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Live captioning is available in Microsoft Teams

- Click on the 3 dots icon / 'More'
- Click 'Turn on live captions'

NESO Operational Transparency Forum

9 April 2025



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 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: marketreporting@nationalenergyso.com
- 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 in advance (before 12:00 on Monday) at: https://forms.office.com/r/k0AEfKnai3
- Ask questions anytime whether for inclusion in the forum or individual response at: box.nc.customer@nationalenergyso.com

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



Future deep dive / focus topics

Slido code #OTF

Today's Focus Topics/deep dives

NESO Market Monitoring activities

Future

March Balancing Costs – 16 April

Summer Outlook - 16 April

There will be no OTF on 23 April (week after Easter)

Introduction to contracts for Difference (CfD) - 30 April

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@nationalenergyso.com



New OTF Calendar Invite



We have updated our Operational Transparency Forum calendar invitation ahead of the 2025-26 Financial Year.

Please <u>subscribe</u> to receive OTF communications (make sure to tick Operational Transparency Forum). You will then receive pre-event emails which contain the joining link and calendar invitation for you to download and save in your calendars.

If you have already subscribed to receive OTF communications, you do not need to resubscribe. Just download the new calendar invite once you receive the email with the relevant links.



Future Event Summary



Event	Date & Time	Link
Quick Reserve Phase 2 – IT integration drop- in sessions covering OBP, Settlement and Operational Metering	Weekly until 10 April (10:30 – 11:30)	Register here
Skip Rate methodology and dataset drop-in	15 th April (16:00-16:45)	Register here
Long-term 2029 tender – consultation and expression of interest	Consultation feedback deadline: 17 th April Expression of interest deadline: 28 th April	<u>Further details</u>
Balancing Programme Technology Stakeholder Focus Group	28 th April (11:30-13:00)	Register here
Markets Forum Q&A Webinar	28 th April (15:00-16:00)	Register here
Skip Rate In-Person Forum	1st May (09:30-15:00)	Register here
Balancing Programme Event	24 th June (09:00-17:30)	Register here



NESO's 2025 Markets Roadmap

Slido code #OTF

NESO are pleased to publish our 2025 Electricity Markets Roadmap.

The roadmap details our forward-looking view of our markets, our market design principles and plans to reform and evolve our markets.

As always, we'd welcome any feedback on this iteration of the Markets Roadmap as well suggestions for content to include in future publications.







Link – Feedback Form

If you have any questions, contact us at box.market.dev@nationalenergyso.com





NESO's 2025 Operability Strategy Report

Last Friday, NESO published the 2025 Operability Strategy Report.

This report outlines our strategy for ensuring an operable clean power electricity system and explores how NESO will overcome the associated challenges. It includes how we will be building on NESO's "Clean Power 2030" advice and highlights our work with industry to develop new tools, processes, strategies and capabilities.

If you have any questions, please contact us at sof@nationalenergyso.com



Link - System Operability Framework (SOF)



Balancing Programme Technology Stakeholder Focus Group

Date: 28 April 2025

Time: 11:30 - 13:00

Location: Microsoft Teams

Join our second Balancing Programme Technology Stakeholder Focus Group of 2025 to learn more about the EDL/EDT transition to the Open Balancing Platform, with details of cutover plans and timelines for transition activity and provider testing outlined. This session will be useful for providers of EDL/EDT software, and market participants interacting with the submission/receipt of EDL/EDT data.

If you are not signed up to our Balancing Programme Technology
Stakeholder Focus Group and would like to attend this session, please register for the Focus Group here – a calendar invite will be sent to you following sign up.

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



Skip Rate In-Person Forum

Slido code #OTF

Secure your place at our upcoming in-person Skip Rates Programme Engagement Event.

Date: Thursday 1 May

Location: Hilton London Paddington

This event is open to all stakeholders taking part in Balancing Services, and will cover updates on NESO Skip Rate methodology and data sets, as well as provide opportunities to speak to our Subject Matter Experts on the day.

A detailed agenda for the day will be made available closer to the event. If there are specific topics you would like to hear about, please email us at: box.SkipRates@nationalenergyso.com

REGISTER HERE





Markets Forum Q&A 28th April 2025

Slido code #OTF

Join our live Q&A webinar on **28 April** at **3pm** where the NESO Markets Team will be available to answer your questions. We'll share a pre-read of our latest updates with you by the 21 April, which will cover topics such as the Markets Roadmap, Routes to Market and REMA.

If you have any questions ahead of the webinar, you can submit them on Sli.do using the code #MFAPR25. Alternatively, you can email your questions to us here - box.marketsengagement@nationalenergyso.com

Sign up here





Balancing Programme Event

Date: 24 June 2025

Time: 09:00 – 17:30

Location: The Clermont Hotel, London, Charing Cross, WC2N 5HX

Secure your place at our in-person Balancing Programme Engagement Event on 24 June in London, to hear the latest from the programme, how it supports the transition to clean power and is delivering consumer value.

You'll hear updates on activity to transform our balancing and forecasting capabilities and we'll discuss a range of topics you told us were important. Back by popular demand is the day in the life of a control room engineer (covering a different time period from our previous session). Our team will be on hand to answer your questions.

A detailed agenda and slide pack will be sent out ahead of the event.

Please note that although this event has reached capacity, we are running a wait list and hope to release some spaces over the coming weeks.

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





Market Monitoring Introduction





Market Monitoring Team

Slido code #OTF

NESO have a licence obligation (C1.5(c)) to monitor balancing services markets.

In compliance with this licence obligation, NESO agreed in 2020 to carry out their PPAT responsibilities under REMIT, leading to the formation of the Market Monitoring team. A PPAT is defined as a Person Professionally Arranging Transactions.

Our team operates independently from the rest of the NESO organisation, and the following rules fall within the scope of our monitoring.

REMIT (Inside information, Market Manipulation, Artificial Pricing, Capacity Hoarding etc)

Ofgem open letter on Dynamic Parameters 2020.

