



भारतीय रिज़र्व बैंक  
संपदा विभाग  
चेन्नै

ई-निविदा आमंत्रित करने की नोटिस

भारतीय रिज़र्व बैंक, चेन्नई निम्न कार्य के लिए सीलबंद निविदाएं (दो भाग) आमंत्रित करता है - 'चेन्नई में बैंक के कार्यालय भवन की ऊर्जस्विता का लेखा परीक्षा आयोजित करने के लिए निविदा'

2. निविदा के भाग-I में बैंक का निविदा दस्तावेज, निविदाकर्ता का कवरिंग पत्र, निविदाकर्ता की अतिरिक्त शर्तें, यदि कोई हों, शामिल होंगी और इसे एक लिफाफे में सील किया जाएगा, जिस पर "भाग-I बैंक के कार्यालय भवन, भारतीय रिज़र्व बैंक, चेन्नई का ऊर्जस्विता का ऑडिट" लिखा होगा।

3. निविदा के भाग-II में कोई शर्त नहीं होगी, बल्कि केवल निविदाकर्ता की मूल्य बोली (मात्रा का बिल) होगी और इसे एक अलग लिफाफे में सील किया जाएगा, जिस पर "भाग-II - बैंक के कार्यालय भवन, भारतीय रिज़र्व बैंक, चेन्नई का ऊर्जस्विता का ऑडिट" लिखा होगा। इन दोनों सीलबंद लिफाफों को क्षेत्रीय निदेशक, भारतीय रिज़र्व बैंक, संपदा विभाग, चेन्नई को नाम से संबोधित एक अन्य लिफाफे में सील किया जाएगा और इसे **08 अगस्त, 2025 को 14:00 बजे** से पहले संपदा विभाग में रखे गए कोटेशन बॉक्स में डाल दिया जाएगा।

4. जिन कार्यों के लिए बोलियां आमंत्रित की गई हैं, उनका मुख्य विवरण तथा बोलीदाताओं के लिए महत्वपूर्ण निर्देश निम्नानुसार हैं:

कार्य का नाम	चेन्नई स्थित बैंक के कार्यालय भवन का ऊर्जस्विता का ऑडिट आयोजित करना।
निविदा का प्रकार	मैनुअल / ऑफ़लाइन
कार्य की अनुमानित लागत	₹2.20 लाख (जीएसटी सहित)
पार्टियों को डाउनलोड करने के लिए एनआईटी की उपलब्धता तारीख	18 जुलाई, 2025 से आगे
बयाना राशि	प्रत्येक बोलीदाता को ₹4,400/- जमा करने होंगे। हालांकि, सूक्ष्म और लघु उद्यमों (एमएसई) को उद्यम पंजीकरण प्रमाणपत्र (उद्योग आधार ज्ञापन) जमा करने के अधीन निविदा जमा करते समय ईएमडी राशि जमा करने से छूट दी गई है। हालांकि, अगर काम उन्हें दिया जाता है, तो इन

	विक्रेताओं को ईएमडी जमा करनी होगी। यह ईएमडी ऑडिट पूरा होने और अंतिम रिपोर्ट जमा करने के बाद वापस कर दी जाएगी। सफल बोलीदाता को काम दिए जाने के बाद असफल बोलीदाताओं की ईएमडी वापस कर दी जाएगी।
बयाना राशि प्रस्तुत करने की अंतिम तारीख	<b>08 अगस्त 2025 को 14:00 बजे</b>
तकनीकी-वाणिज्यिक बोली और मूल्य बोली पीक्यू दस्तावेजों के साथ ऑनलाइन प्रस्तुत करने के लिए निविदा बंद करने की तारीख	<b>08 अगस्त 2025 को 14:00 बजे</b>
निविदा खोलने की तारीख और समय	निविदा का भाग I (तकनीकी-वाणिज्यिक बोली) <b>08 अगस्त 2025 को 15:00 बजे</b> खोला जाएगा। भाग-II (मूल्य बोली) बाद की तारीख को खोली जाएगी जिसकी सूचना योग्य बोलीदाताओं को दी जाएगी।
निविदा की वैधता	निविदा के भाग-I के खुलने की तिथि से तीन माह।
निविदा आमंत्रित करने वाले प्राधिकारी के कार्मिक के संपर्क विवरण	a) श्री रिजेश आर एन (सहायक महाप्रबंधक) 044-2561 9261/( <a href="mailto:rjeshrn@rbi.org.in">rjeshrn@rbi.org.in</a> ) b) श्री नितिन जे सेबेस्टियन (एएम-इलेक्ट्रिकल) 044-25619847 <a href="mailto:nithinisebastian@rbi.org.in">nithinisebastian@rbi.org.in</a> c) श्री अभिषेक देशमुख, (सहायक प्रबंधक) 044 - 25399066 / <a href="mailto:adeshmukh@rbi.org.in">adeshmukh@rbi.org.in</a>

5. अधिक जानकारी के लिए कृपया निविदा दस्तावेज तकनीकी-वाणिज्यिक बोली (भाग I) और मूल्य-बोली (भाग II) देखें। बैंक सबसे कम निविदा स्वीकार करने के लिए बाध्य नहीं है और किसी भी निविदा के पूर्ण या आंशिक रूप से स्वीकार करने का अधिकार सुरक्षित रखता है। बैंक बिना कोई कारण बताए किसी एक या सभी निविदाओं को अस्वीकार करने का अधिकार भी सुरक्षित रखता है।

**क्षेत्रीय निदेशक  
भारतीय रिज़र्व बैंक  
चेन्नै**



**भारतीय रिज़र्व बैंक/Reserve Bank of India**  
**संपदा विभाग/Estate Department**  
**चेन्नै/Chennai**

**बैंक के मुख्य कार्यालय परिसर की ऊर्जा लेखा परीक्षा आयोजित करने के लिए निविदा**

**Tender for Conducting Energy Audit in Bank's Office Building,**  
**Reserve Bank of India, Chennai.**

**PART- I**

निविदाकर्ता का नाम /Name of the Tenderer	
पता/ Address	
निविदा प्रस्तुत करने की अंतिम दिनांक Last date of submission of Tender	14:00 Hrs. of August 08, 2025
निविदा खोलने की दिनांक Date of opening of the Tender	15:00 Hrs. of August 08, 2025
स्थान / Venue	संपदा विभाग, भारतीय रिज़र्व बैंक, भारतीय रिज़र्व बैंक Estate Department, RBI, Chennai

