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- Click 'Turn on live captions'

# NESO Operational Transparency Forum

10 December 2025



#### Slido code #OTF

# Apologies for the inconvenience...

Please accept our apologies, we experienced some technical issues last week caused by the continuing migration of NESO IT away from National Grid.

The loss of key webinar functionality required us to set up a new meeting link for last week's live forum, and we have also lost access to the Advanced Questions forms.

We have not been able to access the advance questions sent since 25 November.

Please send us these questions, and any new ones via email to: <a href="mailto:box.nc.customer@neso.energy">box.nc.customer@neso.energy</a> marked clearly as "OTF Advanced questions".

We are working to set up a new Advanced questions form and expect to have this in place when we return after the Christmas break.



### Introduction | Sli.do code #OTF

Slido code #OTF

#### To ask questions live & give us post event feedback go to Sli.do event code #OTF

- Ask your questions as early as possible as our experts may need time to ensure a correct answer can be given live.
- Please do not edit or update your questions after submission as this may result in us answering the first version only. To get the answer you need feel free to submit the revised version as a new question.
- **Please provide your name or organisation**. This is an operational forum for industry participants therefore questions from unidentified parties will not be answered live. If you have reasons to remain anonymous to the wider forum, please use the advance question or email options below.
- The OTF is not the place to challenge the actions of individual parties (other than the NESO), and we will not comment on these challenges. This type of concern can be reported to the Market Monitoring team at: <a href="marketreporting@neso.energy">marketreporting@neso.energy</a>
- Questions will be answered in the upvoted order whenever possible. We will take questions from further down the list when: the answer is not ready; we need to take the question away or the topic is outside of the scope of the OTF.
- **Sli.do will remain open until 12:00**, even when the call closes earlier, to provide the maximum opportunity for you to ask questions. After that please use the advance questions or email options below.
- All questions will be recorded and published. Questions which are not answered on the day will be included, with answers, in the slide pack for the next OTF.
- Ask questions anytime whether for inclusion in the forum or individual response at: <a href="mailto:box.nc.customer@neso.energy">box.nc.customer@neso.energy</a>

**Stay up to date on our webpage:** <a href="https://www.neso.energy/what-we-do/systems-operations/operational-transparency-forum">https://www.neso.energy/what-we-do/systems-operations/operational-transparency-forum</a> (OTF Q&A is published with slide packs)



# Future deep dive / focus topics

Slido code #OTF

### **Today's Deep Dive/Focus Topics**

BMU Control Point obligations – 10<sup>th</sup> December 2025 Enabling Demand-side Flexibility (EDSF) in NESO Markets – 10<sup>th</sup> December 2025

#### **Future**

Balancing Costs: November costs – 17<sup>th</sup> December 2025

### Please note: there will not be an Operational Transparency Forum on 24 and 31 December 2025

Normal service is expected to resume on 7 January 2026 and regular content for the Christmas break will be included in the slidepack

If you have questions/suggestions of areas to cover during above presentations or ideas for deep dives or focus topics you would like us to consider, please send them to us at: box.nc.customer@neso.energy



# **Future Event Summary**



Event	Date & Time	Link
DFS EBR 18 Consultation	10 Dec (17:00) closing date	Consultation documents
Webinar: Dispatch Transparency	15 Dec (11:00-12:00)	Register here
Energy Forecasting Strategy consultation feedback	19 Dec (17:00) closing date	Consultation documents
Response Reform Consultations Launch	19 Dec	Dynamic Response 2025 Consultation Static Firm Frequency Response 2025 Consultation
NESO Dispatch Transparency Forum	28 Jan (09:30)	Register here



#### Slido code #OTF

# Demand Flexibility Service (DFS) EBR Article 18 Consultation launch

The DFS team have launched an EBR Article 18 Consultation seeking industry feedback on several new proposals to evolve the service – click <a href="here">here</a> to listen to a recording detailing the changes and <a href="here">here</a> for all the consultation documents

- 10 November 25 Consultation launched
- 10 December 25 Consultation closes
- w/c 12 January 26 Submission to Ofgem\*
- w/c 16 March 26 Ofgem decision\*
- w/c 30 March 26 Go live\*
- \* Indicative Timeframes

### **New Service Design Proposals**



#### **Baselines**

Introduce an additional Baseline for renewable assets (Wind & Solar)



#### **Demand Turn-Up**

Add a Negative Margin element to the service



#### **Eligibility Rules**

Reduce eligibility criteria from 1MW to 0.1MW



#### **Zones and Primacy**

- Add 5 Locational Zones
- Introduce some form of a Primacy Process



# Dispatch Transparency Forum

Join our Dispatch Transparency Programme team in person for project updates and discussion addressing skip rates.

### Wed 28 Jan

Register

Updates and developments on:

- Root Cause Analysis
- Dispatch Strategic Review
- Materiality cost of skips
- Skip rate reduction target
- Skips behind constraints
- GC0166 storage optimisation

There will be opportunities to ask questions. If possible, please send your questions in advance to <a href="mailto:box.SkipRates@neso.energy">box.SkipRates@neso.energy</a>.

The content will be published afterwards on our **Skip Rates** webpage.





### **Energy Forecasting Strategy - Consultation open**

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#### **General**

The Energy Forecasting team have issued this consultation to all stakeholders to gather feedback and views on its Energy Forecasting Strategy.

Link to document and consultation call

### **Forecasting Strategy consultation**



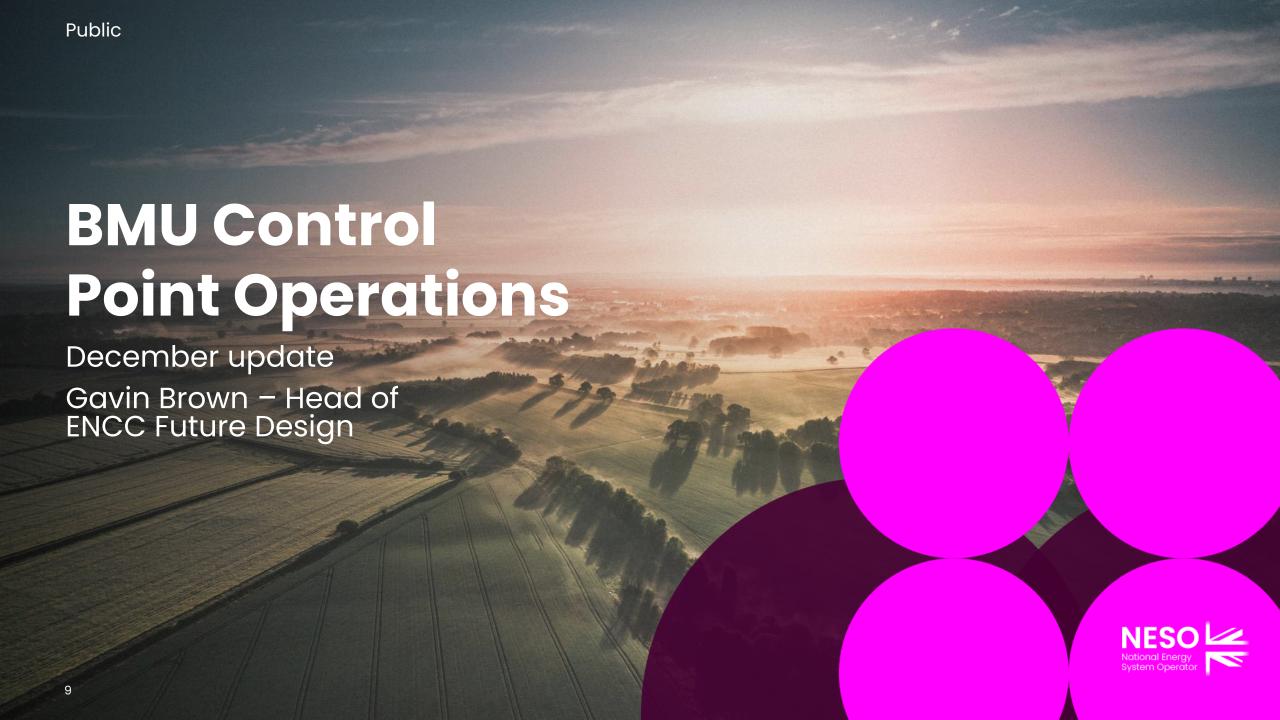
All Stakeholders are encouraged to provide feedback by responding to the three key questions in the document.



Responses should be submitted to Demand.forecasting@neso.energy by 5PM GMT on 19th December 2025.







### **BMU Control Point operations**

Last week, an open <u>letter</u> from Craig Dyke was published, along with an associated <u>guidance</u> note related to operational challenges we have been experiencing with some registered Control Points, urging action from some parties. This is in response to:

### **Increasing occurrences of:**



Out-of-date or incorrect registered phone numbers for some Control Point contacts.



Lack of understanding of Control Point expectations, including not being able to act on or follow instructions as required.

### **Associated operational impact:**



Uncertainty created in balancing actions, and possible risk to security of supply.



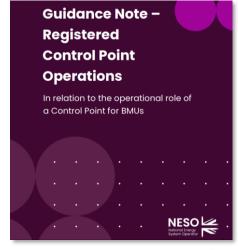
Time wasted in the Control Room chasing details with Control Points and related 3<sup>rd</sup> Parties.



Potential operating cost impact as a result of the above.









### **BMU Control Point operations**

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It is the obligation of Users to ensure continuous compliance with the Grid Code (GC) and Balancing and Settlement Code (BSC). Similarly, it is the responsibility of the BMU Lead Party to ensure all registered information is accurate and up to date. The actions requested in the published letter include:

#### Action 1:

For each BMU, check and validate the operational contact information for associated Control Points on the Single Markets Platform (SMP). This may require coordination between the BMU Lead Party and the Control Point operator. If any updates are required, contact bmu.registration@neso.energy

Note: We are aware there is limited visibility of Control Point information in the Single Markets Platform. This is because the Control Points data is managed directly by NESO to prevent any accidental changes to the data which could cause significant issues in the operational systems. For units registered before SMP go live NESO hold the legacy Control Point information. As part of this exercise, please will Control Point operators email bmu.registration@neso.energy with the Control Point Name, Control Point Operational Contact Number (telephone number able to accept and act on telephone instructions), Control Point owner (company name), Contact person (person with responsibility for Control Point operation - name, email and telephone number) and the team will confirm these match our records.

