Public

Forecasting Stakeholder Focus Group

11th November 2026
11:00 – 12:30



Welcome

Microphones are on mute

for a 2 minute silence to recognise a moment of remembrance, giving attendees the opportunity to pause and reflect on those impacted by conflict.

We will begin at 11:02

NESO
National Energy System Operator

Agenda for Today's Session

Time	Agenda Item	Item Details	Presenters
11:02 – 11:15	Welcome & Setting the Scene	• Purpose of today's session & how to participate • Recap on forecasting at NESO	**John Walsh**, Forecasting Manager
11:15 – 11:20	Energy Forecasting Strategy & Delivery Plan	• Progress against Energy Forecasting Delivery Plan • Upcoming stakeholder-facing activities over the next year	**John Walsh**
11:20 – 11:35	New National Demand Forecasting Models	• Update on new National Demand Forecasting Models, how they will be used & the anticipated impact and benefits, both for NESO & Industry	**John Walsh**
11:35 – 11:55	NESO Published Forecasts	• **Interactive breakout:** Help us build out the information we provide. We want to understand how you currently use forecasts published by NESO, & what 'informative' forecasts mean to you	**John Walsh**
11:55 – 12:05	Grid Supply Point (GSP) Activity	• Overview of new GSP innovation project exploring the factors influencing GSP outturns & the accuracy of these • New GSP Products, their use, and impact	**Barbara Teszler**, Product Manager
12:05 – 12:10	Modelling of Small, Embedded Generation	• Proposed approach to modelling small, embedded generation, with a call for industry collaboration	**Barbara Teszler**
12:10 – 12:15	Managing Complex Weather Conditions	• How improved wind forecasting supports increasingly complex weather conditions	**John Walsh**
12:15 – 12:25	Q&A	• Ask your questions to our SMEs	**John Walsh**
12:25 – 12:30	Closing Remarks	• Future Engagement Opportunities • Keeping in contact	**John Walsh**
12:30 Meeting Close			

Introductions

John Walsh, Energy Forecasting Manager



Barbara Teszler, Product Manager - GSP Future Capability



Audience Participation



There is time allocated to Q&A **towards the end of the session** - we will take all questions during this part of the agenda to ensure we get through all pre-prepared content.



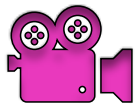
Please post any questions you have for our speakers in the Microsoft Teams chat ensuring to list both your **full name and organisation -** this will enable us to follow up with you after the webinar if necessary. During the Q&A section, you can also use the 'raise hand' function and come off mute to ask your question.



Out of scope questions will be forwarded on to the appropriate NESO team or expert for a direct response. We may ask you to contact us by email to ensure we have the correct contact details for the response.



If you have any further questions after the Focus Group, please get in contact with us at **box.balancingprogramme@neso.energy**

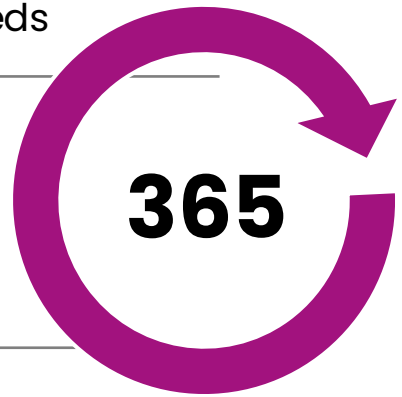


Today's Forecasting Focus Group will be **recorded and published online** after the session, along with the slide pack.

NESO
National Energy System Operator

Recap on the Role of the NESO Forecast Team

	Timescales	Frequency
National Demand (As per Grid Code definition)	• Within day • Day ahead • 2DA & 7DA • 13 Weeks ahead • 2-52 Weeks ahead	• 3 x daily, 24 x daily, 48 daily • 3 x daily, 24 x daily, 48 daily • Daily • Daily • Monthly, or as per needs
Wind Power Metered & Non-metered	• Within day – 14 days ahead	• 24 x daily
Solar Power Metered (new) & Non-metered	• Within day – 14 days ahead	• 24 x daily
GSP forecasts (Demand, Wind & Solar)	• Within day – 13 Weeks ahead	• 6 x daily, plus 24 x daily
Reactive power (MVAr)	• Within day – 13 days ahead • 2DA – 13 Weeks ahead	• Daily • Daily

