Data Classification: Public

Winter Review and Consultation 2025/26

June 2026

NESO
National Energy System Operator

Welcome

Welcome to our *Winter Review and consultation 2025/26*. This report reviews the modelling and analysis detailed in the *Winter Outlook 2025/26* against actual events during the season.

Each year, we produce a Winter Outlook report that sets out our assessment of electricity security of supply. This document reviews the forecasts and analysis in our *Winter Outlook 2025/26*, comparing what we expected with what happened. Alongside this report, we have published the *Winter Outlook 2026/27: Early View* – our early annual assessment of year-on-year changes to the security of supply outlook. Together, these reports support effective planning and preparation for the coming winter.

As in previous years, the consultation section of this report focuses on the *Winter Review 2025/26* and the upcoming *Winter Outlook 2026/27*. However, we welcome feedback on all aspects of our winter planning and preparation and will pass any comments and information received to the relevant teams across NESO. You can email us at marketoutlook@neso.energy, or join us at the NESO Operational Transparency Forum.

National Gas has published a separate *Gas Winter Review and Consultation*.

Kayte O'Neill
Chief Operating Officer
National Energy
System Operator

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Winter Review at a Glance

01

Operational surplus

Winter margins were broadly within the expected range of the *Winter Outlook 2025/26* report and there was no interruption to customer demand due to unavailable supply. No Capacity Market Notices (CMNs) or Electricity Margin Notices (EMNs) were issued.

Our plans, preparations and balancing tools were sufficient to enable reliable operation of the system under varied supply and demand conditions.

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02

Demand and supply

Demand was largely within the forecast range published in the *Winter Outlook 2025/26* report. There were a few short-lived cold spells, most notably in early January, which caused demand to move towards or above the higher end of our forecast range. In particular, the peak National Demand – of 47.3 GW – was the highest since March 2018. This was within our probabilistic assessment of the seasonal peak.

Conventional generation availability was broadly in line with our forecast throughout the winter. Mild, windy conditions led to wind generation regularly above the seasonal average. Conventional generators responded to market conditions as we saw generation increase during days when temperatures were cold and wind was low.

03

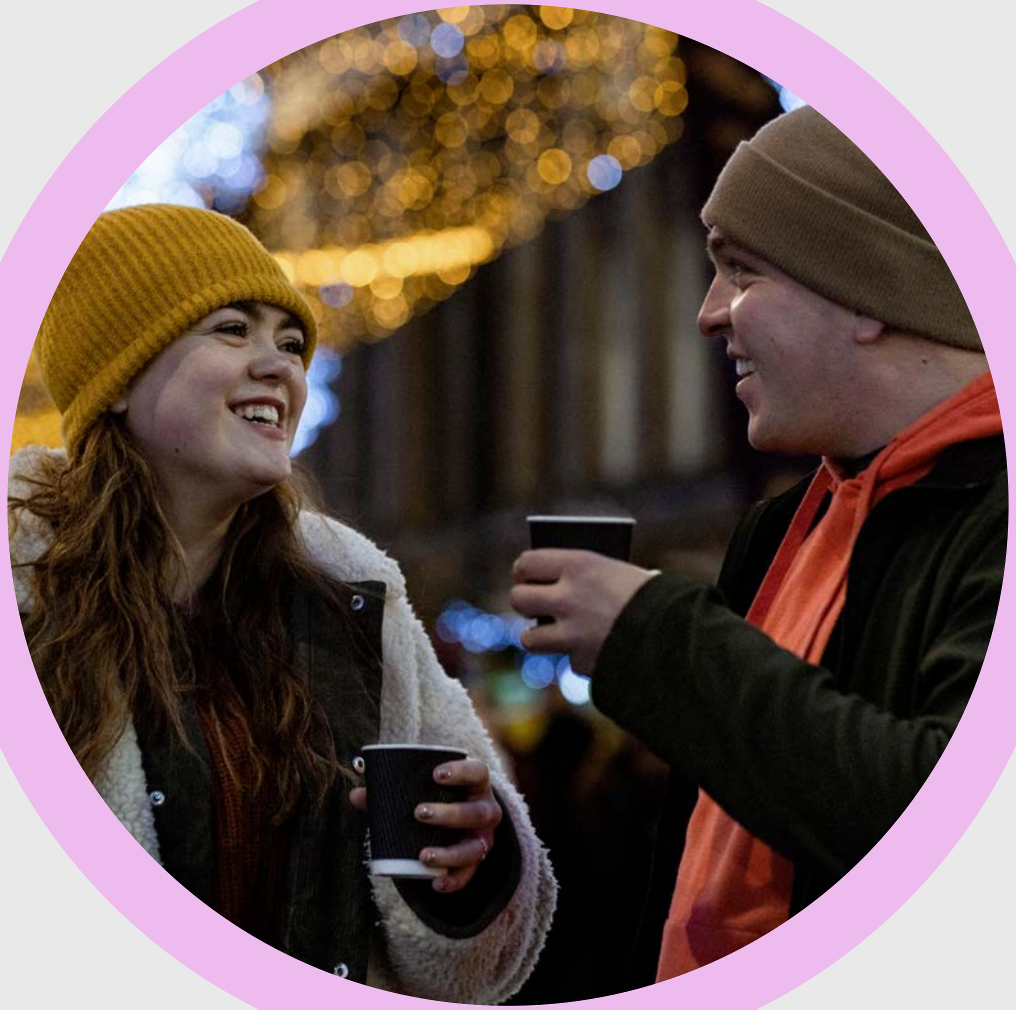
Electricity markets

The pattern of interconnector flows was consistent with our expectations ahead of winter. Great Britain's power prices were typically higher than those in interconnected markets, resulting in net imports during both peak and off-peak periods. In line with expectations, Great Britain typically exported to Ireland and Northern Ireland.

Reciprocal support and close coordination with neighbouring system operators ensured interconnectors remained mutually beneficial.

A summary of how the gas network responded to last winter's demand is available in the *National Gas Winter Review and Consultation*.

Margins



1.1 How did the operational surplus compare to our expectations in the *Winter Outlook 2025/26* report?

What we said in the *Winter Outlook 2025/26* report	What happened
"We expect to have a sufficient operational surplus throughout the winter."	Sufficient margins were maintained throughout winter. All operational, system and balancing requirements were met at all times. The operational surplus was above the central forecast on 59% of days (against an expected value of 50%), reflecting generally mild and windy conditions in Great Britain and adequate supplies in neighbouring markets.
"There may be times when we need to use our standard operational tools, including system notices. Note: If our forecasts suggest that our control room may not be able to meet our normal margin for operating the system through the normal mechanisms, we have a range of standard tools to secure additional margin, including issuing system notices. While rare, these notices form part of our standard operational tools."	As highlighted in the *Winter Outlook 2025/26* report, a combination of factors – including periods of cold weather with low wind, low interconnector imports and high levels of generator outages – would be required for a period of low operational surplus to materialise. No such instances were observed across the season. High wind generation on the seasonal peak demand day (5 January) enabled Great Britain to support exports across the peak.
"There could be days where the operational surplus falls below our forecast range – around 5% of days."	The operational surplus fell below the lower bound of the range presented in the *Winter Outlook 2025/26* on 14 out of 153 days. This was slightly more frequent than expected, representing 9% of days against an expected value of 5%. Of these, 10 days occurred in March, when conventional generator availability was lower than forecast. Full details of our demand and supply modelling and its effect on operational surplus forecasting can be found on pages 9-12.

1.2 Operational surplus

Winter 2025/26 was generally milder than normal with a few cold spells. A sufficient operational surplus was maintained throughout the winter.

Figure 1 shows the operational surplus for the winter (the blue line) compared with the expected range (90% confidence level) presented in the *Winter Outlook 2025/26* report. As expected, there was considerable variation in the operational surplus, driven by changes in demand, wind output, interconnector flows and generator availability. In general, this variability was well captured within our expected range. The operational surplus was above the central forecast on 59% of days (against an expected value of 50%), reflecting generally mild and windy conditions in Great Britain and adequate supplies in neighbouring markets.

The operational surplus fell below the lower bound of the range presented in the *Winter Outlook 2025/26* on 14 out of 153 days. This was slightly more frequently than expected, representing 9% of days against an expected value of 5%. Of these, 10 occurred in March when conventional generator availability was lower than forecast. We used our standard operational toolkit throughout the winter to maintain a sufficient operational surplus and did not need to issue system notices.