#### Action 2:

Review published Control Point <u>quidance note</u> and confirm between relevant parties that any registered BMU Control Points can meet these requirements.

#### Action 3:

Within 6 weeks, confirm to NESO that for each BMU you own and/or operate the registered Control Point contact details are accurate, and that the Control Point can meet obligations as documented in the Grid Code and referenced in the published guidance note.

For any questions related to this content, please email .box.nc.customer@neso.energy



If we continue to experience challenges related to this topic, NESO will consider taking appropriate <sub>11</sub> Compliance actions in accordance with the Grid Code Compliance Processes.



### Demand-side Flexibility



- Clean Power 2030 (CP30) sets a vision for Britain to have a secure, affordable electricity system, dominated by at least 95% clean electricity by 2030.
- In our advice to government, NESO has been clear that achieving this vision depends on far more flexibility that we
  have today.
- We are moving from supply-side flexibility to the world where both demand and clean supply-side flexibility are needed.
- According to our CP30 analysis, by 2030 the level of demand-side flexibility (DSF) may increase to four-to-five times today's levels. We could see demand side flexibility from smart charging of electric vehicles, domestic and industrial demand and storage heating.
- To address the need for demand-side flexibility in NESO markets, NESO reviewed its own markets in 2024 and published **Enabling Demand-side Flexibility (EDSF)** report. The report clarified NESO's vision for demand-side flexibility and commitment to achieve coherency, competition, and coordination.



### Scope of the EDSF programme at NESO

- •Clean Power 2030 Sets out plans for a two to three-fold increase in clean flexibility capacity, to a range of 51GW to 66GW, by 2030.
- •By 2030, demand flexibility from consumers in the Clean Power 2030 pathways reaches 10-12 GW (via both implicit and explicit markets).

Clean Power 2030 (CP30)

DESNZ



- •The Clean Flexibility Roadmap sets out the government's vision for flexibility required for CP30.
- •The roadmap includes actions for government, NESO and Ofgem to enable flexibility, including from demand-side participants.

Clean Flexibility Roadmap (CFR) DESNZ, Ofgem, NESO



•This programme is NESO's organized effort to unlock participation from demand-side flexibility in NESO markets and achieve coherency, competition and coordination.

#### Scope:

- •All NESO energy services. Voltage, stability and restoration are out of the scope this programme.
- •The scope was updated in 2025 to incorporate all the markets and consumer led flexibility actions in the Clean Flexibility Roadmap.

Enabling Demand-side Flexibility (EDSF)
Programme

**NESO** 

Quarterly update

Markets review is part

•Routes to Markets review is part of the EDSF programme and aims to increase competition. This initiative addresses the need to create a level playing field by identifying and removing barriers to NESO markets where feasible.

#### Scope

**Annual** 

- Identified barriers
- Priorities of barriers
- Progress of removing barriers

Route to Market (RTM)
Review

**NESO** 



- We published two documents to update stakeholders on our progress on December 5<sup>th</sup>
  - EDSF annual update
  - RTM quarterly review



### NESO's vision for demand-side flexibility





Vision

Enable flexibility resources to operate seamlessly between markets, driven by effective market signals, delivering whole electricity system value to consumers and supporting the transition to net zero.



**Outcomes** 

Fit for the future, **coherent** market arrangements

A level playing field and inclusive markets to maximise **competition** between all types of flexible resources

**Coordinated** flexibility markets across
Great Britain



**Objectives** 

1.1 NESO markets evolved to address system needs with clear roadmaps and requirements to help Flexibility Service Providers maximise the potential of flexibility.

**1.2** A coherent approach for enabling market arrangements, unlocking the demand-side flexibility needed by the system.

#### RTM Review

- 2.1 Ensure existing NESO markets are technology inclusive by removing barriers.
- **2.2** All new NESO markets to be technology inclusive.
- **2.3** Support demand-side flexibility market innovation leveraging international best practice.

- **3.1** Markets Facilitator coordination governance implemented.
- **3.2** Standardised NESO onboarding process and coordination with DNOs onboarding process.
- **3.3** Revenue stacking enabled across both NESO services and NESO/DNOs services.
- **3.4** NESO market design standardised and aligned with DNOs market design.
- **3.5** Coordinated NESO/DNO networks operations and planning.



**Enablers** 

Data, Digitalisation and Technology

**NESO Capabilities** 

Policy

Network Access, Connection & Charging Reform

Consumer Engagement



**Principles** 

Digital first mindset

Transparent at every stage

Deliver in partnership

Encourage innovation and creativity

Technology inclusive

Be flexible and adaptable

Consumer value driven

### What has changed?

- Coordination objectives have been reviewed to reflect the new arrangement with Market Facilitator.
- Clean Flexibility Roadmap (CFR) actions related to markets and consumers are added to the programme

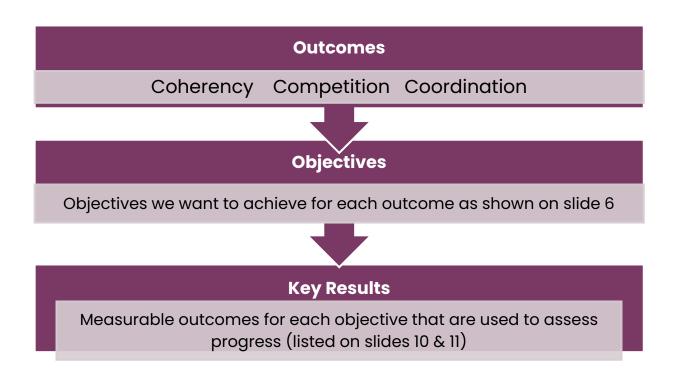


### Measuring progress in the EDSF programme

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We are using an objectives and key results framework to turn the EDSF programme's objectives into actionable, measurable key results. We will use these clearly defined, 'key results' as the reference point against which to track progress towards each objective.

We will use a RAG system to visualise the risk and progress of each key result. In this document we provide: (1) list of key results defined for each objective; (2) progress update of each key result.



Green: Key delivery is on track and meeting its goals.

**Amber**: Some issues or risks exist, but they are not critical and there is a plan to resolve them.

**Red**: A significant issue or risk exists that put the timely delivery of the key result at risk.

Blue: Completed



flexibility capacity and providers to enter NESO

markets

### Key Results for each EDSF objective



#### Coherency

Key Results - Targeted outcomes for each objective to achieve by 2030 Objective 1: NESO markets evolved to address 1.1 2030 within-day flexibility requirements are modelled and communicated through Operability Strategy Report... system needs with clear roadmaps and 1.2 NESO to publish non-domestic flexibility capacity target (CFR Action). requirements to help Flexibility Service Providers 1.3 NESO to share its vision for demand-side flexibility in its markets in the 2026 Markets Roadmap. maximise the potential of flexibility 1.4 Longer term direction of travel for LCM and DFS is designed and communicated (CFR Action). Objective 2: Deliver a coherent approach for **2.1** Clean flexibility roadmap is published (support role). enabling market arrangements, unlocking the 2.2 Market reform options post-REMA decision are designed with demand-side flexibility in mind (support role). flexibility required for CP2030 Competition Key Results - Targeted outcomes for each objective to achieve by 2030 1.1 Barriers are identified & prioritised through quarterly engagement with stakeholders. Internal NESO processes are in place to assess and remove barriers if appropriate and to communicate the progress update to both stakeholders and Clean Flex Objective 1: Ensure existing NESO markets are Governance. (CFR Action)(Route to Market Review) technology inclusive by removing barriers. 1.2 NESO has explored the potential to report on consumer carbon savings resulting from flexibility actions (CFR Action) 1.3 NESO teams have access to the distributed energy data and capabilities required to operate a clean power system with increased volume of distributed energy assets, including forecasting and operating demand flexibility. (Publishing the roadmap by Q1,2026 is part of the CFR Action) Objective 2: All new NESO markets to be 2.1 Demand-side flexibility capabilities are fully understood and incorporated into new NESO markets including Slow Reserve and technology inclusive. Static FFR, balancing reserve, LCM, DFS Objective 3: Support demand-side flexibility 3.1 Flexibility availability and dispatch behaviour of residential demand, EVs and low carbon heating are studied via innovation market innovation leveraging international best projects. practice. 4.1 Increased NESO engagement with non-domestic flexibility capacity and organisations, to Objective 4: Engage & support non-domestic

4.2 NESO has Increased onboarding support for non-domestic consumers and their

promote NESO markets (CFR Action).

suppliers/aggregators (CFR Action)

NESO
National Energy
System Operator

### **Key Results**



Coordination		
	Key Results – Targeted outcomes for each objective to achieve by 2030	
<b>Objective.1</b> Markets Facilitator coordination governance implemented.	<ul><li>1.1 NESO's internal governance and ways of working with the Market Facilitator are designed and implemented.</li><li>1.2 Flexibility market rules designed by the Market Facilitator are implemented as required.</li></ul>	
Objective 2: Standardised NESO onboarding process and coordination with DNOs onboarding process*	<ul><li>2.1 NESO Services: Balancing Mechanism and Slow Reserve registration have moved to the Single Markets Platform(SMP).</li><li>2.2 Coordination with DNOS: NESO has integrated with the Flexibility Markets Asset Registration (FMAR) platform and process.</li></ul>	
<b>Objective 3:</b> Revenue stacking enabled across both NESO services and NESO/DNOs.*	<ul><li>3.1 NESO Services: Overview of revenue stacking in NESO services and next step is communicated to stakeholders.</li><li>3.2 Coordination with DNOs: Stacking principles in ways of working (designed by ENA) is implemented by NESO.</li></ul>	
<b>Objective 4:</b> NESO market design standardised and aligned with DNOs market design.*	<ul> <li>4.1 NESO Services Standardisation challenges across NESO services are identified and prioritised including services window, procurement and performance monitoring.</li> <li>4.2 Coordination with DNOs: Market Facilitator will be assigning further priorities to coordinate NESO/DNOs market design.</li> </ul>	
<b>Objective 5:</b> Coordinated NESO – DNO network operations and planning.*	<ul><li>5.1 Coordination with DNOs: Regional Energy Strategic Plans are established to enable whole system planning.</li><li>5.2 Coordination with DNOs: Primacy rules across NESO/DNOs designed by Market Facilitator are implemented in NESO's internal operation.</li></ul>	