Transmission Constraint License Condition (TCLC)

Inflexible Offer Licence Condition (IOLC)

Grid Code – Balancing Codes and data submission



Overview of the market monitoring process

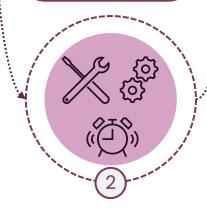


Data Gathering

- Internal Database
- Elexon Insights Platform
- Spot Market Data
- NESO Data Portal
- Produce internal and external market intelligence reports
- Provide analytics tools and data internally

Tools and Alerts

- Automated alerting tool
- Internal and external reporting channels
- Team engagement
- Automatic consideration of specific asset technical exemptions
- Proactive engagement on poor data





Investigation

- Assessment of behavior
- REMIT legislation & market rules
- Wider market conditions
- Longer term analysis
- Review of technical exemptions
- Internal and external market behaviors considered

Review

- · Second line review
- Logging and tracking
- Closure of alerts
- Potential to recommend market changes
- Potential to discuss license condition changes with OFGEM





Escalation

- Suspicious Transaction Reports
- Market Incident Reports
- Regular reporting to Ofgem
- Market participant engagement



Alert Types and Tools

Dynamic Parameters Alert

Detection of change over time and statistical parameters violations using threshold and standard deviation based rules, which could be fuel type specific.

Example: MEL change during the day

Anomaly models

Using machine learning models on submitted price, physical notifications and constraints data.

Example: Isolation forest based anomaly models set to identify a 1% 'contamination level' against n dimensional input characteristics

Transmission Constraint Licence Condition specific model

Pricing anomaly model applied to bid prices after the unit accepts a system tagged bid.

Analytics skills and electricity market knowledge

Use the data capability and understanding to produce reports, share internal data, support OFGEM, recommend code change modifications and support ancillary services market design.

Important: We do not issue REMIT specific guidance to the wider market but support the wider business, government and regulator on understanding of cost data

Internal and External reporting channels

.Box email for internal & external communications, Control Room walks, weekly balancing costs and trading team catchups, sampling of audio communications.

Example: Average 5 emails tip-offs per week

Visual inspections

Tools, which display pricing behaviours and dynamic parameters & physical outturns by generators.

Example: PNs changes close to gate closure after system actions

Inflexible Offer Licence Condition specific model

Pricing anomaly model applied to conditions where the PN has been withdrawn within day.

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In numbers...

~60,000 alerts per year

~2000 investigations per year

~650 data or model improvements

~200 informal reports / near misses to OFGEM

~20 formal reports to OFGEM



In focus: Regulation on Wholesale Energy Market Integrity and Transparency (REMIT)

Slido code #OTF

Definition

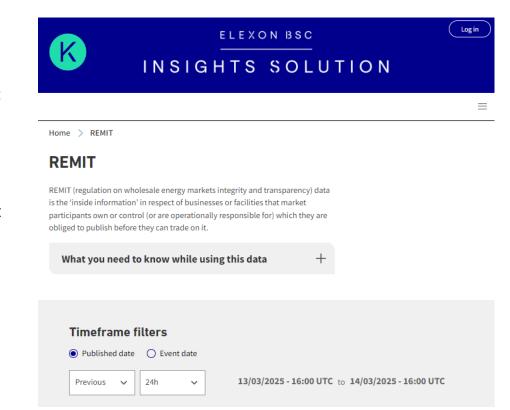
REMIT provides a regulatory framework specific to wholesale energy markets that:

- defines market abuse, including market manipulation, attempted market manipulation or insider trading
- · explicitly prohibits market abuse
- requires effective and timely public disclosure of inside information by market participants
- obliges firms professionally arranging transactions to report suspicious transactions.

Objective

This helps consumers, industry and other market participants have confidence that wholesale energy prices are open, fair and competitive.

Impact: REMIT compliance updates and outcomes



Source: BMRS, Elexon

EDF Energy (Thermal Generation) Limited agrees to pay Finding that SSE Generation Limited has breached Ofgem closes its compliance engagement with ESB Authority's Approval, in accordance with Article 4(8) of £6 million for breaching wholesale energy market Article 4 (obligation to publish inside information) of Independent Generation Trading Limited and Carrington the Transparency Regulation as amended, of the Power Limited in relation to misleading dynamic Balancing Mechanism Reporting Service (BMRS) as a Regulation (EU) No 1227/2011 on wholesale energy market integrity and transparency ('REMIT') 'reporting service' Ofgem has found that from September 2017 to March 2020, EDF Energy (Thermal Generation) Limited (EDF ETG) regularly sent misleading signals to the National Grid Ofgem has fined SSE £2.06 million for failing to publish inside information about the Ofgem has closed its compliance engagement with ESB Independent Generation Ofgem approves the Balancing Mechanism Reporting Service as a reporting service. Electricity System Operator (ESO) about the capabilities of its generation plant. wholesale energy market in a timely and effective manner Trading Limited ('IGT') and Carrington Power Limited ('Carrington'). Published: 4 January 2021 Published: 16 December 2020 Published: 3 September 2020 Generation and Wholesale Market Generation and Wholesale Market Gas Shipper Licence ... Generation and Wholesale Market



In focus: Transmission Constraints Licence Condition (TCLC) Slido code #OTF

Definition

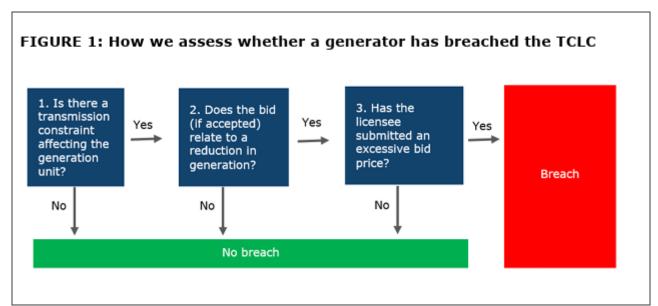
The TCLC prohibits generation licensees from obtaining or seeking to obtain an excessive benefit in relation to bids submitted in the Balancing Mechanism (BM) in active export transmission constraint periods.