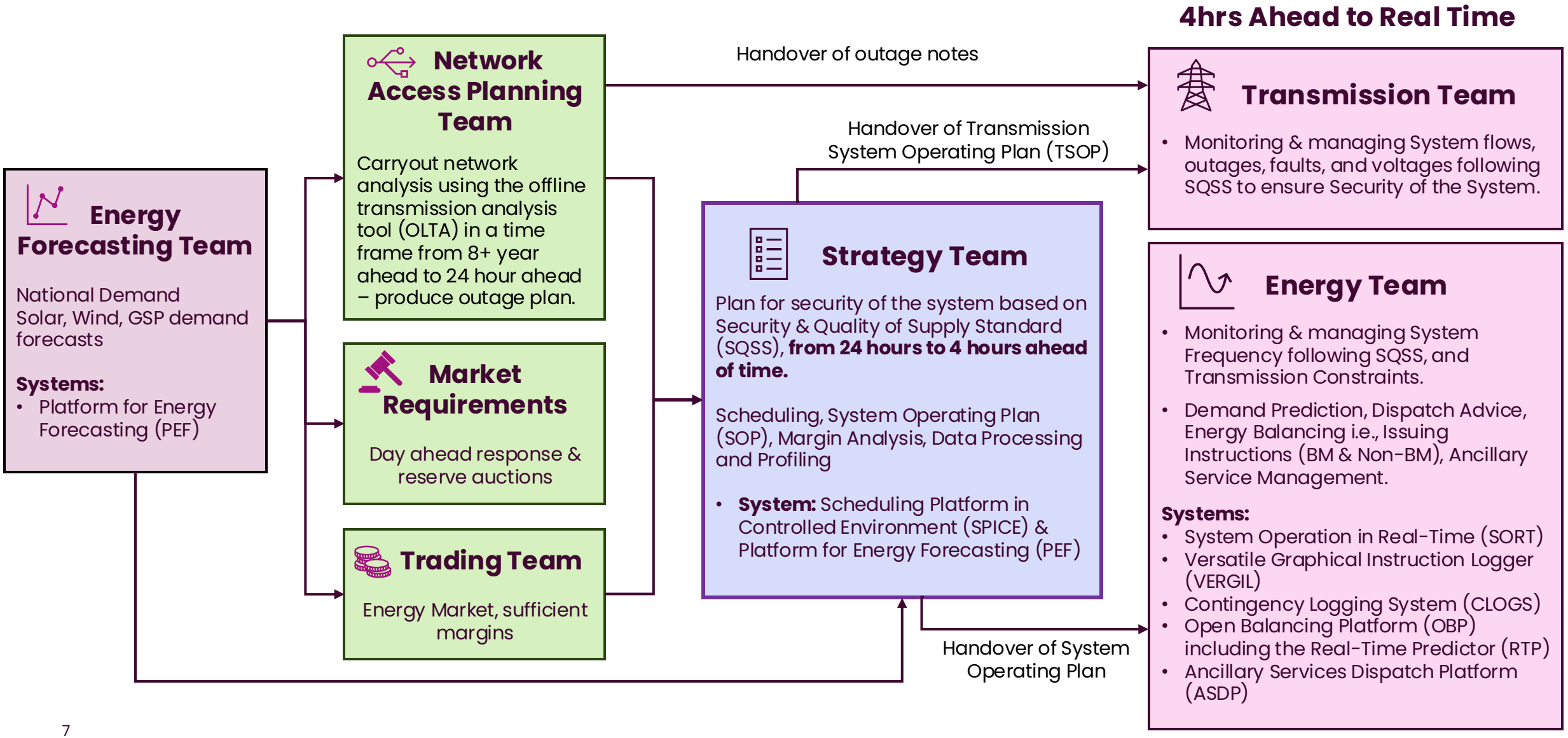


Recap on the Role of the NESO Forecast Team

	Timescales	Frequency
Transmission Losses	• Retrospective/On request	• Monthly • Yearly
TV Pick-ups (ENCC notification)	• Within day • Day ahead	• Daily
Special event forecasts (Demand forecasts, Demand profiles & TV Pick-ups) e.g. Eclipse 2026	• Within day • Seasonal	• On request
Customer Support (Publish new data and respond to queries from Data Portal, Extranet and BMRS)	• Data dependant	• Daily
Media Support (Response to media stories, support for bulletins, data validation, etc.)	• Story/theme dependant	• Daily
Innovation Projects	• Project dependant	• Weekly

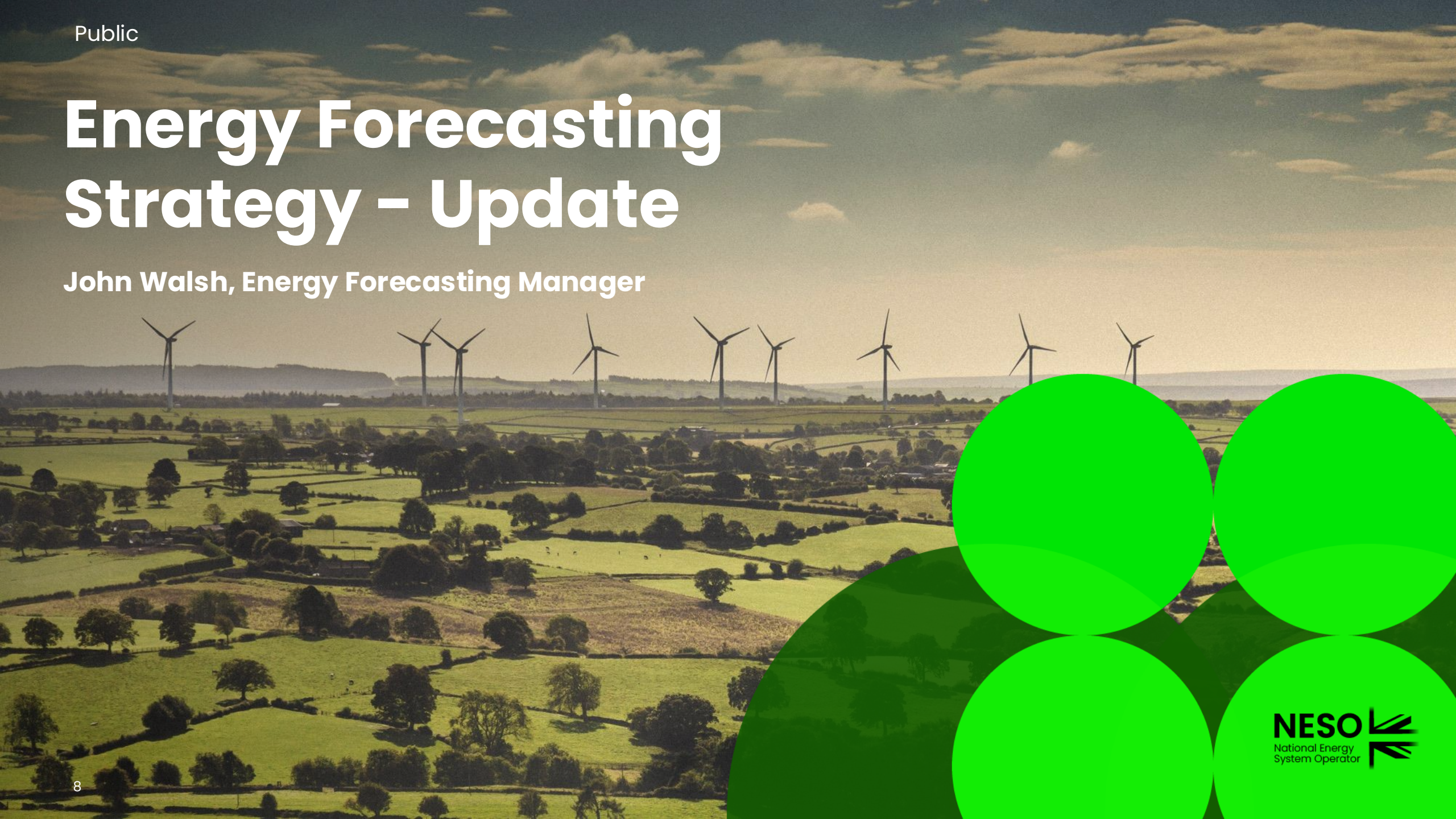
Public

In Context: How are these Forecasts used?



