

क्षेत्रीय कार्यालय, इंदौर
क्षेत्रीय कार्यालय, जीवन प्रदीप बिल्डिंग, 12-12A, अनूप नगर, इंदौर (म.प्र.) – 452011
ई मेल: pndroindore@unionbankofindia.bank वेबसाइट: www.unionbankofindia.co.in

**ELECTRICAL SAFETY AND ENERGY AUDIT OF BANK'S BUILDINGS / OFFICES / BRANCHES
LOCATED UNDER REGIONAL OFFICE, INDORE**

Union Bank of India, Regional Office, Indore invites rates quotation from empanelled Electrical Safety & Energy Auditors by Bank' Central Office to carry out Electrical safety and Energy Audit of Bank's Buildings / Offices / Branches at Alirajpur, Barwani, Burhanpur, Dhar, Indore, Jhabua, Khargone, Mandsaur, Neemuch, Ratlam & Ujjain districts under Regional Office, Indore (M.P.)

Empanelled Electrical Safety & Energy Auditors by Bank' Central Office may submit their bids as per attached format to The Regional Head, Union Bank of India, Regional Office, Indore, Jeevan Pradeep Building, 12-12 A, Anoop Nagar, Indore (M.P.) 452011 during working hours from 02/05/2022 to 23/05/2022.

The last date for submission of the bids is 23/05/2022 upto 14.00 Hrs at Union Bank of India, Regional Office Indore. The bids will be opened on 23/05/2022 at 15.30 Hrs.

Union Bank of India reserves the right for rejecting any or all applications received without assigning any reasons whatsoever.

Regional Head

**ELECTRICAL SAFETY AND ENERGY AUDIT OF BANK'S BUILDINGS / OFFICES / BRANCHES
LOCATED UNDER REGIONAL OFFICE, INDORE**

Union Bank of India, Regional Office, Indore invites rates quotation from empanelled Electrical Safety & Energy Auditors by Bank's Central Office to carry out Electrical safety and Energy Audit of Bank's Buildings / Offices / Branches at Alirajpur, Barwani, Burhanpur, Dhar, Indore, Jhabua, Khargone, Mandsaur, Neemuch, Ratlam & Ujjain districts under Regional Office, Indore (M.P.)

OBJECTIVE

- (i) 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:
- (ii) Identifying the potential electrical/fire hazards
- (iii) Boosting employee morale by providing safe working environment.
- (iv) Smoothening the operation and maintenance of electrical installation.
- (v) Avoiding loss of properties, human life and costly equipment.
- (vi) Ensuring the compliance with relevant codes and practice, statutory rules and regulations.
- (vii) Establishing procedures and process of safe working in electrical installation.

SCOPE OF WORK:

A. The Electrical safety & energy audit shall be carried out in branches/offices to specifically cover the following aspects:

- (i) Check and record the existing electrical installations, quality of cables, switches DBs/MCB/MCCB/electrical panel/at Landlord's end/LT panel at office/branch level and its capability to cater the present electrical load. Check and note.
- (ii) The Main incomer feeders and its ratings.
- (iii) No of feeders both single phase MCB and 3 phases MCB for UPS, AC & LIGHTS.
- (iv) Note the Main incoming cable from the meter room DB to main DB of the Branch.
- (v) Check the termination is proper with lugs or not. Thermal image the main incomer in the main panel and at meter room, also take digital photographs of the all these panels and feeder respectively.
- (vi) Measure all electrical Parameters like Voltage, Load Current, Power Factor, Kilo Watts per Phase and review these parameter with respect to design parameters, record the maximum and minimum voltage between Phase and neutral and between neutral and earth respectively.
- (vii) Check and record the temperature of the live wires using Infra Red Guns / Thermal imaging device. Also check load balancing, earth resistance, Earth & Neutral voltage, check

harmonics or any abnormalities. In case if the temperature is above permissible limits then solution needs to be provided to rectify the same.

(viii) Check AC installations like electrical terminations, Refrigerant lines insulation, Measure / Check compressor load, Check any heating at the electrical terminations, water leakage due to condensation.

(ix) Checks: Insulation and outdoor units and take photographs and also measure the load current, Voltage, Power single phase and power factor. Measure Supply and return air temp.

