

MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION

5TH Floor Metro Plaza, Bittan Market, Bhopal - 462 016



Request for Proposal (RFP) for providing Consultancy support for determination of Agricultural Consumption Norms for Distribution Licensees of Madhya Pradesh

REQUEST FOR PROPOSAL (BID)

1. INTRODUCTION:

- 1.1. Electricity consumption by agricultural consumers constitutes around 40% of total electricity consumption in Madhya Pradesh. There are nearly 35.24 Lakh agricultural consumers in Madhya Pradesh as on 31/03/2023 with following break up:

Table 1. : Discom wise and category wise Agricultural consumers Number (as on 31/03/23)

| Category | Central Discom | West Discom | East Discom | State |
|----------------------|----------------|------------------|------------------|------------------|
| Metered General | 6,584 | 3,171 | 2,700 | 12,455 |
| Metered Temporary | 1,813 | 283 | 504 | 2,600 |
| Un metered General | 880,109 | 1,342,059 | 1,091,601 | 3,313,769 |
| Un metered Temporary | 56,495 | 76,104 | 63,077 | 195,676 |
| Total Numbers | 945,001 | 1,421,617 | 1,157,882 | 3,524,500 |

- 1.2. It is pertinent to mention that under the feeder bifurcation scheme of State Govt, total 8005 nos feeders having pre-dominant agricultural loads were bifurcated and meterised. The Discom wise details and status of meterisation of pre-dominant agricultural feeders as on 31/03/2023 are as under :-

Table 2. : Status of Meterisation of pre-dominant agricultural feeders as on 31/03/2023

| Name of Discom | Nos of Agricultural Feeders | % meterisation |
|----------------|-----------------------------|----------------|
| Central Discom | 3135 | 100% |
| West Discom | 3413 | 100% |
| East Discom | 1457 | 100% |
| Total | 8005 | 100% |

- 1.3. Discoms have reported 100% meterisation of agricultural predominant feeders as on 31/03/2023. As such, the Commission has decided to conduct an independent study for assessment of Agricultural Consumption and determination of Agricultural Norms for Distribution Licensees of State. This assessment shall subsequently form the basis of agricultural demand

estimation, approval of sales and norms of Agricultural consumption.

2. SCOPE OF WORK

2.1. The entire scope of study is divided into following broad stages with clear objectives and to provide flexibility to undertake course corrections, if necessary, as the study progresses:

- i. **Formulation Stage:** Deciding sampling methodology, selection of sample size of feeders to be surveyed, identification of feeders and collection of feeder and other relevant data from Discoms.
- ii. **Data handling and Management stage:** Establishing platform using IT tools for data capture, archive and reporting framework for further analysis. The data collected from DISCOMs as well as through Survey, will be hosted on respective DISCOM's Server/Cloud space. All the necessary arrangements in this regard will be made by the respective DISCOMs. The Consultant shall have access to such data during the study period only.
- iii. Further, the development of Mobile App/Platform would be Consultant's Responsibility.
- iv. **Survey Stage:** Mapping of consumers to the right feeders and DTRs, DTR survey, consumer survey, monitoring of survey works by survey agencies/person (appointed by consultant).
- v. **Analysis and Reporting Stage:** Detailed analysis of feeder data and survey data, preparation of Report on the overall study conducted.

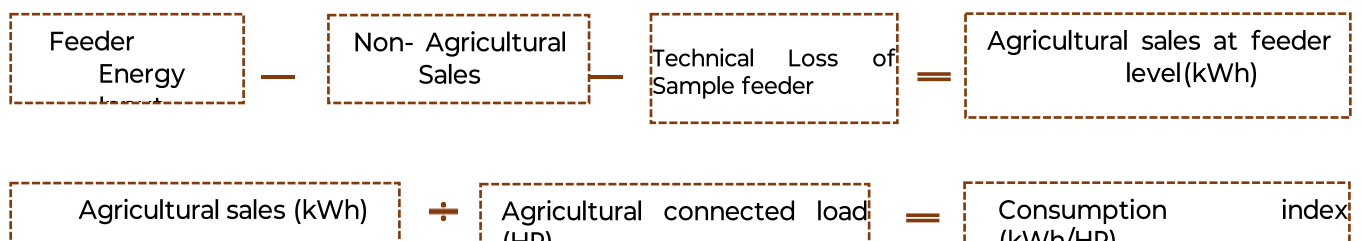
2.2. Broad contours of proposed methodology for aforesaid study are as under:

2.2.1. Study and analysis of available feeder-wise energy input data based on AMR/AMI provided by DISCOMs.

2.2.2. To recommend detailed methodology by Consultant for estimation of agricultural consumption norms with representative sample size, for each Discom in the State based on existing status of meterisation of

Agricultural feeders.