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## Section I

### निविदा फार्म/ Form of Tender

क्षेत्रीय निदेशक/ The Regional Director  
भारतीय रिज़र्व बैंक/ Reserve Bank of India  
संपदा विभाग, फोर्ट ग्लेसिस-16,/ Estate Department, Fort Glacis-16,  
राजाजी सालै, पोस्ट बॉक्स संख्या 40/ Rajaji Salai, P.B.No 40  
चेन्नै 600 001/ Chennai-600 001

महोदय/ Dear Sir,

इसमें इसके पश्चात ज्ञापन में विनिर्दिष्ट कार्यों से संबंधित विनिर्देशनों, ड्राइंगों, डिजाइनों और मात्राओं की अनुसूची की जांच कर और उक्त ज्ञापन में विनिर्दिष्ट कार्य-स्थल देखकर एवं जांचकर तथा निविदा को प्रभावित करनेवाली तत्संबंधी अपेक्षित जानकारी प्राप्त कर, मैं / हम एतद्वारा उक्त ज्ञापन में विनिर्दिष्ट समय के भीतर, संलग्न की गई मात्राओं की अनुसूची में उल्लिखित दरों पर निविदा में दिए गए करार के अंतर्नियमों, संविदादारों के लिए विशेष अनुदेशों, संविदादारों को सामान्य अनुदेश तथा विशेष शर्तों, शर्तों मात्राओं की अनुसूची एवं निविदा की शर्तों में लिखित रूप में दिए गए विनिर्देशनों, डिजाइनों, ड्राइंगों और डाटा शीट और मात्राओं की अनुसूची और इसके लिये उपलब्ध करायी गयी सामग्रियों के साथ तथा अन्य सभी मामलों में ऐसी शर्तों के अनुसार जहाँ तक वे लागू हों, उक्त ज्ञापन में विनिर्दिष्ट कार्य को निष्पादित करने का प्रस्ताव रखता हूँ/ रखते हैं।

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

### MEMORANDUM

(a)	कार्य का विवरण /Description of works	बैंक के मुख्य कार्यालय परिसर की ऊर्जा लेखा परीक्षा आयोजित करने के लिए निविदा Tender for Conducting Energy Audit of
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		Bank's Main Office Building, Chennai
(b)	<b>अनुमानित लागत(रु)Estimated cost</b>	Rs.2.20 lakh (Inclusive of GST)
(c)	<b>बयाना / Earnest money deposit</b>	Rs.4,400/- ) to be submitted by each bidder. However, Micro and Small Enterprises (MSEs) are exempted from submission of Earnest Money Deposit (EMD) amount at the time of tendering subject to submission of Udyam Registration certificate (Udyog Aadhar Memorandum). However, they shall submit EMD in case the work is awarded to them.
(d)	<b>भुगतान का प्रकार/ Terms of payment</b>	वाणिज्यिक शर्तों के मद संख्या 12 के अनुसार As per item no.12 of commercial conditions.
(e)	<b>कार्य पूरा करने का अनुमेय समय/ Time allowed for completion</b>	कार्य आदेश के 10 वें दिन से 06 हफ्तों / 06 weeks from the 10th day of work order.
(e)	<b>बिल के पटाने की अवधि/ Period for settlement of Bill</b>	अंतिम बिल- एक महीना / Final Bill- 1 month

1. हम इससे भी सहमत है कि निविदा खोलने की दिनांक से हमारी निविदा 90 दिनों तक बैंक के लिए स्वीकार करने के लिए वैध रहेगी और वैधता की यह अवधि बैंक और हमारे बीच लिखित आपसी सहमति के बाद बढ़ाई जा सकती है।

We also agree that our tender will remain valid for acceptance by the Bank for 90 days from the date of opening 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.

2. निविदा स्वीकार होने पर मैं/हम यहां संलग्न संविदा को उक्त शर्तों के निबंधनों एवं प्रावधानों को पूरा करने और उसका पालन करने के लिए या उसमें चूक करने पर संविदा की लिखित में स्वीकृति सहित उक्त शर्तों में वर्णित बयाना जमा राशि जब्त किये जाने और आपके उत्तराधिकारियों, समुनेदेशियों या नामितों को अदा करने के लिए सहमत हूँ/हैं।

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 The list showing the particulars and the names of manufacturers of specified item are enclosed.

3. मैं/हम यह बात समझते हैं कि आपके पास बिना कोई कारण बताए सभी या किसी निविदा को स्वीकार करने या अस्वीकार करने का अधिकार सुरक्षित है। हमने की रु7,670/- राशि बयाना जमा राशि के रूप में



भारतीय रिज़र्व बैंक के पास जमा की है जिस पर कोई ब्याज देय नहीं होगा। यदि हम सूचित किए गए अनुसार संविदा को निष्पादित करने में असफल रहते हैं तो हम इस बात से सहमत हैं कि भारतीय रिज़र्व बैंक द्वारा इस राशि को जब्त कर लिया जाएगा।

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 **₹4,400/-** 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 us to the Reserve Bank of India.

The details of our bankers are

Sr. No.	Name of Bank	Branch and its complete address	Name of the contact person	Telephone and FAX number
1	2	3	4	5

Name of the partner of the firm authorized to sign

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(or)

Name of person having power of Attorney to sign the contract. (Certified true copy of the Power of Attorney should be attached.)

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Yours faithfully

Signature of Contractor



(Signatures and addresses of witnesses)





## **Section II**

### **Articles of Agreement**

#### **करार की शर्तें**

ARTICLES OF AGREEMENT made the \_\_\_\_\_ day of \_\_\_\_\_ 2025 between the **Reserve Bank of India**, (hereinafter called "The Bank") on the one part and \_\_\_\_\_ (hereinafter called "the Contractor") on the other part.

