

Introduction | Sli.do 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 ESO) and we will not comment on these challenges. This type of concern can be reported to the Market Monitoring team at: marketreporting@nationalgrideso.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@nationalgrideso.com

Future deep dive / focus topics

Today

None

Future

Space Weather – October

Winter Outlook – October (report will be published on 8th October)

Initial National Demand Outturn - TBC

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

Becoming the National Energy System Operator (NESO)

Energy Secretary Ed Miliband has confirmed that the National Energy System Operator (NESO) will launch on 1 October following the government agreeing to acquire the Electricity System Operator (ESO) from National Grid, transferring the ESO into public ownership.

As NESO, we'll be a new independent organisation responsible for planning Britain's entire energy system, operating the electricity network and offering expert advice to the energy sector's decision makers.

More information about NESO can be found here including past webinar recordings.

Please subscribe to our new NESO mailing list <u>here</u> and select 'Operational Transparency Forum (OTF)' to continue receiving future OTF meeting invites and other communications.

Balancing Reserve

- Timeline for implementation of Incremental Volume Cost
- How is the IVC calculated including examples
- Dispatch Flexibility review methodology

Quick And Slow Reserve

- Outline of the proposed service designs for Quick Reserve phase 2 and Slow Reserve
- Update on Quick Reserve phase 1 timeline and consultation process

Balancing Reserve Webinars - starting 23 Sept

Sign up for our series of Reserve webinars in the events tab on our future reserve webpage https://www.nationalgrideso.com/industry-information/balancing-services/reserve-services/future-reserve-services#Events

Quick Reserve (Phase 1) drop-in sessions- starting 26 Sept

Join our series of weekly drop-in sessions where we'll run through and demonstrate some of the key requirements for registering and taking part in the Quick Reserve service prior to go live. Each session will include time for Q&A on all aspects of the service. Sign up in the events tab on the Quick Reserve webpage https://events.teams.microsoft.com/event/25829ed3-88e4-4567-ab79-c53a15659a7d@f98a6a53-25f3-4212-901c-c7787fcd3495

Markets Forum- September 2024

18 September

Publication of pre recorded webinar

Including topics, such as:

- Introduction from Rebecca Beresford as new Director of Markets
- Becoming NESO (National Energy System Operator)
- Whole energy update
- Constraints Collaboration Project
- Latest on Product Development

Access the webinar recording here.

25 September

10am - Live Q&A

To sign up to the webinar please **Register Here** or follow

the QR code

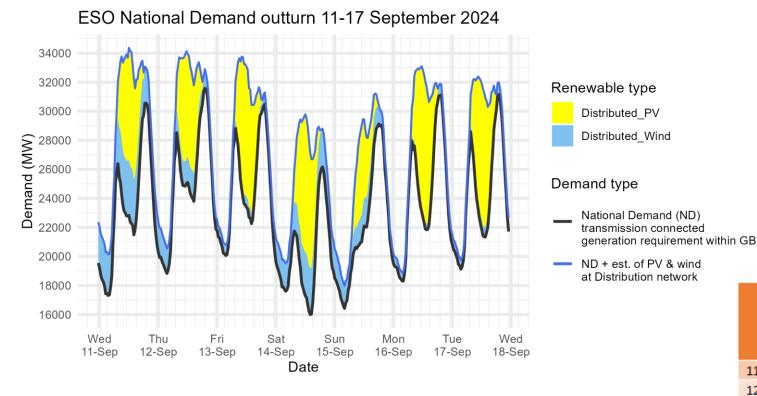


We welcome any questions before the Live Q&A via **Slido** using **#MFSEP24**

Future Event Summary

Event	Date & Time	Link
Markets Forum (publication of pre-recorded webinar)	18 th September 2024	
2024 Revenue and Charging Forum – Online	24 th September 9:00-15:00	Register here
Markets Forum (Live Q&A)	25 th September 10:00	Register here
Monthly Reserve Webinars	23 rd September	Register here
Quick Reserve Webinars	26 th September	Register here

Demand | Last week demand out-turn



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 ESO has no real time data.

