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NESO Operational Transparency Forum

30 October 2024

NESO
National Energy System Operator

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
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- **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)

NESO National Energy System Operator

Future deep dive / focus topics

Slido code #OTF

Today

No deep dives

Future

Clean Power 2030 – 6 November

Operational Margins – TBC November

Initial National Demand Outturn – TBC

Information share on FRCR 2025 (scope, deep dives and key dates) – TBC

If you have suggestions for future deep dives or focus topics, please send them to us at: box.nc.customer@nationalenergyso.com and we will consider including them in a future forum

Slido code #OTF

Future of Reactive Power

Join us on **13 November** from **2pm – 3pm** to hear how the Future of Reactive Power project is progressing.

During the webinar, you'll see our current thinking about the Mid-Term market design and be able to share your feedback and ideas.

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

Book your place by signing up here

Register here

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Quick Reserve

Quick Reserve phase 1 mock auctions and weekly drop-in sessions

As we continue our mock auctions between **28 October and 8 November** for phase 1 of Quick Reserve, join us for our weekly drop-in sessions each Thursday, these sessions are for providers to ask the team any questions regarding Quick Reserve. On **24 October**, we covered the end-to-end process for participation in the service.

LCP Delta – skip rate methodology

Slido code #OTF

This webinar will be held on **07/11/2024** at **3pm**.

You can register for this event by following this link

The event will be hosted by NESO with the methodology being presented by Chris Matson at LCP.

Additional queries can be sent to .box.battery-storage-strategy@nationalgrideso.com and Box.Battery-Storage-Strategy@uk.nationalenergyso.com.

We will be publishing the full report in November and will also be hosting one-on-one surgeries in the weeks following the webinar. During surgeries there will be further opportunity to ask any specific queries on the methodology.

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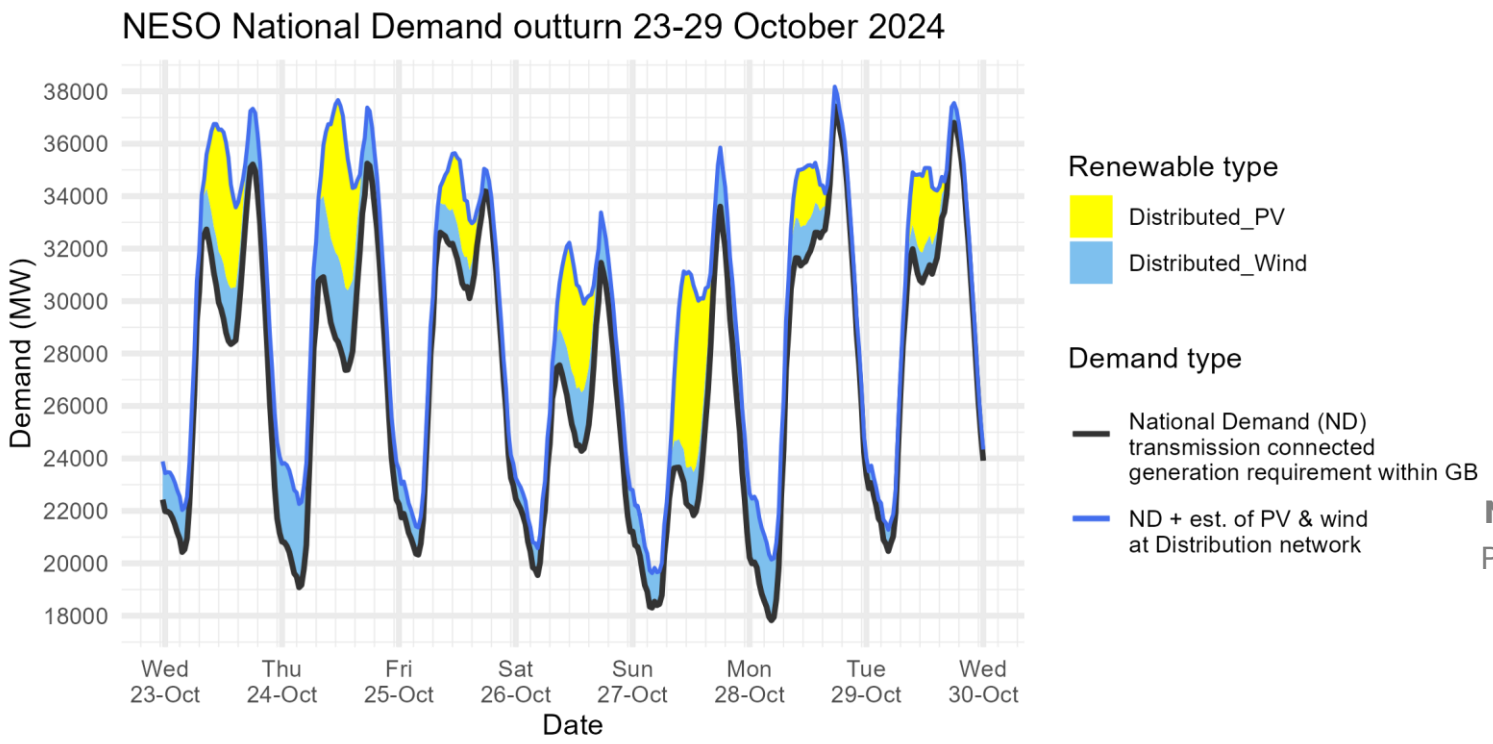
Future Event Summary

Slido code #OTF

Event	Date & Time	Link
Quick Reserve Phase 1 Weekly Drop In Sessions	24 October 2024 – 07 November 2024	Sign Up
LCP Delta – skip rate methodology	7 November 2024 (3pm)	Sign Up
Markets Forum	11 November 2024 (10am)	Sign Up
Future of Reactive Power	13 November (2pm)	Sign Up

Demand | Last week demand out-turn

Slido code #OTF



Distributed generation

Peak values by day

Date	OUTTURN	
	Daily Max Dist. PV (GW)	Daily Max Dist. Wind (GW)
23 Oct 2024	5.1	2.9
24 Oct 2024	6.0	3.3
25 Oct 2024	2.9	1.4
26 Oct 2024	4.5	2.3
27 Oct 2024	7.5	2.4
28 Oct 2024	2.2	2.5
29 Oct 2024	2.9	1.2

National Demand

Peaks and troughs

Date	Forecasting Point	FORECAST (Wed 23 Oct)		OUTTURN	
		National Demand (GW)	Dist. wind (GW)	National Demand (GW)	Dist. wind (GW)
23 Oct 2024	Evening Peak	36.2	2.1	35.2	2.1
24 Oct 2024	Overnight Min	18.6	3.1	19.1	3.2
24 Oct 2024	Evening Peak	35.6	2.7	35.2	2.1
25 Oct 2024	Overnight Min	20.3	1.7	20.3	1.0
25 Oct 2024	Evening Peak	34.6	1.5	34.2	0.8
26 Oct 2024	Overnight Min	19.4	1.9	19.5	1.0
26 Oct 2024	Evening Peak	31.1	2.4	31.5	1.9
27 Oct 2024	Overnight Min	17.1	2.2	18.3	1.3
27 Oct 2024	Evening Peak	32.5	2.9	33.6	2.2
28 Oct 2024	Overnight Min	17.5	2.5	17.8	2.3
28 Oct 2024	Evening Peak	36.9	2.0	37.4	0.7
29 Oct 2024	Overnight Min	20.0	1.5	20.5	0.8
29 Oct 2024	Evening Peak	37.9	1.4	36.8	0.8

