



**Reserve Bank of India  
Estate Department  
Hyderabad**

**Tender for  
Conducting Energy Audit of Bank's Office Building  
at Hyderabad**

**PART I**

Name of the Tenderer: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

**Last Date of submission of EMD: 11:00 Hrs. on December 16, 2025**

**Due Date of Submission of Tender: 11:00 Hrs. on December 16, 2025**

**Date and time of opening of Part-I: 11:30 Hrs. on December 16, 2025**

**Venue : Estate Department, RBI, Hyderabad**

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**RESERVE BANK OF INDIA  
ESTATE DEPARTMENT  
HYDERABAD**

**Notice Inviting Tender**

Reserve Bank of India, Hyderabad invites sealed tenders (two parts) for the work – 'Tender for Conducting Energy Audit of Bank's Office Building at Hyderabad'

2. Part-I of the tender shall contain the Bank's tender document, tenderers covering letter, tenderers additional conditions, if any and be sealed in one cover, super scribing **"Part-I Tender for Conducting Energy Audit of Bank's Office Building at Hyderabad"**.

3. Part-II of tender shall contain no conditions but only tenderers priced bid (Bill of Quantity) and be sealed in a separate cover, super scribing **"Part-II Tender for Conducting Energy Audit of Bank's Office Building at Hyderabad"**. Both these sealed covers shall further be sealed in another envelope addressed by name to The Regional Director, Reserve Bank of India, Estate Department, Hyderabad and the same shall be dropped in the Quotation Box placed at Estate Department **not later than 11:00 hours on December 16, 2025**.

**4. The schedule of tender is as follows:**

Sl. No	Item	Details
1.	Description of Work	Tender for Conducting Energy Audit of Bank's Office Building at Hyderabad
2.	Mode of Tender	Manual / Offline
3.	Estimated Cost	₹1,00,000/- (Inclusive of GST)
4.	Earnest Money Deposit (EMD)	<b>₹2,000/- (Rupees Two Thousand only)</b> from all the bidders in the form of NEFT/ Demand Draft in favour of Reserve Bank of India payable at Hyderabad before 11:00 Hrs of December 16, 2025  <b>Details for NEFT:</b> <b>Beneficiary Name: Reserve Bank of India</b> <b>IFSC: RBIS0NEFTHY (fifth digit is zero)</b> <b>Account No: 8614038</b>  Remarks: (Your Firm's Name), Tender for Conducting Energy Audit of Bank's Office Building at Hyderabad  Participants are required to submit the details of EMD made by them via e-mail to <a href="mailto:estatehyderabad@rbi.org.in">estatehyderabad@rbi.org.in</a>

		DD needs to be submitted in person to Estate Department, Reserve Bank of India, Main Office Building, Hyderabad, before 11:00 Hrs of December 16, 2025  <b>However, Micro and Small Enterprises (MSEs) are exempted from submission of EMD amount subject to submission of latest Udyam Registration certificate (Udyog Aadhar Memorandum).</b>
5.	Date of Notice Inviting Tender (NIT) and Tender document available for download	<b>November 14, 2025</b> onwards
6.	Date and Time of Pre-Bid Meeting	<b>December 05, 2025 at 11:00 Hrs</b> (Venue: Reserve Bank of India, Estate Department, 1st Floor, Secretariat Road, Saifabad, Hyderabad - 500004). Note: The participants are required to confirm their participation one day before on email id <a href="mailto:estatehyderabad@rbi.org.in">estatehyderabad@rbi.org.in</a> to make the necessary arrangements.
7.	Last Date of submission of EMD	<b>11:00 Hrs. on December 16, 2025</b>
8.	Date and time of closing of tender for submission of techno-commercial bid & price bid	<b>11:00 Hrs. on December 16, 2025</b>
9.	Date and time of opening of Part-I (Techno-Commercial-Bid)	<b>11:30 Hrs. on December 16, 2025</b>
10.	Date of opening of Part-II (Price-Bid)	Shall be decided on scrutiny of Part I and shall be intimated to the eligible bidders

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 all the tenders without assigning any reason thereof.

