

12/05/2025

## Request for quotation (RFQ) – UK PACT Expert Deployment

<b>RFQ title</b>	Implementing Load Forecasting Tool in Discoms – Power Sector Reforms
<b>RFQ issue date</b>	12/05/2025
<b>Project title</b>	Implementing Load Forecasting Tool in Discoms – Power Sector Reforms
<b>Close date and time</b>	09/06/2025 12:00 BST
<b>Details for submission</b>	<a href="mailto:expertdeployments@ukpact.co.uk">expertdeployments@ukpact.co.uk</a>

Palladium as the delivery partner for the Foreign, Commonwealth and Development Office (FCDO) funded UK Partnering for Accelerate Climate Transitions (UK PACT) programme invites you to submit a quotation for the services detailed in this RFQ.

Please forward your quote in accordance with the Details for Submission above by the Close Date and Time. This RFQ includes the following materials:

Schedule 1 – Terms of Reference

Schedule 2 – Instructions for submission

Schedule 3 – Terms and Conditions

Annex I – RFQ Response Form

Annex II – Budget and workplan template

We look forward to your response.

## Schedule 1 - Terms of Reference

### 1.1. Overview of requirements

Name of project	Implementing Load Forecasting Tool in Discoms – Power Sector Reforms
Country/region	India
Proposed start date	07/07/2025
Proposed end date	31/03/2026

### 1.2 Context and scope of work

#### Background

The power sector is a critical enabler of India's sustainable economic growth—supporting industrialisation, agriculture, services, and infrastructure development. It is pivotal to enhancing connectivity and improving the quality of life, especially in rural areas. As India moves toward achieving its Nationally Determined Contributions (NDCs) and the Net Zero target by 2070, the electricity sector must undergo structural transformation, including increased adoption of clean energy, improved grid efficiency, and market reforms.

The UK recognises the transformative potential of India's power sector to deliver climate and development goals. In the UK, coal contributes only 0.6% to net-zero electricity generation (2024), demonstrating the viability of a clean power transition. The UK is committed to sharing technical expertise to help India adopt similar reforms, with a focus on market design, renewable energy integration, and regulatory strengthening.

UK PACT (Partnering for Accelerated Climate Transitions) is a flagship technical assistance programme under the UK's International Climate Finance. It supports partner countries to accelerate their low-carbon transitions and unlock opportunities for inclusive and sustainable growth. UK PACT works by funding high-impact projects that build capacity and capability in areas critical to meeting net-zero ambitions.

PSR is a technical partnership between the Government of India and UK government. This partnership is based on a MoU between the two countries to support structural reforms in the Indian Power sector with the aim of reducing GHG emissions, improving electricity access for all, economic growth and achieving 2030 NDC targets and 2070 Net Zero goal. UK is supporting structural market reforms, renewable energy integration and regulatory capacity building through technical assistance to Ministry of Power and its statutory bodies (CEA and CERC among others).

#### Objectives

We are seeking to support the adaptation, operationalisation, and institutionalisation of a Load Forecasting Tool, originally developed by IIT Kanpur under UK PACT support, for Rajasthan state.

A load forecasting tool is a comprehensive solution used to predict future electricity demand (load) over various time horizons from data collected from various bodies like DISCOM, SLDC & hosted centrally by Central Electricity Authority (CEA). These forecasts are crucial for grid reliability, power generation planning & energy market regulations. The aim of this project is to enhance long-term electricity demand-supply forecasting and strengthen resource adequacy planning at the state level for three states in India.

## Expected Outcomes:

- Strengthened institutional capacity of DISCOMs in Delhi, Gujarat, and Tamil Nadu to undertake robust long-term electricity demand forecasting using the tool
- Enhanced technical collaboration between CEA, state DISCOMs, and regulators through structured engagements and shared forecasting platforms.
- Improved planning capabilities and data-driven decision-making at state-level regulatory bodies through scenario-based forecasting outputs.
- Aligned state-level forecasts and planning standards with national resource adequacy goals set by CEA.
- Demonstrated value-for-money by effectively scaling a proven UK PACT-supported innovation across diverse state contexts.
- Evidence-based inputs to inform regulatory frameworks and reforms in market design and demand-supply balancing.

