



7 October 2025

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

<b>RFQ title</b>	Partnering with Discoms for Grid-Integrated Clean Energy Solutions and Emerging Technologies ...
<b>RFQ issue date</b>	07/10/2025
<b>Terms of reference</b>	The services to be delivered are detailed in the attached Schedule.
<b>Project title</b>	UK PACT Energy
<b>Close date and time</b>	07/11/2025 12:00 GMT
<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.

Annex III – Clarification question template.

We look forward to your response.

## Schedule 1 - Terms of Reference

### 1.1. Overview of requirements

Name of project	Partnering with Discoms for Grid-Integrated Clean Energy Solutions and Emerging Technologies
Country/region	India
Proposed start date	05/01/2026
Proposed end date	28/02/2027

### 1.2 Context and scope of work

#### Background

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.

India plans to scale up its energy supply quickly to support its growth and development goals. At the same time, the Indian government has committed to accelerate its energy transition, setting targets such as 500 GW of non-fossil fuel energy and a 45% reduction in emissions intensity by 2030, energy independence by 2047 and net zero by 2070. India's power sector is undergoing a transformative shift driven by the country's commitments to decarbonization, energy security, and grid modernization. States are witnessing rapid renewable energy capacity addition — especially solar and wind — leading to challenges such as over-generation during solar hours, evening peak shortages, grid and frequency imbalance and voltage instability, and rising dependence on short-term power markets. These operational challenges highlight the urgent need for strategically deploying storage solutions to maximise the use of renewable energy, while maintaining grid stability and harmonisation through support services such as frequency regulation, spinning reserve, and reactive power compensation. Battery Energy Storage Systems (BESS), in particular, has emerged as a key enabler of a flexible, resilient, and decarbonized grid, capable of addressing the intermittency of renewable generation, managing peak loads, and improving power quality and reliability. The Government of India, through the Ministry of Power (MoP) and Ministry of New and Renewable Energy (MNRE), have recognized the significance of BESS and introduced various policy mechanisms including Viability Gap Funding (VGF) support, market design interventions, and pilot projects. Notably, states like Tamil Nadu and Maharashtra have already been allocated central support for BESS projects, underlining the national push for state-level adoption.

Distribution Companies (DISCOMs) in the targeted states have expressed interest in receiving technical assistance to explore optimal locations and models for BESS deployment:

- HPSEBL (Himachal Pradesh State Electricity Board Limited),
- Assam Power Distributed Company Limited (APDCL-Assam),
- Gujarat Urja Vikas Nigam Limited (GUVNL-Gujarat),
- Tamil Nadu Generation & Distribution Corporation Limited (TANGEDCO-Tamil Nadu),
- and Maharashtra State Electricity Distribution Company Limited (MSEDCL-Maharashtra).

Each of these DISCOMs operates under distinct geographical, load, and renewable resource profiles, which calls for tailored technical assessments and localised strategies. For example, Himachal Pradesh, with its hydropower dominance, may benefit from BESS during low-inflow periods; Tamil

---

Nadu and Gujarat face high RE curtailment due to over-generation; Assam grapples with fragile infrastructure and disaster-prone zones; and Maharashtra sees increasing pressure from demand spikes and distributed rooftop solar.

Despite growing interest, several challenges persist, including high upfront costs, lack of clarity in revenue streams, evolving regulatory frameworks, and limited utility experience in designing and operating storage systems. Hence, there is a pressing need to undertake comprehensive techno-commercial studies to assess BESS feasibility, design optimal system configurations, and suggest suitable business models.

This ToR seeks suppliers who can work with the above DISCOMs to identify technically viable and commercially attractive BESS deployment opportunities. This will support informed decision-making and provide a roadmap for large-scale BESS adoption in alignment with state-level priorities and national energy transition goals. In addition, the supplier will also identify and support in areas as grid modernization, data analytics, cyber security, climate resilient infrastructure, etc, wherein the DISCOMs need technical support. It will also help build institutional capacity and contribute to India's broader objective of establishing a flexible, clean, and reliable power system for the future through identifying additional scope of work & support with DISCOMs during inception phase of the project.