Energy Forecasting Strategy - Update

John Walsh, Energy Forecasting Manager



NESO
National Energy System Operator

Energy Forecasting Strategy & Delivery Plan

Following consultation on a draft, NESO's **Energy Forecasting Strategy and Delivery Plan** was published in March 2026.

- Details of upcoming consultations will be shared to this group
- Progress update (next slide)



Available at: www.neso.energy/what-we-do/systems-operations

Delivery Plan Progress

Deliverables for FY27

Complete

- New machine learning models for short-term wind and solar power forecasting / ongoing
- Produce wind, solar and demand forecasts by NWP ensemble member to 14 days ahead
- Develop a PEF user interface for operational forecasters and internal stakeholders / ongoing
- Establish KPI for GSP reactive power (MVAr) forecasts

Underway

- Enhanced Demand Forecasting
- PEF integration of third-party forecasts and trial of a third-party NWP supplier.
- Deployment of Dynamic Reserve Setting tool
- Publish prediction intervals for national demand, wind and solar

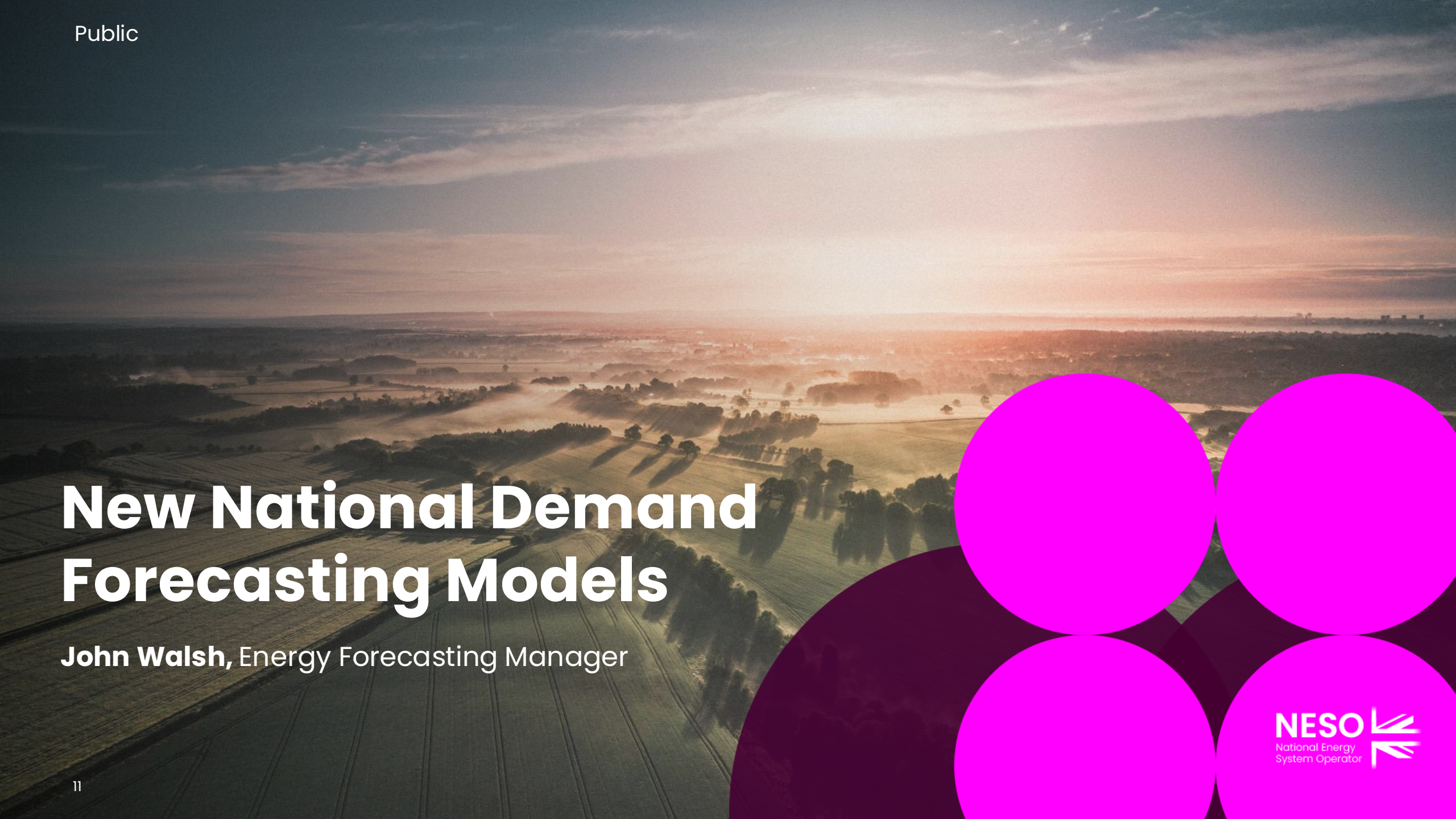
Planned

- Annual review of Energy Forecasting Strategy



System Change Element:
Forecasting & Predictions Capability Journey

NESO
National Energy System Operator



New National Demand Forecasting Models

John Walsh, Energy Forecasting Manager

NESO
National Energy System Operator

New National Demand Products

New National Demand (ND) models are available and awaiting final integration to Elexon.

The first model is planned for release in December 2026.

We are moving away from Cardinal Point* forecasts and historic-date modelling to having increased granularity, with our new technology stack supporting further automation.

0-2 day ahead forecasts will be created and published (Elexon-Insights & NESO Data Portal) from a new source.

Additional National Demand models will come online thereafter, and NESO will publish a composite forecast.

Terminology Explainer

- Electricity demand fluctuates during a day depending on how much energy people, businesses and industries are using at that moment in time. As this electricity demand goes up and down, we get characteristic peaks and troughs, with some of these peaks and troughs appearing every single day at similar times. These we call cardinal points and are the points during the day that we forecast demand for.

