



**REQUEST FOR PORPOSAL FOR CARRYING OUT ENERGY AUDIT IN
MEGHALAYA POWER DISTRIBUTION CORPORATION LIMITED (MePDCL)
AS PER
BUREAU OF ENERGY EFFICIENCY REGULATIONS DATED 06-10-2021.**

**DATE OF ISSUE OF RFP: 12-08-2022
LAST DATE OF SUBMISSION OF RFP: 02-09-2022
PRE BID: TO BE NOTIFIED**

**EXECUTIVE AGENCY
CHIEF ENGINEER (PMC), MEGHALAYA POWER DISTRIBUTION
CORPORATION LIMITED,
MeECL CORPORATE OFFICE, LUMJINGSHAI, SHORT ROUND ROAD
SHILLONG -793001. MEGHALAYA (INDIA)**

1. Letter of Invitation.

Meghalaya Power Distribution Corporation Limited (MePDCL) intends to carry out the Energy Audit as per Bureau of Energy Efficiency Regulations, 2021 - “Manner and intervals for Conduct of Energy Audit in electricity Distribution companies” dated 06-10-2021. In this regard, Proposals are sought from leading firms/ organizations having relevant sectoral experience & infrastructure to undertake such assessment.

MePDCL intends to engage a Firm/Agency to carry out the Energy Audit throughout the state of Meghalaya including Distribution Franchisee Area of Mawsynram, Nangalbibra, Phulbari and Dalu. The objective of this assessment is to carry out the Annual Energy Audit as per the prescribed formats of regulation to conduct Energy Audit in DISCOM issued by Bureau of Energy Efficiency, Ministry of Power Government of India.

The details of the assignment, broad objectives, and letter proforma have been described in this document. Sealed quotations must be submitted to the Chief Engineer (PMC), Meghalaya Power Distribution Corporation Limited (MePDCL), C/o Meghalaya Energy Corporation (MeECL), Lumjingshai, Short Round Road, Shillong – 793001, in physical format as per Time Schedule shown in Request for Proposal published on MeECL website.

The complete proposal shall reach on or before the last date of receipt of proposal. For further details please contact the following contact point mention below.

Contact

1. Chief Engineer (PMC) – Shri P. Sahkhar, (Mobile No.: 9863074990; email – cemoneva.meecl@gmail.com)
2. Executive Engineer (MIS) – Smti S.Rymbai (Mobile No.: 9436928304; email – eemis.mepdcl@gmail.com)

Schedule of RFP (Time Schedule)	Date
Publishing of RFP on MePDCL website	13-08-2022
Last date for receipt of bid Queries through email only	23-08-2022
Pre-bid meeting (through Video conferencing)	May be notified in MeECL website
Last date for receipt of proposals	02-09-2022
Date and Time of opening of proposals	To be notified in MeECL Website
Bid validity	90 days from the last date of receipt of RFP

2. Background:

Meghalaya Power Distribution Corporation Limited (MePDCL), a wholly owned corporate entity under the Meghalaya Government, was incorporated under the Companies Act and functional with effect from on **1st April, 2012** after restructuring the erstwhile Meghalaya State Electricity Board to distribute electricity from the end point of transmission to the end consumers.

MePDCL is a Public Company in the category of ‘**State Government Company**’ registered under the companies Act 1956, with the main objectives of developing, operating and maintenance of distribution system for supplying electricity to the consumer in its area of supply. As a deemed distribution licensee under section 14 of the Electricity Act 2003, **MePDCL** is carrying out the supply of power to the end users as well as maintaining the wire business for supply of such power.

Currently, **MePDCL** provides electricity throughout the State of Meghalaya. It serves more than **6 lakhs consumer** with around **4564 employees**. In terms of infrastructure, the Company operates a vast network comprising of **107 nos. of 33/11KV sub-stations** and switching stations, approximately 350 nos. of feeder, 12405 nos. of Distribution transformers, 18000 KMs of 11KV lines and approximately 1544.12 KMs of 33KV lines spread over 2.24 Thousand sq. km geographical area of Meghalaya covering 6,600 villages and 16 towns. Presently, the Company operates through a network of offices consisting of a **Corporate Office, 2 Zonal Offices, 7 Circle Offices, 17 Divisional Offices and 52 Sub-Divisional offices**.

The overall AT&C (Aggregate Technical and Commercial) losses for the Company has reduced from **33.55%** in **FY 2006-07 to 29.77% FY 2020-21**.

We at MePDCL are committed to do our best to achieve the national goal of uninterrupted and quality power to all at a cheapest cost.

Objective of this Request for Proposal:

Energy Accounting – Energy Accounting means accounting of all energy inflows at various voltage levels in the distribution periphery of the network, including renewable energy generation and open access consumer, and energy consumption by the end consumers. Energy accounting and a consequent annual energy audit will help to identify areas of high loss and pilferage, and thereafter focus efforts to take corrective action.

Bureau of Energy Efficiency (BEE) through Ministry of Power, Government of India issued Regulations dated 06-10-2021 for Conduct of Mandatory Annual Energy Audit and Periodic Energy/Accounting in DISCOMs. As per the regulation, all Electricity Distribution Companies are mandated to conduct annual energy audit and periodic energy accounting on quarterly basis.

These Regulations for Energy Audit in Electricity Distribution Companies provide broad framework for conduct of Annual Energy Audit and Quarterly Periodic Energy Accounting with necessary Pre-requisites and reporting requirements to be met.

MePDCL intends to engage a Firm/Agency to carry out the Energy Audit in MePDCL. The objective of this assignment is to carry out the Annual Energy Audit as per the prescribed formats of regulation to conduct Energy Audit in DISCOM issued by Bureau of Energy Efficiency, Ministry of Power, Government of India.

3. Scope of Work

1. Energy Audit shall be carried out in line with the Bureau of Energy Efficiency (Manner and intervals for conduct of Energy Audit in electricity Distribution companies) Regulations, 2021.
2. Preparation of checklist/action plan for Energy Audit.
3. DISCOM visit shall be carried out by all team members of the Firm/Agency as per the team declaration in technical proposal. Energy audit regulations, 2021, proforma's (formats) will

be used for this audit. The regulations along with proforma's (formats) are enclosed at **Annexure-1**.

4. Review of the energy related data of FY 2020-21 and FY 2021-22 in the Proforma by visiting the DISCOM physically.
5. Verification of existing pattern of energy Distribution across periphery of electricity Distribution Company.
6. Verification of energy flow data of electricity Distribution Company at all applicable voltage level of Distribution network (please refer energy audit regulation).
7. Verification of data on energy received and distributed by DISCOM and its accuracy.
8. Analysis of the data and prepare the same with report;
 - i. Input energy details:
 - a. Analysis of input energy from recorded system meter reading.
 - b. All the input 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 Capture infrastructure details (i.e. no of Circle, Division, Sub-Division, Feeders, DTs, Consumers etc.)
 - ii. Parameters for computation of distribution losses:
 - a) Details of open access, EHT sale, HT sale, LT sale and transmission losses.
 - b) Number of consumer's category wise in each Circle and Division.
 - c) Consumers connected load category wise of each Circle and Division.
 - d) Details of billed and un-billed energy category wise of each Circle and Division.
 - e) Meter and un-metered details.
 - f) Division and Circle wise losses under DISCOM 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;
 - iii. Energy supplied to Open Access Consumers which is directly purchased by Open Access Consumers from many supplier other than electricity Distribution Company.
 - iv. Verifications of input energy and consumption pattern at various voltage levels
 - v. Identification of the areas of energy leakage, wastage or inefficient use;
 - vi. Identification of high loss-making areas/networks, for initiating target based corrective action;
 - vii. Identification of overloaded segments of the network for necessary capacity additions.
 - viii. Computation of agriculture consumption approved by Meghalaya State Electricity Regulatory Commission (MSERC).
 - ix. Methodology for loss computation of various losses.
 - x. 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.
 - xi. Collection Efficiency (Category wise) and computation of AT&C loss.
9. Recommendations on energy accounting and improve energy efficiency.

10. Analysis of the details of loss/gain of DISCOM, 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.
11. Analysis of the current System Metering Status at various voltage levels of DISCOM.
 - Status of Functional meters for all consumers, transformers and feeders.
 - Status of default meters (non-functional meters) for all consumers, transformers and feeders.
12. Analysis of the current status of pre-requisites mentioned in regulations (Please refer the aforesaid energy accounting regulation).
13. Copies of relevant authentic and certified documents shall support the report. Each document shall be sealed and signed by DISCOM authorized representatives as well as by Agency's Accredited Energy Auditor (AEA).
14. Preparation of final report of DISCOM as per the scope of work and as per the regulation of Energy Audit, 2021, in a standard format duly indexed, covering profile of the unit and its details of energy related data with respect to DISCOMs Sector, Analytical & Statistical details and any other relevant information. The queries with respect to the audit report raised by BEE need to be compiled by the Firm/Agency.

Note: Please refer

1. The BEE Regulation dated 06-10-2021 for details.
2. The second schedule for proforma of Annual Energy Audit Report to be completed by the Accredited Energy Auditor and Energy Manager of the Electricity Distribution Company.