Based on initial discussions with DISCOMs, states are exploring the following work related to BESS:

1. **Assam state** DISCOM have plans for installing 250 MW of storage systems and are already exploring a pilot of 25 MW BESS and other storage technologies such as Pumped Storage Plants (PSP), BESS etc.
2. **Himachal Pradesh** has high availability of hydro plants and wants to leverage BESS to further optimise their power procurement costs and meeting the rising demand.
3. **Tamil Nadu** is now producing abundant Renewable Energy (RE) both from wind and solar, but that effectively means high variability in supply as well. TANGEDCO has recently undergone transformation by unbundling into Tamil Nadu Power Distribution Company Limited (TNPDC) and Tamil Nadu Green Energy Corporation Limited (TNGECL). Tamil Nadu has recently published a tender for implementing 500MW/1000 MWhr of BESS in their transmission substation. Tamil Nadu has been allocated VGF for 1500 MWhr of BESS by MoP, and want to leverage these funds to strengthen the planning and use of BESS, for which they want to explore various storage technologies including long duration storage.
4. DISCOMs in both **Maharashtra and Gujarat** are at relatively at advanced stages in terms of storage, known as early movers in this space. Both states have abundant RE (both wind and solar) and to cater the same have started planning to implement BESS into their systems. Gujarat was the first in the country to release a BESS utility scale tender and has released many more. Maharashtra has also release more than 2 GW of BESS tenders. MoP has already allocated VGF for 4000 MWhr of BESS for Maharashtra and Gujarat each. However, both the states, want to prepare a robust plan to make informed decisions on their investment in BESS and various available technologies.

## Objectives

The project aims to facilitate and optimise grid integration of renewable energy in select states while providing evidence and examples for scalability at the national level.

Its specific objectives are as follows:

1. Assess the overall potential of BESS (in the identified states working with DISCOMs and related organisations) based on technical feasibility of potential BESS options, identifying relevant systems, technical studies and the optimal locations for such systems.
  2. Strengthen institutional capacity within DISCOMs for BESS planning, procurement, operation, and business model development and new technologies available to DISCOMs in terms of grid improvement and efficiency. Provide actionable knowledge for scalable BESS adoption across India's distribution sector.
-

3. During project inception phase, in discussion with respective DISCOMs, identify additional but related scope of work in areas such as grid modernisation, data analytics, cyber security, climate resilient infrastructure, etc, wherein the DISCOMs need technical support.

## **Intended Outcomes**

Through these objectives and the delivery of the outputs listed in section 1.3 below, the project expects to contribute to the following outcomes:

- Enhanced institutional capacity of DISCOMs to identify, plan and procure technically feasible and commercially viable BESS options, enabling smoother integration of intermittent renewable sources into state-level grids;
- Improved strategies and policy frameworks for BESS deployment at the state and national levels, including a roadmap for large-scale BESS adoption, aligned with both state-level priorities and India's national energy transition goals; and
- 

By enabling flexible and reliable grid infrastructure, the project supports India's broader objective of achieving 500 GW of non-fossil fuel capacity by 2030 and net zero by 2070.

While recognising that results may be subject to time lags and external dependencies, these interventions aim to influence results that will be measured through indicators such as: potential and actual installed capacity of energy storage in target areas, improved access to clean (off-grid) renewable energy, finance mobilised or leveraged in line with power sector reforms, and overall emissions abatement potential.

## **Scope of work**

Well thought out innovative proposals are sought from consortia and organisations with strong technical expertise, implementation experience with utilities, a demonstrated commitment to long-term capacity building and presence at the state level.

The scope of work includes supporting all five DISCOMs in conducting comprehensive BESS assessments and planning activities aligned with evolving demand patterns, renewable integration, and peak management. This entails detailed techno-commercial evaluations of battery storage applications such as peak shaving, renewable firming, grid balancing, and ancillary services provision. The initiative aims to build institutional capacity for identifying optimal storage capacities, preferred technologies, and potential sites through simulations and grid studies. It will also facilitate knowledge sharing on global best practices, with special emphasis on the UK's leadership in deploying grid-scale and behind-the-meter BESS solutions, including advanced solid-state battery innovations. Furthermore, joint studies may be undertaken to develop robust financial models and explore regulatory pathways to unlock value streams for energy storage—positioning Indian DISCOMs to efficiently integrate BESS within existing and future network plans. Ultimately, the work seeks to enable cost-effective, scalable, and resilient storage deployments contributing to India's broader grid modernisation and decarbonization goals.