(x) Check and record the peak voltage/peak current/peak frequency of main incomer using Voltage analyzer.

(xi) Check the lighting circuits and measure the Lux level. Accordingly suggest reduction/increase in lighting requirements.

(xii) Measure the Noise level (db) in the facility, Measure the room temperature. Check the UPS Load and service reports, condition of Batteries.

(xiii) Power quality monitoring UPS Input and output power, DG and Raw Power Incomer for 4 Hours each.

(xiv) Check the general condition of the facility and equipment and quantification.

(xv) Identification / verification of energy consumption and other parameters by measurements. Check energy bills and recommend the solution to optimize the consumptions, any penalties, contract demand etc.

(xvi) Check the Main Switch, the cable coming from the Electrical supply for any carbon deposition. Check the cable connection/ termination of the DG sets.

(xvii) Check the operation of Fire Alarm system installed at branch/office.

(xviii) Review the SLD and correct the changes if any. Analysis of all these actual parameters and equipments and recommend the solution to overcome the gaps,

(xix) Monitor the power quality at HT Incomer and output of Transformer at least 24 hours, including transient, KVA, KW, Voltage, current, harmonics both Voltage and current.

(xx) Measure the power quality of all UPS input and output, chiller feeder, DG power etc.

(xxi) Testing of all ACB and major MCCB.

(xxii) Check the Lux levels as per standard guidelines

(xxiii) Discrimination test of existing protection system of power distribution system with the help of ETAP SOFTWARE and verifying all relay settings.

(xxiv) Physical inspection of the office premises with reference to applicable Indian standards, Indian Electricity Rules and other relevant codes of Practice & identifying electrical hazards (shocks, fires, etc.).

(xxv) Review of protection devices / system of the electrical installation including fuses, ELCB, MCB, MCCB, master electrical switch, etc.

(xxvi) Review of adequacy of cables, motors, water pumps etc. based on actual load current measurements and cable current carrying capacities.

(xxvii) Review the EPM (Electrical Preventive Maintenance) programme and to examine documentation, checklists, test records, etc. and to suggest recommendations as per applicable standards.

- (xxviii) To evaluate the earthing system (installation and maintenance) based on IS 3043 including availability, upkeep and testing of earth pits and to suggest recommendations
- (xxix) Display of danger notices.
- (xxx) Use of electrical rubber mats, rubber gloves, etc.
- (xxxi) Provision of identification tag of cables, cable glands, sealing of cable entry and unused holes.
- (xxxii) Upkeep and housekeeping of electrical installations.
- (xxxiii) Provision of indicating lamps on the control panels.
- (xxxiv) Use of 3-pin plug and socket.
- (xxxv) Fire protection of electrical installations.
- (xxxvi) Arrangement for repair and maintenance of electrical installations, equipment and appliances including qualified maintenance personnel, accessibility, maintenance practices, etc.
- (xxxvii) Adequacy of rating of electrical equipment and installation.
- (xxxviii) Adequacy of isolation of current carrying parts.
- (xxxix) Lightning protection.
- (xl) Weather protection of outdoor electrical equipment and fittings
- (xli) Cables - dressing, routing, identification tags, glands, lugs, armoured earthing, sealing of cable entry and used holes, adequacy for current carrying capacity, colour coding.
- (xlii) DG Set - emergency switch, oil leakage, stack and noise monitoring,
- (xliii) UPS and battery room.
- (xliv) Review of the following test records, (if any) evaluating the test results and to suggest recommendations as per applicable standards.
- (xlv) Insulation resistance tests.
- (xlv) Earth resistance tests.
- (xlvii) Check the various parameter including energy audit and electric safety audit of Air Conditioning units/system, Heating Ventilation & Air Conditioning Plants (Whole plant including Air Handling Units, air balancing in ducts etc.) and other cooling system.
- (xlviii) List of unsafe condition in buildings and rectification to be done.
- (xlix) How to reduce power consumption.
- (l) Possibility of installation of Solar panels.
- (li) Power consumption incase existing lights are replaced by LED type light fixtures.
- (lii) Preparation of list of electrical equipments (with rating) installed in building.
- (liii) Analysis of electric consumption in last 12 months.
- (liv) Observations and recommendations.

