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## NESO Operational Transparency Forum

19 March 2025









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



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: <u>marketreporting@nationalenergyso.com</u>
- 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:** <u>https://www.neso.energy/what-we-do/systems-operations/operational-transparency-forum</u> (OTF Q&A is published with slide packs)



# Future deep dive / focus topics

Slido code #OTF

### <u>Today's Focus Topics/deep dives</u>

Loss of Infeed (14.03.25) - 19 March

### **Future**

February Balancing Costs – 26 March

Overview of NESO System Access Planning process – 2 April

NESO Market Monitoring activities – 9 April (moved from 19 March)

March Balancing Costs - 16 April

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

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: <u>box.nc.customer@nationalenergyso.com</u>



### Frequency Risk and Control Report (FRCR) 2025 Consultation: 3<sup>rd</sup> – 31<sup>st</sup> March 2025

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- In line with SQSS requirement, NESO is obliged to produce an annual FRCR report and consult with industry on the assessment and policy recommendation presented in the report on how we manage frequency risks.
- We will be consulting on the 2025 version of FRCR between the 3<sup>rd</sup> and 31<sup>st</sup> March 2025. The associated documents is published on <u>FRCR webpage</u>.
- NESO is proving integrated technical assurance whereby Accenture, with whom NESO has an Engineering Services Framework, is performing an independent review. The phase 1 report is now available on <u>FRCR webpage</u>.
- We are holding a webinar on **Wednesday 19<sup>th</sup> March 13:00-14:00**, mid-way through the consultation period to provide further insight into the proposal and take any initial feedback on the proposals ahead of the consultation period closing.
- To further facilitate your understanding of FRCR 2025 modelling approach and data used, please refer to the recordings of
  - FRCR 2025 Technical Webinar 1 Framework and Methodology
  - FRCR 2025 Technical Webinar 2 Model and Data

Please send your response proforma to box.FRCR@nationalenergyso.com or complete the <u>online Response Form</u> by 5pm on Monday 31<sup>st</sup> March 2025

Please register your interest for the webinar using <u>this link</u>



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#### Public

## Future Control Strategy

- Specific workstream focussing on ensuring the structure of roles and responsibilities in the ENCC and supporting functions are appropriate for the future power system.
- Currently developing understanding of new/ evolved capabilities that are needed and want to reach out to discuss with key external stakeholders.
- If you want sign up for updates on Future Control Strategy:

Sign up here



# Response Reform March Webinar Slido code #OTF

Join us for the March Response Reform Webinar on **26 March 15:00 – 16:00** 

This webinar will focus on the **Future of Mandatory Frequency Response** (MFR) as we share a draft service design for **real-time Dynamic Response** with opportunity for industry to share initial thoughts and time for Q&A.

Sign up <u>here</u>.

If you have any questions, contact: <u>box.futureofbalancingservices@nationalenergyso.com</u>



## NESO Customer & Stakeholder Feedback Survey

This is a sample survey across NESO customers and stakeholders conducted during March. If you have been contacted, please do participate as we really value your feedback.



- Email address: <u>surveys@bmgresearch.co.uk</u>
- Phone number: 01213893024
- Scores:
  - Detractor: scores of 1-6 what did we do wrong?
  - Passive: scores of 7 or 8 what do we need to do better?
  - Promoter: scores of 9 or 10 what do we need to keep doing?

## **Closing date: 31 March 2025**



## Joint C9 and Dynamic Response A18 Slido code #OTF Consultation

Respond to the ad hoc C9 and Dynamic Response A18 consultation before 17:00 07 April 2025.

NESO have launched a joint ad hoc C9 Consultation which introduces changes for Quick Reserve Phase 2 launch, as well as C9 changes for ABSVD\* for Response and an Article 18 consultation to facilitate the application of ABSVD to Non-Balancing Mechanism Units (Non-BMUs) in the Dynamic Response Market.

Access the <u>consultation document</u> for full proposals and details on how to respond.