## Approach

The selected supplier will work under the guidance of CEA, with close coordination with state DISCOMs and other key stakeholders, to deliver the following activities:

1. **Adaptation of Load Forecasting Tool**
  - Tailor the IITK-developed tool to meet the specific technical and operational requirements of the selected states.
  - Sign NDAs/MoUs with relevant utilities and authorities as needed.
2. **Data Collection and Tool Pilot**
  - Collect and validate demand/load data (15-min, hourly, monthly, yearly) and category-wise consumption.
  - Pilot the adapted tool within DISCOMs to test forecasting accuracy and usability.
3. **Scenario Analysis and Customisation**
  - Integrate multiple forecasting scenarios (e.g. based on weather patterns, policy changes, economic growth) into the tool.
  - Simulate outputs and validate with utilities and regulators.
4. **Stakeholder Collaboration**
  - Engage with stakeholders including CEA, Grid-India, IMD, SLDCs, and State DISCOMs to ensure smooth implementation and validation.
5. **Capacity Building**
  - Train utility staff and decision-makers on tool operation, data interpretation, and scenario planning.
6. **Sustainability and Handover Plan**
  - Develop a sustainability plan including system documentation, institutional capacity building, and long-term handover strategy.

While the initial budget is allocated for three states (starting with - Delhi, Gujarat, and Tamil Nadu), suppliers should be able to demonstrate their ability to scale support to additional states, in response to increased demand.

The scope of work involves implementation of a load forecasting tool for the state discoms of Delhi, Gujarat and Tamil Nadu in India. This initiative aims to enhance the long-term demand supply forecasting while ensuring long term energy security and reliability. The proposal should include a detailed implementation plan that takes into account:

- **Inception Plan:** 1 month
- **Direct technical support to 3 states:** 6 months across 3 states in parallel
- **Training and Capacity Building & Handover of the tool:** 2 months

Output	Description and milestone	Deliverables	Deliverable due
Inception Report	<p>Development of a detailed roadmap containing the Objectives, Goals, Timelines, Milestones, Monitoring plan etc., for tool adaptation and phased deployment. This includes stakeholder engagement, data assessment as well as the following:</p> <ul style="list-style-type: none"> <li>• Detailed plan outlining the deployment of the final version of the Load Forecasting Tool for the Gujarat, Delhi, Tamil Nadu state DISCOM(s) and Private DISCOM(s).</li> </ul>	<ul style="list-style-type: none"> <li>• Submission of inception report including detailed roadmap/ workplan: for implementation and stakeholder engagement</li> <li>• Submission of workplan and methodology for tool adaptation <ul style="list-style-type: none"> <li>-Stakeholder consultation plan</li> <li>-Data availability and gap assessment.</li> <li>-Timeline and roles</li> </ul> </li> </ul>	31 July 2025
Direct Technical Support in 3 states (DISCOMS)	<ul style="list-style-type: none"> <li>• Organising visits or stationing of experts (if required) at state discoms, gather data, discuss with State discoms, CEA and other stakeholders for the data procurement: <ul style="list-style-type: none"> <li>- Category-wise - 15 min, hourly, monthly and yearly demand / load.</li> <li>- Other data of the selected state - GDP, population, etc.</li> </ul> </li> <li>• Cleaning of data and feeding the collected data into the fit-in tool and observing the output.</li> </ul>	<ul style="list-style-type: none"> <li>• Data Identification, collation and cleaning of data from stakeholders (discoms, sldc etc.)</li> <li>• Observation report on data availability and gap assessment, accepted by the selected state's DISCOM</li> </ul>	31 January 2026

	<ul style="list-style-type: none"> <li>• Deployment of expert/experts within CEA. Assistant experts to be stationed in the selected state's DISCOMs</li> <li>• Testing the stability of the final alpha version by building multiple scenarios.</li> <li>• Discussion on the final beta version of the load forecasting tool.</li> </ul>		
Training and Capacity Building and hand over of the tool	<ul style="list-style-type: none"> <li>• Organising the stakeholder consultations for the training and capacity building programs.</li> <li>• Submission of an error-free report capturing analysis and results of various test scenarios from the Tool</li> <li>• Handover of the tool to the state utilities-Submission of a final version of the load forecasting tool for all the selected DISCOMs</li> <li>• Acceptance of the outputs provided by the tool by CEA and Discoms for the respective states.</li> </ul>	<ul style="list-style-type: none"> <li>• Stakeholder consultations for the training and capacity building programs.</li> <li>• Handover of the tool to the state utilities including necessary documentation (e.g., usage manuals, training.</li> </ul>	15 March 2026

#### 1.4 Required expert qualifications and experience

The supplier should propose a team of experts with the necessary expertise and experience to deliver the outputs detailed above. This will include the following aspects:

- Deep understanding on Power Markets of India and International Power markets
- Experience with Indian assessment and management in Regulatory and Policy landscape
- Deep understanding on country and state level, working of the power sector, stakeholders involved, data and modelling
- Hand-on experience in working with government officials, stakeholders

- Previous experience of working with CERC & CEA is desirable not mandatory
- Experience with some amount of training and capacity building for government officials
- Deep familiarity with working with DISCOMs and handling power sector datasets and operations.
- Sound knowledge of resource adequacy planning within both Indian and international power systems.

