



Reserve Bank of India
Premises Department
Fort, Mumbai

Notice Inviting Quotation
(NIQ)

Quotation for Conducting Electrical Safety Audit of Bank's Central Office
Building at Fort, Mumbai

Sealed quotations are invited for "Conducting Electrical Safety Audit of Bank's Central Office Building at Fort, Mumbai". The work is estimated to cost ₹. 1,00,000/- including GST and is to be completed within 8 weeks from the 10th day of award of work.

1. Quotations are invited from firms having office in Mumbai

- The intending tenderer for conducting Electrical Safety Audit should be professionally qualified degree holder and experienced Electrical Safety Auditor.
- The firm should have experience of carrying out at least two electrical safety audits in Banks, Financial Institutions, major hotels or multi-storied office buildings or any other electrical installations with minimum connected load of 500KW in last 5 years.

2. In the event of intending tenderer fails to comply with eligibility criteria, the Bank reserves the right to reject the tender without assigning any reason thereof.

3. Quotations may be downloaded from www.rbi.org.in from **24/10/2020 to 01/12/2020** up to 15:00 Hrs. on all days. The duly filled in tender documents should reach at Premises Department, Central Office Building, Reserve Bank of India, Shahid Bhagat Singh Marg, Fort, Mumbai-400001 by 14:00 Hrs. on 01/12/2020.

4. The Earnest Money Deposit (**EMD**) of **Rs.2000/-** may be remitted through NEFT and documentary evidence in support of remittance shall be submitted in sealed cover addressed to Chief General Manager, Premises Department, Central Office Building, Mumbai-400 001 so as to reach Premises Department Central Office up to **14:00 Hrs. on 01/12/2020** superscripted as "EMD for Conducting Electrical Safety Audit of Bank's Central Office Building at Fort, Mumbai".

5. The eligible tenderer shall submit their quotation in two parts in sealed covers. Part-I of the tender will contain the Pre- Qualification papers and Bank's standard technical and commercial conditions for the proposed work, tenderers' covering letter, and tenderer's additional conditions, if any and the same should be sealed in one cover, superscribing "Part – I Conducting Electrical Safety Audit of Bank's Central Office Building at Fort, Mumbai".

6. Part II of quotation will contain only price part and be sealed in a separate cover, superscribing "Part – II Conducting Electrical Safety Audit of Bank's Central Office Building at Fort, Mumbai". Both these sealed covers will further be sealed in another envelope addressed by name to the Chief general Manager, Reserve Bank of India, Premises Department, Central Office Building, Shahid Bhagat Singh Marg, Fort, Mumbai-400001 **will be received by up to 14:00 Hrs. on 01/12/2020** in the manner described in the tender form.

Quotation received after the due date and time will not be accepted under any circumstances.

7. Pre Bid Meeting of intending tenderers will be held on **18 November 2020** at 11:00 Hrs. in Premises Department, Central Office Building, Shahid Bhagat Singh Marg, Fort, Mumbai-400001

8. Part I of the Quotations will be opened at 15.00 Hrs on 01 December 2020 in the presence of the authorized representative of the tenderers who choose to be present. The time and date for opening of Part II shall be intimated to the contractors after scrutiny of clarifications/conditions, if any, received in Part-I. If no condition is mentioned by any of the tenderer, Part II shall be opened on the same day.

9. For any clarification please contact Shri. Subhash Govind Pawar, Assistant Manager. Contact no. 9958969919 and [email](#).

10. The Bank is not bound to accept the lowest tender and reserves the right to accept either in full or in part any tender. The Bank also reserves the right to reject any or all the tenders without assigning any reason there for.

Chief General Manager



**Reserve Bank of India
Premises Department
Fort, Mumbai**

**Quotation for Conducting Electrical Safety Audit of
Bank's Central Office Building at Fort, Mumbai**

(Part I)

Name of Tenderer _____

Address _____

Date and time of Pre Bid Meeting : - November 18, 2020 at 1100 Hrs

Due date and time of submission of tender: - December 01, 2020 upto 1400 Hrs.