- 2.2.3. Conduct field survey through appropriate Agency/Persons to be appointed by the Consultant, covering area under selected sample feeders having significant agricultural load in all Discoms.
- 2.2.4. Conduct sample study of feeder data based on agricultural load, Technical loss levels, feeder wise consumption etc.
- 2.2.5. For carrying out technical loss study of sample feeders (preferably through I^2R Method), all the network data such as conductor type /cable length and its parameters (R, X and Y), cable's dielectric loss and transformer iron loss etc. shall be provided by the Discom. Load readings shall be made available to the consultant by Discom through supervisory control data acquisition system (SCADA)/ MDAS (Meter data acquisition system)/available automated IT system as the case may be. Discoms shall ensure that all the sample feeders shall be installed with correct meters and maximum demand (MD) shall be recorded regularly.
- 2.2.6. Developing Discom and circle wise agricultural consumption index for such feeders based on broad methodology as shown in Figure below :-



2.3. Role and responsibilities of the Consultant are as under:

- Review of agricultural sales status and estimation methodology adopted by States having major agricultural consumption including Madhya Pradesh and prepare a report summarising state wise estimation methodology, agricultural sales and agricultural norms.
- Finalisation of sampling methodology, sample size and identification of representative agricultural feeders (minimum 1% of total agricultural feeders).
- The sample size of the consumers to be surveyed will be minimum 1 % of total agriculture Consumers mentioned in RFP.
- Finalisation of the field survey methodology and preparation of survey

questionnaire for surveying agency /Persons to be appointed by the Consultant to seek requisite data pertaining to feeder metering status, agricultural load of consumers connected to respective DTR/ representative feeders, validation of the same with relevant records /billing data (to be provided by Discoms).

- Consultant shall develop IT tools /APP for conducting and monitoring various assigned activities such as survey, data verification and reporting.
- Undertaking analysis and validation of data and key findings presented by Survey Agency/persons, preparation of survey report, presentation of findings during review meeting of Working Group.
- Develop a methodology for agricultural sales estimation based on sample survey and feeder metering data and using the developed methodology, estimation of agricultural consumption.
- Report preparation; and
- Any other work which is important for successful completion of Study

3. CONSTITUTION OF WORKING GROUP:

To undertake this study, the Commission intends to constitute a Working Group comprising representatives from Commission's officer, Academic institutions, Expert energy group, MP Power Management Co. Ltd. and State Discoms. The Working Group will review the progress of study on fortnightly basis at O/o the Commission or through Virtual mode (as the case may be), and will fine tune the study methodology suggested by consultant as per field requirement including finalisation of representative sample size, preparation of survey questionnaire and approach for monitoring, verification and reporting of data highlighting gaps, if any. The composition of Working Group is as follows:

Members of Working Group:

| Sr. No | Name of Organization | Position |
|--------|--|----------|
| 1 | Director (Regulatory Enforcement), MPERC | Convener |
| 2 | Senior Professor, Electrical Engineering Department, Maulana Azad National Institute of Technology, Bhopal | Member |
| 3 | Principal Consultant, Atal Bihari Vajpayee Institute of Good Governance and Policy Analysis, Bhopal | Member |

| | | |
|---|------------------------------|-----------------|
| 3 | Prayas (Energy Group) | Member |
| 4 | Consultant (to be appointed) | Member |
| 5 | MP Power management Co. Ltd | Special Invitee |
| 6 | East Discom | Special Invitee |
| 7 | West Discom | Special Invitee |
| 8 | Central Discom | Special Invitee |

4. TIMELINE FOR PROPOSED STUDY:

Activity wise time lines are under. The study should be completed within 8 months from the date of award of contract.

