

EXPRESSION OF INTEREST (Eoi)

Engagement of an Independent Third-Party Evaluator (TPE) for Baselining and Revenue Assessment of the AI/ML Solution Roll-out across Utility

Issued by: REC Power Development and Consultancy Limited (RECPDCL)

S.NO	Particular	Date
1	Eoi Issuance date	03.09.2026
2	Pre-bid Meeting date	09.09.2026 @ 11:00AM at following address: RECPDCL, D Block, 2 nd Floor Conference Hall REC Headquarters Plot No: I-4, Sector 29, Near Iffco Chowk Gurugram
3	Eoi Submission date	16.09.2026

Eoi Reference No.: RECPDCL/TPE/AIML/2026/001

1. Introduction

RECPDCL proposes to establish and operate a national-scale DISCOM AI/ML Scale-up Programme to facilitate identification, procurement, pilot validation, implementation, monitoring, and scale-up of AI/ML-based solutions across participating Distribution Utilities (DISCOMs).

The DISCOM AI/ML Scale-up Programme aims to accelerate the adoption of high-impact Artificial Intelligence (AI), Machine Learning (ML), Advanced Analytics, and Intelligent Automation solutions across participating Distribution Utilities (DISCOMs) to address critical operational, commercial, customer service, asset management, forecasting, reliability, and loss reduction challenges. The programme seeks to establish a structured and standardized framework for identification, evaluation, procurement, pilot validation, implementation, and scale-up of technology solutions that can deliver measurable business outcomes and create demonstrable value for utilities. For Utility wide scale up, Technology Solution Providers (TSPs) shall be engaged by RECPDCL for the deployment of AI/ML-based solutions in participating DISCOMs under a Revenue Creation (RC) based solution through Revenue Sharing Model or Revenue Optimization (RO) based solution through Milestone based/Periodic payments under the Expense based Model or Hybrid approach i.e. RC & RO based solution between the TSP(s) and the Utility, with RECPDCL acting as BPC and PMC.

The engagement is organized in four phases — (I) DISCOM Readiness Assessment, Use-Case Finalization & TSP Empanelment; (II) RFP Issuance, Limited Tender, Pilot & Tripartite Agreement; (III) Implementation till Go-Live; and (IV) KPI Monitoring & Incremental Revenue-Share after Go-Live, as applicable.

Through above engagement, programme aims to institutionalize an outcome-based approach for utility digital transformation by ensuring that technology deployments are linked to clearly defined business objectives, independently validated performance indicators, and measurable benefits realization. Through coordinated engagement of RECPDCL, participating DISCOMs, Third Party Evaluators (TPEs), and Technology Solution Providers (TSPs), the programme shall facilitate transparent procurement, objective solution evaluation, effective implementation management, and long-term monitoring of realized benefits.

To ensure transparent, independent and verifiable quantification of the revenues saved or generated through the AI/ML intervention, RECPDCL intends to engage an Independent Third-Party Evaluator (TPE). Through this Expression of Interest, RECPDCL invites responses from competent and experienced firms to be shortlisted for the said engagement.

2. Objective of the EoI

The objective of this EoI is to identify and shortlist qualified agencies for the TPE engagement. Specifically, this EoI seeks to:

- Identify experienced and capable firms to act as the Independent Third-Party Evaluator for the Revenue Sharing programme.
- Assess prospective bidders' credentials, domain experience and institutional capacity in the power / utility sector and in AI/ML-led revenue and performance assessment.
- To ascertain the budgetary estimate in the aforesaid work.

3. Scope of Work (Indicative)

Considering the above, the TPE shall perform the following functions during the period of engagement with RECPDCL. Each individual use case shall be deployed through a separate Request for Proposal (RFP) ensuring clarity of scope, accountability of vendors, and streamlined evaluation for each deployment.