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

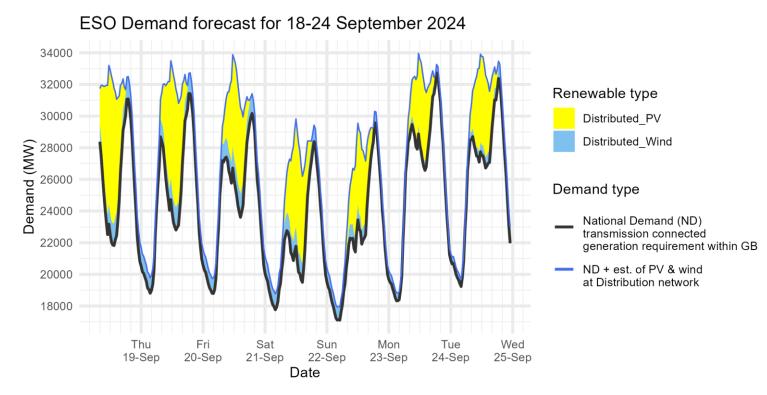
Distributed generation

Peak values by day		OUTTURN		
	Date	Daily Max Dist. PV (GW)	Daily Max Dist. Wind (GW)	
	11 Sep 2024	8.0	3.9	
	12 Sep 2024	7.4	2.2	
	13 Sep 2024	9.0	1.3	
	14 Sep 2024	9.5	3.3	
	15 Sep 2024	6.2	2.1	
	16 Sep 2024	9.8	0.7	
	17 Sep 2024	9.4	0.9	
	12 Sep 2024 13 Sep 2024 14 Sep 2024 15 Sep 2024 16 Sep 2024	7.4 9.0 9.5 6.2 9.8	2.2 1.3 3.3 2.1 0.7	

National Demand

Peaks and troughs		FORECAST (Wed 11 Sep)		OUTTURN	
Date	Forecasting Point	National Demand (GW)	Dist. wind (GW)	National Demand (GW)	Dist. wind (GW)
11 Sep 2024	Evening Peak	30.1	2.6	30.6	2.5
12 Sep 2024	Overnight Min	18.8	2.0	18.8	1.7
12 Sep 2024	Evening Peak	31.5	1.2	31.3	1.1
13 Sep 2024	Overnight Min	20.5	0.7	20.1	0.7
13 Sep 2024	Evening Peak	30.8	0.7	30.1	0.7
14 Sep 2024	Overnight Min	17.9	1.7	17.6	1.9
14 Sep 2024	Evening Peak	26.5	2.5	26.0	2.7
15 Sep 2024	Overnight Min	16.6	1.7	16.4	1.6
15 Sep 2024	Evening Peak	29.2	1.0	29.1	1.2
16 Sep 2024	Overnight Min	18.4	0.6	18.3	0.6
16 Sep 2024	Evening Peak	31.9	0.7	31.1	0.7
17 Sep 2024	Overnight Min	19.0	0.8	19.1	0.6
17 Sep 2024	Evening Peak	31.9	0.7	31.1	0.8

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.

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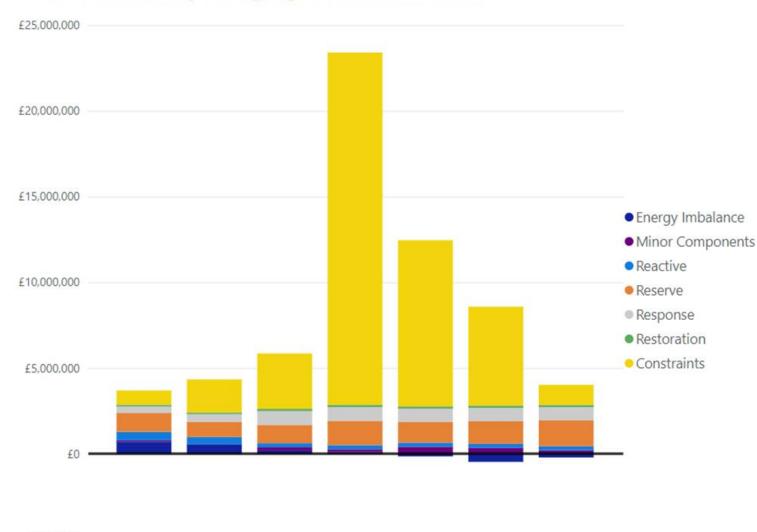
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National Demand