यह करार एक ओर **भारतीय रिज़र्व बैंक** (जिसे इसके बाद "बैंक" कहा गया है) और दूसरी ओर \_\_\_\_\_ (जिसे इसके बाद संविदाकार कहा गया है) के बीच \_\_\_\_\_ **2025** को किया गया।

WHEREAS the Employer is desirous of conducting "**Energy Audit in Bank's Office Building, Reserve Bank of India, Chennai**" and has caused specifications and Schedule of Quantities describing the works to be done which have been signed by or on behalf of the parties hereto

जबकि नियोक्ता बैंक की कार्यालय बिल्डिंग, भारतीय रिज़र्व बैंक, चेन्नै, बैंक की ऊर्जा लेखा परीक्षा का कार्य करवाने के लिए इच्छुक है तथा किए जाने वाले कार्य को दर्शाने और कार्य का वर्णन करने वाले विनिर्देशनों और मात्राओं की अनुसूची को तैयार किया है जिस पर दोनों पार्टियों ने या उनकी ओर से हस्ताक्षर किए गए हैं।

AND WHEREAS the said specifications, the Schedule of Quantities and drawings have been signed by or on behalf of the parties hereto.

और जबकि कार्य का वर्णन करने वाले विनिर्देशनों और मात्राओं की अनुसूची पर इसके पक्षकारों द्वारा अथवा उनकी ओर से हस्ताक्षर किए गए हैं।

AND WHEREAS the Contractor has agreed to execute upon the subject 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 (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 specification 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 thereunder (hereinafter referred to as 'the said Contract Amount')



और जबकि संविदाकार शर्तों के अधीन आगे यहाँ नियत शर्तों और विशेष शर्तों में निर्धारित शर्तों और काम की मात्रा की अनुसूची और संविदा की शर्तों) जिन्हें इसके बाद सामूहिक रूप से " तथाकथित शर्तें " कहा जाएगा (के अनुसार काम को उक्त ड्राइंग और/या उक्त विनिर्देशन में वर्णित है और काम की मात्रा की अनुसूची में शामिल है ,पर उसमें निर्धारित संबंधित दर पर गणना की गई कुल राशि पर या ऐसी अन्य देय राशि पर) इसके बाद इसे" तथाकथित संविदा राशि "कहा जाएगा (कार्य करने के लिए सहमत है।

**NOW IT IS HEREBY AGREED AS FOLLOWS:**

**एतद्वारा अब निम्नानुसार सहमति हुई है:-**

1. In consideration of said Contract Amount to be paid at the times and in the manner set forth in the said conditions, the Contractor shall upon and subject to the said Conditions execute and complete the work shown upon the said Drawings and described in the said Drawings and described in the said Specifications and the Schedule of Quantities.

संविदाकार तथाकथित शर्तों में उल्लिखित समय और नियत तरीके से तथाकथित संविदा राशि के भुगतान करने के मद्देनज़र ,तथाकथित शर्तों के अधीन विनिर्देशनों के अनुसार नियत ड्राइंग और काम की मात्राओं की अनुसूची में दर्शाया गया काम पूरा करेगा।

2. The Bank shall pay the Contractor the said Contract Amount, or such other sum as shall become payable, at the times and in the manner specified in the said conditions.

बैंक संविदाकार को कथित संविदा राशि अथवा समय-समय पर देय होनेवाली अन्य राशि तथाकथित शर्तों में विनिर्दिष्ट तरीके से अदा करेगा।

3. The said Conditions and Appendix thereto shall be read and construed as forming part of this agreement and the parties hereto shall respectively abide by, submit themselves to the said Conditions and perform the agreements on their part respectively in the said Conditions contained.

तथाकथित शर्तें और साथ में दी गई परिशिष्ट इसके साथ पढ़ी जाएंगी और इस करार का हिस्सा मानी जाएंगी और संबंधित पक्ष इस करार की तथाकथित शर्तों के अधीन रहेंगे और अपनी ओर से क्रमशः तथाकथित शर्तों के अपने-अपने कर्तव्य का पालन करेंगे।



4. The plans, agreement and documents mentioned herein shall form the basis of this Contract.

इसमें उल्लिखित प्लान ,करार एवं दस्तावेज इस संविदा के आधारभूत घटक होंगे।

5. This Contract is neither a fixed Lump sum Contract nor a Piece Work Contract but is a Contract to carry out the work of conducting “**Energy Audit in Bank's Office Building, Reserve Bank of India, Chennai**” for ₹ \_\_\_\_\_/- to be paid for according to actual measured quantities at the rates contained in the Schedule of Rates and Probable Quantities or as provided in the said conditions.

यह संविदा न तो स्थायी एकमुश्त संविदा है और न ही खंडित कार्य संविदा। अपितु यह बैंक की कार्यालय बिल्डिंग, भारतीय रिज़र्व बैंक, चेन्नै बैंक की ऊर्जा लेखा परीक्षा के संपूर्ण कार्य के लिए अनुसूची में निहित दरों पर रु \_\_\_\_\_ के लिए संविदा है जिसका भुगतान वास्तविक मात्राओं और संभाव्य मात्रा अथवा तथाकथित -/ शर्तों के अनुसार किय जाना है।

6. The Bank reserves to itself the right of altering the Drawings and nature of the work by adding to or omitting any items of work or having portions of the same carried out without prejudice to this contract.

नियोक्ता के पास इस संविदा पर प्रतिकूल प्रभाव डाले बिना काम की किसी भी मद की ड्राइंग और काम की प्रकृति बदलने ,कोई मद जोड़ने या किए गए काम की मद को निकालने का अधिकार सुरक्षित होगा।

7. Time shall be considered as the essence of this Contract and the contractor hereby agrees to commence the work from tenth day of the date of issue of work order as provided for in the said Conditions and to complete the entire work **within a period of 6 weeks from the 10<sup>th</sup> day of date of work order** subject nevertheless to the extension of time granted by the Bank.

समय इस संविदा का महत्वपूर्ण कारक है और संविदाकार एतद्वारा सहमत है कि समय विस्तार का प्रावधान होते हुए भी वह कार्य आदेश जारी करने की दिनांक से दसवें दिन से तथाकथित शर्तों में उल्लिखित किए गए अनुसार जो भी बाद में हो, काम शुरू कर देगा और उसके बाद **कार्य आदेश की तारीख के 10 वें दिन से 6 सप्ताह की अवधि के भीतर पूरा काम करेगा।**

8. All payments by the Bank under this Contract will be made only at Chennai.

इस संविदा के अंतर्गत नियोक्ता द्वारा सभी भुगतान केवल चेन्नै में किए जाएंगे।



9. All disputes arising out of or in any way connected with this agreement shall be deemed to have arisen at Chennai and only Courts in Chennai shall have jurisdiction to determine the same.