4. Timeline: -

This time for delivery and acceptance of deliverable for this assignment is as follows:

- Energy Accounting for FY 2020-21 & FY 2021-22 within 1 (one) month of award of work. The timeline may be extended with the approval of the CE (PMC).

5. Selection Process

5.1 Pre-Qualification Criteria

The Firm/Agency interested in this task shall be considered and preferably on fulfilment of the following criteria:

- Shall be a firm/Agency company registered/incorporated in India. The organization registered under Companies Act or Societies Registration Act shall be eligible to apply. Necessary registration certificate of the Firm/Agency is to be submitted. Subcontracting after award of RFP is not allowed.
- Consortium is permitted. The consultancy Firm/ Agency may involve one Agency only as partner for meeting work, experience and MoU for such must be submitted. The consortium partner shall not have been blacklisted by any Central/ State Government or Public Sector Undertakings or any Private Entity. The Bidder (individual/ all members of consortium) shall have a valid PAN and GSTIN Number if applicable. Copy of relevant certificates indicating PAN number, GST registration number (GSTIN) to be submitted.

- The organization (in case of consortium, the lead-member of the consortium) must be registered/incorporated in India, within at least 5 years of experience in the field of consultancy services/ research area.
- Average Annual turnover of minimum of Rs.10 lakh for the last three financial years. (FY 2019-20, 2020-21, 2021-22). In case of provisional account for FY 2021-22, CEA certified statement is required to be submitted.
- Shall not be involved in any litigation that may have an impact of affecting or comprising the delivery of services as required under this contract.
- Shall not be blacklisted by any Private Entity/ Central/ State Government / Public Sector Undertaking India.
- The Firm/Agency shall have the following as minimum team strength of 4 personnel who will be engaged for the work:

Table number 1

Sl. No.	Designation	Qualification	Nos.	Minimum years of experience
1	Team Leader	Accredited Energy Auditor with Graduate in Engineering	1	5 years working experience in Power Distribution Sector
2	Team Member	Certified Energy Manager with Graduate in Engineering	1	Must have 3 years' experience working on projects/ assignments with DISCOMs
3	Team Member	Electrical Engineer/ Diploma Engineer	2	Must have 3 years' experience working on projects/ assignments with DISCOMs

Necessary certificate/ document shall be submitted.

1. The team shall be led by BEE Accredited Energy Auditor (AEA).
2. Team Leader/ authorized member shall be reporting to MePDCL as communicated by Agency Name.
3. Minimum qualification criteria: BEE certification for AEA and CEM.
4. The team member as proposed by the Agency in the tender document shall not change till the completion of work.

Table number 2

Parameter	Criteria	Minimum Qualification Criteria
(A)	Experience of Agency: Shall have carried out at least 3 (three) projects of yearly Energy Audit in any Indian DISCOM on commercial basis during last 5 years. Free pilot project experience will not be accepted.	Documentary evidence of Satisfactory work completion report issued by DISCOM
(B)	Annual turnover of the Firm	Average Annual turnover of minimum Rs 10 lakhs for the last three financial years (FY 2019-20, 2020-21, 2021-22)
(C)	Approach & detailed work methodology	As per scope of work given under section 3 of this RFP

Note:

- If Firm/Agencies do not meet any of the above listed criteria, their proposals will not be considered for further evaluation.
- Firm/Agencies meeting above listed criteria are required to submit evidence (i.e. details/documents of audited financial statements of last 3 years etc.) in support- otherwise proposal may be disqualified.

Preliminary Scrutiny

Preliminary scrutiny of the proposal will be made to determine whether they are complete whether the required EMD fee has been furnished, whether the documents has been properly signed, whether the bids are in order, and whether the bidder meets all the pre-qualification criteria. Proposals not conforming to these requirements will be rejected.

5.2 Evaluation of Proposals

The number of points to be given under each of the evaluation criteria is:

- The Bidder shall take enough care to submit all the information sought by the Authority in the desired formats. The proposals are liable to be rejected if information is not provided in the desired formats.
- The Technical Proposals, which are found acceptable in accordance with the above, shall be deemed as responsive proposals. The Bidders with such responsive proposal shall be considered as Technically qualified Bidders and will be eligible for next stage of the Bidding Process i.e. Financial Evaluation.
- In the case of key personnel, their CVs shall be submitted duly signed by the respective personnel and countersigned by the Authorized Signatory of the firm. Their experience need not necessarily be with the firm where they are currently employed.
- In the case of firms, their experience will be considered only in those cases where they have been awarded contracts, either on individual basis or as a Joint Venture. The experience of firms where they have only been associated as Sub-Firm/ Agencies for any assignments will not be considered for evaluation.
- The firms shall substantiate their claims of experience by providing copies of the relevant contract along with the names, designations, email addresses and contact numbers of their Clients.

5.3 Mode of Selection

The Price Bid of Bidder(s) meeting minimum eligibility criteria will be opened. Thereafter award will be issued to lowest rate received in Price Bid as per final decision of Competent Authority. MePDCL reserves the right to award the energy audit for 1(one) year only or multiple years.

6. Instruction to Bidders**6.1 Procedure for Submission of Proposal**

The Bidder must comply with the following instructions during preparation of Proposals:

1. The Bidders are to carefully examine all the instructions, guidelines, terms and condition and formats of the Request for Proposal. Failure to furnish all the necessary information as required or submission of a proposal not substantially responsive to all the requirements, shall be at Bidder's own risk and will be liable for rejection.

2. The Proposal and all associated correspondence shall be written in English and shall conform to prescribed formats. Any interlineations, erasures or overwriting shall be valid only if they are initiated by the authorized persons signing the Proposal.
3. The Proposal shall be in indelible ink and shall be signed by the Bidder or duly authorized person (s). The letter of authorization shall be indicated by written power of attorney and shall accompany the proposal.
4. In addition to the identification, the physical envelopes containing the Proposal shall mention the name and address of the Bidder to enable the proposal to be returned in case it is declared late pursuant and for mailing purposes.
5. Proposals received by Email or facsimile or mobile file transfer shall be treated as defective, invalid and rejected.
6. Only detailed proposal complete in all respect and in the forms indicated shall be treated as valid.
7. No Bidder can modify, substitute, or withdraw the Proposal after its submission.
8. The Firm/Agency shall submit their Proposal with Cover letter in two separate envelopes marked as ENVELOPE-A and ENVELOPE-B for (EMD and Technical proposal) and (Financial proposal) documents respectively.
9. COVER LETTER: - The cover letter must clearly mention the name, Address, telephone no., mobile no., and email id of the authorized person who will serve as the primary point of contact for all communication. The person who is signing the cover letter and the proposal shall have authorization.
10. ENVELOPE- A: - Demand draft of EMD Amount of Rs 5,000/- in sealed envelope and One Hard Copy of Technical Proposal, in original with signature of authorized personnel and stamp/ seal of the organization. The sealed envelope shall be super scribed with the wordings Technical Proposal for "Carrying out the Annual Energy Audit in MePDCL."
11. ENVELOPE- B: - One Hard Copy of Financial Proposal, in original with signature of authorized personnel and stamp/ seal of the organization. The sealed envelope shall be super scribed with the wording Financial Proposal for "Carrying out the Annual Energy Audit in MePDCL."

Each document in the two envelopes of Proposal shall be a complete document and shall be bound as a volume separately. Each of the document shall be page numbered and appropriately flagged and contain the list of contents with page number. Different copies must be bound separately. The deficiency in documentation may result in the rejection of the Proposal. This envelope shall be sent to MePDCL.

12. The Technical and Financial Proposal must be delivered at the submission address on or before time and date stated above. Any Proposal received after the closing time for submission of proposal shall be returned unopened. MePDCL does not take any responsibility for the delay and any explanation for the same.
13. The sealed cover shall also clearly indicate the name, address and telephone number of agencies to enable the proposal to be returned unopened in case it is declared "Late".
14. The proposal shall contain all the documentary evidences to substantiate the claim for pre-qualification criteria set in Para 5.1 above i.e. names, CVs and duration of association of personnel who will be engaged in the said work/ activities (duly signed CVs must have name and nationality of staff, profession/designation of staff, proposed position in the team, whether employee of the firm or Firm/ Agency, the number of years with the firm key qualifications, academic background, experience and languages known).

15. Each team member who is not a full-time employee of the firm is required to give an undertaking that he/she is available to undertake the task allocated to him/her in the technical proposal. Each CV shall be maximum of 3 pages and signed (by the key personnel) confirming that the information given in the CV is correct.
16. Moreover, Firm/Agency/ is supposed to present a write up (maximum 5 pages) on the methodology it tend to follow to undertake Proposal for “carrying out the Energy Audit in MePDCL” along with timelines for project completion which must not exceed one month from date of awarding of contract. The timeline may be extended with the approval of the Chief Engineer (PMC).
17. ENVELOPE-B i.e., Financial Proposal will be opened only for bidders who have been found qualified in meeting the evaluation criterion set in Section 5 above with all required information furnished un ENVELOPE-A.
18. Both the EMD and Technical Bid cover (Envelope-A) and Price Bid cover (Envelope-B) shall then be put in a single outer cover and sealed appropriately. The outer cover shall be super scribed as Proposal for “Carrying out the Energy Audit in MePDCL.” The “FROM” address and “TO” address shall be written legibly failing which, the Technical Bid is liable for rejection.