Peaks and troughs			FORECAST (Wed 18 Sep)		
Date		Forecasting Point	National Demand (GW)	Dist. wind (GW)	
	18 Sep 2024	Evening Peak	31.1	1.4	
	19 Sep 2024	Overnight Min	18.8	1.0	
	19 Sep 2024	Evening Peak	31.4	1.3	
	20 Sep 2024	Overnight Min	18.8	1.0	
	20 Sep 2024	Evening Peak	29.9	1.3	
	21 Sep 2024	Overnight Min	17.8	1.0	
	21 Sep 2024	Evening Peak	27.8	1.1	
	22 Sep 2024	Overnight Min	17.1	0.8	
	22 Sep 2024	Evening Peak	29.6	0.7	
	23 Sep 2024	Overnight Min	18.3	0.5	
	23 Sep 2024	Evening Peak	32.7	0.5	
	24 Sep 2024	Overnight Min	19.2	0.5	
	24 Sep 2024	Evening Peak	32.4	0.8	

Slido code #OTF

ESO Actions | Category Cost Breakdown



£61.46M

Weekly Total

£33.55M

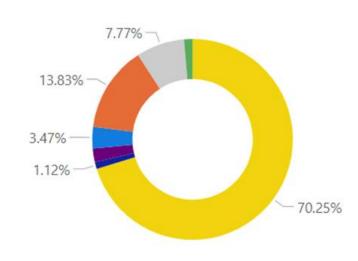
Previous Week Total

£9.37M

Past 30 Days Average

Date •	Total (£)	
07/09/2024	£3,691,113	
08/09/2024	£4,318,085	
09/09/2024	£5,846,470	
10/09/2024	£23,404,259	
11/09/2024	£12,303,502	
12/09/2024	£8,101,271	
13/09/2024	£3,800,169	
Total	£61,464,869	



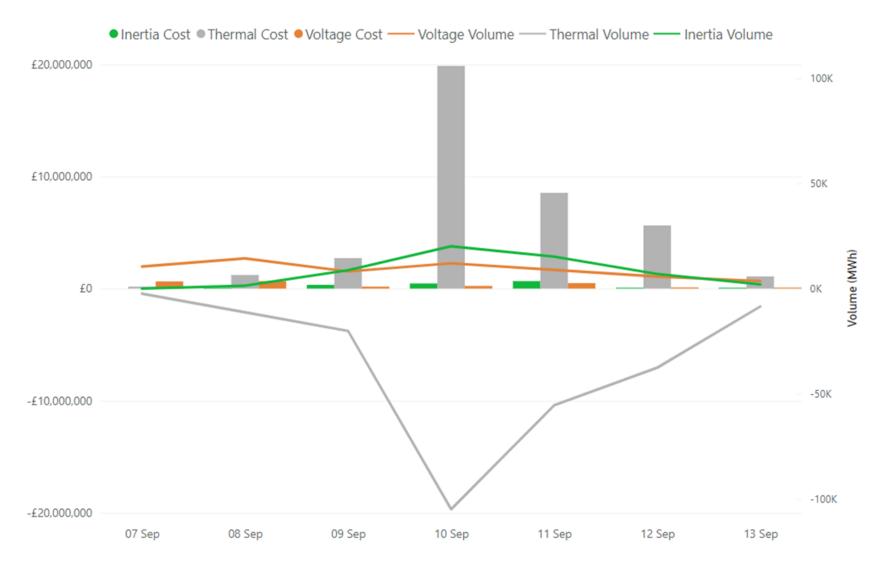


07/09/2024 08/09/2024 09/09/2024 10/09/2024 11/09/2024 12/09/2024 13/09/2024

-£5,000,000

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ESO Actions | Constraint Cost Breakdown





