

Public

Ref: FOI/24/0004

National Energy System Operator

Faraday House

Gallows Hill

Warwick

CV34 6DA

[InformationRights@nationalenergyso.com](mailto:InformationRights@nationalenergyso.com)

[nationalenergyso.com](http://nationalenergyso.com)

12 November 2024

Dear requester

### Request for Information

Thank you for your request for information which we received on 15 October 2024. We have considered your request under the Freedom of Information Act 2000.

### Request

Your request for information was as follows:

*Ratcliffe-on-Soar has closed and EDF have stated that there will only be 1.2 GB of nuclear capacity after 2028. Hinkley Point C may only be operational in 2031.*

*Does NESO have any calculations on how the grid will meet demand on days of low wind and high demand in 2029 and 2030?*

*Set out below are the grid supply and demand figures for the afternoon of 1<sup>st</sup> December 2023. This ESO data shows a deficit of at least 5.7 GW if there were only 1.2 GB of nuclear capacity and no coal power station. There is little headroom for dealing with this deficit via batteries or imports as both sources were close to the maximum in the period shown.*

													TOTAL SUPPLY WITH NO COAL AND		
													TOTAL	1.2 GB NUCLEAR	DEFICIT
023-12-01 14:00	GAS	COAL	NUCLEAR	WIND	HYDRO	IMPORTS	BIOMASS	OTHER	SOLAR	STORAGE	GRID DEMAND				
023-12-01 14:30		25341	960	4778	1660	594	4068	2798	980	1391	906	43476	36348.2	-7128	
023-12-01 15:00		25328	960	4773	1291	807	4120	2793	1069	422	1502	43065	36911.2	-6154	
023-12-01 15:30		25290	871	4781	1134	907	5206	2800	1172	28	1608	43797	38118.2	-5679	
023-12-01 16:00		25235	907	4784	1199	977	5280	2801	1977	0	1516	44676	38986.2	-5690	
023-12-01 16:30		25471	931	4786	1289	929	5570	2796	2169	0	1556	45497	39781.2	-5716	
023-12-01 17:00		25863	958	4783	1759	777	5574	2793	1923	0	890	45320	39580.2	-5740	
023-12-01 17:30		26523	959	4783	1718	839	5356	2790	1344	0	772	45084	39343.2	-5741	
023-12-01 18:00		26293	959	4782	1262	799	5344	2798	1177	0	866	44280	38540.2	-5740	

## Our response

We confirm that we hold some information in scope of your request.

NESO’s (and previously National Grid ESO’s) planning and modelling on security of supply continues to develop as the range of factors which affect it, including government policy, develops and changes. This is evident in our annual [Electricity Capacity Reports](#), which set out our advice to Government on how much capacity to secure for future years through the Capacity Market in order to meet the reliability standard set by Government. Please also see our previously published report on [Resource Adequacy in the 2030s](#) which showed how different generation mixes could meet security of supply in a decarbonised system.

In our [Business Plan](#) we explain that we intend to publish a further capacity adequacy study and it is our current intention to publish reports approximately every two years. We are currently undertaking the analysis but the publication of the next report has been delayed until spring 2025 due to NESO’s recent work on a Government commission. We currently, therefore, do not hold the full and final analysis for this report.

The National Energy System Operator was asked by the Department for Energy Security and Net Zero (DESNZ) to provide independent advice on the pathway towards the Government’s 2030 ambition, with expert analysis of the location and type of new investment and infrastructure needed to deliver it. For more information about this commission please see: [ESO commissioned to provide key advice and expertise on how Great Britain can achieve clean power by 2030 | National Energy System Operator](#). This work was in progress at the time that your request was received.

We have now submitted our advice to Government and published the report. Please see: [Our Clean Power 2030 advice to Government | National Energy System Operator](#) which is published alongside four annexes. You will see that this includes assumptions and proposals in relation to nuclear capacity, demand-side flexibility, bioenergy with carbon capture, storage, batteries,

interconnectors and gas, as well as weather dependent renewables in order to ensure security of supply.

In addition we undertake seasonal security of supply modelling each year to ensure that we operate well within the reliability standards set by government. Our published planning and modelling information and information that we plan to publish in future looks across a range of risks and across a year or several years with the aim of confirming operability within reliability standards.

Given that NESO intends to publish an updated resource capacity report in early 2025, we are refusing your request for current working and draft calculations and analyses which are used to inform modelling of different scenarios under the exemption at Section 22 (information intended for future publication) of the FOIA.

Section 22 is a qualified exemption which means that it is subject to a public interest test.

NESO recognises that there is a general public interest in transparency and that there is a public interest in information about security of supply and the move towards renewable energy sources as part of the Government's decarbonisation plans.

NESO does not believe, however, that there is a public interest in releasing draft and unfinished modelling data which may lead to speculation and public misinformation. This in turn could lead to participants in the energy market changing their trading strategy, altering their bidding strategy in the capacity market, changing their investment plans, and adjusting their pricing. Such market exploitation would be to the detriment of consumer costs. The teams conducting the modelling and analysis also need to be able to use the work from the CP30 report and feed this into the work undertaken so far on the planned resource capacity report.

Having weighed these public interest arguments, our opinion is that the balance of the public interest lies in maintaining the exemption and withholding the draft and working data.

The report will be published on our website: [Publications library | National Energy System Operator](#).

The report will set out a range of risks and considerations. Should the report not address your concerns at the appropriate level of detail, you may submit a further Freedom of Information request at that time, once the analysis has been finalised.

This concludes our response to your request.

## **Next steps**

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.

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](http://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)