B. AUDIT METHODOLOGY:

- (i) Development of audit checklist based on the scope of work provided by Union Bank of India, Regional Office, Indore
- (ii) Carry out inspection of electrical installations in the Office premises / Branches.
- (iii) Discussions with key personnel to verify existence of the systems/procedures.
- (iv) Review of key documents and records.
- (v) Submission of the audit report.

C. AUDIT CRITERIA:

- (i) Applicable safety-related statutes including the Electricity Act and Indian Electrical Rules
- (ii) National Building Code (Electrical Installations)
- (iii) National Electrical Code
- (iv) Other Relevant Indian standards & codes of practice.
- (v)

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

E. SCOPE: It includes comprehensive electric safety audit on the following measures:

- (a) Visiting each and every branch / offices and verifying the installation.
- (b) Electric safety Audit & Energy Audit.
- (c) Suggestion and corrective measures necessary towards electrical fire and safety measures, Up gradation in the electrical system, electrical load, connected load, sanctioned load, enhancement of load, penalties in electricity bills, contract demand etc.
- (d) Submission of Comprehensive Report, observed/verified during Building inspection. Triplicate report to be prepared.
- (e) The scope includes arranging all required tools, measuring instruments and technicians required for completion of the scope of work. It also includes work instructions from Bank, visiting site, and preparing reports so as to enable Bank to take a decision for improvement.
- (f) The agency shall maintain following registers on daily basis i.e. Daily progress report and hindrance register.
- (g) The agency has to submit PERTCHART incorporating all activities required for the completion of the work in time to Regional office.

6. PAYMENT TERMS: No advance payment will be given against the subject work. 100% payment will be effected by the respective Offices / Branches on carrying out the Electrical safety & energy audit and submission of the electrical safety & energy audit report to the respective Offices / Branches.

7. **DETAILS OF BRANCHES:** The District wise branches under Regional Office, Indore where the audit is to be carried out are listed below. It may be noted that, at the discretion of competent authority the branches may be increased or decreased. The successful bidder/s shall be provided with complete details of the Branches & Address on award of contract.

| Sl. | District | Metro | Urban | Semi urban | Rural | Total |
|-------------|-----------|--------------------------------|-------|--------------------|-------|--------------------------------|
| 1 | Alirajpur | 0 | 0 | 1 | 0 | 1 |
| 2 | Barwani | 0 | 0 | 1 | 0 | 1 |
| 3 | Burhanpur | 0 | 1 | 0 | 0 | 1 |
| 4 | Dhar | 0 | 1 | 2 | 2 | 5 |
| 5 | Indore | 24 + 01 (RO) + 03 Offsite ATMs | 1 | 0 | 3 | 28 + 01 (RO) + 03 ATMs |
| 6 | Jhabua | 0 | 0 | 1 | 0 | 1 |
| 7 | Khargone | 0 | 1 | 2 | 2 | 5 |
| 8 | Mandsaur | 0 | 1 | 0 | 0 | 1 |
| 9 | Neemuch | 0 | 0 | 0 | 0 | 0 |
| 10 | Ratlam | 0 | 1 | 1 + 01 Offsite ATM | 5 | 7+ 01 Offsite ATM |
| 11 | Ujjain | 0 | 3 | 1 | 0 | 4 |
| GRAND TOTAL | | 24 + 01 (RO) + 03 Offsite ATMs | 9 | 9 + 01 Offsite ATM | 12 | 54 + 01 (RO) + 04 Offsite ATMs |

INSTRUCTIONS TO BIDDERS

(i) Intending Applicants are required to submit their applications with full bio-data giving details about their organization, experience, technical personnel in their organization, competence and adequate evidence of their financial standing, etc. in the enclosed form which will be kept confidential.

(ii) Duly sealed cover super scribed as “Price Bid to carry out Electrical safety and Energy Audit of Bank’s Buildings / Offices / Branches located under Regional Office, Indore (M.P.) and the envelope containing the bid must be addressed to:

The Regional Head,
Union Bank of India, Regional Office, Indore
Jeevan Pradeep Building, 12-12 A, Anoop Nagar, Indore (M.P.) 452011

(iii) The sealed tenders must be submitted by 23/05/2022 up to 3.00 PM in the TENDER BOX kept at the above mentioned address.