Date of opening of Part I of Quotation :- December 01, 2020 upto 1500 hrs

Venue : RBI, Premises Department, 5th floor, Central
Office Building at Fort, Mumbai-400 001

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RESERVE BANK OF INDIA

Premises Department

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Chief General Manager

Section I

Form of Quotation

Place _____

Date _____

To,

The Chief General Manager
Premises Department,
Reserve Bank of India
Fort, Mumbai

Dear Sir,

We have carefully examined the specifications, designs and schedule of quantities relating to the Electrical Safety Audit specified in the memorandum hereinafter set out and having visited and examined the site of the Electrical Safety Audit as specified in the said memorandum and having acquired the requisite information relating thereto as affecting the tender. We hereby offer to conduct the Electrical Safety Audit as specified in the said memorandum within the time specified in the said memorandum at the rates mentioned in the attached Schedule of Quantities and in accordance in all respects with specifications, designs and instructions in writing referred to in articles of agreement, general instructions to the tenderers and special conditions, conditions hereinbefore referred to, specification, data sheet and schedule of quantities and with such equipment as are provided for, by and in all other respects, in accordance with such conditions so far as they may be applicable.

MEMORANDUM

a	Description of works	Conducting Electrical Safety Audit of Bank's Central Office Building at Fort, Mumbai
b	Estimated cost	Rs.1,00,000/-
c	Terms of payment	As per clause 12 of Commercial Conditions.
d	Earnest Money	Rs.2000/- Through NEFT A/c. No – 41869163273 IFSC Code – RBIS0COD001 A/c. Name – Reserve Bank of India, Mumbai Intimation of the same we may be given at ashutoshsingh@rbi.org.in
e	Time allowed for completion of work from tenth day after the date of letter advising acceptance of tender.	8 weeks

2. We also agree that our Quotation will remain valid for acceptance by the Bank for 90 days from the date of opening of Part I of the Quotation and this period of validity can be extended for such period as may be mutually agreed between the Bank and us in writing.
3. Should this Quotation be accepted, I/we hereby agree to abide by and fulfil all the Terms and Conditions of the Quotation and in default thereof, to forfeit and pay to you or your

Successors, or assignees or nominees such sums of money as are stipulated in the conditions contained in the Quotation together with the written acceptance of the Contract.

4. I/We understand that you reserve the right to accept or reject any or all the Quotation either in full or in part without assigning any reason therefor. We will deposit a sum of **Rs.2000/-** as earnest money (2% of estimated cost) with the Reserve Bank of India, which amount is not to bear any interest, immediately after the issue of work order. Should we fail to execute the Contract when called upon to do so, we do hereby agree that this sum shall be forfeited by us to the Reserve Bank of India.

5. The Quotation is submitted in two parts in separate sealed envelopes as under:

- Part I shall all commercial terms and conditions and technical particulars.
- Part II shall have the Price Bid in sealed cover in the Bank's proforma.

Dated this _____ day of _____ 2020.

For and on behalf of M/s _____

(Signature with seal)

Name _____

Designation _____

Place _____

Date _____

(Certified true copy of the Power of Attorney of the above signatory should be enclosed).

Witnesses

(1) Signature with
name, address and date _____

(2) Signature with
name, address and date _____

Section II

Articles Of Agreement

ARTICLES OF AGREEMENT made the _____ day of _____ between the Reserve Bank of India, having its Central Office at Mumbai (hereinafter called "the Employer") of the one part and _____ (hereinafter called "the Auditor") on the other part.

WHEREAS the Employer is desirous of conducting **Electrical Safety Audit of Bank's Central Office Building at Fort, Mumbai** and has caused drawings and specifications describing the work to be done. AND WHEREAS the said the specifications and the schedule of quantities have been signed by or on behalf of the parties hereto.

AND WHEREAS the Auditor has agreed to execute upon the subject work to the conditions set forth herein and to the conditions set forth in the special conditions and in the schedule of quantities and conditions of Contract as modified and finally accepted by both the parties (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 or such other sum as shall become payable there under (**hereinafter referred to as "the said Contract Amount"**).