If you have any questions, contact: <u>balancingservices@nationalenergyso.com</u>

\*ABSVD – Applicable Balancing Services Volume Data <u>Understanding Applicable Balancing</u> <u>Services Volume Data for Secondary BM Units - Elexon BSC</u>



## **Future Event Summary**



| Event   | Date & Time   | Link                              |
|---|---|-----------------------------------|
| Frequency Risk and Control Report (FRCR) 2025<br>Consultation Webinar   | 19 <sup>th</sup> March 2025 (13:00-14:00)             | Register here                     |
| Quick Reserve Phase 2 – IT integration drop-in<br>sessions covering OBP, Settlement and<br>Operational Metering | Weekly from 20 March till 10<br>April (10:30 – 11:30) | <u>Register here</u>              |
| Response Reform Webinar   | 26 <sup>th</sup> March (15:00-16:00)                  | Register here                     |
| NESO Customer & Stakeholder Feedback Survey   | Closes: 31 March 2025                                 | Provided via email when invited   |
| Joint C9 and Dynamic Response A18 Consultation  | 7 <sup>th</sup> April 2025                            | Provide your response <u>here</u> |

Check out the <u>NESO Events Calendar</u> for more...



# Significant Loss of Infeed event on 14/03/2025



### **Overview**



- At 08:51 hrs on 14th March 2025 a significant loss of infeed of around 1,877MW occurred due to the trip of three generating units at Drax power station.
- This was the largest event since the power outage in August 2019 which was around 1.9GW.
- This event was well contained under the current Frequency Risk and Control Report (FRCR) policy based on the system conditions and the response services holding.
- The lowest frequency reached was 49.667Hz.
- Frequency returned above operational limits within 3min and to 50Hz in 12min.
- No demand or generation interrupted.



### Frequency behaviour following a major instantaneous infeed loss



### Balancing the grid





### System conditions before the event

| Date and time                   | Friday, 14th March 2025 at 08:51:37   |                                   |  |
|---------------------------------|---|-----------------------------------|--|
| <b>National Demand</b>          | 34.85GW   |                                   |  |
| System frequency                | 50.12Hz   |                                   |  |
| Inertia                         | 276.4GVA.s  |                                   |  |
| Contracted Response<br>Services | Dynamic Containment – Low (DC-L):<br>Dynamic Regulation – Low (DR-L):<br>Dynamic Moderation – Low (DM-L):<br>Static Firm Frequency Response (sFFR):<br>MFR:<br>Primary (P): 56 MW<br>Secondary (S): 71 MW<br>High (H): 177 MW | 1153MW<br>480MW<br>147MW<br>185MW |  |
| Weather                         | No weather warnings<br>3.05GW transmission-connected wind<br>832MW estimated embedded wind<br>4.12GW estimated embedded solar   |                                   |  |



### **Detailed timeline**

Based on the currently available NESO's system data and evidence, the timeline of events is as follows:

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| Time      | Activity  | Source |
|-----------|---|--------|
| 08:51:37  | DRAX-1 tripped from 654.94MW. The system frequency was at 50.12Hz   | NESO   |
| 08:51:42  | DRAX-2 and DRAX-3 tripped from 612.51MW and 609.52MW, respectively.   | NESO   |
| 08:52:00* | Three pump storage units instructed with a total of 370MW.  | NESO   |
| 08:52:09  | The system frequency reached its nadir at 49.667Hz. The estimated total cumulative infeed loss was around 1877MW. | NESO   |
| 08:53:00* | 400MW of small BMUs instructed and 500MW of batteries that were PN'd to come off were instructed to keep on.      | NESO   |
| 08:53:06  | Optional Fast Reserve dispatched with a total of 600MW.   | NESO   |
| 08:53:32  | The system frequency returned above operational limit (49.8Hz) within 3 minutes and to 50Hz in 12 minutes.        | NESO   |
|           |   |        |

No DNOs have reported customer impacts.

All three generating units became available by 13:10 hrs

\*This is the most accurate time stamp available at the moment

| Generation Unit                                       | Infeed Loss | Cumulative Infeed Loss |
|---|-------------|------------------------|
| A large generating unit                               | 654.94MW    | 654.94MW               |
| Two more generating units from the same power station | 1,222.03MW  | 1,876.97MW             |
| Reported embedded generation infeed loss              | None        | 1,876.97MW             |



### Frequency behaviour following a major instantaneous infeed loss



### **Response service performance**



| Service | Available<br>volume (MW) | Contracted<br>volume (MW) | Shortfall<br>(MW) | Notes                          |
|---------|--------------------------|---------------------------|-------------------|--------------------------------|
| DC-L    | 1077                     | 1153                      | 78                |                                |
| DM-L    | 128                      | 147                       | 19                | Shortfall were due to declared |
| DR-L    | 480                      | 480                       | 0                 | when analysina                 |
| Total   | 1683                     | 1780                      | 97                |                                |

- Overall, system frequency can be well replicated in NESO frequency simulation model. System behaved as expected during the event.
- Based on current available performance monitoring data, Dynamic Response Services, i.e. DC, DR and DM, responded to the event as expected containing frequency from deviating further.
  - Total contracted LF volume at the time of the event was 1780 MW. The average performance score in the settlement period
    relevant to the event is above 90% indicating a good performance of dynamic services.