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

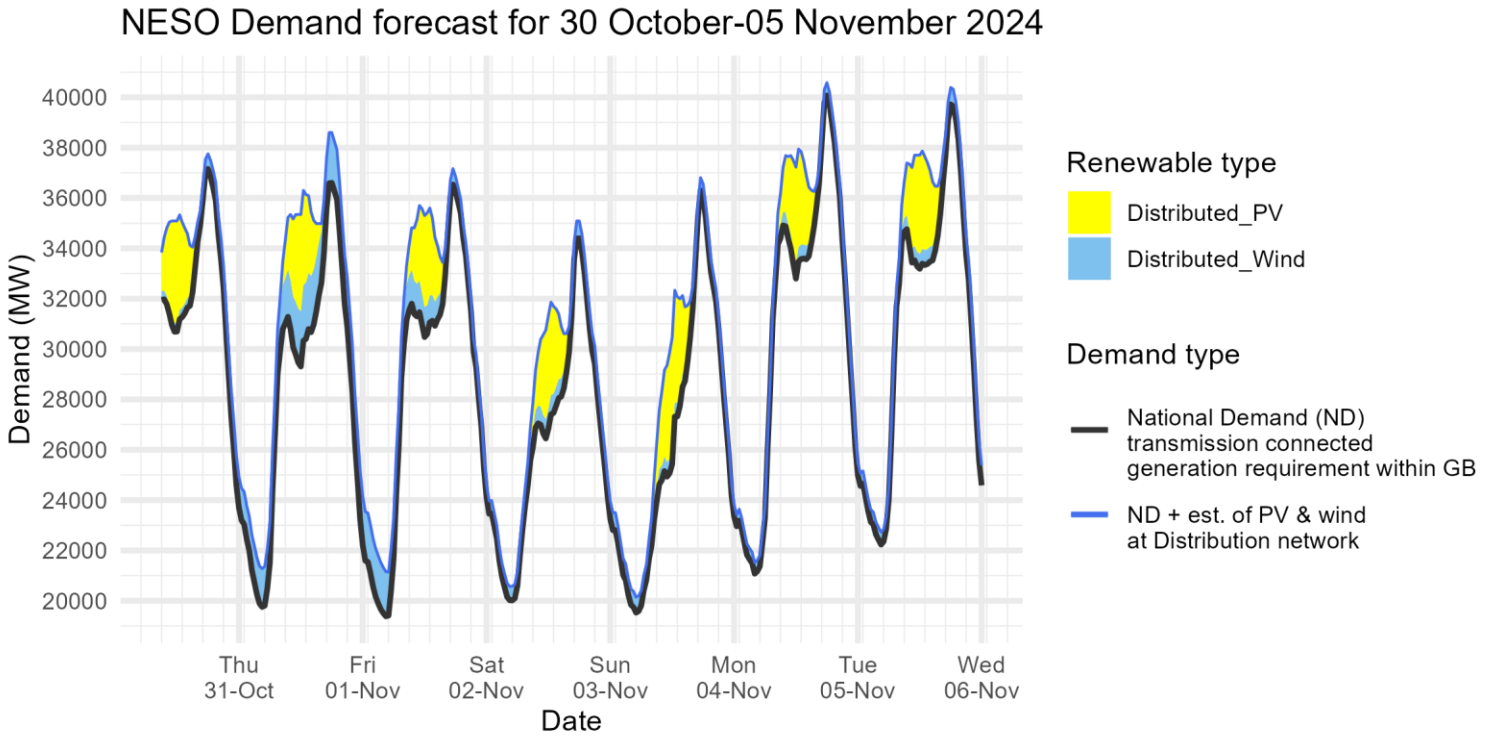
ND values do not include export on interconnectors or pumping or station load

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

Slido code #OTF



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National Demand

Peaks and troughs

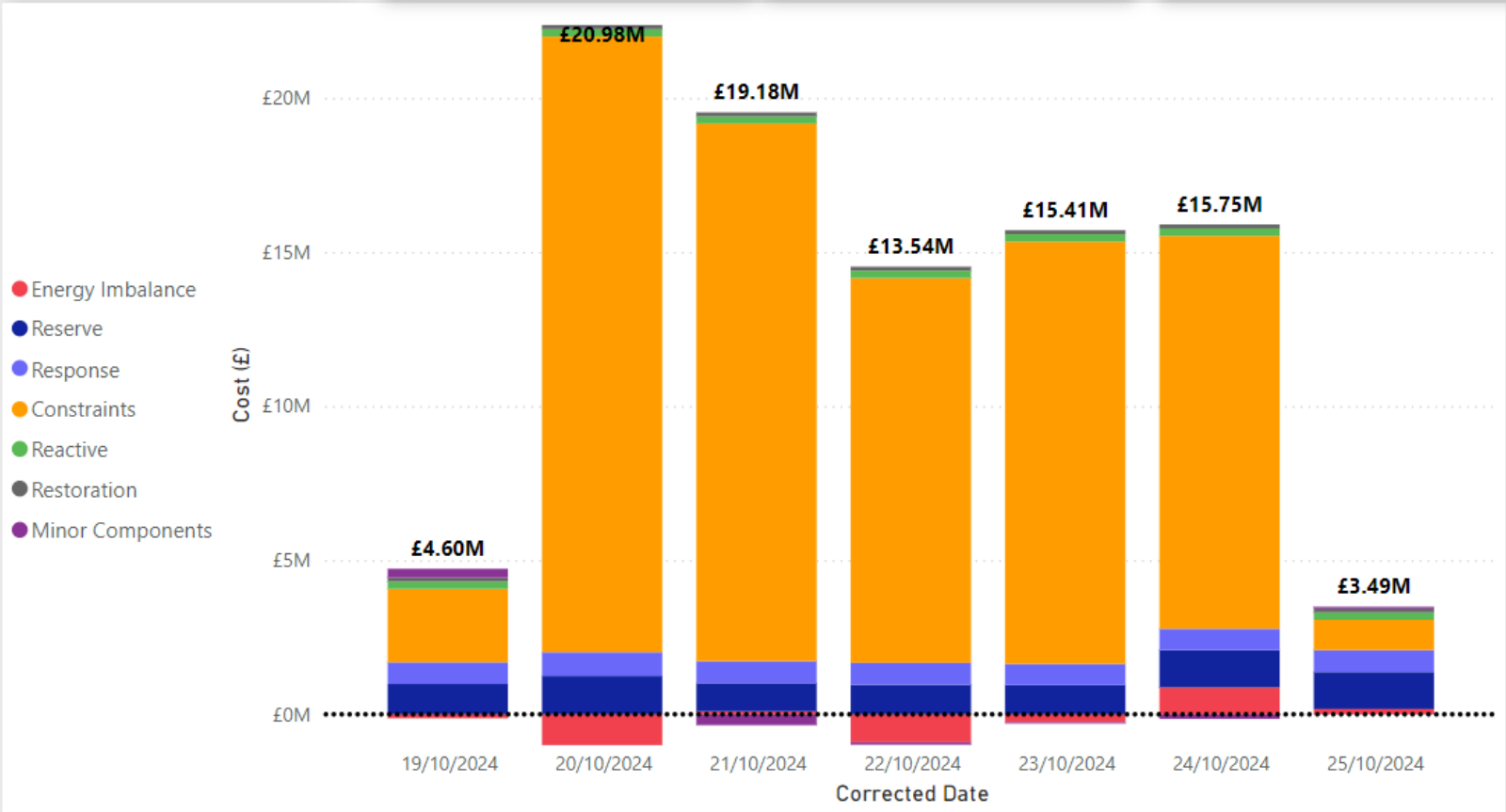
		FORECAST (Wed 30 Oct)	
Date	Forecasting Point	National Demand (GW)	Dist. wind (GW)
30 Oct 2024	Evening Peak	37.2	0.6
31 Oct 2024	Overnight Min	19.8	1.5
31 Oct 2024	Evening Peak	36.6	2.0
01 Nov 2024	Overnight Min	19.4	1.8
01 Nov 2024	Evening Peak	36.5	0.6
02 Nov 2024	Overnight Min	20.0	0.6
02 Nov 2024	Evening Peak	34.4	0.7
03 Nov 2024	Overnight Min	19.5	0.6
03 Nov 2024	Evening Peak	36.3	0.5
04 Nov 2024	Overnight Min	21.1	0.4
04 Nov 2024	Evening Peak	40.1	0.5
05 Nov 2024	Overnight Min	22.2	0.5
05 Nov 2024	Evening Peak	39.7	0.7