| Sr. No | Activity | Time line for deliverables |
|--------|---|--|
| 1 | <ul style="list-style-type: none"> ▶ Review of estimation methodology adopted by States having major agricultural consumption ▶ Review of metering status and data for MP Discoms (East, West and Central Discoms) ▶ Finalization of sample size of feeders ▶ Finalization of methodology for estimation of agricultural consumption norms ▶ Finalization of field survey methodology and survey questionnaire | <p>Deliverable 1</p> <p>Within 60 days from the date of award of Contract</p> |
| 2 | <ul style="list-style-type: none"> ▶ Completion of field survey by surveying agencies/persons ▶ Analysis of data collected from field survey including validation of data with relevant records such as billing data etc. provide by Discoms. ▶ Analysis of sample feeder data to obtain agricultural sales at feeder level, Agricultural load, estimation of consumption index | <p>Deliverable 2</p> <p>Within 75 days of appointment of survey Agency/persons by consultant.</p> |
| 3 | <ul style="list-style-type: none"> ▶ Submission of first draft report with Agricultural consumption norms and suggested methodology for | <p>Deliverable 3</p> <p>45 days (after completion of activity 2)</p> |

| Sr. No | Activity | Time line for deliverables |
|--------|--|---|
| | <p>estimation of agricultural demand for next 5 years.</p> <p>▶ Consultant shall make a presentation before the Commission on findings of first draft report to seek suggestions, directions.</p> | |
| 4 | <p>▶ Submission of second draft incorporating suggestions /comments of the Commission.</p> <p>▶ Consultant shall make a presentation before the Commission on findings of second draft report to seek suggestions, directions.</p> | <p>Deliverable 4</p> <p>Within 30 days (after completion of activity 3)</p> |
| 5 | Submission of final report | <p>Deliverable 5</p> <p>Within 30 days (after completion of activity 4)</p> |

5. BID SCHEDULE:

a) The Commission has specified following schedule for various activities:-

| <u>ACTIVITY</u> | <u>COMPLETION DATE/TIME</u> |
|---|--|
| 1. Issue of Bid document | - 8th June 2024 |
| 2. Receipt of bid proposals | - 15:00 Hours of 1st July 2024 |
| 3. Opening of technical portion of bids | - 16:00 Hours of 2 nd July 2024 |

The Commission reserves the right to extend any of the aforementioned scheduled date, if deemed necessary.

b) The Commission at its discretion may cancel the above process at any point of time before award of the Contract without assigning any reason to it.

6. ELIGIBILITY CRITERIA:

6.1. The Bidder should be a registered firm / legal entity.

6.2. The Bidding firm should be in existence for not less than 3 years and should have proven experience in the field of Power Sector in providing consultancy services to various SERCs / Power Utilities across States in accordance with the provisions of the Electricity Act, 2003, Tariff policy, and the other relevant regulations of the State Commission(s).

6.3. The Bidding Firm should have adequate technical, financial capability and human resource to undertake task as per the terms of reference provided in this RFP considering various steps to be undertaken from the inception to the completion of the task within the time frame specified by the Commission.

7. BIDDING PROCEDURES:

7.1. The consultants are requested to submit separate technical and price (financial) bids for **“providing Consultancy support determination of Agricultural consumption Norms for Distribution Licensees of Madhya Pradesh** in superscribed and separate sealed envelopes. The consultants are also requested that the price (financial) bid should mention the total amount (including of all applicable taxes) in desired format.

Both the envelopes shall be placed in an outer envelope and sealed. The bids shall be typed or written with indelible ink.

- i. Any signing of bids by authorised representative of the consultants should be supported by a written power of attorney from Board of Directors/ Partners / proprietors as the case may be.
- ii. The person signing the bids must initial any correction / overwriting.
- iii. All the pages of Bid document should be in numbered, signed and stamped by the authorised representative of the consultants
- iv. The technical bid has to be accompanied with non-refundable processing fee of Rs. 2000.00 (Rupees Two Thousand only) in the form of Demand Draft drawn on a Scheduled Commercial Bank at Bhopal payable to the ‘M.P. Electricity Regulatory Commission, Bhopal.
- v. The bids must be accompanied with the earnest money deposit of Rs. 10,000.00 (Rupees Ten Thousand only) in the form of Demand Draft drawn on Scheduled Commercial Bank at Bhopal payable to the ‘M.P. Electricity Regulatory Commission, Bhopal’. This amount is refundable after the award of contract.
- vi. Bids not accompanied by processing fee and / or earnest money deposit as indicated above will not be considered and summarily rejected.