<sup>\*</sup> We expect the Market Facilitator to define further key outcomes to coordinate NESO-DNOs services

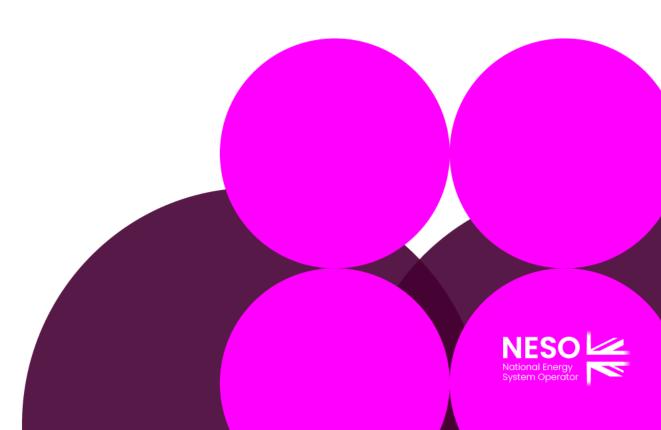
# We appreciate your feedback

Slido code #OTF



If you have any feedback regarding the key results and progress, please email us at:

flexibilitystrategy@neso.energy

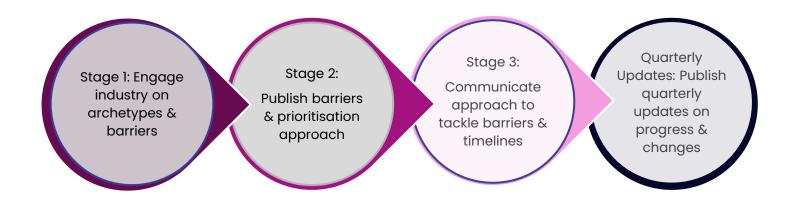




### Demand-side Flexibility Routes to Market Review

The Routes to Market Review for Demand Side Flexibility is NESOs project for **removing barriers** to NESO services for demand side flexibility.

It is a part of the Enabling Demand Side Flexibility in NESO Markets programme that is seeking to deliver increased **competition**, **coordination** and **coherent** market arrangements for GB, in collaboration with DESNZ, Ofgem, Elexon, DNOs and industry.





**Public** 

# We have put in place a prioritisation & delivery framework

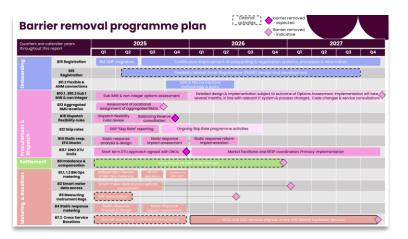


We have a **prioritisation** framework and a **process** for assessing barriers from options assessment through to implementation, in line with our service development & reform activities.

To ensure meaningful change, we have developed an overarching change process for identifying, prioritising and removing barriers from our services. This process aligns with our internal market change process stages!

| Investigate Options | Optio

Barrier removal projects are tracked across the process stages & programme managed by the **EDSF programme** & **governance**.





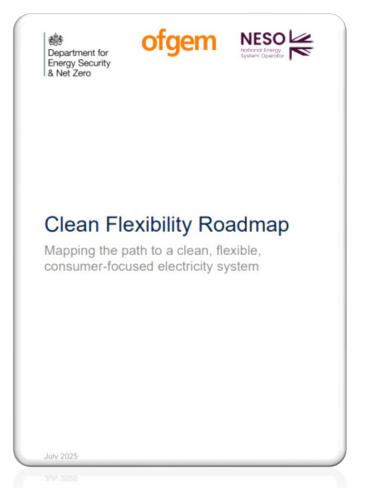


**Public** 

# We have made commitments as part of the Clean Flexibility Roadmap

Slido code #OTF

We have reinforced our commitment to removing barriers for demand side flexibility by adding a DSF Routes to Market Review action in the **DESNZ**, **Ofgem & NESO Clean Flexibility Roadmap** & are reporting into roadmap governance and monitoring.





### Keeping you involved & up to date





### **Quarterly engagement & updates**

- We are holding quarterly sessions with the Power Responsive Challenge Group, ADE flexibility forum, the Energy UK DSR working group, & with DESNZ & Ofgem.
- We will publish quarterly updates on the Markets Forum webpage including progress, service RAG update & change log, and DSF volume in NESO markets dashboard.



### **Reporting**

• We will include an annual update in the Markets Roadmap.



### **Clean Flexibility Roadmap**

We will participate in the Annual Roadmap Forum and workshops.



# Service barriers summary V3



Slido code #OTF

Services Demand flexibility	-side	DFS	LCM	Slow Reserve	Balancin g Reserve	Quick Reserve	Static FFR	Dynamic Regulation	Dynamic Moderation	Dynamic Containme nt	Balancing Mechanis m
0 =	Supplier										
Domestic	Virtual Lead Party (VLP)			•		<b>Ø</b>					•
Δ <sub>0</sub>	Non VLP aggregat or										
otic r	Supplier										
Non Domestic consumer	Virtual Lead Party (VLP)										
NoN	Non VLP aggregat or										

Not aware of any insurmou ntable barriers Barriers or design requirements are likely stopping some of the market Barriers or design requirements are stopping all of the market Not capable of participati ng in

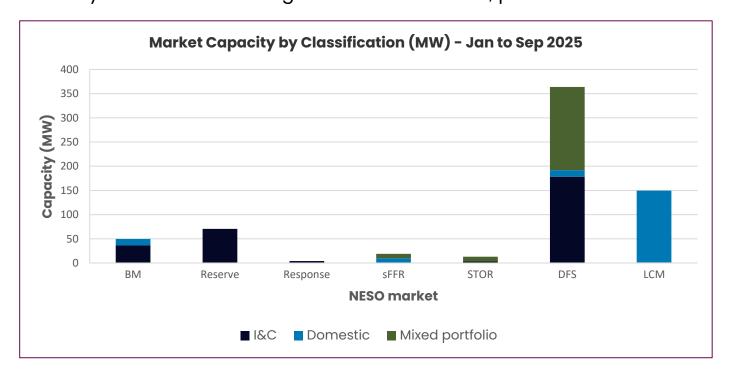


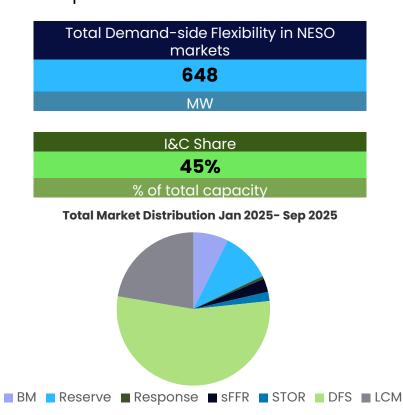
service

### Market metrics dashboard



We will be publishing a Demand-side Flexibility in NESO markets data dashboard on a quarterly basis alongside these updates. Below is a summary of the total volume of Demand-side Flexibility<sup>1</sup> that is active<sup>2</sup> in NESO markets currently. The full dashboard can be found here. We have reached out to all providers recently to update SMP data. If you believe your units are missing from the below data, please reach out to us so we can update data in SMP.





- Our full definitions of Demand-side Flexibility can be found <u>here</u>. This includes demand, storage and generation assets located "behind the meter" at a consumers site.
- Active means units that have been active in bidding in markets within the last 12 months.



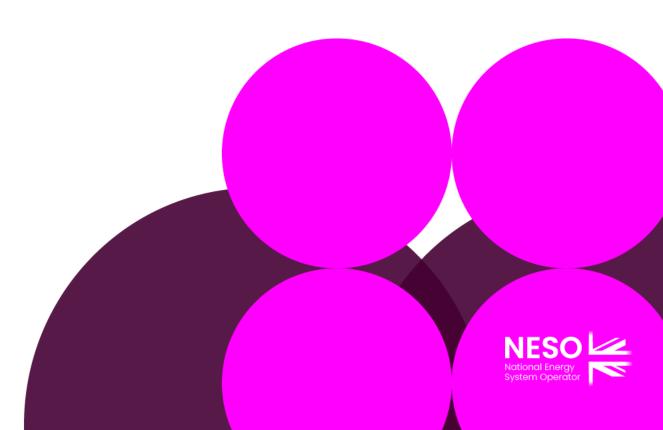
# We appreciate your feedback

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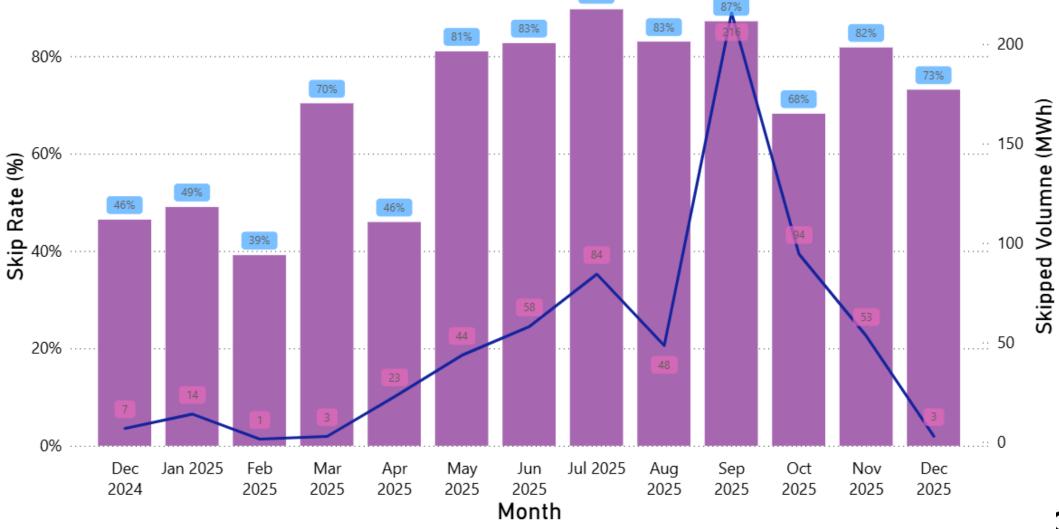