इस करार के तहत या इससे जुड़े किसी भी कारण से उत्पन्न विवाद चेन्नै में उत्पन्न विवाद समझा जाएगा और उसके निपटान का क्षेत्राधिकार चेन्नै में ही स्थित न्यायालयों का निर्धारित क्षेत्राधिकार होगा।

10. The Contractor / 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 and the Contractor / Agency shall ensure appropriate action under the said Act in respect to the complaint. Any complaint of sexual harassment from any aggrieved employee of the contractor against any employee of the Bank shall be taken cognizance of by the Regional Complaints Committee constituted by the Bank.

संविदाकार/एजेंसी कार्यस्थलों पर महिलाओं का यौन उत्पीड़न) रोकथाम, निषेध और निवारण (अधिनियम, "2013 अधिनियम ("के प्रावधानों का पूर्ण अनुपालन करने के लिए पूरी तरह जिम्मेदार होंगे। भारतीय रिज़र्व बैंक) चेन्नै कार्यालय (के परिसर के भीतर अपने कर्मचारी के खिलाफ यौन उत्पीड़न की किसी भी शिकायत के मामले में शिकायत संविदाकार/एजेंसी द्वारा गठित शिकायत समिति के समक्ष दायर की जाएगी संविदाकार/एजेंसी उक्त शिकायत के संबंध में अधिनियम के अंतर्गत समुचित कार्रवाई सुनिश्चित करेगा। संविदाकार के किसी पीड़ित कर्मचारी द्वारा बैंक के किसी कर्मचारी के विरुद्ध की गई यौन उत्पीड़न की किसी भी शिकायत का संज्ञान बैंक द्वारा गठित क्षेत्रीय शिकायत समिति द्वारा लिया जाएगा।

11. The contractor 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, if sexual violence by the Employee of the contractor is proved. The contractor shall be responsible for educating its employees about prevention of sexual harassment at work place and related issues. The Contractor shall employ its labour in sufficient numbers to maintain the required rate of progress and of quality to ensure workmanship of the



degree specified in the Contract and to the satisfaction of the RBI. The Contractor shall not employ in connection with Works any person who has not completed eighteen years of age.

यदि घटना में संविदाकार का कोई कर्मचारी शामिल होता है तो उस स्थिति प्रदान की जाने किसी भी मौद्रिक प्रतिपूर्ति के लिए संविदाकार उत्तरदायित्व होगा ,उदाहरण के लिए बैंक के किसी कर्मचारी को दी जाने वाली मौद्रिक राहत यदि संविदाकार के कर्मचारी द्वारा यौन हिंसा सिद्ध हो जाती है। कार्यस्थल पर यौन उत्पीड़न की रोकथाम और अन्य संबंधित मुद्दों पर अपने कर्मचारियों को शिक्षित करने की जिम्मेदारी संविदाकार की होगी। संविदा में विनिर्दिष्ट किए गए अनुसार कार्य की आवश्यक गति को बनाए रखने और कारीगरी की गुणवत्ता को सुनिश्चित करने के लिए पर्याप्त संख्या में श्रमिकों को काम पर रखेगा। संविदाकार कार्य के संबंध में अठारह वर्ष से कम के किसी व्यक्ति को काम पर नहीं रखेगा।

12. All the workers or employees deployed by the contractor shall consider the employees of contractor and RESERVE BANK OF INDIA shall not have any liability what so ever in nature in regard to such workers / employees. The Contractor shall pay to labour employed by him directly wages not less than fair wages as per Minimum Wages Act. Fair Wage means wages, which shall include wages for weekly day of rest and other allowances whether for time or piece work, after taking into consideration prevailing market rates for similar employment in the neighborhood but shall not be less than the minimum rates of wages fixed under the payment of Minimum Wages Act.

संविदाकार द्वारा काम पर लगाए गए सभी श्रमिक या कर्मचारी संविदाकार के कर्मचारी माने जाएंगे और ऐसे श्रमिकों / कर्मचारियों के संबंध में भारतीय रिज़र्व बैंक पर किसी भी प्रकार की प्रकृति की जिम्मेदारी नहीं होगी। संविदाकार उसके द्वारा काम पर लगाए गए श्रमिकों को सीधे ही मजदूरी का भुगतान करेगा जो कि न्यूनतम मजदूरी अधिनियम के रूप में उचित मजदूरी से कम नहीं होगी। उचित मजदूरी का अर्थ है वह मजदूरी जिसमें साप्ताहिक अवकाश के दिन के लिए मजदूरी और समय अथवा कार्य के भाग के लिए अन्य भत्ते शामिल होंगे। यह भत्ते आसपास दिए जा रहे ऐसे ही रोजगार के लिए प्रचलित बाजार दर के आधार पर दिए जाएंगे लेकिन ये भत्ते न्यूनतम मजदूरी अधिनियम के अंतर्गत निर्धारित मजदूरी से कम नहीं होंगे।

13. The Contractor shall in respect of labour employed by him or his sub-contractor comply with or cause to be complied with the Bidder Labour Regulation in regard to all matters provided therein. The contractor shall comply with the provisions of



the payment of Wages Act, 1936, Minimum Wages Act, 1948, Employers Liability Act, 1938. Workmen's Compensation Act, 1923, Industrial Disputes Act, 1947, Maternity Benefit Act, 1970, Sexual Harassment of Women at work place (Prevention, Prohibition and Redressal) Act, 2013, or any modification thereof or anyother law relating thereto and rules made there under from time to time. The Contractor shall indemnify and keep indemnified the RESERVE BANK OF INDIA against

संविदाकार उसके द्वारा या उसके उप-संविदाकार द्वारा काम पर लगाए गए श्रमिकों के संबंध में बोलीदाता श्रम विनियमन में उल्लिखित सभी मामलों के संबंध में अनुपालन करेगा। संविदाकार मजदूरी अधिनियम, 1936, न्यूनतम मजदूरी अधिनियम, 1948, नियोक्ता दायित्व अधिनियम, , 1938कर्मकार प्रतिकर अधिनियम, ,1923औद्योगिक विवाद अधिनियम, ,1947मातृत्व लाभ अधिनियम, ,1970कार्यस्थल पर महिलाओं का यौन उत्पीड़न) रोकथाम, निषेध और निवारण (अधिनियम, 2013या उसमें किए गए किसी प्रकार के संशोधन या इससे संबंधित अन्य कानून और समय-समय पर बनाए गए नियमों का पालन करेगा। संविदाकार निम्न के संबंध में भारतीय रिज़र्व बैंक के पक्ष में बीमा करवाएगा और उसे लागू रखेगा

- i) Any claim arising out of third party loss / damage to life or property caused by / during execution of the work.