The proposed team must be able to mobilise at pace to deliver according to the indicated timelines.

## 1.5 Reporting

Alongside the project specific reporting outlined in the output section and below, the supplier will also be required to align with the UK PACT monitoring and reporting governance framework which includes:

- Monthly progress reporting on outputs
- A full project completion report, summarising project achievements, any lessons learned through delivery, and any recommendations for future action.

To report against standard UK PACT indicators, the supplier will also need to collect and report disaggregated data on the organisations and individuals participating in workshops and trainings. Disaggregation should cover gender as a minimum and include age and disability where feasible.

Project specific reporting includes:

Reporting requirements	Deadline
<ul style="list-style-type: none"> <li>• Inception report including detailed roadmap to tool implementation and stakeholder capacity building.</li> <li>• Workplan and methodology for tool adaptation</li> <li>• Stakeholder consultation plan.</li> <li>• Data availability and gap assessment.</li> <li>• Implementation timeline and defined roles and responsibilities</li> </ul>	31 July 2025
<ul style="list-style-type: none"> <li>• Submission of a brief report summarising the stakeholder consultation process, including objectives, attendees, key feedback, and next steps. Handover of the tool to the state utilities.</li> <li>• Acceptance of the outputs provided by the tool by CEA and Discoms for the respective states.</li> </ul>	31 Jan 2026
<ul style="list-style-type: none"> <li>• Submission of a detailed data compilation report capturing hourly, monthly, and yearly demand of various consumer categories, including peak demand, for each state. Implementation of Beta version of Load forecasting tool, with draft report on outputs from the tool.</li> <li>• Load forecasting outputs with various scenarios building and error free outputs.</li> </ul>	15 March 2026

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| <ul style="list-style-type: none"><li>• Observation report submitted by the selected state's DISCOM / DISCOMs</li></ul> |  |
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## 1.5 Budget and contracting

The maximum budget is GBP 450,000 which must include personnel and expenses and be inclusive of all applicable taxes.

The supplier must provide a breakdown of budgeted personnel and expenses using Annex II.

Expenses should cover workshop and conference logistics, venue, any interpretation & translation services, travel & accommodations of delivery team, as well as participants.

Please note that the selected supplier will also be responsible for arranging and organising the travel and accommodation, venues and packages for all workshops and stakeholder engagement sessions. Managing these logistical aspects is a component of the service expected.

The successful supplier having passed the requisite due diligence checks will enter into a subcontractor agreement with Palladium for the delivery of these services on a time and materials basis. The agreement will include a milestone payment structure with 30% of personnel fees withheld against agreed deliverables. The exact milestone structure will be agreed between both parties during contract mobilisation.

The supplier will submit a monthly invoice, forecast and progress update.

## Schedule 2 – Instructions for submission

### 2.1 Submission process

#### *Timeline*

Stage	Date
1. Terms of Reference (ToR) and application process launched	12/05/2025
2. Deadline for receipt of clarification questions	19/05/2025
3. Deadline for submission of applications	09/06/2025
4. Applicants notified of project selection	13/06/2025
5. Due diligence complete	30/06/2025
6. Agreement signature	07/07/2025

#### *Applicant guidance*

Interested suppliers should complete and submit the below documents to [expertdeployments@ukpact.co.uk](mailto:expertdeployments@ukpact.co.uk) with the subject line: **RFQ Submission – [Supplier name] India Implementing Load Forecasting Tool in Discoms**

- **RFQ Response form**
- **Budget and Workplan Template**
- **CVs of key experts or personnel** (max two pages per CV)

Please note the following key dates:

- **Deadline for Queries:** 19/05/2025 (23:59 GMT)
- **Submission Deadline:** 09/06/2025 (12:00 BST)

### 2.2 Evaluation criteria

Criteria	Category	Weighting
Technical	Approach and methodology	30%
	Personnel	50%
Commercial	Competitiveness of the supplier's personnel cost	20%
<b>Total</b>		<b>100%</b>