(iv) Applications received after last date and time at the above mentioned address shall be summarily rejected. The bids shall be opened on 23/05/2022 at 15.30 hrs (IST) at the above referred address in the presence of Bank’s officials and representatives of the bidders. Only one representative shall be allowed to present during the opening of the bid.

(v) Bank reserves the right to reject any/all the applications/offers without assigning any reason whatsoever. The tenderer must use only the tender form as per this tender document for the purpose. The tender must be dropped in the tender box before last date and time. Delivery of tender through Courier / Post shall be avoided as any disputes arising thereof shall not be entertained. However, the tenderer, if sending the tender through Courier / Post should ensure that the tender document should reach the office before the last date and time of submission. Record of such tenders will be maintained by Bank and the pre-qualification cum technical bids will be opened on the date & time of opening of the bids as mentioned in the tender document. Bank will not be responsible for damage in transit and delay of receipt of tender, if any or sent by a special messenger. Tender received late shall be rejected.

(vi) Decision of Bank in regard to selection of agency/firm will be final and binding on the applicants. Bank is not bound to assign any reason for acceptance / rejection of any applications.

(vii) Each page of the application shall be signed. The application shall be signed by persons / persons on behalf of the organization having necessary authorization / Power of Attorney to do so.

(viii) If the space in the Performa is insufficient for furnishing full details, such information may be supplemented on separate sheets of paper, stating therein the part of the Performa and serial number. Separate sheets shall be used for each part. However the format shall strictly be as per Performa.

(ix) Award of Contract: Price bids of bidders shall be evaluated and L1 price bid(s) shall be decided from qualifying price bids. The bank does not bind itself to accept the lowest or any tender and reserves to itself the right to accept or reject any or all the tenders, either in whole or in part, without assigning any reasons for doing so.

(x) The application which is received after due date & time is liable for rejection. Applications incomplete in any respect & which are not legible are liable for rejection.

(xi) The appointed agency / firm has to carry out the Electrical & Energy Audit as per the agreed audit Performa and detailed scope of work defined in the tender document. The copy of the report duly signed by the certified Electrical Auditor / Engineer on behalf of the firm is to be submitted to the respective Branch and copy to Regional Office, Indore (M.P.). It is to be noted that, Union Bank of India or its Offices / Branches shall not be liable to pay any charges related to travelling, lodging / boarding, food or refreshment etc. other than professional fees payable with applicable taxes on account of the subject work under the scope of contract.

(xii) The Electrical Safety & Energy Audit of all the Offices / Branches must be completed within three months time period from the date of awarding the contract.

(xiii) Submission of tenders in any other format will not be entertained & will be summarily rejected.

(xiv) The bank reserves the right to cancel one or all bids without assigning any reason whatsoever.

(xv) **Non-disclosure clause:** The empanelled firm/agency shall not disclose directly or indirectly any information, materials and of the Bank's infrastructure/ systems/ equipment's etc., which may come to the profession or knowledge of the firm/agency during the course of discharging its contractual obligations in connection with the agreement, to any third party and shall at all times hold the same in strictest confidence. The empanelled firm/agency shall treat the details of the contract as private and confidential, except to the extent necessary to carry out the obligations under it or to comply with applicable laws. The firm/agency shall not publish, permit to be published, or disclose any particulars of the works in any trade or technical paper or elsewhere without the previous written consent of the Employer. The firm/agency shall indemnify the Employer for any loss suffered by the Employer as a result of disclosure of any confidential information. Failure to observe the above shall be treated as breach of contract on the part of the firm/agency and the Employer shall be entitled to claim damages and pursue legal remedies. The firm/agency shall take all appropriate actions with respect to its employees to ensure that the obligations of non-disclosure of confidential information under this agreement are fully satisfied. The contractor's obligations with respect to non-disclosure and confidentiality will survive the expiry or termination of this agreement for whatever reason.

(xvi) **Sexual harassment Clause:**

(a) The firm/agency shall be solely responsible for full compliance with the provisions of "the Sexual Harassment of women at work place (Prevention, Prohibition and Redressal) Act, 2013. In case of any complaint of sexual harassment against its employee within the premises of the Bank, the complaint will be filed before the internal complaints committee constituted by the contractor/Agency or Local Complaints committee as the case may be and the contractor/ agency shall ensure appropriate action under the said Act in respect of the Complaint.