**The Regional Director  
Reserve Bank of India  
Hyderabad**



**भारतीय रिज़र्व बैंक  
संपदा विभाग  
हैदराबाद**

**निविदा आमंत्रण सूचना**

भारतीय रिज़र्व बैंक, हैदराबाद, हैदराबाद स्थित बैंक के कार्यालय भवन के ऊर्जा लेखा-परीक्षण हेतु निविदा कार्य हेतु मुहरबंद निविदाएँ (दो भागों में) आमंत्रित करता है।

2. निविदा के भाग-I में बैंक का निविदा दस्तावेज़, निविदाकर्ता का कवरिंग लेटर, निविदाकर्ता की अतिरिक्त शर्तें, यदि कोई हों, शामिल होंगी और इसे एक लिफ़ाफ़े में सीलबंद किया जाएगा, जिस पर **"हैदराबाद स्थित बैंक के कार्यालय भवन के ऊर्जा लेखा-परीक्षण हेतु निविदा भाग-I"** लिखा होगा।

3. निविदा के भाग-II में कोई शर्त नहीं होंगी, बल्कि केवल निविदाकर्ता की मूल्य बोली (मात्रा का बिल) होगी और इसे एक अलग लिफ़ाफ़े में सीलबंद किया जाएगा, जिस पर **"हैदराबाद स्थित बैंक के कार्यालय भवन के ऊर्जा लेखा-परीक्षण हेतु निविदा भाग-II"** लिखा होगा। इन दोनों मुहरबंद लिफ़ाफ़ों को एक अन्य लिफ़ाफ़े में सीलबंद किया जाएगा, जिस पर नाम से संबोधित किया जाएगा क्षेत्रीय निदेशक, भारतीय रिज़र्व बैंक, संपदा विभाग, हैदराबाद और इसे संपदा विभाग में रखे गए कोटेशन बॉक्स में **16 दिसंबर, 2025 को सुबह 11:00 बजे से पहले डाला जाएगा।**

**4. निविदा की अनुसूची इस प्रकार है:**

क्र.सं.	मद	विवरण
1.	कार्य का वर्णन	भारतीय रिज़र्व बैंक, हैदराबाद के कार्यालय भवन का ऊर्जा लेखापरीक्षा करने के लिए निविदा
2.	निविदा का तरीका	मैनुअल/ऑफ़लाइन
3.	अनुमानित लागत	₹1,00,000/- (जीएसटी सहित)
4.	बयाना राशि जमा (ईएमडी)	<p><b>₹2,000/- (दो हजार रुपये मात्र)</b></p> <p>सभी बोलीदाताओं से एनईएफटी/डिमांड ड्राफ्ट के रूप में भारतीय रिज़र्व बैंक के पक्ष में हैदराबाद में 16 दिसंबर, 2025 को सुबह 11:00 बजे से पहले देय।</p> <p><b>एनईएफटी के लिए विवरण:</b>  <b>लाभार्थी का नाम: भारतीय रिज़र्व बैंक</b>  <b>आईएफएससी: RBISONEFTHY</b>  <b>खाता संख्या: 8614038</b></p> <p><b>टिप्पणी:</b> (आपकी फर्म का नाम), हैदराबाद स्थित बैंक के कार्यालय भवन का ऊर्जा लेखा-परीक्षण करने हेतु निविदा</p>

		<p>प्रतिभागियों को अपनी जमा राशि का विवरण <a href="mailto:estatehyderabad@rbi.org.in">estatehyderabad@rbi.org.in</a> पर ईमेल के माध्यम से जमा करना होगा।</p> <p>डीडी को 16 दिसंबर, 2025 को सुबह 11:00 बजे से पहले संपदा विभाग, भारतीय रिज़र्व बैंक, मुख्य कार्यालय भवन, हैदराबाद में व्यक्तिगत रूप से जमा करना होगा।</p> <p>हालाँकि, सूक्ष्म और लघु उद्यमों (एमएसई) को उद्यम पंजीकरण प्रमाणपत्र (उद्योग आधार ज्ञापन) जमा करने की शर्त पर ईएमडी राशि जमा करने से छूट दी गई है।</p>
5.	निविदा आमंत्रण सूचना की तिथि (एनआईटी) और निविदा दस्तावेज डाउनलोड के लिए उपलब्ध है	<b>14 नवंबर, 2025 से आगे</b>
6.	बोली-पूर्व बैठक की तिथि और समय	<p><b>05 दिसंबर, 2025 प्रातः 11:00 बजे</b> (स्थान: भारतीय रिज़र्व बैंक, संपदा विभाग, पहली मंजिल, सचिवालय रोड, सैफाबाद, हैदराबाद - 500004)।</p> <p>सूचना: प्रतिभागियों को आवश्यक व्यवस्था करने के लिए एक दिन पहले ईमेल आईडी <a href="mailto:estatehyderabad@rbi.org.in">estatehyderabad@rbi.org.in</a> पर अपनी भागीदारी की पुष्टि करनी होगी।</p>
7.	ईएमडी जमा करने की अंतिम तिथि	<b>16 दिसंबर 2025 को 11:00 बजे तक</b>
8.	तकनीकी-वाणिज्यिक बोली और मूल्य बोली जमा करने के लिए निविदा बंद करने की तिथि	<b>16 दिसंबर 2025 को 11:00 बजे तक</b>
9.	भाग-I (तकनीकी-वाणिज्यिक बोली) खोलने की तिथि	<b>16 दिसंबर 2025 को 11:30 बजे</b>
10.	भाग-II (मूल्य-बोली) खोलने की तिथि	भाग I की जांच पर निर्णय लिया जाएगा और पात्र बोलीदाताओं को सूचित किया जाएगा