## **Frequency analysis**



• NESO frequency simulation model runs a few indicative scenarios based on information available.

| Scenario          | Cascading /<br>Simultaneous    | System Inertia<br>(GVA.s) | Starting<br>frequency (Hz) | Frequency<br>Nadir (Hz) |  |
|-------------------|--------------------------------|---------------------------|----------------------------|-------------------------|--|
| <b>Real Event</b> | Unit 2 & 3 tripped 5           | 276.4                     | 50.12                      | 49.68                   |  |
| <br>1             | secs later,                    | 120                       | 50                         | 49.53                   |  |
| 2                 | following Unit I               | 120                       | 49.85                      | 49.24                   |  |
| 3                 |                                | 120                       | 50                         | 49.35                   |  |
| 4                 | 3 units tripped simultaneously | 120                       | 49.85                      | 49.11                   |  |
| 5                 |                                | 102                       | 49.85                      | 49.10                   |  |

- None of the scenarios would trigger Low Frequency Demand Disconnection (LFDD) operation (stage 1 initiating at 48.8 Hz).
- In some of the scenarios system frequency might not return to 49.5Hz within 60s and additional reserve would need to be instructed.
- Analysis is based on the procured DC volume for the time of the event. We set up DC requirement based on estimated system inertia. For SP19 (08:30-09:00hrs) on 14 March we estimated system inertia to be 234 GVA.s. If we estimated inertia to be 120 GVA.s we would have procured higher DC volume.

## Impacts to current frequency control policy

- Currently according to Frequency Risk and Control Report (FRCR) 2024 edition, we
  - Maintain the existing minimum inertia requirement at 120 GVA.s,
  - Secure all Balancing Mechanism Unit (BMU) only risks and do not apply additional actions to mitigate all BMU + Vector Shift (VS) and simultaneous events, and

- Procure additional 100 MW DC-Low service to further reduce residual risks.
- This event was a simultaneous event where 3 BMUs tripped within ~5 secs. This event was well contained under the current FRCR policy based on the system conditions and the response services holding.
- This event involved the largest infeed loss volume since the 2019 power cut event and the implementation of FRCR in 2021. For reference, ~1.5 GW loss in 2008 blackout event, ~1.9 GW loss in 2019 power cut event, and ~1.7 GW in 2023 simultaneous event.
- If this event occurred in 2024, together with historic records, the occurrence of simultaneous events considered in FRCR would change from 3.5 to 3.67 per year. We might see a slight increase in 49.2 Hz event probability.
- This event will be included in future FRCR assessment. Its occurrence however does not change our current FRCR policy in managing GB frequency.
   NESO

### Demand | Last week demand out-turn

#### NESO National Demand outturn 12-18 March 2025 42000 40000 38000 36000 Demand (MW) 34000 32000 30000 28000 26000 24000 22000 Wed Thu Fri Sat Sun Mon Tue Wed 15-Mar 12-Mar 13-Mar 14-Mar 16-Mar 17-Mar 18-Mar 19-Mar Date

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 <u>does not include</u> 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 <u>NESO Data Portal</u> in the following data sets: <u>Historic Demand Data & Demand Data Update</u>

Peak values by day OUTTURN **Daily Max Daily Max** Dist. Wind Date Dist. PV Demand type (GW) (GW) 5.7 2.7 National Demand (ND) 12 Mar 2025 transmission connected 13 Mar 2025 5.5 1.9 generation requirement within GB 14 Mar 2025 7.0 1.0 ND + est. of PV & wind 7.6 15 Mar 2025 0.9 at Distribution network 16 Mar 2025 7.3 1.2 17 Mar 2025 3.7 1.9 Renewable type 18 Mar 2025 11.6 2.2