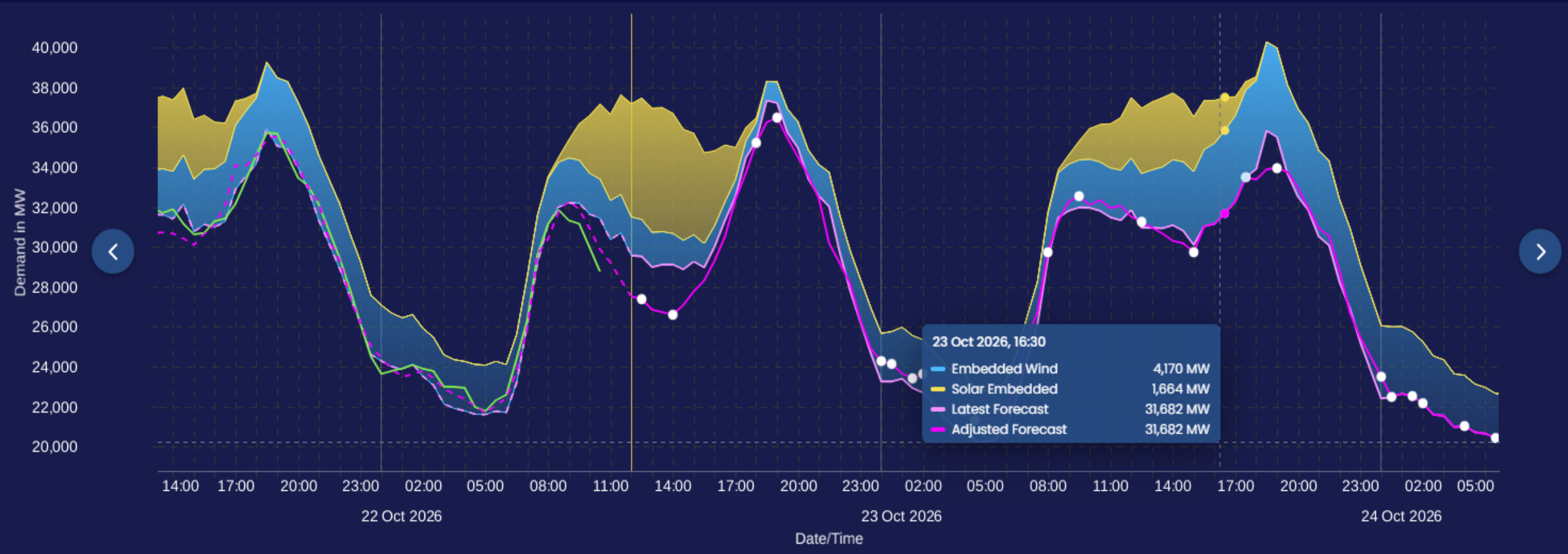
NESO
National Energy System Operator

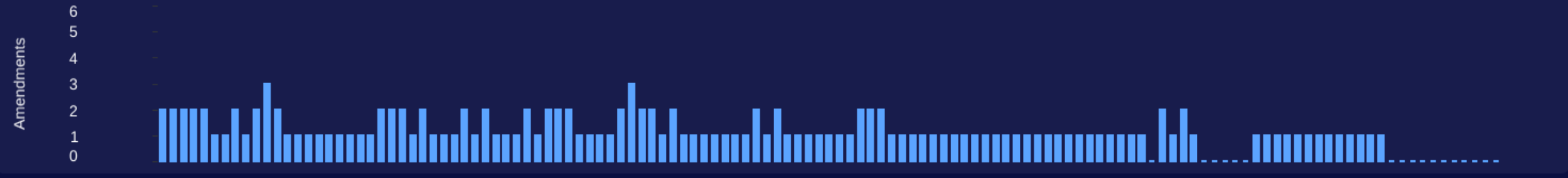
NESO
National Energy System Operator

Last forecast update: 11:58 22 Oct 2026

Historical outturns | SPICE file

Actual demand | Adjusted forecast | Latest forecast | Virtual demand | Solar embedded | Wind embedded | Cardinal points | DA 0900





