


MANGALORE ELECTRICITY SUPPLY COMPANY LIMITED

(A Government of Karnataka Undertaking)

 Corporate Office, 2nd Floor MESCOM Bhavan, Bejai, Mangaluru-575 004

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No: SE (T)/EE(T)/AEE(DSM)/2022-23/I/22062/2022

Date: 01/08/2022

Encl:

Letter of Enquiry
Sub: To carry out the Energy Audit in MESCOM for the year 2021-22- reg

- Ref:**
1. Gazette of Notification dated: 06.10.2021 of Bureau of Energy Efficiency, New Delhi.
 2. Approved vide Note No. MESCOM/TECH/DSM/5/2022-TECH dated 28.07.2022.

* * * * *

MESCOM requires services to carry out the Annual Energy Audit of MESCOM as specified below; Please quote your lowest offer (FIRM prices) inclusive of GST and all other applicable taxes & duties, charges of stationary, field visits, any other charges for fulfilling the requirements as per General Terms and Conditions /Scope of the Work duly indicating the breakup of the same. If GST is not mentioned, the rates will be treated as inclusive of GST in case of registered firms. **You are also requested to submit the self-attested acceptance for the General Terms and Conditions/Scope of Work attached with this letter.**

Particulars	Last date of receipt of quotation	Desired Delivery	Consignee details
Services to carry out the Annual Energy Audit of MESCOM for the year 2021-22 as per the attached scope of work.	11.08.2022	As per the Time Schedule in General Terms and Conditions/Scope of Work	Superintending Engineer (Ele)(Tech), Corporate Office, MESCOM, Mangaluru Contact person: 9448289406 Email id: semescom@gmail.com

- **EMD: Rs.2,100/-** shall be furnished along with the quotation without fail, EMD in the form of D.D drawn in favour of Chief Financial Officer, MESCOM, Mangaluru. Quotation without EMD is liable for rejection without further notice.
 - ✓ EMD paid by the unsuccessful Bidders will be returned as soon as possible after finalization of contract.
 - ✓ EMD of the successful Bidder will be refunded on award of contract and after security deposit is furnished.
 - ✓ The deposit towards EMD shall not carry any interest.
- **EMD will be Forfeited:**
 - ✓ If a Bidder withdraws/modifies its bid during the period of contract;
 - ✓ In case of a successful Bidder, if the Bidder fails to sign the Contract or if the Bidder fails to furnish the Security Deposit.
- **Security Deposit:** 5% of the contract value by Demand Draft/Bank Guarantee shall be submitted by successful bidder.
 - ✓ In case the bidder fails to furnish the required Security Deposit within the prescribed time, MESCOM reserves the right to cancel the LOI/Work Award, forfeit the EMD.

- ✓ Security deposit will be refunded without any interest after successful completion of the Contract and acceptance of reports by BEE.
- The offers of such firms who do not meet the requirements of General Terms and Conditions/Scope of Work will be rejected without any correspondence.

- Note:**
1. Vendors belonging to SC, ST, OBC and minority categories are required to furnish certificate issued by Revenue Authorities for considering purchase preference as per the Govt Order No: SWD34BCA 2004, Bangalore date 10.03.2005.
 2. Please provide GSTIN number along with the quotation. The firms which are not registered under GST, shall furnish the self declaration for the same.


**Superintending Engineer (Ele)(Tech),
MESCOM, Mangaluru**

General Terms and Conditions / Scope of Work

MESCOM intends to engage an agency to carry out the Energy Audit in MESCOM. The objective of this assignment is to carry out the Annual Energy Audit for the year 2021-22 as per the prescribed formats of regulation to conduct Energy Audit in DISCOMs issued by Bureau of Energy Efficiency, Ministry of Power Government of India vide Gazette Notification dated 06.10.2021 of BEE. **However, this does not constitute any form of employment/obligation on MESCOM to give employment.**

The detailed scope of work and General Terms and Conditions are as below;