6.2 Cost of RFP

The firm/Agency shall bear all cost associated with the preparation and submission of its RFP, including cost of presentation for the purposes of clarification of the bid, if so desired by MePDCL will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the RFP Process. The issue of this RFP does not imply that MePDCL is bound to select an agency for the Project and MePDCL reserves the right to reject all or any of the proposals of Bidders or Bids or discontinue or cancel the entire process without assigning any reason whatsoever.

6.3 Validity of Bids

The Bids submitted shall remain valid for a period of 90 days from the last date of receipt/opening of proposal. If the bid validity given in the received bid is less than the period specified, the Bid will be rejected as non-responsive. The Successful Bidders shall extend the price validity till the completion of the order/Award or as requested by MePDCL.

6.4 Modification and Withdrawal of Bids

The bids once submitted will not be allowed to be modified or amended or withdraw at any cost.

6.5 Acceptance and withdrawal of Bids

The right of final acceptance of the bids is entirely vested with the MePDCL who reserves the right to accept or reject, any or all the RFPs in full or in parts without assigning any reason whatsoever. There is no obligation on the part of RFP inviting Authority to communicate with rejected Bidders. After acceptance of the Bid by MePDCL, the bidder shall have no right to withdraw his proposal or claim higher price. MePDCL may also reject any bid. Proposal for reasons such as change in scope of work, new technologies, and lack of anticipated financial resources, court orders, accidents or calamities and other unforeseen circumstances.

6.6 Earnest Money deposit /Bid Security:

Demand Draft of Rs. 5,000/- (Rupees Five thousand only) valid for 6 months in favour of “Meghalaya Power Distribution Corporation Ltd.” Payable at Shillong shall be submitted.

6.7 RFP

The RFP document can be downloaded from the MePDCL website (www.meecl.nic.in).

6.8 Contents of the RFP

The Firm/Agency is expected to examine all instructions, forms, terms & conditions and Statement of work in the RFP documents. Failure to furnish all information required or submission of an RFP Document not substantially responsive to the RFP in every aspect will be at the Firm/Agency's risk and may result in the rejection of the RFP.

The proposals will be scrutinized based on the criterion set in para 5.1 above.

The specific experience of the Agency/firm will be check based on the following information provided in ENVELOPE-A along with the prescribed documents:

1. Evidence of satisfying all the minimum eligibility criterion listed out in Para 5.1.
2. Evidence of having successfully carried out similar assignments.
3. Sufficient size, organization, and management to carry out the entire project.
4. Specialized skills and creativity related to the assignment.

However, MePDCL in its sole/absolute discretion can apply whatever criteria deemed appropriate in determining the responsiveness of the Proposal submitted by the respondents.

6.9 Language of Bids

The bids prepared by the Firm/Agency and all correspondence and documents relating to the bids shall be written in the English language, provided that any printed literature furnished by the Firm/Agency may be written in another language so long as the same is accompanied by an English Translation in which case, for purpose of interpretation of the bid, the English translation shall govern.

6.10 Pre-Bid Meeting

1. Pre-Bid Meeting may be convened remotely by Video Conference at the designated date as mentioned above at a time and to be specified by the MePDCL.
2. A maximum of two representatives of each agency shall be allowed to participate.
3. During Pre-Bid Conference(s), the Bidders may seek clarifications and make suggestions for consideration of the MePDCL.
4. The MePDCL shall endeavor to provide clarifications and such further information as it may, in its sole discretion; consider appropriate for facilitation a fair, transparent and competitive Bidding process.
5. All enquiries from the Bidders relating to this RFP notice document must be submitted to MePDCL before the deadline mentioned in this document.
6. These queries shall also be emailed to cemoneva.meecl@gmail.com and eemis.mepdcl@gmail.com

6.11 Opening of Bid

The Bidder or his authorized representative may be present at the time of opening of bid on the specified date. In case of unscheduled holiday on the closing/opening day of bid, the next working day will be treated as scheduled prescribed day of closing/opening of bid; the time notified remaining the same.

6.12 Performance Security

The successful bidder will be required to deposit an amount equivalent to 10% of the value of the contract within 15 working days from the date of issuance of LOA. This shall be furnished through the Demand Draft in favour of “Meghalaya Power Distribution Corporation Ltd.”, payable at Shillong. The Performance Security amount furnished by Demand Draft will be returned without interest within 60 days of completion of all obligations under the contract to the satisfaction of Chief Engineer (PMC). The Performance Security will be returned after adjusting for penalties on account of deficiencies, if any. In the performance of the contract, the performance Security in the form of Demand Draft shall be valid for the period of 6 months plus 6 days claim period, which can be further extended for another 6 months on mutual consent.

6.13 Liquidated Damage

If delay in completing any of the above written deliverable/Submissions (in section 4), a show cause notice may be served to the Firm/Agency and liquidate damages (LD) will be imposed @ 2.5% per week or part of a week or which delay has occurred subject to a maximum of 10% of the contract value. LD may be attributed to the successful bidder for each payment milestone as defined in the contract. Recoveries through Liquidated Damages are to be without any prejudice to the other remedies as available to MePDCL under the terms of the contract. The CE (PMC) reserves the right to waive off the penalty/LD.

6.14 Conflict of Interest

The Firm/Agency who is selected for the work will have to maintain the confidentiality of the information complied. In no case the Firm/Agency will be allowed to use the data or share the information with anyone else, except for the MePDCL. MePDCL shall hold the copyrights over any of the data collected or complied during the awards.

6.15 Confidentiality

MePDCL require that recipients of this document to maintain its content in the same confidence as their own confidential information.

6.16 Authorized Signatory (Consultant)

The Firm/Agency as used in the RFP shall mean the one who has signed the RFP document forms. The Firm/Agency shall be the duly authorized of the Firm/Agency, for which power of Attorney shall be submitted. All certificates and documents (including any clarification sought and any subsequent correspondences) received hereby, shall as far as possible, be furnished and signed by the Authorized Representative.

In case of consortium, letter of association signed by the authorized signatory of the member firms authorizing the lead firm shall be attached in original. The power or authorization, or any other documents consisting of adequate proof of the ability of the signatory to bind the Firm/Agency shall be annexed to the bid. MePDCL may reject outright any proposal not supported by adequate proof of the signatory's authority.

6.17 Contact Details of Firm/Agency

Firm/Agency who wants to receive MePDCL response to queries shall give their contact details to MePDCL. The Firm/Agency shall send their contact details in writing at the MePDCL contact address indicated above.

6.18 Queries on RFP

Firm/Agency requiring any clarification on this document shall send a query through email. MePDCL will response to all the queries, received not later than the dates prescribed by the MePDCL in Para 1 of this document sent to all bidders through email.

6.19 Non-disclosure of Contract Document

Except with the written consent of the MePDCL the firm/agency shall not disclose the contract or any provision, specification, plan, design, pattern, sample or information thereof to any third party.

6.20 Amendment to RFP

At any time prior to the last date for receipt of bids, MePDCL may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Firm/Agency, modify the RFP Document by an amendment. In order to provide prospective Firm/Agency reasonable time in which to take the amendment into account in preparing their bids, MePDCL may in its sole discretion, extend the last date for the receipt of Bids and/or make other changes in the requirements set out in the invitation for RFP. Any amendment issued on RFP will be published in MePDCL website to make it accessible to all Bidders and shall be deemed to be a part of this document.

6.21 Power of Attorney

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

6.22 Issuance of LOA

The Letter of Award (LOA) of RFP will be issued to the Successful Bidder by MePDCL. This will be treated as commencement of the work for the successful bidder.

6.23 Document Comprising the RFP

The proposal prepared by the Firm/Agency shall comprise the following components:

1. Form 1: Letter Pro-forma.
2. Form 2: Minimum eligibility.
3. Form 3: Team Composition.
4. Form 4: CV of proposed team members.
5. Form 5: List of Projects implemented by the bidder organization.
6. Form 6: Prior Experience.
7. Form 7: Approach and Methodology.
8. Form 8: Declaration Letter.
9. Form 9: Financial Proposal.
10. Earnest Money Deposit of INR 5,000 (INR Five Thousand Only).
11. Any other documents/evidence as deemed appropriate.

6.24 Terms of Payment

- Payment authority will be MePDCL, Lumjingshai, Shillong.
- The successful bidder shall raise the invoice in favour of “The Chief Engineer (PMC), MePDCL, C/o MeECL, Lumjingshai, Short Round Road, Shillong-793001”
- Payment will be made after the end of timeline mentioned below for energy audit of FY 2020-21 & FY 2021-22 and after the satisfaction of Chief Engineer (PMC). The payment breakdown will be as follows:

Sr. No.	Payment Terms upon submission and acceptance of annual energy audit report	Payment Percentage	Timeline for payment
1	50% of “total one year cost of that particular-Financial year” after issue of LOA and after submission of report to BEE	50%	Within 60 working days through RTGS system after submission of report to BEE and after submission of performance Security and other formalities
2	Balance amount of 50% of “total one year cost of that particular Financial Year” after acceptance of report by BEE	50%	Within 60 working days or as per availability of funds through RTGS system after submission of report by BEE. In case response is not received from BEE then Chief Engineer (PMC) will decide the acceptance.