If you have any feedback regarding the key results and progress, please email us at:

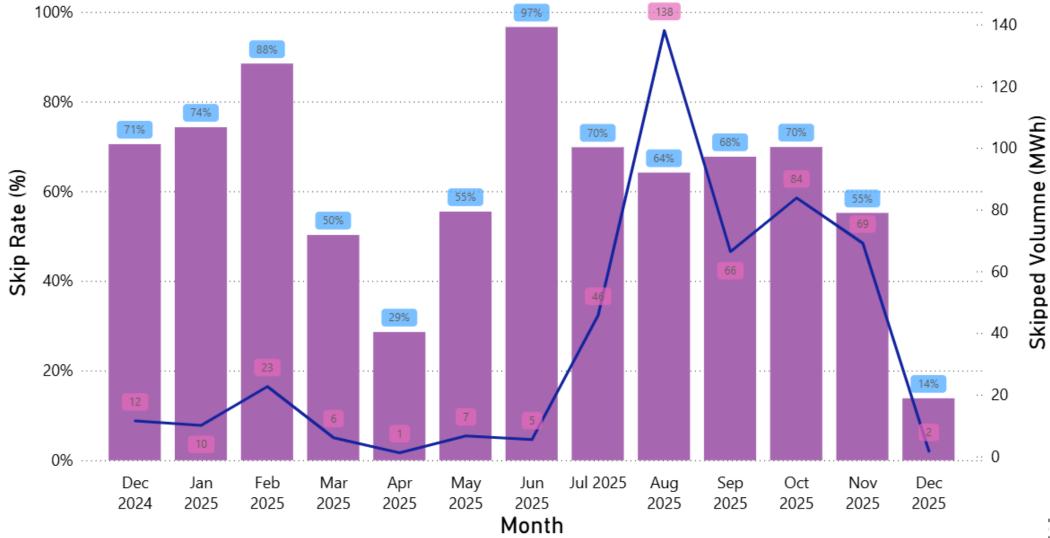
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### DSF Specific Skip Rate and Skipped Volume- Bids

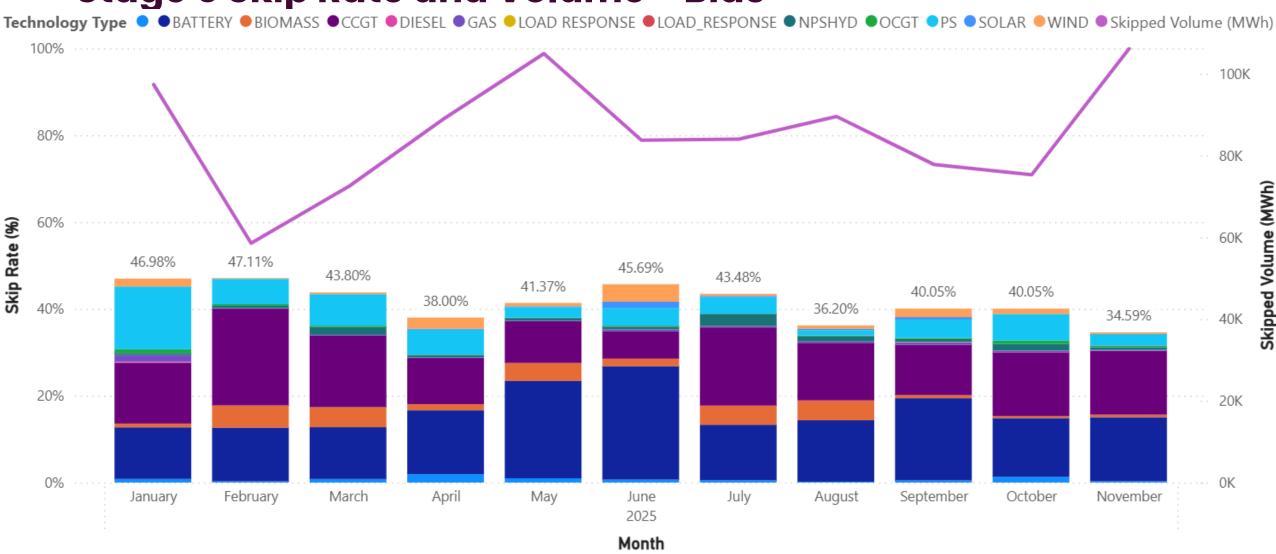


### DSF Specific Skip Rate and Skipped Volume- Offers



**Public** 

### Stage 6 Skip Rate and Volume - Bids

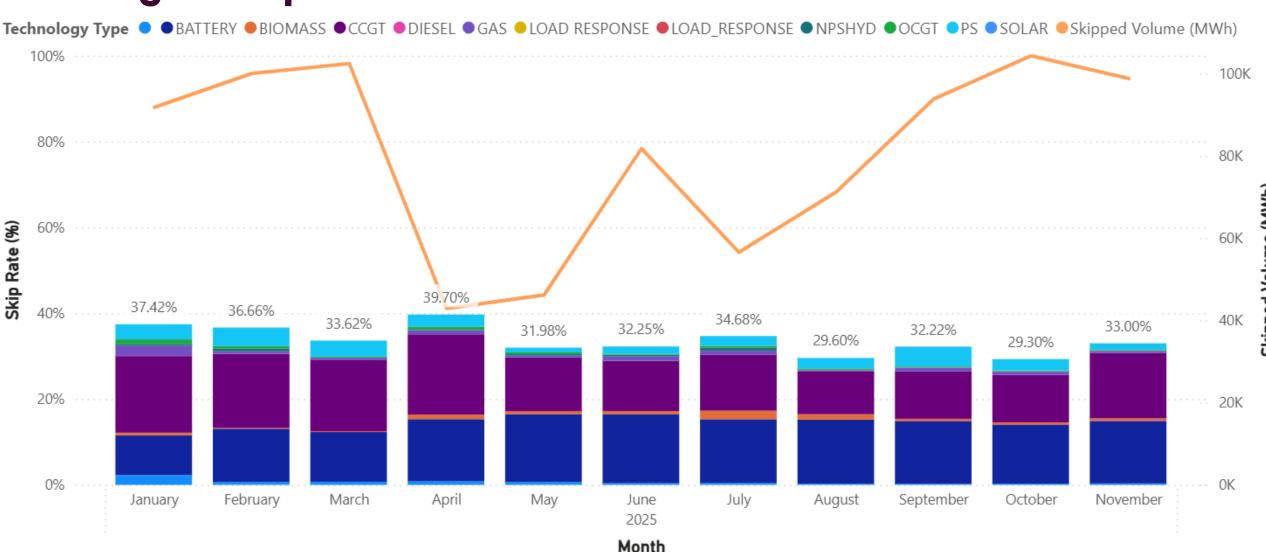


Webinar - Dispatch Transparency updates-20251103\_151824UTC-Meeting Recording



**Public** 

### Stage 6 Skip Rate and Volume - Offers



31 Webinar - Dispatch Transparency updates-20251103\_151824UTC-Meeting Recording

### Skip Rates by Technology Type - Bids

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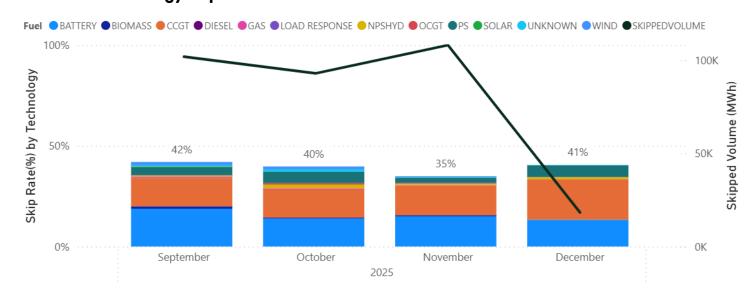
The current skip rate methodology only considers energy actions within the BM

We welcome your comments and feedback on these figures and how we present this data.

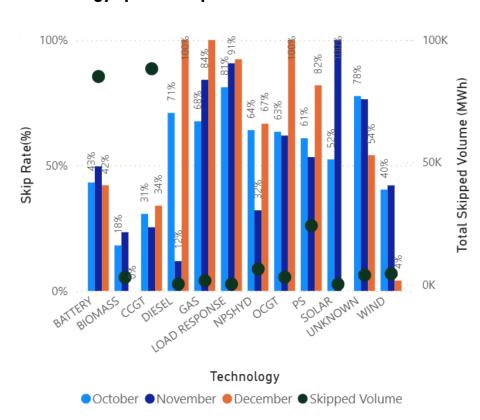
These graphs are based on stage 5 of the Post System Action definition.

Weekly Average w/e	Bids - All BM	Bids - PSA
16/11	7%	28%
23/11	11%	44%
30/11	5%	42%
07/12	5%	41%

#### **Relative Technology Skip Rate**



#### Technology Specific Skip Rate - last 3 months



Gas: Gas reciprocating units

NPSHYD: Non-Pumped Storage Hydro

PS: Pumped Storage



Contact us on box.SkipRates@neso.energy

Skip rate data and more info on <u>skip rates</u> including methodology can be found on our website.