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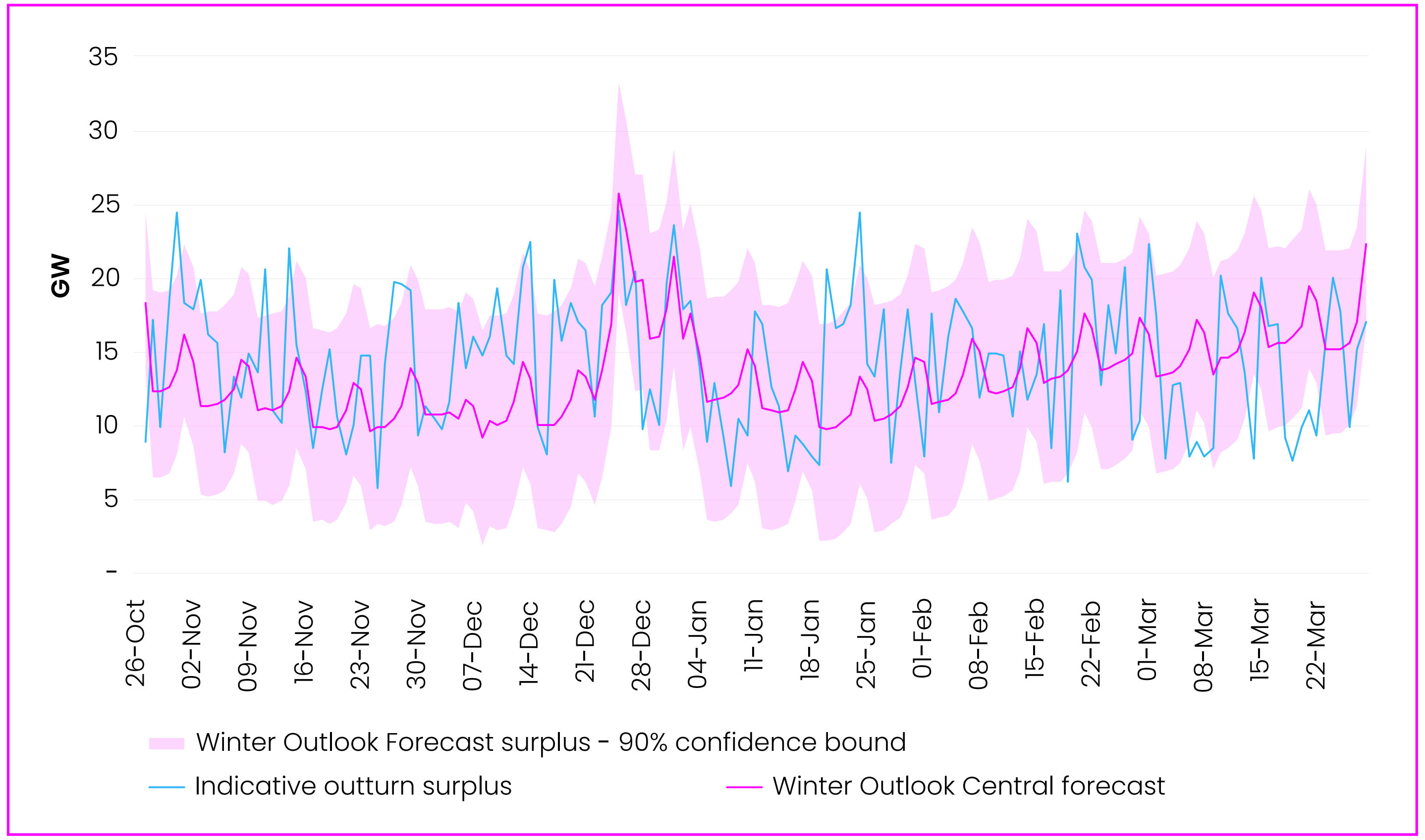

Figure 1: Forecast and actual operational surplus for winter 2025/26. The operational surplus is the final declared capacity of conventional generation, wind outturn and available interconnector flow.

Interpreting this chart: Figure 1 shows the credible range of the operational surplus at peak demand throughout the winter, as published in the *Winter Outlook 2025/26*. The shaded region represents the 90% confidence bound, reflecting day-to-day variations in weather and available generation. We would expect around 5% of days to fall below this range.

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Demand and Supply

2.1 How did demand and supply compare to our expectations in the *Winter Outlook 2025/26* report?

What we said in the *Winter Outlook 2025/26* report	What happened	For more details
Weather-corrected peak demand is expected to be broadly in line with last winter. The highest daily demand periods are most likely in December and January. **Across the whole season, there is approximately a 5% chance that National Demand could exceed 48 GW on at least one day.**	Weather-corrected peak demand was comparable with, but slightly above, recent winters. Peak National Demand was 47.3 GW and occurred on 5 January.	Page 10
We expect the lowest levels of generation availability in early December.	Generation was higher than forecast in the *Winter Outlook 2025/26* report for much of the winter. This was driven by high wind generation, while conventional generation unavailability was broadly in line with the published unavailability factor.	Page 11

2.2 Demand review

Demand observed during winter 2025/26 was well captured by the credible range published in the *Winter Outlook 2025/26* report.

As shown in Figure 2, daily peak demand was broadly within the forecast range throughout the season. Winter 2025/26 was generally milder than average, with approximately 67% of days warmer than seasonal normal. However, a few short-lived cold spells led to relatively high demand at times, most notably on 5 January when peak National Demand reached 47.3 GW, the highest National Demand since March 2018.

Figure 3 shows that weather-corrected peak demand was largely in line with our expectations, although generally slightly higher than our central forecast in the first two weeks in January.