Objective

Protecting against the exploitation of market power by generators operating in the presence transmission constraints and in results, it helps to keep down balancing costs and, ultimately, customers' bills.

Impact

Failure to comply with the TCLC can lead to significant financial penalties for generators.



Source: TCLC guidance 10 June 2024, Ofgem



In focus: Inflexible Offer Licence Condition (IOLC)

Slido code #OTF

Definition

The IOLC prohibits generators (with a Minimum Zero Time or MZT longer than 60 minutes) from obtaining or seeking to obtain an excessive benefit from their BM offers when the generator has revised its PN from a positive MW value to 0MW within the operational day.

Objective

Protecting against the ability to leverage the generators inflexible dynamic parameters, high costs of BM offers and therefore, helps to keep down balancing costs and customers' bills.

Impact

Failure to comply with the IOLC can lead to significant financial penalties for generators.

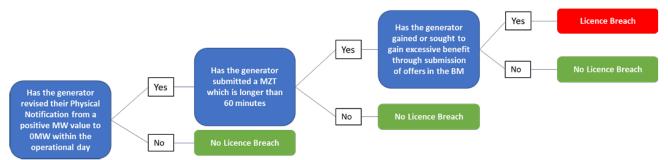


Figure 1 - Pathway of compliance under the IOLC

Source: IOLC guidance 31 August 2023, Ofgem



Slido code #OTF

In focus: Grid Code – (PN Accuracy)

Scope

We review balancing codes and data submissions against Grid Code. Recently we have rolled out a Guidance Note for Physical Notification (PN) Accuracy in the Balancing Mechanism (BM) for Wind BMUs and began monitoring improvements from 01/03/2025.

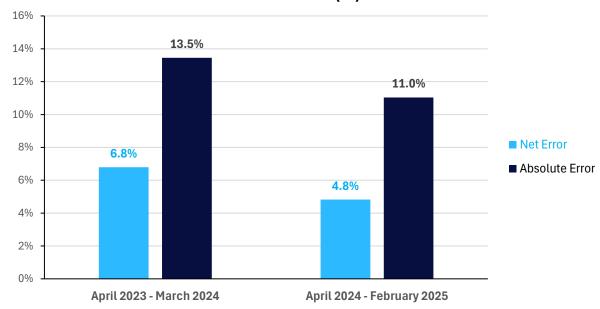
Objective

Improve the quality of data submissions into the BM, by establishing threshold measures that align with NESOs view of "Good Industry Practice"

Impact

Enabling more accurate provision of bids and offers resulting in lower balancing costs. 3 monthly monitoring phases to raise the standard of accuracy, with the option to raise the inaccuracy to Ofgem should there be outstanding concerns.

Mean Net and Absolute Error (%)





Market Monitoring Team

We are part of the legal and regulation department but to maintain autonomy to investigate NESO actions for any potential breaches of market rules all escalation decisions are made by an independent market monitoring committee.

The Market Monitoring team is dedicated to addressing your concerns promptly and ensuring a fair and transparent market.

We commit to investigate all behaviour that is raised with our team, however due to the requirement for all escalation decisions to be treated as confidential under REMIT, we are not able to share the details of any outcome relating to a specific BMU or a specific event.

We encourage market participants to report any suspicious transactions that might breach market rules to our team.

You can reach us through: MarketReporting@nationalenergyso.com

Alternatively, you can report suspicious transactions directly to Ofgem at: Market.conduct@ofgem.gov.uk





Demand | Last week demand out-turn

Slido code #OTF

OUTTURN

Daily Max

Dist. Wind

(GW)

3.2

3.1

3.2

3.0

2.2

1.3

0.7

Daily Max

Dist. PV

(GW)

12.4

11.6

10.6

12.4

12.7

12.5

10.7

Date

02 Apr 2025

03 Apr 2025

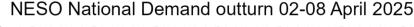
04 Apr 2025

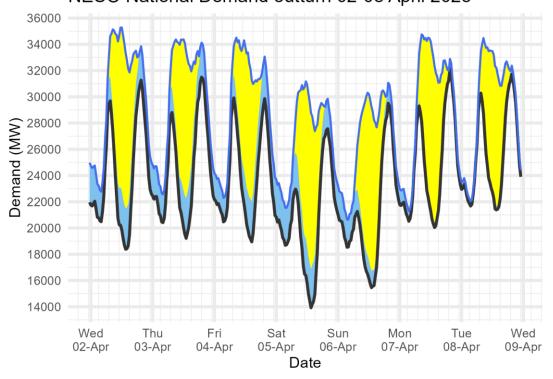
05 Apr 2025

06 Apr 2025

07 Apr 2025

08 Apr 2025





- National Demand (ND) transmission connected generation requirement within GB
- ND + est. of PV & wind at Distribution network

Renewable type

Demand type

Distributed PV Distributed Wind

National Demand

Minimum Domando

Distributed generation

Peak values by day

Minimum Demanas							
v	FORECAST (Wed 02 Apr) OUTTURN			FORECAST (Wed 02 Apr)			
Date	Forecasting Point	National Demand (GW)	Dist. wind (GW)	Dist. PV (GW)	National Demand (GW)	Dist. wind (GW)	Dist. PV (GW)
02 Apr 2025	Afternoon Min	19.2	3.1	9.9	18.4	3.1	11.8
03 Apr 2025	Overnight Min	20.0	2.5	0.0	20.4	2.2	0.0
03 Apr 2025	Afternoon Min	20.8	3.6	9.4	19.2	3.1	11.2
04 Apr 2025	Overnight Min	20.9	1.6	0.0	20.5	1.8	0.0
04 Apr 2025	Afternoon Min	19.0	2.8	8.9	18.9	3.1	9.2
05 Apr 2025	Overnight Min	18.6	2.6	0.0	18.7	2.9	0.0
05 Apr 2025	Afternoon Min	16.1	2.5	9.0	13.9	3.0	11.9
06 Apr 2025	Overnight Min	19.3	1.7	0.0	18.5	2.1	0.0
06 Apr 2025	Afternoon Min	18.0	1.1	10.9	15.5	1.3	12.5
07 Apr 2025	Overnight Min	21.4	0.6	0.0	20.5	0.8	0.0
07 Apr 2025	Afternoon Min	23.5	0.3	10.5	20.0	0.4	11.9
08 Apr 2025	Overnight Min	22.6	0.4	0.0	21.7	0.4	0.0
08 Apr 2025	Afternoon Min	27.0	0.4	6.4	21.4	0.3	10.6