कार्य के निष्पादन से/दौरान होने वाली तीसरी पार्टी के नुकसान /व्यक्ति या संपत्ति को हुए नुकसान से उत्पन्न दावा

- ii) Any claim arising out of loss / damage to the workmen engaged by the contractor during execution of the work.

कार्य के निष्पादन के दौरान संविदाकार द्वारा काम पर लगाए गए कामगार के कारण हुए नुकसान/क्षति से उत्पन्न दावा

- iii) Any claim due to non-compliance of applicable PF / Labour laws, ESI. regulations etc.

लागू पीएफ/श्रम कानूनों ,ईएसआई ,विनियमों आदि का अनुपालन न किए जाने के कारण उत्पन्न कोई दावा

The contractor shall take Workmen Compensation Policy with Reserve Bank of India as the first name, at their cost, before commencement of the work.

संविदाकार कार्य शुरू करने से पहले पहली पार्टी के रूप में भारतीय रिज़र्व बैंक के नाम पर सभी आवश्यक बीमा कवर )अर्थात कामगार क्षतिपूर्ति पॉलिसी, सीएआर पॉलिसी, तीसरी पार्टी देयता, फायर और ट्रांजिट बीमा आदि (अपनी लागत पर लेगा।

The Contractor shall comply with the provisions of Contract Labour (Regulation &



Abolition) Act, 1970. Before release of final bill, the contractor shall submit a certificate to the effect that he has actually paid the entire dues to the labourers of all descriptions engaged by him, for completion of this work at the rate, which is not less than the one prescribed under the Minimum Wages Act, 1949 and has complied with the provisions of CLRA Act with regard to providing the essential amenities to the Contract Labour. विदाकार संविदा श्रम) विनियमन और उन्मूलन (अधिनियम 1970 का पालन करेगा । अंतिम बिल का भुगतान किए जाने से पूर्व संविदाकार इस आशय का प्रमाणपत्र प्रस्तुत करेगा कि उसने कार्य को पूरा करने के लिए उसके द्वारा काम पर लगाए गए सभी कामगारों को वास्तव में सभी देयों का भुगतान कर दिया है और इस भुगतान की दर न्यूनतम मजदूरी अधिनियम 1949 के अंतर्गत निर्धारित दर से कम नहीं है और संविदा पर लगाए गए श्रमिकों के लिए आवश्यक सुविधाएं उपलब्ध करवाने में सीएलआरए अधिनियम के प्रावधानों का अनुपालन किया है।

The Contractor shall provide a complete and updated list of its employees who are deployed within the Bank's premises.

संविदाकार बैंक परिसर में काम पर लगाए गए अपने कर्मचारियों की पूरी और अद्यतन सूची उपलब्ध करवाएगा।

14. That the several parts of this Contract have been read by the Contractor and fully understood by the Contractor.

कि इस संविदा के विभिन्न भागों को संविदाकार द्वारा पढ़ और पूरी तरह से समझ लिया है।

If the contractor is a Partnership or an Individual

IN WITNESS WHEREOF The Bank and the Contractor have set their respective hands to these presents and two duplicate hereof the day and year first hereinabove written.

If the contractor is a Company

IN WITNESS WHEREOF The Bank has set its hand to these presents through its duly authorized official and the Contractor has caused its common seal to be affixed hereunto and the said two duplicate/has caused these presents 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 the Reserve Bank of India by the hand of

Shri ..... (Name and designation)

.....

..... in the presence of

(1)

Address

(2)

Address

.....

.....

.....

### Witnesses

SIGNED AND DELIVERED BY If the part is a partnership firm or any individual  
M/s \_\_\_\_\_ by should be signed by all or on behalf of all the  
the \_\_\_\_\_ hand \_\_\_\_\_ of partners.

Shri.....

...

1).....

...Address

.....

.....

If the Contractor signs under its common Seal





..... the signature clause should tally with their  
sealing clause in the Articles of Associations.  
2)

.....

..

Address

.....

.....

.....

Witnesses

The Contractor is signing by the hand of power  
of attorney whether a company or individual.

THE COMMON SEAL OF

Was hereunto affixed pursuant to  
the resolutions passed

The Contractor is signing by the hand of power  
of attorney whether a company or individual.

By its Board of Directors at the  
meeting held on

.....

.....

.....

.....

In the presence of

( 1 )

.....

....

( 2 )



.....

....

Directors who have signed these presents in taken thereof in the presence of

(1) .....

.....

(2) .....

.....

SIGNED AND DELIVERED BY the Contractor by the hand Of

Shri

.....

and duly constituted attorney.