बैंक न्यूनतम निविदा को स्वीकार करने के लिए बाध्य नहीं है और किसी भी निविदा को पूर्ण या आंशिक रूप से स्वीकार करने का अधिकार सुरक्षित रखता है। बैंक बिना कोई कारण बताए सभी निविदाओं को अस्वीकार करने का अधिकार भी सुरक्षित रखता है।

**क्षेत्रीय निदेशक  
भारतीय रिज़र्व बैंक  
हैदराबाद**

## Section I Form of Tender

Place \_\_\_\_\_

Date \_\_\_\_\_

To,

The Regional Director  
Estate Department,  
Reserve Bank of India  
Hyderabad

Dear Sir,

We have carefully examined the specifications, designs and schedule of quantities relating to the Energy Audit specified in the memorandum hereinafter set out and having visited and examined the site of the Energy 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 Energy 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, specifications, data sheet and schedule of quantities and with such equipments 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 Energy Audit of Bank's Office Building at <b>Hyderabad</b>
(b)	Estimated cost	Rs. 1.00 lakh (One Lakh rupees only) (inclusive of GST)
(c)	Terms of payment	As per clause 12 of Commercial Conditions.
(d)	Earnest Money Deposit (EMD)	<b>₹2,000/- (Rupees Two Thousand only)</b> from all the bidders in the form of NEFT/ Demand Draft in favour of Reserve Bank of India payable at Hyderabad before 11:00 Hrs of December 16, 2025  <b>Details for NEFT:</b> <b>Beneficiary Name: Reserve Bank of India</b> <b>IFSC: RBIS0NEFTHY (fifth digit is zero)</b> <b>Account No: 8614038</b>  Remarks: (Your Firm's Name), Tender for Conducting Energy Audit of Bank's Office Building at Hyderabad Participants are required to submit the

		<p>details of EMD made by them via e-mail to <a href="mailto:estatehyderabad@rbi.org.in">estatehyderabad@rbi.org.in</a></p> <p>DD needs to be submitted in person to Estate Department, Reserve Bank of India, Main Office Building, Hyderabad, before 11:00 Hrs of December 16, 2025</p> <p><b>However, Micro and Small Enterprises (MSEs) are exempted from submission of EMD amount subject to submission of latest Udyam Registration certificate (Udyog Aadhar Memorandum).</b></p>
(e)	Time allowed for completion of work from tenth day after the date of letter advising acceptance of tender.	<b>Six weeks</b>

2. We also agree that our tender will remain valid for acceptance by the Bank for 90 days from the date of opening of Part I of the tender 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 Tender be accepted, I/we hereby agree to abide by and fulfill all the Terms and Conditions of the Tender 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 tender 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 tender either in full or in part without assigning any reason therefor. We have deposited a sum of **Rs. 2000** as earnest money with the Reserve Bank of India, which amount is not to bear any interest. Should we fail to execute the Contract when called upon to do so, we do hereby agree that this sum shall be forfeited by the Reserve Bank of India.
5. **The Tender is submitted in two parts in separate sealed envelopes as under:**
  - Part I shall have proof of EMD/EMD and 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 \_\_\_\_\_ 2025.