1. Baseline Identification

1.1. KPI Identification and Baseline Methodology Definition for Existing Use Cases

- The TPE shall, as a first order of activity, conduct a structured inventory of all Use Cases identified under the Revenue Sharing arrangement. For each Use Case the TPE shall document the following:
 - The nature and description of the Use Case.
 - The operational domain covers (e.g., AT&C Loss reduction, Energy Accounting, Meter Insights, Demand response, energy efficiency, outage reduction, network optimisation, etc.).
 - The relevant data streams and systems involved.
 - The anticipated measurement challenges specific to that Use Case.
 - The tentative list of use cases as identified by MoP is at Annexure-1.
- The TPE shall assist in identifying and formally defining the Key Performance Indicators (KPIs) applicable to each Use Case. For Use Cases where KPIs have already been specified in the underlying contract, RFP, or any approved project document, the TPE shall review, validate, and confirm their measurability and adequacy for the purpose of revenue quantification. Where KPIs are absent, inadequate, or insufficiently defined, the TPE shall independently design and propose suitable KPIs for that Use Case, based on industry best practice and the specific operational characteristics of the intervention.
- For each Use case identified by Utility, the TPE shall define the baseline measurement methodology, specifying: the data source and collection mechanism; the formula or algorithm for computing the KPI value; the reference period and frequency of measurement; the applicable tolerance or threshold bands; and the linkage between the KPI outcome and the revenue quantification model for that Use case. This KPI-methodology mapping shall be documented in a Use case- KPI and Measurement Framework, prepared separately for each Use case and forming an integral part of the overall Assessment Methodology.
- The Use case- KPI and Measurement Framework for each Use case shall be submitted to the Utility, RECPDCL and the TSP for review and approval prior to commencement of any baseline data collection for that Use case. Approved KPIs and their corresponding measurement methodologies shall be binding for the duration of the engagement and shall not be altered except through the formal methodology amendment process.
- The TPE shall prepare a formal listing of all Use Cases with their KPIs. This listing along with desired Use case shall be approved by the Utility, RECPDCL and the TSP before baseline activities commence and shall serve as the master reference throughout the engagement.
- Any addition or removal of Use case during the engagement shall be formally documented as an amendment to the Use case list.

1.2. Use case-Wise Baseline Data Requisition from the Utility

- For each Use case identified, the TPE shall formally requisition from the Utility all data necessary to establish the pre-intervention baseline. The Utility shall be the primary and authoritative source of all data for baseline and assessment purposes throughout the engagement.
- Data to be requisitioned shall include, without limitation:
 - Historical billing and revenue records.
 - Metering and sub-metering data.
 - Network performance logs.
 - Outage and restoration records.
 - Demand and consumption profiles.
 - Operational cost data.
 - Any other relevant operational or financial records as determined by the TPE.
- The TPE shall issue structured Data Requisition Notices (DRNs) specifying the exact data sets, formats, time periods, and submission timelines required. The Utility shall share the requisite data as per DRNs within agreed timelines.
- Any non-supply or partial supply of data shall be formally documented by the TPE and informed to the Utility.

1.3. Use case-Wise Baseline Establishment and Confirmation

- Upon satisfactory data verification, the TPE shall independently establish a distinct baseline for each identified Use case. Each baseline shall define the pre-intervention reference values for all parameters relevant to revenue quantification under the respective Use case - including consumption levels, loss factors, efficiency metrics, revenue per unit, and such other parameters as specified in the Assessment Methodology mentioned in point 2 below.
- The TPE shall document each Use case baseline in a separate Baseline Confirmation Report, setting out data sources, assumptions, limitations, and the agreed reference period.
- All baselines shall be formally accepted in writing by the Utility and the TSP. Post-confirmation, baselines shall be immutable except through a formal and unanimous amendment process documented by the TPE.

2. Assessment Methodology

1.1. Revenue Quantification Methodology Development - Per Use case

- The TPE shall develop the Assessment Methodology or Methodologies to define precisely how total revenues saved or generated through the TSP's intervention are to be quantified for each Use case.
- The Methodology shall address the following:
 - Identification of revenue streams attributable to each Use case.
 - Calculation of incremental or avoided revenues against the established baseline.
 - Elimination of confounding factors and non-attributable revenues.
 - Treatment of shared or overlapping revenue impacts across Use cases.
 - The formula for arriving at the total revenue base to which the TSP's agreed share percentage is applied.

- The TPE's role in methodology development is to establish the quantification framework i.e. the mechanism for arriving at the total revenue figure. The TSP's quoted revenue share percentage shall be treated as a given input agreed separately between the TSP and the Utility; the TPE shall not determine, recommend, or alter that percentage.
- The TPE shall prepare a separate Methodology Document for each approved model common or Use case-specific detailing algorithms, data inputs, calculation steps, validation checks, and output formats.