**Distributed generation** 

#### **National Demand**

Peaks and troughs

Distributed PV

Distributed Wind

| Date        | Forecasting<br>Point | National<br>Demand<br>(GW) | Dist. wind<br>(GW) | National<br>Demand<br>(GW) | Dist. wind<br>(GW) |
|-------------|----------------------|----------------------------|--------------------|----------------------------|--------------------|
| 12 Mar 2025 | Evening Peak         | 39.6                       | 2.0                | 39.0                       | 1.8                |
| 13 Mar 2025 | Overnight Min        | 23.6                       | 1.6                | 23.5                       | 1.7                |
| 13 Mar 2025 | Evening Peak         | 39.7                       | 0.6                | 40.2                       | 0.6                |
| 14 Mar 2025 | Overnight Min        | 25.0                       | 0.6                | 25.2                       | 0.5                |
| 14 Mar 2025 | Evening Peak         | 38.7                       | 0.8                | 38.6                       | 0.7                |
| 15 Mar 2025 | Overnight Min        | 23.4                       | 0.8                | 24.2                       | 0.7                |
| 15 Mar 2025 | Evening Peak         | 35.7                       | 0.8                | 36.1                       | 0.8                |
| 16 Mar 2025 | Overnight Min        | 22.6                       | 0.6                | 23.5                       | 0.8                |
| 16 Mar 2025 | Evening Peak         | 36.9                       | 0.5                | 36.6                       | 1.0                |
| 17 Mar 2025 | Overnight Min        | 23.4                       | 0.6                | 22.8                       | 1.0                |
| 17 Mar 2025 | Evening Peak         | 39.3                       | 1.1                | 40.0                       | 1.6                |
| 18 Mar 2025 | Overnight Min        | 23.1                       | 1.6                | 24.1                       | 2.0                |
| 18 Mar 2025 | Evening Peak         | 37.9                       | 2.5                | 37.7                       | 2.2                |

FORECAST (Wed 12 Mar)

#### Slido code #OTF

OUTTURN

20

### **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.

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

#### Demand type

National Demand (ND) transmission connected generation requirement within GB

 ND + est. of PV & wind at Distribution network

#### Renewable type

Distributed\_PV

Distributed\_Wind

#### **National Demand**

Peaks and troughs

|                   | FURECAST  | ved 19 Warj   |
|-------------------|---|---|
| Forecasting Point | National<br>Demand<br>(GW)  | Dist. wind<br>(GW)  |
| Evening Peak      | 38.6  | 0.4   |
| Overnight Min     | 24.2  | 0.4   |
| Evening Peak      | 35.2  | 2.1   |
| Overnight Min     | 20.3  | 2.8   |
| Evening Peak      | 32.9  | 2.7   |
| Overnight Min     | 19.5  | 2.3   |
| Evening Peak      | 31.7  | 1.4   |
| Overnight Min     | 20.0  | 1.3   |
| Evening Peak      | 33.7  | 1.3   |
| Overnight Min     | 21.4  | 1.2   |
| Evening Peak      | 37.0  | 1.1   |
| Overnight Min     | 22.5  | 1.1   |
| Evening Peak      | 37.5  | 0.9   |
|                   | Forecasting Point<br>Evening Peak<br>Overnight Min<br>Evening Peak<br>Overnight Min<br>Evening Peak<br>Overnight Min<br>Evening Peak<br>Overnight Min<br>Evening Peak<br>Overnight Min<br>Evening Peak<br>Overnight Min | Forecasting PointNational<br>Demand<br>(GW)Evening Peak38.6Overnight Min24.2Evening Peak35.2Overnight Min20.3Evening Peak32.9Overnight Min19.5Evening Peak31.7Overnight Min20.0Evening Peak33.7Overnight Min21.4Evening Peak37.0Overnight Min22.5Evening Peak37.5 |





## **Operational Margins | Week Ahead**

Slido code #OTF

#### 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<br>Generation<br>(MW) | Wind (MW) | IC Flows*<br>(MW) | Peak<br>demand<br>(MW) | Indicative<br>surplus<br>(MW) |
|-----|------------|--------------------------------|-----------|-------------------|------------------------|-------------------------------|
| Thu | 20/03/2025 | 40561                          | 9970      | 5120              | 35480                  | 15140                         |
| Fri | 21/03/2025 | 40641                          | 16040     | 5120              | 33470                  | 20230                         |
| Sat | 22/03/2025 | 40059                          | 9170      | 5120              | 32270                  | 17450                         |
| Sun | 23/03/2025 | 40919                          | 6270      | 5120              | 34310                  | 13990                         |
| Mon | 24/03/2025 | 41317                          | 6210      | 5120              | 37630                  | 10980                         |
| Tue | 25/03/2025 | 41612                          | 5000      | 5120              | 38060                  | 9370                          |
| Wed | 26/03/2025 | 41784                          | 5050      | 5120              | 38150                  | 9500                          |