#### *2.2.1 Technical evaluation*



The technical criteria will be evaluated by the procurement panel using the scale detailed below:

Score	Description
5 (Excellent)	Demonstrates an expert understanding of the project and proposes excellent and accurate solutions which address all requirements, and which are innovative where appropriate. Responses are excellently tailored to the context in all aspects. The level of detail and quality of information provides the highest degree of confidence in the ability to deliver.
4 (Very Good)	Demonstrates a very good understanding of the topic relating to delivery of the project. Responses are relevantly tailored to the context in the majority of aspects. There is sufficient detail and quality of information to give a strong level of confidence that they will deliver.
3 (Good)	Demonstrates a good understanding of the topic relating to the delivery of the project. Responses are reasonably tailored to the context for many of the aspects. There is a good level of detail and quality to give a good level of confidence that they will deliver.
2 (Satisfactory)	Demonstrates a satisfactory understanding of the topic relating to delivery of the project. Some appetite to tailor to context where required. Provides a limited level of detail and the quality of information provided gives only some level of confidence that they will be able to deliver satisfactorily.
1 (Unsatisfactory)	Demonstrates a poor understanding of the topic relating to delivery of the project. Poor tailoring to the context where this is required. Generally, an unsatisfactory and a low level of quality information and detail, leading to a low level of confidence that they will deliver.
0 (Fail)	Failure to address the material requirements of the project. No tailoring of responses to meet the context. No quality responses providing no confidence that they will deliver.

### 2.2.2 Commercial evaluation

The commercial evaluation will be conducted using the total personnel cost quoted in the Schedule III - Budget and Workplan (Cell W15 of "Budget Summary" sheet).

Supplier scores will be calculated relative to the lowest price supplier using the formula below:

$$((\text{Personnel cost of lowest price supplier} / \text{personnel cost of supplier}) * \text{price weighting } 20\%)$$

Where required, a Best and Final Offer process may be used to differentiate between suppliers of equal scoring.

## Schedule 3 - Terms and Conditions

### 1. Quote conditions

By submitting a quote, potential suppliers are bound by these terms and conditions. Potential suppliers must submit offers with all details provided in English and with prices quoted in GBP.

### 2. Quote Lodgement

The Company may grant extensions to the Closing Time at its discretion. The Company will not consider any quotes received after the Closing Time specified in the RFQ unless the Company determines to do so otherwise at its sole discretion.

### 3. Evaluation

The Company will evaluate submissions in line with the criteria provided in the RFQ to confirm compliance with this RFQ and to determine the best quote in the circumstances. The Company reserves the right to reject incomplete or abnormally low quotations.

### 4. Alterations

The Company may decline to consider a quote in which there are alterations, erasures, illegibility, ambiguity or incomplete details.

### 5. The Company's Rights

The Company may, at its discretion, discontinue the RFQ; decline to accept any quote; terminate, extend or vary its selection process; decline to issue any contract; seek information or negotiate with any potential supplier that has not been invited to submit a Quote; satisfy its requirement separately from the RFQ process; terminate negotiations at any time and commence negotiations with any other potential supplier; evaluate quotes as the Company sees appropriate (including with reference to information provided by the prospective supplier or from a third party); and negotiate with any one or more potential suppliers

### 6. Amendments and Queries

The Company may amend or clarify any aspect of the RFQ prior to the RFQ Closing Time by issuing an amendment to the RFQ in the same manner as the original RFQ was distributed. Such amendments or clarifications will, as far as is practicable be issued simultaneously to all parties. Any queries regarding this RFQ should be directed to the Contact Person identified on the cover page of this RFQ.

### 7. Clarification

The Company may, at any time prior to execution of a contract, seek clarification or additional information from, and enter into discussions and negotiations with, any or all potential suppliers in relation to their quotes. In doing so, the Company will not allow any potential supplier to substantially tailor or amend their quote.

### 8. Confidentiality

In their quote, potential suppliers must identify any aspects of their quote that they consider should be kept confidential, with reasons. Potential suppliers should note that the Company will only agree to treat information as confidential in cases that it considers appropriate. In the absence of such an agreement, potential suppliers acknowledge that the Company has the right to disclose the information contained in their quote. The potential supplier acknowledges that in the course of this RFQ, it may become acquainted with or have access to the Company's Confidential Information (including the existence and terms of this RFQ and the TOR). It agrees to maintain the confidence of the Confidential Information and to prevent its unauthorised disclosure to any other person. If the potential supplier is required to disclose Confidential Information due to a relevant law or legal proceedings, it will provide reasonable notice of such disclosure to the Company. The parties agree that this obligation applies during the RFQ and after the completion of the process.