✓ **General Terms and Conditions;**

1. The bidder shall have following as minimum team strength of 4 personnel:

Sl. No.	Designation	Qualification	No.	Minimum experience	Remarks
1	Team Leader	Accredited Energy Auditor with Graduate in Engineering	1	Experience in handling atleast 5 works such as PAT, M&V, Energy Audit in power sector	As a proof, the bidder shall submit Team Composition Details as per enclosed Form-2 and CVs of Proposed Team as per Form-3 along with work award copies/work completion certificates as supporting documents.
2	Team Member	Certified Energy Auditor	1	Experience in handling atleast 3 works such as PAT, M&V, Energy Audit in power sector	
3	Team Member	Electrical Engineer/Diploma Engineer	1	Experience in handling atleast 2 works such as PAT, M&V, Energy Audit in power sector	
4	Sector Expert	Retired DISCOM official not less than rank of Executive Engineer having minimum 10 years' experience in DISCOMs			
<ul style="list-style-type: none"> The team should be led by BEE Accredited energy Auditor (AEA). Team Leader/authorized member should be reporting to MESCOM. 					

Note:

- If consultancy firm /agencies do not meet any of the above listed criteria, their proposals will not be considered.
2. Contract period: One Month from the date of Award (30 Calendar days) which may be extended at the discretion of MESCOM on need basis and on mutual consent.
3. Deliverables under the assignment will include following:
- Certified Energy Audit reports of MESCOM for the year 2021-22 in the prescribed formats along with supporting documents to be submitted to BEE in 5 set hardcopies.
 - Soft copies of the report.
 - Further, if any clarification/modifications intimated by BEE/ State designated agency shall be taken into consideration and shall submit the revised reports without any extra cost to MESCOM and without any delay.

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4. The Bidders shall submit their Bids complete in all respect in hard copy to the undersigned. The Bidder shall submit a comprehensive list of attached forms/declarations/certificates etc. in response to this enquiry.
5. **Cost of services:** Proposal to be submitted in Indian Rupees inclusive of all taxes duties and GST and all other applicable taxes & duties, charges of stationary, field visits, any other charges for fulfilling the requirements as per General Terms and Conditions /Scope of the Work (Breakup of cost i.e. quoted amount and taxes to be mentioned)
6. **Payment Clause:**
 - a) Payment authority will be MESCOM.
 - b) The successful bidder shall raise the invoice in favour of Superintending Engineer(Ele)(Technical), Corporate Office, MESCOM, Mangaluru.
 - c) The successful bidder shall raise the invoice on submission of final Certified Annual Energy Audit Report. Payment will be made on submission of reports to BEE. However, the Security Deposit will be refunded after acceptance of reports by BEE.
 - d) For arranging payment, the following document shall be furnished by the firm/agency:
 - i. Tax Invoice comprising of "MSME UNIT" tag line if applicable, GSTIN of the Firm/agency and MESCOM (29AADCM7029H1ZA) duly indicating the IGST, SGST & CGST separately, in duplicate, stamped and pre-receipted.
 - ii. The arrangement for payment of "Tax Amount" will be made only after the Invoice details of the respective month are uploaded in GSTR-1 by the firm/agency.
 - iii. No extra amount shall be paid on any ground whatsoever.
7. **Penalty:** In case the work is not completed within the period stipulated in the award, BIDDER shall be liable to pay at the discretion of the MESCOM as the case may be, penalty to the MESCOM at ½ % per week, subject to a maximum of 10% reckoned on the contract value of such complete portion or section of the work which could not be brought into commission due to any part thereof not having been completed in time, subject to force majeure condition. Otherwise it should be as specifically noted in the time schedule.

✓ **Scope of Works:**

1. Energy Audit should be carried out in line with the Regulation to Conduct Energy Audit in DISCOMs, 2021 and as per Gazette Notification dated 06.10.2021 of BEE.
2. Preparation of checklist/action plan for Energy Audit.
3. Proforma of Energy Audit will be shared with selected agency after the issuance of LoA. MESCOM visit should be carried out by the team members of the agency as per the team declaration in the proposal. Energy Audit regulation, 2021, Gazette Notification dated 06.10.2021 proforma's (formats) will be used for this audit.
4. Collection and Review of the energy related data of said Financial Year (FY) in the Proforma by visiting the MESCOM.
5. Verification of existing pattern of energy distribution across periphery of MESCOM.