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

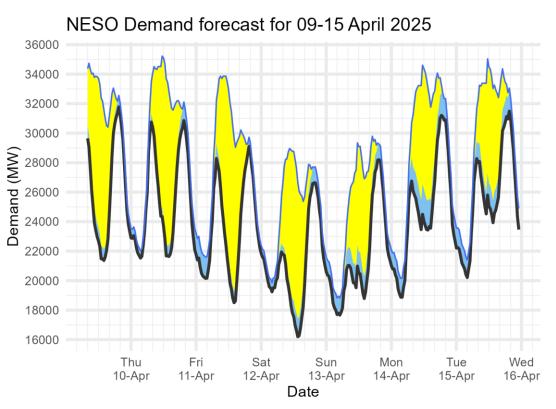
Blue line serves as a proxy for total GB customer demand. It includes demand supplied by the distributed wind and solar sources, but it does not include demand supplied by non-weather driven sources at the distributed network for which NESO has no real time data.

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



FORECAST (Wed 09 Apr)



Demand type

National Demand (ND) transmission connected generation requirement within GB

15 Apr 2025

National Demand Minimum Demands

Afternoon Min

ND + est. of PV & wind at Distribution network

Renewable type

Distributed PV

Distributed_Wind

Date	Forecasting Point	National Demand (GW)	Dist. wind (GW)	Dist. PV (GW
09 Apr 2025	Afternoon Min	21.4	0.8	9.4
10 Apr 2025	Overnight Min	21.5	0.5	0.0
10 Apr 2025	Afternoon Min	21.6	0.8	10.4
11 Apr 2025	Overnight Min	20.1	1.5	0.0
11 Apr 2025	Afternoon Min	18.5	0.8	10.4
12 Apr 2025	Overnight Min	19.2	0.6	0.0
12 Apr 2025	Afternoon Min	16.2	1.2	9.2
13 Apr 2025	Overnight Min	17.7	1.2	0.0
13 Apr 2025	Afternoon Min	18.8	1.5	6.6
14 Apr 2025	Overnight Min	18.9	1.3	0.0
14 Apr 2025	Afternoon Min	23.4	2.0	7.6
15 Apr 2025	Overnight Min	20.2	1.2	0.0

23.9

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.



7.6

1.5

Operational Margins | Week Ahead



How to interpret this information

This slide sets out our view of operational margins for the next week. We are providing this information to help market participants identify when tighter periods are more likely to occur such that they can plan to respond accordingly.

The table provides our current view on the operational surplus based on expected levels of generation, wind and peak demand. This is based on information available to NESO as of the day these slides are being published and is subject to change. It represents a view of what the market is currently intending to provide before we take any actions. The interconnector flows are equal to those in the Base case presented in the Winter Outlook.

The indicative surplus is a measure of how tight we expect margins to be and the likelihood of the NESO needing to use its operational tools.

For higher surplus values, margins are expected to be adequate and there is a low likelihood of the NESO needing to use its tools. In such cases, we may even experience exports to Europe on the interconnectors over the peak depending on market prices.

For lower (and potentially negative) surplus values, then this indicates operational margins could be tight and that there is a higher likelihood of the NESO needing to use its tools, such as interconnector trading and issuing margins notices. We expect there to be sufficient supply available to respond to these signals to meet demand.

Margins are adequate for the next week.

Day	Date	Notified Generation (MW)	Wind (MW)	IC Flows* (MW)	Peak demand (MW)	Indicative surplus (MW)
Thu	10/04/2025	39300	6480	4180	31360	12430
Fri	11/04/2025	38518	2840	4740	29600	12630
Sat	12/04/2025	38958	6470	4740	27130	19290
Sun	13/04/2025	39481	5090	4740	28690	17040
Mon	14/04/2025	39758	7540	5240	31710	16020
Tue	15/04/2025	39835	7130	5240	32000	15490
Wed	16/04/2025	40085	6900	5240	31920	15860

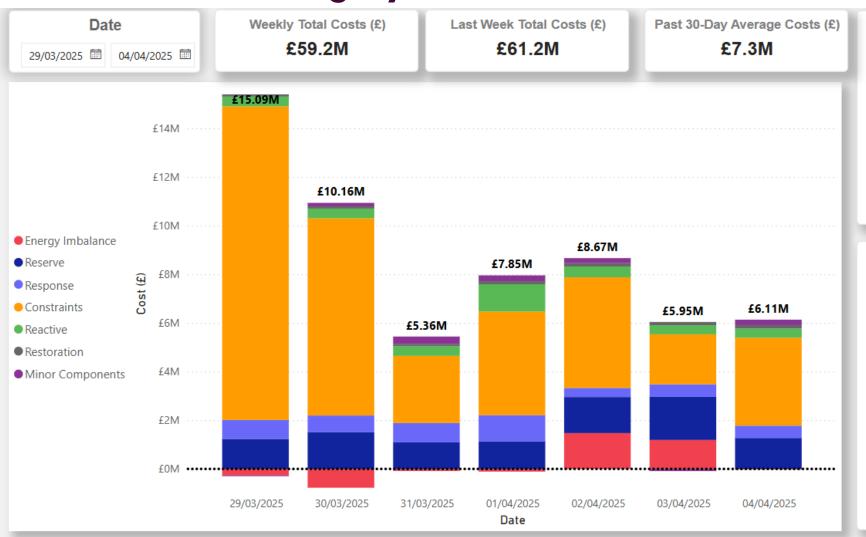
^{*}Interconnector flow in line with the Winter Outlook Report Base Case but will ultimately flow to market price