यदि संविदाकार एक साझेदारी फ़र्म या एक व्यक्ति हो		नियोक्ता और संविदाकार ने इस बारे में साक्ष्य स्वरूप अपने-अपने हस्ताक्षर किए और इसकी दो प्रतियाँ उक्त दिन और वर्ष को तैयार की गई।
यदि संविदाकार एक कंपनी है तो		नियोक्ता और संविदाकार ने इस बारे में साक्ष्य स्वरूप अपने-अपने अधिकृत हस्ताक्षरकर्ताओं के माध्यम से निष्पादित किए और संविदाकार ने इसकी दोनों प्रतियों पर अपनी सामान्य मुहर लगाई इसकी दो प्रतियों पर उसकी ओर से इन्हें उक्त दिन और वर्ष को निष्पादित किया गया।
हस्ताक्षर खंड		
भारतीय रिज़र्व बैंक की ओर से हस्ताक्षरित एवं सुपुर्द श्री-----		



नाम एवं पदनाम(		
इनकी उपस्थिति में हस्ताक्षर किए गए		
1. पता		
.2 पता		
साक्षी		
_____ की ओर से हस्ताक्षरित एवं सुपुर्द श्री ----- -----		
इनकी उपस्थिति में हस्ताक्षर किए गए  .1 पता  .2 पता		यदि पार्टी भागीदारी फर्म या वैयक्तिक फर्म हो तो सभी अथवा सभी भागीदारों की ओर से हस्ताक्षर किये जाने चाहिए।
		यदि निविदाकार उसके कॉमन मुहर के अंतर्गत हस्ताक्षर करता है तो हस्ताक्षर खंड संस्था के अन्तर्नियमों में दिए गए मुहर खंड से मेल खाने चाहिए।
साक्षी		
निम्नलिखित की उपस्थिति में दिनांक ----- को संपन्न निदेशक बोर्ड की बैठक में पारित संकल्प के अनुसरण में इस पर ----- की कॉमन मुहर लगाई गई है।		यदि संविदाकार चाहे कंपनी के रूप में या वैयक्तिक रूप में मुख्तारनामा के अंतर्गत हस्ताक्षर करता हो तो
		यदि संविदाकार चाहे कंपनी के रूप में या वैयक्तिक रूप में मुख्तारनामा के अंतर्गत



		हस्ताक्षर करता हो तो
निम्न की उपस्थिति में		
(1)		
(2)		
निदेशक ,जिन्होंने निम्नलिखित की मौजूदगी में इसके प्रमाणस्वरूप इन दस्तावेजों पर हस्ताक्षर किए हैं।		
(1)		
(2)		
विधिवत गठित अटॉर्नी एवं श्री द्वारा हस्ताक्षरित एवं सुपुर्द		

### Section III

#### Commercial Conditions



1. Sealed tenders are invited from accredited energy auditors for conducting Energy Audit in Bank's Office Buildings at Chennai.

2. **Eligibility:**

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

In support of the above, the firms should submit the **letter of accreditation** issued by Bureau of Energy Efficiency.

3. **Deleted.**

4. Intending tenderers shall remit an amount of ₹4,400/- towards EMD to the Bank Account of Reserve Bank of India Chennai on or before **15.00 hours on July 27, 2025**. The account details for NEFT transactions are as follows,

**Beneficiary Name: RBI Chennai**

**IFSC: RBIS0CNPA01**

**Account No. 186003001**

The bidders are advised to send the proof of remittance with transaction number (scanned copy to [estatechennai@rbi.org.in](mailto:estatechennai@rbi.org.in)). However, Micro and Small Enterprises (MSEs) are exempted from submission of Earnest Money Deposit (EMD) amount at the time of tendering subject to submission of Udyam Registration certificate (Udyog Aadhar Memorandum). However, they shall remit EMD in case the work is awarded to them. EMD submitted by the unsuccessful bidders will be returned by the Bank after awarding the work to successful bidder without any interest. EMD remitted by successful bidder will be returned by the Bank after submission of Final report without any interest.

5. The tenders for the above work shall be submitted in separate sealed covers addressed to The Regional Director, Reserve Bank of India, Estate Department, Fort Glacis-16, P.B.No.40, Rajaji Salai, Chennai -600001, so as to reach the office not later than **14.00 hours on August 08, 2025**. The envelopes shall be super-scribed "**Tender for Conducting Energy Audit in Bank's Office Building, Reserve Bank of India, Chennai**". Tenders will be opened on the same day at 15:00 hours.

6. 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 price bid.



7. The tenders shall be valid for acceptance by the Bank for a period of 90 days from the date of opening of tender 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 GST and other applicable taxes, 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 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 the 10th day of award of work. The site survey, data collection/measurements and draft report shall be completed in five weeks and the final report shall be submitted within one week thereafter.

12. **Terms of payment**

The following terms of payment, subject to statutory deductions shall be applicable for the work:

- a. 80% of the quoted amount shall be paid after completion of energy audit and submission of draft report to the Bank.
- b. 20 % of the quoted amount shall be paid on submission of the final report (3 copies) to the Bank.

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

14. 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.

15. On receipt of intimation from the employer of the acceptance of his/ their tender, the successful tenderer shall be bound to sign a formal contract and within fourteen



days thereof or before commencement of the work, whichever is earlier, 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.

16. The successful tenderer shall obtain Workmen Compensation Policy (WCP) for the laborers working at the site, in joint names with Reserve Bank of India as the first name and the firm's name, at their cost valid till the virtual completion of works. The policy document and receipts for the premium paid shall be submitted to the employer before commencement of the works.

17. If the Auditor being an 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:

## **Section IV**

### **Technical specifications**



## **1. Introduction**

Reserve Bank of India is desirous of undertaking Energy audit of the Electrical / Electromechanical installations provided in the office building at Chennai. The office building receives power supply at 11 KV from the Electricity supply authorities. In addition, diesel generator sets 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 equipment 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. Equipment / measuring instruments**

i) All the equipment/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 equipment/instruments for energy audit:

1. Three-phase Power analyzer
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.

#### **B. Equipment details**

The energy audit of the electrical I electromechanical installation as detailed in **annexure-I** shall be conducted. The major list of equipment is as under:

1. Electricity Supply and Distribution
2. Air Conditioning System
3. Air Handling Units
4. Split I Package Air Conditioners
5. UPS
6. Lighting
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 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**

#### **Centralized 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 optimize the energy utilization.

#### **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 & out water temperatures, gas suction & discharge pressure, Power Consumption etc. after stabilizing 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 parameter 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 (Tsa), Return air temperature (Tra), Chilled Water Inlet and outlet temperature i.e. Tin, Tout 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 I 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 UPS loading, redundancy, operating efficiency, load pattern to suggest measures for energy cost reduction, Measurement and analysis of Harmonics as per standards.

### **v) Lighting**

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 lighting circuits.

