25:15:10 if necessary and 50:30:20 if only three vendors out of L1/L2/L3/L4 are willing at L1 rate and 60:40 if only two vendors out of L1/L2/L3/L4 are willing.
- 10. Please enclose the list of technical staff with contact addresses, telephone numbers.
- 11. Conditional tenders are not acceptable.
- 12. The Electrical safety auditor or firm must arrange for the conveyance, lodging expenses, men and material required for conducting the safety audit at their cost.
- 13. Adequate care should be taken by the electrical auditor during the verification, measuring and recording of the data.
- 14. Any damage to the Bank's property, equipment's under testing and measurement during the electrical fire safety audit will be charged to the firm.

- 15. Bank is not responsible for accidental injury of any of the operating personnel involving in the audit procedure. Personnel should be well trained and should have adequate knowledge in electrical safety aspects and handling of electrical equipment's.
- 16. All the rates quoted against each category as per the Price bid format in Annexure D must include Conveyance, Lodging expenditure required for men and material. GST will be paid extra as per the actual.
- 17. The Electrical auditor must submit four copies of audit reports to the respective Branch, Regional Manager(RBO Trivandrum), Chief Manager (Administrative office, Trivandrum), and Assistant General Manager, Premises &Estate(SBI). A soft copy of the audited reports has to be sent to agmpre.lhotri@sbi.co.in.
- 18. After the completion of Electrical Audit, the visit and Electrical Audit report with the acknowledgement of the Branch official, Invoice shall be submitted to the Office of SBI AO, Thiruvananthapuram for forwarding to respective Regional Office of SBI for the payment.
- 19. The copy of the contact number, ID card and authorization letter of the auditing person(s) must be submitted to SBI RBOs/AO well in advance for necessary coordination. Shut down required if any may be intimated to branch in advance.
- 20. Payment will be made at respective Branches/Regional Offices after successful completion and submission of Electrical safety audit reports duly acknowledged by the branch in complete form along with the proof such as photographs of the audited premises during course of the work. No advance is payable.
- 21. Upon the non-successful submission of report in required format in 4 copies, bank reserves the right to reduce the fees payable to the vendor.
- 22. Over writing should be avoided and all corrections should be duly signed.
- 23. No inconvenience should be caused to staff/customer during working hours
- 24. SBI reserves the right to allocate any region or branch as per their requirement of SBI Administrative unit, Trivandrum to the Empanelled Auditors at the L1 rate.
- 25. SBI reserves the right to cancel the work order issued to the Safety Auditor at any stage in the event of failure of Non response, Non commitment and Non completion of the assigned task as per tender terms and conditions.
- 26. The Electrical Auditor must submit the soft copy of the report to agmpre. Ihotri@sbi.co.in and hard copy to Electrical Engineer at SBI Local head office, Thiruvananthapuram.

- 27. Upon the non-successful submission of report in required format in four copies as detailed in point 16, SBI reserves the right to reduce the fees payable to the vendor.
- 28. If the SBI observes that the Auditor has not completed the task upto its satisfaction, SBI reserves the right to ask for re auditing the premises without any additional payment.
- 29. Time allowed for completion after the allotment of Branches is 2.5 months from the day of issue of Work order. Time is the essence of the Contract. Delay will be penalized suitably @1/2 % per week of delay.

| Date: | Accepted/Not accepted |
|--------|---------------------------------|
| Place: | Applicant's Signature and stamp |

SCOPE OF WORK FOR ELECTRICAL SAFETY AUDIT

- a. Physical inspection of the Bank premises with reference to applicable Indian standards, Indian Electricity Rules and other relevant codes of Practice & identifying electrical fire hazards (shocks, fires, etc.) as per Kerala Electrical Inspectorate and KSEB Ltd Guidelines.
- b. Review of protection devices such as MCCB/MCB/ELCB system of the electrical installation and whether the performance is satisfactory or not.
- c. Review of adequacy of Wires/Cable sizes based on actual load current measurements, Insulation resistance and tightness of terminations.
- d. 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 Bank Premises to suggest recommendations as per applicable standards.
- e. 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.
- f. Check for any loose contacts at the mains switches, DB, Switch boards etc.
- g. Inspection of UPS and batteries for its adequacy in the capacity for the load requirement of the branch.
- h. 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.
- i. Evaluating whether the demand load is within the sanctioned load with proper load balancing.
- j. Verification of the operation of system room Air conditioners with timer mechanism.
- k. 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.
- I. Preparation of Safety audit report and submission within the completion period in triplicate with non-scale layout of the branch including denomination of the areas used by you for auditing. Report must consist of the single line diagram of existing electrical system including marking the position of critical faults needing immediate attention.

- m. Review of the Existing condition of the HT transformer, Substation, Main panels, Load break switch.
- n. Thermo-graphic images of DB's, panel boards shall be enclosed with the report for Category Z branches.
- o. For HT substation, with single metering for various out fits, Auditor shall submit report for the HT Substation and individual outfit reports connected to the system separately with individual connected load particulars.
- p. If there is any change in the category of branch, then the sanctioned load as per electricity bill will be consider as final for fixing the X,Y and Z category of the branch.

