

Public

Ref: FOI/25/055

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Dear requester

Request for Information

Thank you for your request for information which we received on 16 June 2025.

Your request has been considered under the Freedom of Information Act 2000 (FOIA) and the Environmental Information Regulations 2004 (EIR). There is information on both pieces of legislation on the NESO website: [Freedom of Information and Environmental Information Regulations | National Energy System Operator](#).

For information, NESO manages the flow of electricity from generation to transmission and is responsible for '[balancing the grid](#)' and planning and co-ordinating the design of electricity networks. NESO does not own or operate the electricity network infrastructure but moves high voltage electricity from where it is generated through the energy system using the infrastructure owned by three onshore transmission companies (National Grid Electricity Transmission, Scottish Power Transmission and Scottish & Southern Electricity Networks Transmission). This high voltage electricity is passed onto the Distribution Network Operators (DNOs) which own the local networks and maintain the infrastructure connecting homes and businesses to the transmission network. Information on DNOs can be found in the link at the bottom of this page: [Energy outages | National Energy System Operator](#).

NESO's duties include:

- developing and maintaining an efficient, co-ordinated and economical transmission system and facilitating competition in generation and supply.

- promoting net zero, energy security and cost efficiency.
- the provision of advice, analysis, or information to the government or Ofgem.

Further information on our operations is available here: [Operational information | National Energy System Operator](#) and you may find the '[What We Do](#)' section of the NESO website of interest.

Request

You asked us:

I hereby request disclosure of the following environmental information held by National Grid ESO, or held on its behalf, relating to the environmental and operational impact of wind turbine electricity consumption from the grid:

1. *A breakdown of the estimated or recorded volume of electricity consumed by wind turbines (as grid-connected loads) across the UK for each of the last five calendar years. This includes, but is not limited to, energy consumed for yaw systems, blade heating, stator magnetisation, internal controls, and any generator-as-motor operations.*
2. *Data and internal analyses on the scale and frequency of grid draw by wind farms when turbines are non-operational (i.e., curtailed or in low-wind conditions), including peak consumption scenarios.*
3. *Any assessments, modelling, or technical reports produced by or for National Grid ESO concerning the implications of parasitic loads from wind turbines on grid stability, balancing operations, or fossil-fuel generation backup requirements.*
4. *Any incident reports or engineering risk logs detailing cases where high localised demand due to turbine restart (e.g., post cut-out magnetisation) or blade de-icing caused grid voltage drops, imbalances, or increased reliance on fossil generation.*
5. *Any policies, procedures, or guidelines used by NGENSO for measuring or auditing incoming power consumption at wind generation sites, including whether this data is routinely collected or metered.*
6. *Records or data relating to balancing costs or carbon intensity increases that have been attributed, directly or indirectly, to turbine consumption (e.g., during curtailment or winter de-icing periods).*

Our response

We have conducted information searches in response to your request. I can confirm that we were unable to find any recorded information which falls within the scope of your request. The exception at EIR Regulation 12(4)(a) applies to instances where an organisation does not hold the requested information at the time that the request is received. Where NESO does not hold

recorded information in scope of your request, we have advised you of an alternative organisation that may hold the information that you are interested in and provided an external link.

We are required to complete a public interest test for all EIR exceptions. As always, we are mindful of the presumption in favour of disclosure and the general public interest in transparency and accountability. However, the ICO recognise that it can be impossible to do a meaningful public interest test if we don't hold the information.

This concludes our response to your request.

Advice and assistance

In accordance with EIR Regulation 9, I wish to advise The National Grid may be the relevant authority who maybe able to address your questions and respond more appropriately, please see links below:

[Environmental Information Regulations \("EIR"\) 2004 | National Grid](#)

[Wind power: your questions answered | National Grid](#)

Ofgem, as the industry regulator, provides advice for consumers and is subject to the FOIA and EIR. For information on how to submit information requests to Ofgem please visit [Information requests | Ofgem](#).

Next steps

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)