1.2. Methodology Finalization - Multi-Stakeholder Consultation and Approval

- The TPE shall facilitate structured multi-stakeholder consultation sessions to present, discuss, and refine the proposed Methodology Document or Documents. Separate consultation sessions shall be conducted for each distinct model where Use case-specific frameworks apply, ensuring that the relevant parties are engaged in the review of each applicable model.
- The TPE shall maintain an auditable record of all feedback received, revisions made, and the rationale for acceptance or rejection of suggestions raised by any party.
- All finalized Methodology Documents shall be executed in a Methodology Agreement by the Utility and the TSP. Post-execution; no methodology shall be altered without a formal amendment process with documented multi-stakeholder consent. Further, if so required by Utility, TPE shall represent the methodology to the Regulator for approval.
- The methodology agreed upon shall be a part of the RFP issued for engagement of TSP for implementation of AIML Solution.

3. Assessment

2.1. Pilot Phase Assessment

- Prior to the commencement of the full-scale quarterly assessment cycle, as a part of Selection Process, the TSPs are required to carry out pilot in the Utility project area. The TPE shall conduct an independent assessment of the pilot phase for each such Use case pilot. The pilot assessment shall evaluate actual performance during the pilot period against the parameters and performance expectations set out in the RFP of TSP or any equivalent project design document. Where such parameters are not specified or are insufficiently detailed in the SBD, the TPE shall design the assessment parameters based on the approved KPIs (Scope Item 1.2), and the TPE's independent professional judgment of what constitutes a meaningful and measurable pilot outcome for that Use case.
- The pilot assessment shall cover, as a minimum: the degree of achievement of pilot-phase targets; data quality and availability observed during the pilot; performance of metering and data collection systems. The TPE shall prepare a Pilot Phase Assessment Report for each Use case and submit it simultaneously to the RECPDCL for further evaluation.

2.2. Quarterly Assessment — Use case-Wise Revenue Quantification

- The TPE shall conduct independent quarterly assessments across all active Use cases, applying the approved methodology or Use case-specific model as applicable. Each quarterly assessment shall:
 - Collect and verify current-period data from the Utility

- Quantify total revenues saved or generated for each Use case against the respective baseline.
- Calculate the TSP's applicable revenue share for each Use case by applying the agreed percentage to the TPE-quantified revenue base.
- Aggregate results across Use cases where required for consolidated reporting.
- Each quarterly assessment shall be completed and the Assessment Report submitted within thirty (30) days of the close of the quarter. The TPE shall ensure strict methodological consistency across assessment cycles for each Use case.
- Any changes in data availability, operational conditions, or other factors that may affect comparability between periods shall be documented and disclosed in the Assessment Report.

2.3. Invoice Verification and Clearance Certificate Issuance

- The TPE shall verify all invoices submitted by the TSP to the Utility under the Revenue Sharing arrangement. Verification shall confirm the following:
 - The invoiced revenue share amount is consistent with the TPE's quarterly assessment finding for the relevant Use case/s.
 - All applicable conditions for invoicing have been met as per the Revenue Sharing Agreement.

4. Dispute Management — Registration, Assessment, and Adjudication

The TPE shall maintain a structured Dispute Register covering all Use cases. Any party may raise a dispute regarding data, methodology application, revenue quantification, or invoice amounts. The TPE shall log each dispute with a unique reference, Use case tag, classification of nature (data dispute, calculation dispute, or methodology dispute), severity level, and target resolution timeline.

- At first level, the TPE shall issue a Dispute Assessment Note (DAN) setting out its independent technical findings on the matter in dispute based solely on data and the agreed methodology.
- Where first-level resolution fails, the TPE shall formally adjudicate the matter as a neutral expert and issue a binding Expert Determination within thirty (30) days of escalation. All determinations shall be based exclusively on technical and factual grounds and not on the financial interests of any party.
- Expert Determinations shall be final and binding on all parties in the absence of a challenge on grounds of manifest error as defined in the Revenue Sharing Agreement.