£2.4M

Sum of Voltage Cost

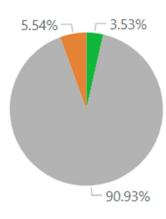
£1.5M

Sum of Inertia Cost

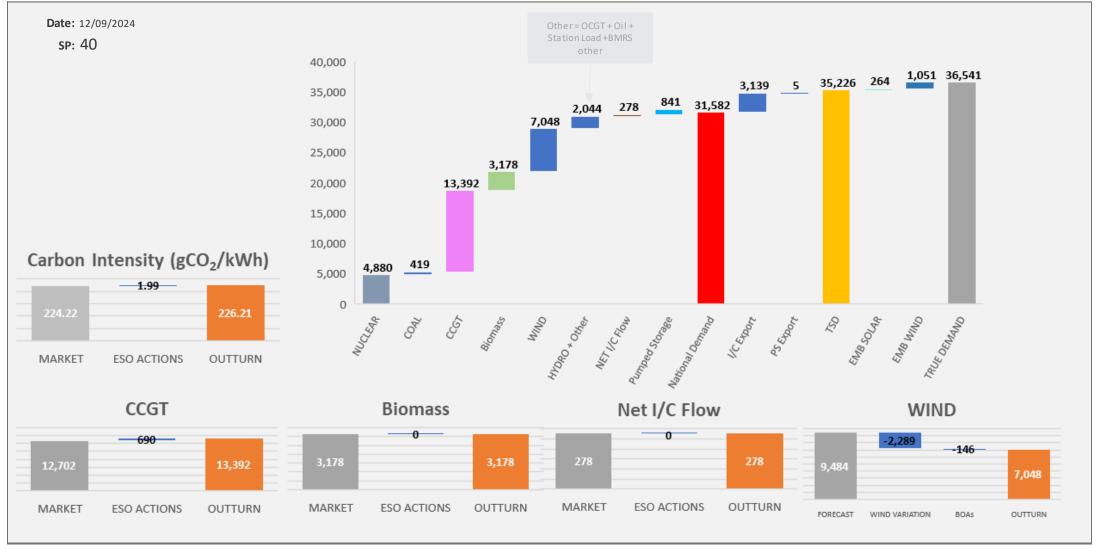
£39.2M

Sum of Thermal Cost

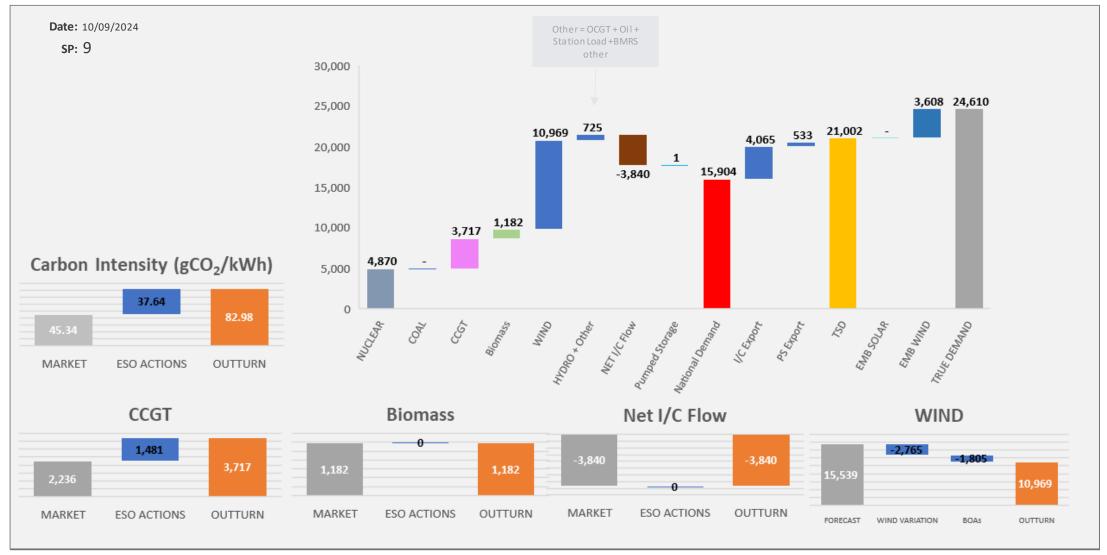
Share of cost



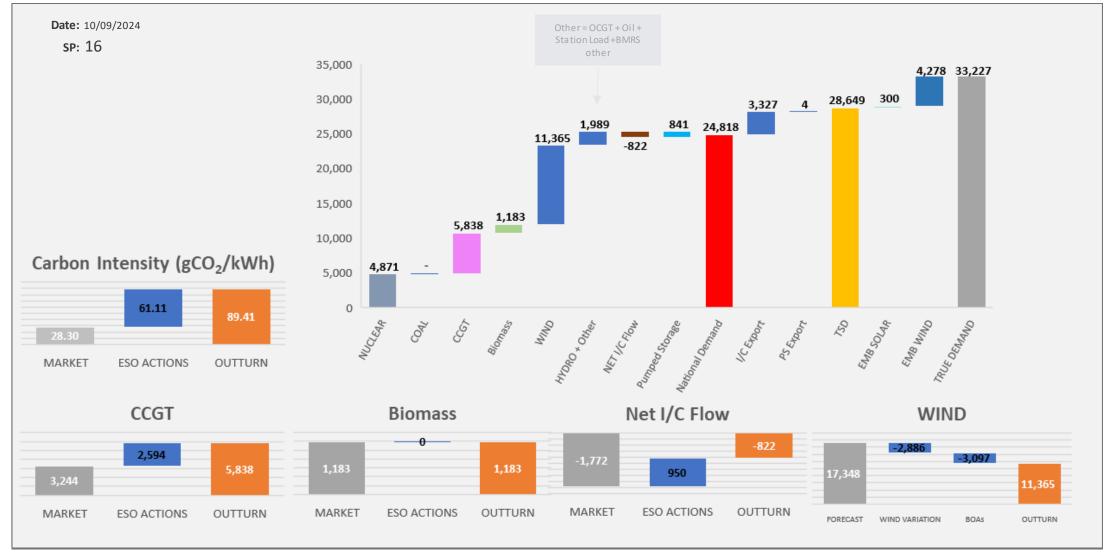
ESO Actions | Thursday 12th September – Peak Demand – SP spend ~ £72k



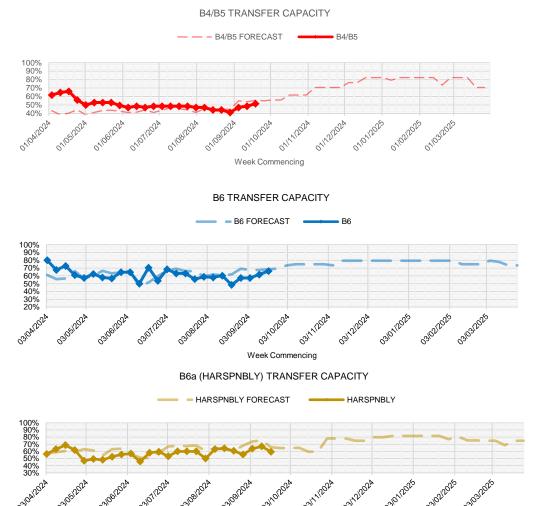
ESO Actions | Tuesday 10th September – Minimum Demand – SP Spend ~ £406k



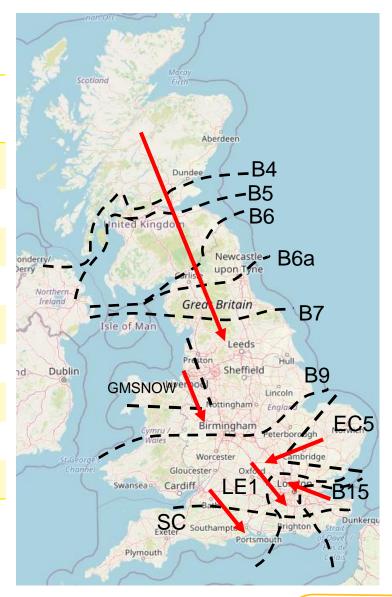