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

1. General Inspection of DG set.
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 equipment**

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

### **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 equipment. 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 equipment, 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, Reserve Bank of India,**

**Chennai**

Duration of energy audit:

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Name of the energy audit agency:

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Address :

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**Summary of Recommendations**

**Remarks**

### **DETAILS OF EXISITING ELECTRICAL SYSTEMS**

Sanctioned load: 1400 KVA

Connected load : 2550 KW approx.

Gross carpet area : 20431 Sq.m

Gross built up area : 26242 Sq.m

Gross Air conditioned area : 19000 Sq.m

**Details of major power equipment:**

Type of equipment	Capacity (KVA)	Voltage ratio	Type of cooling
Transformer 1	1000 KVA	11KV / 433V	Air
Transformer 2	1000 KVA	11KV / 433V	Air

**Central AC plant data**

Type of equipment	Capacity (TR)	Compressor 1 (Amps)	Compressor 2 (Amps)	Chilled water flow (LPM)	Condenser water flow (LPM)
Chiller 1	254	131	160	2300	2760
Chiller 2	254	131	160	2300	2760
Chiller 3	254	131	160	2300	2760

**Chilled water pumps**

Type of equipment	Flow (Cu.M / hour)	Head (M)	Power (KW)
Chilled water pump 1	191	35	30
Chilled water pump 2	191	35	30
Chilled water pump 3	191	35	30
Chilled water pump 4	191	35	30

**Condenser water pumps**

Type of equipment	Flow (Cu.M / hour)	Head (M)	Power (KW)
Condenser water pump 1	289.5	25	30



Condenser water pump 2	289.5	25	30
Condenser water pump 3	289.5	25	30
Condenser water pump 4	289.5	25	30

**Cooling tower**

Type of equipment	Capacity (TR)	Flow (M)	Power (KW)
Cooling tower 1	400	4500	9
Cooling tower 2	400	4500	9
Cooling tower 3	400	4500	9

**Air handling units**

AHU no.	Location	Capacity (TR)	Air flow (CFM)	Motor (Kw)	Area covered (Approx.) (Sq.M)
AHU 1	Financial gallery	12	12000	5.5	300
AHU 2	Financial gallery	12	32.04 GPM	5.5	300
AHU 3	PSE Cell	39	16000	7.5	400
AHU 4	Issue	39	16000	7.5	400
AHU 5	CVPS 1	31	21500	9.3	1000
AHU 6	CVPS 2	73	38000	9.3 KW x 02 nos	2000
AHU 7	IBD	40	16000	7.5	300
AHU 8	BO & PMC	38	18000	9.3	450
AHU 9	HRMD / RD area	38	18000	9.3	900
AHU 10	Banking hall	31	21500	9.3	1100
AHU 11	CES	38	18000	9.3	900
AHU 12	DCBS, FIDD	63	34000	15	500

AHU 13	Board room	19	12000	5.5	300
AHU 14	DBS	63	34000	15	600
AHU 15	FED Record room	63	34000	15	500
AHU 16	Executive lounge	18	12000	5.5	400
AHU 17	OLDR	41	12000	5.5	400
AHU 18	Annex – Canteen	60	25000	11	500
AHU 19	Annex - ZTC	65	34000	15	600

**Lifts**

Lift no.	Location	Make	Capacity	No. of floors served	Whether V3F controller provided
1	Main office	Johnson	16 passenger	4	Yes
2	Main office	Johnson	16 passenger	4	Yes
3	Main office	Johnson	16 passenger	4	Yes
4	Main office	Johnson	1.5T	4	Yes
5	Main office	Johnson	1.5T	4	Yes
6	Annex building	Kone	06 passenger	2	Yes

**DG Sets**

DG set no.	Location	Generator Make	Capacity
1	Substation – Ground floor	Crompton greaves	400 KVA
2	Substation – Ground	Stamford	320 KVA

	floor		
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**UPS**

UPS no.	Location	Make	Capacity
1	Centralized UPS room	Numeric	2 x 60KVA
2	Centralized UPS room	Numeric	2 x 100KVA

**Lighting load**

Location	Lighting load in KW
Ground floor	20 KW
First floor	38 KW
Second floor	19.5 KW
Third floor	29.5 KW
Fourth floor	9 KW
Annex building	21 KW
Periphery lighting	5.3 KW

**Standalone AC units where centralized AC is not provided:**

Sl.no	Location	Type of AC	Quantity	Capacity of each AC (TR)	Expected per day operating hours
1	Ground floor	Split AC	06 nos	1TR – 1.5TR	08 Hours
2	Ground floor	Cassette AC	04 nos	2TR – 3TR	12 Hours
3	1 <sup>st</sup> floor	Split AC	02 nos	2TR	12 Hours
4	1 <sup>st</sup> floor	Tower AC	01 no	4TR	12 hours
4	2 <sup>nd</sup> floor	Split AC	04 nos	1TR – 2TR	10 Hours
5	2 <sup>nd</sup> floor	Cassette Ac	02 nos	2TR	04 Hours

6	3 <sup>rd</sup> floor	Split AC	03 nos	1.5TR – 2TR	08 Hours
7	3 <sup>rd</sup> floor	Cassette AC	04 nos	2TR – 3TR	02 Hours
8	4 <sup>th</sup> floor	Split AC	09 nos	1.5TR – 2TR	02 Hours
9	4 <sup>th</sup> floor	Cassette AC	03 nos	3TR	02 Hours
10	4 <sup>th</sup> floor	Tower AC	03 nos	4TR	02 Hours
11	Annex building	Split AC	05 nos	1.5TR – 2TR	04 Hours
12	Annex building	Cassette AC	06 nos	3TR	08 Hours

**Standalone AC units where centralized AC is provided:**

Sl.no	Location	Type of AC	Quantity	Capacity of each AC (TR)	Expected per day operating hours
1	1 <sup>st</sup> floor	Split AC	15 nos	1.5TR – 2TR	08 Hours
2	1 <sup>st</sup> floor	Cassette AC	06nos	1.5-2TR	08 Hours
3	1 <sup>st</sup> floor	Tower AC	03 nos	4TR	08 Hours
4	1 <sup>st</sup> floor	Ductable AC	02 nos	8.5TR	08 Hours
5	2 <sup>nd</sup> floor	Split AC	07 nos	1TR – 2TR	08 Hours
6	2 <sup>nd</sup> floor	Cassette Ac	05 nos	2TR	04 Hours
7	3 <sup>rd</sup> floor	Split AC	22 nos	1.5TR – 2TR	08 Hours
8	3 <sup>rd</sup> floor	Cassette AC	03 nos	2TR	02 Hours
9	Annex building	Split AC	03 nos	1.5TR -	08 Hours