5. Reporting— Use Case-Wise and Consolidated

- The TPE shall deliver, for each assessment cycle, the following reports:
 - Use case-Wise Assessment Reports, each containing verified data, revenue quantification, baseline comparison, variance analysis, and invoice certification for the respective Use case.
 - A Consolidated Revenue Sharing Report aggregating results across all Use cases, highlighting cumulative revenue shares, trends, and any systemic issues observed.
- In addition, the TPE shall provide monthly data dashboards summarising key performance indicators, revenue trends, and data quality indicators by Use case.
- All reports shall be submitted simultaneously to the Utility, the TSP, and the Regulator. Formats and submission protocols shall be agreed at the outset and may be Use case-specific where data structures differ materially.

5. Audit Trail Maintenance, Record Certification, and Regulatory Access

The TPE shall maintain comprehensive and tamper-evident audit trails for all assessments, data verifications, calculations, communications, and determinations, separately maintained by Use case where applicable. Records shall be retained for the minimum period prescribed by regulations or as otherwise agreed.

- The TPE shall provide certified copies of all records upon reasonable request by Utility or the Regulator and shall facilitate and actively support any regulatory audit or review of the Revenue Sharing programme.
- All record sets shall be clearly labelled by Use case, assessment period, and document type.

6. Engagement Closure — Final Report, Knowledge Transfer, and Handover

- Upon expiry or termination of the engagement, the TPE shall prepare a comprehensive Final Engagement Report covering the following:
 - A summary of all Use cases assessed throughout the engagement.
 - All baselines established and their evolution over the engagement period.
 - Methodologies developed and all amendments made.
 - Cumulative revenue quantifications and share certifications by Use case.
 - All disputes registered and their resolution status.
 - Key observations on the overall Revenue Sharing programme.
- The TPE shall conduct a structured knowledge transfer session with all parties, providing complete documentation of all tools, templates, Use case registers, data repositories, and audit trails. All assets shall be handed over to the designated custodian, and the TPE shall issue a Handover Completion Certificate.
- A separate handover pack shall be prepared for each Use case model where independent frameworks were applied.

4. Period of Engagement

The engagement shall be for an indicative period of three (3) years from the date of the Letter of Award / signing of the Agreement, covering the Pilot Phase assessment and the revenue assessment during the roll-out of the AI/ML solution. The term shall be extendable for a period of two years by mutual consent.

5. Payment Terms

The engagement shall be remunerated on a milestone basis. Payments are expressed as a percentage of the total professional fee and become due upon written acceptance of the associated deliverable(s). The detailed financial breakup shall be quoted by bidders against the Bill of Quantities (BoQ) issued as an annexure to the RFP.

M	Milestone	Deliverable	% of Fee per Quoted per Use case at Schedule A a) of Annexure 2 – Financial bid
M1	Baseline Establishment & Confirmation	Utility accepted Baseline Confirmation Reports (per Use case)	15%

M	Milestone	Deliverable	% of Fee per Quoted per Use case at Schedule A a) of Annexure 2 – Financial bid
M2	Methodology Finalization & Agreement	Final Methodology + executed Methodology Agreement (forms part of the TSP RFP)	20%
M3	Pilot Phase Assessment (per Use case)	Pilot Phase Assessment Report for each Use case, submitted to RECPDCL	15%
M4	Quarterly Assessment, Invoice Verification & Reporting (pro-rata per quarter for 9 quarters)	Quarterly Use case-wise Assessment Reports, invoice clearance certificates, and consolidated / periodic reports	40%
M5	Engagement Closure, Knowledge Transfer & Handover	Final Engagement Report + Handover Completion Certificate	10%
Total			100%

Note: Milestone M4 (operational phase) is recurring and is released pro-rata against each accepted quarterly Assessment Report. All percentages are of the fee payable per Use case per DISCOM. Taxes (GST) are payable additionally as applicable. Each undisputed tranche is payable within thirty (30) days of a valid invoice supported by the accepted deliverable.

6. Pre-Qualification Criteria

This EoI invites responses from established firms with a demonstrable Use case record in the power-sector and utility-performance / revenue-assessment space. To be eligible for shortlisting, a bidder must satisfy ALL of the following criteria.