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6. Collection and verification of energy flow data of electricity distribution company at all applicable voltage levels of distribution network (please refer energy audit regulation)
7. Collection of data on energy received and distributed by MESCOM and verify the accuracy of data
8. Collection & analysis of the data and prepare the same with report;
 - I. Input energy details:
 - a. Collection of input energy from recorded system meter reading
 - b. All the inputs points of transmission system
 - c. Details provided by transmission unit
 - d. Recorded meter reading at all export points (where energy sent outside the State (interstate as well as intrastate)is from the distribution system);
 - e. System loading and Captures infrastructure details (i.e. no. of circle, division, sub-division, feeders, DTs, & Consumers)
 - II. Parameters for computation of distribution losses:
 - a) Details of open access, EHT sale, HT sale, LT sale and transmission losses
 - b) Number of consumers category wise in each circle
 - c) Consumers connected load category wise in each circle
 - d) Details of billed and un-billed energy category wise of each circle
 - e) Metered and un-metered details.
 - f) Circle wise losses of all circles under MESCOM periphery
 - g) Boundary meter details
 - h) Energy Cost and Tariff data
 - i) Source of energy Supply (e.g. electricity from grid or self-generation), including generation from renewables;
 - j) Energy supplied to Open Access Consumers which is directly purchased by Open Access Consumers from any supplier other than electricity distribution company
 - III. Monitoring and verifications of input energy and consumption pattern at various voltage levels
 - IV. Identify the areas of energy leakage, wastage or inefficient use;
 - V. Identify high loss-making areas/networks, for initiating target based corrective action;
 - VI. Identify overloaded segments of the network for necessary capacity additions.
 - VII. Computation of agriculture consumption (approved by SERC)
 - VIII. Methodology for loss computation various losses.
 - IX. Computation of Average Billing Rate (ABR)
 - a) Total revenue billed category wise.
 - b) Category wise ABR with tariff subsidy.
 - c) Category wise ABR without tariff subsidy.
 - X. Collection Efficiency (Category wise) and computation of AT&C loss.
9. Observe and compile various Energy Conservation (ENCON) options implemented by the MESCOM and prepared report containing details of expenditure made by DC along with saving and payback period.
10. Recommendations to facilitate energy audit, energy accounting and improve energy efficiency

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11. Study the details of loss/gain of MESCOM, analysis of Average Cost of Supply (ACS) and Average Revenue realized (ARR) gap, details of energy charges/Power purchase cost along with the financial analysis.
12. Current System Metering Status at various voltage level of MESCOM
 - Status of Functional meters for all consumers, transformers and feeders.
 - Status of default meters (non-functional meters) for all consumers, transformers and feeders
13. Current status of pre-requisites mentioned in regulations (Please refer energy accounting regulation).
14. Copies of relevant authentic and certified documents should support the report. Each document should be sealed and signed by MESCOM authorized representative as well as by agency's AEA.
15. Prepare final report of DSICOM as per the scope of work and as per the regulation of Energy Audit, 2021 and as per Gazette Notification dated 06.10.2021 of BEE, in a standard format duly indexed, covering profile of the unit and its details of energy related data w.r.t MESCOMs Sector, analytical & Statistical details and any other relevant information.

Further, the Energy Audit carried out by the team shall abide to requirement as per Gazette of Notification dated 06.10.2021 of BEE or any further amendments, directions and shall coordinate with BEE, KREDL and PCKL in submitting the Energy Accounting reports.

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Forms

Proposal is to be submitted in the following format along with the necessary documents as listed. The Proposal shall be liable for rejection in the absence of requisite documents. Proposal should provide information against each of the applicable requirements. In absence of the same, the Proposal shall be liable for rejection.

Form 1: Letter Pro-forma

To,
Superintending Engineer(Ele)(Tech)
MESCOM Bhavana, Bejai,
Kavoor Cross Road,
Mangalore-575004.

Sub: Proposal for Carrying out the Energy Audit in MESCOM

Sir,

The undersigned Agency, having read and examined in detail in respect of appointment of an Agency for MESCOM for the said assignment, do hereby express their interest to provide their Services as specified in the scope of work.

