

विनयलता एस.  
Vinayalatha S.  
कुलसचिव

Registrar



गणितीय विज्ञान संस्थान  
THE INSTITUTE OF MATHEMATICAL SCIENCES  
(परमाणु ऊर्जा विभाग, भारत सरकार का एक स्वायत्त संस्थान)

(An Autonomous Institution under Dept. of Atomic Energy, Govt of India)  
CIT CAMPUS, TARAMANI, CHENNAI - 600113

फोन/Phone: 044-22543150 & 044-22541416 (Direct), 044-22543100/166(Board) फ़ैक्स/Fax : 044-22541586 (general)  
वेबसाइट/Website : [www.imsc.res.in](http://www.imsc.res.in) ईमेल/Email: [registrar@imsc.res.in](mailto:registrar@imsc.res.in)

Ref: IMSc / Energy audit / E02 /2026

24.04.2026

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To

Sir,

Kindly send your competitive rate for the Completion of Energy audit, harmonic study for the electrical system improvements to the entire electrical distribution systems and the equipments installed in IMSc Taramani campus, Lilavati residential quarters located at Thiruvanmiyur and DAE Nodal centre PDF and Hostel buildings located at Pallavaram to save electrical energy as per Annexure - I. You are requested to send your **sealed quotations** with detailed scope of works as specified with other details as to reach The Registrar, Institute of Mathematical Sciences on the above address **on or before 11.05.2026**. The Institute reserves the right to reject any or all the quotations or split the order to different agencies without assigning any reason. Contractors are requested to inspect our entire HT, LT installations and the premisses before quote their rates. Also it is mandatory to indicate our inquiry reference number and due date in top of your envelops / quotes. If any clarification, Please contact Phone no: 044-22543300/149 in this regard.

Vinayalatha S.

Registrar  
For and on behalf of the Director,  
IMSc

## ANNEXURE - I

### Name of the work :

Completion of Energy audit, harmonic study for the electrical system improvements to the entire electrical distribution system and the equipments installed in IMScTramani campus, Lilavati residential quarters located at Thiruvanniyur and DAE Nodal centre PDF and Hostel buildings located at pallavaram to save electrical energy.

Tender in query no : IMSc/02/ Energy audit /2026 dated 15.04.2026

### A. General instructions and conditions of the contract :

1. The energy audit service providers shall be more than 5 years similar experience and they have to submit work order and the completion certificate for minimum two similar works for the supporting documents along with the offer.
2. The progressive performance evidence certificates shall be submitted along with the offer which was completed based on the sample data for the completed works.
3. The quoted rates should be inclusive of GST and other applicable taxes and duties. All the rates must be quoted in the prescribed format only placed in this document (D.Price schedule). The service provider profile and a list of customers with proper documentations to be attached along with the offer.
4. The rates quoted shall be valid for 90 days from the date of opening of offer.
5. The service provider shall engage adequate qualified & experienced energy audit personals during the conducting of the works.
6. The service providers shall compensate in full the loss sustained by this institute on account of damage or mis use of the materials or equipments or the systems during discharge of the activities.
7. In case the staff provided by the service provider to the Institute found to be indulging in any undesirable or unfair activities in the premises of the office, the service provider will solely be responsible for all the consequences apart from the liberty of office to lodge complaints before appropriate authorities.
8. The Institute will not take any responsibility in case of any accident / injury to the laborers during their working time. The firm shall take all safety measures and welfare of the labourer as per Labour law latest notification.
9. If any damage is caused to any equipment or items available at the Institute premises due to negligence of the service provider work force, the responsibility shall be entirely on service provider, the amount so involved on this account shall be deducted from the payment due to service provider.
10. Any dispute arising out of this agreement or that which may arise in future will be resolved by taking recourse to mutual settlement in the first instance, failing which the dispute will be subject to Chennai jurisdiction only. The Institute is entitled to withhold payments due to the service provider in case of dispute till it is resolved.
11. The IMSc reserves the right to accept or reject any tender and to amend the tendering process and reject all tenders at any time prior to award.

12. The IMSc shall award the work order to the successful tenderer whose offer has been determined to be best evaluated responsive tender not only on the basis of competitive rates but also on their credentials.