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 Energy Audit for its Office Building at RBI Hyderabad** and has caused drawings and specifications describing the work to be done AND WHEREAS the said 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 Annexures 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 the bill of quantities and specifications in part I and Part II of the tender documents.
- 2.7 The Auditor shall afford every reasonable facility for carrying out of all works relating to Energy 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 six 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, Hyderabad.
- 2.11 All disputes arising out of or in any way connected with this agreement shall be deemed to have arisen in Hyderabad and only courts in Hyderabad 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 authorised 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, \_\_\_\_\_

\_\_\_\_\_  
(Name and Designation)

In the presence of -

Witness -

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 tenders are invited from accredited energy auditors for conducting energy audit in Bank's office buildings at Hyderabad.

#### 2. Eligibility:

The intending tenderer for energy audit should be **qualified accredited energy auditor** by Bureau of Energy Efficiency.

In support of the above, the firms should submit the **valid letter of accreditation issued by Bureau of Energy Efficiency in the name of the firm**, along with this tender form; failing which the tender forms shall be considered as invalid.

3. **Earnest Money Deposit (EMD):** The Earnest Money Deposit shall be paid by the tenderer either in the form of Demand Draft drawn in favour of Reserve Bank of India payable at Hyderabad or through NEFT. The draft for EMD or proof of EMD shall be submitted along with Part I of the tender. **The EMD shall be returned only after satisfactory completion of work i.e. audit and submission of final report.**
4. **Pre-Bid Clarification:** The pre-tender clarification by the intending tenderers can be sought through e-mail or by visiting the Bank on or before 11:00 hrs on December 16, 2025 in Estate Department, RBI Hyderabad to clarify any point/doubt in respect of the tender. All the intending tenderers are advised to go through the tender documents in details. The issues will be discussed and all the tenderers will be advised suitably. The tenderers are expected to get all the issues clarified before filling up the tender and therefore should desist from deviating from the Bank's tender conditions/specifications in their technical (Part I) and Price bids (Part II).
5. The tenders and proof of EMD for the above work shall be submitted in separate sealed covers addressed to Shri Chinmoy Kumar, Regional Director, Reserve Bank of India, Hyderabad, so as to reach him not later than 11:00 hrs on December 16, 2025. The envelopes shall be super-scribed **"Tenders for conducting energy audit for Bank's Office Building at Hyderabad (Part-I/ part-II)"**. Part-I of the tenders will be opened on the same day at 11:30 hrs.
6. Part-II of the tenders 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 tenders are liable for rejection. No terms and conditions or any other information/ enclosures shall be included in tender Part-II.
7. The tenders shall be valid for acceptance by the Bank for a period of 90 days from the date of opening of tender 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 equipments and persons deputed.

9. This contract is a fixed lump sum contract in respect of the entire energy 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 tender quantities unless specifically approved in writing by the Bank's engineer.
11. **Completion Period:** The time for completion of the entire work is six weeks from tenth day after the date of letter advising acceptance of tender. The site survey, data collection/measurements and draft report shall be completed in six weeks and the final report shall be submitted within seven days thereafter.

12. **Terms of payment**

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

- i) 80% of the quoted amount after completion of energy audit and submission of draft report to the Bank. Draft report and final reports should include all the required information and audit findings in the format indicated in this tender including the annexures.
- ii) Balance 20% of the quoted amount on submission of the final report to the Bank

All payments for the work will be made after statutory deductions.

13. The Reserve Bank of India 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.
14. 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 tender 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.
15. 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 fulfill 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:  
Place:

Signature of tenderer  
Name and Address

### **List of clients**

(For whom similar scope has been completed in the last 5 years.)

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	Date of award of contract			
5	Date of completion of work			
6	Whether the Establishment is with central air-conditioning system			

## **Section IV**

### **Technical Specifications**

#### **Terms and Conditions**

##### **1. Introduction**

Reserve Bank of India, Hyderabad is desirous of undertaking Energy audit of the Electrical/Electromechanical installations provided in the office building at Hyderabad. The office building receives power supply at 11 KV from the Electricity supply authorities. In addition, Diesel Generator set, and UPS system of suitable capacities have been installed to meet critical applications during power outages.

##### **2. Objective**

- a. The objective of energy audit is to have Energy Performance Assessment of equipments and utilities in the electrical sub-station, Electric power distribution network, HVAC systems, Electric motors and drives, Fans and blowers, Water pumping systems, UPS systems, Lighting systems, Diesel generator sets etc. including study of energy consumption pattern and management of power demand in the building.
- b. Based on the above observations, to identify opportunities for energy saving and to have recommendations for the same along with cost benefit analysis.

