

Public

Ref: FOI/25/153

National Energy System Operator
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Dear requester

Request for Information

Thank you for your request for information which was received by NESO on 15 October 2025. You submitted your request under the Freedom of Information Act 2000 (FOIA). Information relating to 'blackstart' (restoration services) and/or 'grid-forming capability' would meet the definition of environmental information as set out in Regulation 2(1) of the Environmental Information Regulations 2004 (EIR). The exemption at Section 39 of the FOIA covers information that a public body is obliged to consider under the EIR and has the effect of routing all requests for environmental information via the EIR rather than the FOIA. Your request has therefore been considered under the Environmental Information Regulations 2004 (EIR).

Request

The initial section of your request is:

Under the Freedom of Information Act 2000, please provide documents, datasets or briefing material held by the Department for Energy Security and Net Zero and/or National Grid ESO, from 1 January 2018 to the present, that relate to committed, funded, or contractually-approved projects or programmes whose stated purpose includes maintaining, restoring, or materially improving Great Britain's black-start or grid-forming capability.

The full text of the request has been included as an annex to this letter.

Our response

Unfortunately, we are unable to progress your request any further without clarification. This is because we want to ensure that we are clear on the exact information that you are interested in.

Regulation 12(4)(c) of the EIR allows for a public authority to refuse a request where it is formulated in too general a manner. This exception applies where a request is unclear or open to more than one interpretation and the public authority has provided advice and assistance to help the requester to provide clarification.

The Regulation 12(4)(c) exception is subject to the public interest test in the EIR. However, the Information Commissioner recognises that it is difficult to conduct a public interest test when a public authority is unsure about what the applicant is after. The Commissioner therefore takes the position that the public interest in maintaining the exception will outweigh the public interest in disclosing what may be the wrong information.

We are requesting clarification because of the use of two terms throughout your request:

- The email subject header was 'FOI *Blackstart* Capability'
- The initial part of the request refers to both '*blackstart*' and '*grid-forming capability*'.
- The 'requested information' section of the request refers only to '*blackstart*'.
- The 'Annex A' survey refers to both '*blackstart*' and '*grid-forming capability*'.
- A public interest statement was provided in the email, with reference to '... *black-start and system-restoration capability*...'.
- Point 4 of the 'Procedural clarifications to facilitate efficient processing' section of the request refers to '*grid security capability*'.

We are uncertain whether you are interested in information on *restoration services* ('*blackstart*') only, or on both *restoration* and *grid-forming capability services*.

The information provided in the links below may assist you to clarify your request should you wish to do so.

Restoration (formally referred to as '*blackstart*') refers to the process of restarting the grid following a total or partial shutdown of the national electricity transmission system (NETS). It is a requirement for NESO to make sure there are contingency arrangements in place to ensure electricity supplies can be restored in a timely and orderly way in the unlikely event of a total or partial shutdown of NETS. Information on restoration services is available here:

- [Restoration Services | National Energy System Operator](#)

- [What is restoration? | National Energy System Operator](#)

Grid-forming capability is a plant's ability to exhibit similar characteristics to that of a conventional synchronous generator, thereby reducing the impact of any network disturbances that may occur and contributing to the stability of the electricity system. Information on grid-forming is available here:

- [What is Grid Forming? | National Energy System Operator](#)

This concludes our response to your request.

Next steps

When a public authority requests clarification on a request for information there is no further obligation to respond to that request until clarification is provided.

We will manage any clarified request as a new request under the information rights legislation, responding as soon as possible and within 20-working days of receiving that clarification. Information requests should be sent to InformationRights@neso.energy.

If you are dissatisfied with our handling of your request, you can ask us to review our response. If you want us to carry out a review, please let us know within 40 working days and quote the reference number at the top of this letter. You can find our procedure here: [Freedom of Information and Environmental Information Regulations | National Energy System Operator](#).

The ICO's website also provides guidance on the internal review process: [What to do if you are dissatisfied with the response | ICO](#).