The broad scope related to BESS is divided into two phases. The contract will be structured with a break clause between phases. Phase 1 will be implemented upon contract signature. Phase 2 will progress based on the findings of Phase 1, and acceptance of the Phase 1 deliverables, and the availability of budget for work package 2. The contracting authority reserves the right not to proceed to Phase 2 without incurring any liability, financial or otherwise, beyond the scope of Phase 1.

---

**Phase 1 (Jan- Mar 26)- Assessment -3 months):** This will involve working with each DISCOM to refine the scope, conduct baseline assessments for BESS and scoping of additional areas of supports shall be explored. The key deliverable will be a Phase 1 Report for each state which will include:

- Summary of findings from BESS analysis, assessments and recommendations
- Capacity building of DISCOMS
- Identification of wider areas of potential support to DISCOM
- Phase 2 delivery plan of work package 2, risks and mitigations with costed workplan

**Phase 2 - Delivery (11 months-Apr-Feb 2027):** The second phase has two workstreams:

- i. Workstream 1: conducting detailed technical studies on identifying the site/ locations for BESS implementation and financial models for the same shall be prepared.
- ii. Workstream 2: working with each DISCOMs to identify further demand for technical assistance which would contribute to the overall outcomes detailed above. Once demand has been identified and confirmed by UK PACT as aligned with the intended outcomes, the supplier will develop terms of reference for additional work packages to be delivered.

Further specificity on the state-level objectives and tailored scope is provided below: -

Scope for Himanchal Pradesh:

A. Inception Phase:

i. BESS-Phase 1 (3 months):

- a) Analyse the need for battery energy storage systems. Carry out studies using suitable planning tools to confirm/update the need and optimal requirements for utility-scale battery energy storage systems with reference to the existing and planned grid, source/capacity addition and electricity demand growth in the State
- b) Analyse the impact of BESS on system operation with respect to optimization of existing sources of thermal, hydro power and Variable Renewable Energy (VRE) System, energy requirements and excess energy for a typical day based on the load profile. The capacity and energy balance for all years over the life horizon of the storage units.
- c) Analyse with support of simulations using software(s) to determine the suitability of BESS for ancillary services and shifting peak, ramping requirements
- d) Analyse & suggest the appropriate BESS capacity for implementation in the State in 10 years' time (the year to be decided based on requirement of the DISCOMs)
- e) Exploring various technologies available for BESS deployment, i.e. Chemical based, Long Duration Energy System (LDES), compressed air, molten salt, etc
- f) Capacity building discussions and workshops for the DISCOMs in terms of BESS technology, system designing and operations.

- ii. The supplier shall discuss with the DISCOM and finalise additional areas to support the DISCOM based on their requirement, in terms of capacity building, new technology or research/study support. The supplier will finalise the detailed scope of work, with a potential of providing technical assistance to support implementing the same under phase 2 (e.g. Cyber security, climate resilient infrastructure, grid modernisation etc).
-

## B. Phase 2

### i. BESS-Phase 2 (11 months):

- a) Propose the sizing of the battery system, suitable technology, identification of sites, optimum layout, and location.
- b) Carry out preliminary investigation for site selection.
- c) Undertake a grid study that will involve power systems simulations for load flow, fault analysis and system stability at the selected locations/substations (min. 5, max. 10 locations). The existing Power System Stimulation for Engineering (PSSE) model shall be updated and simulations without and with BESS shall be carried out to confirm location, sizing and other important technical analysis relating to system stability following introduction of BESS in the grid.
- d) Develop a conceptual design for the proposed systems and associated infrastructure and advise on an implementation strategy.
- e) Undertake financial and Economic Analysis; Carry out a risk analysis and mitigation; and develop a comprehensive implementation plan for the technologies identified backed by robust financial modelling and ascertaining savings to the system and Discoms; Recommend the mode of implementation i.e. whether the Discoms should go for capital expense or leverage Operation expense (OPEX models) etc
- f) Knowledge transfer & capacity building of DISCOM through workshops, industry consultations (at least 2 in-person).