Deputy General Manager (B&O), AO Thiruvananthapuram, Sangamam Building, Palayam, Thiruvananthapuram -695001

ELECTRICAL / FIRE SAFETY AUDIT FOR OFFICES/BRANCHES OF SBI ADMINISTRATIVE OFFICE THIRUVANANTHAPURAM, SBI LHO, SBILD THIRUVANANTHAPURAM

(Invariably respond to all the following parameters/aspects. Do not delete or add any parameter from/to this list.) $\frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2} \left(\frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2} \left(\frac{1}{2} \int_{-\infty}^{\infty} \frac{1}$

| SI No | Parameter | Your |
|---------|--|----------------|
| | | Response |
| 1 | Whether agreeable to all the terms and conditions expressed by the SBI? | Yes / No |
| 2 | Whether agreeable to the payment norms of the SBI? | Yes / No |
| 3 | Whether agreeable to execute Electrical safety audit for number less than indicated in this tender in case of need at any point of time, during period of contract | Yes / No |
| 4 | Whether agreeable to execute all the parameters as per the enclosed check list for Electrical fire safety audit | Yes/ No |
| We have | read and understood all the terms and conditions stipulate do hereby agree to each and every item indicated th | • |
| | Dated this day of2023. | |
| COMPANY | Y SEAL AUTHORISED SIGNATORY | OF THE COMPANY |

ELECTRICAL / FIRE SAFETY AUDIT FOR OFFICES/BRANCHES OF SBI ADMINISTRATIVE OFFICE THIRUVANANTHAPURAM, SBI LHO TVPM, SBILD THIRUVANANTHAPURAM

APPLICATION FOR ELECTRICAL AUDITORS FOR CONDUCTING SAFETY AUDITS FOR VARIOUS SBI OFFICES/BRANCHES

Annexure -A

Date:

Place:

Address

Name of the Firm / Electrical Safety Auditors

1.

2.

| 3. | Telephone nos. including Mobile no. | |
|----|--|--|
| 4. | Fax No. & e-mail Id | |
| 5. | List of Technical Personnel employed for the task. | |
| 6. | List of other staff. | |
| 7. | Banker's Name | |
| 8. | GST registration number | |
| | | |

Signature of authorized signatory with seal

ANNEXURE - B

FORMAT FOR ELECTRICAL SAFETY AUDIT

| BRANCH CODE & REGION | |
|----------------------------------|----------------|
| DATE OF INSPECTION | |
| AREA OF BRANCH | Sq FT/Sq.Meter |
| KSEB CONSUMER NO | |
| KSEB SECTION AREA WITH TELEPHONE | |
| DETAILS | |

ELECTRICAL DETAILS

| OL NO | DARTICUL ARC | DEMAND / \/ALLIE |
|-------|--|------------------|
| SL.NO | PARTICULARS | DEMAND / VALUE |
| 1 | SANCTIONED LOAD | |
| 2 | AVERAGE USED LOAD | |
| 3 | AVERAGE POWER FACTOR | |
| 4 | PEAK LOAD | |
| 5 | CONNECTED LOAD | |
| 6 | MONTHLY AMOUNT OF ENERGY BILL (APPROX) | |
| 7 | TOTAL TONNAGE OF AIRCONDITIONERS IN BRANCH | |
| 8 | DETAILS OF ACS WHICH ARE MORE THAN 10 YEARS OLD(Type, Tonnage and Quantity) | |
| 9 | WHETHER LIGHT FIXTURES IN THE BANK ARE OF LED TYPE | YES/NO |
| 10 | DETAILS OF LIGHT FITTINGS WHICH ARE NOT LED(Wattage & Quantity) | |
| 11 | CAPACITY & MAKE OF UPS | |
| 12 | CAPACITY & MAKE OF DG SET | |
| 13 | APPROVED DRAWING & ENERGISATION SANCTION ORDER OF DG AVAILABLE WITH THE BRANCH | YES/NO |