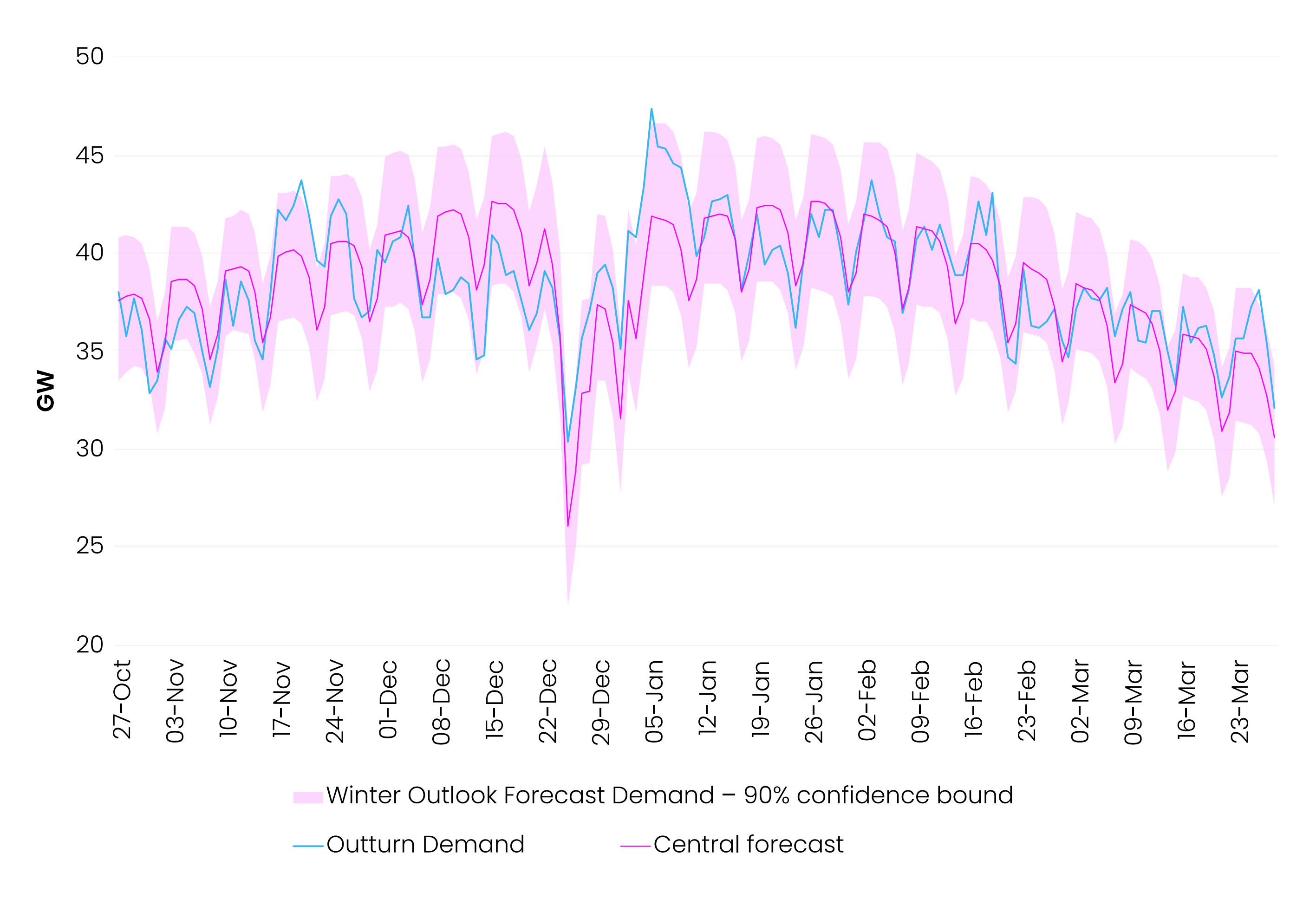


Figure 2: National Demand during winter 2025/26

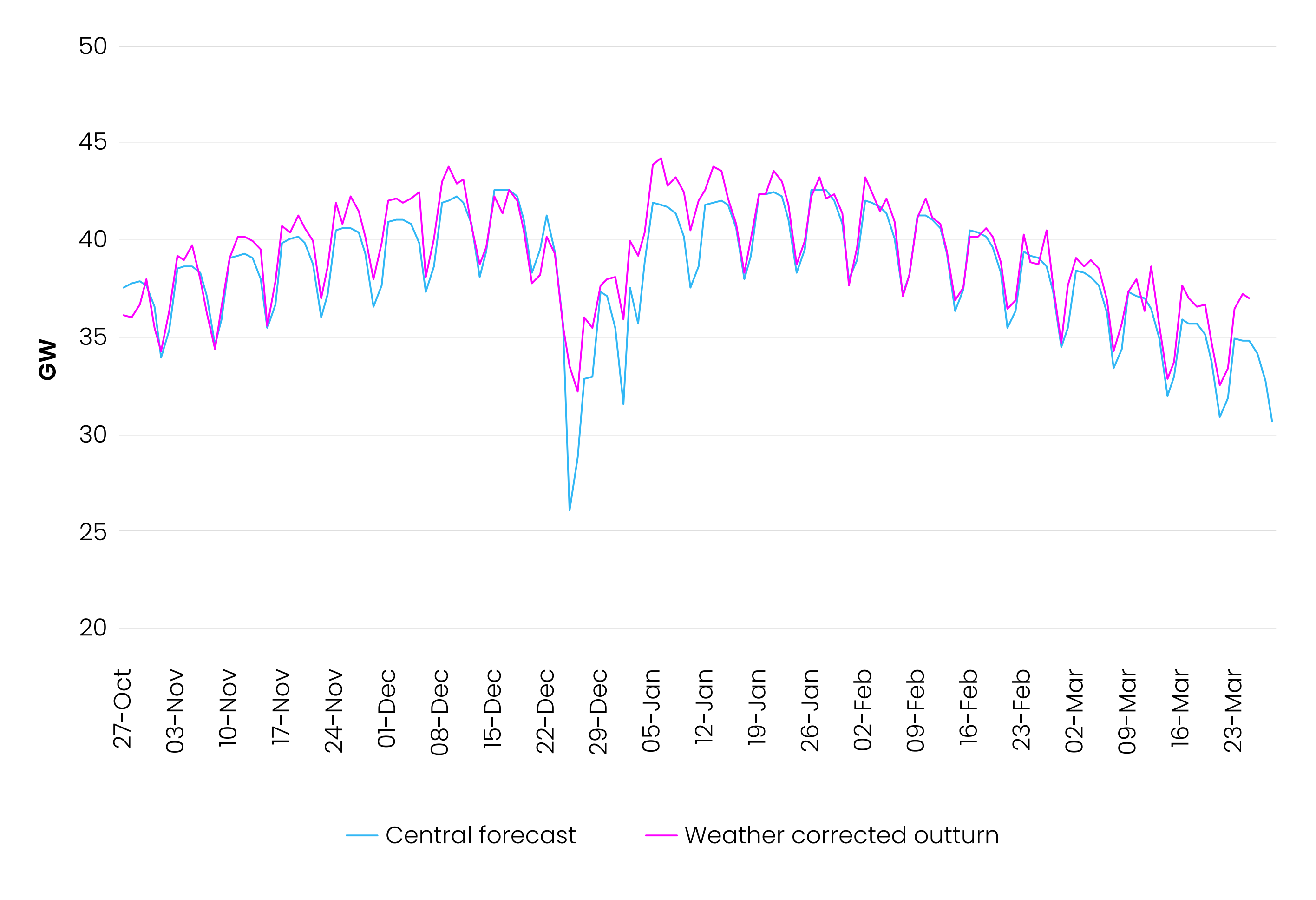


Figure 3: Actual and forecast weather corrected daily peak demand for winter 2025/26

2.3 Supply review: wind variability and demand interactions

Wind generation

Effectively planning for the potential range of weather-dependent variables, over extended periods, requires the production of a confidence range. The pink plume in Figure 4 shows the modelled variability of wind generation (90% confidence level) against actual wind output during peak hours. Wind output was higher than the central forecast in our assessment on 69% of days, against an expected value of 50%, and exceeded the forecast range on 11% of days, against an expected value of 5%. This was due to an unusually high number of high-wind-speed days throughout the season. New records for wind generation were set on 11 November at 22.7 GW, 5 December at 23.8 GW and 25 March at 23.9 GW.

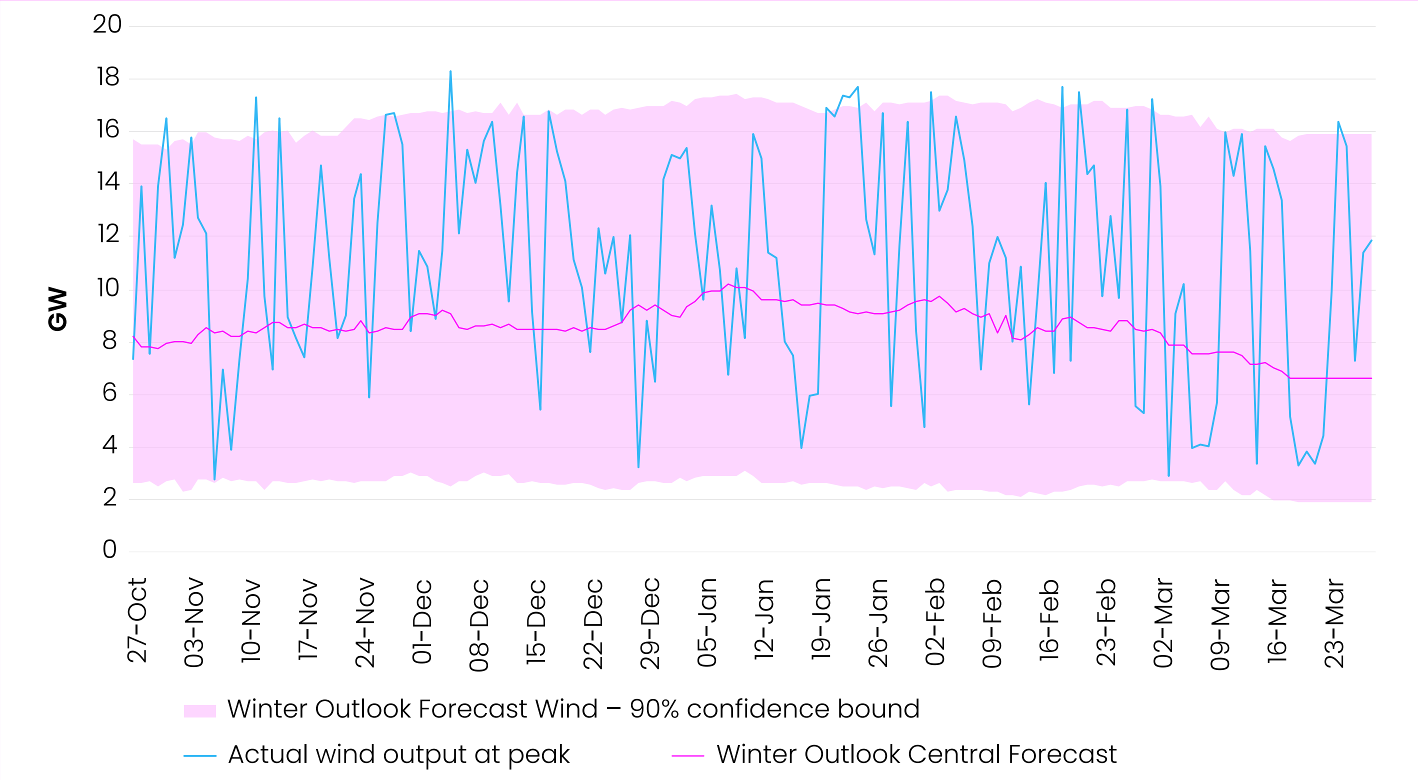


Figure 4: National wind generation during winter 2025/26 at the 90% confidence range against actual wind output during peak hours

Demand net wind

The range of weather patterns experienced throughout winter leads to large variability in the requirement for non-wind generation. Windier-than-normal conditions throughout the winter led to low demand net wind and lower levels of non-wind generation required to meet demand. Figure 5 shows the forecast range (90% confidence level) of demand required to be sourced from non-wind generation. Due to the combination of mild temperatures and high wind output, the requirement for non-wind generation was below our central forecast on 72% of days, against an expected value of 50%, with 8% of days falling below the forecast range, against an expected value of 5%. There were no instances of demand net wind exceeding our forecast.