8. AMENDMENT IN DOCUMENT:

- i. At any time prior to the deadline for submission of the bid (proposals) or extended date, if deemed necessary, MPERC reserves the right to add / modify / delete any portion of this document by issue of an amendment, which shall be intimated accordingly . The amendment shall be binding on all the bidders.
- ii. In such eventualities, the Commission may allow additional time for modification of the Bids to the Bidders.
- iii. Interested consultants may submit their offer to carry out the task as detailed in scope of work in this document so as to reach the Commission's office by **15:00 hours on 1st July 2024** in separate sealed covers for techno-financial bids, placed in an outer sealed envelope, on the following address:

**Secretary,
M.P. Electricity Regulatory Commission,
5th Floor, Metro Plaza, Bittan Market,
Bhopal – 462 016 (M.P).**

- iv. Bids received after the aforesaid specified date/time shall not be entertained. However, the Commission shall have the option of retaining/ returning all bid documents received including those received after the scheduled time as indicated above. The Commission shall not be responsible for any delay/ loss/ non-receipt of the documents due to error in the in transit i.e. by post, courier or any other means.

9. PREPARATION OF BIDS BY THE BIDDER:

- i. The Bidder should study the Scope of Work thoroughly and accordingly is required to furnish the details as per evaluation criteria indicated in this document.

The Bidder must submit curriculum vitae (CV) of manpower to be deployed for the assignment duly signed by the proposed key professional staff or an authorized competent person of the Bidder. Key information should include

years with the firm, professional qualification and degree of responsibility held in various assignments during the past five years only. Any change or replacement of Resource person (s) either at the time of commencement of work or during the study period, from the list of resource person (s) approved at time of award of work, prior approval of the Commission is required.

- ii. The Formats enclosed with this document must be duly filled and submitted along with the Bid.

10. OPENING OF BIDS

- i. The Commission shall appoint a Committee of at least two officers for opening of bids. One of the two members has to necessarily be the Secretary of the Commission.
- ii. The Bids received up to the specified time and date, shall be opened by the Committee on the due date and time in presence of the Bidders who wish to participate.

11. PROCESS FOR AWARDING SPECIFIC TASKS TO THE CONSULTANTS

- i. The selection of the Consultants for awarding the assignment shall be based on the composite scores for the assignment and it would comprise technical weighted @ 80% and Financial weighted @ 20%. Bidding process among empanelled consultants shall be based on Quality & cost based selection (QCBC) while selecting final Consultancy firm for the assignment wherein firms will be allotted marks based on the following:
 - i. Technical (80 marks):
 - a. Expertise of Resources proposed for the specific task /assignment (Qualification & Experience) –15Marks
 - b. Assignments of similar nature undertaken by the proposed resources (work order/ completion certificate as the case may be) – 30 Marks
 - c. PPT: understanding and proposed methodology /work plan – 35 Marks

Minimum 60 marks are mandatory to qualify technical scrutiny. Only Technically qualified bidders shall be considered for next process.

- ii. Financial (20 marks)

- a. Lowest total cost of the work (total assignment) amongst technically qualified bidders will get 20 marks.
 - b. All other technically qualified bidders will get proportionate marks with reference to their total cost vis-à-vis lowest cost.
 - c. Firms getting highest composite score (Technical + Financial) will be selected as successful bidder.
- ii. MPERC reserves the right to reject any bid without assigning the reason. The bidder shall be required to disclose conflict of interest if any in the bid clearly. The Commission shall be at liberty to reject the bid or terminate the contract at any stage without any liability, if such conflict of interest for any Task/Assignment comes to its knowledge. The decision of the Commission on whether or not conflict of interest is involved, shall be final and binding.

12. DEVIATIONS:

The Bidder must ensure that Technical Offers submitted for tasks /assignments under this bid should satisfy all the Terms and Conditions specified in the RFP Bid document. In case of any deviations from the RFP bid document, the Bidder shall specifically bring out the same in writing along with cogent reasons for such deviation. The Commission reserves the right to reject any such proposals involving deviations, without assigning any reason.