LIST OF MAJOR EQUIPMENTS & DEVICES

| SL.N O | DESCRIPTION | STANDA WATTAG | | INVENTO |)R\ | Y FLOOR WISE | Ξ | TOTAL WATTAGE(KW) |
|-----------|--|------------------|-----|---|-----|---|---|-----------------------|
| | | | | I st | | II nd | | |
| 1 | | | | | | | | |
| 2 | | | | | | | | |
| 3 | | | | | | | | |
| 4 | | | | | | | | |
| 5 | | | | | | | | |
| 6 | | | | | | | | |
| | TOTAL LOAD(KW) | | | | | | | |
| SI No | Check points | | det | esents Status ailed scription shall | ŗ | Rectifications proposed. Detailed | С | Observations/Comments |
| | | | | provided | | description | | |
| | | | | providod | | shall be | | |
| | | | | | ŗ | orovided | | |
| 1 | Whether demand load than the sanctioned load | | | | | | | |
| 2 | Whether penalty is bei | ng | | | | | | |
| | imposed on electricity | • | | | | | | |
| | may be ascertained from | om the | | | | | | |
| | electricity bill of | | | | | | | |
| 3 | April/May/June/July Whether additional ele | etrical | | | + | | | |
| 3 | load is required from p | | | | | | | |
| | distribution company | OWCI | | | | | | |
| 4 | Whether Lightning arre | estor is | | | | | | |
| | provided for Multi store | | | | | | | |
| | building | | | | | | | |
| 5 | Whether DB's are prop | erly | | | | | | |
| | covered | | | | | | | |
| 6 | Whether Electrical equ | ıipment's | | | | | | |
| | of pantry are properly | | | | | | | |
| | connected to plug soci | | | | | | | |
| 7 | arrangement with MCE | | | | + | | | |
| 7 | Whether panel boards distribution boards we | | | | | | | |
| | and checked for overh | • | | | | | | |
| | loose contact, blacken | - | | | | | | |
| | the electrician who und | • | | | | | | |
| | the preventive mainter | nance | | | | | | |
| 8 | Whether branch has | | | | | | | |
| | arrangement for period | | | | | | | |
| | maintenance if so nam | | | | | | | |
| | contact no and addres | | | | + | | - | |
| 9 | General condition of A | c's water | | | | | | |

| | cooler, water filter etc | | |
|----|--|--|--|
| 10 | Whether preventive maintenance of equipment is carried out by skilled license holder electricians | | |
| 11 | Whether the contact numbers of persons, electricians, power distribution co, generator vendor etc are available with guard room | | |
| 12 | Whether Load is balanced in all phases to avoid unbalancing of phases | | |
| 13 | Whether the sizes of cables/wires are of adequate rating and gauge a. Incoming b. UPS c. PDB d. AC e. LDB f. Electrical gadgets | | |
| 14 | Whether cables are properly terminated | | |
| 15 | Whether existing MCB /MCCB/ELCB provided are of adequate rating | | |
| 16 | Whether MCCB/MCB/ELCB provided in Distribution boards are functioning properly | | |
| 17 | Whether all plug points are provided with proper earth lead | | |
| 18 | General Condition of Electrical wiring and type of electrical wiring Open/concealed | | |
| 19 | Whether single isolating switch is available for the premises and separate switch for the AC in system room, UPS provided at the branch for switching off the non-essential loads at premises during the night | | |
| 20 | Whether ELCB is provided for Glow sign board | | |
| 21 | Whether system room AC's and glow sign boards are | | |

| | provided with timer mechanism | | |
|-----|---|--|--|
| | of adequate rating and | | |
| 22 | functioning properly Whether UPS room is properly | | |
| 22 | ventilated and isolated from | | |
| | printer room, system, record | | |
| | room | | |
| 23 | Whether UPS output is provided | | |
| | for CCTV, Fire alarm system and emergency loads | | |
| 24 | Condition of Electrical panel | | |
| | room and UPS room and | | |
| | whether properly well-kept and | | |
| | presence of inflammable items if any present may be | | |
| | mentioned clearly in the report | | |
| 25 | Any hanging/unprotected loose | | |
| | electrical live wires inside the | | |
| -00 | branch premises | | |
| 26 | Whether power supply to Locker, strong rooms, | | |
| | record/Stationary are | | |
| | disconnected by the removal of | | |
| | three core wire and plug | | |
| 27 | arrangement Condition of earthing with | | |
| 21 | meggered values and whether | | |
| | meggered resistance values are | | |
| | within the standards | | |
| 28 | Condition of HT transformer, | | |
| | Breaker, Power cables, Load break switch | | |
| 29 | Whether Cos is of proper | | |
| | capacity | | |
| 30 | Whether DG sets neutral and | | |
| | body are independently grounded | | |
| 31 | Whether AC points are at easily | | |
| | accessible height | | |
| 32 | Whether Air conditioners, | | |
| | stabilizers are functioning | | |
| | properly. Please specify the Quality and type of stabilizer | | |
| 33 | Whether AC's and UPS | | |
| | systems are under AMC | | |
| 34 | Readings for Incoming Voltage | | |
| | and Current at peak hours | | |
| | between 11.00AM to 3.00PM as per the below format | | |
| L | Por the below format | | |

| 35 | General condition of Main switch, Electric meter board and change over switch | | |
|----|--|--|--|
| 36 | Whether light provided in electrical rooms/operation areas is sufficient / adequate for easy operation & maintenance works | | |
| 37 | Whether Emergency light is provided in Electrical rooms | | |
| 38 | Whether pump room is maintained dry in good condition | | |
| 39 | Whether water seepage is observed near any of the Electrical equipment and wirings | | |
| 40 | Whether paper, old material or any other scrap kept near DB/panels/UPS/Batteries etc. If so whether they are kept atleast 3 feet distance from Electrical points/switch/junction boxes | | |
| 41 | Whether proper arrangement for ventilation of panel room/electrical room/UPS room is provided | | |
| 42 | Whether diesel ie inflammable materials are safely stored | | |
| 43 | Whether the contact numbers of persons, electricians, power distribution co, Generator vendor etc are available with guard and other staff and displayed? | | |
| 44 | Whether Earth pits are provided and connected /Earthing report is provided by the Electrical contractor or licensed electrician | | |
| 45 | Whether Earthing for body and Neutral are provided for DG sets | | |
| 46 | Whether Neutral to earth voltage is within permissible limits | | |
| 47 | Combustible leaf, litter/waste papers etc in and around the branch is removed /cleaned periodically | | |