## Scope for Tamil Nadu:

### A. Inception Phase:

#### i. Energy Storage Systems (ESS)-Phase 1 (3months):

- a) In consultation with the DISCOM, leverage the existing data, studies on resource adequacy and ESS requirements, carry out studies using suitable planning tools to confirm/update the need and optimal requirements for utility-scale battery energy storage systems.
- b) Analyse the impact of BESS on system operation with respect to optimization of existing sources of thermal, hydro power and VREs; System energy requirements and excess energy for a typical day based on the load profile. The capacity and energy balance for all years over the life horizon of the storage units.
- c) Explore various operational models of storage, the feasibility and viability of Hybrid systems Storage+wind (making wind more feasible, available 24x7). Green hydrogen based seasonal storage, storage at 11kV & Distribution (DT) system.
- d) Exploring various technologies available for deployment, i.e., Long Duration Energy Storage (LDES), compressed air, molten salt, etc
- e) Capacity building discussions and workshops for the DISCOM in terms of BESS technology, system designing and operations.

- ii. The supplier will also be responsible for scoping out other related, additional areas to support the DISCOMs based on their requirement, in terms of capacity building, new technology or research/study support. The supplier will finalize the detailed scope of work, with a potential of providing technical assistance to support implementing the same under phase 2 (e.g. Cyber security, climate resilient infrastructure, grid modernization etc).
-

## B. Phase 2

### i. BESS-Phase 2 (11 months):

- a) Propose the sizing of the battery system, suitable technology, identification of sites, optimum layout, and location.
- a) Carry out preliminary investigation for site selection.
- b) Undertake a grid study that will involve power systems simulations for load flow, fault analysis and system stability at the selected locations/substations (min. 5, max. 10 locations). The existing PSSE model shall be updated and simulations without and with BESS shall be carried out to confirm location, sizing and other important technical analysis relating to system stability following introduction of BESS in the grid.
- c) Develop a conceptual design for the proposed systems and associated infrastructure and advise on an implementation strategy.
- d) Undertake financial and Economic Analysis; Carry out a risk analysis and mitigation; and develop a comprehensive implementation plan for the technologies identified backed by robust financial modelling and ascertaining savings to the system and Discoms; Recommend the mode of implementation i.e. whether the DISCOMs should go for capital expense or leverage Operation expense (OPEX models) etc
- e) Knowledge transfer & capacity building of DISCOM through workshops and industry consultations (at least 2 in-person).

## Scope for Maharashtra and Gujarat:

### A. Inception Phase:

#### i. Energy Storage Systems (ESS)-Phase 1 (3months):

- a) Analyse the need for battery energy storage systems. Carry out studies using suitable planning tools to confirm/update the need and optimal requirements for utility-scale battery energy storage systems with reference to the existing and planned grid, source/capacity addition and electricity demand growth in the State.
- b) Analyse the impact of BESS on system operation with respect to optimization of existing sources of thermal, hydro power and VREs; System energy requirements and excess energy for a typical day based on the load profile. The capacity and energy balance for all years over the life horizon of the storage units.
- c) Explore various operational models of storage, the feasibility and viability of Hybrid systems Storage+wind (making wind more feasible, available 24x7). Green hydrogen based seasonal storage, storage at 11kV & Distribution (DT) system.
- d) Exploring various technologies available, i.e. LDES, compressed air, molten salt, etc
- e) Capacity building discussions and workshops for the DISCOMs in terms of BESS technology, system designing and operations.

- ii. In parallel, the supplier shall discuss and finalise additional areas to support the DISCOMs based on their requirement, in terms of capacity building, new technology or research/study support. The supplier will finalize the detailed scope of work, with a potential of providing technical assistance to support implementing the same under phase 2 (e.g. Cyber security, climate resilient infrastructure, grid modernization etc).
-



## B. Phase 2

### i. BESS-Phase 2 (11 months):

- a) Propose the sizing of the battery system, suitable technology, identification of sites, optimum layout, and location.
- b) Carry out preliminary investigation for site selection.
- c) Undertake a grid study that will involve power systems simulations for load flow, fault analysis and system stability at the selected locations/substations (min. 5, max. 10 locations). The existing PSSE model shall be updated and simulations without and with BESS shall be carried out to confirm location, sizing and other important technical analysis relating to system stability following introduction of BESS in the grid.
- d) Develop a conceptual design for the proposed systems and associated infrastructure and advise on an implementation strategy.
- e) Undertake financial and Economic Analysis; Carry out a risk analysis and mitigation; and develop a comprehensive implementation plan for the technologies identified backed by robust financial modelling and ascertaining savings to the system and Discoms; Recommend the mode of implementation i.e. whether the Discoms should go for capital expense or leverage Operation expense (OPEX models) etc
- f) Knowledge transfer & capacity building of DISCOM through workshops, industry consultations (at least 2 in-person).