13. AWARD OF CONTRACT

- i. The successful Bidder shall be required to furnish a “Performance Bank Guarantee” equal to 10% of the price of contract towards faithful performance of the contract, through a D.D. drawn on a Scheduled Commercial Bank at Bhopal in favour of ‘M.P. Electricity Regulatory Commission, Bhopal’ within the time limit fixed by the Commission, which shall be refunded without any interest, after successful completion of the assignment to the satisfaction of the Commission. Security in any other form shall not be accepted.
- ii. In case of failure of the Consultant to comply with the above requirement within the prescribed time limit, the Commission shall be free to counter offer the next lowest eligible party for awarding the contract and forfeit the earnest money deposit of the defaulting bidder.

- iii. The Bidder is required to nominate a Project Director for assignment who shall interact with the Commission or the Officer designated by the Commission on regular basis during the consultancy period. The Commission shall require two resource persons during execution of the tasks.
- iv. The Consultant shall be at liberty to work in hybrid mode (virtual /physical mode) as per need of assignment. The Consultant, however, shall ensure that he will be available for any discussions, presentation as directed by the Commission on short notice. In case dedicated person fails to respond to the calls from officers of the Commission for virtual meeting/discussion, notice of default shall be issued by the Secretary of the Commission. After 3 instances of such default, the Commission may proceed for termination of contract as per provisions under "Termination of Agreement" Clause of this RFP.
- v. The Consultant should ensure that at least one resource person proposed for this assignment should not be involved in more than one ongoing assignment of the Commission simultaneously.
- vi. The Commission shall provide requisite office space to the consultants but the arrangements for their residential accommodation shall be made by the Consultants.

14. PAYMENT

Payment to the consultant after award of assignment would be made subject to submission of bills along with deliverables as specified in work order along with work sheet/time sheet of work to be carried out by consultant during the month. The work shall have to be completed as per agreed timelines between the Commission and the Consultant.

Payment milestone are as under:-

Payment Milestones:

The schedule of payment to the bidder is as under;

- i. 10% on completion of activity 1 subject to deliverable 1 as per clause 4 of this RFP.
- ii. 20% on completion of activity 2 subject to deliverable 2 as per clause 4 of this RFP.

- iii. 20% on completion of activity 3 subject to deliverable 3 as per clause 4 of this RFP
- iv. 20% on completion of activity 4 subject to deliverable 4 as per clause 4 of this RFP
- v. 30% on submission of draft final report incorporating suggestions /comments of the Commission and acceptance of such final report by the Commission.

15. TAXES AND DUTIES

The Consultant shall pay the taxes, duties, fees, levies and other impositions levied under the existing, amended or enacted laws during life of this contract. The payment to the Consultant shall be made by the Commission after the deduction of tax at source in accordance with law for the time being in force, the amount of which is deemed to have been included in the total Contract Price.

16. DESCRIPTION OF THE SERVICES

The Consultant shall perform the Services and complete the assignment/task as per the schedule of work issued by the Commission through the work order.

17. TERMINATION OF AGREEMENT

The Commission may terminate the contract if:

- i. The Consultant is not timely performing the assigned works.
- ii. Quality of the assigned works is not to the satisfaction of the Commission.
- iii. The Consultant repeatedly fails to achieve the milestones and meet the timelines as decided by the Commission.
- iv. The Consultant commits any material or persistent breach of its obligations under the contract (which, in the case of a breach capable of remedy, shall not have been remedied within 15 days of intimation), or Team members of the Consultant are found lacking in honesty and integrity;
- v. The Consultant becomes insolvent.

The Commission reserves the right to terminate the contract, by giving fifteen days' notice to the Consultant. Termination shall be effective after 15 days of written notice having been served on the Consultant either through email or

through Registered post/ Speed Post/Courier. In such event, the performance guarantee shall stand forfeited. The termination will be without prejudice to either party's rights accrued before termination.

18. LIQUIDATED DAMAGES:

- i. For delay: If the Consultant fails to complete the allotted work within the prescribed time period as per clause 4 of this RFP, the Commission may levy liquidated damages at the rate of 10 % of the cost of contract value.
- ii. For errors/ mistakes: If the Consultant commits any errors/ mistakes in the allotted work, the Commission may levy liquidated damages at the rate of 10 % of the cost of contract value.
- iii. "Cumulative penalty, or indemnity claim or liability under the engagement, if any, on consultant shall not be more than the total project cost under the engagement."