ESO Actions | Tuesday 10th September – Highest SP Spend ~ £666k



Transparency | Network Congestion



Boundary	Max. Capacity (MW)	Current Capacity (%)
B4/B5	3400	51%
B6 (SCOTEX)	6800	66%
HARSPNBLY	8000	59%
B7 (SSHARN)	8325	73%
GMSNOW	4700	57%
EC5	5000	86%
LE1 (SEIMP)	8500	68%
B15 (ESTEX)	7500	59%
SC1	7300	100%

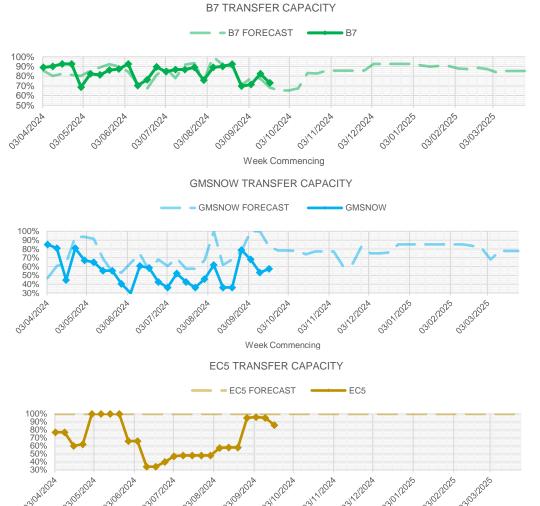


Day ahead flows and limits, and the 24-month constraint limit forecast are published on the ESO Data Portal: Constraints Management