NESO Actions | Category Cost Breakdown

Slido code #OTF

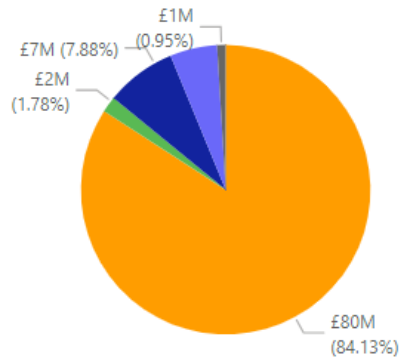
Date
19/10/2024 25/10/2024

Weekly Total Costs (£)	Last Week Total Costs (£)	Past 30-Day Average Costs (£)
£92.9M	£61.4M	£8.7M



Date	Total Outturn Cost
19/10/2024	£4,595,825
20/10/2024	£20,977,129
21/10/2024	£19,182,097
22/10/2024	£13,539,099
23/10/2024	£15,412,594
24/10/2024	£15,750,088
25/10/2024	£3,491,342
Total	£92,948,174

Weekly Cost (£) and Share (%)



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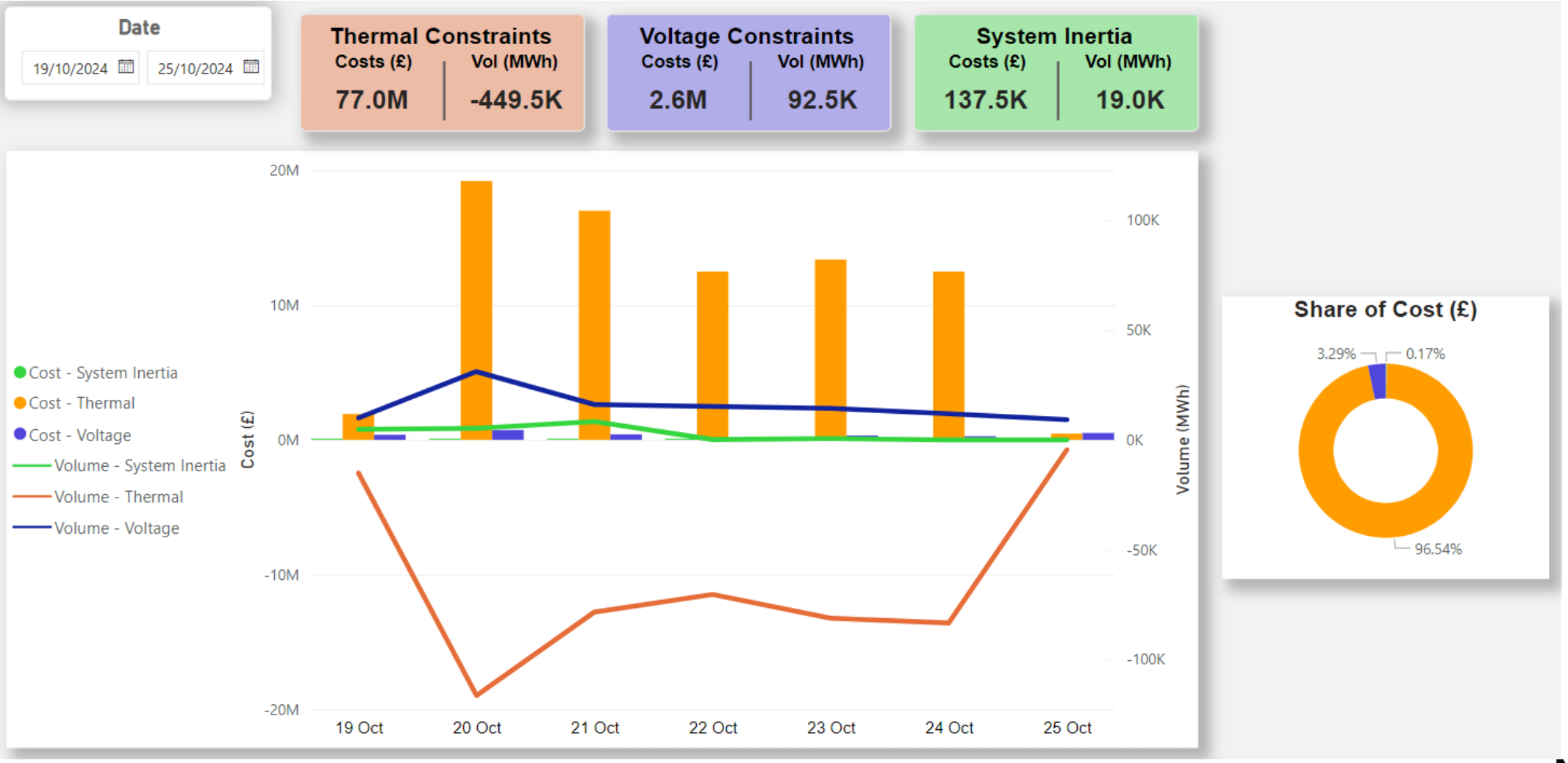
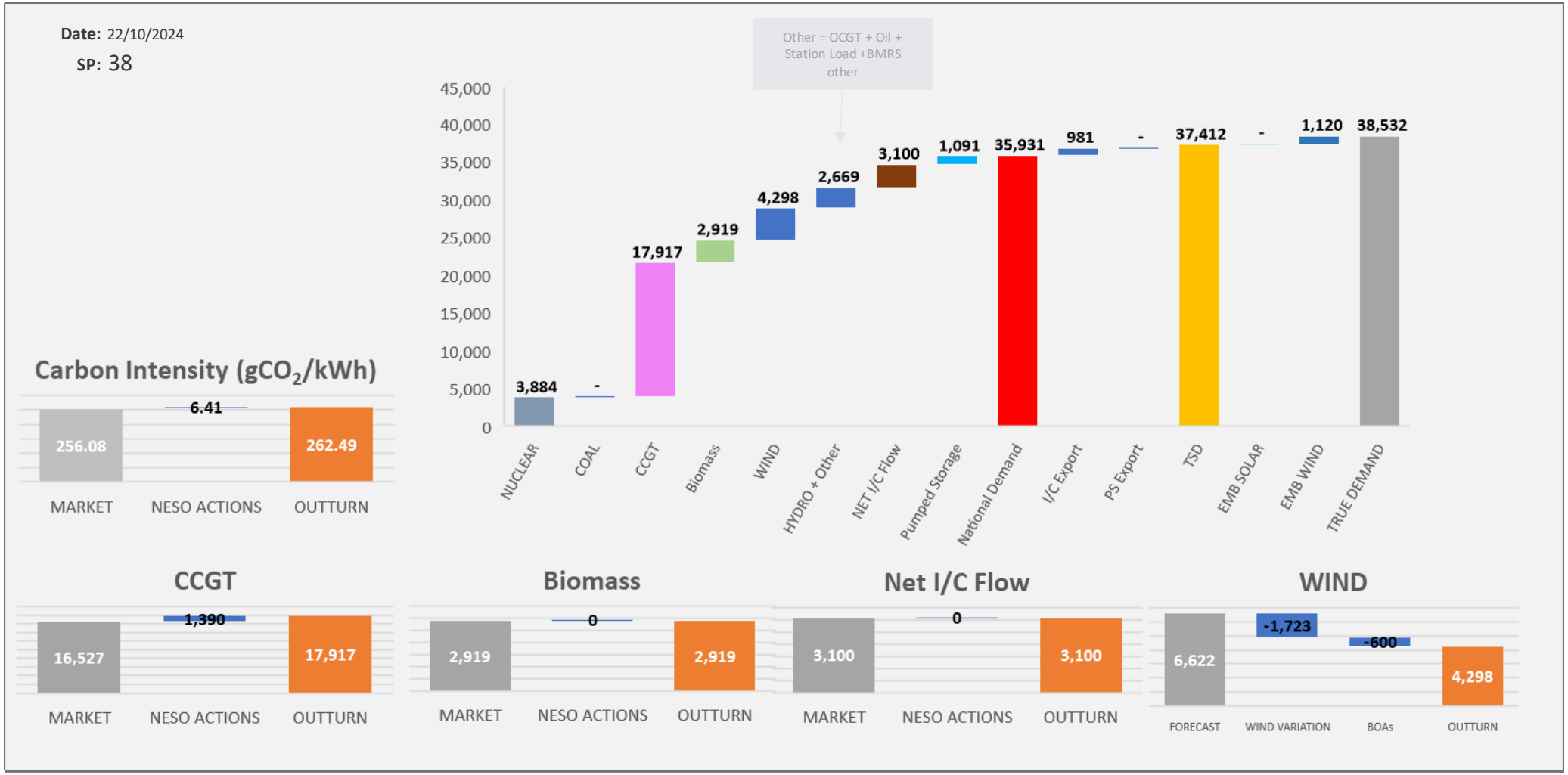
NESO Actions | Constraint Cost Breakdown