Margins do not include NESO enhanced or emergency actions

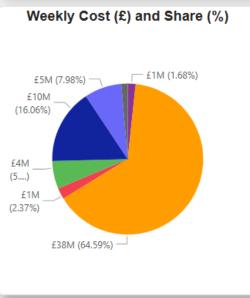


NESO Actions | Category Cost Breakdown

Slido code #OTF

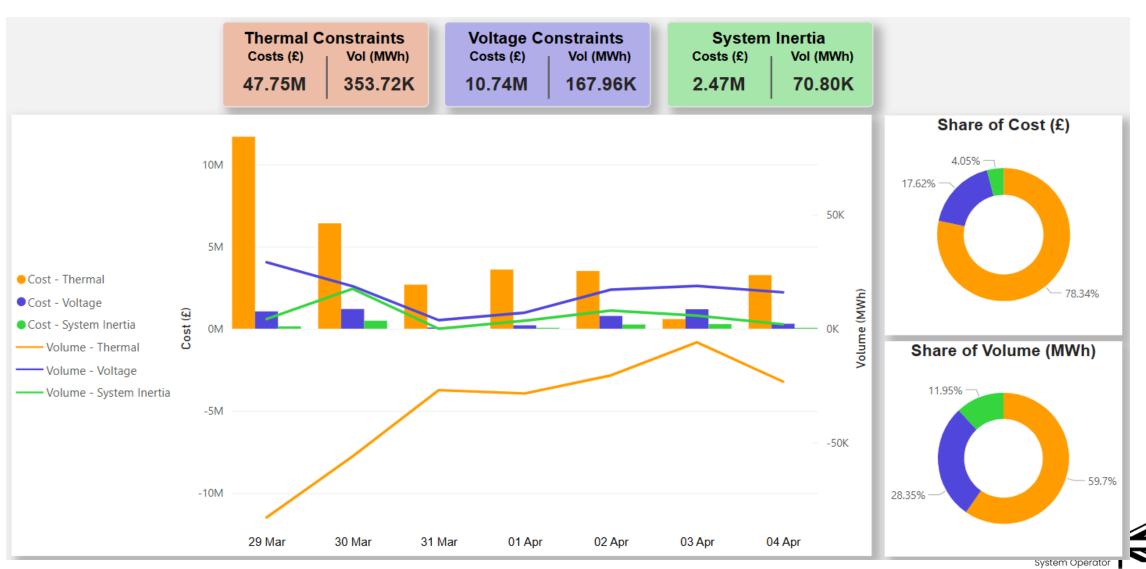


Date	Total Outturn Cost
29/03/2025	£15,093,225
30/03/2025	£10,162,227
31/03/2025	£5,356,568
01/04/2025	£7,846,738
02/04/2025	£8,665,717
03/04/2025	£5,953,354
04/04/2025	£6,109,837
Total	£59,187,666