##### **3. Terms & conditions**

###### **A. Equipments/measuring instruments**

i) All the equipments/instruments required for site measurements for carrying out the energy audit will have to be arranged by the firm without any extra payment to the Bank. The firm should have the following minimum equipments/instruments for energy audit:

1. Three-phase Power analyser
2. Ultra sonic flow meter
3. Pressure gauges
4. Thermometers
5. Anemometers
6. Thermography camera
7. Harmonic Analyzer

ii) All testing instruments/meters shall be accompanied with valid calibration certificate().

iii) The site measurements should be recorded in the presence of Bank's personnel.

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.



## **B. Work at site**

The firm may visit the premises and ascertain site conditions. The work has to be carried out in a working office building without causing inconvenience to the normal working of the Bank. No power shut down will be provided during office hours. Power shut down required for the work will be given on holidays and after office hours at the discretion of the Bank. No extra claims will be admissible later, on these grounds.

The firm should deploy only qualified and experienced Engineers/Technician having requisite licenses to carry out such works. Utmost care shall be exercised by the firm in carrying out the work to ensure that no damage is caused to persons and properties. The Bank will not be liable for any injury or damage to persons and any such happening will be entirely the responsibility of the firm.

## **Scope of Work:**

### **A. Methodology:**

Energy audit activities shall include the following:

1. **Pre Audit:** Meeting with Bank's technical team, Visual inspection of the site & verification of various documents regarding energy consumption and electrical installation.
2. **Audit:** Auditing and performance analysis to determine the condition of electrical installation as detailed below.
3. Submission of **Draft report** to Bank and discuss the report with Bank's representative.
4. Submission of **Final report** to Bank after incorporating the changes as per discussions with the Bank.
5. Energy Audit should be conducted in conformity to the relevant BEE directives including Part III Sec4, 116 No.2/11(6)/05-BEE, dated 28-04-2010 or the latest, if any published.

### **B. Equipment details**

The energy audit of the electrical / electromechanical installation as detailed in [annexure-I](#) shall be conducted. The major list of equipments is as under:

1. Electricity Supply and Distribution System
2. Air Conditioning System
3. Air Handling Units
4. Split / Package Air Conditioners
5. UPS
6. Lighting, fans
7. Kitchen Equipment's
8. Water Pumps, Fire Pumps
9. Lifts
10. DG sets
11. Any other existing electrical system not mentioned above

**C. The energy audit of the electrical installation shall cover, in particular, the following activities:**

**i) Building Energy Bills Analysis**

Analysis of energy consumption pattern in the building with respect to peak demand, load pattern, power factor for the last 3 years

**ii) Electricity Supply and Distribution network-**

**Distribution Transformer(s)**

Study and analysis of the utility pattern of transformer(s), checking no load loss of the transformers, measuring all Day Efficiency for each transformer etc.

**LT Distribution Panels**

1. General inspection of the LT distribution panel(s) for its maintenance and working including checking all the meters mounted on it.
2. Performing thermography for the cable termination wherever required and analysis of the observations
3. Measurement and analysis of demand and power factor, suggestions to reduce the demand and improve the power factor.
4. Study on Metering system and suggestion for improvement.
5. Study on V, I, KW fluctuation and profiling, V & I imbalances in the network.
6. Detailed examination of the existing energy use of the facility with break up.
7. Study and examination of use of electric energy, cost balance with break up.
8. Performance evaluation of installed capacitors to ensure deliverance of desired output, level of losses, management of system power factor and operation of capacitors.

**iii) Air Conditioning Systems–**

**Centralised Air Conditioning System**

1. Performance evaluation of existing central air conditioning system(s) in all the areas, measurement and analysis of indoor temperatures and suggest to optimise the energy utilisation.

**Chillers -**

1. Measuring all the operating parameters such as water flow (If the actual flow found to be in variation with the designed flow, the same needs to be adjusted to match designed flow before taking observations) inlet & outlet water temperatures, gas suction & discharge pressure, Power Consumption etc. after stabilising the parameters.
2. Calculation of operating Input KW per TR (IKW / TR) of Chiller(s) at minimum three different available load conditions for each chiller.
3. Comparison of actual parameters with the design values, and suggestion for corrective actions to be implemented.

**Pumps -**

1. Measuring all the operating parameter such as water flow, suction & discharge head, power consumption etc.
2. Performance Evaluation of chilled water & Condenser water pumps and compare the same with the design or generally expected efficiency of such pumps.