If you are still dissatisfied after our internal review, you can complain to the Information Commissioner's Office (ICO). You should make complaints to the ICO within six weeks of receiving the outcome of an internal review. The easiest way to lodge a complaint is through their website: www.ico.org.uk/foicomplaints. Alternatively, they can be contacted at: Wycliffe House, Water Lane, Wilmslow, SK9 5AF.

Thank you for your interest in the work of the National Energy System Operator (NESO).

Regards,

The Information Rights Team, National Energy System Operator (NESO)

Annex: Full text of information request

Under the Freedom of Information Act 2000, please provide documents, datasets or briefing material held by the Department for Energy Security and Net Zero and/or National Grid ESO, from 1 January 2018 to the present, that relate to committed, funded, or contractually-approved projects or programmes whose stated purpose includes maintaining, restoring, or materially improving Great Britain's black-start or grid-forming capability.

SCOPE AND DEFINITIONS

For the purposes of this request, "committed, funded, or contractually-approved" means at least one of the following has occurred:

- (i) Contract signed with supplier(s);*
- (ii) Funding formally allocated in departmental or programme accounts;*
- (iii) Planning permission or equivalent statutory consent granted; or*
- (iv) Physical works commenced ("spades in the ground").*

For the avoidance of doubt: Projects that were committed, funded or contractually approved within this period but have since been completed, cancelled or superseded should still be included, as they establish the historical baseline for capability assessment.

INFORMATION EXPLICITLY EXCLUDED FROM THIS REQUEST

This request does not seek:

- Site-specific operational procedures*
- Detailed restoration plans or sequence documentation*
- Control system designs, architectures or configurations*
- Passwords, access credentials or security protocols*
- Real-time operational data or live system status*
- Any information whose disclosure would, in the opinion of the National Protective Security Authority or equivalent designated security body, materially increase operational risk beyond that already in the public domain*

I am seeking strategic, programme and procurement level documentation and quantitative project metadata only.

REQUESTED INFORMATION

Please provide the following for each identified project or programme (or, where no such project exists, please respond "none held"):

- 1. Project or programme title and lead organisation(s)*
- 2. Technology class (for example: synchronous condenser, battery-based grid-forming inverter, pumped storage, fast-start gas turbine, hybrid storage/generation, other - please specify)*

3. Contractual/financial status (contract signed / funding allocated / procurement ongoing / planning consent granted / works commenced / completed / cancelled)
4. Contract or programme start date and expected or actual commissioning date
5. Committed or contracted capacity (MW) and whether black-start capability was explicitly referenced in contract documentation (Yes/No)
6. Contract value or budget band (exact figures where available; otherwise provide banding: £0-10m / £10-50m / £50-100m / £100m+)
7. One-paragraph non-technical summary of the project purpose and deliverables as stated in the contract or programme documentation
8. Any internal assessments or modelling summaries that estimate the contribution of committed projects to national black-start and system-restoration capability (please provide tables, charts or summary documents where they exist). If no such assessment exists, please confirm this explicitly.

EXEMPTIONS AND REDACTIONS

If any requested document is withheld under an exemption:

- Please identify the document by title and date
- Cite the specific exemption(s) relied upon
- Explain why the public interest in maintaining the exemption outweighs disclosure
- Consider partial disclosure where exemptions apply only to specific sections

If the information requested is held by an external contractor, please either provide the information directly or supply the contractor name and contract reference so I may pursue the information under the Act. If parts of this request are considered sensitive, I would be content to receive a redacted copy limited to programme-level data as described above, with commercially sensitive figures provided in bands rather than exact amounts.