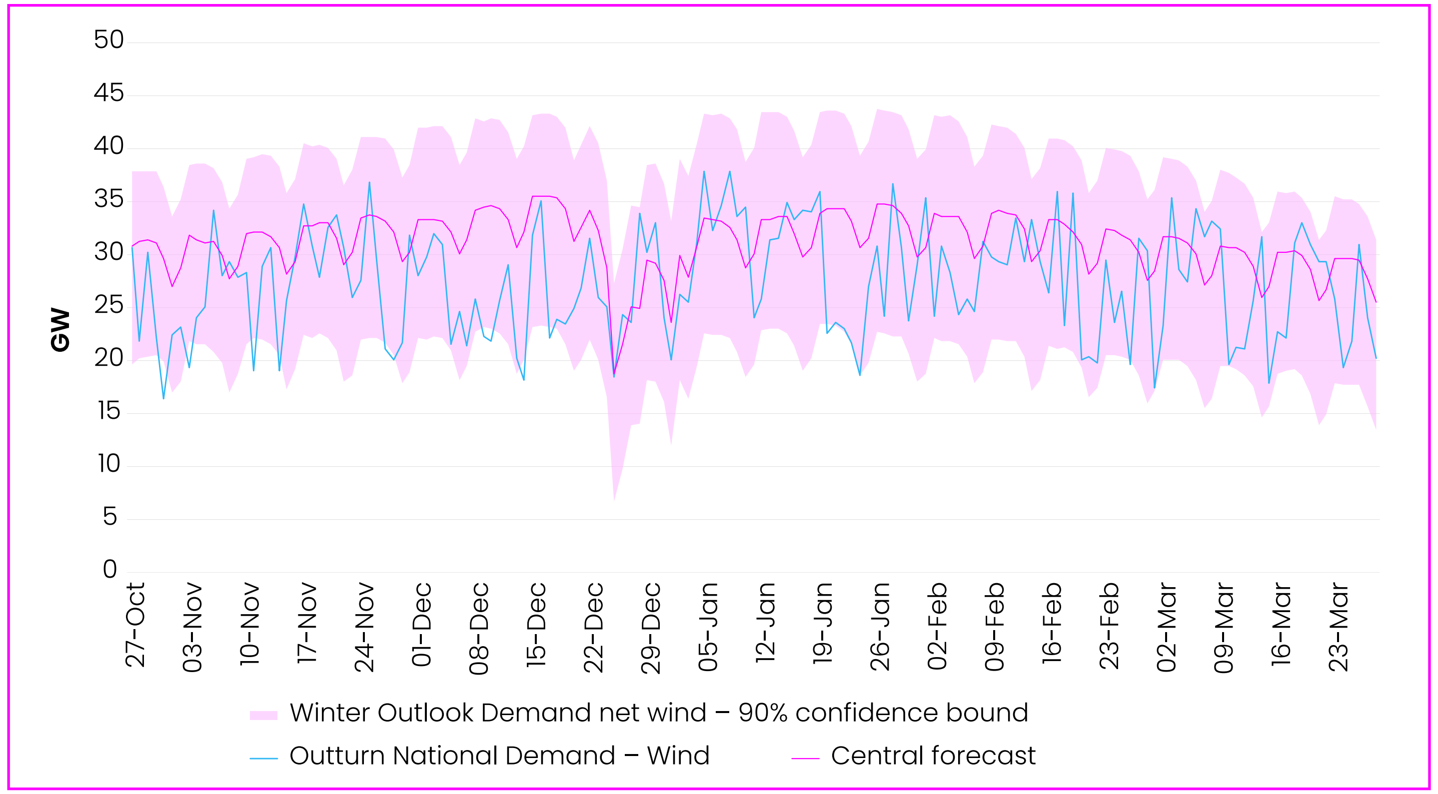


Figure 5: Forecast and actual National Demand net of wind generation during winter 2025/26 at the 90% confidence range

2.4 Supply review: conventional generation

Conventional generator availability

Available conventional generation was largely below the *Winter Outlook 2025/26* forecast range throughout the winter (see Figure 6). This was driven by several generators extending outages or scheduling new planned outages during low demand periods associated with mild and windy weather. Availability recovered during periods of high demand driven by cold spells, notably in early January.

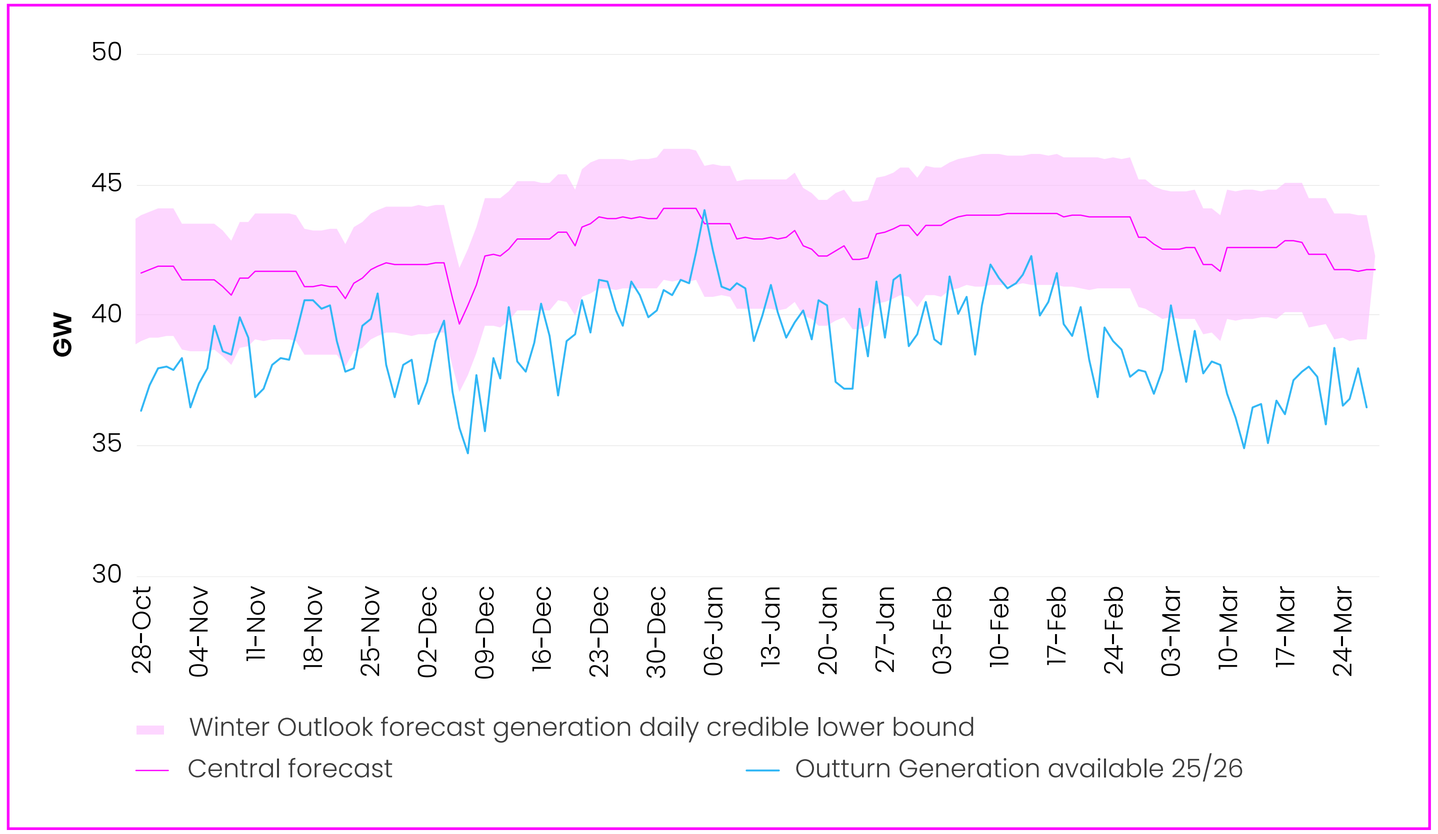


Figure 6: Forecast and actual conventional generation availability for winter 2025/26

Unavailability factor methodology

Planned outages are included in our supply assessment based on the latest market submissions from generators. Actual availability may deviate from this schedule due to the rescheduling or extension of existing outages, or new planned or unplanned outages occurring during the season. We use historical variation from expected availability to inform our forecast of how available supply is likely to change throughout the winter. A generator's maximum capacity is calculated as the highest output achieved for two consecutive half-hour periods over the past year. This is consistent with the approach used in our operational surplus modelling. Table 1 shows how unavailability for each technology compared with the expected value detailed in our accompanying data workbook for the *Winter Outlook 2025/26*.