13. IMSc shall issue an order indicating the details of the work order and other terms and conditions, including all the details and this is to be strictly followed by the service provider.

14. The service provider is not permitted to award sub-contract or part thereof under any circumstance.

15. Deductions shall be made from the bills of service provider payment for all the taxes as per the rules of the Government latest norms.

16. The Security Deposit of 2.5 % of work order value will be recovered from the payments as a retention money and it will be released after successful completion of minimum 6 month period and against the certification issued by Electrical-in- Charge , IMSc.

17. No advance payment shall be made for this work. IT will be deducted from the bills as per latest Government Norms.

18. If the proposed works fails to complete within the work order period an amount of Rs. 300/- per day shall be levied per day and it will be deducted from the bills.

19. The service provider shall follow the labour rules and the regulations stipulated by the competent authorities.

20. The service provider shall ensure that the men engaged for the work will follow all the security rules in force at site.

21. The service provider shall meet the Engineer in charge to receive the details of works to be carried out suitable for IMSc requirements and to be report to the Engineer in charge about the day to day work completion up to the end of entire work as planned. The service provider shall work in close co-ordination with IMSc staff and for any clarification Engineer-in-charge shall be consulted.

22. If a tenderer quotes unworkable rates i.e. if the quoted price is less than the lower of the estimated price (determined internally by the Department) and is considered for placement of order, the party will be asked to justify the rate quoted.

23. In case any tenderer fails to perform as per the contract, the contract will be liable to be closed with due notice. Further, they will not be considered for participating in the tendering.

24. The service providers shall have sufficient experienced and certified enery auditors / Energy audit panel certified members, number of measuring tools and the specific tools and the kits for the execution of the entire work. ( Document proof is must )

**B. Structure and organisation details about the service provider:**

NOTE: below details to be submitted along with their offer.

1. Name and communication details:

2. Telephone No. / Mobile No / e-mail ID etc. :

3. Chennai office address and communication details :

4. Legal status of the applicant (Please tick and attach attested copies of original document defining the legal status)

(a) An individual; (b) A proprietary firm; (c) A firm in partnership

(d) A limited company or Corporation.

5. Particulars of registration with various Government bodies (attach attested photocopy)

Dept. / Organisation & Place of registration Registration No.

6. Names and Titles of Director & Officers with designation proposed to be concerned with this work

7. Designation of individuals authorised to act for the organisation

8. Was the applicant ever required to suspend any work for a period of more than six months continuously after you commenced the construction? If so, give the name of the project and reasons of suspension of work.

9. Has the applicant or any constituent partner in case of partnership firm, ever abandoned the awarded work before its completion? If so, give name of the project and reasons for abandonment.

10. Has the applicant, or any constituent partner in case of partnership firm, ever been debarred / black listed for tendering in any organisation at any time? If so give details.

11. Has the applicant, or any constituent partner in case of partnership firm, ever been convicted by a court of law? If so, give details.

12. In which fields of Engineering subject the applicant has specialisation and interest?

13. Any other information considered necessary, but not included above.

### **C. Scope of work and the Requirements:**

#### **1. Location and climatic conditions:**

The IMSc is located at 4<sup>th</sup> cross street, C.I.T Campus, Taramani, Chennai-113. The service provider may note that the condition existing in the region with co-incident humidity, salt laden atmosphere and high temperature. All the electrical system and the equipments are in good condition.

#### **2. Scope of work :**

Completion of Energy audit, harmonic study for the electrical system improvements to the entire electrical distribution system and the equipments installed in IMScTaramani campus, Lilavati residential quarters located at Thiruvanmiyur and DAE Nodal centre pallavaram PDF and Hostel buildings to save electrical energy.

Since IMSc need to control electrical power consumption and the power bill charges, the electrical losses , level of harmonic distortions, power factor placed in the electrical systems and individual feeder power losses occurred in various electrical distribution networks to be identified. An electrical energy audit is an inspection, survey, measurements, collection of data for the analysis and the assessment of energy consumption in all the buildings.