| 48 | All disposable records, broken furniture etc accumulated at the premises have been cleared | |
|----|--|--|
| 49 | In the pantry/canteen LPG is used (Yes/No) | |
| 50 | Whether Exhaust fan is installed in UPS room | |
| 51 | Are fire extinguishers available in the following work area and clearly marked and accessible? A. System/UPS Room-Co2(3 Kg/4.5Kg)x2 B. Banking Hall- Water Co2 type C. Stationary Room – Water CO2 type | |
| 52 | At least two 6Kg ABC capacity fire extinguishers are placed near the Diesel Generator? | |

| Parameter | Test Point | Reading | Standard range | Observation |
|----------------|----------------------------|---------|----------------|-------------|
| Voltage at | Between phases, | | | |
| Incoming point | Between Phase and neutral, | | | |
| | N-E | | | |
| Current at | R phase | | | |
| Incoming point | Y phase | | | |
| | B phase | | | |
| | Neutral | | | |
| Frequency | | | | |
| Power factor | | | | |

The above observations are true and actually recorded by me.

| Place : | Signature |
|---------|-----------|
| Date : | Stamp |

FOR HT SUBSTATION

ELECTRICAL DETAILS

| SL.NO | PARTICULARS | DEMAND / VALUE |
|-------|--|----------------|
| 1 | SANCTIONED LOAD | |
| 2 | CONNECTED LOAD | |
| 3 | BILLING DEMAND | |
| 4 | MAXIMUM DEMNAD (preferably April/May/June months) | |
| 5 | PEAK LOAD/PF VALUE AS MENTIONED IN ELECTRICITY BILL (preferably April/May/June months) | |
| 6 | MONTHLY AMOUNT OF ENERGY BILL (APPROX) | |
| 7 | KSEB CONSUMER NO, SECTION AREA WITH TELEPHONE NO | |
| 8 | TOTAL TONNAGE OF AIRCONDITIONERS IN BRANCH | |
| 9 | DETAILS OF ACS WHICH ARE MORE THAN 10 YEARS OLD(Type, Tonnage and Quantity) | |
| 10 | WHETHER LIGHT FIXTURES IN THE BANK ARE OF LED TYPE | |
| 11 | DETAILS OF LIGHT FITTINGS WHICH ARE NOT LED (Wattage, Quantity) | |
| 12 | CAPACITY OF SUBSTATION AND VOLTAGE | |

| SI No | Description | Presents Status (Yes/No) | Observations/Comments |
|-------|--|-----------------------------|-----------------------|
| 1 | Whether permission of substation and DG set are available and copies of the same are available at Substation | | |
| 2 | Whether Electric shock treatment charts Electrical and fire safety charts and single line diagram are displayed? | | |
| 3 | Whether emergency contact numbers of Fire station, Health center, Power distribution Co etc are displayed at substation and control room | | |
| 4 | Whether electrical danger (fig of skull & cross bones, 440 V/ 230V) is provided on Main Electrical panel/electrical room/operating areas | | |

| 5 | Safety Materials like Fire extinguishers, Sand buckets, Rubber Mats, Hand gloves, First aid box etc are available in substation? | |
|----|--|--|
| 6 | Whether the inspection of Substation/DG set/Lift is done once in a year and inspection fees paid well in time? | |
| 7 | Whether the observations by Electrical inspector during his last visit have attended? | |
| 8 | Whether preventive maintenance of Breakers, Transformers, Panels etc is carried out as per schedule | |
| 9 | Whether contract for Maintenance of transformer/Breaker etc are given to respective manufacturer? | |
| 10 | Whether (I) The Maintenance contractor has "A" class Electrical contractors license as per prevailing guide lines of the concerned state/Central govt. (II) The workmen/Technicians possess the wire men/Electricians license? | |
| 11 | In case of outdoor substation(I) Whether the stone gities provided in substation yard?(II) Whether the Substation structure fencing boundary is provided, painted and well maintained? | |
| 12 | Whether proper nomenclature and painting is done on Electric panels and earthing pits? | |
| 13 | Whether earthing test reports are provided by the Electrical contractor | |
| 14 | Check last date of oil BDV test and confirm the BDV value whether permissible or not? | |
| 15 | Whether mechanical and Electrical interlocks of critical equipment's are working or not? | |
| 16 | Operating manuals for critical equipment's like transformer, breaker etc are available on site or not? | |
| 17 | Whether Automatic power factor control (APFC) panel is provided or not & whether pf value is maintained within | |

| | limits. | |
|----|--|--|
| 18 | Whether any penalty is imposed in electricity bill for poor pf value or any incentive are getting in Electricity bills for maintaining the PF value | |
| 19 | Whether the Maintenance staff wear shoes and they are well dressed | |
| 20 | Whether some training/meeting with maintenance staff about safety challenges is arranged at least half yearly | |
| 21 | Thermographic Observations on thermo graphic images at Electric panels. & Distribution boards.(please upload the thermographic images on the system) | |