Table 1: Forecast and actual unavailability during winter 2025/26

Fuel Type	Forecast Rate in Winter Outlook Report	Actual Unavailability Rate for Winter 2025/26
CCGT	6.4%	8.1%
Nuclear	12.3%	8.1%
OCGT	7.4%	5.3%
Storage	3.2%	6.0%
Biomass	14.9%	6.4%
Hydro	11.8%	15.5%
Weighted Average	**11.0%**	**11.0%**

3

Interconnectors and Energy Markets

3.1 How did interconnector flows compare to expectations in the *Winter Outlook 2025/26* report?

What we said in the *Winter Outlook 2025/26* report	What happened
Imports into Great Britain to be available when required.	Sufficient interconnector flows were available to meet reserve requirements at all times during the winter.
We expect Great Britain to be a net importer from Continental Europe over the winter, as baseload forward power prices in key markets show a premium in Great Britain for the winter period.	Great Britain was a net importer from Continental Europe across the winter. Day-ahead prices in Great Britain traded at a premium to key continental markets across winter, particularly with France. As expected, this led to Great Britain being a net importer across the continental interconnectors.
There will be periods when exports flow from Great Britain to Europe, including over some peak periods, when we have sufficient operational surplus.	There were numerous periods when Great Britain exported to Europe during the winter, including during peak demand periods including several periods on 5 January, the highest peak demand day of the winter.

3.2 Interconnector review

Adequate supply in interconnected markets resulted in interconnector imports into Great Britain during the winter.

At the time of publishing the *Winter Outlook 2025/26* report, Great Britain's power prices were trading at a premium to France but were in line with other connected markets. Along with the results of long-term interconnector capacity auctions, this led us to expect Great Britain to be a net importer of power across the interconnectors over the winter, particularly from France. As shown in Figure 7, this trend continued across the winter, with Great Britain's power prices trading at a premium to French prices for most of the season. This was largely due to high levels of nuclear generation in France. We also anticipated a typical pattern of exports to the Integrated Single Electricity Market (ISEM) for Ireland and Northern Ireland.

Figure 8 shows how this typical premium affected interconnector flows during the winter, with Great Britain a net importer from Continental Europe across almost all periods. Outturn flows reflected the expected strong import bias from France and the more variable pattern of flows – based on prevailing conditions – to other markets. As anticipated in our operational surplus modelling, Great Britain was a strong exporter to Ireland and Northern Ireland.

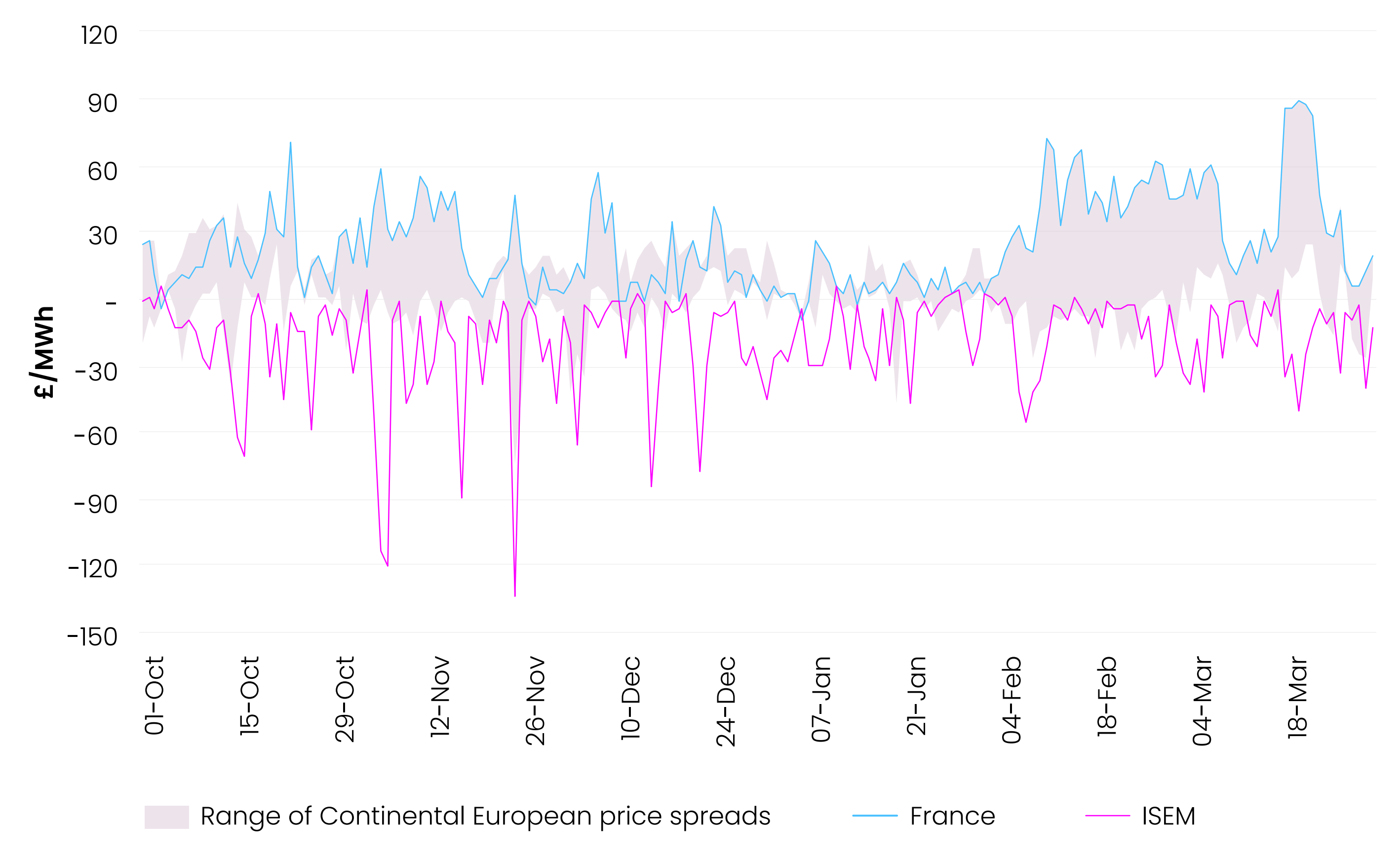


Figure 7: Day-ahead price spread for Great Britain compared with border countries in winter 2025/26 (positive values indicate Great Britain was more expensive)