### Scope for Assam:

## A. Inception Phase:

### i. BESS-Phase 1 (3months):

- a) Analyse the need for battery energy storage systems. Carry out studies using suitable planning tools to confirm/update the need and optimal requirements for utility-scale battery energy storage systems with reference to the existing and planned grid, source/capacity addition and electricity demand growth in the State.
- b) Analyse the impact of BESS on system operation with respect to optimization of existing sources of thermal, hydro power and VREs; System energy requirements and excess energy for a typical day based on the load profile. The capacity and energy balance for all years over the life horizon of the storage units.
- c) Analyse with support of simulations using software(s) to determine the suitability of BESS for ancillary services and shifting peak, ramping requirements.
- d) Analyse & suggest the appropriate BESS capacity for implementation in the State in 10 years' time (the year to be decided based on requirement of the DISCOMs)
- e) Study of feasibility of BESS in existing Distribution S/s of Assam Power Distribution Company Limited (APDCL), including Techno-Economic analysis of BESS at existing Distribution S/s of APDCL V/s BESS at Grid Level (132kv and above)
- f) Capacity building discussions and workshops for the DISCOMs in terms of BESS technology, system designing and operations.

- ii. In parallel, the supplier shall discuss and finalise additional areas to support the DISCOMs based on their requirement, in terms of capacity building, new technology or research/study support. The supplier will finalize the detailed scope of work, with a potential of providing technical assistance to support implementing the same under phase 2 (e.g. Cyber security, climate resilient infrastructure, grid modernization etc).
-



## C. Phase 2

### i. BESS-Phase 2 (11 months):

- a) Propose the sizing of the battery system, suitable technology, identification of sites, optimum layout, and location.
- b) Carry out preliminary investigation for site selection.
- c) Undertake a grid study that will involve power systems simulations for load flow, fault analysis and system stability at the selected locations/substations (min. 5, max. 10 locations). The existing Power System Simulator for Engineering (PSSE) model shall be updated and simulations without and with BESS shall be carried out to confirm location, sizing and other important technical analysis relating to system stability following introduction of BESS in the grid.
- d) Develop a conceptual design for the proposed systems and associated infrastructure and advise on an implementation strategy.
- e) Undertake financial and Economic Analysis; Carry out a risk analysis and mitigation; and develop a comprehensive implementation plan for the technologies identified backed by robust financial modelling and ascertaining savings to the system and Discoms; Recommend the mode of implementation i.e. whether the Discoms should go for capital expense or leverage Operation expense (OPEX models) etc
- f) Knowledge transfer & capacity building of DISCOM through workshops, industry consultations (at least 2 in-person).

### **Additional expectations**

- Applicants are encouraged to propose innovative activities and outputs beyond those listed, provided they align with the programmes goals of supporting identified DISCOMS in enhancing their capabilities in terms of improving efficiency, grid reliability, and renewable integration.
  - Proposals should outline mechanisms for fostering long-term institutional learning, adapting global best practices, and bridging critical gaps between recommendations and implementation to achieve measurable outcomes.
  - While the initial budget is allocated for the for the above scope of work, suppliers should be able to demonstrate their ability to scale support, in response to potential DISCOM demand on providing technical assistance to support implementation of some of the additional themes identified under inception phase.
-

### 1.3 Outputs and timelines

#### Implementation plans:

The overall outputs and deliverables would remain the same across all the states, however context specific customisation as mentioned in the scope of work might be required for each state separately, which can be refined and finalised during the inception phase in discussion with the DISCOMs. The below table outlining clear description of work & output has to be implemented for each State separately, based on the respective scope of work.