The above observations are true and actually recorded by me.

| Place: | Signature: |
|--------|--------------------------------|
| Date : | Name of the Auditor: |
| | Name of the Agency: |
| | Supervisor's valid License No: |
| | Stamp: |

ANNEXURE - C- COUNT OF BRANCHES (Approx)

| SLNO | BRANCHES UNDER CATEGORY X | BRANCHES UNDER CATEGORY Y | BRANCHES UNDER CATEGORY Z |
|------|------------------------------|--------------------------------------|--|
| | LT category upto 30KW | LT category above 30KW and upto 60KW | HT category /connected load above 60KW |
| 1 | 66 | 86 | 11 |

ANNEXURE - D-BRANCH DETAILS

| Sl. No | RBO | BRANCH CODE-BRANCH NAME | CATEGORY |
|--------|------|---|----------|
| 1 | RBO1 | 08293 - KANNAMMOOLA | Х |
| 2 | RBO1 | 08671 - THAMPANOOR | Х |
| 3 | RBO1 | 10707 - MEDICAL COLLEGE CAMPUS TRIVANDRUM | Х |
| 4 | RBO1 | 13313 - PANAVILA | Х |
| 5 | RBO1 | 16084 - SREEKANTESWARAM KAITHAMUKKU | Х |
| 6 | RBO1 | 70292 - KERALA UNIVERSITY OFFICE CAMPUS | Х |
| 7 | RBO1 | 70308 - VELLAYAMBALAM | Х |
| 8 | RBO1 | 70506 - BAKERY JUNCTION | Х |
| 9 | RBO1 | 70690 - NANTHENCODE P. B. BRANCH | Х |
| 10 | RBO1 | 70923 - PBB AMBALAMUKKU | Х |
| 11 | RBO1 | 71125 - KURAVANKONAM | Х |
| 12 | RBO2 | 07622 - KOTTUKAL | Х |
| 13 | RBO2 | 08292 - VALIYAVILA TRIVANDRUM | Х |
| 14 | RBO2 | 10694 - PARASSALA TOWN | Х |
| 15 | RBO2 | 10704 - KANJIRAMKULAM | Х |
| 16 | RBO2 | 70032 - POOJAPURA | Х |
| 17 | RBO2 | 70049 - VENGANOOR | Х |
| 18 | RBO2 | 70458 - DHANUVACHAPURAM | Х |
| 19 | RBO2 | 70460 - UDIYANKULANGARA ADB | Х |
| 20 | RBO2 | 70544 - NELLIMOODU | Х |
| 21 | RBO2 | 70566 - POZHIYOOR | Х |
| 22 | RBO2 | 70588 - KUDAPPANAMOODU | Х |
| 23 | RBO2 | 70950 - CHOWARA | Х |
| 24 | RBO2 | 71190 - PERUMKADAVILA | Х |
| 25 | RBO2 | 71191 - AMBALATHARA | Х |
| 26 | RBO2 | 71192 - KALADY THIRUVANANTHAPURAM | Х |
| 27 | RBO3 | 07617 - TECHNOPARK TRIVANDRUM | Х |
| 28 | RBO3 | 12318 - TECHNO VALLEY | Х |
| 29 | RBO3 | 32675 - CHAVARCODE | Х |
| 30 | RBO3 | 70043 - KARYAVATTAM | Х |
| 31 | RBO3 | 70045 - PALLITHURA | Х |
| 32 | RBO3 | 70047 - PUTHUKURUCHY | Х |
| 33 | RBO3 | 70347 - CHERUNNIYOOR | Х |
| 34 | RBO3 | 70406 - PALLIPPURAM | Х |
| 35 | RBO3 | 70422 - POONTHURA | Х |
| 36 | RBO3 | 70631 - N R I BRANCH- ATTINGAL | Х |
| 37 | RBO3 | 70737 - TEJASWINI TECHNOPARK TRIVANDRUM | Х |
| 38 | RBO3 | 70795 - CHACKAI | Х |
| 39 | RBO3 | 71068 - EDAVA | Х |