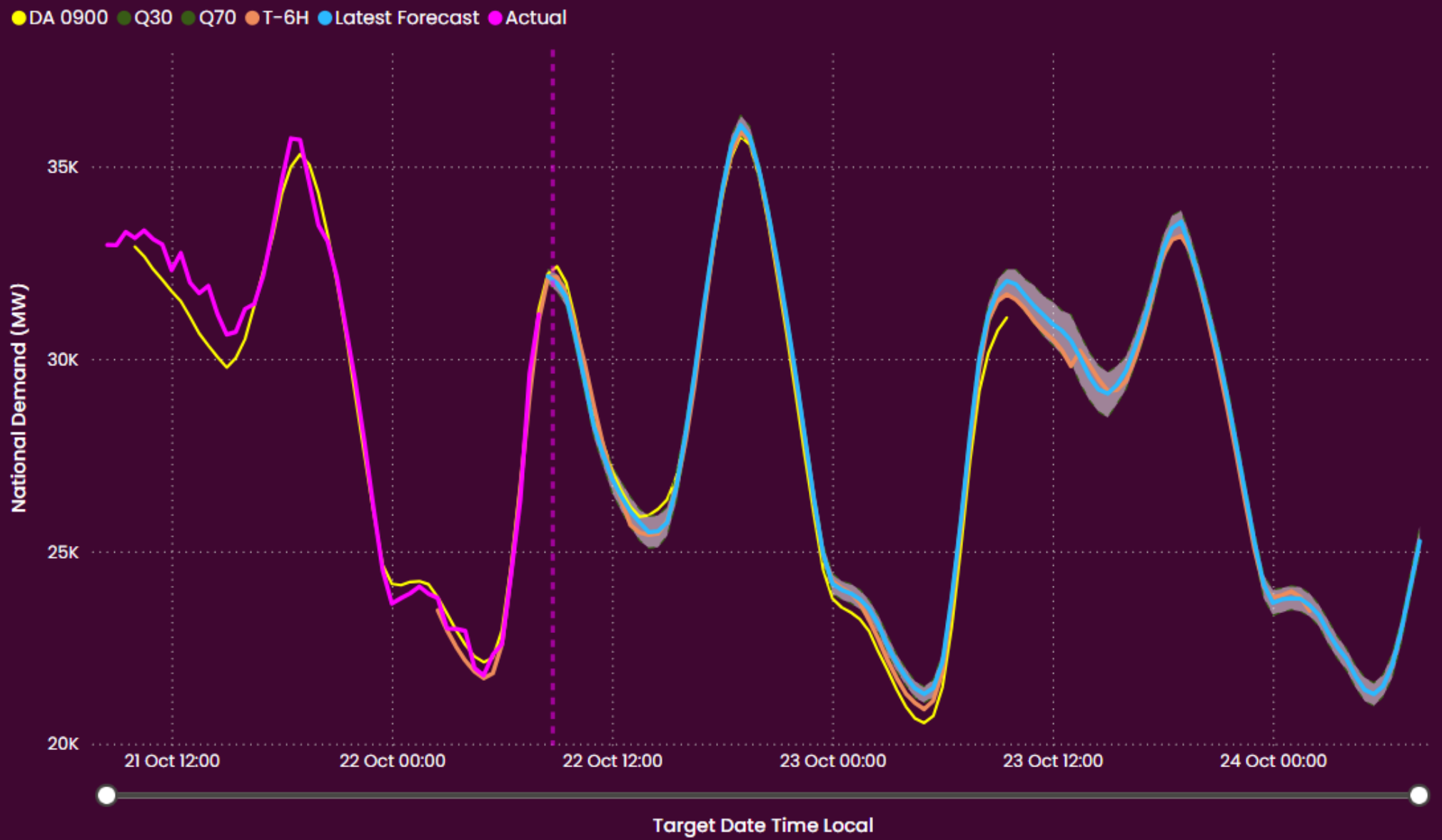
National Demand Forecast TFT

30 minute Interval Ending

22/10/26 08:00
Latest Forecast (local time)

22/10/26 07:40
Latest Weather (local time)

This is a Development dashboard only - use with caution. Contact Energy Forecasting Team with queries



Date-Time	CP	Type	Demand
22/10 - 05:30	1B	T	22,316
22/10 - 08:00	2F	F	31,151
22/10 - 08:30	2A	P	32,147
22/10 - 12:30	2B	P	26,427
22/10 - 14:00	3B	T	25,497
22/10 - 18:00	3C	P	34,405
22/10 - 19:00	4B	P	36,076
23/10 - 00:00	4C	F	24,162
23/10 - 00:30	1F	F	24,003
23/10 - 01:30	1S	T	23,755
23/10 - 02:00	1A	P	23,508
23/10 - 04:00	04	F	21,738
23/10 - 05:00	1B	T	21,297
23/10 - 08:00	2F	F	30,002
23/10 - 09:30	2A	P	32,027
23/10 - 12:30	2B	P	30,740
23/10 - 15:00	3B	T	29,099
23/10 - 18:00	3C	P	32,826
23/10 - 19:00	4B	P	33,564
24/10 - 00:00	4C	F	23,663
24/10 - 00:30	1F	F	23,753
24/10 - 01:30	1S	T	23,769
24/10 - 02:00	1A	P	23,599

3h error, past 7 days

450 MW

6h error, past 7 days

482 MW

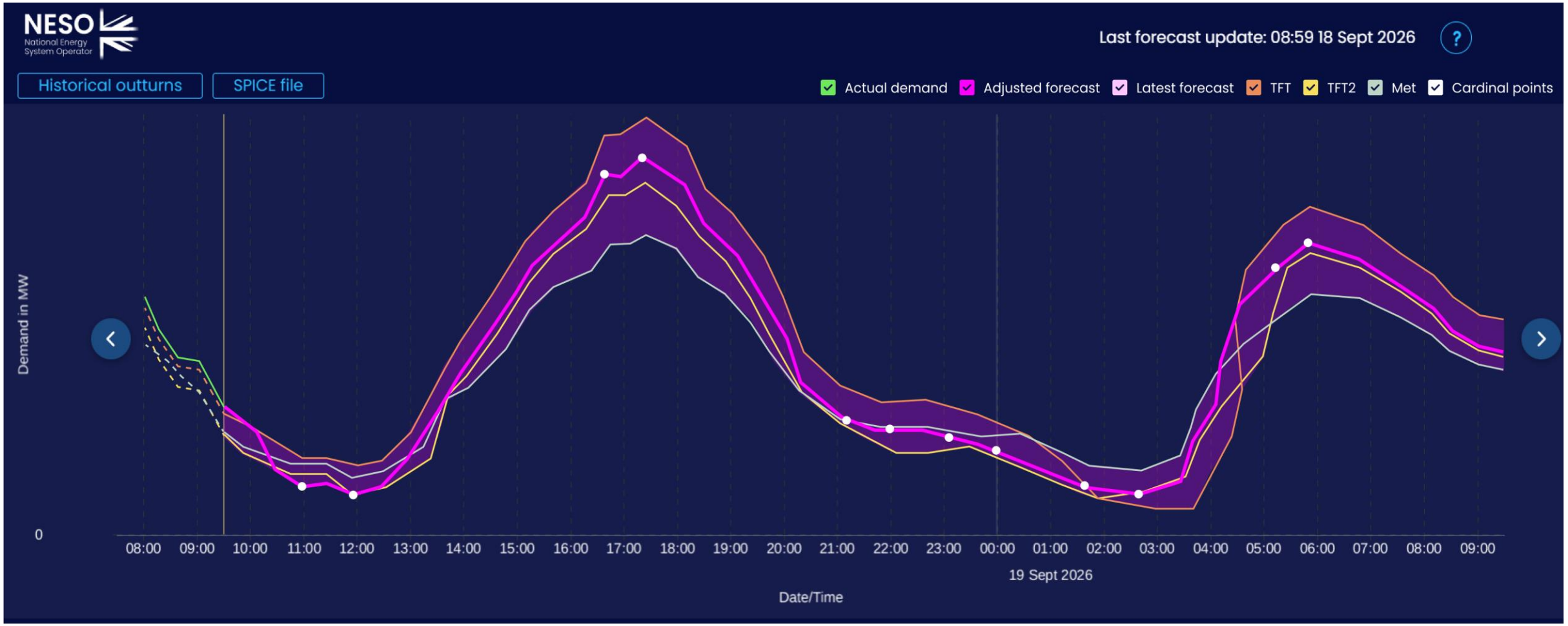
DA 0900 error,

625 M

Zoom In

Future Developments

Note: Image has been created for illustration only



Single forecast constructed from numerous models, can be published along with the expected predicted-interval (risk) range.

Future Developments

Note: Image has been created for illustration only



- Option to publish a single-horizon forecast, from numerous *Forecast* & *Prediction* tools.
- Exploring options on how best to present these dynamic User Interfaces externally.