Slido code #OTF



NESO Actions | Peak Demand – SP spend ~ £241k
Tuesday 22nd October

Slido code #OTF

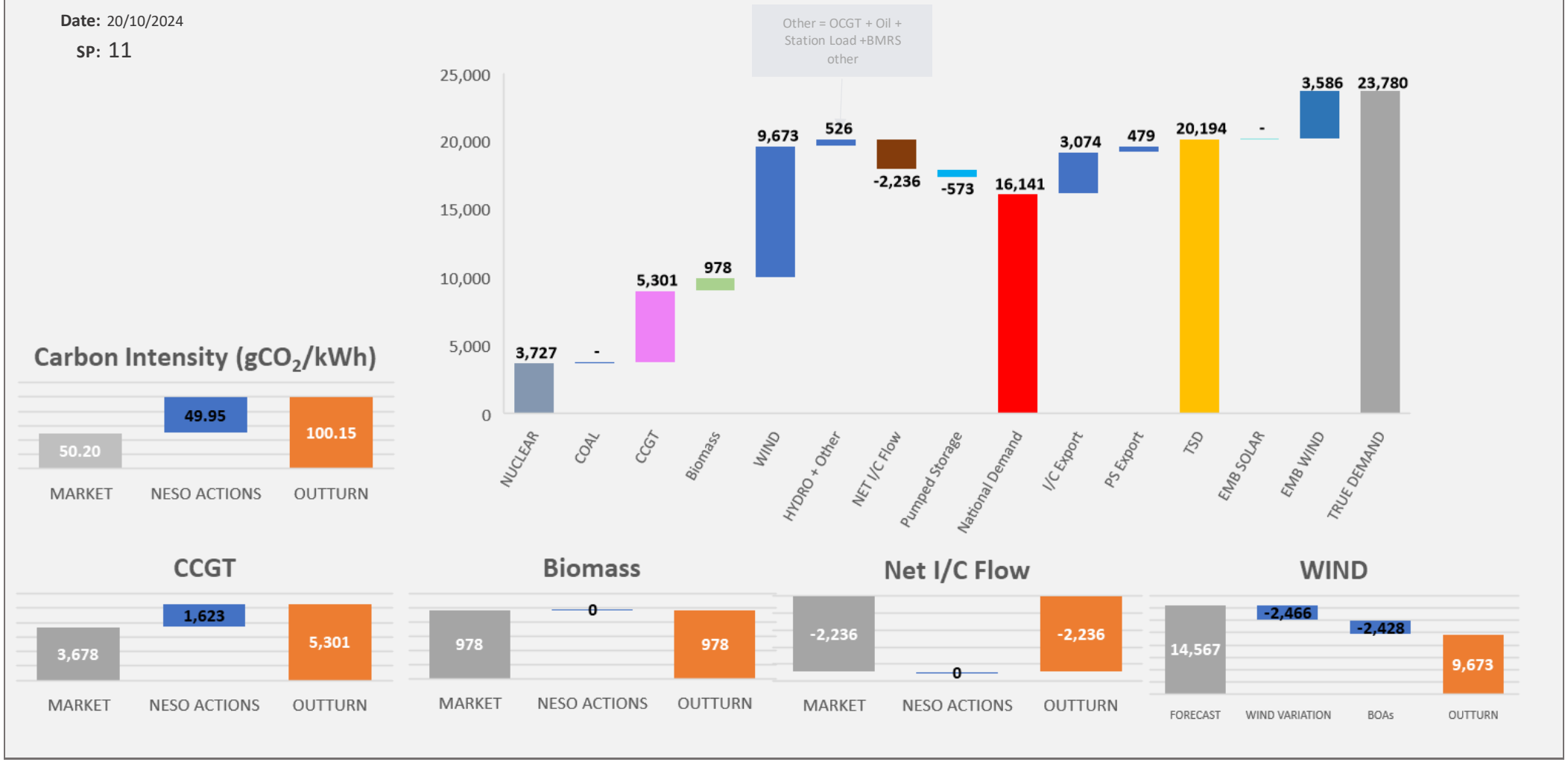


Slido code #OTF

NESO Actions | Minimum Demand – SP spend ~ £511k Sunday 20th October

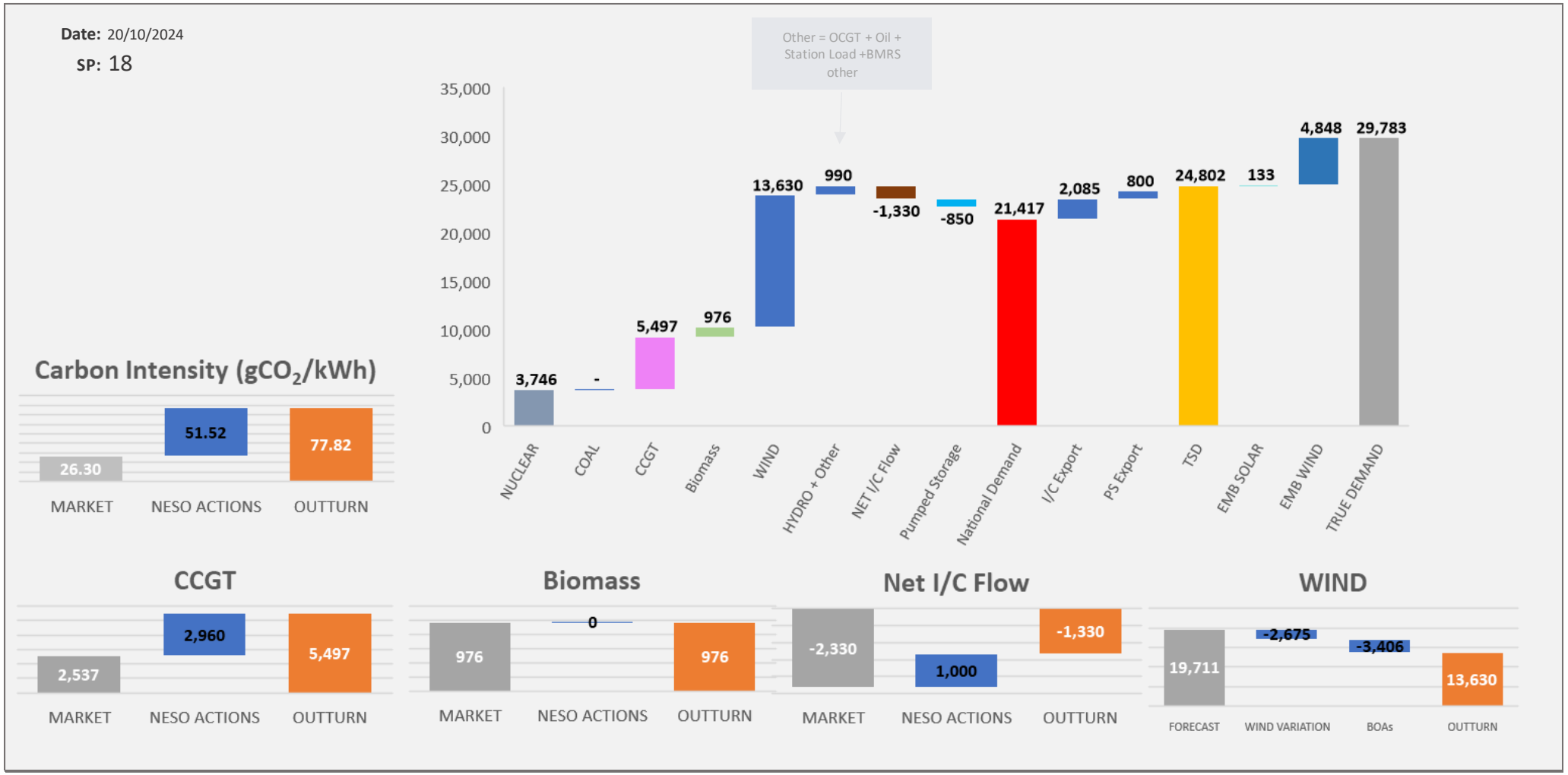
Date: 20/10/2024

SP: 11



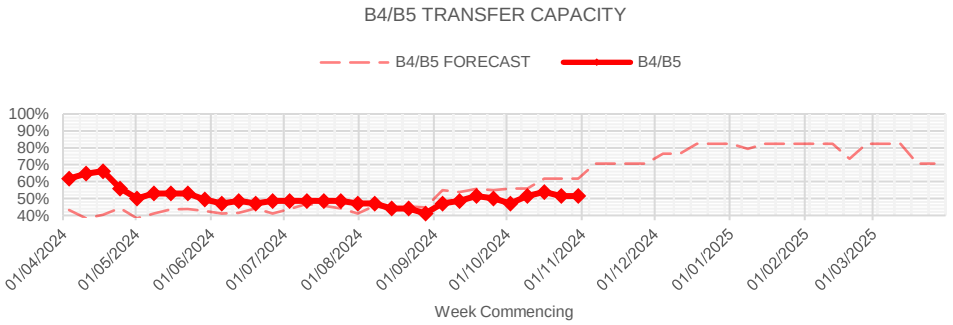
NESO Actions | – Highest SP spend ~ £621k Sunday 20th October