| 41 RBO4 07253 - THEMBAMOOD 42 RBO4 07854 - VALIYAMALA 43 RBO4 08030 - PONGANADU 44 RBO4 10597 - H L L PEROORKADA 45 RBO4 10691 - KATTAKKADA 46 RBO4 10693 - NEDUMANGAD TOWN 47 RBO4 10787 - NETTAYAM 48 RBO4 13221 - THACHOTTUKAVU PEYAD 49 RBO4 32676 - KOTTOOR 50 RBO4 70052 - VAMANAPURAM 51 RBO4 70214 - VITHURA 52 RBO4 70286 - MADAVOOR | X |
|---|---|
| 42 RBO4 07854 - VALIYAMALA 43 RBO4 08030 - PONGANADU 44 RBO4 10597 - H L L PEROORKADA 45 RBO4 10691 - KATTAKKADA 46 RBO4 10693 - NEDUMANGAD TOWN 47 RBO4 10787 - NETTAYAM 48 RBO4 13221 - THACHOTTUKAVU PEYAD 49 RBO4 32676 - KOTTOOR 50 RBO4 70052 - VAMANAPURAM 51 RBO4 70214 - VITHURA 52 RBO4 70286 - MADAVOOR | X X X X X X X X X X X |
| 43 RBO4 08030 - PONGANADU 44 RBO4 10597 - H L L PEROORKADA 45 RBO4 10691 - KATTAKKADA 46 RBO4 10693 - NEDUMANGAD TOWN 47 RBO4 10787 - NETTAYAM 48 RBO4 13221 - THACHOTTUKAVU PEYAD 49 RBO4 32676 - KOTTOOR 50 RBO4 70052 - VAMANAPURAM 51 RBO4 70214 - VITHURA 52 RBO4 70286 - MADAVOOR | X X X X X X X X X X X X X X X X X X X |
| 44 RBO4 10597 - H L L PEROORKADA 45 RBO4 10691 - KATTAKKADA 46 RBO4 10693 - NEDUMANGAD TOWN 47 RBO4 10787 - NETTAYAM 48 RBO4 13221 - THACHOTTUKAVU PEYAD 49 RBO4 32676 - KOTTOOR 50 RBO4 70052 - VAMANAPURAM 51 RBO4 70214 - VITHURA 52 RBO4 70286 - MADAVOOR | X X X X X X X X X |
| 45 RBO4 10691 - KATTAKKADA 46 RBO4 10693 - NEDUMANGAD TOWN 47 RBO4 10787 - NETTAYAM 48 RBO4 13221 - THACHOTTUKAVU PEYAD 49 RBO4 32676 - KOTTOOR 50 RBO4 70052 - VAMANAPURAM 51 RBO4 70214 - VITHURA 52 RBO4 70286 - MADAVOOR | X X X X X X X X |
| 46 RBO4 10693 - NEDUMANGAD TOWN 47 RBO4 10787 - NETTAYAM 48 RBO4 13221 - THACHOTTUKAVU PEYAD 49 RBO4 32676 - KOTTOOR 50 RBO4 70052 - VAMANAPURAM 51 RBO4 70214 - VITHURA 52 RBO4 70286 - MADAVOOR | X X X X X X X |
| 47 RBO4 10787 - NETTAYAM 48 RBO4 13221 - THACHOTTUKAVU PEYAD 49 RBO4 32676 - KOTTOOR 50 RBO4 70052 - VAMANAPURAM 51 RBO4 70214 - VITHURA 52 RBO4 70286 - MADAVOOR | X X X X X |
| 48 RBO4 13221 - THACHOTTUKAVU PEYAD 49 RBO4 32676 - KOTTOOR 50 RBO4 70052 - VAMANAPURAM 51 RBO4 70214 - VITHURA 52 RBO4 70286 - MADAVOOR | X X X X X |
| 49 RBO4 32676 - KOTTOOR 50 RBO4 70052 - VAMANAPURAM 51 RBO4 70214 - VITHURA 52 RBO4 70286 - MADAVOOR | X X X X |
| 50 RBO4 70052 - VAMANAPURAM 51 RBO4 70214 - VITHURA 52 RBO4 70286 - MADAVOOR | X X X |
| 51 RBO4 70214 - VITHURA 52 RBO4 70286 - MADAVOOR | X X X |
| 52 RBO4 70286 - MADAVOOR | X X |
| | Χ |
| 53 RBO4 70302 - POOVACHAL ADB | |
| 33 1123 13332 13311111111 | Х |
| 54 RBO4 70322 - OTTASEKHARAMANGALAM | |
| 55 RBO4 70433 - VATTIYOORKAVU | Χ |
| 56 RBO4 70503 - PALLICKAL THIRUVANANTHAPURAM | Χ |
| 57 RBO4 70525 - MADATHARA | Χ |
| 58 RBO4 70546 - PANGODE | Χ |
| 59 RBO4 70547 - UZHAMALACKAL | Χ |
| 60 RBO4 70738 - MALAYINKEEZHU | Χ |
| 61 RBO4 70793 - VELLANAD | Χ |
| 62 RBO4 70796 - KUDAPPANAKUNNU | Χ |
| 63 RBO4 70861 - ENIKKARA | Χ |
| 64 RBO4 70872 - KALLARA | Χ |
| 65 RBO4 70884 - PBB NEDUMANGAD | Χ |
| 66 RBO4 71176 - PULIYARAKONAM | Χ |
| 1 RBO1 03355 - PATTOM | Υ |
| 2 RBO1 04182 - PERSONAL BANKING BRANCH TRIVANDRUM | Υ |
| 04478 - TREASURY BR THIRUVANANTHAPURAM | |
| 3 RBO1 10298 - CURRENCY ADMN CELL TVM | Υ |
| 4 RBO1 04685 - JAWAHAR NAGAR [TVM] | Υ |
| 5 RBO1 07019 - NRI TRIVANDRUM | Υ |
| 6 RBO1 07203 - ALTHARA JUN.TVM | Υ |
| 7 RBO1 07211 - SME BRANCH THIRUVANANTHAPURAM | Υ |
| 8 RBO1 07898 - NANTHENCODE TVM | Υ |
| 9 RBO1 13312 - VANCHIYOOR | Υ |
| 10 RBO1 16083 - MARUTHAMKUZHY | Υ |
| 11 RBO1 16656 - PBB SASTHAMANGALAM | Υ |
| 12 RBO1 17183 - PONGUMOODU | Υ |
| 13 RBO1 17756 - COTTON HILL | Υ |
| 14 RBO1 18145 - KUMARAPURAM | Υ |