Rerecorded deep dive can for found on our webpage: here

### Skip Rates by Technology Type - Offers

The current skip rate methodology only considers energy actions within the BM

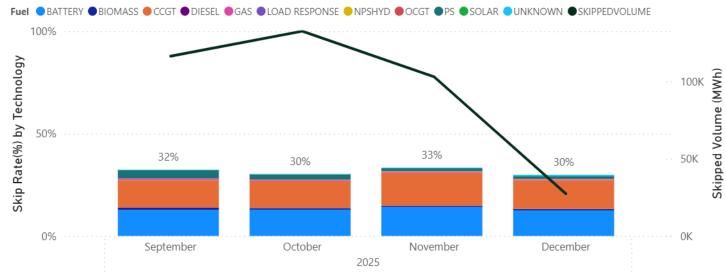
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These graphs are based on stage 5 of the Post System Action definition.

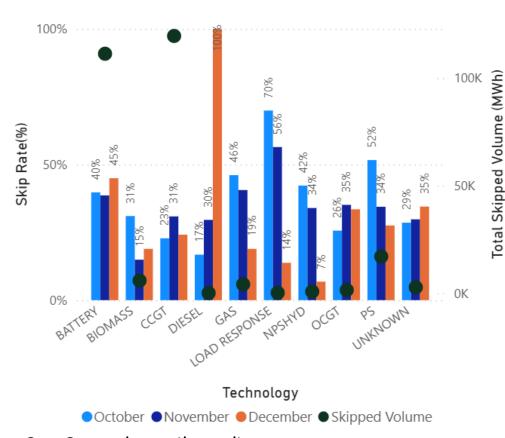
Weekly Average w/e	Offers - All BM	Offers - PSA
16/11	9%	30%
23/11	13%	36%
30/11	14%	35%
07/12	19%	30%

#### **Relative Technology Skip Rate**



### NPSHYD: Non-Pumped St PS: Pumped Storage

#### Technology Specific Skip Rate – last 3 months



Gas: Gas reciprocating units NPSHYD: Non-Pumped Storage Hydro PS: Pumped Storage



Skip rate data and more info on skip rates including methodology can be found on our website. Rerecorded deep dive can for found on our webpage: here

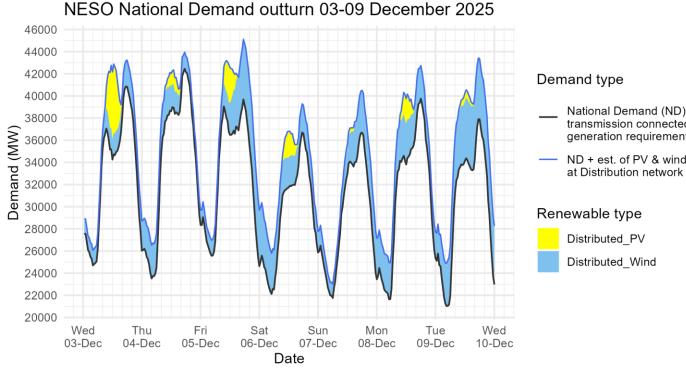
### Demand | Last week demand out-turn

Slido code #OTF

OUTTURN



Peak values by day



#### transmission connected generation requirement within GB

ND + est. of PV & wind

#### Renewable type

Distributed PV Distributed Wind

#### **National Demand**

Minimum & Peak Demands

	OUT	TURN
Date	Daily Max Dist. PV (GW)	Daily Max Dist. Wind (GW)
03 Dec 2025	6.2	2.7
04 Dec 2025	1.4	3.1
05 Dec 2025	3.4	5.8
06 Dec 2025	2.4	4.9
07 Dec 2025	0.6	4.2
08 Dec 2025	2.3	3.8
09 Dec 2025	0.7	5.8

		FURECASI (	wed us Decj	001	UNIV
Date	Forecasting Point	National Demand (GW)	Dist. wind (GW)	National Demand (GW)	Dist. wind (GW)
03 Dec 2025	<b>Evening Peak</b>	41.1	2.2	40.9	2.3
04 Dec 2025	Overnight Min	22.8	3.2	23.5	3.0
04 Dec 2025	<b>Evening Peak</b>	42.6	1.1	42.5	1.5
05 Dec 2025	Overnight Min	25.9	1.1	25.6	1.4
05 Dec 2025	<b>Evening Peak</b>	38.7	4.7	39.7	5.4
06 Dec 2025	Overnight Min	22.1	3.6	22.1	3.7
06 Dec 2025	<b>Evening Peak</b>	37.9	1.8	36.7	2.6
07 Dec 2025	Overnight Min	22.7	1.4	21.8	1.2
07 Dec 2025	<b>Evening Peak</b>	37.9	2.8	36.7	3.8
08 Dec 2025	Overnight Min	22.4	2.7	21.6	3.3
08 Dec 2025	<b>Evening Peak</b>	40.0	3.4	39.8	3.0
09 Dec 2025	Overnight Min	22.1	3.6	21.0	3.9
09 Dec 2025	<b>Evening Peak</b>	39.1	3.9	37.9	5.5

FORECAST (Wed 03 Dec)

The black line (National Demand ND) is the measure of portion of total GB customer demand that is supplied by the transmission network.

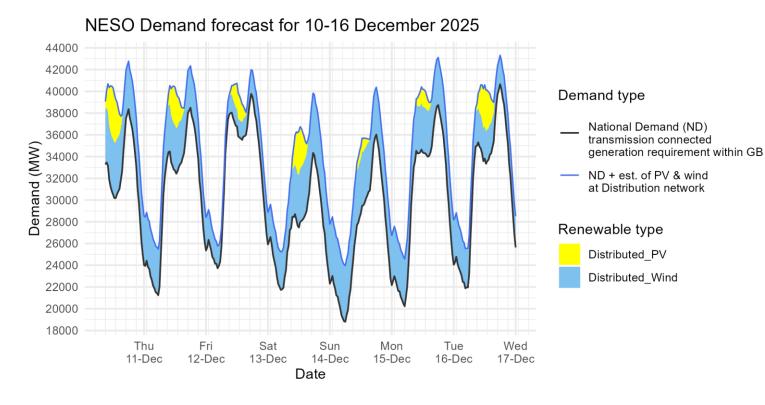
ND values do not include export on interconnectors or pumping or station load

Blue line serves as a proxy for total GB customer demand. It includes demand supplied by the distributed wind and solar sources, but it does not include demand supplied by non-weather driven sources at the distributed network for which NESO has no real time data.

Historic out-turn data can be found on the NESO Data Portal in the following data sets: Historic Demand Data & Demand Data Update

### Demand | Week Ahead





The black line (National Demand ND) is the measure of portion of total GB customer demand that is supplied by the transmission network.

ND values <u>do not include</u> export on interconnectors or pumping or station load

Blue line serves as a proxy for total GB customer demand. It includes demand supplied by the distributed wind and solar sources, but it <u>does not include</u> demand supplied by non-weather driven sources at the distributed network for which NESO has no real time data.

#### **National Demand**

Minimum Demands

		FORECAST (\	Wed 10 Dec)
Date	Forecasting Point	National Demand (GW)	Dist. wind (GW)
10 Dec 2025	Evening Peak	38.4	4.4
11 Dec 2025	Overnight Min	21.2	4.2
11 Dec 2025	<b>Evening Peak</b>	38.5	3.9
12 Dec 2025	Overnight Min	23.7	2.1
12 Dec 2025	Evening Peak	39.8	2.2
13 Dec 2025	Overnight Min	21.7	3.5
13 Dec 2025	<b>Evening Peak</b>	34.3	5.5
14 Dec 2025	Overnight Min	18.8	5.2
14 Dec 2025	<b>Evening Peak</b>	36.0	4.4
15 Dec 2025	Overnight Min	20.2	4.4
15 Dec 2025	Evening Peak	38.7	4.4
16 Dec 2025	Overnight Min	21.9	3.7
16 Dec 2025	Evening Peak	40.6	2.7

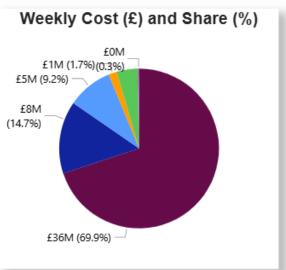


### NESO Actions | Category Cost Breakdown





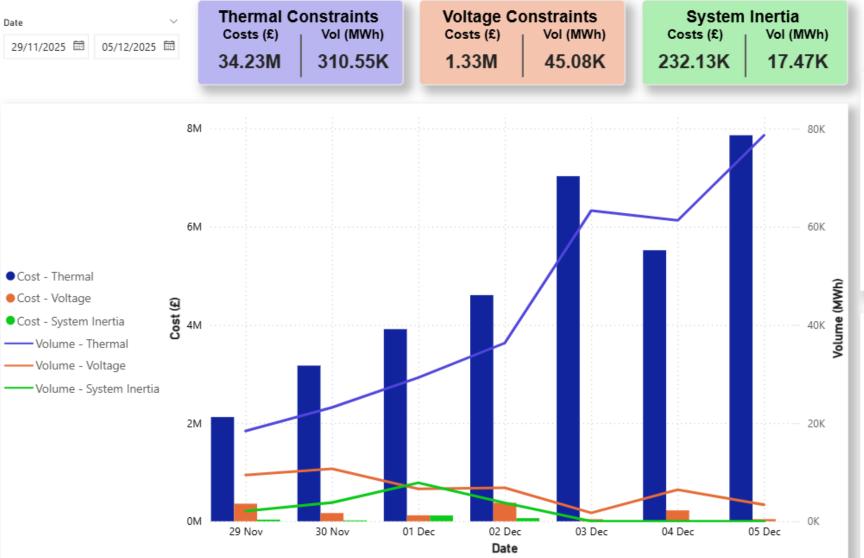
Date	Total Costs
29 November 2025	£4,118,725
30 November 2025	£5,223,828
01 December 2025	£6,911,102
02 December 2025	£7,933,056
03 December 2025	£8,752,887
04 December 2025	£7,333,809
05 December 2025	£9,649,713
Total	£49,923,121