Output	Description	Deliverable due	Acceptance criteria/sign-off
<b>State: Himanchal Pradesh, Tamil Nadu, Maharashtra, Gujarat*, Assam</b> (to be prepared for each State separately) <b>(* -All DISCOMs will be covered in Gujarat)</b>			
<b>PHASE 1:</b>			
<b>Phase 1:</b> Phase 1 Report suggesting the appropriate BESS capacity for implementation in the State in 10 years' time. (separate for each state)	<b>Phase 1:</b> <ul style="list-style-type: none"> <li>During inception Phase, refine and finalize the scope of work in discussions with DISCOM.</li> <li>Analyse the need for battery energy storage systems. Conduct studies using suitable planning tools to confirm/update the need and optimal requirements for utility-scale battery energy storage systems with reference to the existing and planned grid, source/capacity addition and electricity demand growth in the State.</li> <li>Analyse the impact of BESS on system operation with respect to optimization of existing sources of thermal, hydro power and VREs; System energy</li> </ul>	Within 3 months of contract signing (March 2026)	<ul style="list-style-type: none"> <li>Final report submission detailing capacity for implementation in the State in 10 years' time in the DISCOM.</li> <li>Submission of costed workplan for Phase 2</li> <li>1<sup>st</sup> level acceptance with UK PACT &amp; FCDO</li> <li>Submission and acceptance by DISCOM officials</li> </ul>

Output	Description	Deliverable due	Acceptance criteria/sign-off
	<p>requirements and excess energy for a typical day based on the load profile. The capacity and energy balance for all years over the life horizon of the storage units.</p> <ul style="list-style-type: none"> <li>Analyse with support of simulations using software(s) to determine the suitability of BESS for ancillary services and shifting peak, ramping requirements</li> </ul>		
Capacity building workshop for the DISCOMs.	At least one capacity building workshop for the DISCOMs in terms of BESS technology, system designing and operations.	Within 3 months of contract	
Identifying additional theme or area of support to DISCOM.	Identification of additional areas of demand from DISCOMs for technical assistance which aligns with the intended outcomes of UK PACT support.	Within 3 months of contract	<ul style="list-style-type: none"> <li>A detailed scope of work on additional areas of support to the DISCOMs,</li> <li>Submission and acceptance by DISCOM officials and UK PACT</li> </ul>
<b>PHASE 2:</b>			
<ul style="list-style-type: none"> <li>Technical report with simulation outcomes, cost-benefit analysis, and RE-BESS integration strategy.</li> </ul>	<ul style="list-style-type: none"> <li>Conduct preliminary investigation for site selection (at max. 5-10 substations).</li> </ul>	Within 9 months	<ul style="list-style-type: none"> <li>Detailed presentation to UK PACT and DISCOMs for acceptance. A comprehensive report outlining BESS implementation plan/roadmap, recommending mode of implementation.</li> </ul>

Output	Description	Deliverable due	Acceptance criteria/sign-off
Report including preferred BESS capacity, site selection, dispatch hours, and financial model.	<ul style="list-style-type: none"> <li>Undertake a grid study that will involve power systems simulations for load flow, fault analysis and system stability. The existing PSSE model shall be updated and simulations without and with BESS shall be carried out to confirm location, sizing and other important technical analysis relating to system stability following introduction of BESS in the grid.</li> </ul>	Within 5-6 months	<ul style="list-style-type: none"> <li>Detailed presentation &amp; report submission</li> <li>1<sup>st</sup> level acceptance with UK PACT team.</li> <li>Submission and acceptance by DISCOM officials</li> </ul>
<ul style="list-style-type: none"> <li>Comprehensive Report including preferred BESS capacity, site selection, dispatch hours, and financial model)</li> </ul>	<ul style="list-style-type: none"> <li>Develop a conceptual design for the proposed systems and associated infrastructure and advise on an implementation strategy.</li> </ul>	Within 5-6 months	<ul style="list-style-type: none"> <li>Report Submission and acceptance by DISCOM officials.</li> </ul>
<ul style="list-style-type: none"> <li>Comprehensive report including optimal locations, financial IRR/NPV model, and implementation plan.</li> </ul>	<ul style="list-style-type: none"> <li>Undertake financial and Economic Analysis; Conduct a risk analysis and mitigation; and develop a comprehensive implementation plan; Recommend the mode of implementation- Whether CAPEX/TBCB etc</li> </ul>	Within 5-6 months	<ul style="list-style-type: none"> <li>Report Submission and acceptance by DISCOM officials</li> </ul>
<ul style="list-style-type: none"> <li>A comprehensive BESS implementation plan/roadmap,</li> </ul>	<ul style="list-style-type: none"> <li>Transfer of knowledge to DISCOMs/conduct of capacity building</li> </ul>	Last 1 month	<ul style="list-style-type: none"> <li>Submission and acceptance by DISCOM officials</li> </ul>