NOW IT IS HEREBY AGREED AS FOLLOWS -

- 2.1 In consideration of the said Contract amount to be paid at the times and in the manner set forth in the said conditions, the Auditor 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 schedule of quantities.
- 2.2 The Employer shall pay the Auditor the said Contract amount or such other sum as shall become payable at the times and in the manner specified in the said conditions.
- 2.3 The term "Architect" in the said conditions shall mean CGM, Premises Department, Central Office, Reserve Bank of India and on his ceasing to be the architect for the purpose of this Contract for whatever reason, such other person or persons as shall be nominated for that purposes by the Employer, not being a person to whom the auditor shall object for reasons considered to be sufficient by the Employer provided always that no person or perhaps persons subsequently appointed to be architect under this Contract shall be entitled to disregard or overrule any previous decisions or approval or direction given or expressed in writing by the architect for the time being.
- 2.4 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.
- 2.5 The drawings, agreement and documents mentioned herein shall form the basis of this Contract.
- 2.6 This Contract is deemed to be lump sum Contract as described in detail in the bill of quantities and specifications in part I and Part II of the Quotation documents.
- 2.7 The auditor shall afford every reasonable facility for carrying out of all works relating to Electrical Safety Audit in the manner laid down in the said conditions, and shall make good any damages done to walls, floors, etc, after the completion of such works.

- 2.8 The Employer 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 at any time during the currency of Contract, without prejudice to this Contract.
- 2.9 Time shall be considered as the essence of this Contract and the auditor hereby agrees to commence the work from the day of issue of works order/letter of acceptance as provided for in the said conditions and to complete the entire work **within 8 weeks** subject nevertheless to the provisions for the extension of time.
- 2.10 All payments by the Employer under this Contract will be made only at Reserve Bank of India, Mumbai.
- 2.11 All disputes arising out of or in any way connected with this agreement shall be deemed to have arisen in Mumbai and only courts in Mumbai shall have jurisdiction to determine the same.
- 2.12 That the several parts of this Contract have been read by the auditor and fully understood by the auditor.

If the auditor is a partnership or an individual	IN WITNESS WHEREOF the Employer and the Auditor have set their respective hands to these presents and two duplicates hereof the day and year first herein above written.
If the auditor is a company	IN WITNESS WHEREOF the Employer has set its hands to these presents through its duly authorized official and the Auditor has caused its common seal to be affixed hereunto and the said two duplicates hereof to be executed on its behalf, the day and year first hereinabove written.

Signature Clause :

SIGNED AND DELIVERED by Reserve Bank of India, Mumbai

(Name and Designation)

In the presence of -

Witnesses –

1. _____

Address _____

2. _____

Address _____

If the party is a partnership firm or individual

SIGNED AND DELIVERED BY _____

In the presence of -

Witness -

1. _____

Address _____

2. _____

Address _____

THE COMMON SEAL OF _____

was hereunto affixed pursuant to the resolutions passed by its Board of Directors at the meeting held on _____

In the presence of -

Witness –

1. _____

2. _____

If the Auditor signs under common seal, the signature clause should tally with the sealing clause in the articles of association.

Directors who have signed these presents in token thereof in the presence of -

1. _____

2. _____

If the Contract is signed by the hand of power of attorney, whether a company or an individual.

SIGNED AND DELIVERED BY -
the Auditor by the hand of
Shri _____
_____ and duly constituted attorney.

Section III

Commercial Conditions

1. Sealed Quotations are invited from Electrical Safety Auditors for conducting Electrical Safety Audit in Bank's Central office buildings at Fort, Mumbai.

2. **Eligibility:**

The intending tenderer for conducting Electrical Safety Audit should be professionally qualified degree holder and experienced **Electrical Safety Auditor**.

The firm should have the experience of carrying out at least **two electrical safety audits** in Banks, Financial institutions, major hotels or multi-storeyed office buildings or any other electrical installations with a minimum **connected load of 500 KW** in last 5 years on after October 31, 2015. Valid evidences should be submitted along with quotation otherwise quotation may be rejected without further notice.

3. **Earnest Money Deposit (EMD)**: The Earnest Money Deposit shall be paid by the tenderer, through NEFT or in the form of crossed Demand Draft drawn in favour of Reserve Bank of India payable at Mumbai.

4. **Pre Bid Meeting**: **A pre-Quotation briefing meeting of the intending tenderers will be held at 11:00 hours on 18 November 2020 in Premises Department, Central Office Building, Fort, Mumbai**, to clarify any point/doubt raised by them in respect of the tender. No separate communication will be sent for this meeting. All the intending tenderers are advised to be present and study the Quotation documents. They may indicate any points/conditions/specifications which need to be clarified during the meeting. These issues will be discussed and all the tenderers will be advised suitably. The tenderers are expected to get all the issues clarified during this meeting and therefore should desist from deviating from the Bank's Quotation conditions/specifications in their technical (Part I) and Price bids (Part II).