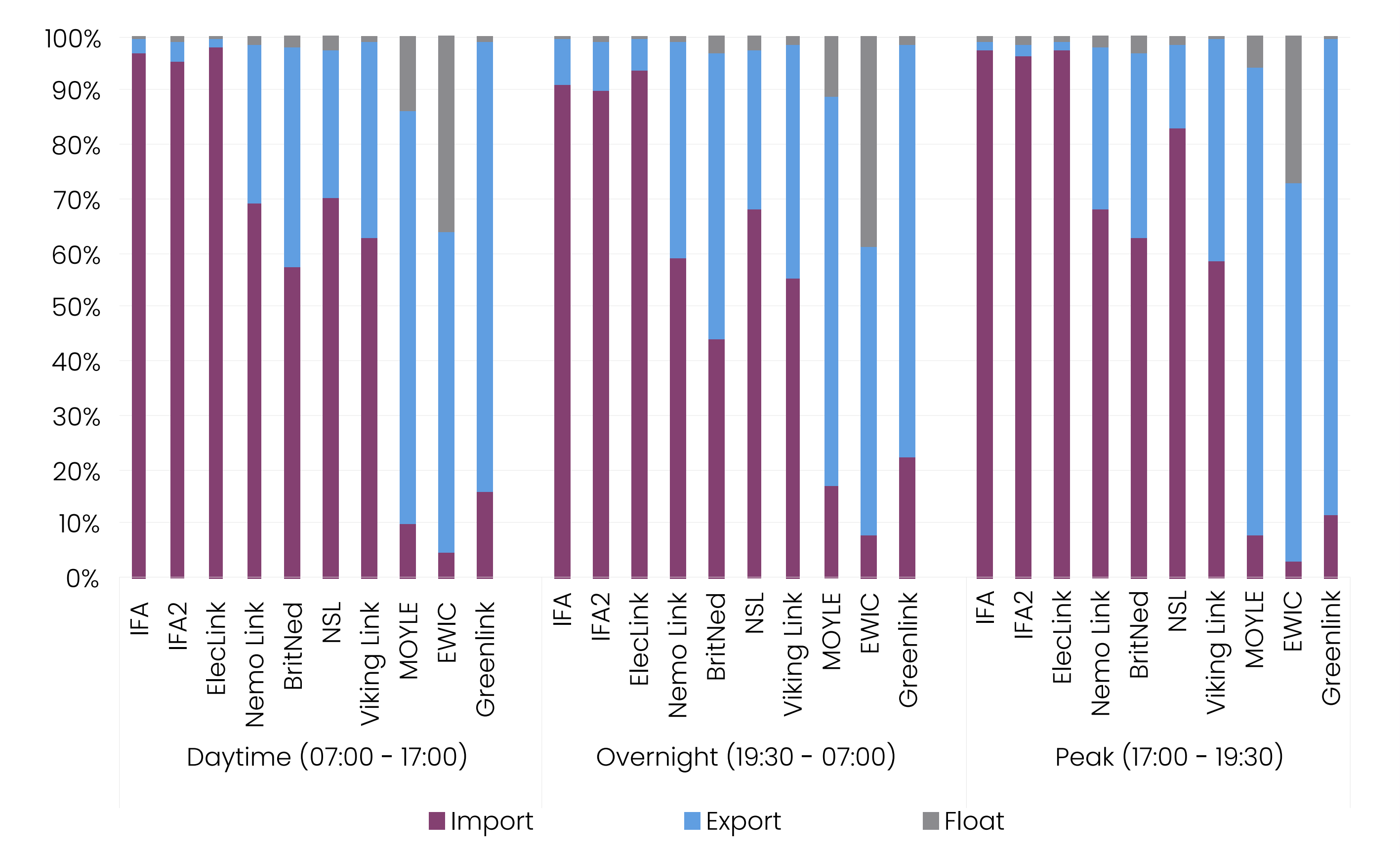


Figure 8: Proportion of imports and exports by interconnector by time of day for winter 2025/26

4

Consultation

4.1 Winter review and outlook consultation

This annual consultation gathers stakeholder feedback on our outlook documents to inform our analysis for the upcoming *Winter Outlook 2026/27* report.

Your views on market conditions and reflections on our plans and preparations help us better understand the challenges and opportunities facing the electricity system in the coming winter. This consultation also allows us to test how useful the outlook documents are and identify ways to improve how we engage with market participants.

We will share any comments or information received in response to this consultation with the relevant teams across NESO.

Consultation questions

Winter Review and Consultation

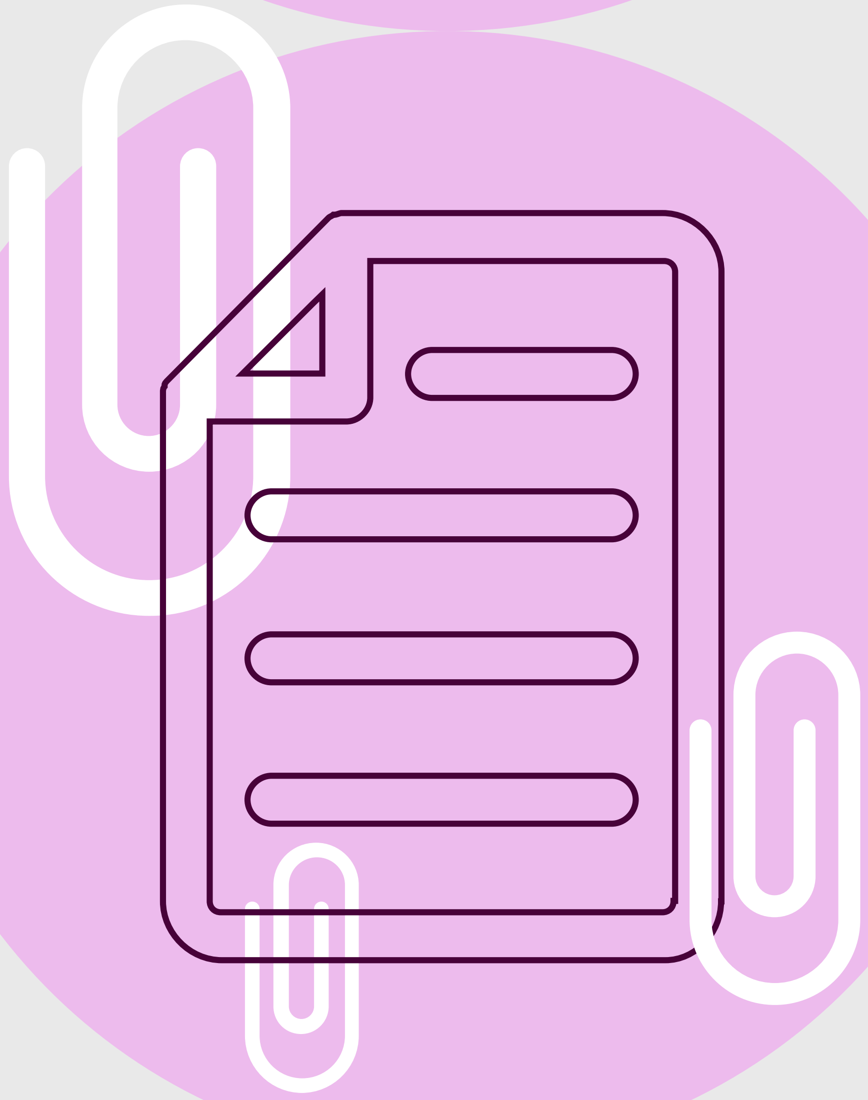
1. What do you use the *Winter Review and Consultation* report for? What information in the report is most useful to you?
2. Is there anything else that could be included in the *Winter Review and Consultation* report?
3. How could the *Winter Review and Consultation* report be improved to increase its value?
4. Do you have any other feedback on this report or the wider suite of outlook documents?

Winter Outlook

5. What would you like to see included in the *Winter Outlook 2025/26* report, in terms of content or modelling?
6. Do you have any general queries or concerns relating to winter 2025/26?

Please send your views and responses to marketoutlook@neso.energy.

Appendices



Appendix A: Relationship between Types of Demand

Daily peak demand can vary significantly. Historically, peak winter demand has occurred between the first week of December and the first week of February, but never during the Christmas fortnight or on a weekend. National Demand will depend on weather (temperature, wind speed, radiation), calendar effects (time of day, day of week, bank holidays, school holidays) and – as the role of demand flexibility grows – market factors (from time-of-use tariffs to our Demand Flexibility Service). Observed Transmission System Demand (TSD) will depend on additional market factors, such as price differences between interconnected markets. Figure 11 shows the relationship between types of demand.