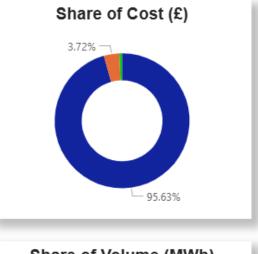


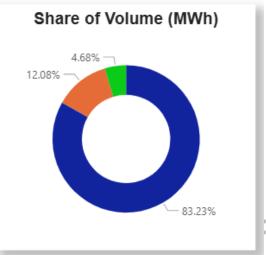


### **NESO Actions | Constraint Cost Breakdown**





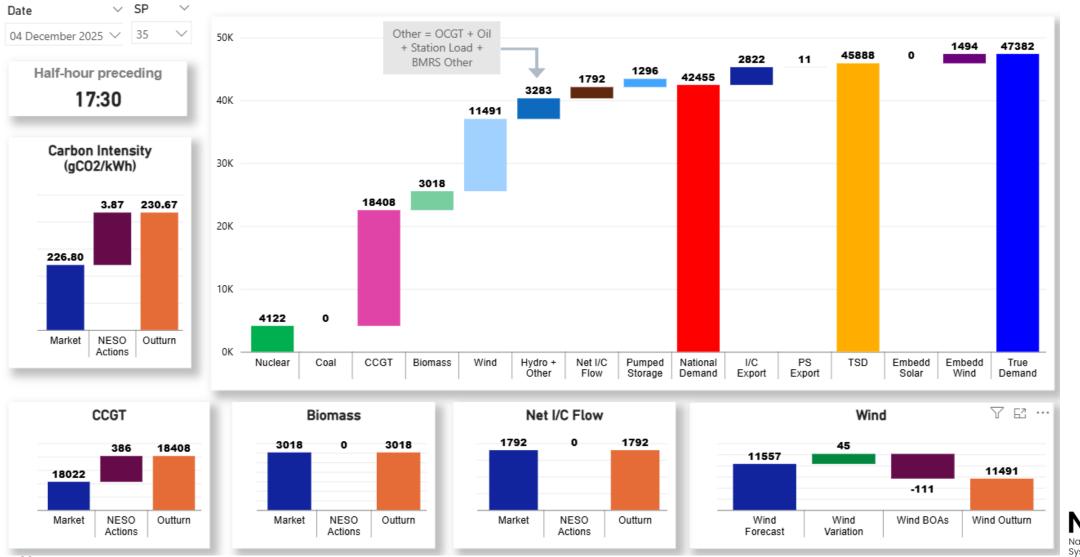




Note: Thermal Constraint volume is reported as an absolute figure.

#### NESO Actions | Peak Demand – Settlement Period (SP) spend ~£126k Thursday 4<sup>th</sup> December

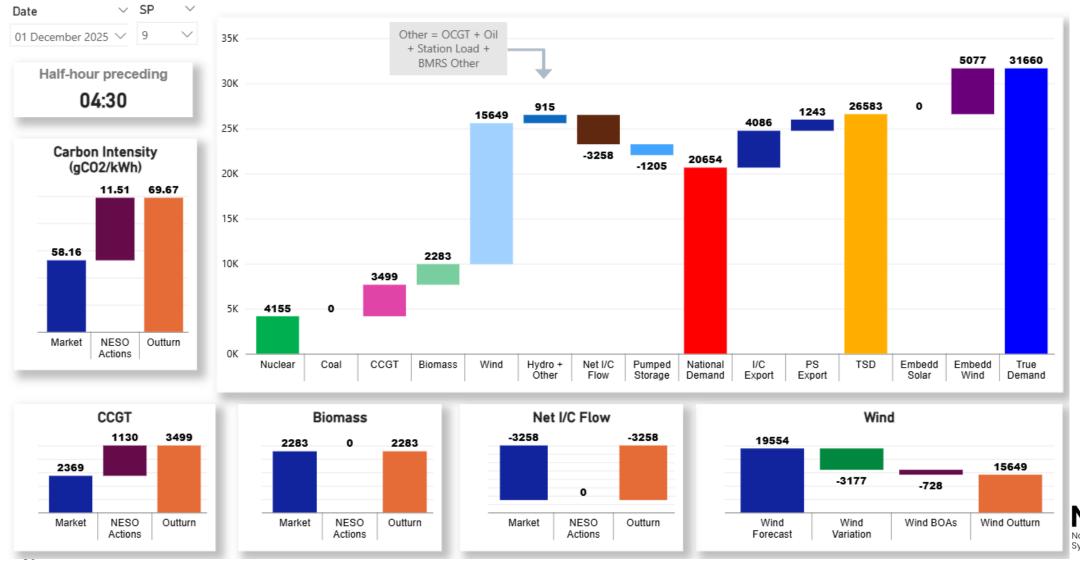






# NESO Actions | Minimum Demand – SP spend ~£225.5k Monday 1st December

Slido code #OTF

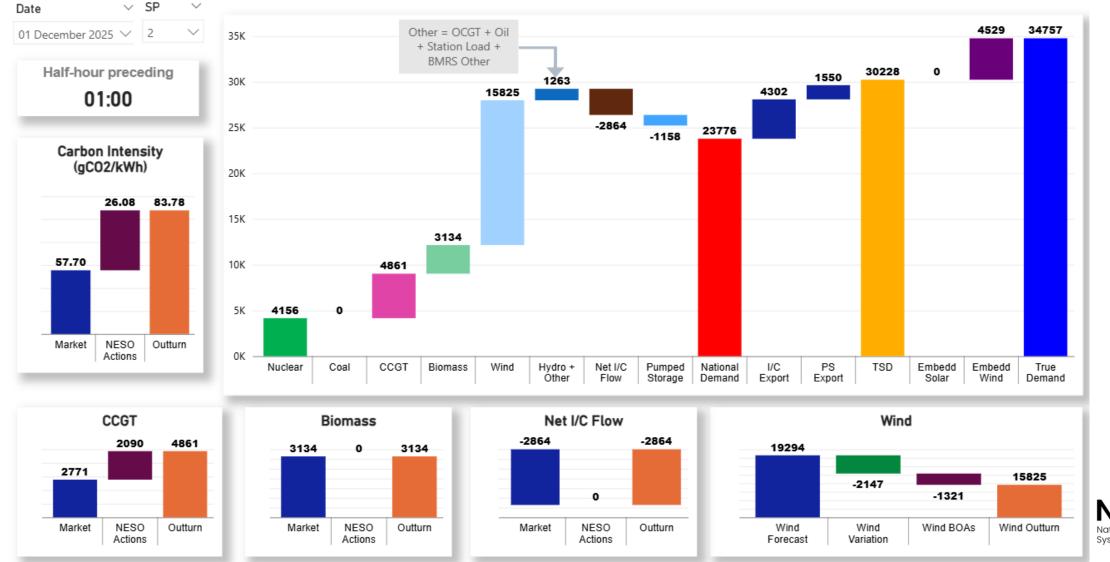




**Public** 

### NESO Actions | Highest SP spend ~£372k Monday 1<sup>st</sup> December

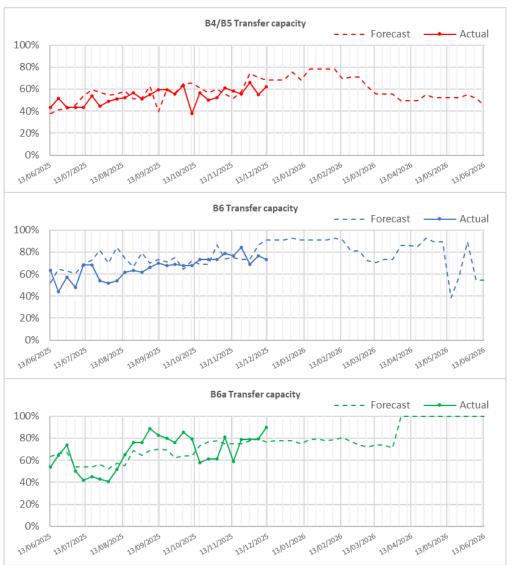




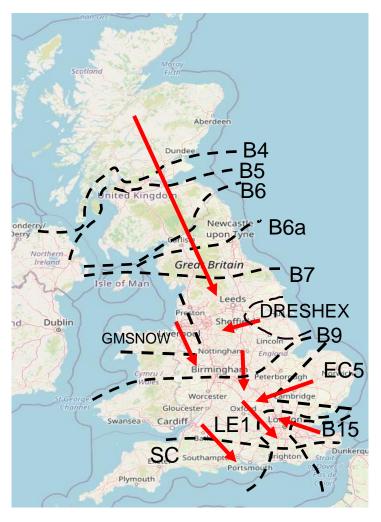


## Transparency | Network Congestion





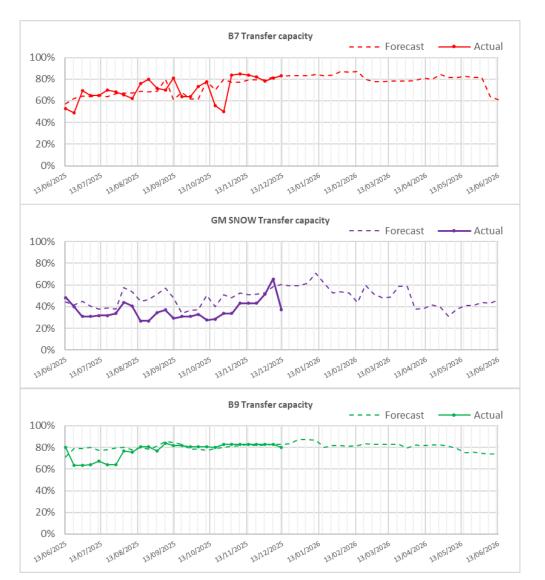
Boundary	Max. Capacity (MW)	Current Capacity (%)
B4/B5	3400	62%
B6 (SCOTEX)	6800	74%
B6a	8000	90%
B7 (SSHARN)	9850	83%
GMSNOW	5800	37%
FLOWSTH (B9)	12700	80%
DRESHEX	9675	85%
EC5	5000	100%
LE1 (SEIMP)	8750	69%
BI5 (ESTEX)	7500	94%
SC1	7300	100%



The forecast line is updated with the 10-week ahead view, and this happens each week. So, everything up to 10 weeks ahead is the forecast from 10-week ahead view, and everything after that is the fixed long-term forecast view.

