

Electricity System Restoration (ESR) Competitive Procurement Event - Invitation to the Northern Tender: Invitation to Tender (ITT) Part 1 16th January 2023

National Grid Electricity System Operator (ESO) has introduced a market mechanism for the procurement of Electricity Restoration Services¹ (ERS) contracts, in the form of a competitive tender process.

Background and instructions for completing ITT Part 1

Background

The ESO has an obligation to maintain the capability to restore the National Electricity Transmission System (NETS) of Great Britain (GB) from a full or partial black out event.

The ESO must demonstrate that the ESR Capability procured maintains an acceptable level of provision, but at a cost which is economic and efficient.

The ESO has held a competitive procurement event to procure against our restoration requirement for the Northern region for services commencing on 1st November 2025, or earlier at the discretion of the ESO, for a five year contract.

This tender will include the outputs from the [Distributed ReStart Project](#) to enable potential distribution-led restoration to complement the transmission-led restoration services.

Providers had the option of submitting their Expressions of Interest (EOI) against four different categories by which they can provide restoration services. Following confirmation of eligibility via an accepted EOI submission that met the minimum/ mandatory criteria, ESO invites successful parties to this next stage of tender. By participating in the competitive procurement event and making submissions, you agree to the tender rules.

This ITT part 1 tender pack contains information for all categories so please ensure you read all the information enclosed for instructions on what sections needs to be completed and submitted.

Northern Tender Key dates

10 March 2023

ITT Part 1 deadline

22 May 2023

ITT Part 2 tender documents released

May 2024

Contract Award

November 2025

Service commencement

What's inside?

ITT Part 1 contains the information required for the Feasibility Study. The Feasibility Study will be in two parts (ITT1 F1 and ITT2 F2). Submissions must be made during the appropriate submission periods, please note that late submissions will not be considered.

¹ ESR was formerly known as Black Start. The previous reference 'Black Start' is still used if part of official documents or references.

ITT Part 1 Submissions require the following documents to be submitted:

- ITT1 - F1 Submission Template
- ITT2 - F2 Scope Submission Template

Please make sure that you read this document and the ones below before you complete the templates above.

- Appendix 1 - Northern Tender Technical Requirements & Assessment Criteria
- Appendix 2 – Northern Tender Query Form
- Appendix 3 - Northern Tender FAQs

All providers must make a submission for this stage. If a provider already has an approved F1 study, they should submit the previously approved study along with the ITT1 F1 submission template, clearly referencing within the template the parts of the prior study that meet each requirement.

The ITT2 F2 scope of works should include a detailed breakdown of the costs. Providers must minimise these costs as far as reasonably possible, and the costs will be considered as part of the assessment of total costs in the commercial submission for the tender.

The deadline for submitting the ITT1 F1 and ITT F2 is 10 March 2023 at 2400hrs.

Following assessment of ITT1 F1 and ITT2 F2 scope submissions, ESO will confirm in writing to whether providers have been successful and eligible to move to the next stage. If a provider is assessed to be eligible, and an ITT2 F2 study is required (and the technical scope and budget is approved) providers will be sent an endorsed Feasibility Study Agreement² to sign along with information around the capped contribution from the ESO towards completing the study.

ESO is under no obligation to accept ITT1 F1 studies if they do not indicate a viable service, and progression to F2 is not guaranteed. Progression to the next stage will ultimately be at the discretion of NGESO.

Tender rules

1. By participating in this stage, you are agreeing to be bound by the rules of the tender process.
2. A 'provider', meaning one legal entity, may submit tenders for more than one site and for more than one category, but must not submit multiple tenders for the same site/asset within

the same category. We expect the provider to perform their own options assessment, using the provided technical assessment criteria, and to submit the best value option.