**Cooling Towers -**

1. Measurement of various parameters for cooling tower fans, water flow rate, air flow rate, dry bulb temperature (DBT) wet bulb temperature (WBT) sump temperature, relative humidity etc.
2. Evaluation of cooling tower performance (Range, approach, and effectiveness) and comparing it with designed data.

**Air Handling Units**

1. Measurement of airflow, Relative Humidity (RH), Supply air temperature ( $T_{sa}$ ), Return air temperature ( $T_{ra}$ ), Chilled Water Inlet and outlet temperature i.e.  $T_{in}$ ,  $T_{out}$  through cooling coil and energy consumption of Air Handling Units (AHUs).
2. Examination of Air Handling Units for air delivery capacity, capacity utilization, temperature pattern, pressure drop and operational pattern with respect to time to identify potential energy saving measures.
3. Calculation of actual tonnage of AHUs and Measurement of operating zone temperatures under each unit. Comparison of actual parameters with the design values.

**Package/ precision Air Conditioners / Split or window air conditioners**

1. Evaluation of operating Coefficient of Performance (COP) of Precision and package Air Conditioner. Identification and suggestions for performance improvement and energy saving potential.
2. Calculation of actual tonnage and comparison of actual parameters with the design values and corrective actions.

**iv) UPS**

1. Measurement and analysis of UPS loading, redundancy, operating efficiency, load pattern to suggest measures for energy cost reduction, Measurement and analysis of Harmonics as per standards.

**v) Lightning and fans**

1. Examination of the performance of existing lighting system in all the areas, measurement of illumination levels, etc
2. To look possibilities to reduce energy use by incorporating energy efficient lighting system.
3. Study of operating electrical parameters like voltage, current etc in the lightening circuits.

#### **vi) Diesel generator sets**

1. General Inspection of DG sets.
2. The DG sets are to be tested for operational performance and parameters including fuel consumption, power generated, Voltage, Ampere, KW, KWh, KVA should be recorded during the audit.

#### **vii) Kitchen equipments**

1. Examination of the performance of the existing kitchen equipments, measurement of power consumption etc to improve efficiency and optimizing power consumption.
2. To look possibilities to reduce energy use by incorporating energy efficient equipments.

#### **viii) Fire Hydrant Pumps and Domestic Water Pumps**

1. Performance analysis of all major motors (above 10 HP) needs to be studied for possible energy savings opportunities by the application of following items.
  - a. Possibility of on /off control
  - b. Interlocking
  - c. Downsizing motors etc.

#### **D. Energy Audit Report**

The report shall contain complete building information, inventory of all equipments. It should include the log sheet data collected/measured at site, analysis of data (Log sheet and actual measured), observations of operational performance of various equipments, findings and recommendations for achieving energy and cost saving.

The recommended energy saving measures shall be categorized as (i) short term, (ii) medium term and (iii) long term measures for energy conservation. The report should also include energy use indices and comparison with industry averages.

The report should provide the estimated cost, estimated savings and simple pay back for each recommended energy saving measures in a chart. A detailed description of each energy conservation measure and supporting calculation with energy use and savings calculations, economic analysis and any assumptions that are made regarding operation or equipment efficiency shall be included. The recommendations for energy efficiency shall include the technical particulars of the equipment, life expectancy and details of manufacturer etc.

Date:

Place:

Seal & Signature of Agency

Report  
on  
Energy Audit of Bank's Office Building  
at Hyderabad

Duration of Energy Audit:

Name of the Energy Audit Agency: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

## **Summary of Recommendations**

## **Remarks**

## Annexure-I

### Details of existing Electrical Systems

(It should be a part of the report)

#### **Details of Power Supply:**

Sanctioned Load (KVA)	
-----------------------	--

	Capacity (KVA)	Voltage ratio	Type of cooling (oil / air)
Transformer No. 1 Rating			
Transformer No. 2 Rating			
Transformer No. 3 Rating			

#### **Details of Major Power Equipments:**

Central A C Plant Data					
	Capacity (TR)	compressor Motor 1 (KW)	compressor Motor 2 (KW)	Chilled Water Flow (LPM)	Condenser Water Flow (LPM)
Chiller No. 1					
Chiller No. 2					

#### **Chilled Water Pumps**

	Flow (LPM)	Head (M)	Motor (KW)
Chilled Water Pump 1			
Chilled Water Pump 2			
Chilled Water Pump 3			
Chilled Water Pump 4			

