Why is future data centre demand on the grid not being tracked?

Yesterday The National revealed Scotland's hidden pipeline of 'phantom' AI data centres': this briefing will set out the implications of this finding for the Committees who are considering how to manage demand for hyperscale data centres.

The Economy, Energy and Tourism Committee heard on 15th September from a National Energy System Operator (NESO) official, who said that there was 9.7GW of data centre demand in the grid queue in Scotland, across 30 projects. APRS has previously calculated this future demand to be 7.3GW, based on applications in the planning pipeline, as shown on our data centre map. The National sought comment from NESO and from Dr Callum McIvor, who also gave evidence to the Economy, Energy and Tourism Committee that day.

Key Points

- Despite its role as the UK's central planning body for energy use and demand, NESO holds no public register of electricity demand projects, including hyperscale data centres, leaving Parliament and the public with no definitive measure of how much demand there is. This is despite the fact that generation and storage projects are required to be on a projects register, called the TEC Register, which is updated twice weekly.
- FoI requests from December show that NESO have not even kept an internal register, but said it is something they were considering.
- Ofgem estimates that that there is 73GW of contracted data centre demand. connections GB-wide, more than 1.5x as much as peak GB demand. This appears to come from a call for information they carried out.
- As above, the NESO official who gave evidence to the Economy, Energy and Tourism committee said that there was 9.7GW of planned demand from 30 data centres in Scotland: however, NESO told The National that the figure was 8.9GW for 28 projects, which is indicative of serious shortcomings.
- 8.9GW of demand would be more than twice the peak winter energy demand of the whole of Scotland.
- It is as yet unclear whether Scottish Ministers have acted in response to this lack of oversight by NESO: in our view, the processes Ministers have committed to at the debate on 16th September will be impossible to conduct effectively without clearer information from NESO and the UK Government about the grid queue for data centres and .
- Planning remains the only tool Scotland has to manage grid demand in a situation where NESO has allowed contracted demand to grow to huge levels above national supply. Ministers need to put in place their own strategic plan and analysis for data centres, as per the commitments given to Parliament on 16th September, and use the planning system to achieve it, because all policy control over the grid queue is reserved to Westminster and because we do not believe that NESO does not have the tools in place to manage this process in the best interests of Scotland.

Background

In mid-September, Ofgem, the GB energy markets regulator, admitted in a consultation document that *"between November 2024 and June 2025, **contracted demand** in the connection queue increased from 41 GW to 125 GW. Of this, around 73 GW are data centres"*. They also note that over 93% of that figure are for data centres over 100MW [1]. Their press release quoted a figure of 'at least 80GW'. This has grown significantly since Ofgem's previous consultation in February 2026, which put demand from data centres at 50MW.

Contracted demand is the electricity demand that developers have received connection offers for, and signed agreements for, but which is not yet operational.

To put this in context, the peak demand of Great Britain in 2025 was 45.8GW, which was hit on 9 January 2025, and 2025 saw an average demand over the year of 31.7 GW (weekdays) and 28.8GW (weekends). So the demand GB-wide that has been **already contracted to data centres** is 1.5 times peak demand and is more than twice the GB's average power demand.

The current policy around the grid queue and data centres

This quoted figure for the power demand in the grid queue keeps changing, and Ofgem and NESO are currently quoting different figures. We have asked NESO to clarify. Their answers are unclear, but it is likely to be due to a combination of two factors: first, NESO are finding out more information about the demand grid queue they previously didn't assemble, despite being responsible for managing it, and second because the grid queue is still open to new demand connections despite the significant overshoot already in effect.

There is no demand queue register

In an answer to a December 2025 FOI request covering information about data centre projects, NESO said they '*do not currently have a register of demand connections*'.

In the FoI response they say that they *'are considering this as a development piece, but it would take considerable time to produce. The data is held in various data sources including contracts, and would need to be extracted from these sources, reviewed and consolidated. To determine whether any demand projects are data centres would involve manually checking these various data sources.'*

NESO are required to keep an up to date and publicly available database for connections that will generate or store energy. This TEC register (Transmission Entry Capacity) is updated twice weekly. There is no equivalent for demand connections, despite the equal or greater capacity of the huge demand connections of data centres to reduce grid stability, hamper decarbonisation, and increase bills for other energy users. NESO told us by email in August 2026 that *"The regulator, Ofgem, is also exploring options to potentially create a Demand Capacity Register which may provide more clarity in the future."*

There is a voluntary list called the 'Existing Agreements Register' which the same FoI says "*details all projects that applied for "Gate 2[1]" in the Connections Reform process where consent was given for inclusion*". Indications are that this includes some demand connections, but is a small sample of the connections given developers need to give consent in order to be included.

In November 2025 NESO issued a demand Queue Call for Input (CfI), designed to establish more information about the status of the projects in the demand queue (which they are required to manage), saying *"There has been a recent surge in demand connection applications which exceeds even the most ambitious forecasts for future demand."*

In February 2026 Ofgem reported that NESO's Demand Queue Call for Input (CFI) *'identified around 140 (50 GW) data centres, the majority of which are likely to receive a Gate 2 offer. 71 (around 20GW) data centres reported they have achieved financial commitment with Final Investment Decision (FID), indicating a significant volume of mature data centre projects in the demand queue'.* Given that this call for input was voluntary, it is likely that this would have been an underestimate, hence the increase to 73GW in the latest consultation, and 80GW by the time they issued the press release.

However the demand queue is also still continuing to grow.

The demand queue is still open.

Shortly after the deadline for the call for information about the demand queue, NESO issued an announcement about reform of the grid supply queue, initiated given substantial oversupply of, particularly, battery and onshore wind in the grid queue. This led to a pause on new projects, to be followed by a move to opening application windows when space allows.

This was not extended to demand connections. In May 2026 NESO put in place Minimum Information Requirements for demand connections above 5MVA, but did not close the queue.

Instead of closing the queue, Ofgem have proposed a process for weeding out those projects least likely to progress including through a process they called 'curate, plan and connect', consulted on in February 2026. Their most recent consultation, published 29 July, noted that there was 73GW of contracted data centre demand in the grid queue, and the new consultation proposes charging developers to stay in the grid queue.

The Power of Planning Permission.

The only way the Scottish Government and Scottish Parliament can manage this troubling situation is the planning system.

Planning permission is the only way that Scotland can retain sovereignty over these decisions in the face of this mismanagement of the grid queue. It is vital that the Scottish Government continue to pause planning permissions for hyperscale data centres while they

[1] Gate 2 is awarded when a project has met readiness criteria and (generation and storage projects only) a strategic need test. And they then get a connection date. Data centres connections do not need to show strategic alignment (NESO - section 4.1.8)

consider this situation and how best to manage it, alongside the other commitments given in the Chamber.

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