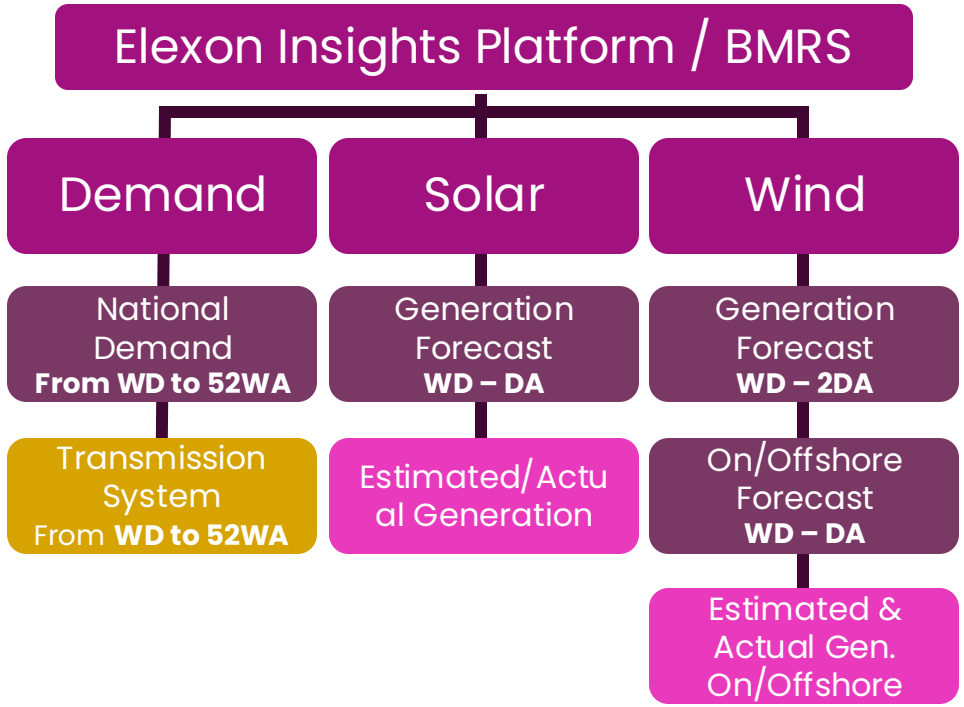


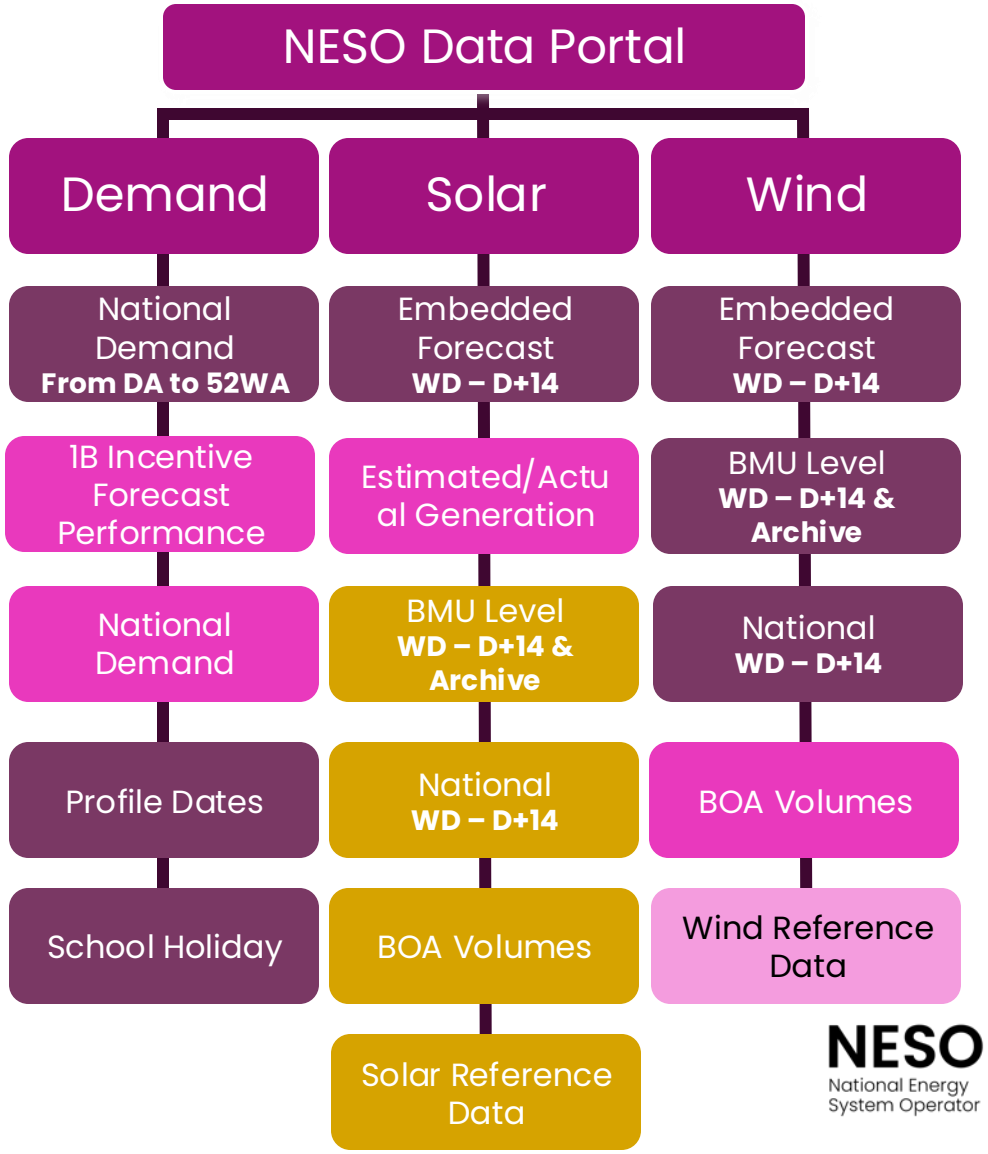
NESO Published Forecasts

John Walsh , Energy Forecasting Manager

NESO
National Energy System Operator

NESO Forecasts: What we Aim to Publish





KEY:
WD = Within Day
WA = Week Ahead
DA = Day Ahead

Forecast | Outturn | Other | Planned changes

Planned updates are expected from the expansion of ***BESS*** and ***Solar*** fueltypes.

NESO National Energy System Operator

Feedback Session

Help us improve the information we publish on our website, making it more useful and valuable to Industry.

We would like to understand:

1. How you currently use forecasts published by NESO
2. What do 'informative' forecasts mean to you
3. What information is missing in these datasets and is there anything else you would like to see?