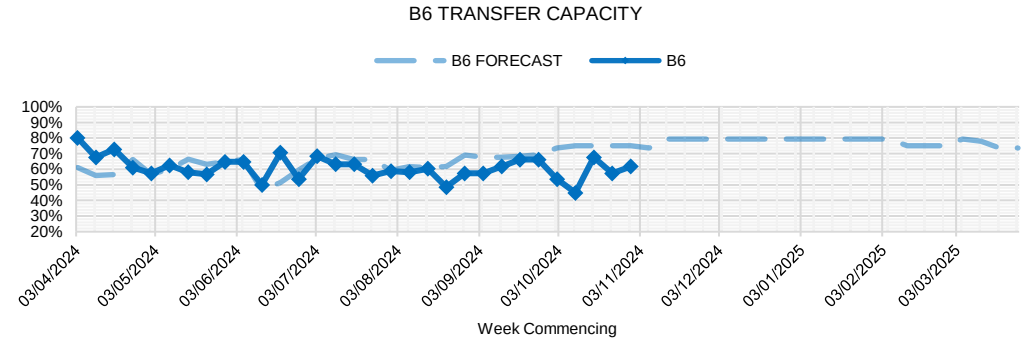
Slido code #OTF

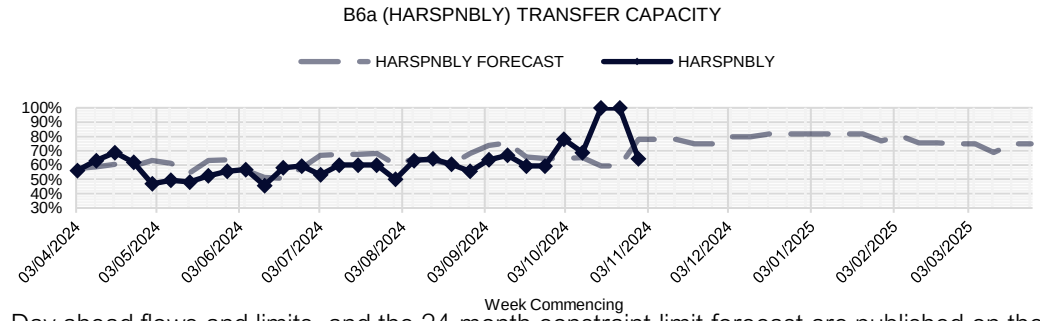


Transparency | Network Congestion

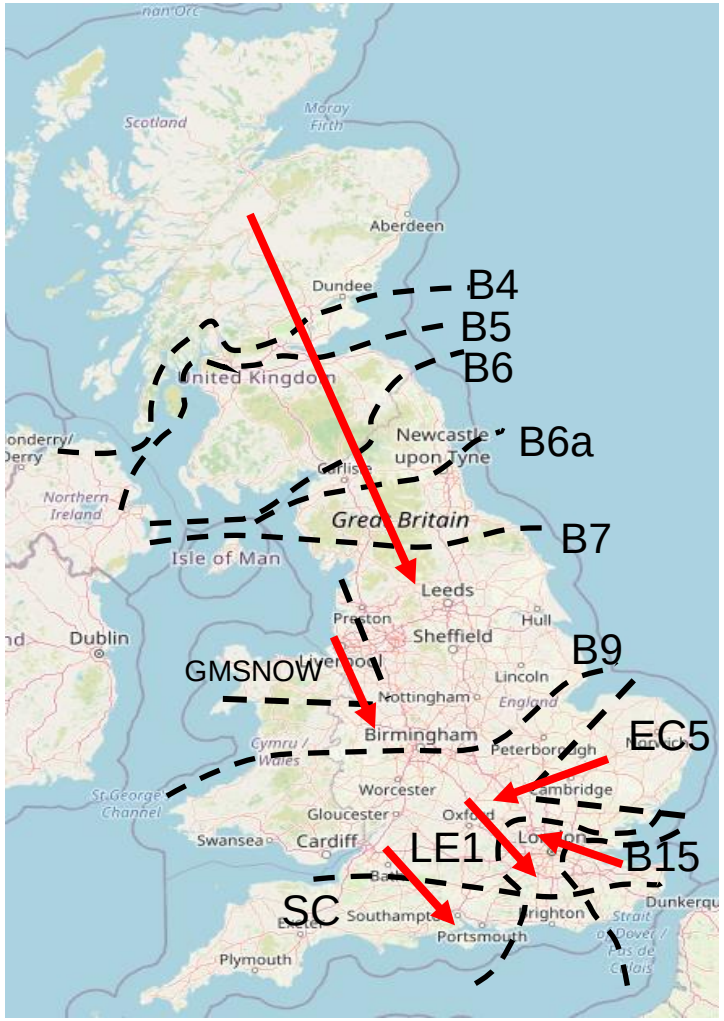
Slido code #OTF







Boundary	Max. Capacity (MW)	Current Capacity (%)
B4/B5	3400	51%
B6 (SCOTEX)	6800	62%
HARSPNBLY	8000	64%
B7 (SSHARN)	8325	88%
GMSNOW	4700	69%
EC5	5000	100%
LE1 (SEIMP)	8500	59%
B15 (ESTEX)	7500	73%
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)

Transparency | Network Congestion

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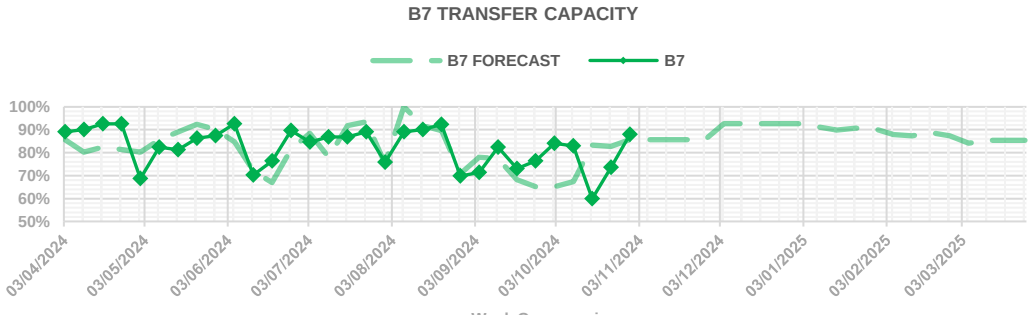