| 15 | RBO1 | 70020 - KOWDIAR | Υ |
|----|------|---|-------|
| 16 | RBO1 | 70023 - SASTHAMANGALAM | Υ |
| 17 | RBO1 | 70026 - PUTHENCHANTHAI | Υ |
| 18 | RBO1 | 70029 - THIRUVANANTHAPURAM- MEDICAL COLLEGE | Υ |
| 19 | RBO1 | 70033 - VAZHUTHACAUD | Y |
| 20 | RBO1 | 70212 - LIC JUNCTION PATTOM | Υ |
| 21 | RBO1 | 70213 - PETTAH BRANCH | Υ |
| 22 | RBO1 | 70263 - SANTHI NAGAR | Υ |
| 23 | RBO1 | 70338 - KAITHAMUKKU | Υ |
| 24 | RBO1 | 70415 - VIKAS BHAWAN | Υ |
| 25 | RBO1 | 70493 - K. S. E. B. ADMN. COMPLEX | Υ |
| 26 | RBO1 | 70671 - KESAVADASAPURAM | Υ |
| | | 70828 - SPL NRI PREM BKG CENTRE | |
| 27 | RBO1 | THIRUVANANTHAPU | Υ |
| 28 | RBO2 | 03826 - MARAKADA ROAD TRIVANDRUM | Υ |
| 29 | RBO2 | 10112 - NEYYATTINKARA TOWN | Υ |
| 30 | RBO2 | 10595 - POONKULAM BRANCH | Υ |
| 31 | RBO2 | 60333 - FORT BRANCH THIRUVANANTHAPURAM | Υ |
| 32 | RBO2 | 70019 - VELLAYANI | Υ |
| 33 | RBO2 | 70022 - THIRUMALA | Υ |
| 34 | RBO2 | 70024 - MANACAUD | Υ |
| 35 | RBO2 | 70030 - INDUSTRIAL ESTATE PAPPANAMCODE | Υ |
| 36 | RBO2 | 70031 - KARAMANA | Υ |
| 37 | RBO2 | 70035 - BALARAMAPURAM | Υ |
| 38 | RBO2 | 70037 - PARASSALA | Υ |
| 39 | RBO2 | 70042 - NEYYATTINKARA | Υ |
| 40 | RBO2 | 70046 - POOVAR | Υ |
| 41 | RBO2 | 70295 - CHENTHITTA | Υ |
| 42 | RBO2 | 70307 - PRAVACHAMBALAM | Υ |
| 43 | RBO2 | 70325 - VIZHINJAM | Υ |
| 44 | RBO2 | 70356 - OORUTTAMBALAM | Υ |
| 45 | RBO2 | 70481 - TEMPLE VIEW THIRUVANANTHAPURAM | Υ |
| 46 | RBO2 | 70568 - JAGATHY | Υ |
| 47 | RBO2 | 70851 - S C T ENGINEERING COLLEGE | Υ |
| 48 | RBO2 | 71075 - UCHAKKADA | Υ |
| 49 | RBO2 | 61001- RBO 2, THIRUVANANTHAPURAM | Υ |
| 50 | RBO3 | 02279 - THUMBA | Υ |
| 51 | RBO3 | 04237 - VALIATHURA | Υ |
| 52 | RBO3 | 05317 - MANGALAPURAM | Υ |
| 53 | RBO3 | 06686 - SREEKARIYAM | Υ |
| 54 | RBO3 | 07017 - ATTINGAL | Υ |
| 55 | RBO3 | 70025 - SANGHUMUGHOM | Υ |