3. The ESO is the lead procurement agent in the ESR process and is responsible for conducting a fair, transparent, and competitive tender event. No provider will be given any unfair advantage through one-to-one engagements.
4. Following success at the ITT F1 stage, commercial bids and detailed feasibility studies are required as part of the next ITT F2 stage.
5. Final contract award at the ESO's discretion, follows assessment of the ITT2 F2 submissions. The ESO will collaborate with the relevant DNO for any Distributed ReStart project related decisions.
6. At the end of the ITT F1 stage, Anchor Generator and Top-up service providers for Distributed ReStart type projects, will be informed if their applications can form a potential feasible Distribution Restoration Zone²/power island connected at distribution level, along with relevant other providers.
7. The providers who are awarded contracts are expected to deliver the service no later than November 2025, maintain the Restoration capabilities and to deliver the service until October 2030. Following successful completion of project build stage and commissioning test, providers may be incentivised to start earlier at the ESO's discretion.
8. By submitting a tender response in connection with this competitive procurement event, potential providers confirm that they will, and that they shall ensure that any consortium members and/or subcontractors will, comply with all applicable laws, the non-disclosure agreement, codes of practice and statutory guidance.
9. Information that is supplied to potential providers as part of this competitive procurement event is supplied in good faith. The information contained in the EOI, and any supporting or subsequent documents and in any related written or oral communication is believed to be correct at the time of issue. The ESO will not accept any liability for its accuracy, adequacy or completeness and no warranty is given as such.

² According to Distributed ReStart, a feasible Distribution Restoration Zone comprises of an Anchor Generator and at least one Top-up service to fulfil a power island's requirements at distribution level. Only at ITT F1 can the

assessment of a potential DRZ be completed once the relevant technical information is reviewed against the Rules of Play criteria of the region by the DNO and ESO.

10. Potential providers are responsible for analysing and reviewing all information provided as part of this competitive procurement event, and for forming your own opinions and seeking advice as you consider appropriate.
11. You should notify ESO promptly of any perceived ambiguity, inconsistency, or omission in the EOI and ITT stages, including any associated/subsequent documents, or communications provided to you as part of this competitive procurement event through the query process.
12. The ESO retains the right to amend the ITT requirements, rules, or timescales at any time prior to the tender submission deadline. Prior notice will be issued to all potential suppliers to ensure they have reasonable time in which to take such amendment into account and if required, the tender submission deadline can be extended at the discretion of the ESO. Your tender response must comply with the amendments, or it may be rejected.
13. A tender response or any other document submitted part of the tender exercise may be rejected if it:
 - contains gaps, omissions, misrepresentations, errors, or uncompleted sections
 - contains handwritten amendments which have not been initialled by the authorised signatory
 - does not reflect and confirm full and unconditional compliance with all the documents issued by ESO forming part of the ITT stage
 - contains any caveats, or any other statements, or assumptions, qualifying the tender response, that are not compliant for evaluation in accordance with any documents issued by ESO in any way
 - is not submitted in a manner consistent with the provisions set out in the request for EOI, ITT stages, or any subsequent or supporting documents
 - is received after the tender submission deadline.
14. The ESO reserves the right to disqualify from the tender process any provider if they breach these tender rules, if there are any errors, omissions, or material adverse changes relating to any information supplied by you at any stage in this competitive procurement event, and/or if your staff, partner companies, sub-contractors, and advisor attempts:
 - to inappropriately influence this competitive procurement event
 - to fix or set the price for the ESR service
 - to enter any arrangement with any other party that such party shall refrain from submitting a tender response
 - to enter any arrangement with any other party (other than another party that forms part of your consortium bid or is your proposed sub-contractor) as to the prices submitted
 - to collude in any other way
 - to engage in direct or indirect bribery or canvassing by you or your appointed advisers in relation to this competitive procurement event.
15. By submitting a tender, you consent to your detailed feasibility studies (F2) submission being shared with a third party for verification during tender evaluation.
16. Providers are responsible for obtaining all information necessary for preparation of tender responses and for all costs and expenses incurred in preparation of the tender response (save for those explicitly agreed to by the ESO as part of the ITT2 F2 process). You accept through participation in this procurement event, including without limitation the submission of a tender response, that you will not be entitled to claim from the ESO any costs, expenses, or liabilities that you may incur in tendering for this procurement irrespective of whether your tender response is successful.
17. The ESO is not bound in any way to enter any contractual or other arrangement with you or any other potential provider.
18. The ESO reserves the right to terminate, suspend, amend, or vary (to include, without limitation, in relation to any timescales or deadlines) this competitive procurement event by notice to all potential providers in writing (if cancelled post the ITT stage), and through our website (if cancelled before the ITT stage).
19. Service providers will be required to provide operational metering if successful and offered a restoration contract. This is a new requirement which is due to be implemented following consultation with the industry and will form part of the contract terms. As a minimum the ESO will require a live feed showing both Voltage and frequency and number of ESR units available from all service providers.

Systems and communications

For the purpose of the ITT1, all documentation will be made available [here](#).