- GST will be paid extra as per the rules of Government of India and shall be clearly spelt in the financial bid.
- No extra amount shall be paid on any ground whatsoever. Prices as quoted in price proposal shall be firm.
- The agency shall submit invoice in triplicate as per agreed payment terms with supporting documents. Payment will be made after submission of the bills and relevant documents which are correct in all respects to the MePDCL and after the approval by Chief Engineer (PMC) after deducting applicable taxes etc.
- The boarding/ lodging and conveyance for Firm/Agency representatives from Headquarters to Shillong shall be at Firm/Agency’s cost and will not be paid by MePDCL.

6.25 DISCLAIMER

MePDCL and/or its officers, employees disclaim all liability from any loss or damage, whether foreseeable or not, suffered by any person action on or refraining from actin because of any information including statements, information forecasts, estimates or projections contained in this document or conduct ancillary to it whether or not the loss or damage arises in connection with any omission, negligence, default, lack of care or misrepresentation on the part of MePDCL and/or any of its officers, employees.

6.26 DISQUALIFICATION

MePDCL may in its sole discretion and at any time during the process if bidding, disqualify any bidder from the tender process if the bidder has –

- Submitted the tender after the schedule date and time
- Firms not meeting eligibility criteria
- Made misleading or false representations in the forms, statements and attachments submitted in proof of the eligibility requirements.
- If found to have a record of poor performance such as abandoning works, not properly completing the contract, inordinately delaying completion, being involved in litigation or financial failures, etc.
- Submitted proposal which is not accompanied by required bid fees.
- Failed to provide clarifications related thereto, when sought.

6.27 CANCELLATION:

The MePDCL reserves the right to cancel the work order as a whole or in part at any time without assigning any reason or in the event of default on the part of the consultant.

6.28 Termination of contract:

The MePDCL reserves its right to terminate the order by giving prior 15 days' notice in the event of one or more of the following situations:

- i. Unnecessary or unwarranted delay in execution of the work allotted.
- ii. Delay in submission of reports beyond the stipulated periods.
- iii. Breach of trust is noticed during any stage of the consultancy assignment.
- iv. Assigns transfer, sublet or attempts to assign transfer or sublet any portion of the work order.
- v. If the firm or any partner thereof shall at any time be adjudged bankrupt or have a receiving order or order for administration of his Estate made against him or shall take any proceedings for liquidation or composition under any Bankruptcy Act for the time being in force or make any conveyance or assignment of its/effect of composition or arrangement for the benefit of his creditor or purport to do so, or if any application he made under any Bankruptcy Act for the time being in force the sequence of his Estate or if a trust deed granted by him on behalf of his creditors.
- vi. On termination of contract MePDCL may entrust the work to any Firm at the risk and cost of the bidder.

6.29 ARBITRATION:

- i. If at any time any question of dispute or difference what so ever shall arise, between the MePDCL and the Consultant upon or in relation to or in connection with work order/contract, either party may forthwith give notice in writing to the other, of the existing of such question, dispute or difference and the same shall be referred for sole arbitration of a nominee of the MePDCL who shall give a reasoned/speaking award. The award of the sole arbitrator shall be final and binding on the parties under the provisions of the Indian Arbitration Act 1996 and of the rules there under. Any statutory amendment, modification or re-enactment thereof for the time being in force, shall be deemed to apply and be incorporated in the contract/work order. The Sole Arbitrator shall be any officer of the MePDCL whose name is approved by the CMD of the Meghalaya Energy Corporation Ltd (MeECL) and its subsidiaries. It will not be objectionable if the Sole Arbitrator is an officer of the MeECL and he has expressed his views on all or any of the matter in question of dispute or difference.
- ii. Upon every or any such reference, the cost of and incidental to the reference and award respectively shall be in the discretion of the Sole Arbitrator so appointed who may determine the amount thereof or direct the same to be fixed as between solicitor and client or as between party and shall direct by whom and to whom and in what manner the same is to be borne and paid.
- iii. The work under the contract shall, if reasonably possible continue during the arbitration proceedings and no payment due or payable by the MePDCL shall be withheld on account of such proceedings.

6.30 Jurisdiction of Courts

Any dispute arising out of or in respect of the contract will be subjected to the jurisdiction of Shillong Court only.

6.31 FORCE MAJEURE:

During the pendency of the Contract, if the performance in whole/part by either party or any obligation there under is prevented/delayed by causes arising out of any war, hostility, civil commotion, acts of the public enemy, sabotage, fire, floods, explosions, epidemics or under order/instructions of Central/State Government/MSERC Regulations, strikes lockout, embargo, acts of Civil/Military authorities or any other causes beyond their reasonable control, neither of the two parties shall be made liable for loss or damages due to delay or failure to perform the contract during the currency of Force Majeure conditions, provided that the incident is notified in writing (with documentary proof) by the successful bidder to MePDCL within 30 days from the date of the occurrence.

7 Forms for the Technical proposal (Envelope A)

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 supporting documents. Proposal shall provide information against each of the applicable requirements. In absence of the same the proposal shall be liable for rejection.

7.1 Form 1: Letter Pro-forma

To,

CE (PMC)
MePDCL, Shillong

Sub: Proposal for carrying out the Energy Audit in MePDCL.

Sir,

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

2. Correspondence Details

1	Name of the Agency	
2	Address of the Agency	
3	Name of the contact person whom all references shall be made regarding this RFP	
4	Designation of the person to whom all references shall be made regarding this RFP	

5	Address of the person to whom all references shall be made regarding this RFP	
6	Telephone (with STD code)/ Mobile No	
7	E-Mail of the contact person	

3. Document forming part of Proposal

We have enclosed the following:

- Form 1: Letter Pro-forma
- Form 2: Minimum Eligibility
- Form 3: Team Composition
- Form 4: CV of proposed team members.
- Form 5: List of Projects implemented by the bidder organization.
- Form 6: Prior Experience
- Form 7: Approach and Methodology
- Form 8: Declaration Letter
- Form 9: Financial proposal
- Earnest Money deposit of INR. 5,000/- (INR Five Thousand)only
- Any other document(s)/evidence(s) as deemed appropriate (to be specify).

3. 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,

(Authorized Signatory)

Name :

Designation :

Seal :

Date :

Place :

Business Address :

Witness:

Agency:

Signature:

Signature:

Name:

Name:

Address :

Designation:

Company:

Date:

Date:

7.2 Form 2: Minimum Eligibility

[Agency shall not include the figures of the subcontractors for Form-2]

1.1	Name of Firm/Agency			
1.2	Year of Registration/Incorporation			
1.3	Year of Registration/Incorporation in India*			
1.4	Annual Turnover (INR Lakh)**	FY 2019-20	FY 2020-21	FY 2021-22
1.5	Name of Consortium partner if any			
1.6	Lead Member of Consortium if any			
1.7	Experience of Firm/Agency:-	Shall have carried out at least 3 (three) years project of yearly Energy Audit in any Indian DISCOM on commercial basis during last 3 years. Free pilot project experience will not be accepted.		
1.8	Approach & detailed work methodology	Submitted/not submitted		
1.9	Availability / expertise of team as per on Para 5.1	Yes/No		
1.10	Blacklisting by Central/State Government/PSUs	Yes/No		

1.11	Litigation that may impact on deliverables	Yes/No (If yes, please provide detail thereof)
------	--	---

*Enclose a copy of Registration document (including registration certificate)

**Enclose a copy of Audited Financial Statement as annexures to form 2

***Enclose copy of the self-attested supporting documents as annexures to form 2, with respect to information furnished in 1.7

Witness:

Agency:

Signature:

Signature:

Name:

Name:

Address :

Designation:

Company:

Date:

Date:

7.3 Form 3: Team Composition

S. No.	Name of person	Role (Team Leader/Team Member/Other) 1	Year of relevant experience in DISCOM 2	List of projects (Energy Audit/data collection/ with DISCOMs) 3	List of other relevant projects 4	Signature 5
				1. 2. 3.	1. 2. 3.	
				1. 2. 3.	1. 2. 3.	

1 Role of the person in this project, please define only separate roles to individuals, as mentioned in this document.

2 Year of relevant experience and same shall also be depicted in the attached resume of the person.

3 List of projects related to energy audit/data collection, other assignment with DISCOMs, and same shall be depicted in the attached CV of the person.

4 Signature shall be original and signed in ink by all team members and also attach self-attested copy of PAN card/Passport etc. for verification of signature. Bid will be rejected, if signatures are not valid/not signed in original.