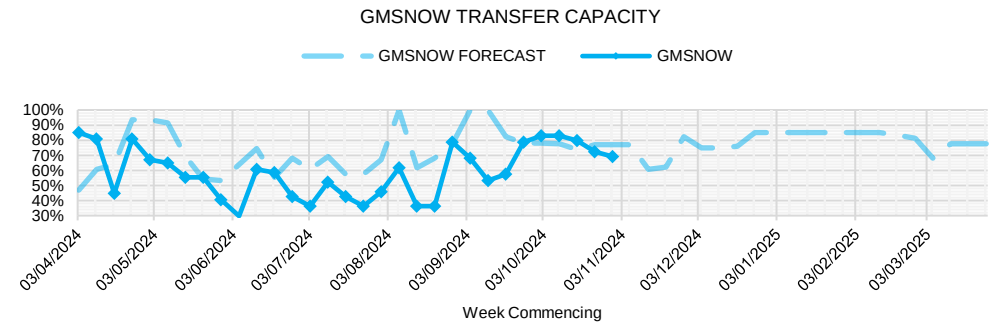

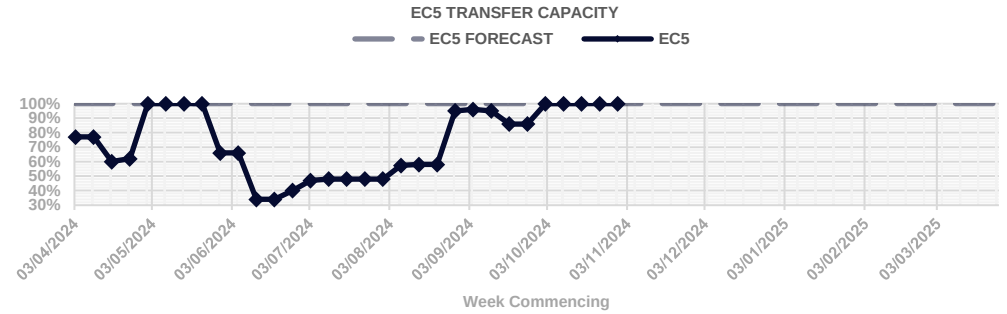

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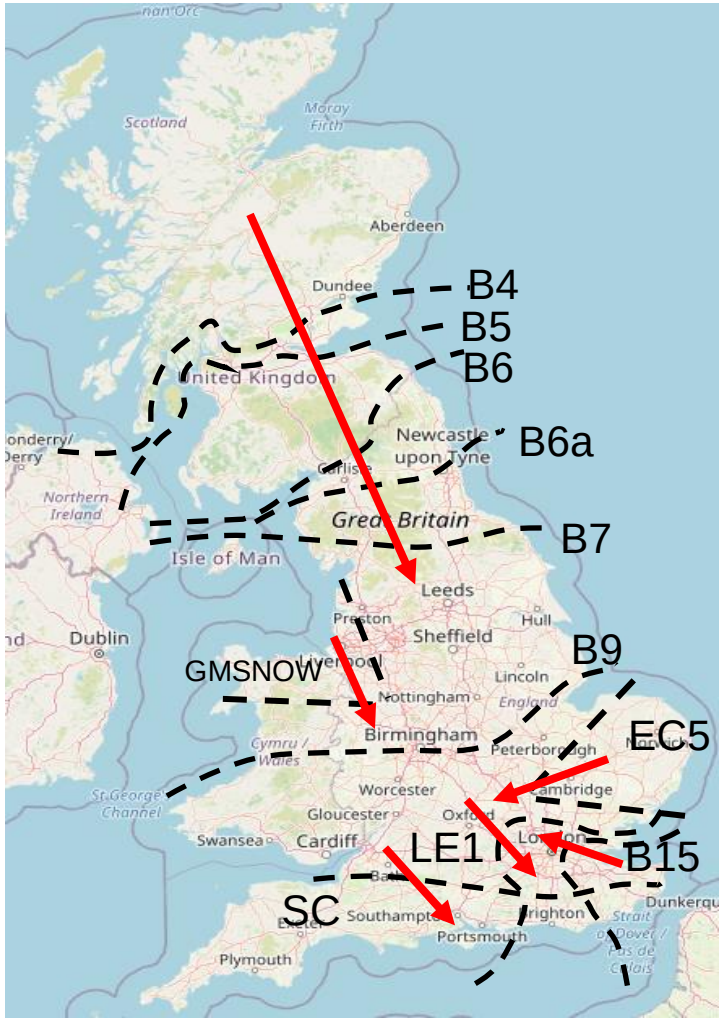

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Transparency | Network Congestion

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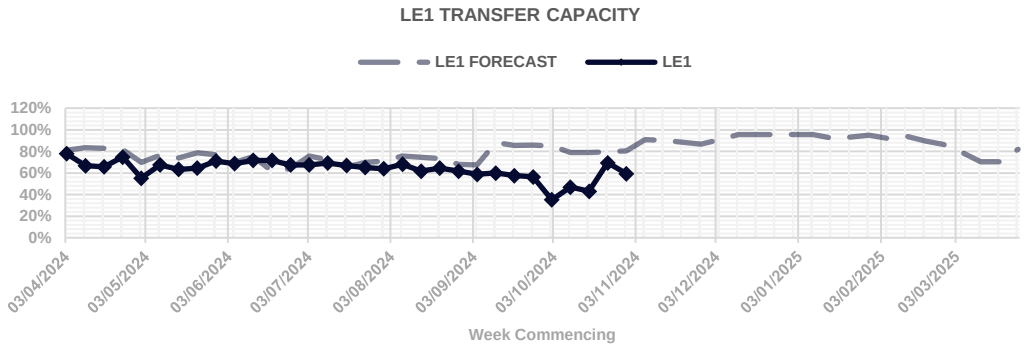

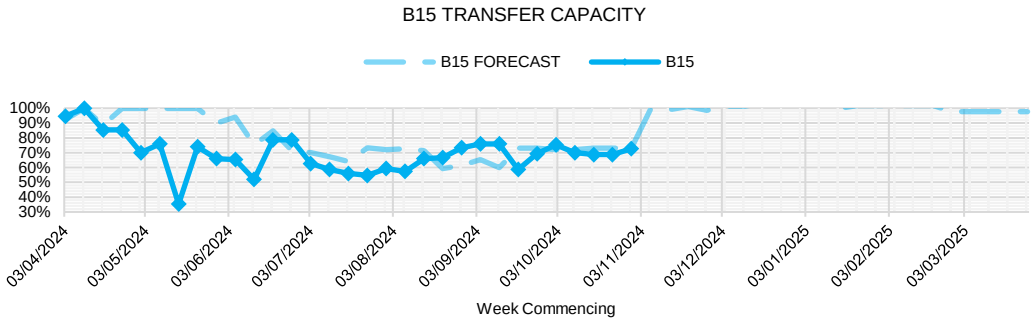

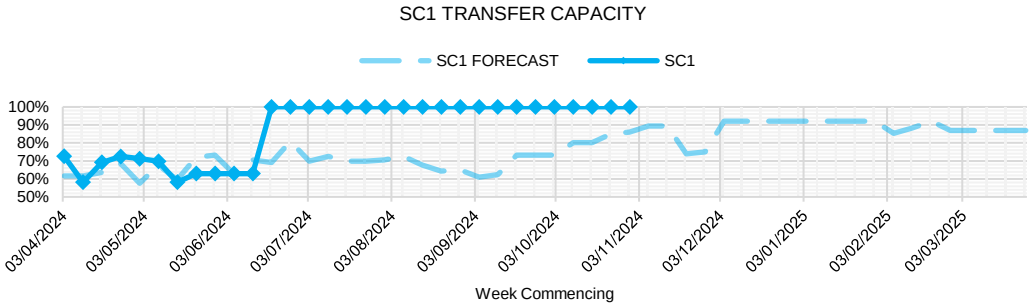