Output	Description	Deliverable due	Acceptance criteria/sign-off
recommending mode of implementation	workshops (at least 2 in-person);		
<ul style="list-style-type: none"> <li>Research study/Report/capacity building workshop</li> </ul>	Implementation of additional area to support the DISCOMs based on their requirement.	Within 5-6 months	<ul style="list-style-type: none"> <li>Detailed presentation.</li> <li>1<sup>st</sup> level acceptance with FCDO &amp; UK PACT team.</li> <li>Submission and acceptance by DISCOM officials</li> </ul>

## 1.4 Required qualifications and experience

### Organisational capacity:

This RfQ is seeking one lead organisation that can deliver on all the activity streams mentioned above. Consortiums are welcome to apply, however please note the responsibility of the consortium will lie with the lead partner who will be primary point of contact and bear all responsibilities of holding the consortium together until the project end date, contracting, due diligence, coordination, delivery and reporting. The supplier/consortium must have a demonstrated experience in working with the distribution companies of India. Bidders (consortia) must be able to demonstrate experience of:

- The delivery of at least 10 technical assignments with state governments in the power sector. (at least 2 assignments with each DISCOM). These could include conducting technical studies, system studies like load flow studies, fault studies, system stability studies among others.

### 1. Personnel:

The supplier should propose a team of technical experts and project management support with the necessary expertise and experience to deliver on all the outputs detailed above. The proposed team should be detailed in proposals along with CVs (max two-pages per CV) and is expected to include:

- a Team Leader/Project Director – who takes overall accountability for delivery of this project. They must have a proven track record of overseeing projects of similar complexity in the energy sector.
- Sufficient programme management resources to cover work-planning, reporting, monitoring evaluation and learning, financial management, risk management and logistics.
- A pool of experts, relevant to each of the themes covered under this RFP.

We anticipate that suppliers would be required to provide 4-5 experts for each state, but welcome proposals from the market on the best structure for the team and delivery approach. The team and experts proposed by suppliers should address the requirements set out below:

1. **Educational Background:** Advanced degree and strong academic background in Power Systems, Electrical Engineering, Statistical studies, Regulatory Affairs, or related disciplines.

2. **Sectoral Experience:** Strong experience in Indian power sector with demonstrable expertise in electricity distribution, power systems, and utility. Minimum 10 years of professional experience in the Indian power sector, with demonstrable expertise in electricity system studies, power distribution, regulatory frameworks, and utility reform. (minimum 5-year experience of working in power system designing & operation)
3. **Regulatory and Policy Expertise:** Proven experience in working with electricity regulators, utilities, or relevant government bodies on power sector planning, cost of supply studies, tariff setting, or performance benchmarking.
4. **Analytical and Research Skills:** Strong skills in data analysis, financial modelling, and research methods, especially in the context of distribution utility operations, load forecasting, and consumer behaviour analysis.
5. **Experience with Donor/Multilateral Programs:** Prior engagement in donor-funded programmes (e.g., World Bank, FCDO, ADB) or technical assistance initiatives focused on electricity sector reforms in India.
6. **Knowledge of Gender Equality, Disability and Social Inclusion (GEDSI):** Familiarity with GEDSI frameworks and ability to integrate gender and inclusion considerations into technical assessments and capacity-building activities.
7. **Stakeholder Engagement:** Demonstrated ability to liaise and coordinate with diverse stakeholders including government officials, regulators, DISCOMs, think tanks, and development partners.
8. **Communication and Reporting:** Strong communication skills with a proven track record of preparing high-quality reports, policy briefs, and presentation materials tailored to senior decision-makers.
9. **Preferred:** Familiarity with System Studies and Planning, Energy Storage, BESS, Experience with strategic planning tools, performance evaluation frameworks, or digitalization in the power sector.