Activity: Mural & Discussion

Scan the QR code below or click the web link in the Teams Q&A function

NESO National Energy System Operator



Grid Supply Point (GSP) Activity

Barbara Teszler, Product Manager - GSP Future Capability

New GSP Forecasting Product

The Challenge

The energy landscape is changing faster than our current tools can follow.

What we're building

1. Benefiting from new technology for increasingly complex flows
2. Designing a geographically flexible tool
3. Building with innovation and speed of change in mind

What it means for you

1. Improved forecast accuracy
2. Aligning our offering to cater for different user needs, simplifying integration into your system
3. Higher responsiveness to new requirements and grid changes

NESO
National Energy System Operator

Why Model Embedded Generation?

Current State

We forecast what we can see …

- Forecasts are based on net GSP flows.
- Small embedded generation is largely invisible.
- We cannot separate local consumption from local generation.
- Limits understanding of underlying demand & future network needs.

Proposed Approach

If we cannot measure it, model it …

- Use generation forecasts and machine learning to estimate unmetered embedded generation.
- Combine estimated embedded generation with observed GSP flows.
- Derive a better view of true underlying demand.
- Invite 3rd party innovation benefits.

Benefits

Benefits we aim to deliver …

- Improved view of actual consumer demand
- Better network planning & operational decision-making
- Greater resilience as embedded solar & other distributed resources continue to grow
- Cost savings driven by improved system resilience

CALL TO ACTION

Partner with us to solve GSP asset visibility challenges

energy.forecasting@neso.energy

NESO National Energy System Operator

GSP Innovation Project

- **Collaboration:** From the last Forecasting Focus Group session in early June 2026, NESO were approached by an external vendor with an Innovation Project proposal.

- **Purpose of the Project:** The project aims to explore how we better account for the hidden outliers that influence local demand fluctuations.

- **Current Status:** The Proposal has cleared NESO's '*Innovation Board*' first stage gate:
  - There is still work to do, to further refine the project deliverables.
  - We are aiming to start in early 2027, subject to the necessary approvals.

Collaboration is key. We welcome your ideas and opportunities to work together to tackle shared challenges – please do get in contact!



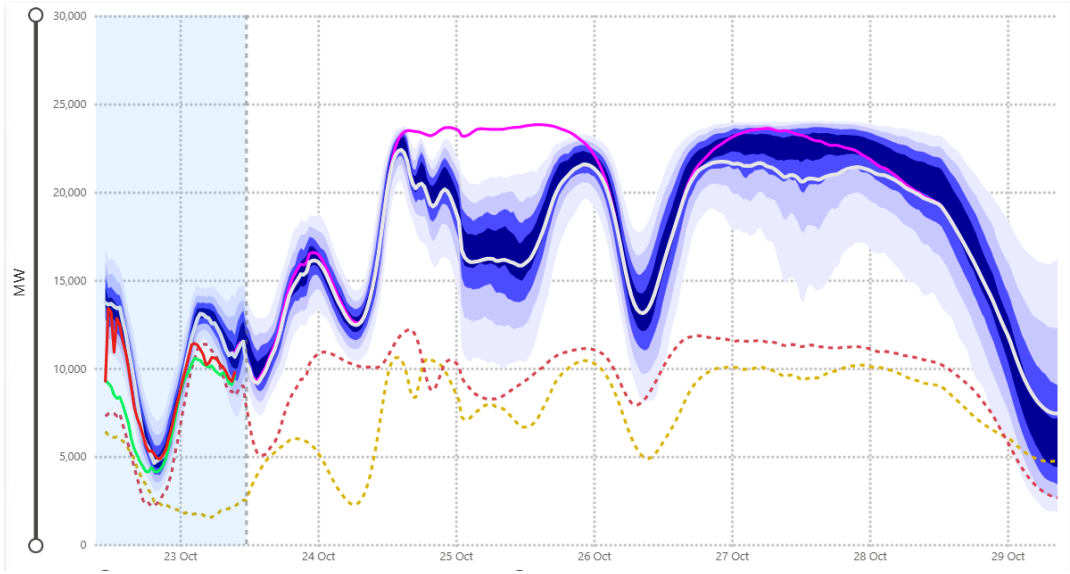


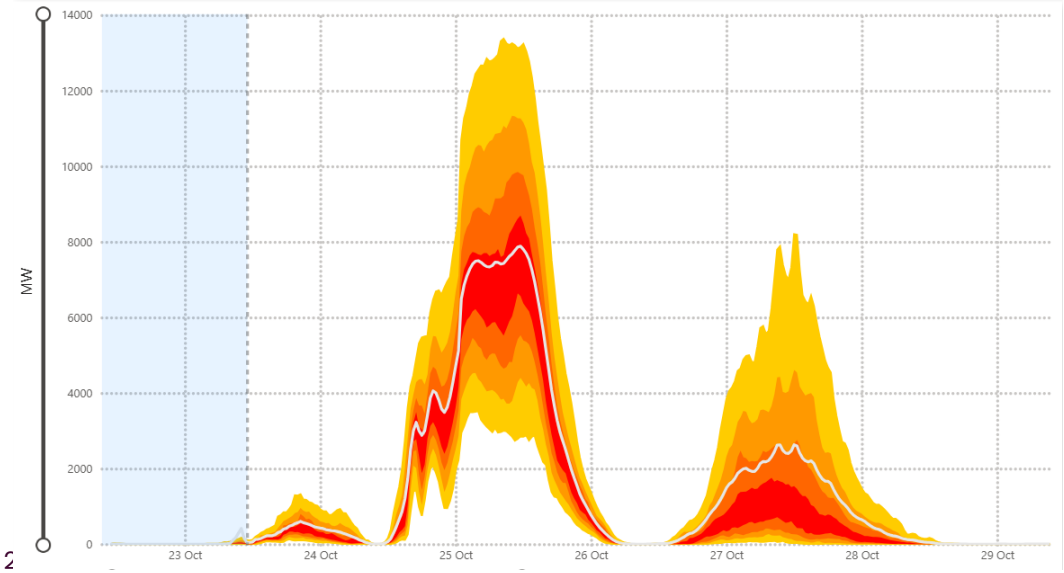
Managing Complex Weather Conditions

John Walsh , Energy Forecasting Manager

NESO
National Energy System Operator

Storm Austen & Storm Boelo





- The biggest impact since Storm Dave in Apr-26.
- Up to 13GW was potentially at risk of cut-out.