Correspondence Details

1	Name of the Agency	
2	Address of the Agency	
3	Name of the contact person to whom all references shall be made regarding this tender	
4	Designation of the person to whom all references shall be made regarding this tender	
5	Address of the person to whom all references shall be made regarding this tender	
6	Telephone (with STD code)	
7	Mobile number of the authorized contact person	
8	E-Mail of the authorized contact person	

Document forming part of Proposal

We have enclosed the following:

- Form 1: Letter Pro-forma
- Form 2: Team Composition
- Form 3: CV of team members.
- Form 4: List of Projects implemented by the bidder organization.
- Form 5: Approach and Methodology
- Form 6: Declaration Letter

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- Registered Power of Attorney executed by the Agency in favour of the Principal Officer or the duly Authorized Representative, certifying him/her as an authorized signatory for the purpose of this enquiry.

We hereby declare that our Proposal is made in good faith and the information contained is true and correct to the best of our knowledge and belief.

Thanking you,

Yours faithfully,

(Signature of the Officer)

Name :
Designation :
Seal :
Date :
Place :
Business Address :

Witness:

Signature

Name

Address

Date

Agency:

Signature

Name

Designation

Company

Date

I/22062/2022 Form 2: Team Composition

S. No	Name of Person	Role (Team Leader/ Team Members/ Sector expert) ¹	List of projects (M&V, PAT, Energy Audit in power sector) ²			List of other relevant projects
			Work details ³	Duration		
				From	To	
			1. 2. 3. 4. 5.			1. 2. 3.
			1. 2. 3. 4. 5.			1. 2. 3.

- 1 Role of the person in this project, please define only separate roles to individuals, as mentioned in this document.
- 2 List of projects related to M&V, PAT, Energy Audit in power sector and same should be depicted in the attached CV of the person
- 3 Work details :- Supporting documents such as work award copies/work completion certificate to be furnished.

Signature

I/22062/2022 **Form 3: CVs of Proposed Team**

[Provide CVs of the proposed team for undertaking the current assignment, especially of the Proposed Head of the Agency. The CVs to be included in the following format:]

NAME:

1. Proposed Position:
2. Name of Firm:
3. Name of Staff:
4. Date of Birth:
5. Nationality:
6. Education:

Name of Degree	Year	Name of Institution

7. Membership of Professional Associations:
8. Other Training:
9. Countries of Work Experience:
10. Languages:

Language	Speak	Read	Write

13. Employment Record:

Firm	From - To Date	Designation / Role

14. Projects undertaken

Name	Role & Description	Duration (From-To)	Organization Name	Nature of the project (Energy Audit/ MEA/M&V in power sector)

15. Certification:

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes me, my qualifications, and my experience. I understand that any willful misstatement described herein may lead to my disqualification or dismissal, if engaged.

Signature

Date

[Signature in ink of staff member or authorized representative of the staff]

Day/Month/Year Full name, Signature and designation of authorized representative.

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Form 4: List of Projects implemented by the bidder Organization

Type of Project	List of Project
Consultancy Projects (including policy and financial related project) in DISCOMs / Power Sector	1 -
	2 -
	3 -
Detailed Energy Audit related project in DISCOM / Power Sector	1 -
	2 -
	3 -
Energy Audit, PAT and M&V related projects in DISCOM / Power Sector	1 -
	2 -
	3 -
Other similar projects	1 -
	2 -
	3 -

Form 5: Approach and Methodology (Work Plan with Timelines of 30 days)

[Explain your understanding of the objectives of the assignment/job, approach to the assignment/job, detailed execution plan for the assignment, methodology for carrying out the activities and obtaining the expected output, and the degree of detail of such output.

Form 6: Declaration Letter

Declaration Letter on official letter head stating the following:

We are not involved in any major litigation that may have an impact of affecting or compromising the delivery of services as required under this contract.

We are not black listed by any Central / State Government / Public Sector Undertaking in India.

Witness:
Signature
Name
Address
Date

Agency:
Signature
Name
Designation
Organization
Date