NESO Actions | Constraint Cost Breakdown

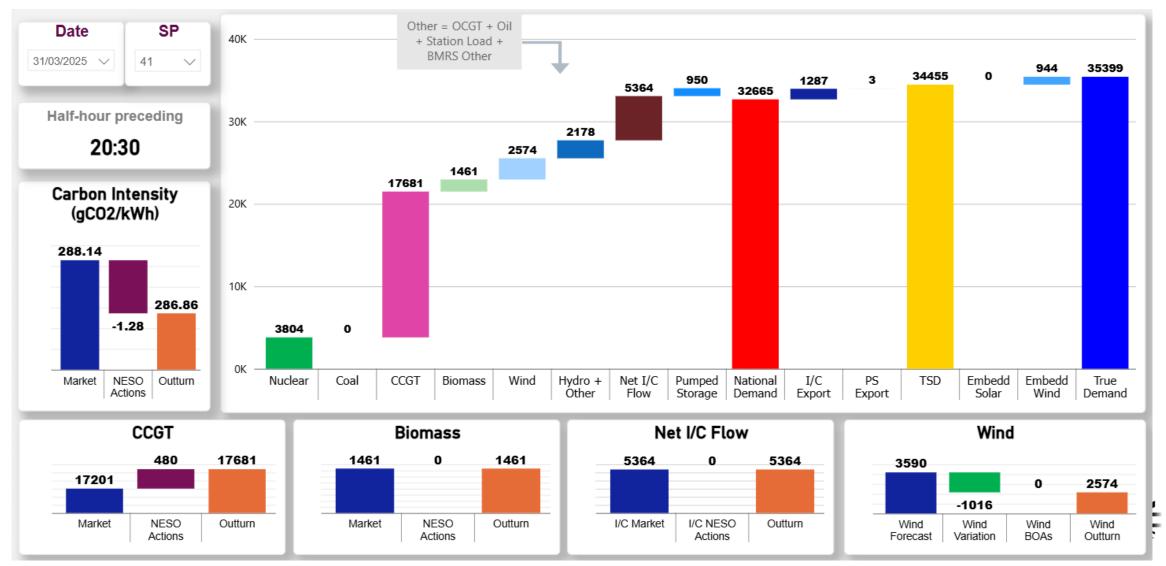




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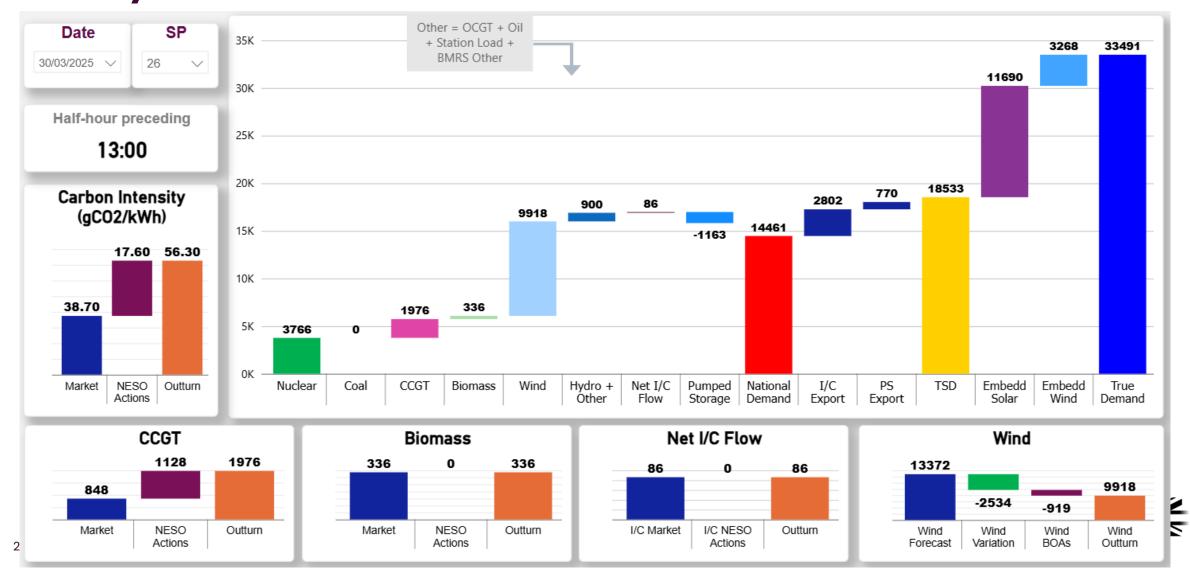
NESO Actions | Peak Demand – SP spend ~ £50k Monday 31st March

Slido code #OTF

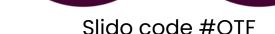


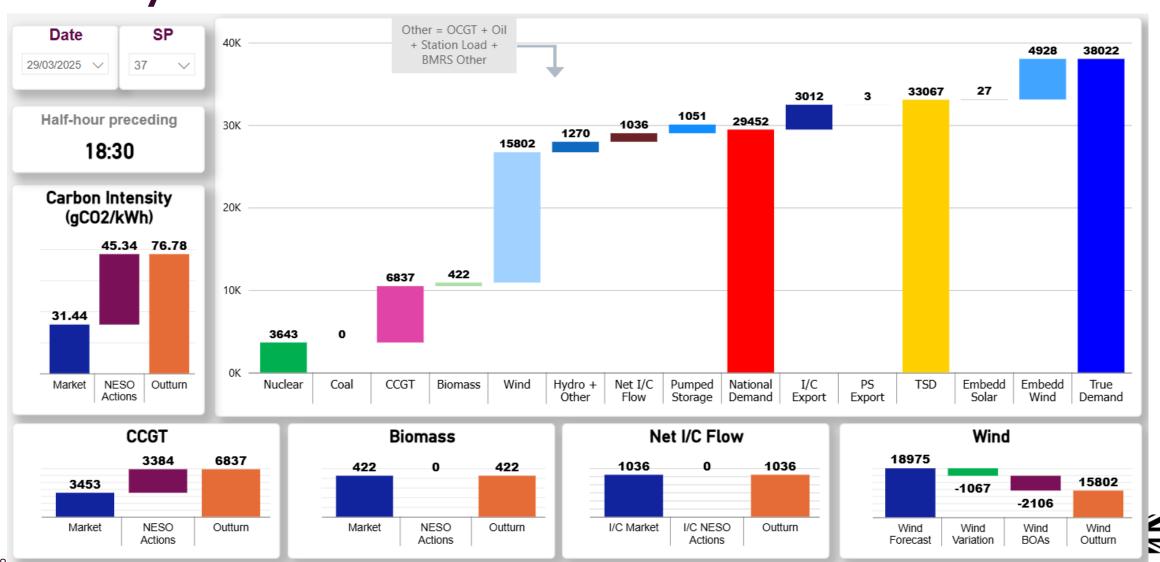
NESO Actions | Minimum Demand – SP spend ~ £143k Sunday 30th March

Slido code #OTF



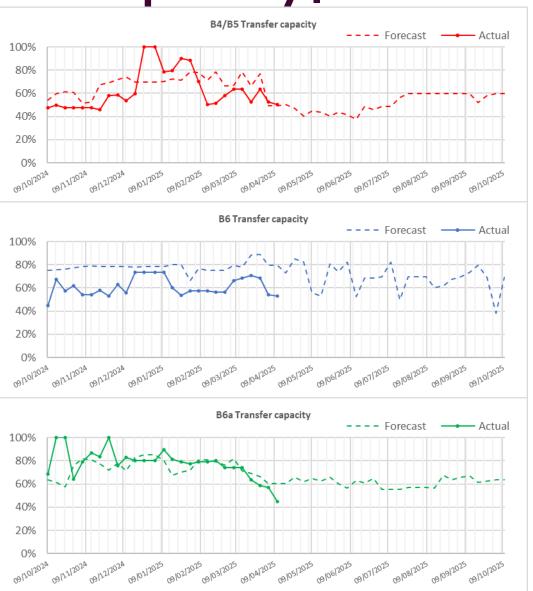
NESO Actions | – Highest SP spend ~ £573k Saturday 29th March





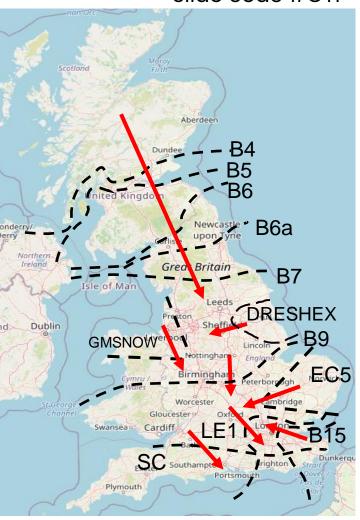
Public

Transparency | Network Congestion



Boundary	Max. Capacity (MW)	Current Capacity (%)
B4/B5	3400	50%
B6 (SCOTEX)	6800	53%
B6a	8000	45%
B7 (SSHARN)	9850	63%
GMSNOW	5800	57%
FLOWSTH (B9)	12700	81%
DRESHEX	9675	84%
EC5	5000	85%
LE1 (SEIMP)	8750	56%
B15 (ESTEX)	7500	88%
SC1	7300	56%