5. The Quotations and EMD for the above work shall be submitted in separate sealed covers addressed to **The Chief General Manager, Premises Department, Reserve bank of India, Fort Mumbai**, so as to reach him not later than **14.00 hours on 01-12-2020**. **The envelopes shall be super-scribed "Quotations for conducting Electrical Safety Audit for Bank's Central Office building at Fort, Mumbai (Part-I/Part-II)"**. Part-I of the Quotations will be opened on the same day at 15.00 hours.

6. Part-II of the Quotations will be opened on a subsequent date under intimation to all the tenderers. Tenderers are advised to use only the forms supplied by the Bank and not to use any other forms. Incomplete Quotations are liable for rejection. No terms and conditions or any other information/ enclosures shall be included in Quotation Part-II.

7. The Quotations shall be valid for acceptance by the Bank for a period of 90 days from the date of opening of Quotation Part-I and shall be extended by such period as may be mutually agreed to.

8. **Prices**: The price quoted for the work shall be firm till completion of the work and shall include all taxes including service tax as applicable and cost of transportation/accommodation etc. of the equipment's and persons deputed.

- 9 This contract is a fixed lump sum contract in respect of the entire Electrical Safety Auditing and to be paid for according to, at the rates contained in the schedule of rates and as provided in the said conditions.
- 10 The employer reserve to itself the right of altering the items to be executed by adding to or omitting any items without prejudice to this contract. However, the Auditor shall not be entitled to any payment for the works done exceeding the Quotation quantities unless specifically approved in writing by the Bank's engineer.

11. Completion Period:

- The time for completion of the entire work is **56 days (8 weeks)** from the date of award of work. The site survey, data collection /measurements and draft report shall be completed in **56 days** and the final report shall be submitted **within 7 days** thereafter.
- **Liquidity Damages:** If work does not completed within stipulated time period as mentioned clause 11 a liquidity damage of Rs.100/- per day and maximum up to 10% of contract amount.

12. Terms of payment

The following terms of payment shall be applicable for the work:

- i) 100% of the quoted amount after completion of energy audit and submission of final report to the Bank (3 no's of hard copies).
- ii) All payment for the work will be made after statutory deductions is liable to deduct TDS@10% and GST as applicable or any other taxes.

13. All disputes arising out of or in way connected with this Agreement shall be deemed to have arisen at Mumbai and only courts in Mumbai shall have the jurisdiction to determine the same.

14. The Reserve Bank of India does not bind itself to accept the lowest or any Quotation 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.

15. On receipt of intimation from the employer of the acceptance of his/ their tender, the successful tenderer shall be bound to sign the formal contract and within fourteen days thereof, the successful tenderer shall sign an agreement in accordance with the draft agreement and the schedule of conditions but the written acceptance by the Reserve Bank of India of a Quotation will constitute a binding contract between the RBI and the person so tendering, whether such formal Agreement is or is not subsequently executed. The cost of necessary stamp paper for execution of the agreement shall be borne by the successful tenderer.

16. If the Auditor being individual or a firm commits any act of insolvency or shall be adjudged an Insolvent or being an incorporated company shall have an order for compulsory winding up made against it or pass an effective resolution for winding up voluntarily or subject to supervision of the court and official Assignee or liquidator in such acts of solvency or winding up, as the case may be, shall be unable within seven days after notice of him requiring him to do so, to show to the reasonable satisfaction of the Bank's Engineer that he is able to carry out and fulfil the contract and to give security therefore, if so required by the Bank's Engineer. Or If the Bank's Engineer shall clarify in writing to the employer that the Auditor.

Date:

Signature of tenderer

Place:

Name and Address

List of clients

(For whom similar scope has been completed in the last 5 years on or after October 31, 2015)

Sr. No.	Details	Name of client (1)	Name of client (2)	Name of client (3)
1	Address, fax and telephone numbers			
2	Establishment name, location and address.			
3	Brief details of the work			
4	Value of work as completed			
5	Date of award of contract			
6	Date of completion of work			
7	Whether the Establishment is with central air-conditioning system			

(Add more columns in case of more than 3 clients)

Copy of work order must be attached.

