

Public

Ref: FOI/25/229

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Dear requester

Request for Information

Thank you for your request for information which was received by NESO on 11 December 2025.

Your request has been considered under the Environmental Information Regulations 2004 (EIR). This is because the requested information about the Connections Reform process meets the definition of 'environmental information' provided at Regulation 2(1) of the EIR.

Request

You asked us:

1. *What is NESO's assessment of minimum storage capacity by duration class required to operably connect queued generation without excessive curtailment?*
2. *Has NESO modelled annual curtailment costs if current queue composition proceeds unchanged?*
3. *Given 70%+ new renewables in Scotland but limited transmission capacity, what minimum Scottish-located storage volume is needed to avoid grid paralysis?*
4. *How does strategic alignment scoring weight LDES versus short-duration battery? Are technology-specific multipliers applied reflecting system value?*
5. *Does NESO differentiate between co-located storage with Scottish generation versus standalone storage near constraint points?*
6. *Has NESO considered separate gating tracks for storage projects ensuring sufficient capacity progresses alongside generation?*

Our response

It is important to note that the obligation under both the Freedom of Information Act (FOIA) and the Environmental Information Regulations (EIR) is to provide recorded information held at the time of the request. Requests framed as questions (e.g., that ask 'what', 'does', 'how', 'why') are valid requests under the EIR/FOIA if a public authority holds recorded information that answers the specific question. There is no obligation to create new information to answer a question or provide an opinion if it's not already recorded.

Where we do not hold recorded information that specifically responds to the question you asked, we have explained that no recorded information is held, but we have provided some background information or explanation which we hope is helpful.

1. What is NESO's assessment of minimum storage capacity by duration class required to operably connect queued generation without excessive curtailment?

We do not hold recorded information in scope of this question.

The closest assessments we have are studies like [Clean Power 2030](#) and [Future Energy Scenarios \(FES\)](#), that have multiple scenarios with different levels of storage and also consider the constraints in each scenario. However, we wouldn't describe these as assessing an optimal or minimum required level of storage.

We published the study [Energy Storage for Constraint Management](#) in 2022 on the effectiveness of adding storage as a way to manage thermal constraints. This is not exactly the same as the question you asked, but may be of interest.

2. Has NESO modelled annual curtailment costs if current queue composition proceeds unchanged?

We do not hold recorded information in scope of this question.

The Connections queue had grown to over 700GW, four times what's needed by 2030. We have not calculated curtailment costs for a system with the entire 700GW queue.

3. Given 70%+ new renewables in Scotland but limited transmission capacity, what minimum Scottish-located storage volume is needed to avoid grid paralysis?

Unfortunately, we are unable to provide a response under EIR legislation to this question without clarification of what you mean by 'grid paralysis'. However, we have provided some additional explanation which we hope is helpful.

Our [Clean Power 2030](#) and [Future Energy Scenarios \(FES\)](#) have multiple scenarios with different levels of storage and also consider the constraints in each scenario. The 2022 study referred to in our response to Q1 above showed that storage located inside a wind driven export constraint doesn't help very much, because typical windy and non-windy periods are much longer than typical storage durations.

4. How does strategic alignment scoring weight LDES versus short-duration battery? Are technology-specific multipliers applied reflecting system value?

We do not hold recorded information in scope of this question.

There are no scoring or technology-specific multipliers. We aligned to the battery and long duration energy storage (LDES) capacity figures in the [UK Government's Clean Power 2030 Action Plan](#), but allowed 'protected' battery or LDES projects to exceed those capacity figures (which is why we have a 60GW oversupply of batteries compared to CP30 figures).

5. Does NESO differentiate between co-located storage with Scottish generation versus standalone storage near constraint points?

We do not hold recorded information in scope of this question.

The queue was formed in line with the arrangements set out in the Connections Network Design Methodology that refer to the combination of readiness and strategic alignment criteria.

6. Has NESO considered separate gating tracks for storage projects ensuring sufficient capacity progresses alongside generation?

We do not hold recorded information in scope of this question.

We have not considered separate gating tracks for storage connections. We aligned to the battery and LDES capacity figures in the [UK Government's Clean Power 2030 Action Plan](#) but allowed 'protected' battery or LDES projects to exceed those capacity figures.

This concludes our response to your request.

Note regarding the engagement of the exception provided at Regulation 12(4)(a) – information not held

Where we have explained that we do not hold recorded information for questions 1, 2, 4, 5 & 6 we are relying on the EIR exception at Regulation 12(4)(a) which states that a public authority may refuse to disclose information if it does not hold that information when an applicant's request is received. All EIR exceptions are subject to public interest test (PIT), however the Information Commissioner's Office (ICO) recognises that it is not possible to carry out a meaningful PIT where information is not held.

Note regarding the engagement of the exception provided at Regulation 12(4)(c) – unclear request

Where we have explained that we can't respond to question 3 without clarification, we are relying on Regulation 12(4)(c) of the EIR which 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 too non-specific or ambiguous for a public authority to identify and locate the information.

This exception is subject to the public interest test in the EIR. However, the ICO recognises that it is difficult to conduct a public interest test when a public authority is unsure what information the requester 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.

Advice and assistance

We have explained in our response to Q3 where we would need you to provide further clarification to provide a response under the EIR and have provided some background information which might assist you should you wish to submit a refined request.

In considering any future request that you may wish to make, focussing your request on specific recorded information would make it more manageable for us to respond to under the legislation.

You may find the following guidance helpful:

[How to access information from a public authority | ICO.](#)

[Writing effective requests - WhatDoTheyKnow.](#)

Further information – Connections Reform

Information on Connections Reform is available here:

- [Connections Reform | National Energy System Operator.](#)
- [About Connections Reform | National Energy System Operator](#)

A key part of this reform is the introduction of the new Gate 2 to Whole Queue (G2TWQ) process, which ensures that only projects that are ready to go and are aligned to the [UK Government's Clean Power Action Plan](#) progress through to the new connections delivery pipeline.

The Gate 2 Criteria Methodology and Connections Network Design Methodology can be found here:

- [Connections Reform design documents and methodologies.](#)

On 8 December 2025 NESO began informing Customers of the outcome of their applications and published the results of the new connections delivery pipeline. Further detailed results data was published in January 2026:

- [Connections Reform Results | National Energy System Operator.](#)
- [Connections Reform: Detailed Results Data](#)

The published information provides a high-level view of the reformed pipeline. NESO will not be disclosing information on the status of individual projects at this time. Further aggregated information on the new connections pipeline will be made available over the coming weeks and months.

Next steps

Should you decided to submit a clarified request, we will respond as soon as possible and within 20 working days of receiving your clarification.

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)