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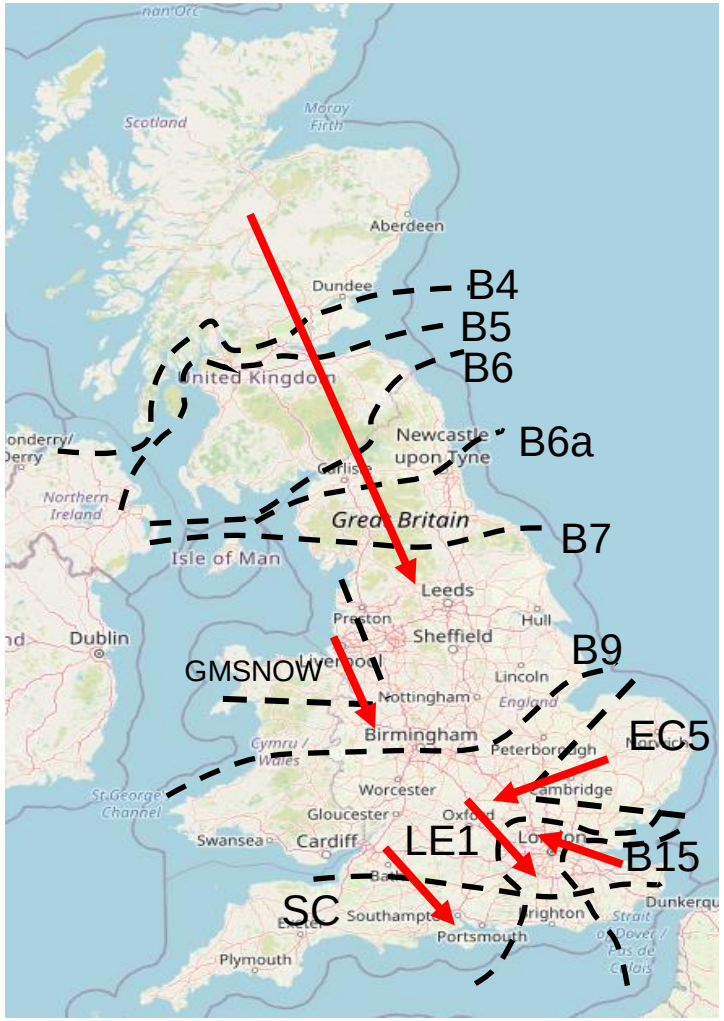

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NESO National Energy System Operator

Previously Asked Questions

Slido code #OTF

Q: Hi, on the 21st there were buy requests on Faradyn for the B9 reason. My question is: what is the exact area for this and how does it differ from lets say a different area, since there seems to have been cases with requests for smaller sub areas of that region? So what is the diffefence?