Date:

Place:

Seal & Signature of Agency

Section IV

Terms and Conditions and Scope of work

Introduction

Reserve Bank of India, Mumbai is desirous of undertaking Electrical Safety Audit of the Electrical/Electromechanical installations provided in the office building at Fort, Mumbai. The office building receives power supply from the local Electricity supply authorities. In addition, diesel generator sets of suitable capacities have been installed to meet critical applications during power outages.

Objective

- The objective of conducting Electrical safety is to review the condition of the existing electrical installation and to recommend measures for further strengthening the system in order to eliminate/reduce the electrical fire hazards and to improve the safety of the personnel. The audit shall mainly focus on:
 - Identifying the potential electrical/fire hazards
 - Boosting employee morale by providing safe working environment.
 - Smoothing the operation and maintenance of electrical installation.
 - Avoiding loss of properties, human life and costly equipment.
 - Ensuring the compliance with latest relevant codes and practice, all statutory rules and regulations.
 - Establishing procedures and process of safe working in electrical installation.

A. 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 minimise accidents. The Audit should be carried out using calibrated instruments and personal protective equipment during field visits for inspection and data collection. During the Audit, the audit team should ensure that in addition to other provisions of the IE rules as per IE Act, the provisions contained in para 29 of the IE act specifically listed as under are complied with:

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

1[(1) All electric supply lines and apparatus shall be of sufficient ratings for power, insulation and estimated fault current and of sufficient mechanical strength, for the duty which they may be required to perform under the environmental conditions of installation, and shall be constructed, installed, protected, worked and maintained in such a manner as to ensure safety of 2(human beings, animals and property))

(2) Save as otherwise provided in these rules, the relevant code of practice of the 3[Bureau of Indian Standards] 4[including National Electrical Code] if any may be followed to carry out the purposes of this rule and in the event of any inconsistency, the provision of these rules shall prevail.

(3) The material and apparatus used shall conform to the relevant specifications of the 3 [Bureau of Indian Standards] where such specifications have already been laid down.

1. Subs. by GSR 358, dt. 30.4.1987, w.e.f. 9.5.1987.
2. Subs. by GSR 45, dt. 1.1.1993, w.e.f. 23.1.1993.
3. Subs. by GR. 466, dt. 18.7.1991, w.e.f. 17.8.1991.
4. 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.
- c. IS: 5216 (Part-II) Recommendations on Safety Procedures and practices in Electrical Work.
- d. IS: 1646-1961 Code of Practice for fire safety (General): Electrical works
- e. IS: 4770: 1968 - Specifications for Rubber gloves for Electrical Purpose
- f. IS: 2309 Protection of Buildings and Allied Structures against Lighting
- g. Gazette Notification dated 20th September 2010 issued by Central Electricity Authority regarding Regulations for measures relating to safety and Electric Supply.
- h. National Building Code, 2005 (as amended up to date)
- i. Para 4.11 of PD Manual "Guidelines for operations and maintenance of various installations in the Bank's properties
- j. Any other local guidelines / bylaws as applicable.

B. Details of Electrical Installations in Bank's office building:

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

C. Scope of work

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

1. **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.
2. **Preparation of single line diagram (SLD) of Electrical Installation** from LT panel to Floor panels, main LT panel, capacitor panel, DG set, UPS Panel , rising mains etc. The SLD should indicate the ratings of the equipment, feeders (wherever possible) etc..
3. **Preparation of earthing layout** encompassing all the accessible and working earth pits in the office premises. Each earth pit should be given a unique identification number and marked on building plan.
4. **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.
5. **Identification of any unbalancing of loads**. The unbalancing/overloading, if any, in the electrical installation viz., LT panels, Emergency panel, Floor Distribution Panels, Distribution Boards etc shall be identified with the help of measuring equipment.
6. **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.
7. **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.
8. **Physical inspection of the sources of power supply** viz 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 Rule

and other relevant codes of practice. Any leakage of oil in capacitor banks, 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.