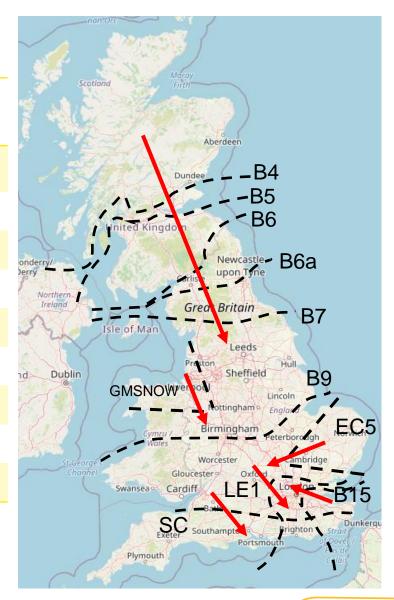
(The forecast and day ahead limits may vary due to changes in the outage plan. The plan is reviewed periodically throughout the year to ensure we are optimising system conditions, whilst managing any necessary outage plan changes)



Transparency | Network Congestion



Boundary	Max. Capacity (MW)	Current Capacity (%)
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B15 (ESTEX)	7500	59%
SC1	7300	100%

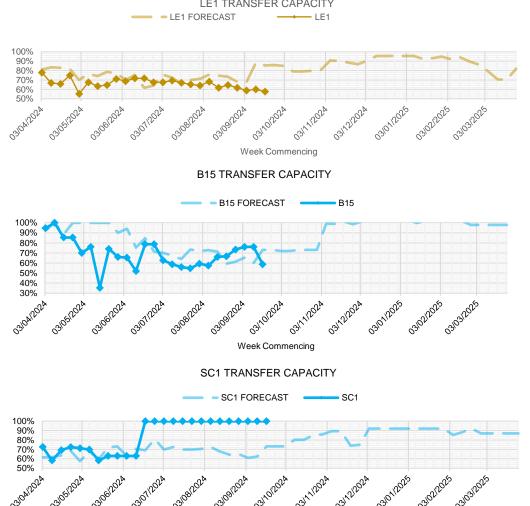


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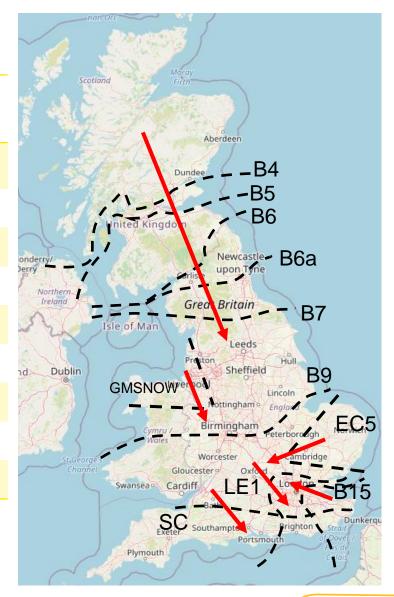
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Transparency | Network Congestion



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B15 (ESTEX)	7500	59%
SC1	7300	100%



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Previously Asked Questions

Q: We would like to know the frequency of CMIS Arming data files at NG ESO data portal. The last we have seen was published around May, since then we have not seen any data published on CMIS arming. Is it that the service has not been utilised since/ is there a frequency that this data is published at

A: Previous response: Thank you for flagging this – we'll pick up with the relevant ESO team and confirm the frequency of the upload of these files.

Updated response: This dataset is published monthly but only when the service has been utilised. As there has been no use the of the service, there has been no update to the file.

(CMIS – Constraint Management Intertrip Service)

Q: Do you know the date this years Winter Outlook will be published?

A: We are expecting to publish the Winter Outlook on 8th October and will plan a deep dive session shortly afterwards.

Previously Asked Questions

Q: What was the reason for the £ 3036.26 /MWh unflagged GB-Belgium interconnector trade on 28/08/24, SP35-36? The reason stated was "Margin", however the action being unflagged feels unusual given other pricing.