| 56 | RBO3 | 70038 - KADAKKAVOOR | Υ |
|----|------|---|---|
| 57 | RBO3 | 70039 - MAMOM ATTINGAL | Y |
| 58 | RBO3 | 70044 - CHIRAYINKEEZHU | Y |
| 59 | RBO3 | 70050 - VAKKOM | Y |
| 60 | | 70221 - KALLAMBALAM TOWN | Y |
| 61 | RBO3 | 70268 - ENGINEERING COLLEGE- KULATHOOR | Y |
| | RBO3 | | |
| 62 | RBO3 | 70288 - KALLAMPALLY JUNCTION SREEKARYAM | Y |
| | RBO3 | 70312 - PERUNKUZHI | Y |
| 64 | RBO3 | 70445 KAZHAKITTANA | Y |
| 65 | RBO3 | 70445 - KAZHAKUTTAM | Y |
| 66 | RBO3 | 70581 - AKKULAM | Y |
| 67 | RBO3 | 70667 - ALAMCODE | Y |
| 68 | RBO3 | 70722 - CHEMPAKAMANGALAM | Y |
| 69 | RBO4 | 70041 - KILIMANOOR | Y |
| 70 | RBO4 | 08787 - THATTATHUMALA | Y |
| 71 | RBO4 | 10789 - VENJARAMOOD TOWN | Y |
| 72 | RBO4 | 12319 - VATTAPPARA | Y |
| 73 | RBO4 | 16081 - MANNANTHALA | Y |
| 74 | RBO4 | 70018 - POTHENCODE | Y |
| 75 | RBO4 | 70040 - COLLEGE ROAD KATTAKADA | Y |
| 76 | RBO4 | 70278 - VEMBAYAM | Y |
| 77 | RBO4 | 70383 - PEYADU | Y |
| 78 | RBO4 | 70434 - PEROORKADA- INDIRANAGAR | Y |
| 79 | RBO4 | 70523 - PALODE | Y |
| 80 | RBO4 | 70639 - NALANCHIRA | Y |
| 81 | DGM | 04350 - COMMERCIAL BRANCH TRIVANDRUM | Y |
| 82 | DGM | 04494 - RACPC I TRIVANDRUM | Y |
| 83 | DGM | 61042 - RASMEC KAZHAKOOTAM | Y |
| 84 | LHO | 4477-CPPC | Y |
| 85 | LHO | 15210-DAC | Y |
| 86 | CC | 10058-SARB TRIVANDRUM | Y |
| 1 | RBO1 | 00941 - THIRUVANANTHAPURAM | Z |
| | | 04360 - SPL PBB THIRUVANANTHAPURAM 14916-RBO 1, THIRUVANANTHAPURAM | |
| | | 61002- RBO 3, THIRUVANANTHAPURAM | |
| 2 | 7 | 06204- AO, TRIVANDRUM | Z |
| 3 | RBO1 | 70252 - MAIN TREASURY TRIVANDRUM 70028 - TRIVANDRUM CITY | Z |
| 4 | RBO3 | 70048 - MAIDANAM VARKALA | Z |
| 5 | RBO4 | 70036 - NEDUMANGAD | Z |

| 6 | DGM | 13202 - SME CITY CREDIT CENTRE TRIVANDRUM | Z |
|----|-----|--|---|
| | | 61003- RBO 4, THIRUVANANTHAPURAM | |
| 7 | DGM | 61043 - RASMECCC NEDUMANGAD | Z |
| 8 | DGM | 70901 - RACPC - II THIRUVANANTHAPURAM | Z |
| 9 | LHO | 70578-CCPC | Z |
| | | 4282-LHO 70502 - NEW ADMINISTRATIVE COMPLEX- POOJAPURA | |
| 10 | LHO | 61181-SBILD | Z |
| 11 | CC | 61035-CAO THRIUVANANTHAPURAM 61146-GOC THIRUVANANTHAPURAM | 7 |
| 11 | | 011+0-GOC TITINOVANANTHAFONAIVI | |

- There may be changes in the category of the branches depending on load enhancement due to increase in connected load.
- The sanctioned load of KSEB will be taken as the criteria for fixing the category of the branch/ office and the payment will be based on the same.
- For Z category/HT substation, with single metering for various out fits, Auditor shall submit report for the HT Substation considering all the connected loads and individual reports to each outfits connected to the system with their respective connected load details.
- For Z category branches, thermos-graphic images of DB's, panel boards shall be enclosed with the report without which payment may not be released.
- All Empaneled Electrical Auditors can apply for Category X & Category Y.
- For Category Z, only Empaneled Electrical Auditor with accreditation for Energy Auditing shall be eligible. Proof for the same shall be enclosed as documentary proof

ANNEXURE - E - PRICE BID FORMAT

| BRANCHES UNDER CATEGORY X | BRANCHES UNDER CATEGORY Y | BRANCHES UNDER CATEGORY Z | |
|---|--|---|--|
| LT category upto 30KW | LT category above 30KW - 60KW | HT category/ connected load above 60KW | |
| Rate quoted per branch in Rs (Exclusive of GST) | Rate quoted per branch in Rs (Exclusive of GST) | Rate quoted per branch in Rs (Exclusive of GST) | |
| In Fig: | In Fig: | In Fig: | |
| In words: | In words: | In words: | |
| | | | |
| | | | |

| Place: | Signature |
|--------|-----------|
| Date: | Stamp |