Submission of Queries

Please submit any questions you have Appendix 2 – Northern Tender Query Form

Commercial.operation@nationalgrideso.com & CC alexander.unitt@nationalgrideso.com

We expect to anonymise queries and circulate the responses as far as possible. If you believe your query is confidential, please state this on the query form along with your justification.

Where NGESO does not agree that a query should be confidential, they will present two options to the provider, either for the response to be shared, or for the provider to withdraw the question. We will aim to meet a

turnaround time of 10 working days for all queries received.

The deadline for all queries is 10 working days before the submission deadline.

Next steps

To participate in the ITT F1 please download and complete the following documents and submit them via email back to the ESO by 2400hrs on 10 March 2023 via commercial.operation@nationalgrideso.com & CC alexander.unitt@nationalgrideso.com

- ITT1 - Feasibility Study 1 Submission Template
- ITT2 - F2 Scope Submission Template

Please note all tender submissions must be made using the templates provided else they will be deemed non-compliant.

Purpose of the ITT Part 1 tender documents

Document	Purpose of Document	Action
ITT1 - Feasibility Study 1 Submission Template	<p>This document is required to be complete and submitted</p> <ul style="list-style-type: none"> ITT F1 should summarise the known information about the plant, and its capability or potential to provide a ESR Service. Full instructions are provided at the front of the document. 	For mandatory completion and to be submitted back to the ESO
ITT2 - F2 Scope Submission Template	<p>This document is required to be complete and submitted</p> <ul style="list-style-type: none"> Please complete all sections within this document will include details of the works required to prove the Restoration capability of the plant, along with details of associated costs. ITT2 F2 scope of works should include a detailed breakdown of the costs for the study only. Providers must minimise these costs as far as reasonably possible. 	For mandatory completion and to be submitted back to the ESO
Appendix 1 – Technical requirements and assessment criteria.	<p>Use this document for:</p> <ul style="list-style-type: none"> Understanding the technical requirements and related parameters, why they are important to the service and why they are set at the agreed limits Understanding the assessment criteria, a high-level summary of the proposed feasibility assessment process and some of the contract principles The information contained in this document is still a work in progress and will be updated following feedback. 	Read ahead of filling in any information
Appendix 2- Northern Tender Query form	<p>Use this document for:</p> <ul style="list-style-type: none"> Any provider queries during the event. We expect to anonymise queries and share the responses on our website as far as possible. If you believe your query is confidential, please state this on the query form along with your justification. Where the ESO does not agree that a query should be confidential, they will present two options to the provider, either for the response to be shared, or for the provider to withdraw the question. 	Can be completed and sent to the ESO at any point during the tender process
Appendix 3 – Northern Tender FAQs	<p>Use this document for:</p> <ul style="list-style-type: none"> Collating all questions & Answers during each stage of the event. This will be a live document so please keep up to date with it and ensure you review this prior to submitting a query. 	Read ahead of filling in any information

Northern tender procurement timelines



Stage	Date	Detail
Invitation to tender	16 January 2023	The formal invitation to tender will be released to all providers who have met the EOI submission deadline and accepted and met the minimum/mandatory criteria. At this stage, all other tender documentation will be available, and the feasibility process will commence.
ITT Part 1 - F1 and F2 scope submission period	16 January – 10 March 2023 (8 weeks)	<p>The first stage of the tender requires submission of the ITT1 F1, along with a scope of works for the more detailed ITT2 F2. The ITT1 F1 should summarise the known information about the plant, and its capability or potential to provide a service that meets the technical requirements of one of the service categories.</p> <p>In parallel to the ITT F1 report, a scope of work for the ITT2 F2 (F2 Scope) should be produced. The F2 Scope will include details of the works required to prove the Restoration capability of the plant, along with details of associated costs.</p>
ITT Part 1 deadline	10 March 2023	All documents must be submitted by midnight, submissions made after this may not be considered.
ITT Part 1 assessment period	13 March – 19 May 2023 (10 Weeks)	<p>After reviewing the submissions (in collaboration with the DNO for Distributed ReStart type applications), those providers who meet the agreed standard outlined in the assessment criteria and receive budgetary approval will proceed to the next stage of the tender. This will be formalised with a side letter contracting the terms of the agreement, and an instruction to proceed with the ITT2 F2.</p> <p>The full requirements for the next stage will be detailed in the ITT2 F2 outline document, available to review during this period.</p>
ITT Part 2 - F2 and commercial bid submission period	22 May 2023 - 2 February 2024 (38 weeks)	<p>The ITT2 F2 report will be accompanied by a technical and commercial bid submission which combined will form the tender submission. The ITT2 F2 report itself should sufficiently prove that the provider's plant does have Restoration capability or will have Restoration capability subject to proposed changes detailed in the report. As with the ITT1 F1, if confirmed in their EOI acceptance that a previous study is satisfactory, there will be no need to duplicate this work.</p> <p>Depending on the service bid for, the ESO can make a capped contribution of up to £150,000 for Primary Service and Anchor Generator services, and up to £100,000 for Top-up services towards these ITT2 F2 studies (in line with historical spend) which will be contractually agreed with a side letter.</p>