7.4 Form 4: CVs of Proposed Team

[Provide CVs of the proposed team for undertaking the current assignment. 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. Employment Record:

Firm	From-To date	Designation/Role

11. Projects undertaken

Name	Role & Description	Duration (From-To)	Organization Name	Nature of the project (Energy Audit/Data Collection/Other assignment with DISCOMs/M&V/Technical evaluation of project)

12. 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 of the proposed team member] Full name, Signature and designation.

7.5 Form 5: List of Projects implemented by the bidder Organization

Type of Project	List of Project
Detailed Energy Audit related project in DISCOM	1-
	2-
	3-
Data Collection and M&V (Monitoring & Verification) related projects in DISCOM sector	1-
	2-
	3-
Consultancy Projects (including policy and financial related project) in DISCOMs	1-
	2-
	3-
Other assignment with DISCOMs	1-
	2-
	3-

7.6 Form 6: Prior Experience in carrying out Energy Audit Project.

A. Prior experience in projects (preferably similar experience)

Name of project:	
Description of Project:	
Country :	
Location within country :	
Duration of the project :	
Name of the Client along with contact details	
Start date (month/year) :	
Completion date (month/Year) :	
Firm/Agency:	
Name of senior professional staff of your firm involved and functions performed.	
Approx. value of the Assignment/Job provided by your firm under the contract (in Rupees):	
Description of actual Assignment/Job Provided by your staff within the Assignment/Job:	

Note:

Enclose copy of the self-attested supporting documents with respect to information furnished above.

Use separate table for separate experience.

Witness:

Signature:

Name:

Address:

Date:

Authorized Signatory:

Signature:

Name:

Designation:

Organization:

Date:

7.7 Form 7: Approach and Methodology (Work Plan with Timelines)

[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. Maximum- 5 (five) pages.

7.8 Form 8: Declaration Letter

Declaration letter on official letter head stating the following:

We are not involved in any 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/Pvt. Entity in India.

Witness:

Agency:

Signature:

Signature:

Name:

Name:

Address:

Designation:

Organization:

Date:

Date:

8.0 Forms for the Financial Proposal (Price-bid)

8.1 Forms 9: Financial Bid Pro – Forma

To,

Date _____

The Chief Engineer (PMC)

MePDCL, Shillong.

Sub – Carrying out the Energy Audit in MePDCL

Sir,

I/We, the undersigned, offer to provide our services for Carrying out the Energy Audit in MePDCL, in accordance with your Request for Proposal dated _____. Our attached Financial Proposal is for the sum of << *Amount in words and figures* >>. This amount is inclusive of all the cost inclusive out of pocket expenditure linked with the project and all the taxes are clearly spelt.

Sl. No	Annual Energy Audit	SAC/HSNNO.	Total Cost excluding GST as per scope of work (in Rs.)	GST (in Rs)	Total Cost including GST as per scope of work (in words)
(a)	(b)	(C)	(d)	(e)	(f)
1	2020 - 21				
2	2021-22				

Further, I/We understand that the payment will be made based on actual invoice and GST rates prevalent during the time of payment.

Our Financial Proposal shall be binding upon us i.e., shall be valid up to expiration of the validity period of the proposal i.e., << *date of 90 days after the last date of bid submission* >>Also, we understand you are not bound to accept any Proposal you receive.

Thanking you,

Yours faithfully

(Authorized Signatory)

Name :

Designation :

Seal :

Date :

Place :

BUREAU OF ENERGY
EFFICIENCY NOTIFICATION

New Delhi, the 6th October, 2021

No. 18/1/BEE/DISCOM/2021.—Whereas the draft regulations namely, the Bureau of Energy Efficiency (Manner and Intervals for Conduct of Energy Audit (Accounting) in Electricity Distribution Companies) Regulations, 2021, were published vide notification No.18/1/BEE/DISCOM/2021, dated the 15th April, 2021 in the Gazette of India, Extraordinary, Part III, Section 4, as required under sub-section (1) of section 58 of the Energy Conservation Act, 2001 (52 of 2001) inviting objections and suggestions from all persons likely to be affected thereby within forty- five days from the date of publication of the Notification in the Official Gazette;

AND WHEREAS objections and suggestions received with respect to the said draft regulations within the specified period aforesaid have been duly considered;

NOW, THEREFORE, in exercise of the powers conferred by clause (g) of sub-section (2) of section 58, read with clause (q) of sub-section (2) of section 13 of the Energy Conservation Act, 2001 (52 of 2001), the Bureau of Energy Efficiency, with the previous approval of the Central Government, hereby makes the following regulations, namely:--

1. **Short title, application and commencement.** — (1) These regulations may be called the Bureau of Energy Efficiency (Manner and Intervals for Conduct of Energy Audit in electricity distribution companies) Regulations, 2021.
 - (2) These regulations shall apply to all electricity distribution companies specified as designated consumer.
 - (3) They shall come into force on the date of their publication in the Official Gazette.
2. **Definitions.**- (1) In these regulations, unless the context otherwise requires, —
 - (a) “Act” means the Energy Conservation Act, 2001 (52 of 2001);
 - (b) “annual energy audit” means the energy audit conducted by an accredited energy auditor on annual basis in accordance with these regulations;
 - (c) “annual energy audit report” means the report on annual energy audit;
 - (d) “Circle” means the demarked area of the electricity distribution company in which electricity distribution company is divided.
 - (e) “consumer” shall have the meaning assigned to it under clause (15) of section 2 of the Electricity Act, 2003 (36 of 2003);
 - (f) “division” means an administrative unit in which an electricity distribution company is divided for the purpose of ease of operation;
 - (g) “electricity distribution company” means a distribution licensee as defined in clause (17) of section 2 of the Electricity Act, 2003 (36 of 2003);
 - (h) “energy accounting” means accounting of all energy inflows at various voltage levels in the distribution periphery of the network, including renewable energy generation and open access consumers, and energy consumption by the end consumers;
 - (i) “periodic energy accounting” means the energy accounting conducted on quarterly

basis as mentioned in regulation 4;

(j) “periodic energy accounting report” means the report on periodic energy accounting submitted and signed by the energy manager;

(2) Words and expressions used herein and not defined but defined in the Act shall have the meanings respectively assigned to them in the Act.

3. **Intervals of time for conduct of annual energy audit.**- (1) Every electricity distribution company shall conduct an annual energy audit for every financial year and submit the annual energy audit report to the Bureau and respective State Designated Agency and also made available on the website of the electricity distribution company within a period of four months from the expiry of the relevant financial year:

Provided that on the commencement of these regulations, the first annual energy audit of every electricity distribution company shall be conducted within six months from the date of such commencement, by taking into account the energy accounting of electricity distribution company for the financial year immediately preceding the date of the commencement of these regulations.

(2) Where a new electricity distribution company is established after the commencement of these regulations, such electricity distribution company shall conduct its first annual energy audit on completion of the first financial year from the date of being notified as designated consumer.

Explanation. — If any entity created as a result of merger, demerger, slump sale, acquisition, change of control or any other corporate restructuring of, or involving, any existing electricity distribution company, such entity shall not be considered as a new electricity distribution company for the purposes of this sub- regulation.

4. Intervals of time for conduct of periodic energy accounting.- (1) Every electricity distribution company shall —

(a) ensure that all feeder wise, circle wise and division wise periodic energy accounting shall be conducted by the energy manager of the electricity distribution company for each quarter of the financial year; and

(b) submit the periodic energy accounting report to the Bureau and respective State Designated Agency and also made available on the website of electricity distribution company within forty-five days from the date of the periodic energy accounting.

(2) After the commencement of these regulations, every electricity distribution company shall, notwithstanding anything in sub-regulation (1), —

(a) conduct its first periodic energy accounting, for the last quarter of the financial year immediately preceding the date of such commencement; and

(b) conduct its subsequent periodic energy accounting for each quarter of the financial year for a period of two financial years from the date of such commencement, and submit the periodic energy accounting report within sixty days from the date of periodic energy accounting.