#### **Condenser Water Pumps**

	Flow (LPM)	Head (M)	Motor (KW)
Condenser Water Pump 1			
Condenser Water Pump 2			
Condenser Water Pump 3			
Condenser Water Pump 4			

#### **Cooling Towers**

		Capacity (TR)	Flow (LPM)	Motor (KW)	
Cooling Tower 1					
Cooling Tower 2					
Air Handling Units (AHUs)	Location	Capacity (TR)	Air Flow (CFM)	Motor (KW)	Area catered (M²)
AHU 1					
AHU 2					
AHU 3					
AHU 4					



AHU 5					
AHU 6					
AHU 7					

### **Hot Water Generator**

	Make	Capacity (KW)
Hot Water Generator 1		
Hot Water Generator 2		

### **Lightening**

#### **Internal Lightening (Floor wise)**

Sr. No.	Floor	Type of fitting	Wattage	Qty.	Total carpet area covered (M <sup>2</sup> )

#### **External Lightening**

Sr. No.	Location	Type of fitting	Wattage	Qty.	Total ground area covered (M <sup>2</sup> )

### **Lifts**

Lifts No.	Location	Make	Passenger Capacity	Speed (M/S)	No. of floors served	Whether controller V3F or not
1						
2						
3						
4						

#### **Standalone A. C. units where central AC is also provided (Area wise)**

Sr. No.	Location	Type of AC (window / split / package etc.)	Qty	Capacity of each AC (TR)	Area catered (M <sup>2</sup> )	Expected per day operating hours

**Standalone A. C. units where central AC is not provided (Area wise)**

Sr. No.	Location	Type of AC (window / split / package etc.)	Qty	Capacity of each AC (TR)	Area catered (M <sup>2</sup> )	Expected per day operating hours

**DG Sets**

	Location	Make	Rating (KVA)
DG SET No. 1			
DG SET No. 2			
DG SET No. 3			
DG SET No. 4			

**Special Equipment viz. Shredding & Briquetting Machine, CVPS machine etc.**

Sr. No.	Name of the machine	Make	Power Rating of the machine (KW)	Expected per day operating hours

**UPS Details**

Sr. No.	Location	Make	Capacity (KVA)

## Annexure-II

### Performance Evaluation of Main Equipments-Sample Formats

#### Central AC Plant

**Chiller No. \_\_\_\_\_.**

(To be done at three different loading)

Sr. No.	Chilled water inlet Temp. (T <sub>in</sub> )°C	Chilled water outlet Temp. (T <sub>out</sub> )°C	Chilled Water Flow (LPM)	Suction Pressure	Discharge Pressure	Capacity (TR)	Input Power (KW)	IKW/ TR	Remarks/ Comments/ Suggestions

**Capacity of the Chiller (TR) = (T<sub>in</sub> -T<sub>out</sub>) \*Water Flow rate (LPM)\*60/3024**

**Efficiency of Chiller in KW/TR = Total Power input (in KW)/Total Tonnage**

#### Air Handling Units

Air Handling Unit (AHU) No. \_\_\_\_\_

	Return / Inlet Air		Supply / outlet Air						
Sr. No.	Dry Bulb Temp. Tdb (°C)	Wet Bulb Temp. Twb (°C)	Dry Bulb Temp. Tdb (°C)	Wet Bulb Temp. Twb (°C)	Air Flow (CFM)	Tons of Refrigeration (TR)	Input KW	IKW/ TR	Remarks/ Comments/ Suggestions

**AHU TR = 1.699\*Air Flow (CFM)\* Density of Air (Kg/M³)\*(H<sub>in</sub>-H<sub>out</sub>)/(4.18\*3024)**

Where:

H<sub>in</sub> = Enthalpy of inlet Air at AHU (KJ/Kg)

Enthalpy of outlet Air from AHU

H<sub>out</sub> = (KJ/Kg)

Density of Air = 1.18 Kg/M³ at standard Temperature and Pressure

**Note: Enthalpy is to be read from Psychrometric Chart corresponding to DB and WB Temp.**

### Chilled Water Pumps

Chilled Water Pump No. \_\_\_\_\_

Sr. No.	Discharge Pressure ( $P_{disc}$ ) Kg/cm <sup>2</sup>	Suction Pressure ( $P_{suc}$ ) Kg/cm <sup>2</sup>	Chilled Water Flow (LPM)	Developed Hydraulic Power (KW)	Measured Input Power (KW)	Pump efficiency	Remarks / Comments / Suggestions