Up to 80 mph forecast coastal gusts



Strong winds, heavy rain and high renewable output created a complex operating picture

Improved Wind Forecast Capabilities

NESO wind models and User Interfaces are continually improved.

1. Optimised blend of weather driven forecasts

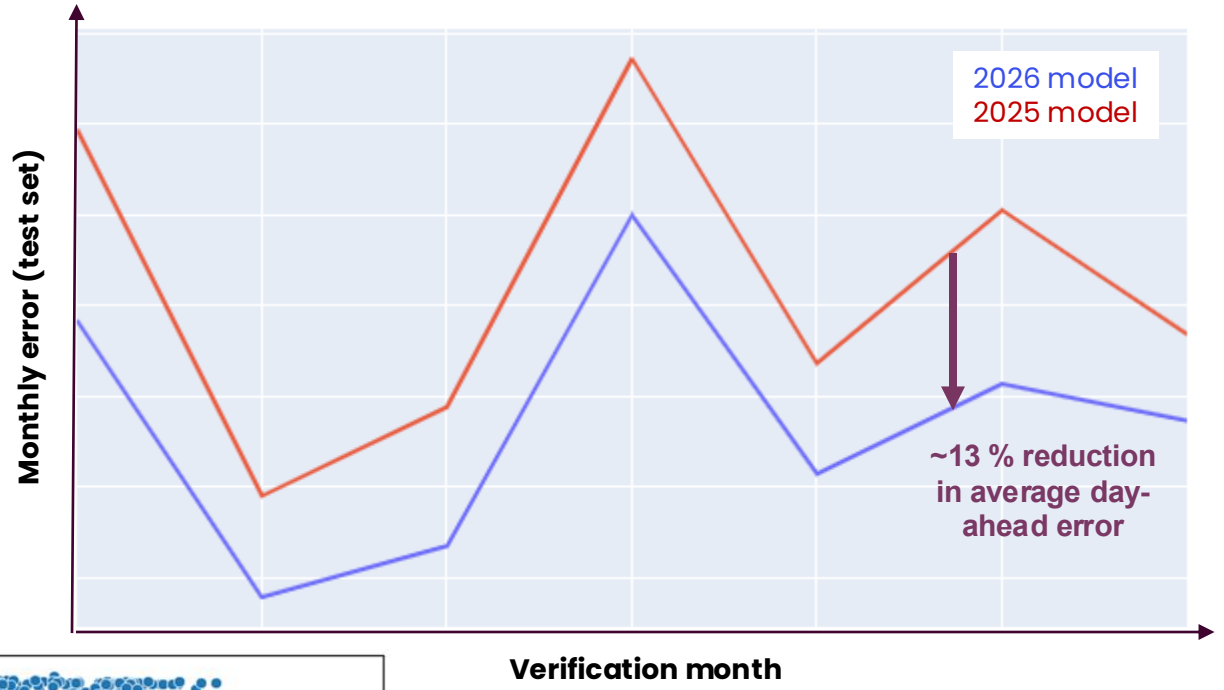
- More optimally blending Met Office and European Centre (ECMWF) based forecasts.

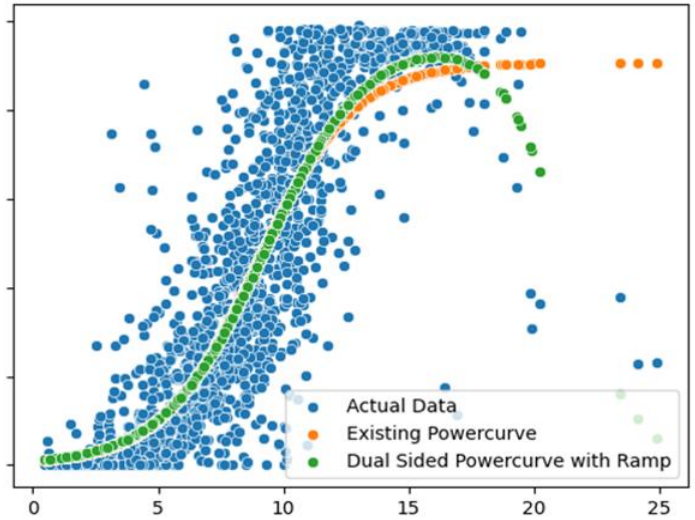
2. New wind model architecture

- Hybrid classical + machine learning (XGBoost).
- Captures more nuanced dependencies with wind speed & direction.

Impact:

- Reduction in day-ahead wind errors
- Reduction in largest errors (including storms)







Q&A

NESO
National Energy System Operator

Public

NESO Balancing Programme Optimisation Stakeholder Focus Group

Date: 16.11.2026

Time: 12:30 – 14:00

Format: Microsoft Teams Online

Join our Optimisation Focus Group to hear the latest updates on the development of balancing optimisation capabilities delivered into the Control Room. During the session, we will:

- Recap on where we are in our journey to improve optimisation capabilities.
- Provide an update on the Future State of Energy (FSoE) model, including the development roadmap and key milestones.
- Share insights from data analysis on how Maximum Delivery Offer (MDO) & Maximum Delivery Bid (MDB) are being used in the Control Room.
- Explore the logic behind the 'Optimisation within a Constraint' capability, including how it operates today and how it is evolving to support additional asset types.

If you are not signed up to our Balancing Programme Optimisation Stakeholder Focus Group and would like to attend this session, please register **here** – a calendar invite will be sent to you within 48 hours of signing up.

If you have any questions, please contact the team at:
box.balancingprogramme@neso.energy

Scan to sign up

NESO
National Energy System Operator

Closing Remarks . . .



We welcome your feedback & questions – please get in contact with us at **box.balancingprogramme@neso.energy**



The recording & slides from today's session will be published on our website and shared with stakeholders signed up to this Forecasting Focus Group.



Sign-up to our other Stakeholder Focus Groups for Optimisation & Technology to receive invites to these sessions - **Balancing Programme Stakeholder Focus Groups**.



If you are interested in a regular meeting with a representative from the Balancing Programme and would like more information, please get in contact using the email address above.



Subscribe to our NESO newsletter **here** **-** please select **Future of Balancing Services inc. Balancing Programme** to keep up to date.

NESO
National Energy System Operator

Public

Forecasting Stakeholder Focus Group

11th November 2026
11:00 – 12:30



NESO
National Energy System Operator