5. Pre-requisites for annual energy audit and periodic energy accounting — Save as otherwise provided, every electricity distribution company shall undertake all actions as may be required for the annual energy audit and periodic energy accounting before the start of the relevant financial year, including the following actions, namely:—

- (a) the identification and mapping of all of the electrical network assets;
- (b) the identification and mapping of high tension and low-tension consumers;
- (c) the development and implementation of information technology enabled energy accounting and audit system, including associated software;
- (d) the electricity distribution company shall ensure the installation of functional meters for all consumers, transformers and feeders:

Provided that meter installation may be done in a phased manner within a period of three financial years from the date of the commencement of these regulations in accordance with the trajectory set- out in the First Schedule;

- (e) all distribution transformers (other than high voltage distribution system upto 25kVA and other distribution system below 25 kVA) shall be metered with communicable meters. And existing non- communicable distribution transformer meters shall be replaced with communicable meters and integrated with advanced metering infrastructure;
- (f) the electricity distribution company shall establish an information technology enabled system to create energy accounting reports without any manual

interference:

Provided that such system may be established—

- (i) within a period of three years from the date of the commencement of these regulations in case of urban and priority area consumers; and
- (ii) within five years from the date of the commencement of these regulations in case of rural consumers;
- (g) the electricity distribution company shall create a centralized energy accounting and audit cell comprising of—
 - (i) a nodal officer, an energy manager and an information technology manager, having professional experience of not less than five years; and

- (ii) a financial manager having professional experience of not less than five years;
- (h) any other requisite that Bureau may direct for energy audit and accounting purpose.
- 6. Reporting requirements for annual energy audit and periodic energy accounting – (1)** Every electricity distribution company shall designate a nodal officer, who shall be a full time employee of the electricity distribution company in the rank of the Chief Engineer or above, for the purpose of reporting of the annual energy audit and periodic energy accounting and communicate the same to the Bureau.
- (2) Every electricity distribution company shall ensure that the energy accounting data is generated from a metering system or till such time the metering system is not in place, by an agreed method of assumption as may be prescribed by the State Commission.
- (3) Metering of distribution transformers at High Voltage Distribution System upto 25KVA can be done on cluster meter installed by each electricity distribution company.
- (4) The energy accounting and audit system and software shall be developed to create monthly, **quarterly** and yearly energy accounting reports.
- (5) Every electricity distribution company shall provide the details of the information technology system in place as specified in clause (f) of regulation 5 that ensures minimal manual intervention in creating the energy accounting reports and any manual intervention of any nature, in respect of the period specified therein, shall be clearly indicated in the periodic energy accounting report.
- 7. Manner of annual energy audit and periodic energy accounting.- (1)** Every annual energy audit and periodic energy accounting under these regulations shall be conducted in the following manner, namely:—
- (a) verification of existing pattern of energy distribution across periphery of electricity distribution company; and
- (b) verification of accounted energy flow submitted by electricity distribution company at all applicable voltage levels of the distribution network,—
- (i) energy flow between transmission and 66kV/33kV/11kV incoming distribution feeders;
- (ii) energy flow between 66kV/33kV outgoing and 11kV/6.6kV incoming feeders;
- (iii) energy flow between 11 kV/6.6kV feeders and distribution transformers, or high voltage distribution system;
- (iv) energy flow between distribution transformer, or high voltage distribution system to end-consumer, including ring main system;
- (v) energy flow between Feeder to end-consumer; and
- (vi) energy flow between 66/33/11 kV directly to consumer.
- (2) The accredited energy auditor, in consultation with the nodal officer of the electricity distribution company shall,—
- (a) develop a scope of work for the conduct of energy audit required under these regulations;
- (b) agree on best practice procedures on accounting of energy distributed across the network; and
- (c) collect data on energy received, and distributed, covered within the scope of energy audit.

(3) The accredited energy auditor shall—

(a) verify the accuracy of the data collected in consultation with the nodal officer of the electricity distribution companies as per standard practice to assess the validity of the data collected; and

(b) analyse and process the data with respect to—

(i) consistency of data monitoring compared to the collected data;

(ii) recommendations to facilitate energy accounting and improve energy efficiency; and

(iii) with respect to the purpose of energy accounting in reducing losses for the electricity distribution company.

8. Prioritization and preparation of action plan.- (1) The annual energy audit report submitted by accredited energy auditor in consultation with the nodal officer and periodic energy accounting report submitted by energy manager of the electricity distribution company shall include following activities, namely:—

- (I) data collection and verification of energy distribution—
- (a) monthly energy consumption data of consumers and system metering from electricity distribution company at following voltage levels —
 - (i) 33/66/132 kV levels, including 33/66/132kV feeder and Sub-station;
 - (ii) 11/22 kV levels, including 11/22 kV feeder and Distribution Sub-station;
 - (iii) 440 V level, including Distribution Transformer and low tension consumer;
 - (b) input energy details for all metered input points;
 - (c) boundary meter details;
 - (d) source of energy supply (e.g. electricity from grid or self-generation), including generation from renewables.
 - (e) review of the current consumption practices in order to identify the energy loss in the system;
- (II) data verification, validation and correction—
- (a) a monitoring and verification protocol to quantify on annual basis the impact of each measure with respect to energy conservation and cost reduction for reporting to Bureau and the concerned State designated agency;
 - (b) verification and correction of input energy, taking into account the following —
 - (i) recorded system meter reading by metering agency;
 - (ii) all the input points of transmission system;
 - (iii) details provided by the transmission unit;
 - (iv) relevant records at each electricity test division for each month;
 - (v) recorded meter reading at all export points (where energy sent outside the State is from the distribution system); and
 - (vi) system loading and corresponding infrastructure;
 - (c) energy supplied to Open Access Consumers which is directly purchased by Open Access Consumers from any supplier other than electricity distribution company; and
 - (d) verify and validate the system metering data provided by metering agency through random field visit (particularly for data irregularity).

9. Structure of the annual energy audit report.- (1) The structure of annual energy audit report shall be prepared in the format as set-out in the Second Schedule.

(2) It shall be mandatory to record the energy supplied separately for each category of consumers which is being provided a separate rate of subsidy in the tariff, by the State Government, so that the subsidy due for the electricity distribution company is quarterly calculated by multiplying the energy supplied to each of such category of consumers by the applicable rate of subsidy notified by the State Government.

(3) The annual energy audit report shall—

- (a) provide for monitoring of input energy and consumption pattern at various voltage levels;
- (b) identify the areas of energy leakage, wastage or inefficient use;

- (c) identify high loss-making areas and networks, for initiating target based corrective action; and
- (d) identify overloaded segments of the network for necessary capacity additions.

(4) The accredited energy auditor shall highlight the strengths and weaknesses of the electricity distribution company in the management of energy and energy resources in the annual energy audit report and recommend necessary action to improve upon method of reporting data, energy management system in detail along with their underlying rationale.

(5) The accredited energy auditor shall sign the energy audit report under the seal of its firm giving all the accreditation details along with details of manpower employed in conducting the annual energy audit.

10. Report of Bureau.- On receipt of the annual energy audit report, the Bureau may—

- (a) direct the electricity distribution company to take such actions as it may consider appropriate; and
- (b) make such recommendations to the Central Government as it may consider necessary.

THE FIRST SCHEDULE

[See regulation 5(d)]

**TRAJECTORY FOR METER
INSTALLATION****(A) Timeline for metering—**

- (i) 100% Communicable Feeder Metering integrated with AMI, by 31st December 2022 along-with replacement of existing non-communicable feeder meters.
- (ii) All Distribution Transformers (other than HVDS DT upto 25kVA and other DTs below 25 kVA) shall be metered with communicable meters. Communicable DT Metering for the following areas / consumers to be completed by December 2023 and in balance areas by December 2025:
- All Electricity Divisions of 500 AMRUT cities, with AT&C Losses > 15% ;
 - All Union Territories (for areas with technical difficulty, non-communicable meters may be installed);
 - All Industrial and Commercial consumers;
 - All Government offices at Block level and above;
 - Other high loss areas i.e. rural areas with losses more than 25% and urban areas with losses more than 15%.

Further, existing non-communicable Distribution Transformer meters to be replaced with communicable meters integrated with AMI, within the timelines applicable to the respective areas.

- (iii) Prepaid Smart Consumer Metering to be completed for all directly connected meters and AMR in case of other meters, by December 2023 in the following areas:
- All Electricity Divisions of 500 AMRUT cities, with AT&C Losses > 15%;
 - All Union Territories (for areas with technical difficulty, prepaid meters to be installed);
 - All Industrial and Commercial consumers;
 - All Government offices at Block level and above;
 - Other high loss areas i.e. rural areas with losses more than 25% and urban areas with losses more than 15%.

The balance areas and consumers may be taken up in a phased manner subsequently. However, Distribution Companies can additionally cover any other areas as well as agricultural consumers, at their option by December 2023. Further, in rural / hilly areas with connectivity or communication issues, wherein installation of smart meters may not be feasible, prepaid meters may be opted for.