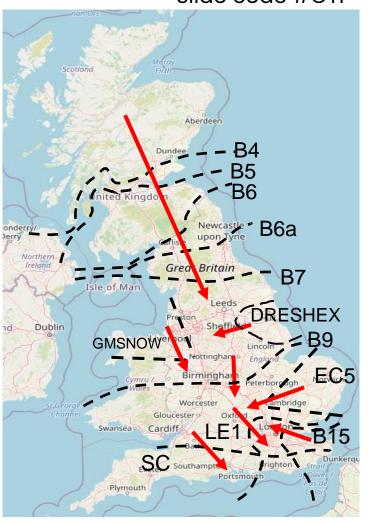


### Transparency | Network Congestion



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DRESHEX	9675	85%
EC5	5000	100%
LE1 (SEIMP)	8750	69%
B15 (ESTEX)	7500	94%
SC1	7300	100%

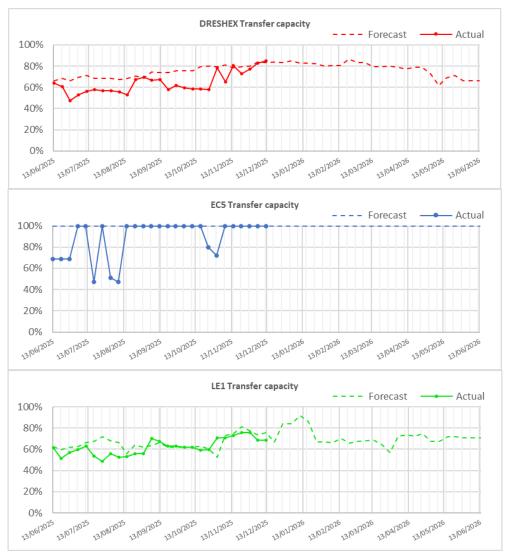




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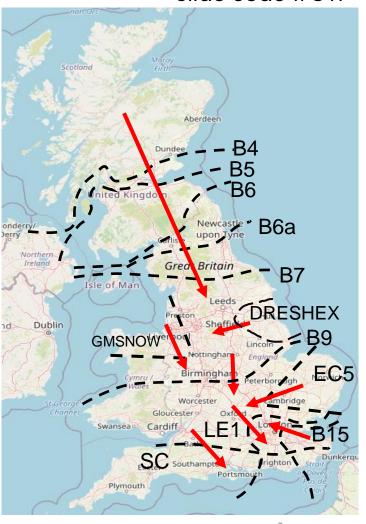


## Transparency | Network Congestion



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B15 (ESTEX)	7500	94%
SC1	7300	100%



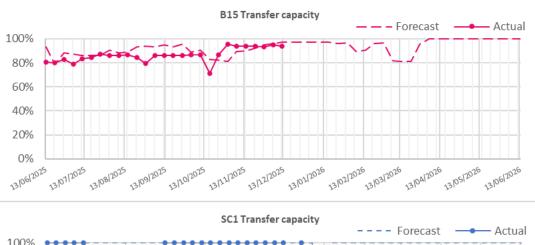


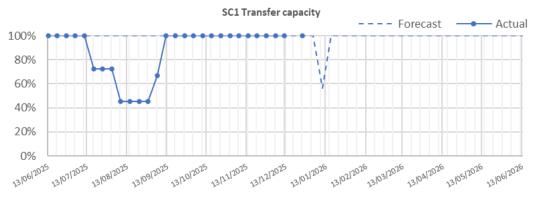
The forecast line is updated with the 10-week ahead view, and this happens each week. So, everything up to 10 weeks ahead is the forecast from 10-week ahead view, and everything after that is the fixed long-term forecast view.



#### **Public**

## Transparency | Network Congestion





The forecast line is updated with the 10-week ahead view, and this happens each week. So, everything up to 10 weeks ahead is the forecast from 10-week ahead view, and everything after that is the fixed long-term forecast view.

Boundary	Max. Capacity (MW)	Current Capacity (%)
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DRESHEX	9675	85%
EC5	5000	100%
LE1 (SEIMP)	8750	69%
B15 (ESTEX)	7500	94%
SC1	7300	100%





Day ahead flows and limits, and the 24-month constraint limit forecast are published on the ESO Data Portal: Constraints Management

(The forecast and day ahead limits may vary due to changes in the outage plan. The plan is reviewed periodically throughout the year to ensure we are optimising system conditions, whilst managing any necessary outage plan changes.



**Public** 

# Correction to previously given answer:

Q: (06/11/2025) According to the ENTSO-E Report on the Iberian Blackout, the 76 Operational PMUs (Phasor Measurement Units) in Spain enabled the establishment of important facts in relation to events there. What access does NESO have to PMUs in GB, how many, when were they established and in what locations? Where is this data published? Does NESO have unfettered access to use and publish the data collected by these PMUs in GB? Can NESO provide any examples of PMU data used in the OTF?

Correction: last week we said we do have access to all PMU data, this is incorrect, and the answer should have said:

**A:** NESO **will have** access to all in-service PMUs across England, Scotland and Wales. The installation of PMUs and the build out of the associated infrastructure to collect and link PMU data across SO and TOs, has continued over the RIIO2 period. The infrastructure is now in place with all TOs, and the roll out of PMUs to all key areas continues, in close collaboration with TOs.

There are currently 73 PMUs in service, which are spread across applications such as FATE and Inertia. The level of NESO access and any rights to publish are determined by the System Operator Transmission Owner Code (STC), which is available here:

System Operator Transmission Owner Code (STC) | National Energy System Operator

NESO does not currently publish raw PMU data but will publish data that uses this raw PMU data as an input. Some examples of this are:

- Inertia data
- Frequency data

Requests for NESO to publish data obtained from PMUs (or any other data not currently published) must be made using the <a href="Data Request Form">Data Request Form</a> which can be found at: <a href="Data Sharing">Data Sharing</a> Approach | National Energy System Operator

# **Previously Asked Questions**

Slido code #OTF

**Q:** (26/11/25) I note the NESO felt calling parties impacted by the CM portal failure as sufficient. All parties needed to know there was an issue to inform senior staff about the regulatory risks this portal continues to place on the industry.

**A:** We always carefully consider the most suitable and effective way when engaging customers. In this specific issue of Capacity Market Portal, whereby very few customers were affected, we believe that our targeted emails and calls to explain the issues and resolutions is more suitable. For a widespread issue, we inform customers via emails. For transparency, CM portal related issues are published on the Issues and Resolution Log available on our website.

**Q:** (26/11/25) How does NESO's decision making work weigh SO-SO trades and BM actions? There has been instances where decisions seemed counterintuitive. Could there be a deep dive or some transparency so we can better understand why certain actions were taken?

**A:** Thank you for the question. We kindly request that you provide more clarity over which decisions seemed counterintuitive. Please submit this to box.nc.customer@neso.energy where NESO experts will investigate further.

Q: (03/12/25) Why is the wind output still persistently below the forecast? Is this forecasting issue being addressed?

**A:** If you are comparing the day ahead forecast to the metered output, the main difference is due to control room actions (BOA). To properly compare, these BOAs need to be accounted for in any analysis. We do monitor our forecasts, and do not see a consistent bias in either direction. BOA – Bid Offer Acceptances





## **Previously Asked Questions**

**Q:** (19/11/25) Given the system's failure yesterday took out the EAC and CM portal - on the last day for appeals - are you looking at some back-up? Appreciate it was not NESO's fault, but it does seem to be a resilience issue.

**A:** Cloudflare is a resilience solution however, as many companies have discovered recently it can also be a point of failure. NESO is investigating the use of a Multi-provider strategy to reduce dependency and improve fault tolerance.

**Q** (03/12/2025) Can you please confirm if there is an ongoing issue with BSAD publication, whilst BSAD volumes have been published on the NESO data portal in upcoming trades file, they have not been published in the net imbalance volume since yesterday afternoon.

**A:** Thank you for your question regarding publication of imbalance volume. If this is data published via BMRS (Balancing Mechanism Reporting Service), this is an Elexon system, so we recommend you reach out to Elexon support - <u>Elexon Support Homepage - Elexon Support</u>.

However, if this is regarding data published on NESO systems, could you please reach out to box.settlement.queries@neso.energy and provide specific examples.



# **Previously Asked Questions**

Slido code #OTF

**Q:** (03/12/25) Can you ask your Delivery Body colleagues for guidance on what they expect parties to do about entering the CM auctions with no connection firm dates being given to them before hand?

**A:** The Delivery Body are working closely with DESNZ on the impact of Connections Reform to Capacity Market Applicants. We will provide an update at the next Capacity Market Advisory Group (CMAG) meeting (16 December) regarding the implications of Connections Reform for Capacity Market Applicants and Agreement holders. The update will be shared on the Delivery Body's guidance site following the meeting. We will notify participants when the updated guidance is published.



# **Advance Questions**

Slido code #OTF

**Q:** (26/11/25) Data: BMU Control point contacts are important for NESO, no doubt. 'Missing' BMU Dynamic data on the BMRS .: not visible to other market participants is also important. Is there an update on when NESO are going to fix this information void?

My question raided via Slido was in fact a follow up on an Advance question I raised back in April-25 (#2709) and have raised with NESO in emails over a number of years. These emails provided ample examples of 'missing' data. I see another market participant has raised a similar question,. #2769.

Also today, downloading the Q&A https://www.neso.energy/document/304926/download This is currently a csv! :: with questions including punctuation commas the file doesn't open into the desired columns headings as would be intended.