Sl.	Criteria	Minimum Requirement	Supporting Documents
A	Legal Entity	Bidder shall be a legally registered entity in India (Company under the Companies Act / LLP / registered Partnership)/Research Center/regional research & Policy organization/Society under societies registration act	Certificate of Incorporation/Other supporting documents/ PAN, GST registration .
B	Sectoral Experience	Minimum 3 years of experience in the power / energy sector, with demonstrated assignments for power distribution utilities.	Letter of Award / completion certificates/ MoUs/Final Analysis reports submitted to client

Sl.	Criteria	Minimum Requirement	Supporting Documents
C	Relevant Domain Experience	Demonstrated experience in assessment or implementation of at least 2 of the following use cases in any of Indian Utilities: (i) AT&C loss reduction / energy accounting / energy audit; (ii) AI/ML or advanced data-analytics deployment in power utilities; (iii) Measurement & Verification (M&V) of utility performance or savings;	Letter of award/ /Client certificates/ MoUs/Final Analysis reports submitted to client
D	Similar Assignments	At least 3 assignments of independent assessment / M&V / performance-or-revenue evaluation in the power sector during the last 7 years.	Letter of award/Client certificates / /signed contracts/ MoUs/Final Analysis reports submitted to client
E	Key Personnel	Access to a multidisciplinary team comprising atleast 5 members across following sectors: 1. Power-systems / distribution expert, 2. Data-science / 3. AI-ML specialist, 4. M&V expert, and 5. financial / chartered-accountant expert.	Self declaration form the Head of the organization along with min. 1 CV for each sector
F	Statutory & Integrity	The bidder (and each consortium member) shall not be blacklisted / debarred by any Central or State Government, PSU, utility or regulator as on the date of EoI submission.	Self-declaration / affidavit

7. EoI Submission Requirements

- A covering letter on the bidder's letterhead, duly signed by an authorized signatory, expressing interest in the engagement.
- Documentary evidence against each Pre-Qualification Criterion (Section 6), along with the bidder's profile and relevant assignment summaries.
- Responses shall be submitted along with **Annexure 1, Annexure 2 and Annexure 3** to the following email id – **aiml.power@recpdcl.in** on or before the due date of EOI submission.

8. Budgetary Estimate

The interested parties matching above eligibility shall submit the Budgetary estimate as per Annexure-2.

9. General Terms

- This EoI is an invitation for expression of interest for shortlisting purposes only and does not constitute an offer, contract or commitment of any nature.
- Based on the inputs received during the EoI a detailed RFP shall be issued for shortlisting and final selection
- Bidders shall bear all costs of preparing and submitting their responses; RECPDCL shall not reimburse any such costs.
- RECPDCL reserves the right to amend, extend, or cancel this EoI, or to accept or reject any or all responses, without assigning any reason and without incurring any liability.

For further details please contact:

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REC Power Development and Consultancy Limited D- Block, REC Corporate Headquarter, Plot No. I-4, Sector-29, Gurugram (Haryana)-122001, Landmark: Near IFFCO Chowk Metro Station

List of Hybrid Use cases identified by MoP vide letter dtd. 16.01.2026

Sl.	Hybrid Use-case
1	Smart Meter Analytics / Power Quality Platform RC: Detects theft/tamper/wrong categorization → recovery + better billing accuracy RO: Improves voltage balance / phase issues → fewer complaints & outages
2	Asset Management + Loss Reduction RC: Targets high-loss DTs/feeders → AT&C improvement (more realized energy) RO: Predictive maintenance → lower failures & O&M cost
3	Outage Management + Meter Insights RC: Flags illegal reconnections / missing reads post-outage → revenue protection RO: Faster restoration + optimized crew dispatch → SAIDI/SAIFI improvement
4	Prepaid Metering + Alerts RC: Pay-before-use → arrears reduction & improved collections RO: Low-balance/usage alerts → fewer disputes, better CX
5	Demand Response Program + Market Aggregation RC: If aggregated into markets → flexibility/fee revenues RO: Peak shaving → avoided power purchase + deferred capex
6	DER Integration + Prosumer Settlement RC: Prevents settlement leakage (export anomalies/config errors) → revenue assurance RO: Grid stability + hosting capacity visibility → operational resilience
7	EV Charging + Managed Charging RC: New billed EV load → incremental sales RO: Shifts charging off-peak → capex deferral & reliability gains

In addition to above, additional Use-cases may vary based on requirement from utility.