- (iv) Consumer Metering:
- 98% by FY 2022-23
 - 99% by FY 2023-24

(B) Targets for functional meters—

Meter	FY 22-23	FY 23-24	FY24-25
Feeder metering	98.5%	99.5%	99.5%
DT metering	90%	95%	98%
Consumer metering	93%	96%	98%

THE SECOND SCHEDULE

[See regulation 9(1)]

**ANNUAL ENERGY AUDIT
REPORT**

[to be completed by the Accredited Energy Auditor and Energy Manager of the
Electricity Distribution Company]

(a) Indicative Structure of Energy Audit Report—

1. Executive Summary
2. Summary of Critical Analysis by Energy Auditor (including status and progress in compliance to pre-requisites to energy accounting) and Management Analysis (Responses of DISCOM management on Comments by Auditor)
3. Background—
 - (i) Extant Regulations and role of BEE
 - (ii) Purpose of audit and accounting Report
 - (iii) Period of Energy Auditing and accounting
4. Introduction of DISCOMs (DC) —
 - (i) Name and Address of Designated Consumer
 - (ii) Name and contact details of energy manager (BEE Certified, if any) and Authorized signatory of DC (Nodal Officer)
 - (iii) Summary profile of DCs (Assets, Energy Flow, Consumer base, salient features etc.)
5. Discussion and Analysis—
 - (i) Energy accounts for previous years (Discussion and data in tabular format)
 - (ii) Energy accounts and performance in the current year (% losses – aggregate, voltage-wise and category-wise, division-wise, feeder and DT wise):
 - (iii) Unit-wise performance
 - (iv) Energy Conservation measures already taken and proposed for future
 - (v) Critical analysis by Energy Auditor
 - (vi) Inclusion and Exclusions
 - (vii) Detailed Formats to be annexed
6. Notes of the EA/EM along with queries and replies to data gaps.
7. Annexures—to be accompanied with the Report—
 - (i) Introduction of Verification Firm.
 - (ii) Minutes of Meeting with the DISCOM team
 - (iii) Check List prepared by auditing Firm.
 - (iv) Brief Approach, Scope & Methodology for audit
 - (v) Infrastructure Details
 - (vi) Electrical Distribution System

- (vii) Power Purchase Details
- (viii) Line Diagram (SLD)
- (ix) Category of service details (With Consumer and voltage-wise)
- (x) Detailed Formats to be annexed
- (xi) List of documents verified with each parameter
- (xii) Brief Description of Unit
- (xiii) List of Parameters arrived through calculation or formulae with list of documents as source of data

Form for Energy Accounting - to be completed by the Accredited Energy Auditor and Energy Manager of the Electricity Distribution Company—

General Information			
1	Name of the DISCOM		
2	i) Year of Establishment		
	ii) Government/Public/Private		
3	DISCOM's Contact details & Address		
i	City/Town/Village		
ii	District		
iii	State	Pin	
iv	Telephone	Fax	
4	Registered Office		
i	Company's Chief Executive Name		
ii	Designation		
iii	Address		
iv	City/Town/Village	P.O.	
v	District		
vi	State	Pin	
vi i	Telephone	Fax	
5	Nodal Officer Details		
i	Nodal Officer Name (Designated at DISCOM's)		
ii	Designation		
iii	Address		
iv	City/Town/Village	P.O.	
v	District		
vi	State	Pin	
vi i	Telephone	Fax	
6	Energy Manager Details		
i	Name		
ii	Designation	Whether EA or EM	
iii	EA/EM Registration No.		
iv	Telephone	Fax	

v	Mobile		E-mail ID	-
7	Period of Information			
	Year of (FY) information including Date and Month (Start & End)	1st Apr, – 31 ST March, 20 20		

Performance Summary of Electricity Distribution Company			
1	Period of Information Year of (FY) information including Date and Month (Start & End)	1st Apr, 20 - 31 st March, 20	
2	Technical Details		
(a)	Energy Input Details		
(i)	Input Energy Purchase (From Generation Source)	Million kwh	0.0 0
(ii)	Net input energy (at DISCOM Periphery after adjusting the transmission losses and energy traded)	Million kwh	0.0 0
(iii)	Total Energy billed (is the Net energy billed, adjusted for energy traded)	Million kwh	0.0 0
(b)	Transmission and Distribution (T&D) lossDetails	Million kwh	0.0 0
		%	0.0 0
	Collection Efficiency	%	
(c)	Aggregate Technical & Commercial Loss	%	0.0 0
<p>I/We undertake that the information supplied in this Document and Pro-forma is accurate to the best of my knowledge and if any of the information supplied is found to be incorrect and such information result into lossto the Central Government or State Government or any of the authority under them or any other person affected, I/we undertake to indemnify such loss.</p>			
Authorized Signatory and Seal			
		Signature:-	
		Name of Energy Manager:	
Name of Authorized Signatory		Registration Number:	
Name of the DISCOM:			
Full Address:			
Seal			

Form-Details of Input Infrastructure					
1	Parameters	Total	Covered during in audit	Verified by Auditor in Sample Check	Remarks (Source of data)
i	Number of circles				
ii	Number of divisions				
iii	Number of sub-divisions				
iv	Number of feeders				
v	Number of DTs				
vi	Number of consumers				
2	Parameters	66kV and above	33kV	11/22kV	LT
a. i.	Number of conventional metered consumers				
ii	Number of consumers with 'smart' meters				
iii	Number of consumers with 'smart prepaid' meters				
iv	Number of consumers with 'AMR' meters				
v	Number of consumers with 'non-smart prepaid' meters				
vi	Number of unmetered consumers				
vii	Number of total consumers				
b.i	Number of conventionally metered Distribution Transformers				
ii	Number of DTs with communicable meters				

iii	Number of unmetered DTs				
iv	Number of total Transformers				
2	Parameters	66kV and above	33kV	11/22kV	LT
c.i	Number of metered feeders				
·					
ii	Number of feeders				

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	with communicable meters				
iii	Number of unmetered feeders				
iv	Number of total feeders				
d.	Line length (ct km)				
e.	Length of Aerial Bunched Cables				
f.	Length of Underground Cables				

3	Voltage level	Input Energy Particulars	M U	Reference	Remarks (Source of data)
i	66kV and above	Long-Term Conventional		Includes input energy for franchisees	
		Medium Conventional			
		Short Term Conventional			
		Banking			
		Long-Term Renewable energy			
		Medium and Short-Term RE		Includes power from bilateral/PX/ DEEP	
		Captive, open access input		Any power wheeled for any purchase other than sale to DISCOM. Does not include input for franchisee.	
		Sale of surplus power			
		Quantum of inter-state transmission loss		As confirmed by SLDC, RLDC	

				etc	
		Power procured from inter-state sources	0	Based on data from Form 5	
		Power at state transmission boundary	0		

3	Voltage level	Input Energy Particulars	MU	Reference	Remarks (Source of data)
ii	33kV	Long-Term Conventional			
		Medium Conventional			
		Short Term Conventional			
		Banking			
		Long-Term Renewable energy			
		Medium and Short-Term			

		Captive, open access input			
		Sale of surplus power			
		Quantum of intra-state transmission loss	0		
		Power procured from intra-state sources	0		
iii		Input in DISCOM wires network	0		
iv	33 kV	Renewable energy			
		Small capacity conventional/ biomass/ hydro plants Procurement			
		Captive, open access input			
v	11 kV	Renewable Energy Procurement			
		Small capacity conventional/ biomass/ hydro plants Procurement			
		Sales Migration Input			
vi	LT	Renewable Energy Procurement			
		Sales Migration Input			
vii		Energy Embedded within DISCOM wires network	0		
vii i		Total Energy Available/ Input	0		

4	Voltage level	Energy Sales Particulars	M U	Reference	Remarks (Source of data)
i	LT level	DISCOM' consumers		Include sales to consumers in franchisee areas, unmetered consumers	
		Demand from open access, captive		Non DISCOM's sales	
		Embedded generation used at LT level		Demand from embedded generation at LT level	
		Sale at LT Level	0		
		Quantum of LT level losses	0		
		Energy Input at LT level			

4	Voltage level	Energy Sales Particulars	MU	Reference	Remarks (Source of data)
ii	11 kV level	DISCOM' consumers		Include franchisee sales, unmetered consumers	
		Demand from open access, captive		Non DISCOM's sales	
		Embedded generation at 11 kV level used		Demand from embedded generation at 11kV level	
		Sale at 11 kV Level	0		
		Quantum of Losses at 11 kV	0		
		Energy Input at 11 kV level			
iii	33 kV level	DISCOM' consumers		Include sales to consumers in franchisee areas,	

				unmetered consumers	
		Demand from open access, captive		Non DISCOM's sales	
		Embedded generation at 33 kV or below level		This is DISCOM and OAdemand met via energy generated at same voltage level	
		Sale at 33 kV Level	0		
		Quantum of Losses at 33 kV	0		
		Energy input at 33kV Level			
iv	> 33 kV	DISCOM' consumers		Include franchisee sales, unmetered consumers	
		Demand from open access, captive		Non DISCOM's sales	
		Cross border sale of energy			
		Sale to other DISCOMs			
		Banking			
		Sales at 66kV and above (EHV)	0		
Total Energy Requirement			0		
Total Energy Sales			0		

Energy Accounting Summary					
5	DISCOM	Input (in MU)	Sale (in MU)	Loss (in MU)	Loss %
i	LT				
ii	11 Kv				
iii	33 kv				
iv	> 33 kv				
6	Open Access, Captive	Input (in MU)	Sale (in MU)	Loss (in MU)	

i	LT				
ii	11 Kv				
iii	33 kv				
iv	> 33 kv				

Loss Estimation for DISCOM	
T&D loss	
D loss	
T&D loss (%)	
D loss (%)	

Form-Input energy(Details of Input energy & Infrastructure)

A. Summary of energy input & Infrastructure			
S.No	Parameters	Period From....To....	Remarks (Source of data)
A.1	Input Energy purchased (MU)	0	
A.2	Transmission loss (%)	0%	
A.3	Transmission loss (MU)	0	
A.4	Energy sold outside the periphery(MU)	0	
A.5	Open access sale (MU)	0	
A.6	EHT sale	0	
A.7	Net input energy (received at DISCOM periphery or at distribution point)- (MU)	0.00	
A.8	Is 100% metering available at 66/33 kV (Select yes or no from list)		
A.9	Is 100% metering available at 11 kV (Select yes or no from list)		
A.10	% of metering available at DT	0%	
A.11	% of metering available at consumer end	0%	
A.12	No of feeders at 66kV voltage level	0	
A.13	No of feeders at 33kV voltage level	0	
A.14	No of feeders at 11kV voltage level	0	