**A:** BMU dynamic data is included within our Data Accuracy Project, which we launched a consultation on earlier this year. We will ensure your points are reflected as this progresses.

Data inaccuracies in the BM (Call for input) - <a href="https://www.neso.energy/document/369606/download">https://www.neso.energy/document/369606/download</a>

The csv file should open out into the correct columns under standard Excel settings. You may need to select all and 'unwrap text' in the alignment setting for a clearer visual. We are interested in any suggestions which might make this information more easily accessible.

# Slido code #OTF

## **Advance Questions**

**Q:** (09/12/25) In a hypothetical situation where a multi BMU BESS site has all BMU's available, with the same dynamic data and identical BOA pricing, will OBP always default to issuing BOA's in BMU number order, i.e. number 1 ahead of number 2 and so on, or would it evenly distribute BOA volume across BMU's with identical cost if full BMU site volume not required?

**A:** Every day NESO randomly generate a "tie break order". So, in this case it depends what order the BMUs are in the tie break. By doing this randomly once a day every BMU should get a fair chance of being higher priority over the year.



## **Outstanding Questions**



**Q:** (05/11/25) On the data portal, the OBP Non-BM Reserve Instructions has not been updated in 3 weeks. Is there an issue with OBP, or publishing data from OBP?

**Q:** (26/11/25) If SORT uploads are delayed should NESO not pay compensation to those missing out on BM income as a result?

**Q:** (03/12/25) Can you please confirm if there is an ongoing issue with BSAD publication, whilst BSAD volumes have been published on the NESO data portal in upcoming trades file, they have not been published in the net imbalance volume since yesterday afternoon.



# Outstanding Questions: interconnector actions taken 20 and 21 November

Slido code #OTF

#### Our experts are working to provide a full explanation for these events.

Q: (03/12/25) It's concerning that NESO are unable to provide any explanation around the extreme actions taken on 20th and 21st of Nov after 12 days. These types of actions should be logged and immediately explainable. What's the cause of the delay?

**Q:** (26/11/25) Extreme prices were taking on interconnectors across the 20th and 21st of Nov, thousands of pounds/MWh more expensive than nearly every spare domestic BMU, with the majority of spare assets of all technology types going unused all day. Is this being investigated?

Q: (26/11/25) Can NESO explain their decision to pay £3899/MWh for 100MW of interconnector BSAD in SP25&26 in 21st Nov when there was 6GW of GB capacity offering prices thousands of pounds lower in the BM

**Q:** (26/11/25) Can there be more justifications on trading costs on 20th and 21st Nov, did this include the £3000 BSAD action taken on interconnections? This certainly did not seem optimal.

Q: (26/11/25) On Thursday 20th, NG went early for trades, but for hour 15-16 and 16-17 only tendered for NEMO trades (with BN and VKL available). Later they did more trades on all available ICs for these hours. Why did they do this? This led to very expensive prices

Q: (26/11/25) Did you not anticipate questions on ICs after last week?

Please see the next slide for the BSAD submission details



## **BSAD Submission**

Following confirmation of prices, please see details below regarding a BSAD (Balancing Services Adjustment Data) submission made following action taken on 20<sup>th</sup> November.

Time in BST 20 <sup>th</sup> Nov	Settlement Period	Midchannel Volume (MWh)	Reported cost in GBP
14:30	30	- 31.634	- 2,978.50
15:00	31	- 479.838	- 48,583.60
15:30	32	- 462.572	- 46,835.42
16:00	33	- 93.882	- 10,985.68
16:30	34	- 94.781	- 11,090.88
17:00	35	- 299.656	- 38,256.26
17:30	36	- 296.158	- 37,809.68
18:00	37	- 12.887	- 1,564.25



## **Outstanding Advanced Questions**

Slido code #OTF

**Q:** (27/10/25) Good morning NESO team. I have an advance question for the Wednesday ENCC. I appreciate that the time taken to investigate might mean that it is just listed as such this week.

The BSC Section Q6.3 lays out the timescales within which NESO is expected to deliver various DISBSAD items to Elexon.

Some of these deadlines are quite prompt in order that the data is available for Elexon to be able to include it in their Indicative CashOut calculation, approx. 15-18 mins after the hhr and .: give market participants a best view of WithinDay Imbalance price on which to base commercial decisions.

Can NESO provide some summary statistics on how well NESO is meeting their BSC obligations in respect of timely BSAD publication?

e.g. number of DISBSAD published over a time period, % that were published to Elexon in time, % that didn't meet the BSC timescales.

As the obligations are different for categories of BSAD e.g. DISBSAD for System / Energy Schedule 7 vs DISBAD for STOR vols, the metrics would need to be split accordingly



# Reminder about answering questions at the NESO OTF



Slido code #OTF

- Questions from unidentified parties will not be answered live. If you have reasons to remain anonymous to the wider forum, please use the advance question or email options. Details in the appendix to the pack.
- The OTF is not the place to challenge the actions of individual parties (other than the NESO), and we will not comment on these challenges. This type of concern can be reported to the Market Monitoring team at: <a href="mailto:box.nc.customer@neso.energy">box.nc.customer@neso.energy</a>.
- Questions will be answered in the upvoted order whenever possible. We will take questions from further
  down the list when: the answer is not ready; we need to take the question away or the topic is outside of the
  scope of the OTF.
- **Slido will remain open until 12:00**, even when the call closes earlier, to provide the maximum opportunity for you to ask questions.
- All questions will be recorded and published All questions asked through Sli.do will be recorded and published, with answers, in the Operational Transparency Forum Q&A on the webpage: <a href="https://www.neso.energy/what-we-do/systems-operations/operational-transparency-forum">https://www.neso.energy/what-we-do/systems-operations/operational-transparency-forum</a>
- Takeaway questions these questions will be included in the pack for the next OTF, we may ask you to contact us by email in order to clarify or confirm details for the question.
- Out of scope questions will be forwarded to the appropriate NESO expert or team for a direct response. We
  may ask you to contact us by email to ensure we have the correct contact details for the response. These
  questions will not be managed through the OTF, and we are unable to forward questions without correct
  contact details. Information about the OTF purpose and scope can be found in the appendix of this slide pack



### slido



(i) Start presenting to display the audience questions on this slide.

# Slido code #OTF

## Feedback

Please remember to use the feedback poll in Sli.do after the event.

We welcome feedback to understand what we are doing well and how we can improve the event for the future.

If you have any questions after the event, please contact the following email address: <a href="mailto:box.nc.customer@neso.energy">box.nc.customer@neso.energy</a>



# Appendix



# Purpose and scope of the NESO Operational Transparency Forum



#### **Purpose:**

The Operational Transparency Forum runs once a week to provide updated information on and insight into the operational challenges faced by the control room in the recent past (1-2 weeks) and short-term future (1-2 weeks). The OTF will also signpost other NESO events, provide deep dives into focus topics, and allow industry to ask questions.

#### Scope:

Aligns with purpose, see examples below:

#### In Scope of OTF

Material presented i.e.: regular content, deep dives, focus topics NESO operational approach & challenges NESO published data

#### Out of Scope of OTF

Data owned and/or published by other parties
e.g.: BMRS is published by Elexon
Processes including consultations operated by other
parties e.g.: Elexon, Ofgem, DESNZ
Data owned by other parties
Details of NESO Control Room actions & decision making
Activities & operations of particular market participants
NESO policy & strategic decision making
Formal consultations e.g.: Code Changes,
Business Planning, Market development

# Managing questions at the NESO Operational Transparency Forum



- OTF participants can ask questions in the following ways:
  - Live via Slido code #OTF
  - In advance (before 12:00 on Monday) at <a href="https://forms.office.com/r/k0AEfKnai3">https://forms.office.com/r/k0AEfKnai3</a>
  - At any time to <u>box.nc.customer@neso.energy</u>
- All questions asked through Sli.do will be recorded and published, with answers, in the Operational Transparency Forum Q&A on the webpage: <u>Operational Transparency Forum | NESO</u>
- Advance questions will be included, with answers, in the slide pack for the next OTF and published in the OTF Q&A as above.
- **Email questions** which specifically request inclusion in the OTF will be treated as Advance questions, otherwise we will only reply direct to the sender.
- **Takeaway questions** we may ask you to contact us by email in order to clarify or confirm details for the question.
- Out of scope questions will be forwarded to the appropriate NESO expert or team for a direct response. We may ask you to contact us by email to ensure we have the correct contact details for the response. These questions will not be managed through the OTF, and we are unable to forward questions without correct contact details. Information about the OTF purpose and scope can be found in the appendix of this slide pack.

## Skip Rates – 'In Merit' datasets



We recognise that these datasets aren't as intuitive as they could be – specifically the column headings. Please be reassured that we are looking at ways to improve this - we will update the documentation to include this information and will also discuss the datasets in more detail at the webinar on 27th February.

We will use 'accepted' and 'instructed' differently in this context, even though they are normally the same.

These datasets show the units that should have been instructed if decisions were solely based on price, rather than all units that were instructed. Therefore this dataset does not match the total accepted volume datasets in Elexon.

In Merit Volume = Accepted Volume + Skipped Volume

#### In Merit Volume

- This is the recreated in merit stack showing the lowest cost units that were available to meet the requirement, where the requirement is based on the volume of units that were actually instructed
- Therefore this is the volume that should have been accepted if decisions were solely based on price
- The sum of this column is the total instructed volume in the 5 minute period (subject to the relevant exclusions)

#### Accepted Volume

- This is the volume that was accepted in merit, as a subset of the 'In Merit Volume' column i.e. how much volume was accepted in merit
- The sum of this column will be less than the sum of the 'In Merit Volume' column, unless there is no skipped volume
- Note: this column does not list all instructed units

#### Skipped Volume

• This is the volume that was skipped, as a subset of the 'In Merit Volume' column – i.e. of the volume that we should have instructed, how much was skipped

It's possible that the list of units increases, decreases, or stays the same between stages, but the total 'In Merit Volume' will always remain the same (or no volume is excluded) or decrease (due to exclusions).