Audit deliverable is to identify potential areas for electrical energy conservation thereby reducing the amount of energy input into the system without negatively affecting the output(s). An energy audit is the first step in identifying opportunities to reduce energy expenses in any building / electrical systems. It provides insight into how and where energy consumption can be reduced and energy savings realized. Its insight into energy efficiency and conservation can lead to significant savings on the energy bill.

The energy audit and the harmonic study to be carried in following electrical areas / electrical feeders placed in the campus.

1. Substations and Transformers :
2. Power Distribution System (PCC & MCC)
3. Metering and Monitoring System
4. Motors
5. Blowers and various Fans
6. Centralized Air conditioning plants and Chiller Compressors
7. Various Pump sets
8. Lighting provided in all the buildings
9. All the DG Sets
10. UPS Systems and its related all electrical and electronic equipments.

11. The proposed work shall be carried out by using specific measurement meter, tools, and kits by the firms in a professional way by using their specific instruments and the tools.

12. The service providers shall recommend their suggestions to Provide new Harmonic filters, power factor improvements and the implementation of additional solar power plants based on their survey and results of energy audit and harmonic study to reduce the power consumption charges.

13. The final reports / documentations to be submitted based on the data / measurements taken at various feeders/ equipments / places and this is to be in a professional way for the implementation of energy saving systems / methods suitable for IMSc requirements.

14. The DPR / PROJECT DATA / site feasibility and possibility / Cost implementation and other details also to be submitted to IMSc before submitting the bills.

15. The benefits of energy audit and its associated works are follows :

- a. Reduced expenditure on energy
- b. Reduced maintenance cost
- c. Reduced Carbon Dioxide
- d. Reduction of environmental impacts
- e. Regulatory compliance
- f. Conservation of natural resources particularly fossil fuels and other non-renewable fuels  
Market recognition
- g. Increase the lifespan of the equipment
- h. Discovers any unaccounted consumption that may exist
- i. Regularisation of day to day electrical operations to reduce the power consumption charges with measurements and data.

**D. Price schedule : (The service providers shall quote their rates in the following schedule of quantities).**

**Name of the work :**

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**Tender in query no :** IMSc/02/ Energy audit /2026 dated 15.04.2026

S.No	Description of works	Qty	Rate in Rs.	Amount in Rs.
1.	<b><u>Electrical Energy audit and harmonic study to be carried at following locations.</u></b>			
	1.Power Quality Monitoring in IMSc campus , Taramani. ( Entire electrical systems and installations )	1 Set		
	2. Power Quality Monitoring in DAE Nodal Center, Pallavaram campus. ( Entire electrical systems and installations )	1 Set		
	3. Power Quality Monitoring in Lilavati Staff Quarters, Thiruvanmiyur. ( Entire electrical systems and installations )	1 Set		

<p><b><u>The following electrical parameters to be taken for above systems :</u></b></p> <p>a) Frequency</p> <p>b) RMS Voltage, RMS Current / Phase &amp; Neutral Current</p> <p>c) Power in KW, KVA &amp; Kvar / Phase and its total</p> <p>d) Power Factor / Phase &amp; its average</p> <p>e) Energy in KWh, Kvarh, Kvah / Phase</p> <p>f) Unbalance current &amp; Voltage % (under IEEE &amp; IEC Standards)</p> <p>g) Harmonic THD Average ( Both V &amp; I)</p> <p>h) Individual Harmonics Order ( 1 to 49th Level ) Both V &amp; I</p> <p>i) Factors like Crest, K, Peak Factors Transformer End Monitoring for 24 Hrs and Generator end monitoring for one hour.</p> <p>j) Harmonics Level (1 to 63rd Level ) - Both V &amp; I (Via Communications)</p> <p>k) Min &amp; Max Parameter Variation Separately (V,I,Power,PF,Neutral Current)</p> <p>l) Monitoring Peaks in V &amp; I with different date and time</p> <p>m) Submission of final report and documents for the above energy audit and harmonics study works in a professional way with soft copy and hard copy including the recommendations for the entire electrical system improvements.</p>			
Total Amount in Rs.			

(Total amount in words \_\_\_\_\_)

( Signature of service provider / contractor with seal and address)