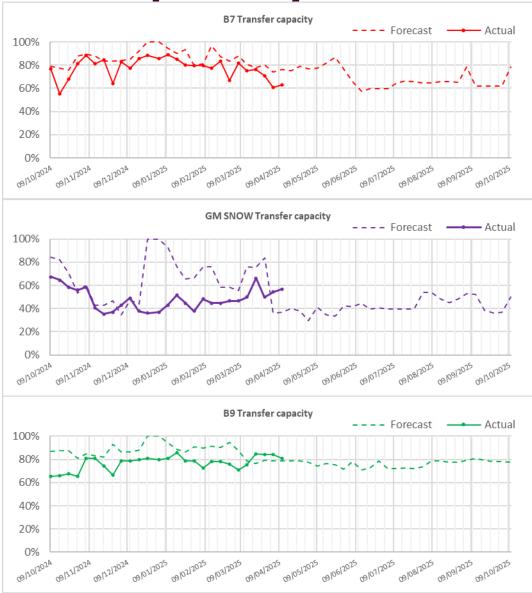






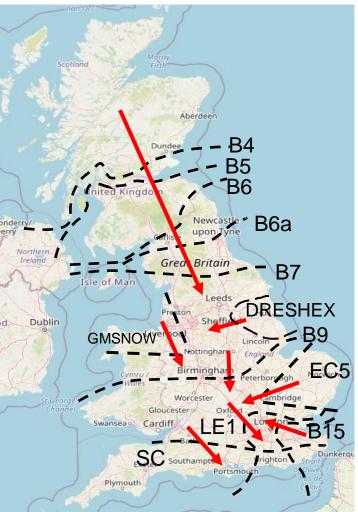
Public

Transparency | Network Congestion



Boundary	Max. Capacity (MW)	Current Capacity (%)
B4/B5	3400	50%
B6 (SCOTEX)	6800	53%
B6a	8000	45%
B7 (SSHARN)	9850	63%
GMSNOW	5800	57%
FLOWSTH (B9)	12700	81%
DRESHEX	9675	84%
EC5	5000	85%
LE1 (SEIMP)	8750	56%
B15 (ESTEX)	7500	88%
SC1	7300	56%

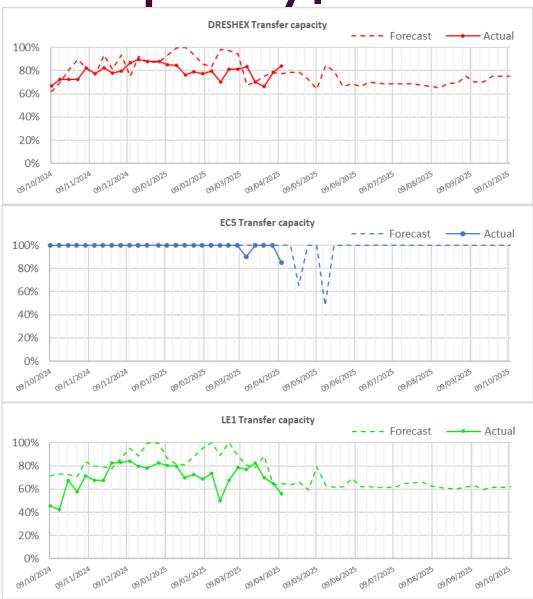






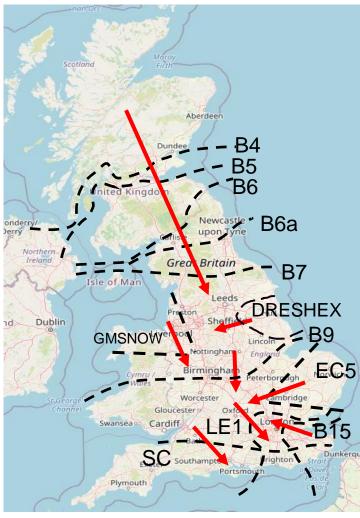
Public

Transparency | Network Congestion



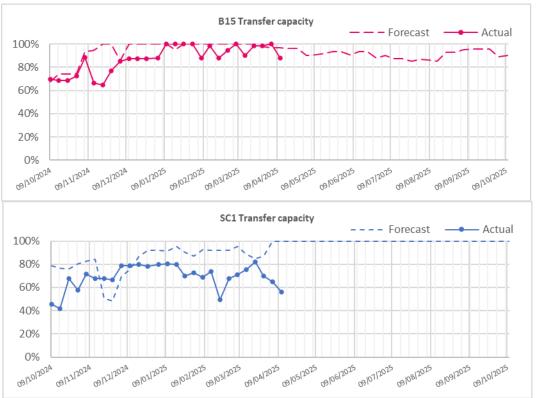
Boundary	Max. Capacity (MW)	Current Capacity (%)
B4/B5	3400	50%
B6 (SCOTEX)	6800	53%
B6a	8000	45%
B7 (SSHARN)	9850	63%
GMSNOW	5800	57%
FLOWSTH (B9)	12700	81%
DRESHEX	9675	84%
EC5	5000	85%
LE1 (SEIMP)	8750	56%
B15 (ESTEX)	7500	88%
SC1	7300	56%





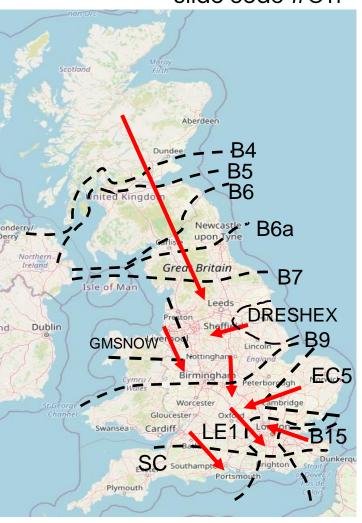


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Day ahead flows and limits, and the 24-month constraint limit forecast are published on the ESO Data Portal: Constraints Management

(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)



Slido code #OTF

Skip Rates

We are now sharing the summary skip rate data on a rolling 4-week basis. We welcome your comments on if you find this valuable and feedback on how we present this data.