				2TR	
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**Special equipment**

Sl.no	Name of the machine	Make	Power rating	Expected hours of running per day
1	CVPS ( 02 nos)	G&D	14KVA	10 Hours
2	CVPS ( 01 no)	Delereau	4 KW	10 Hours
3	CVPS ( 02 nos)	Toshiba	14KVA	10 Hours
4	Briquetting machine	Kusters	28 KW	10 Hours
5	Shredding machine	Kusters	14 KW	10 Hours
6	Dust catcher	Powertech	5.5 KW	10 Hours

**Annexure I****Performance Evaluation of Main equipment – Sample format**

Central AC Plant

Chiller no: \_\_\_\_\_

Sl.no	Chilled water inlet temp. $T_{in}$ (Deg.C)	Chilled water outlet temp. $T_{out}$ (Deg.C)	Chilled water flow (LPM)	Suction pressure	Discharge pressure	Capacity (TR)	Input power (KW)	/KW/TR

Capacity of the chiller (TR) =  $(T_{in} - T_{out}) \times \text{water flow rate (LPM)} \times 60 / 3024$

Efficiency of the chiller =

### Air handling units

Air handling unit (AHU) no: \_\_\_\_\_

Sl.no	Return / Inlet Air		Supply / Outlet Air		Air flow (CFM)	Capacity (TR)	Input power (KW)	/KW/TR
	Dry bulb temp (Deg.C)	Wet bulb temp (Deg.C)	Dry bulb temp (Deg.C)	Wet bulb temp (Deg.C)				

AHU TR =  $1.699 \times \text{Air flow (CFM)} \times \text{Density of Air (Kg / m}^3\text{)} \times (H_{in} - H_{out}) / (4.18 \times 3024)$

Where:

$H_{in}$  – Enthalpy of inlet air at AHU (KJ / Kg)

$H_{out}$  - Enthalpy of outlet air at AHU (KJ / Kg)

Density of air = 1.18 Kg / m<sup>3</sup> at standard temperature and pressure

Note: Enthalpy is to be read from psychometric chart corresponding to DB and WB temperature.

### Chilled water pumps

Chilled water pump no: \_\_\_\_\_

Sl. no	Discharge pressure ( $P_{dis}$ )	Suction pressure ( $P_{suc}$ )	Chilled water flow	Developed hydraulic power	Measured input power	Pump efficiency	Remarks

	Kg / cm <sup>2</sup>	Kg / cm <sup>2</sup>	(LPM)	(KW)	(KW)		

Developed hydraulic power (KW) = Flow (LPM) x (P<sub>dis</sub> - P<sub>suc</sub>) in Kg / cm<sup>2</sup> \*9.81

Pump efficiency = Developed hydraulic power (KW) / Input electric power (KW)

### Condenser water pumps

Condenser water pump no: \_\_\_\_\_

Sl. no	Discharge pressure (P <sub>dis</sub> ) Kg / cm <sup>2</sup>	Suction pressure (P <sub>suc</sub> ) Kg / cm <sup>2</sup>	Condenser water flow (LPM)	Developed hydraulic power (KW)	Measured input power (KW)	Pump efficiency	Remarks

Developed hydraulic power (KW) = Flow (LPM) x (P<sub>dis</sub> - P<sub>suc</sub>) in Kg / cm<sup>2</sup> \*9.81

Pump efficiency = Developed hydraulic power (KW) / Input electric power (KW)

### Cooling tower

Sl.no	Water inlet temp (T <sub>in</sub> ) (Deg C)	Water outlet temp (T <sub>out</sub> ) (Deg C)	Water flow (LPM)	Wet bulb temp T <sub>wb</sub> (Deg.C)	Cooling tower capacity (TR)	Cooling tower efficiency	/KW/TR	Remarks


Range = T<sub>in</sub> - T<sub>out</sub>      Approach = T<sub>out</sub> - T<sub>wb</sub>

Cooling tower efficiency = Range x 100 / (Range + approach)

Cooling tower capacity (TR) = (T<sub>in</sub> - T<sub>out</sub>) x water flow x 60 / 3024

### Internal lighting (Floor wise)

Sl.n	Floor	Type	Calculate	Qty.	Total	Total	Light	Measured	Light
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o		of fitting	d wattage per fitting	wattage (KW)	carpet area covered (m <sup>2</sup> )	power density LPD (W/ m <sup>2</sup> )	average light level (LUX)	efficiency (LUX / LPD)

**DG set**

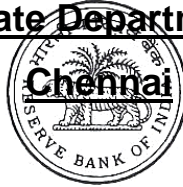
1. Run the DG set at available load
2. The initial and final reading of the diesel tank and energy meter needs to be recorded.

Sl.no	Rating of DG (KVA)	Make of DG set	Start time	Stop time	Period of operation (Hrs)	Diesel consumed (Lts)	Generated energy (Kwh)	Specific fuel consumption (KwH / Ltr)

**Reserve Bank of India**



**Estate Department**



**Tender for Conducting Energy Audit in Bank's Office Building,  
Reserve Bank of India, Chennai**

**PART- II (Price bid)**

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

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

**Due Date of Submission** : On or before 14:00 hrs August 08, 2025

**Date of opening of  
Part I of tender** : 15:00 hrs on August 08, 2025

**Estate Department**

**Chennai**

**Name of the work: Tender for Conducting Energy Audit in Bank's Office Building, Reserve Bank of India, Chennai**

**Bill of quantity**

<b>Sl.no</b>	<b>Description of work</b>	<b>Quantity</b>	<b>Unit rate (Rs.)</b>	<b>Amount (Rs.)</b>
1	Rate for Conducting Energy Audit and submitting 3 sets of audit report, as per the scope specified in part 1 of the tender	Lumpsum		
CGST @ _____ (%)				
SGST @ _____ (%)				
<b>Total amount in Rupees</b>  (_____)				

Date :

Place:

Seal & Signature of Agency