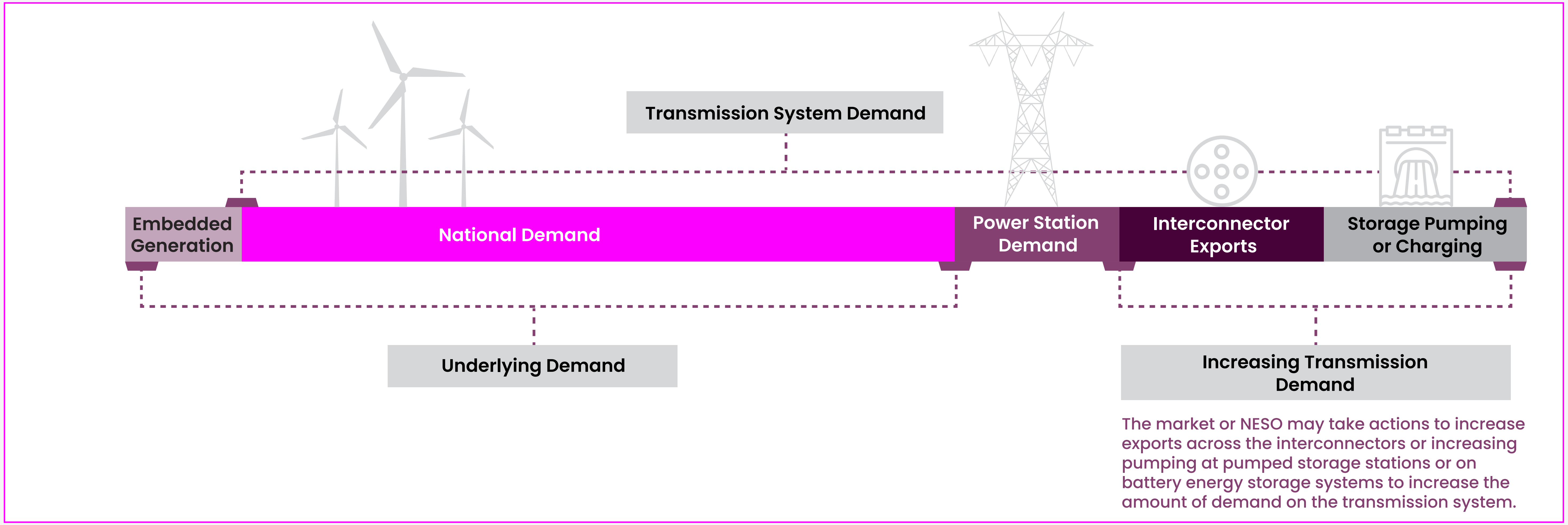


Figure 9: Relationship between types of demand

Note: The published initial transmission system demand outturn (ITSDO) does not currently include charging from battery storage.
The updated reporting methodology for ITSDO will include this contribution.

Appendix B: Map of Interconnectors Linking with Great Britain

Modelling interconnector contributions

We undertake pan-European market modelling to assess the ability of neighbouring markets to support Great Britain's adequacy during periods of tighter margin. Under our Base Case, we assume that interconnector imports will be available in line with Capacity Market (CM) agreements.

This expected contribution is determined after consideration of a range of sensitivities in which the supply and demand balance in European markets is shifted to assess the impact of potential uncertainties. These sensitivities are run over 34 historical weather years and account for randomly selected plant outages to assess both the plausible range of weather-dependent energy system variables and uncertainties in plant availability.

In total, the full set of modelling results comprises approximately 17,000 full-year simulations and almost a million focused on tight periods. These sensitivities allow us to explore a wide range of credible drivers of tight conditions that influence interconnector flows, including prolonged low-wind periods coinciding with cold spells across Europe.

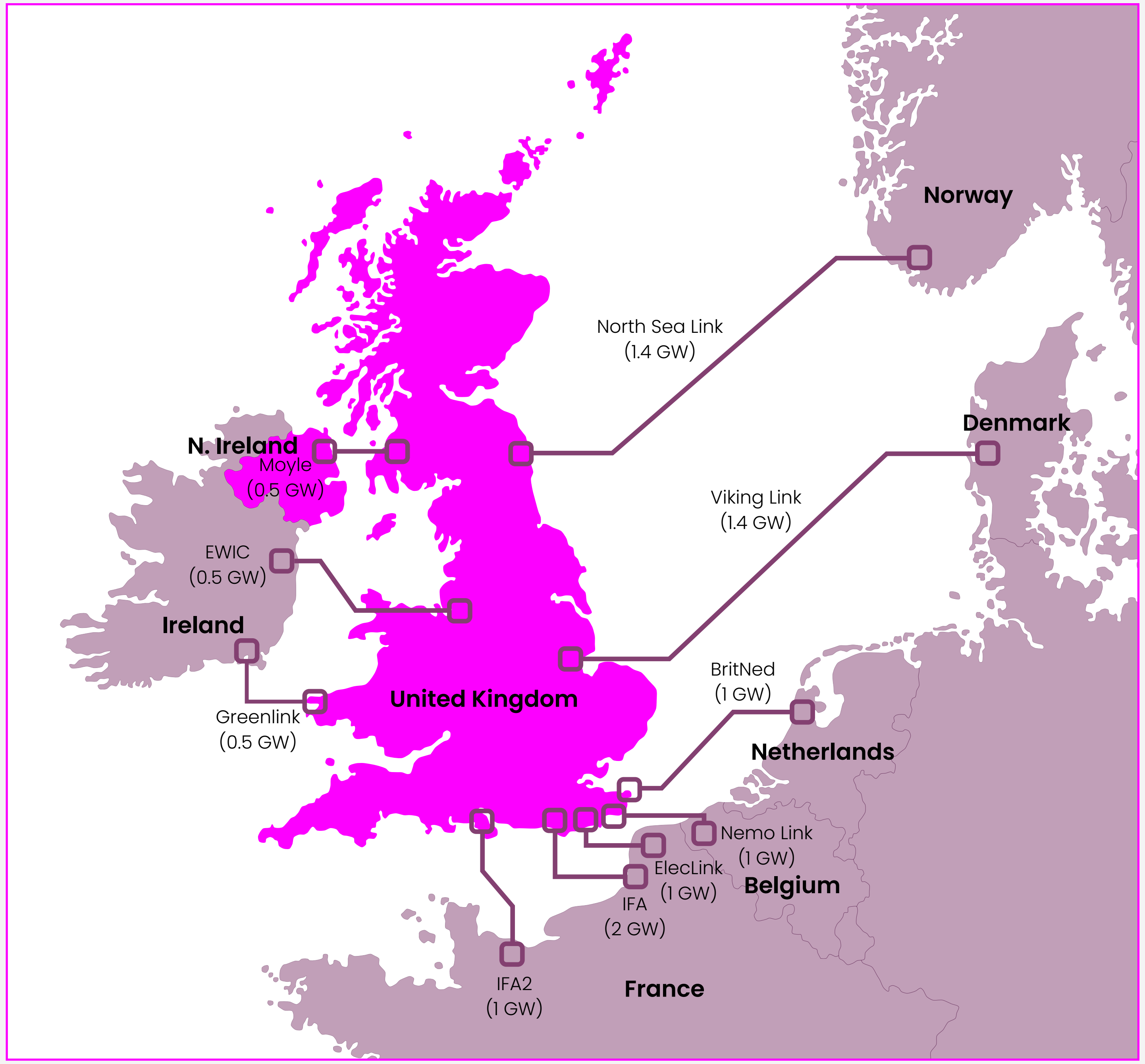


Figure 10: Interconnectors operational this winter

Appendix C: Capacity Market Notices (CMNs) and Electricity Margin Notices (EMNs)

As NESO, one of our key roles is to reliably operate the electricity transmission system, enabling the flow of electricity around the country from where it is generated to where it is needed. To do this, we ensure the supply of electricity from the market always matches demand. This process is known as 'balancing' the system, and it is managed by our national control room.

Our control room experts have a range of operational tools at their disposal to maintain this balance – the primary one being the Balancing Mechanism (BM). Balancing effectively and efficiently requires continuous communication with the electricity market.

On rare occasions, when supply and demand cannot be balanced through the normal mechanisms, we issue formal communications to the market. These messages are known as system notices and include both CMNs and EMNs. A CMN is an indication to all market parties with a capacity market obligation that they should be ready to supply their committed capacity.

While CMNs and EMNs are based on the same fundamental data (such as generator availability and demand forecasts, they differ in how they are triggered, the thresholds at which they are issued, the treatment of constraints and their lead times.