A: Boundary details are not included in trade requests on Faradyn. The ETYS details the different system boundaries and we plan (in the next few months) to publish the planning boundaries and their operational equivalent.

Q: What is the reason for ABSVD to be applied for Primary BMUs and to NOT be applied for Secondary BMUs? Why having this asymmetry in the market which can result in unfair disadvantages to small scale participants?

A: Thank you for the question. We will take this away and provide an update at a future forum. It is also worth highlighting that Issue group 114 is currently underway to review a number of challenges that have been raised from across the market with regards to ABSVD. NESO is participating in this process and appreciates input from across the industry in resolving these.

Issue 114 Settlement of ABSVD for ancillary services delivered through independent aggregators - Elexon BSC

Further information on ABSVD & Secondary BMU's can be found in the following document.

Understanding Applicable Balancing Services Volume Data for Secondary BM Units - Elexon BSC

NESO National Energy System Operator

Previously Asked Questions

Slido code #OTF

Q: Could NESO publish data on electric time errors in future ideally both on the real time dashboard and historic information via the data portal?

A: Thank you for requesting this data. To ensure we respond to all requests in a robust and timely way NESO has established a data sharing process, this does mean you will need to complete our new Data Request Form.

You can find this form and more information about NESO's data sharing approach at: Data Sharing Approach | National Energy System Operator

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Advance Questions

Slido code #OTF

Q: Hello, on the 9th October OTF in response to a question by Johan Askehave, we were told that the control room may have been running the frequency low "to correct an electric time error so as to ensure any assets relying on the GB system frequency (50Hz) to calculate time remain as accurate as possible". Could you outline in which circumstances the control room may take actions to correct ETE? Is there a threshold on built up ETE that triggers action for example? What corrective actions might be taken to correct this ETE, would running the system as low as 49.8Hz as asked in the OTF question be within bounds for example?

A: Under NESO's Electricity System Operator licence, we are obligated to keep the electric time error to within ±1:10(min:secs) but it should be kept as close to 0:00 as possible. Also NESO aims to keep the system frequency within operational limits of ±0.2Hz (49.8-50.2Hz) but as close to 50Hz as possible. As a result, NESO is allowed to drive the frequency towards the operational limits should it need to do for any reason, e.g. in order to correct electric time error amongst other reasons. As to how far from 50Hz NESO chooses to drive the frequency to depends on the situation and the operational circumstances.

Example 1, if there is a significant electric time error but system and operational conditions (e.g. the wind/solar forecasts, interconnector flows, demand levels, etc.) are forecast to be stable for several hours, NESO may choose to drive a small increase/decrease in system frequency to gently correct the time error.

Example 2, if there is a significant electric time error and only a short period where system and operational conditions are forecast to be stable, NESO may choose to drive a larger increase/decrease in system frequency to correct the electric time error as much as possible in the short period.

Please note, NESO will never put the GB system frequency at risk in order to correct for electric time error and any driven frequency changes are always carefully assessed and calculated and always encompass a safety margin for any unforeseen operational issues which may occur.

Advance Questions

Slido code #OTF

Q: Thanks you for your detailed response to my advanced question regarding control room procedures around electric time error at the last OTF. In the response, you said that NESO's licensing conditions require the ETE to be kept "within ±1:10 (mins:secs)". The definition of total ETE depends on a given start point - if I synchronise a new clock to the grid today, next week it will show a different ETE to one synchronised last year. Could you please give the start point of the ETE build up which is being held within the 1:10 constraint? Alternatively, it would be just as useful to have a known value of the ETE at a particular time, from which future/past ETEs can be derived. For example, could you give your measured ETE at midnight on the 30th Oct, the day of the next OTF? Thanks a lot.

A: At NESO, we have responsibility to manage the Electric Time Error at close to zero as defined in the Grid Code, and the frequency at close to 50Hz (see previous answer). Over time the average error on any clock will tend towards zero.

We have emailed you separately for additional information as we would like to understand this in more detail.

Outstanding Questions

Slido code #OTF

Q: How much is the Wider Access API used? In number of BMUs and total MWs if a technology supplier already has an EDL line, what would the advantages be to have the WA API as well?

A: We are still working on this specific question.

More general information about the Balancing Mechanism Wider Access can be found at: Balancing Mechanism Wider Access | National Energy System Operator

Q: What progress has been made on publishing metering of non-BM assets / regional parts of the network, which has been discussed a lot and was been actively worked on?

Q: I notice the b6 boundary limit is shown as 6.8GW. In ETYS 2023 it shows it as 6.3GW. When did it change, what is the constraint driver and what is the circuit? Thanks

Q: Could you please help me understand the reason for the 68p difference between the outturn of £10.88/MWh for September, based on the Current II BSUoS data, and the monthly outturn (based on the BSUoS outturn - September 24 report) , which came to £10.20/MWh?

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: 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

NESO National Energy System Operator

slido

Audience Q&A

ⓘ 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

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Appendix

Participation in the Operational Transparency Forum

Thank you to everyone who participates in the OTF, whether you join weekly, monthly, on specific occasions or follow up with the webinar recordings and published slides. We hear from participant feedback and our NESO colleagues that all of us value the opportunity to share information, ask questions and share the answers.

One of the reasons this format works so well is the professional courtesy we see demonstrated every week.

However, in recent weeks there have been some Slido questions and comments in the Q&A session directed at specific market participants suggesting their actions are not appropriate. This is concerning because:

- The statements are being made in a public forum without the opportunity to reply
- The negative comments may impact these businesses directly, or indirectly e.g.: through social media, etc.
- The individuals asking questions could not be traced using the details provided in Slido
- **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

Remember, if you have reasons to remain anonymous to the wider forum or have concerns your question may not be one to ask in public, you can use the advance questions or email options.

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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

NESO National Energy System Operator

Managing questions at the NESO Operational Transparency Forum

Slido code #OTF

- 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 box.nc.customer@nationalenergyso.com

- **All questions asked through Sli.do** will be recorded and published, with answers, in the Operational Transparency Forum Q&A on the webpage: Operational Transparency Forum | NESO
- **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.

NESO National Energy System Operator

NESO Information Request Statement

The Energy Act 2023 and the power to request information.

Section 172 of The Energy Act 2023 provides NESO, as the Independent System Operator and Planner, with the power to require information, from anyone carrying out a relevant activity, to allow it to carry out any of its functions. This power will come into effect once NESO is operational.

In advance of this we are consulting on what the Information Request Statement will contain and what an Information Request issued by NESO may look like.

The Information Request Statement and Notice.

The Statement will be available on our website and will contain sections on why a request has been issued, the process of responding to a request, what happens if a recipient does not provide the information and how we will manage any data provided. A draft template of an Information Request Notice is also shared on our website.

The Consultation

We are running a consultation from **May 3rd to May 31st** which can be found at https://www.neso.energy/about/operational-information/information-request-statement-consultation and would welcome feedback from across industry to make sure we develop a statement which is clear and accessible.

Following the consultation period Ofgem will determine if the draft Statement is approved or if any changes are necessary.