\*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**



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





### NESO Actions | Peak Demand - SP spend ~ £23k Thursday 13th March



Slido code #OTF

### NESO Actions | Minimum Demand – SP spend ~ £44k Sunday 9<sup>th</sup> March

![](_page_25_Figure_3.jpeg)

### NESO Actions | – Highest SP spend ~ £358k Tuesday 11<sup>th</sup> March

![](_page_26_Figure_3.jpeg)

### **Transparency** Network Congestion

![](_page_27_Figure_2.jpeg)

| Boundary        | Max.<br>Capacity<br>(MW) | Current<br>Capacity<br>(%) |
|-----------------|--------------------------|----------------------------|
| B4/B5           | 3400                     | 53%                        |
| B6 (SCOTEX)     | 6800                     | 71%                        |
| B6a             | 8000                     | 64%                        |
| B7 (SSHARN)     | 9850                     | 76%                        |
| GMSNOW          | 5800                     | 66%                        |
| FLOWSTH<br>(B9) | 12700                    | 85%                        |
| DRESHEX         | 9675                     | 70%                        |
| EC5             | 5000                     | 100%                       |
| LE1 (SEIMP)     | 8750                     | 82%                        |
| B15 (ESTEX)     | 7500                     | 99%                        |
| SC1             | 7300                     | 82%                        |

![](_page_27_Figure_4.jpeg)

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nd>

![](_page_27_Picture_5.jpeg)

Portsm

Plymouth

### **Transparency** | Network Congestion

![](_page_28_Figure_2.jpeg)

| Boundary        | Max.<br>Capacity<br>(MW) | Current<br>Capacity<br>(%) |
|-----------------|--------------------------|----------------------------|
| B4/B5           | 3400                     | 64%                        |
| B6 (SCOTEX)     | 6800                     | 68%                        |
| B6a             | 8000                     | 74%                        |
| B7 (SSHARN)     | 9850                     | 75%                        |
| GMSNOW          | 5800                     | 50%                        |
| FLOWSTH<br>(B9) | 12700                    | 75%                        |
| DRESHEX         | 9675                     | 84%                        |
| EC5             | 5000                     | 90%                        |
| LE1 (SEIMP)     | 8750                     | 77%                        |
| B15 (ESTEX)     | 7500                     | 90%                        |
| SC1             | 7300                     | 75%                        |

![](_page_28_Figure_4.jpeg)

![](_page_28_Picture_5.jpeg)

Portsmi

Plymouth

### **Transparency | Network Congestion**

![](_page_29_Figure_2.jpeg)

| Boundary        | Max.<br>Capacity<br>(MW) | Current<br>Capacity<br>(%) |
|-----------------|--------------------------|----------------------------|
| B4/B5           | 3400                     | 64%                        |
| B6 (SCOTEX)     | 6800                     | 68%                        |
| B6a             | 8000                     | 74%                        |
| B7 (SSHARN)     | 9850                     | 75%                        |
| GMSNOW          | 5800                     | 50%                        |
| FLOWSTH<br>(B9) | 12700                    | 75%                        |
| DRESHEX         | 9675                     | 84%                        |
| EC5             | 5000                     | 90%                        |
| LE1 (SEIMP)     | 8750                     | 77%                        |
| B15 (ESTEX)     | 7500                     | 90%                        |
| SC1             | 7300                     | 75%                        |

![](_page_29_Figure_4.jpeg)

![](_page_29_Picture_5.jpeg)

### **Transparency** | Network Congestion

![](_page_30_Figure_2.jpeg)

![](_page_30_Figure_3.jpeg)

![](_page_30_Figure_4.jpeg)

![](_page_30_Figure_5.jpeg)

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Day ahead flows and limits, and the 24-month constraint limit forecast are published on the NESO 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)