A: These trades were carried out for margin and were unflagged due to being taken for energy reasons. Trading actions are taken ahead of the Balancing Mechanism based on ensuring the system operating plan will be operable when in real time. On this occasion due to the highly constrained network there was limited liquidity, this along with the trade requirement for system security with no other trading options, resulted in the high price seen.

Q: LE1 and B15 have been below the forecast almost every week of the year so far. It is causing lots of constraints and restrictions in that area. Is there a wider concern in the SE area of the network and are you working with the TO?

A: Thank you for your question. Constraints in real time can be lower than forecast due to changes in the outage pattern. We are always working closely with the TO to understand their needs when it comes to maintaining and upgrading the network, and we will always be sure to minimise the impact outages when operating the system.

Previously Asked Questions

Q: There was a BMRS outage on Thursday and SSP settled at negative £19/MWh according to ELEXON. Yet these cheap SPs traded above £100/MWh on M7, so SSPs below £19/MWh do not seem correct. Could you explain these different prices? Thanks.

A: On 29th August imbalance price settled at -£19.19/MWh because the overall system was long (had excess energy) meaning that bids set the imbalance price / SSP (System Sell Price) / SBP (System Buy Price) / cashout. In this instance actions were taken to manage footroom (negative reserve) on wind assets which were negatively priced, whereas in the hours around this period, energy balancing actions taken on thermal units / storage assets with positively priced bid prices set the imbalance price when the market was long.

Wind only infrequently sets the imbalance price because it is typically out of cost merit order for energy actions and thus system flagged for constraint management but it always has the potential to be needed for negative reserve or other energy flagged transactions and in these instances may set a negative cashout price.

Elexon publish a detailed imbalance price calculation methodology and are responsible for this calculation, you can read more at: https://www.elexon.co.uk/settlement/imbalance-

pricing/#:~:text=The%20Imbalance%20Price%20is%20used%20to%20settle%20energy,then%20it%20will%20be%20subject%20to%20imbalance%20charges.

Outstanding Questions

Q: Please can you provide some insight into the below scenario which occurred March 4th 2024.

We received this message: "A request for Emergency Assistance has been agreed on a GB connected Interconnector. The requesting party was NGESO. GB net flow will decrease by 716 MW between 12:50 04/03/2024 to 14:05 04/03/2024. Issued by Simon Williams at 12:45 on 04/03/2024."

This action led to the system shortening by 716MW in SP27. Cashout has remained unchanged on Elexon Insights and those down-regulation actions never fed through post-event. Please can we have some clarity that if Emergency Assistance is used again in the future, we should expect the same outcome (no post-event trades being published)?

Q: Following on from Shivam's question, can you also please explain why non BM FR was called at prices up to £2949.51 when there were flexible units available in the BM, and the control room were taking bids on other flexilbe units?

Q: Yesterday (10th Sept) the cashout price was set (a few times) by reversal actions on batteries. SP22 the cashout price was £68 with a NIV of -620 Mwh and vast majority of bid stack was negative. This seriously affects our ability to trade and market confidence. Please could you comment and suggest solution?

Q: Please explain how with similar demand and 4GW more wind, yesterday's (10th Sept) negative wind bids were all system tagged in the same regions, but today there have been energy neg priced bids since 0800hrs? You'd expect more constrained system to have more 'extreme' price dynamics vs less constrained system.

Q: We understand some wind farms are constrained due to oscillation issue - which type of constraints are they fall under and can you provide an estimated spend so far?

Reminder about answering questions at the ESO 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 ESO) and we will not comment on these challenges. This type of concern can be reported to the Market Monitoring team at: marketreporting@nationalgrideso.com
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- 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.nationalgrideso.com/what-we-do/electricity-national-control-centre/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 ESO 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

Audience Q&A was removed

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

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@nationalgrideso.com



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 ESO 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 ESO) and we will not comment on these challenges. This type of concern can be reported to the Market Monitoring team at: marketreporting@nationalgrideso.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.

Purpose and scope of the ESO 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 ESO 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

ESO operational approach & challenges

ESO 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 ESO Control Room actions & decision making

Activities & operations of particular market participants

ESO policy & strategic decision making

Formal consultations e.g.: Code Changes, Business

Planning, Market development

Managing questions at the ESO 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 box.NC.Customer@nationalgrideso.com
- 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 | ESO (nationalgrideso.com)</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 ESO 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 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.nationalgrideso.com/what-we-do/how-we-operate/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.