A.15	No of LT feeders level	0	
A.16	Line length (ckt. km) at 66kV voltage level	0	

A.17	Line length (ckt. km) at 33kV voltage level	0	
A.18	Line length (ckt. km) at 11kV voltage level	0	
A.19	Line length (km) at LT level	0	
A.20	Length of Aerial Bunched Cables	0	
A.21	Length of Underground Cables	0	
A.22	HT/LT ratio	0	

B. Meter reading of Input energy at injection points																		
S.No	Zone	Circle	Voltage Level (KVA)	Division (KVA)	Sub-Division (KVA)	Feeder ID	Feeder Name	Feeder Metering Status (Metered/unmetered/ AMI/AMR)	Status of Meter (Functional/Non-functional)	Metering Date	Feeder Type (Agricultural/Industrial/Mixed)	Status of Communication				Period from...to...	Sales	Remarks (Source of data)
										Date of last actual meter reading/communication		% data received automatically if feeder AMR/AMI	Number of hours when meter was unable to communicate in period	Total Number of hours	Meter S.No			
B.1																		
B.2																		
B.3																		
B.4																		
B.5																		
B...																		

B...																			
B...																			
B.10 00																			
B.10 01	Total (MU)														0.00	0.00			
B.10 02	Net input energy at DISCOM periphery (MU)														0.0 0				

Color code	Parameter
	Please enter voltage level or leave blank
	Please enter feeder id and name or leave blank
	Enter meter no or leave blank
	Enter CT/PT ratio or leave blank
0	Please enter numeric value or 0
	Please select yes or no from list
	Formula protected

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Authorized Signatory and Seal		Signature:-	
Name of the DISCOM:		Name of Energy Manager:	
Full Address		Registration Number:	
Seal			

(Details of Consumers)						
Summary of energy sold						
Period From.To.						
S.No	Type of Consumers	Category of Consumers (EHT/HT/LT/Others)	Voltage Level (In Voltage)	No of Consumers	Total Consumption(In MU)	Remarks (Source of data)
1	Domestic					
2	Commercial					
3	IP Sets					
4	Hor. & Nur. & Coffee/Tea & Rubber (Metered)					
5	Hor. & Nur. & Coffee/Tea & Rubber (Flat)					
6	Heating and Motive Power					
7	Water Supply					
8	Public Lighting					
9	HT Water Supply					
10	HT Industrial					
11	Industrial (Small)					
12	Industrial (Medium)					
13	HT Commercial					
14	Applicable to Government Hospitals & Hospitals					
15	Lift Irrigation Schemes/Lift Irrigation Societies					
16	HT Res. Apartments Applicable to all areas					
17	Mixed Load					
18	Government offices and department					
19	Others-1 (if any , specify in remarks)					
20	Others-2 (if any , specify in remarks)					
21	Others-3 (if any , specify in remarks)					
22	Others-4 (if any , specify in remarks)					

23	Others-5 (if any , specify in remarks)					
24						
25						
.....						
.....						
.						
				Total	0	0.00

Details of Division Wise Losses (See note below **)																							
Division Wise Losses																							
S.No	Name of circle	Circle code	Name of Division	Period From.To....																			
				Consumer profile								Energy parameters				Losses		Commercial Parameter			AT & C loss (%)		
				Consumer category	No of connection metered (Nos)	No of connection Un-metered	Total Number of connections	% of number of connections	Connected Load metered (MW)	Connected Load Un-Connected	Total Connected Load (MW)	% of connected load	Input energy (MU)	Billed energy (MU)			% of energy consumption	T&D loss (MU)	T&D loss (%)	Billed Amount in Rs. Crore		Collected Amount in Rs.	Collection Efficiency
Metered energy	Unmetered/assessment	Total energy																					
1				Residential	0	0	0	0%	0	0	0	0%	0	0	0	0	0%	0	0%			0.00%	100%
				Agricultural	0	0	0	0%	0	0	0	0%		0	0	0	0%					0.00%	
				Commercial / Industrial-LT	0	0	0	0%	0	0	0	0%		0	0	0	0%					0.00%	
				Commercial / Industrial-HT	0	0	0	0%	0	0	0	0%		0	0	0	0%					0.00%	

			Others	0	0	0	0%	0	0	0	0%		0	0	0	0%					0.00%	
Sub-total				0	0	0	100%	0	0	0	100%	0	0	0	0	100%	0	0%	0	0	0.00%	100%
2			Residenti al	0	0	0	0%	0	0	0	0%	0	0	0	0	0%	0	0%			0.00%	100%
			Agricultu ral	0	0	0	0%	0	0	0	0%		0	0	0	0%					0.00%	
			Commerci al / Industri al- LT	0	0	0	0%	0	0	0	0%		0	0	0	0%					0.00%	
			Commerci al	0	0	0	0%	0	0	0	0%		0	0	0	0%					0.00%	

				/ Industri al- HT																			
				Others	0	0	0	0%	0	0	0	0%	0	0	0	0%	0	0	0	0	0.00%		
Sub-total					0	0	0	100%	0	0	0	100%	0	0	0	100%	0	0%	0	0	0.00%	100%	
..					0	0	0	0%	0	0	0	0%	0	0	0	0%	0	0%			0.00%	100%	
...					0	0	0	0%	0	0	0	0%	0	0	0	0%	0	0%			0.00%	100%	
75				Residenti al	0	0	0	0%	0	0	0	0%	0	0	0	0	0%	0	0%			0.00%	0%
				Agricultu ral	0	0	0	0%	0	0	0	0%		0	0	0	0%					0.00%	
				Commerci al/ Industri al-LT	0	0	0	0%	0	0	0	0%		0	0	0	0%					0.00%	
				Commerci al/ Industri al- HT	0	0	0	0%	0	0	0	0%		0	0	0	0%					0.00%	
				Others	0	0	0	0%	0	0	0	0%		0	0	0	0%					0.00%	
Sub-total					0	0	0	100%	0	0	0	100%	0	0	0	100%	0	0%	0	0	0.00%	0%	
				Residenti al	0	0	0	0%	0	0	0	0%		0	0	0	0%			0	0	0.00%	
				Agricultu ral	0	0	0	0%	0	0	0	0%		0	0	0	0%			0	0	0.00%	

76	Total	Commercial / Industrial-LT	0	0	0	0%	0	0	0	0%	0	0	0	0	0%	0	0%	0	0	%	100 %	
		Commercial / Industrial-HT	0	0	0	0%	0	0	0	0%	0	0	0	0%	0	0%	0	0%	0	0		0.00 %
		Others	0	0	0	0%	0	0	0	0%	0	0	0	0%	0	0%	0	0%	0	0		0.00 %
			0	0	0	0%	0	0	0	0%	0	0	0	0%	0	0%	0	0%	0	0		0.00 %
77	At company level		0	0	0	100 %	0	0	0	100 %	0	0	0	0	100 %	0	0 %	0	0	0.00%	100 %	

**** Note - It shall be mandatory to record the energy supplied separately for each category of consumers which is being provided a separate rate of subsidy in the tariff, by the state government, so that the subsidy due for the electricity distribution company is quarterly calculated by multiplying the energy supplied to each of such category of consumers by the applicable rate of subsidy notified by the state government.**

Col or code	Parameter
	Please enter name of circle
	Please enter circle code
0	Please enter numeric value or 0
	Formula protected

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Authorized Signatory and Seal		Signature:-	
Name of the DISCOM:		Name of Energy Manager:	
Full Address		Registration Number:	
Seal			

List of Abbreviations

AMI	Advanced Metering Infrastructure
AMR	Automated Meter Reading
AMRUT	Atal Mission for Rejuvenation and Urban Transformation
AT & C	Aggregate Technical and Commercial
BEE	Bureau of Energy Efficiency
ckt	Circuit Kilometer
CT	Current Transformer
DC	Designated Consumer
DEEP	Discovery of Efficient Electricity Price
DISCOM	Electricity Distribution Company
DT	Distribution Transformer
EA	Energy Auditor
EHT	Extra High Tension
EHV	Extra High Voltage
EM	Energy Manager
EM	Energy Manager
FY	Financial Year
HT	High Tension
HVDS	High Voltage Distribution System
KVA	Kilo Volt Ampere
LT	Low Tension
MoP	Ministry of Power
MU	Million Unit
MW	Mega Watt
NO	Nodal Officer
OA	Open Access
POC	Point of Connection
PT	Potential Transformer
PX	Power Exchange
RE	Renewable Energy
RLDC	Regional Load Dispatch Centre
SDA	State Designated Agency
SLD	Single Line Diagram
SLDC	State Load Dispatch Centre
T & D	Transmission and Distribution

ABHAY BAKRE, Director

General[ADVT.-

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