Budgetary Estimate

1. Instructions to Bidders

- Bidders shall quote firm, all-inclusive rates in Indian Rupees (INR). Rates are deemed inclusive of all manpower, travel, tools, data and overhead costs, except GST which is shown separately.
- The pricing unit is the fee per Use case per DISCOM, covering the full scope of milestones M1 to M5. This unit fee is released milestone-wise as per the fixed weightage in Schedule A, consistent with Section 5 (Payment Terms) of the EoI.
- Indicative volumes (number of DISCOMs and Use cases) are provided for comparison only; actual payments shall be made on as-accepted, per-Use-Case-per-DISCOM basis and do not constitute a guarantee of quantity.

3. Schedule A —Budgetary Estimate

Particulars	Value
(a) Fee per Use case per DISCOM (from Schedule A, in INR)	XX
(b) Number of DISCOMs [indicative]	15
(c) Number of Use cases per DISCOM [indicative; ref Annexure-1]	3
(d) Total Use case × DISCOM combinations (b × c)	45
(e) Sub-Total = (a) × (d)	XX * 45
(f) GST @ 18%	
(g) Total Budgetary Estimate (e + f)	<u> </u>

Milestone wise weightage of the Fees per Use case per DISCOM is as per following mentioned percentage:

M	Milestone	% of Fee per Quoted per Use case at Schedule A a) of Annexure 2 – Financial bid
M1	Baseline Establishment & Confirmation	15%
M2	Methodology Finalization & Agreement	20%
M3	Pilot Phase Assessment (per Use case)	15%
M4	Quarterly Assessment, Invoice Verification & Reporting (pro-rata per quarter for 9 quarters)	40%
M5	Engagement Closure, Knowledge Transfer & Handover	10%

4. Notes

- Milestones M1, M2, M3 & M5 are one-time per Use case per DISCOM. Milestone M4 (40%) is the recurring operational component, released pro-rata against each accepted quarterly Assessment Report over the engagement term [indicatively 9 quarters].
- Addition or removal of Use Cases via a formal amendment to the Use case Register shall be priced at the same per-Use case-per-DISCOM rates quoted in Schedule A, applied to the affected milestones.
- Taxes (GST) are payable additionally. Each undisputed tranche is payable within thirty (30) days of a valid invoice supported by the corresponding accepted deliverable.

Bidder Information & Credentials
1. Basic Organization Details

S. No.	Particulars	Details
1	Name of Organization	
2	Registered Address	
3	Year of Incorporation	
4	Type of Organization (Company/LLP/Partnership/Proprietorship/Govt. Entity/ if any other, plz mention)	
5	CIN/Registration Number	
6	PAN Number	
7	GST Number	
8	Website	
9	Contact Person Name & Designation	
10	Contact Number	
11	Email ID	

2. Organizational Profile

Provide the following:

- Brief company profile (maximum 500 words).
- Core business areas.
- Number of years in operation.
- Presence across India/International locations.
- Employee strength.
- Paper published

Particulars	Details
Total Employees	
Technical Professionals	
Data Scientists / AI-ML Experts	
Domain Experts	
Support & Operations Personnel	

3. Relevant Experience

Provide details of assignments completed or under execution during the last ____ years relevant to the scope of work.

S.No.	Client Name	Project Name	Scope of Work	Value (Rs. Cr.)	Duration	Status (Completed/Ongoing)
1						
2						
3						
4						
5						

4. Financial Information

Financial Year	Annual Turnover (Rs. Cr.)
FY 2023-24	
FY 2024-25	
FY 2025-26	
Average Annual Turnover	

5. Litigation / Blacklisting Declaration

If yes, provide details.

Particulars	Response
Whether blacklisted/debarred by any Government Department/PSU during last 5 years	Yes/No
Whether any litigation/arbitration is pending that may affect execution of the assignment	Yes/No
If Yes, provide details.	

10. Additional Information

The bidder may provide:

- Unique capabilities relevant to the assignment.
- Proprietary tools/platforms.
- Partnerships/OEM tie-ups.
- Any additional information demonstrating suitability.

Declaration

We hereby certify that the information furnished above is true and correct to the best of our knowledge and belief.

Authorized Signatory

Name: _____
 Designation: _____
 Organization: _____
 Date: _____