(b) Any complaint of sexual harassment from any aggrieved employee of the service provider against any employee of the Bank or any employee of any other firm working in the Bank shall be taken cognizance of by the Regional Complaints Committee constituted by the Bank.

(c) The firm/agency shall be responsible for any monetary compensation that may need to be paid in case the incident involves the employees of the contractor, for instance any monetary relief to Bank's employee or other firm's employee, if sexual violence by the employee of the contractor is proved.

(d) The firm/agency shall be responsible for educating its employees about prevention of sexual harassment at work place and related issues.

(e) The firm/agency shall provide a complete and updated list of employees who shall be deployed within the Bank's premises.

(xvii) **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 purely at the discretion of the Bank. No extra claims will be admissible later on these grounds.

(viii) 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/agency. The persons carrying out the Electrical safety audit shall also use all the required Personnel protective equipment for their own protection.

DECLARATION
(To be submitted on Firm's letter head)

To,

The Regional Head,
Union Bank of India, Regional Office, Indore
Jeevan Pradeep Building, 12-12 A,
Anoop Nagar, Indore (M.P.) 452011

1. I / We have read the instructions appended to the proforma and I / We understand that if any false information is detected at a later date, any future contract made between ourselves and Union Bank of India, on the basis of the information given by me / us can be treated as invalid by the Bank and I / We will be solely responsible for the consequences.
2. I / We agree that the decision of Union Bank of India in selection of Electrical Safety & Energy Auditors will be final and binding to me / us.
3. All the information furnished by me hereunder is correct to the best of my knowledge and belief.
4. I / We agree that I / we have no objection if enquiries are made about the work listed by me / us in the accompanying sheets.
5. I / We agree that I / We have not applied in the name of sister concern for the subject empanelment process.
6. I/We hereby confirm that our firm/agency/company has not been disqualified / debarred / blacklisted by any governments , semi-governments, PSUs, banks during last seven years.

Place :
Date :

SIGNATURE
NAME & DESIGNATION
SEAL OF ORGANISATION

PRICE BID

(To be submitted on Firm's letter head in separate sealed envelope)

To,

The Regional Head,
Union Bank of India, Regional Office, Indore
Jeevan Pradeep Building, 12-12 A,
Anoop Nagar, Indore (M.P.) 452011

Sub: Our offer towards carrying out Electrical safety and Energy Audit of Bank's Buildings / Offices / Branches under Regional Office, Indore.

Dear Sir,

1. I / We have gone through the tender document on the captioned project and we have understood requirements of the works. We are interested in undertaking the subject work as per details of Offices and Branches provided in the tender document. I / We submit our commercial offer as under: -

| Sl. | Branches | Quantity | Rate per Branch in INR | Total Amount in INR |
|-----|--|----------|------------------------|---------------------|
| 1 | Regional Office, Indore | 01 | | |
| 2 | Metro Branches (Approx area: 2200 Sq. Feet) | 24 | | |
| 3 | Urban Branches (Approx area: 1800 Sq Ft) | 09 | | |
| 4 | Semi -Urban Branches (Approx area: 1500 Sq. Feet) | 09 | | |
| 5 | Rural Branches (Approx area: 1300 Sq. Feet) | 12 | | |
| 6 | Offsite ATM | 04 | | |
| | TOTAL | | | |
| | Applicable SGST @ _____ % : | | | |
| | Applicable CGST @ _____ % : | | | |
| | GRAND TOTAL: | | | |

GRAND TOTAL (In words) Rupees _____

2. The rates quoted for carrying out Electrical safety and Energy audit and inspection after for rectification work by Offices / Branches must be inclusive of all the charges, taxes i.e. Transportation, Engineer's fees, TA/DA and any other expenses whatsoever.

3. No conditional discount offered in the Price Bid shall be considered. The tender with any conditional discount will be summarily rejected.

4. Deduction of TDS will be as per rule.

5. We will not claim any additional charges from Union Bank of India or its Offices / Branches towards travelling, lodging / boarding, food or refreshment etc. other than professional fees payable with applicable taxes on account of the subject work under the scope of contract.

I/We have read and understood the above terms and conditions and quoted my/our rates as above.

Place :
Date :

SIGNATURE
NAME & DESIGNATION
SEAL OF ORGANISATION