9. Checking provisions and sufficiency of AC services comprising AC units/ PAC systems and ventilation systems in areas housing electrical/IT equipment in 24x7x365 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.
10. Verification of circulars, Records of Preventive maintenance of electrical installation and equipment maintenance, practices & documentations and compliance thereof as per Premises Department Manual (Para 4.11) shall be done.
11. Identification of Electrical hazards such as loose wire hanging, cables not dressed properly, broken switches, plugs and sockets etc. shall be done.
12. 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.
13. 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.
14. Checking of Illumination level in various working area as per standard and identifying gaps/shortfalls if any as per process/area requirement.
15. 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.
16. Checking the log of electrical accidents maintained.
17. Checking of the provision of Danger sign Boards indicating the voltage at a prominent location of electrical installation.
18. Checking of the cable terminations at various panel and distribution boards to avoid phase and earth fault.
19. Checking of the provision of protective guards and belt covers for all the rotating electrical equipment.
20. Checking the provision of firefighting equipment and fire alarm system detectors near all security/ fire related 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.

21. 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's should be periodically checked for their proper functioning.
22. Verifying provision of First Aid boxes and their periodic replacement of expired medicines.
23. To check the provision of insulated mats of ISI mark in front of all the electrical panels.
24. To check the provision and use of proper height, strong and properly insulated ladders for the maintenance work.
25. To check the provision of proper ventilation of electrical panel rooms and battery rooms etc.
26. In addition to above, checking for any shortfalls in the existing electrical systems which impact on human and fire safety

D: 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 analyser
- 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.

E. 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/Technicians 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.

F: Submission of Report

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

Date:

Place:

Seal & Signature of Agency

Central office building area details:

1. Building status:- stand-alone building.
2. NO. of floor -25+2 floors service+ Upper and lower basement.
3. Total built up area in sq mtrs. :35316
4. Air conditioned area in sq mtrs :17063

Electrical Distribution system:

a) Contract Demand in KVA	1750 KVA
b) Maximum Demand (in KVA)reached during last one year	1294 KVA
c) No. & rating (KVA)and type of power distribution transformers	3 X 1250 KVA dry type resin cast air cooled
d) HT Breaker -4 Panel V C Breaker	
e) Voltage Level at main incoming and at various substation	11 KV / .433KV
f) Average power factor maintained at main substation	0.99
g) Sanctioned load	2852.49 KW
h) P.F correction is made at main incoming	Main LT panel – 600 Kvar AC plant – 500 KVar
i) No. and rating of capacitor banks in Kvar installed:- ii) 25x8- 5 sets 25x4-2 sets	
i) Alternative source in case of Emergency-LT source	i) 537 KW ii)463 KW
j) Centralized Ac Plant – i) 300TR x 3 units with AHU provided with Motors (Various ratings),Pumps, Cooling tower etc, ii) 2 Nos x 52 TR chiller unit – 1 set iii) Pakage Ac – Various rating iv) Window / Ac- Various rating	
k) Lifts – Passenger 12 nos(20 persons), Freight lift – 1 no(1. ST)	
l) Drinking water Pumps – Various ratings	
m) UPS units -2 x 120 KVA (parallel redundant) – 2 sets	
n) Inverter -1 x 5 KVA, 1 X 0.5 KVA	
o) DG Set - 2 nos 200 KVA and 500 kVA	



**Reserve Bank of India
Premises Department
Fort, Mumbai**

**Quotation for Conducting Electrical Safety Audit of Bank's
Central Office Building at Fort, Mumbai**

(Part II)

PRICE BID

Name of Tenderer _____

Address _____

Date and time of Pre Bid Meeting : 18 November 2020 at 11.00 hrs.

Due date and time of submission of tender: 01 December 2020 upto 1400 Hrs.

Date of opening of Part I of Quotation : 01 December 2020 upto 1500 hrs.

Venue : RBI, Premises Department, 5th floor, Central
Office Building at Fort, Mumbai-400 001

**Reserve Bank of India
Premises Department
Fort, Mumbai**

Bill of Quantity

Name of Work: Quotation for Conducting Electrical Safety Audit of Bank's Central Office Building at Fort, Mumbai

Sr. No.	Description	Qty	Rate excluding GST (Rs.)	GST as applicable(Rs)	Total Rate=(4)+(5) (Rs)
(1)	(2)	(3)	(4)	(5)	(6)
1	Rate for conducting Electrical Safety Audit and Submitting Electrical Safety Audit Reports(3 copies) as per the scope of work specified in the Quotation Part-I	L.S			

Date:

Place:

Seal & Signature of Agency