ANNEX A – BINARY / CATEGORICAL QUESTIONS

Please provide a direct response (tick box or supply data) to each of the following items where answers exist in internal modelling, planning or procurement documents:

Q	Question and Response Options
1	<p>Compared with 2010, will contracted black-start capability be greater, the same or less by 2030?</p> <p><input type="checkbox"/> Greater <input type="checkbox"/> Same <input type="checkbox"/> Less <input type="checkbox"/> Not assessed</p>

- 2 Are there projects committed (contracts signed or funding allocated) that explicitly require grid-forming capability to be delivered before 2030?
☐ Yes ☐ No
- 3 Total contracted grid-forming / black-start capable capacity (MW) with contractual commissioning dates before 2035:
☐ 0–500 MW ☐ 501–2,000 MW ☐ 2,001–5,000 MW ☐ >5,000 MW
(or provide exact figure if not commercially sensitive: _____ MW)
- 4 Do current published plans assume future, not-yet-contracted technologies to deliver black-start capability post-2030?
☐ Yes ☐ No ☐ Partially (please specify which technologies)
- 5 Have DESNZ or NESO modelled recovery time from a full-system blackout under the 2030 generation mix?
☐ Yes (modelling complete) ☐ No ☐ In progress
- 6 Under Grid Code or equivalent regulatory framework, are licensed operators required to maintain or procure black-start capability?
☐ Yes ☐ No ☐ Requirement exists but not mandatory

Then this question:

- 7 Total contracted synchronous and dispatchable generation capacity with commissioning dates before 2035 (nuclear, gas, hydro, biomass – excludes wind, solar, battery storage):
☐ <50 GW ☐ 50–70 GW ☐ 71–90 GW ☐ >90 GW

PROCEDURAL CLARIFICATIONS TO FACILITATE EFFICIENT PROCESSING

1. Bulk Data Provision to Avoid Cost Limits

To eliminate any potential Section 12 cost concerns regarding contract-level data, I am willing to accept bulk data provision in whatever format you currently hold it (spreadsheets, database exports, unformatted lists). This requires no sorting, filtering, analysis or presentation by departmental staff and should fall well within statutory cost limits. I will undertake all data organisation and analysis myself.

2. Comprehensive Single Response Requested

If you intend to refuse any part of this request under FOI exemptions, please declare all refusals in your initial response, citing specific exemptions and providing public interest assessments for each. I am explicitly seeking to avoid protracted correspondence involving sequential refinements and partial refusals over many months. A single, comprehensive response—even if partially refused with clear justifications—is far more efficient for both parties and demonstrates good faith engagement with the statutory framework.

3. Disaggregation and Partial Disclosure

If cost limits are approached or exemptions apply to specific elements, please apply the principle of disaggregation: provide all non-exempt, readily-accessible information and clearly identify which specific elements cannot be provided and why. Do not refuse the entire request because some parts may be exempt or costly to retrieve.

4. Good Faith Interpretation of Scope

I have deliberately excluded operationally sensitive material (site-specific procedures, control system details, security protocols) from this request. I explicitly require that you do not provide any information that would genuinely compromise national security or operational safety. Please interpret the scope of this request in good faith: I am seeking strategic programme-level data to understand whether grid security capability is being maintained during the energy transition, not operational intelligence that could be misused.

5. The Matrix Questions (Annex A) Are Non-Controversial

The six binary/categorical questions in Annex A pose no security risk and require only straightforward yes/no responses or selection from provided options. This information is essential to understanding the trajectory of energy system resilience and security over the coming half-decade. I cannot identify any legitimate grounds for refusing these questions, as they request only high-level capability assessment data that any responsible grid operator must hold for planning and regulatory compliance purposes. They should be answered fully and truthfully within the framework established above.

PUBLIC INTEREST STATEMENT

This request concerns a matter of exceptional public interest: whether the United Kingdom's electricity grid will maintain adequate black-start and system-restoration capability during the transition to Clean Power 2030. The ability to recover from a total system blackout is fundamental to national security, economic stability and public safety.

Citizens have a legitimate interest in understanding:

- *Whether replacement capability is being contracted before existing capability (primarily gas-fired generation) is retired*
- *Whether government policy is supported by contracted projects or relies on speculative future technologies*
- *Whether system restoration capability will be maintained, improved or degraded*

The information requested is programme-level metadata, not operationally sensitive detail. Similar information is routinely published by grid operators in comparable jurisdictions. Any public interest in commercial confidentiality or generic security concerns is outweighed by the overwhelming public interest in grid security assurance during a major energy transition.