### 9. Alternatives

Potential suppliers may submit quotes for alternative methods of addressing the Company's requirement described in the RFQ where the option to do so was stated in the RFQ or agreed in writing with the Company prior to the RFQ Closing Time. Potential suppliers are responsible for providing a sufficient level of detail about the alternative solution to enable its evaluation.

**10. Reference Material**

If the RFQ references any other materials including, but not limited to, reports, plans, drawings, samples or other reference material, the potential supplier is responsible for obtaining the referenced material and considering it in framing their quote. And provide it to the Company upon request.

**11. Price Basis**

Prices quoted must be provided as a fixed maximum price and show the tax exclusive price, the tax component and the tax inclusive price. The contract price, which must include any and all taxes, supplier charges and costs, will be the maximum price payable by the Company for Services.

**12. Financial Information**

If requested by the Company, potential suppliers must be able to demonstrate their financial stability and ability to remain viable as a provider of the Services over the term of any agreement. If requested by the Company, the potential supplier must promptly provide the Company with such information or documentation as the Company reasonably requires in order to evaluate the potential supplier's financial stability.

**13. Referees**

The Company reserves the right to contact the potential supplier's referees, or any other person, directly and without notifying the potential supplier.

**14. Conflict of interest**

Potential suppliers must notify the Company immediately if any actual, potential or perceived conflict of interest arises (a perceived conflict of interest is one in which a reasonable person would think that the person's judgement and/or actions are likely to be compromised, whether due to a financial or personal interest (including those of family members) in the procurement or the Company).

**15. Inconsistencies**

If there is inconsistency between any of the parts of the RFQ the following order of precedence shall apply:

- (a) these Terms and Conditions.
- (b) the first page of this RFQ; and
- (c) the Schedule so that the provision in the higher ranked document will prevail to the extent of the inconsistency.

**16. Collusion and Unlawful Inducements**

Potential suppliers and their officers, employees, agents and advisors must not engage in any collusive, anti-competitive conduct or any other similar conduct with any other potential supplier or person or quote any unlawful inducements in relation to their quote or the RFQ process. Potential suppliers must disclose where quotes have been compiled with the assistance of current or former the Company employees (within the previous 9 months and who was substantially involved in the design, preparation, appraisal, review, and or daily management of this activity) and should note that this may exclude their quote from consideration. Potential suppliers warrant that they have not provided or offered any payment, gift, item, hospitality or any other benefit to the Company, its employees, consultants, agents, subcontractors (or any other person involved in the decision-making process relating to this RFQ) which could give rise to a perception of bribery or corruption in relation to the RFQ or any other dealings between the parties.

**17. Jurisdiction**

This Agreement shall be subject to the laws of the Jurisdiction. The Supplier and the Company will use their best efforts to settle amicably any dispute, controversy, or claim arising out of, or relating to this Agreement or the breach, termination, or invalidity thereof. If no agreeable settlement can be found, any dispute, controversy, or claim arising out of or relating to this Agreement or the breach, termination, or invalidity thereof, shall be settled by arbitration in accordance with the UNCITRAL Arbitration Rules in effect on the date of this Agreement. The appointing authority shall be the Secretary-General of the Permanent Court of Arbitration. The Parties will be bound by any arbitration award rendered as a result of such arbitration as the final adjudication of any such dispute. The place of arbitration shall be the headquarters location of Company at the time the claim is filed, and the language of the arbitration will be English. The relevant laws shall be the laws of the Jurisdiction.

**18. Compliance**



If your quote is successful, you will be required to enter into the Company's standard subcontractor agreement for the types of services being provided. In the provision of the Services, you will be required to comply with the Company's policies, including (without limitation) its Business Partner Code of Conduct and any relevant Project Manual. Potential suppliers must also comply with the Company's Business Partner Code of Conduct in the submission of any quotes pursuant to this RFQ. If you are bidding as part of a joint venture, partnership or similar, please make this clear in your submission. Likewise, if you propose to subcontract any part of the services provision, then disclose this fact within your submission. The Company may require additional information from you and approval for subcontracting will not be automatic as subcontractors will be subject to Palladium's Due Diligence process.