Weekly Average w/e	Offers – All BM	Offers – PSA	Bids - All BM	Bids - PSA
16/03	21%	27%	7%	50%
23/03	15%	35%	20%	51%
30/03	14%	29%	5%	48%
06/04	8%	43%	21%	45%

Monthly Average	Offers - All BM	Offers - PSA	Bids - All BM	Bids - PSA
January	18%	34%	11%	53%
February	15%	33%	5%	49%
March	15%	29%	7%	47%
April (MTD)	7%	42%	23%	44%

5th/6th April: High skipped bid volume due to no system actions (causing PSA & All BM to be very close). Low skipped offer volume due to system actions taken for voltage and inertia (causing difference between PSA & All BM).





Note: due to size issues, both 'In Merit' datasets now have a separate file for each month. Based on feedback we intend to maintain this method of publishing the data. We endeavour to publish by 5pm each day.

Skip rate data and more info on skip rates and battery storage including methodology.





Q: (02/04/25) Is your quarterly Markets Forum webinar still on for the 16th April? You strangely didn't mention it in today's OTF, neither in the Future Event table nor after talking about it in your Markets Roadmap update....... unless I missed something? Thanks

A: We have a <u>Q&A forum</u> planned for the 28th April.

This will be advertised in our newsletter and in the OTF. We are also in the process of confirming dates for the summer and will be sharing those at the April forum.

Q: (02/04/25) Hi, where could I find the ETYS transmission boundaries discussed in GIS format?

A: We do not currently provide ETYS transmission boundaries in a GIS format. To request data that is not currently shared via the Open Data Portal or our public website, please submit a request through the <u>Data Request Form</u>.

For more information: <u>Data Sharing Approach</u>





Q: (02/04/25) During outage planning assessment do you ever curtail prefault or only postfault? If the overloading can be solved with category 2 intertrips, is it safe to assume that you will be curtailing the generators post fault? Do you use 5min ratings or 6 h ratings?

A: The short-term rating that NESO secure to is based on those provided by asset owners; on most circuits, NESO are provided with 10-minute, 20-minute and 6-hour ratings. The requirement for how NESO receives ratings from asset owners is set out in <u>STCP 04-4</u>. The level to which NESO secure to is dependent on the amount of generation that can be curtailed post-fault within Section 5 of the <u>SQSS</u> to return the overloading asset to its PFC (post-fault continuous) rating.

The nature of most constraints is that the limiting factor is "post-fault" when an asset overloads into short-term rating, therefore, most constraints are secured based on post-fault curtailment to generation.

If an asset does not have short-term ratings, NESO may be limited by the pre-fault loading on an asset (84% of its pre-fault continuous rating). In this scenario, generation that is effective in overloading the respective asset will be curtailed based on pre-fault loading without any system fault occurring.

STCP: System Operator – Transmission Owner Code Procedures

SQSS: Security and Quality of Supply Standard



Q: (02/04/25) presumably the NAP definitions of stability will evolve as we move towards IBR rather than Synch gen dynamics dominating transfer and risks-how are the insights of perhaps less routine evaluations of non-classical stability factored into planning-do you consider e.g. regional allocations of inertia

A: Currently, NESO assumes the level of stability to be quantified by inertia and short-circuit level on the grid. We are also working with industry to assess how we may quantify system stability ahead of CP30 with a more IBR (inverter-based resource) dominated grid.

Regarding the evolution of the inertia requirement, please see <u>NESO's Markets Roadmap</u> Publication. This outlines the requirements for inertia and short-circuit level requirements on the grid up to and including the 4-year-ahead long-term tender.





Q: (26/03/25) PEHE was bid off for most of yesterday and was SO flagged as usual, apart from a few hours in the afternoon with no flag. Is this correct? Fundamentals weren't suggesting it would be needed for energy balancing reasons. It created some uncertainty in the market so would be good to understand further

Advance Q: (25/03/25) PEHE was bid off at £44/MWh for a large part of 25th March. There were a couple of hours in the afternoon where this action was not SO flagged - that seems to us to be erroneous as it was SO flagged all morning and then again in the evening and the system fundamentals in the mid afternoon would suggest that would be a system balancing action throughout. Please can you confirm this and that the actions will be amended retrospectively in order to contain the flag? It had a big impact on market confidence, thanks

A: Thank you for bringing this to our attention. We have investigated the bids with the Control Engineers who were on duty. The PEHE-1 unit was tagged as energy as per the advice from the OEM (Operational Energy Manager) and ZBE's (Zonal Balancing Engineer) from the morning shift (as wind was forecast to be dropping). But as SSE-SP2 became active, we changed it to system. So, between 13:00-17:00, it was energy tagged.



Advance Questions



Q: (26/03/2025) Are Co-ordinated Third-Party Trades (CTPT) published before delivery? If so, please provide a link

A: This is not currently information which is shared. To request data that is not currently shared via the Open Data Portal or our public website, please submit a request through the <u>Data Request Form</u>.

For more information: Data Sharing Approach



Outstanding Questions



Q: (29/01/25) NESO only send IPs to the BMU – this is a limitation of EDL – was this not meant to be resolved in the EBS1 2010 system refresh parties paid for?

Q: (19/03/25) Is the procurement of more services from non-BM providers not just going to increase the issue highlighted by Celyn earlier regards publication of incorrect imbalance prices. Do NESO consider this before contracting more services or just say 'it's an Elexon issue'?

We are continuing to work with Elexon and review the exchange of data between the 2 companies given some delays in publication. We will come back to OTF ASAP with some further information once we have received analysis from Elexon.

Q: (02/04/25) When you do an emergency return to service why do you not notify the market of what is returning? It would be useful to know at least the impacted region - gencos need to manage TCLC obligations



Reminder about answering questions at the NESO 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: marketreporting@nationalenergyso.com
- 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: https://www.neso.energy/what-we-do/systems-operations/operational-transparency-forum
- 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: box.nc.customer@nationalenergyso.com



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 https://forms.office.com/r/k0AEfKnai3
 - At any time to <u>box.nc.customer@nationalenergyso.com</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 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).