19. MISCELLANEOUS

- i. If the Consultant fails to execute the work under contract agreement within stipulated time schedule and in the manner indicated in the methodology and work plan, the Commission may consider getting the work done through alternate resources at the risk and cost of the defaulting consultant.
- ii. The Commission is neither under any obligation to select any Bidder nor to give any reason for selecting any Bidder. The Commission is also under no obligation to proceed with the work or any part thereof.
- iii. The Commission reserves the right to award the total assignment or to delete any part of the assignment without assigning any reason. Payments shall be made subject to deliverables. The Commission also reserves the right to reject any or all the bids without assigning any reason.
- iv. Failure to provide all information or concealing any information / material facts required in the process to award the contract shall be at Bidder's own risk and may result in to rejection of the proposal / bid / contract.
- v. Any dispute in the matter shall be subject to jurisdiction of Civil Court of Bhopal, Madhya Pradesh.

- vi. Bidder should clearly indicate that he is not presently blacklisted by any of the Govt. organisation/Commission.
- vii. The bidder shall necessarily enclose a **check list** referring to page no. of requisite enclosures, formats and other compliances stated in this document.

FORMAT 1:

A brief description of assignments of similar nature carried out in the last 5 years.

Date:

FROM:

TO: The Secretary
MPERC, Bhopal

A. Relevant Assignments carried out in the last 5 years

(The following information should be given in respect of each assignment separately.)

1. Title of assignment
2. Objective of assignment
3. Narrative description of the assignment.
4. Name of the client
5. Address
6. Commencement and completion of the assignment
7. Number of man months as well as the duration period for completion of assignment
8. Outcome of the assignment.
9. Contract value of the assignment
10. Any other relevant information.

Yours faithfully,

Signature

Full Name _

Designation _____Address _

FORMAT 2 :

List of the resource persons proposed for Assignment

1. Project Personnel

| Sr. No. | Name | Positions held in the Bidding Firm/ assignment | Qualification from Graduation onwards | Total years of experience since completion of graduation | Relevant experience in similar works | Number of years in bidding firm |
|---------|------|--|---------------------------------------|--|--------------------------------------|---------------------------------|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |

Note : Resource persons having experience in statistical analysis /sampling methodology would be added advantage.

FORMAT 3 :

Qualifications, Experience and Competence of the resource persons assigned for the Assignment

Format of Curriculum Vitae (CV) for Consultant proposed for the Assignment (separate sheet for each Consultant)

Name:

Name of Firm:

Profession:

Age & Date of Birth:

No. of Years with Firm:

Tasks Assigned (in brief) :

Key Qualifications (in brief)

(Give an outline of staff members' experience and training most pertinent to the tasks on assignment. Describe degree of responsibility held by each staff member on relevant previous assignment and give dates and locations. Use up to half a page)

Education (in brief):

(Summarize College/University and other specialized education of each staff member, giving names of schools, dates attended and degrees obtained).

Employment Record (in brief)

(Starting with present position, list in reverse order every employment held. List all positions held by the staff members since graduation, giving dates, name of employing organization, title of positions held and location of assignments. For experience in the last ten years, also give types of activities performed and Client references, where appropriate. Use up to three - quarter of a page).

Experience in Utility Business: Position held, Nature of work, Highlights/ Achievements.

Certification:

I, the undersigned, certify that, to the best of my knowledge this bio-data correctly describes myself, my qualifications and my experience.

Signature of Staff Member

Date:

It is certified that the concerned person is a full time employee of the Firm. Signature of authorised Official from the Firm (with name and designation)

FORMAT 4

Financial Proposal

Name and address of the bidder:

Activity wise cost break be provided

| Sr. No | <i>Scope of the Assignment</i> | Total Amount in figures (with all applicable Taxes) (in Rs) |
|--------|--------------------------------|---|
| | Total Cost | |

Note : Bidders are required to provide item/ activities wise cost break up of total cost quoted .

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(Signatures of the Authorized Signatory) Date:
Name & designation:
Address