## 1.5 Reporting

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

1. Monitoring, evaluation and learning (MEL) plan co-created with the UK PACT delivery partner.
2. Creation and regular updating and tracking of GEDSI Action Plan
3. Monthly progress reporting on outputs, both through a monthly progress report, slide deck and monthly meetings (including minute taking)
4. Maintenance of a risk register
5. A full project completion report, summarising project achievements, lessons learnt, including progress and learnings on GEDSI, and any recommendations for future action.
6. At least one case study (inclusive of concept note and final report) that qualitatively describes project results and experiences for programmatic learning; and
7. Participation in fund-wide communities of practice for results and lessons sharing.

To report against standard UK PACT indicators, the supplier/expert 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, disability, geography, and other social characteristics where feasible. As applicable, the supplier may also be asked to accomplish indicator-specific baseline and reporting tools such as for assessing institutional capacity and contribution to GHG emissions reduction/avoidance.

## 1.5 Budget and contracting

The maximum budget is GBP 1,000,000 which must include personnel and expenses and be inclusive of all applicable local taxes. Suppliers who will deliver via an India corporate entity should include a provision for GST in their proposals.

The supplier must provide a breakdown of budgeted personnel and expenses for **Phase 1 only** using Annex II. Suppliers must then provide a rate card for work to be delivered under Phase 2.

The anticipated cost breakdown is as follows.

- Phase 1: £100,000
- Phase 2: £900,000

Expenses should cover all 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 which 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	07/10/2025
2. Date for confirmation of intention to bid	16/10/2025
2. Deadline for receipt of clarification questions	16/10/2025
3. Deadline for submission of applications	07/11/2025
4. Applicants notified of project selection	21/11/2025
5. Due diligence complete	19/12/2025
6. Agreement signature	19/12/2025

#### *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]**

#### **Partnering with 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:

- **Expression of interest** 16/10/2025 (12:00 BST) – express your (non-binding) interest in bidding and receiving tender updates by emailing [expertdeployments@ukpact.co.uk](mailto:expertdeployments@ukpact.co.uk)
- **Deadline for Queries:** 16/10/2025 (12:00 BST) - Clarification questions must be sent using the template provided in Annex III
- **Submission Deadline:** 07/11/2025 (12:00 GMT) – full submission of Annex I, Annex II and CVs.

### 2.2 Evaluation criteria

Criteria	Category	Weighting
Technical	T.1. Approach and methodology	35%
	T.2. Personnel	45%
Commercial	C.1. Competitiveness of the supplier's Phase 1 cost	10%
	C.2. Competitiveness of the supplier's rate card	10%
<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

### C.1. Competitiveness of the supplier's Phase 1 cost

The commercial evaluation will be conducted using the total cost quoted in the Schedule III - Budget and Workplan (Cell V26 of "Budget Summary" sheet).

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

$$((\text{Personnel cost of lowest price supplier} / \text{cost of supplier}) * \text{price weighting } 10\%)$$

### C.2. Competitiveness of the supplier's rate card

The data will be taken from Tab "Rate Cards" using an average of the national and international rates offered (Column F). Where both national and international staff are proposed, both sets of rates must be completed with no negative or nominal entries accepted. If a supplier is not intending to use international staff they may be left blank and they will be excluded from the calculation. Abnormally low rates used to manipulate averages will be grounds for disqualification.

The rate cards will be used for costing work to be delivered under Phase 2 and apply as a maximum for the duration of the contract. They will be calculated as below:

$$((\text{Lowest proposed average fee rate} / \text{your proposed average fee rate}) * \text{price weighting } 10\%) * \text{sub weighting}$$

The sub weightings applied are as follows.

Level	Sub weighting
Principal expert	25%
Senior expert	35%
Expert	30%
Junior expert	10%

Where scoring has not identified a clear winning supplier, the top supplier(s) may be invited to an interview to finalise the evaluation and/or a Best and Final Offer process may be used to differentiate between suppliers of equal scoring.



## 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 may review all quotes to confirm compliance with this RFQ and to determine the best quote in the circumstances.

### 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

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.

If your quote is successful, you will be required to enter into the Company's standard contract 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.