## **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<br>Average w/e | Offers –<br>All BM | Offers –<br>PSA | Bids –<br>All BM | Bids -<br>PSA |
|-----------------------|--------------------|-----------------|------------------|---------------|
| 23/02                 | 15%                | 32%             | 1%               | 51%           |
| 02/03                 | 24%                | 34%             | 6%               | 49%           |
| 09/03                 | 12%                | 29%             | 4%               | 36%           |
| 16/03                 | 21%                | 27%             | 7%               | 50%           |

| Monthly<br>Average | Offers –<br>All BM | Offers –<br>PSA | Bids -<br>All BM | Bids -<br>PSA |
|--------------------|--------------------|-----------------|------------------|---------------|
| January            | 18%                | 34%             | 11%              | 53%           |
| February           | 15%                | 33%             | 5%               | 49%           |
| March (MTD)        | 15%                | 28%             | 5%               | 43%           |

BM outage on 11<sup>th</sup> March has impacted the skip rate. We are still assessing the impact but expect it to be slightly lower than reported.

Webinar <u>recording</u> and <u>slides</u> from 27<sup>th</sup> Feb are available.

#### Note: The <u>Dispatch Transparency dataset</u> will no longer be published after end of March.

Slido code #OTF

Bids: Average Skip Rate and Total Skipped Volume (Daily)

Sum of All BM Bids total volume skipped (MWh) Sum of All BM Bids skip rate (%) Sum of PSA Bids skip rate (%)

![](_page_31_Figure_11.jpeg)

Offers: Average Skip Rate and Total Skipped Volume (Daily)

Sum of All BM Offers total volume skipped (MWh) Sum of All BM Offers skip rate (%) Sum of PSA Offers skip rate (%)

![](_page_31_Figure_14.jpeg)

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.

<u>Skip rate data</u> and more info on <u>skip rates</u> and <u>battery</u> <u>storage</u> including methodology.

![](_page_31_Picture_17.jpeg)

#### **PSA: Post System Action**

# **Previously Asked Questions**

![](_page_32_Picture_2.jpeg)

**Q:** (12.03.25) BESS assets in constrained zones are clearing large QR awards, then submitting PNs opposite to the award and bid via BM to 0MW, so are paid in QR and BM for net zero action. This is within QR terms, but as a consistent & intentional strategy, is bad for the system? Any plans to address this?

**A:** We are continually reviewing our balancing services and how these are being accessed by the market, and we asked for feedback on introducing a locational element in our recent response webinar.

**Q:** (26.02.25): RE questions about cashout prices and pointing us towards Elexon support. Noone at Elexon seems to understand cashout and they have consistently (for years) just put their hands up saying "we just publish the data we're given, talk to grid". Is there a specific team/individual you can point us to.

**A:** We have met with Elexon who have advised that if you raise an Elexon Support ticket and put it For Attention Of (FAO): Settlement and Insights this should go to the right team.

![](_page_32_Picture_7.jpeg)

# **Previously Asked Questions**

![](_page_33_Picture_2.jpeg)

**Q:** (12.03.25) Could you advise the location of the DRESHEX boundary - it doesn't seem to be shown on the maps provided in the Network Congestion slides. Similarly, HARSPNBLY [B6a]. Thanks.)

**A:** Thank you for pointing this out. We have included them in this week's pack. These boundaries can also be found in the Data portal (under 24 -month Ahead data, Day ahead constraint flow and limits).

![](_page_33_Picture_5.jpeg)

# **Outstanding Questions**

![](_page_34_Picture_2.jpeg)

**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?

![](_page_34_Picture_4.jpeg)

# **Reminder about answering** questions at the NESO OTF

![](_page_35_Picture_2.jpeg)

- **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: ٠ 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 ٠ scope of the OTF.
- Slido will remain open until 12:00, even when the call closes earlier, to provide the maximum opportunity for ٠ 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> ٠
- **Takeaway questions** these questions will be included in the pack for the next OTF, we may ask you to ٠ 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 ٠

![](_page_35_Picture_10.jpeg)

![](_page_36_Picture_0.jpeg)

![](_page_36_Picture_1.jpeg)

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

# Appendix

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![](_page_37_Picture_2.jpeg)

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## **Purpose and scope of the NESO Operational Transparency Forum**

![](_page_38_Picture_2.jpeg)

### **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, NESO Business Planning, Market development

![](_page_38_Picture_11.jpeg)

## 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@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 **NESO** found in the appendix of this slide pack.

## Skip Rates – 'In Merit' datasets

![](_page_40_Picture_2.jpeg)

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).