Stage	Date	Detail
		Providers are expected to minimise these costs to reduce the impact on the end consumer and will only be reimbursed for costs once invoices and supporting evidence of costs incurred are received and validated by the ESO. Costs will be reimbursable following closure of the ITT2 F2 assessment period and following satisfactory responses to all clarifications being issued by the ESO during the assessment period.
ITT Part 2 0 F2 and commercial bid deadline	2 February 2024	All documents must be submitted by 5pm, submissions made after this may not be considered.
ITT Part 2 - Tender evaluation and clarifications	5 February 2024 to 17 May 2024 (15 Weeks)	<p>Following tender submission, all tenders will be reviewed (in collaboration with the DNO for Distributed ReStart type applications), and technical clarifications specific to tendered information will be issued to individual providers. These clarifications will be documented as each submission is reviewed, but issued to all tenderers at the same time, to ensure no advantage is gained. All tenderers will be given the same amount of time to respond to clarifications on their tenders.</p> <p>During this period, feedback will also be given on the commercial submissions, and tenderers will be given the opportunity to provide clarification and refine their submission. All tenderers will be given equal opportunity and time to do so.</p>
Contract award	May 2024	Contract/s will be awarded, and decision will be communicated to tenderers. Post-award, we expect to publish elements of the outcome of the tender, potentially including MW volume, technology type and price, in line with security requirements, the owners of the awarded contracts will not be revealed.
Build/Install	May 2024 - November 2025 (18 months)	<p>At the discretion of the ESO, additional time for construction of assets can be agreed prior to service commencement.</p> <p>Where a provider can deliver a service ahead of the planned deadline without incurring excessive cost, we invite them to notify us within their submission, and where possible and economic, we may be able to agree an earlier target commencement date.</p>
Service commencement	November 2025	Once construction has completed, the ESR contract will commence following successful completion of a commissioning test.
Assurance activities	Ongoing	Based on contract terms, providers will be subject to routine ESR tests which are scheduled normally after every three years.
Service expiry	October 2030	Providers will be contacted before the final date.

Distributed ReStart – Service definitions

Service	Requirement	Description	Potential providers
Anchor Generator (Or power park)	Essential	Only one Anchor Generator is required per power island. Can self-start and provide a controlled voltage source, able to energise the distribution network to reach the next resource.	Synchronous generator, or other technology with required capability. A single point of connection is required with the DNO network.
Fast MW control	Top-up service	May be required to supplement technical capability of anchor generator for example to enhance block loading.	Battery, load bank, flywheel, generator, others.
Inertia	Top-up service	Increase frequency stability of the DRZ and/or allow greater demand blocks to be picked up.	Synchronous generator, synchronous compensator (an inherent response is required without any measurement delays), others.
Frequency control	Top-up service	May be required to support the Anchor Generator to maintain frequency parameters during normal operation.	Synchronous generator, converter-based sources with appropriate control, others.
Voltage control	Top-up service	May be required to enhance the MVar capability of the DRZ, to expand the island and energise to a higher voltage.	Wind farm, solar, battery, synchronous generator, Statcom, SVC, others.
Short circuit level	Top-up service	Increase the DRZ fault level. Facilitate protection operation at higher voltage levels, or converter DER to connect.	Synchronous generator, synchronous compensator, others.
Energy (MWh)	Top-up service	Enhance capability of the DRZ to restore demand above the capacity of the Anchor Generator. This could come from other any other generator sets on the island. (May be schedulable or intermittent.)	Schedulable MW - Synchronous generator (additional to the anchor), Intermittent resources (constrained and controlled by a set point), demand side management, others.