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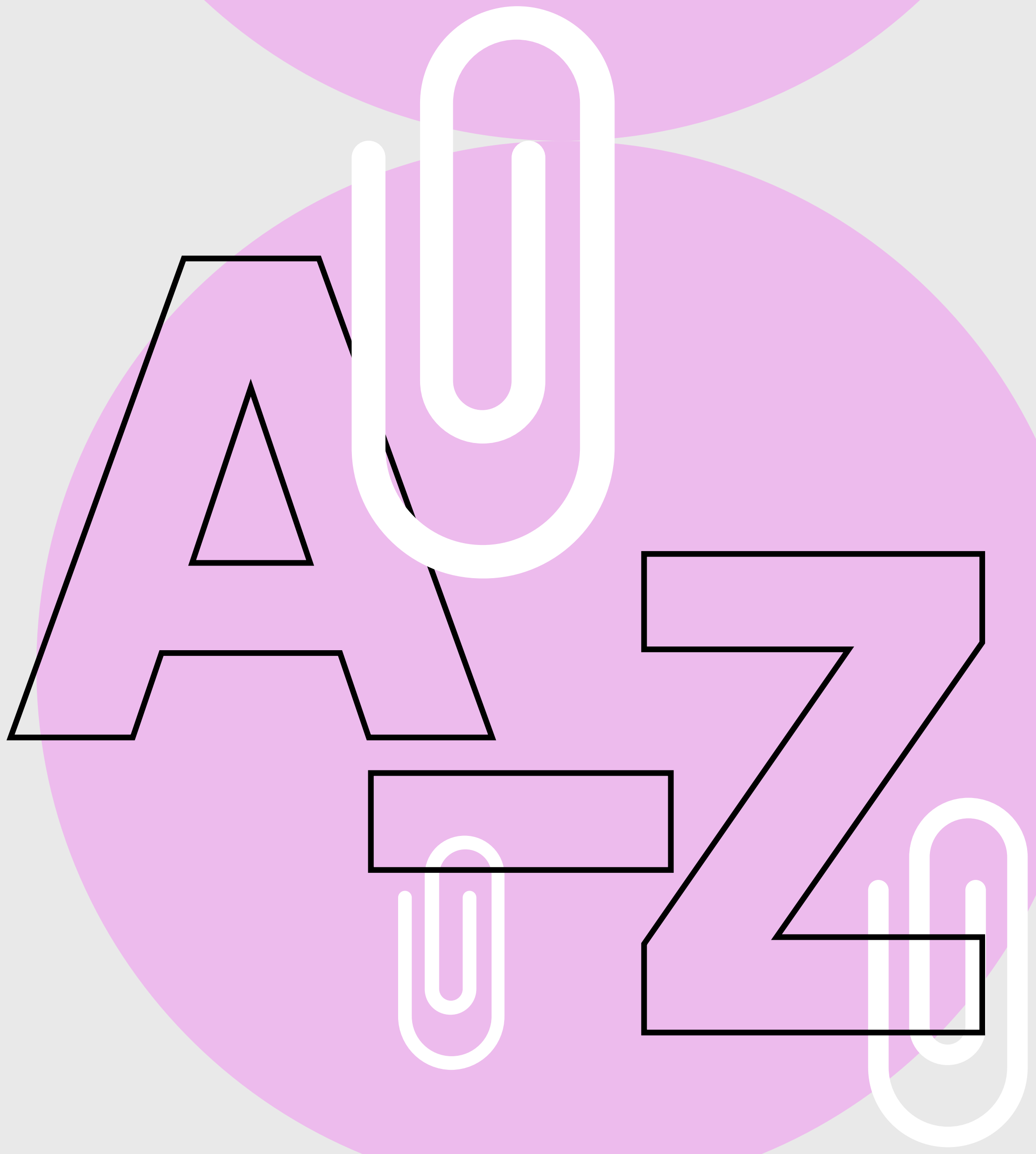
Table 2: Differences between CMNs and EMNs

Aspect	Capacity Market Notices (CMNs)	Electricity Margin Notices (EMNs)
Trigger	Automatically issued four hours ahead of real time based on specific market data relating to the system's operating margin.	Issued manually by the control room based on operational and engineering judgment.
Threshold	Triggered when the volume of available generation above the sum of forecast demand and the Operating Margin is less than 500 MW. This threshold is set in the Capacity Market Rules.	No fixed threshold; issued based on expert assessment, which can result in some variance compared to CMNs.
Constraints	Do not account for transmission system constraints that may prevent capacity from being delivered.	Account for transmission system constraints and operational conditions.
Lead time	Issued four hours ahead of the anticipated shortfall.	Can be issued at any time, typically from the day-ahead stage onwards.

Glossary



Balancing Mechanism
The Balancing Mechanism is NESO's primary tool to balance electricity supply and demand on Great Britain's network. It allows participants to set prices for which they will increase or decrease their output. The Electricity National Control Centre (ENCC) use the BM to procure the right amount of electricity on a minute-by-minute and second-by-second basis.

Baseload electricity
A market product for a volume of energy across the whole day (the full 24 hours), or a running pattern of continuous operation for inflexible power sources such as nuclear.

BritNed
An electricity interconnector between Great Britain and the Netherlands. It is a bidirectional interconnector with a capacity of 1 GW.

Capacity Market (CM)
The CM is designed to ensure security of electricity supply. It provides a payment for reliable sources of capacity, alongside their electricity revenues, ensuring they deliver energy when needed.

Capacity Market Notice (CMN)
Based on CM margins which are calculated from whole system demand and whole system capacity. For more information about margins and margin notices, visit What are system notices? on our website.

Combined Cycle Gas Turbine (CCGT)
A power station that uses the combustion of natural gas or liquid fuel to drive a gas turbine generator to produce electricity. The exhaust gas from this process is used to produce steam in a heat recovery boiler. This steam then drives a turbine generator to produce more electricity.

Distributed (embedded) generation
Any generation or storage that is connected directly to the local distribution network, as opposed to the transmission network. It includes combined heat and power schemes of any scale, wind generation, solar and battery units. This form of generation is not usually directly visible to NESO and reduces demand on the transmission system.

East West Interconnector (EWIC)
A 0.5 GW interconnector that links the electricity transmission systems of Ireland and Great Britain.

ElecLink
A power interconnector through the Channel Tunnel providing a transmission link between the UK and France with a capacity of 1 GW in either direction.

Enhanced Actions
Enhanced actions are part of NESO's order of actions for managing security of supply and are used if everyday actions are insufficient.

Electricity Margin Notice (EMN)
Based on operational margins which are calculated from transmission system demand and transmission system capacity. For more information about margins and margin notices, visit What are system notices? on our website.

Forward prices
The predetermined delivery price for a commodity, such as electricity or gas, as decided by the buyer and the seller of the forward contract, to be paid at a predetermined date in the future.

Greenlink
A 0.5 GW interconnector between Ireland and Great Britain commissioned in early 2025.

GW Gigawatt (GW)
A measure of power. 1 GW = 1,000,000,000 watts.

Interconnector
Electricity interconnectors are transmission assets that connect the market in Great Britain to other markets including continental Europe, Ireland and Northern Ireland. They allow suppliers to trade electricity between these markets.

Interconnexion France-Angleterre (IFA)
A 2 GW interconnector between France and Great Britain commissioned in 1986.

Interconnexion France-Angleterre 2 (IFA2)
A 1 GW interconnector between France and Great Britain commissioned in 2021.

Moyle
A 500 MW interconnector between Northern Ireland and Scotland.

MW Megawatt (MW)
A measure of power. 1 MW = 1,000,000 watts.

Nemo Link
A 1 GW interconnector between Great Britain and Belgium.

North Sea Link (NSL)
A 1.4 GW HVDC subsea link from Norway to Great Britain.

Operational surplus
The difference between the level of demand (plus the reserve requirement) and the generation expected to be available, modelled on a week-by-week or day-by-day basis. It includes both notified planned outages and assumed breakdown rates for each power station type.

Outage
The annual planned maintenance period, which requires a complete shutdown, during which essential maintenance is carried out.

Outturn
Actual historic operational demand from real-time metering.

Peak electricity
A market product for a volume of energy for delivery between 7am and 7pm on weekdays.

Reserve requirement
To manage system frequency and respond to sudden changes in supply and demand, NESO maintains reserves. These reserves, known as positive and negative reserves, help to increase or decrease supply and demand as needed. Positive reserve, or headroom, allows for additional generation or reduced demand, while negative reserve, or footroom, enables lower generation or increased demand. These reserves are made available across all generators synchronised to the system, ensuring stability and reliability in the power grid.

Seasonal normal conditions
The average set of conditions we could reasonably expect to occur. We use industry-agreed seasonal normal weather conditions, which reflect recent changes in climate conditions rather than being a simple average of historic weather.

Unavailability factors
A calculated value to account for unexpected generator unit unavailability including faults, short notice planned outages, restrictions or losses. Forecast unavailability factors are applied to the operational data provided to NESO by generators .

Viking Link
Viking Link is a 1.4 GW high voltage direct current (DC) electricity link between the British and Danish transmission systems, connecting at Bicker Fen substation in Lincolnshire and Revsing substation in southern Jutland, Denmark.

Weather-corrected demand
The outturn demand once the assessed impact of the weather has been removed. This is calculated by constructing a 30-year average of each relevant weather variable for each week of the year. This is then applied to linear regression models to calculate what the demand would have been with this standardised weather.

Get in Touch

We welcome your views on the *Winter Review and Consultation 2025/26*.
You can email us at marketoutlook@neso.energy and we will get back to you.

You can write to us at:

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The *Winter Review and Consultation 2025/26* is part of a suite of documents published by NESO.

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