**Developed Hydraulic Power (KW) = Flow (LPM) \* ( $P_{disc}$ - $P_{suc}$ ) Kg/cm<sup>2</sup> \*9.81/6000**

**Pump Efficiency = Developed Hydraulic Power (KW)/ Input Electric KW**

### Condenser Water Pump

Condenser Water Pump No. \_\_\_\_\_

Sr. No.	Discharge Pressure ( $P_{disc}$ ) Kg/cm <sup>2</sup>	Suction Pressure ( $P_{suc}$ ) Kg/cm <sup>2</sup>	Condenser Water Flow (LPM)	Developed Hydraulic Power (KW)	Measured Input Power (KW)	Pump efficiency	Remarks/ Comments/ Suggestions

**Developed Hydraulic Power (KW) = Flow (LPM)\*( $P_{disc}$ - $P_{suc}$ )\*9.81/6000**

**Pump Efficiency = Developed Hydraulic Power (KW)/ Input Electric KW**

### COOLING TOWER

Sr. No.	Water inlet Temp. ( $T_{in}$ )°C	Water outlet Temp. ( $T_{out}$ )°C	Water Flow (LPM)	Wet Bulb Temp. $T_{wb}$ (°C)	Cooling Tower Capacity (TR)	Cooling Tower Efficiency	IKW/ TR	Remarks/ Comments/ Suggestions

**Range=  $T_{in}$ - $T_{out}$**

**Approach=  $T_{out}$ - $T_{wb}$**

**Cooling Tower Efficiency = Range\*100/(Range+Approach)**

**Cooling Tower Capacity (TR) = ( $T_{in}$  -  $T_{out}$ )\*Water Flow (LPM)\*60/3024**

**Internal Lightening (Floor wise)**

Sr. No.	Floor	Type of fitting	Calculated Wattage per Fitting	Qty	Total Wattage (KW)	Total carpet area covered (M <sup>2</sup> )	Light Power Density (W/M <sup>2</sup> )	Measured Average Light Level (Lux)	Light Efficiency (Lux/LPD)

**DG set**

1. Run the DG set at available load
2. The initial and final reading of the diesel tank and Energy meter needs to be recorded.

Sr. No.	Rating of DG set (KVA)	Make of DG set	Start Time	Stop Time	Period of Operation (Hrs.)	Diesel Consumed (Ltrs.)	Generated Energy (KWH)	Specific fuel Consumption (KWH/Ltr)	Remark /Observation

**UPS**

1. Measurement on each UPS needs to be recorded

Sr. No.	Rating of UPS (KVA)	Make of UPS	Input Voltage			Input Current			Total current Harmonic Distortion THDi	Total Voltage Harmonic Distortion THDv	Remarks
			Vrn	Vyn	Vbn	Ir	Iy	Ib			

**LT Panels: LT Panels at Substation including capacitor****Panel Name:**

Sr. No.	Input Voltage			Input Current			Input KW	Input KVA	P.F.	Total current Harmonic Distortion THDi	Total Voltage Harmonic Distortion THDv	Remarks
	Vrn	Vyn	Vbn	Ir	Iy	Ib						



**Reserve Bank of India  
Estate Department  
Hyderabad**

**Tender for  
Conducting Energy Audit of Bank's Office Building  
at Hyderabad**

**PART II**

Name of the Tenderer: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

**Last Date of submission of EMD: 11:00 Hrs. on December 16, 2025**

**Due Date of Submission of tender: 11:00 Hrs. on December 16, 2025**

**Date and time of opening of Part-I: 11:30 Hrs. on December 16, 2025**

**Venue : Estate Department, RBI, Hyderabad**



**Reserve Bank of India  
Estate Department  
Hyderabad**

**Bill of Quantity**

**Name of Work: Tender for Conducting Energy Audit of Bank's Office  
Building at Hyderabad**

<b>Sl. No.</b>	<b>Description</b>	<b>Qty</b>	<b>Rate excluding service tax(Rs.)</b>	<b>Service tax as applicable (Rs.)</b>	<b>Total rate = (4) + (5) (Rs.)</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
<b>1</b>	Rate for conducting Energy Audit and Submitting detailed Energy Audit Reports as per the scope specified in the tender Part-I.	L.S.			

Date:

Seal and Signature of the agency

Place: