

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

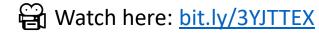
Future

Space Weather – September
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

Non-BM Reserve Implementation on Open Balancing Platform

If you missed our webinar on the proposed operation and interfaces for non-Balancing Mechanism providers of the new Quick and Slow Reserve services, you can watch a recording online.



Respond to our consultation by 10 September to help further develop the interface for these services.

- Fill in the feedback form: bit.ly/3YMRVE3
- Read more about our proposals in the events tab here: bit.ly/4dGlnzu
- Contact us with any questions you have here: box.futureofbalancingservices@nationalgrideso.com

C16 Additional Consultation 2024

We welcome industry's views on the proposed changes within our consultation.

Standard Condition Licence C16 "Procurement and use of balancing services" sets out the obligation on the ESO to publish five statements addressing the procurement and use of balancing services. In accordance with C16 of its Transmission Licence, we are conducting an additional review of all licence statements, following proposed changes to the Procurement Guidelines, Balancing Principles Statement and ABSVD Statement.

Our official consultation is open from the **02 August 2024**. Please respond by **5pm on 30 August 2024**.

Please find the consultation documents on our <u>C16 web page</u>

If you would like to receive notification of future C16 events, consultations and updates, then please sign up to our <u>mailing list.</u>

Any questions, please contact balancingservices@nationalgrideso.com

2024 Revenue and Charging Forum

We are holding an in person and online Charging Forum to provide an overview of all things TNUoS, BSUoS, AAHEDC and Connections Charging.

In Person Event

Date: Tuesday 17th September 9.00am to 15.00pm (approximately)

Location: Faraday House, Gallows Hill, Warwick, CV34 6DA

Register Here

Online Event

Date: Tuesday 24th September 9.30am to 15.00pm (approximately)

Location: Microsoft Teams

Register Here

Agenda for both events

We'll cover who pays, when and how we calculate the charges, as well as deeper dives into specific topics with plenty of opportunities to ask questions. This is an introductory event aimed towards a working level audience, so if you're directly involved in these areas or just want to improve your knowledge, we'd love to see you there.

To make this event as accessible as possible, whilst also giving us the opportunity to meet people face to face, we are running two separate charging forum days, an In Person day at our Warwick Office and an online only event hosted on Microsoft Teams.

The content will be the same on both days so we would suggest only registering for one day.

Slides from our 2023 Revenue and Charging Forum are available on our website, to help decide if it's the right event for you: **Download HERE.**

We'll be in touch with further details, including the final agenda nearer the date.

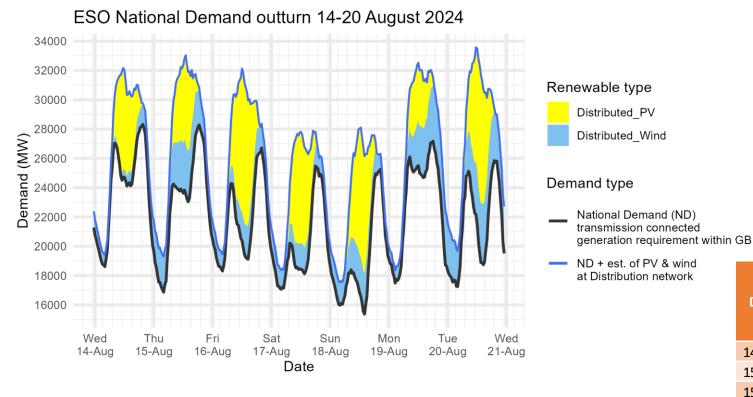
However, please contact us at <u>bsuos.queries@nationalgrideso.com</u> or <u>tnuos.queries@nationalgrideso.com</u> if you have any questions in the meantime.

Please pass this on to any colleagues who may be interested in this event.

Future Event Summary

Event	Date & Time	Link
Demand Flexibility Service (DFS) EBR Article 18 Consultation	22 nd August 2024 (Deadline)	Click here to access the consultation documents
C16 Additional Consultation	2 nd August – 30 th August 2024	C16 webpage
2024 Revenue and Charging Forum – In person	17 th September 9:00-15:00	Register here
2024 Revenue and Charging Forum – Online	24 th September 9:00-15:00	Register here

Demand | Last week demand out-turn



Daily Maximums

Modelled distributed
generation

	OUTTURN		
Date	Daily Max Dist. PV (GW)	Daily Max Dist. Wind (GW)	
14 Aug 2024	7.0	1.9	
15 Aug 2024	6.0	3.5	
16 Aug 2024	9.9	2.4	
17 Aug 2024	7.6	1.8	
18 Aug 2024	8.8	2.8	
19 Aug 2024	4.0	4.0	
20 Aug 2024	8.9	4.2	

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

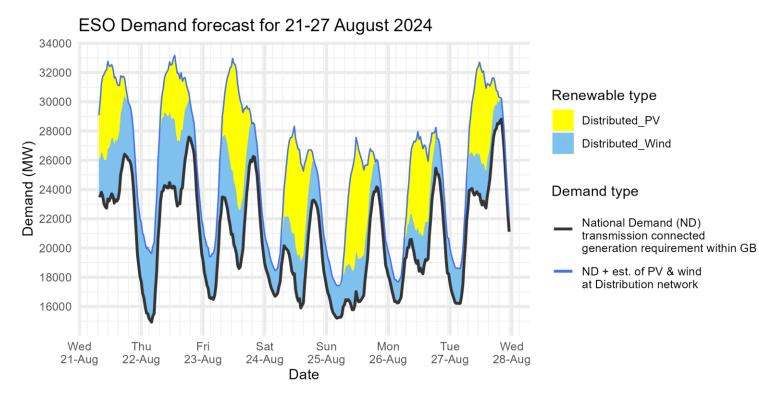
ND values do not include export on interconnectors or pumping or station load

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 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>

	FORECAST (Wed 14 Aug)		0	UTTURN			
Date	Forecasting Point	National Demand (GW)	Dist. wind (GW)	Dist. PV (GW)	National Demand (GW)	Dist. wind (GW)	Dist. PV (GW)
14 Aug	Afternoon Min	24.7	0.8	6.1	24.1	0.7	5.5
15 Aug	Overnight Min	17.3	2.4	0.0	16.9	2.4	0.0
15 Aug	Afternoon Min	22.4	3.7	5.4	23.0	3.5	5.4
16 Aug	Overnight Min	18.2	1.4	0.0	18.3	1.1	0.0
16 Aug	Afternoon Min	19.8	2.4	7.4	19.1	2.3	8.5
17 Aug	Overnight Min	16.8	1.4	0.0	17.1	1.3	0.0
17 Aug	Afternoon Min	16.5	2.0	8.1	18.1	1.8	6.8
18 Aug	Overnight Min	16.4	1.1	0.0	16.0	1.6	0.0
18 Aug	Afternoon Min	16.9	1.9	7.8	15.4	2.8	8.0
19 Aug	Overnight Min	16.6	1.9	0.0	17.5	0.9	0.0
19 Aug	Afternoon Min	21.6	3.5	7.0	24.7	3.4	3.3
20 Aug	Overnight Min	17.4	2.0	0.0	17.2	2.4	0.0
20 Aug	Afternoon Min	22.8	2.3	6.3	18.7	4.1	7.8

Demand | Week Ahead



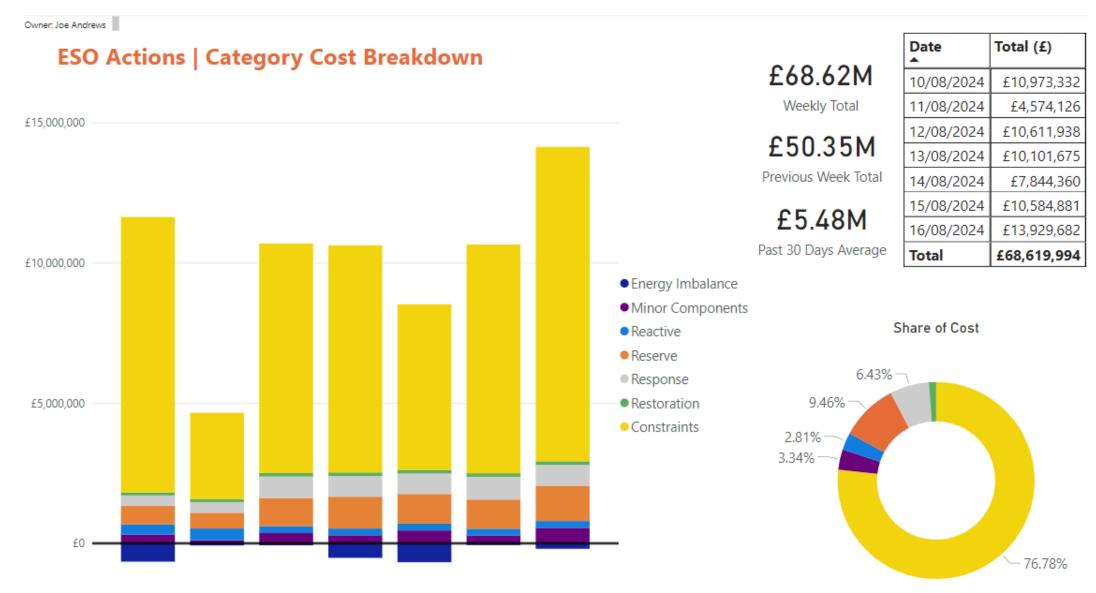
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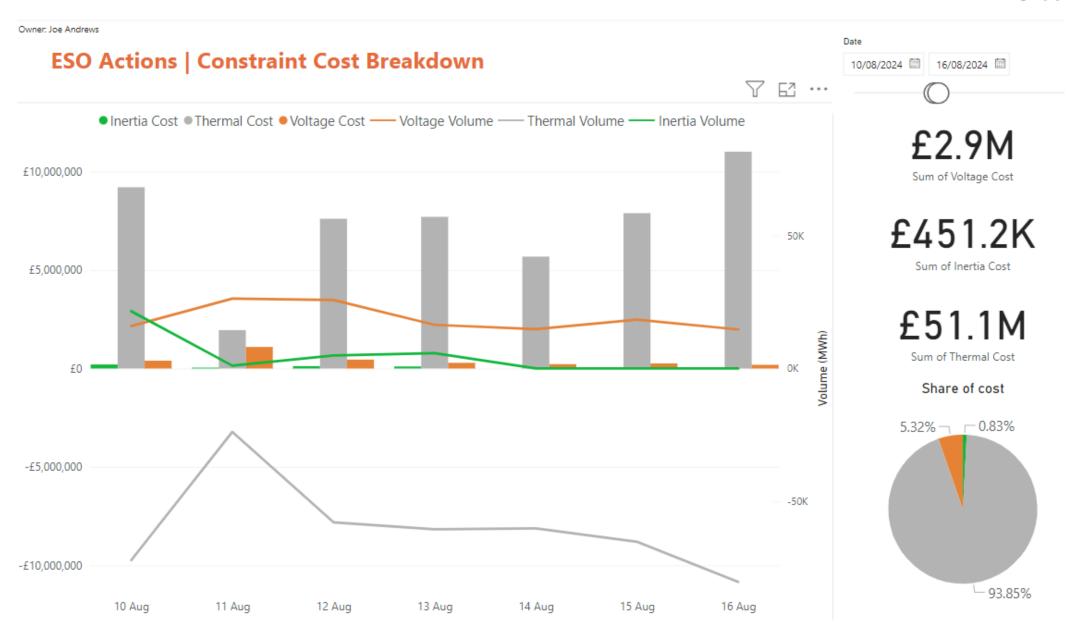
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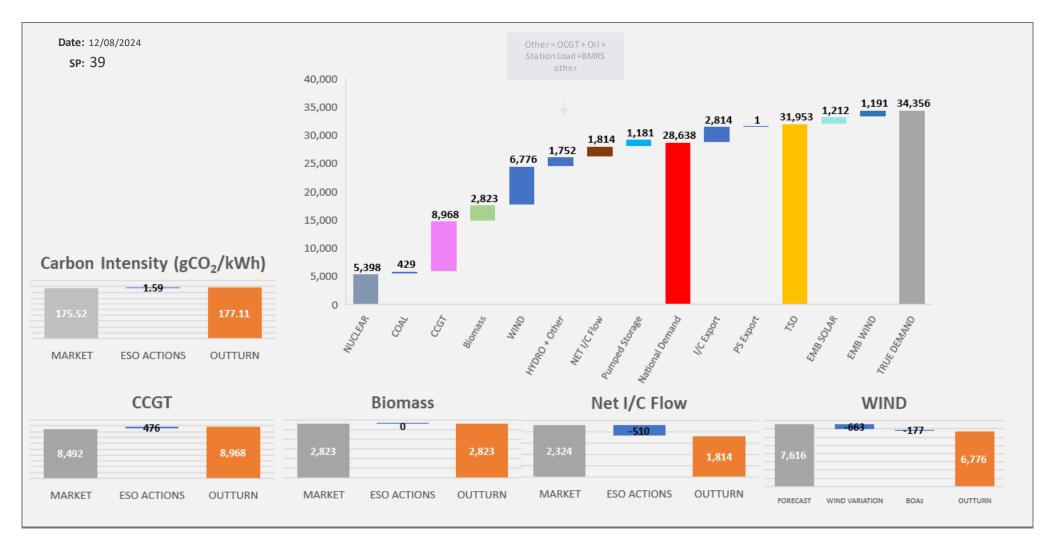
		FORECAST (Wed 21 Aug)		. Aug)
Date	Forecasting Point	National Demand (GW)	Dist. wind (GW)	Dist. PV (GW)
21 Aug 2024	Afternoon Min	23.1	4.0	4.6
22 Aug 2024	Overnight Min	14.9	4.7	0.0
22 Aug 2024	Afternoon Min	22.9	4.4	4.7
23 Aug 2024	Overnight Min	16.5	3.1	0.0
23 Aug 2024	Afternoon Min	18.6	4.0	7.9
24 Aug 2024	Overnight Min	16.7	1.8	0.0
24 Aug 2024	Afternoon Min	15.9	3.2	6.7
25 Aug 2024	Overnight Min	15.2	2.2	0.0
25 Aug 2024	Afternoon Min	16.3	2.9	7.5
26 Aug 2024	Overnight Min	16.2	1.5	0.0
26 Aug 2024	Afternoon Min	18.2	2.5	6.0
27 Aug 2024	Overnight Min	16.2	2.4	0.0
27 Aug 2024	Afternoon Min	22.7	2.5	5.7



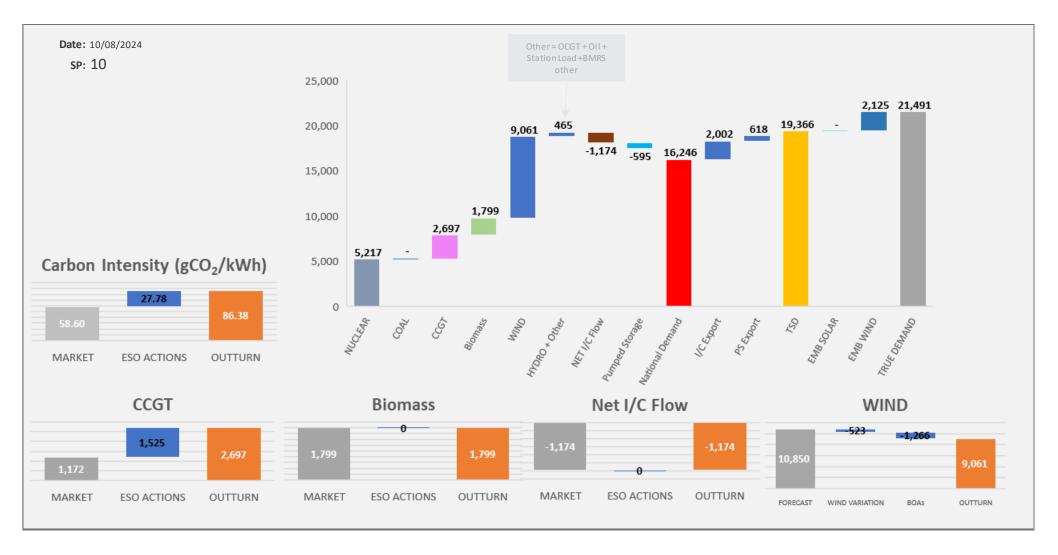
10/08/2024 11/08/2024 12/08/2024 13/08/2024 14/08/2024 15/08/2024 16/08/2024



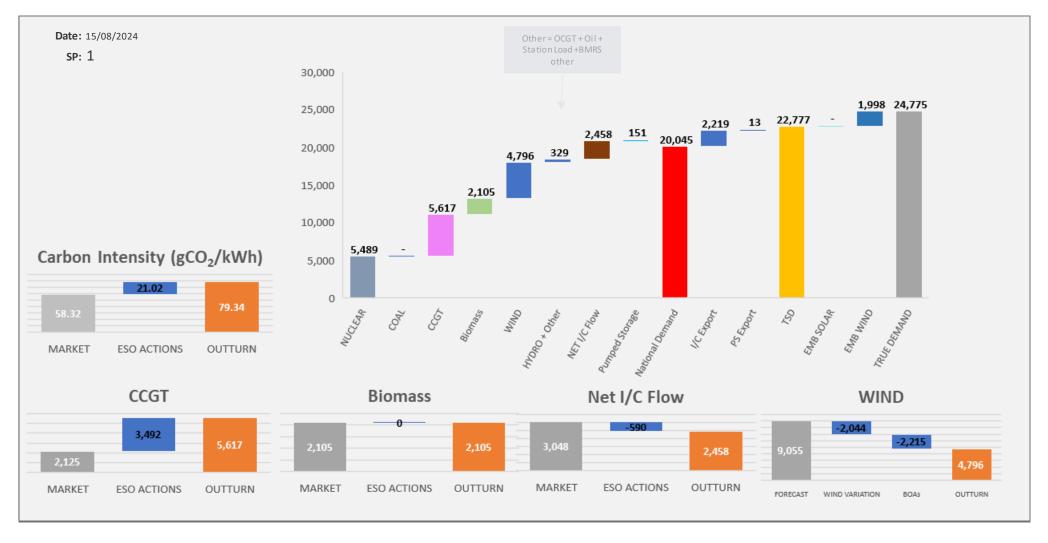
ESO Actions | Monday 12th August – Peak Demand – SP spend ~ £97k



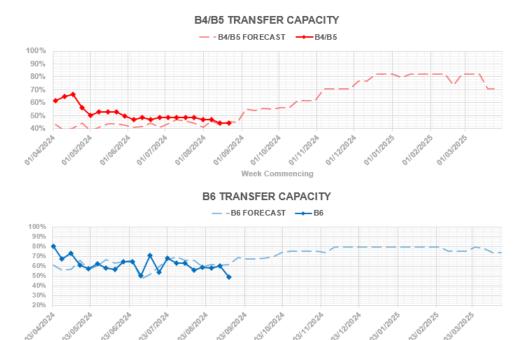
ESO Actions | Saturday 10th August – Minimum Demand – SP Spend ~ £203k



ESO Actions | Thursday 15th August – Highest SP Spend ~ £435k

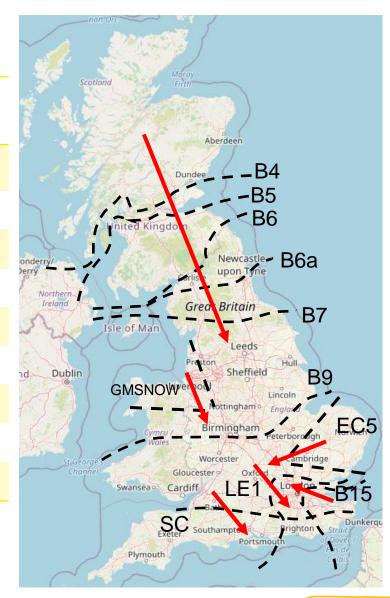


Transparency | Network Congestion



Week Commencing
B6a (HARSPNBLY) TRANSFER CAPACITY
— -HARSPNBLY FORECAST → HARSPNBLY
100% 90% 80% 70% 60% 50% 40%
GRANDER

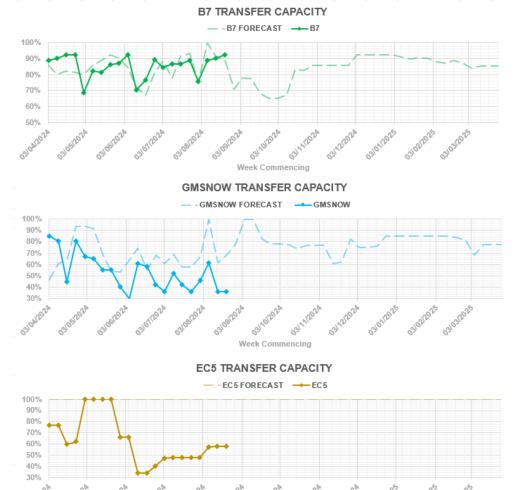
Boundary	Max. Capacity (MW)	Current Capacity (%)
B4/B5	3400	44%
B6 (SCOTEX)	6800	49%
HARSPNBLY	8000	61%
B7 (SSHARN)	8325	92%
GMSNOW	4700	36%
EC5	5000	58%
LE1 (SEIMP)	8500	65%
B15 (ESTEX)	7500	67%
SC1	7300	100%



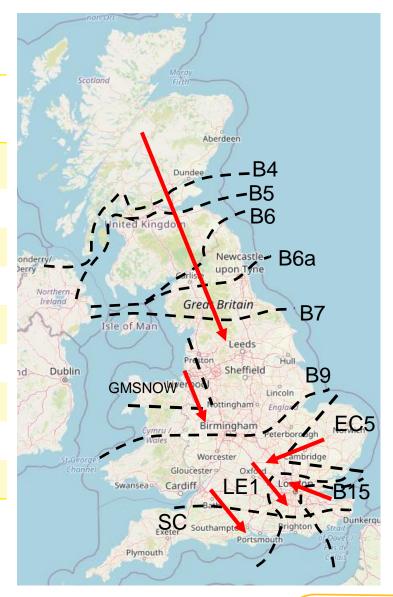
Day ahead flows and limits, and the 24-month constraint limit forecast are published on the ESO Data Portal: Constraints Management

(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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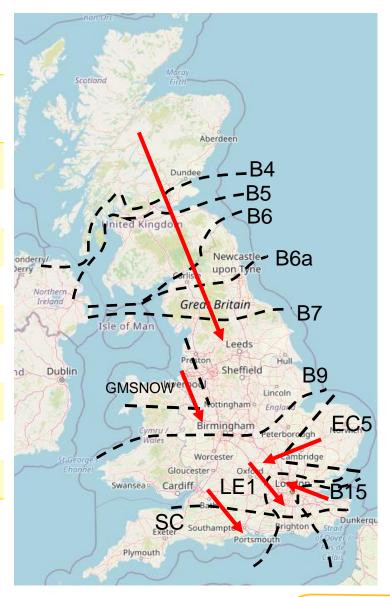
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Previously Asked Questions

Q: Is there some information available on IFA not meeting its FPN yesterday at 3pm. I couldn't find anything on REMIT, thanks

A: Please direct this question to National Grid Ventures (NGIFA) as we cannot comment on individual BMU market activity and behaviours.

However, if you are concerned about any market participant behaviours, you can share this with the ESO market monitoring team at MarketReporting@nationalgrideso.com and we will investigate using the data available to ESO.

Previously Asked Questions

Q: In the recent Sandbox report for trialing NHH meters in balancing services it was noted the unit was never activated despite offering offers as low as £1/MWh - why was this unit never activated and was ESO aware the unit was in a time-limited sandbox derogation?

A: Our electricity system is dynamic and complex and we are exploring new ways of managing it, providing helpful technical and operational insights for all participants. The timing, location and offer/bid prices as well as system needs at that time will all play an important part when determining unit dispatch. This unit joined as part of the 300MW of small-scale aggregated assets with relaxed operational metering standard (Click Here) which was a follow-up to the Power Responsive Small Aggregated Asset Trial earlier this year, which demonstrated the capability of small (domestic) assets to provide flexibility via aggregation. With respect to this Sandbox trial, we've been in contact with the customer throughout. We are committed to working with providers such as Centrica, and Elexon and Ofgem to continue to learn and develop flexibility.

Q: Participation from small assets in balancing services has improved by reducing the minimum capacity to 1MW but the duration of services stays at 15 min or 30 min which is a big market barrier for small scale/limited output assets. Why not consider reducing the duration to boost their participation?

A: We are currently procuring ancillary services to provide capacity for a settlement period or more (EFA Blocks), and requiring at least 15 minutes of delivery (Dynamic Containment) but typically 30 minutes for example Balancing Reserve. For reserve services, we believe it is appropriate to buy the services aligned with Settlement Periods, and to require participants can deliver their contracted volume for the full period. Partly this is to align with market settlement, but also for example with Balancing Reserve there can be significant ramping time associated with any instruction, and restricting the maximum instruction time could significantly affect the flexibility of the product, leading to increased procurement levels.

Our instructions in the balancing Mechanism are more flexible though, and assets are able to participate with shorter durations. Although currently we are using data for batteries to indicate the volume available for a 30 minute instruction, we are working on enhanced parameters through GC0166 which will allow us to more accurately know and instruct smaller volumes of energy.

Previously Asked Questions

Q: Sheffield Solar's on-the-day solar generation outturns are now often worse than some third-party forecasts when evaluated against their final published solar outturns. Does this cause any issues with respect to operational awareness for the control room and, if so, would there be any appetite for revisiting this critical piece of data? Out of interest, have you ever considered partnering with a university to do the same thing for embedded wind?

A: The short answer is that the control room needs to consider both PV_Live and PV forecasts when operating the network and must accept that there is significant uncertainty associated with the operational real-time view of outturns from all embedded, unmetered generators (including wind, batteries, small scale CHP etc). We constantly review working practices and where appropriate update them where necessary.

It is true that the PV_Live outturns computed in near-real-time ("intraday" outturns) have access to less sample PV generation data than is available on day+1. For this reason, the day+1 re-run of day+0 PV_Live outturn calculations is often revised significantly from the intraday outturn estimates, improving the accuracy of the outturn estimates retrospectively.

In some circumstances, it is possible for an NWP-driven day+1 forecast of national PV outturn to be closer to the revised PV_Live outturns than the intraday estimate was. This is something that the operational forecasters consider when interpreting PV_Live outturns and internal/third-party PV forecasts in real-time.

The rationale for retaining the intraday PV_Live calculations, in conjunction with third-party PV forecasts, is that the PV_Live intraday calculations are the only view of PV outturn which is based on real ground truth data, and are independent of NWP error. For example, it is common to see significant uncertainty and bias in day+1 NWP irradiance, which could manifest as significant bias in the real-time view of PV outturn, which could then have a more detrimental impact on the operational awareness in the control room than exists with PV_Live intraday outturns.

The idea of producing equivalent estimates of outturn from unmetered wind generators has been floated in the past, but so far it has been considered that ESO's own internal approach to monitoring unmetered wind generation is sufficient to meet requirements. That said, this assertion is regularly re-evaluated as more and more unmetered wind generators connect. We would welcome proposals on this topic but we are not actively pursuing a new solution for monitoring unmetered wind at this time.

Advance Questions

Q: Issues of moral hazard and contractual penalties not applied have come up in other services. Can ESO undertake to always apply contract terms as written to all parties, or where that is not possible, publicly announce disapplication, giving dates, which should never be in the past?

A: Whilst we endeavour to engage with industry to produce Service Terms and Procurement rules that work exactly as intended when we go-live with a service, we find that in real use of a service, unexpected interpretations of rules can occur and also we may find, as in this case with Balancing Reserve that the penalty we apply may not be sufficient to avoid the unwanted behaviour. We do not apply contract terms differently to different providers, and we expect that providers should act in good faith to follow the rules.

We also note that there is a balance to be struck between the cost of automating detection and performance monitoring of rules (acknowledging that it would not be possible to performance monitor every term) and how often the terms are expected to need to be enforced. This allows us to deliver services earlier, and optimise consumer spend on ESO performance monitoring capability.

Q: We've been seeing that elexon imbalance prices have been missing ASDP volume in their imbalance price calculation. Is this something that will be fixed going forward?

A: Elexon are responsible for these calculations and have advised that the best route for this type of query is to raise a case via the Elexon Support: https://support.elexon.co.uk/csm

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: You've mentioned today a series of constraining on of CCGTs etc to support stability- can we understand patterns of operation occurring (two or three+ shifting?) could impact plant avail & reserve holding- is there need for long term signalling of stability needs to avoid this being excessive?

Q: On 7th August SHOS-1&GRAI-8 were dropped on BM extensions despite offering the cheapest £/MWh of all CCGT's on the system. More expensive units were extended and offered up to MEL causing the cost to the consumer to be significantly higher than the if they had been kept on. Why were they dropped?

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
- 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.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

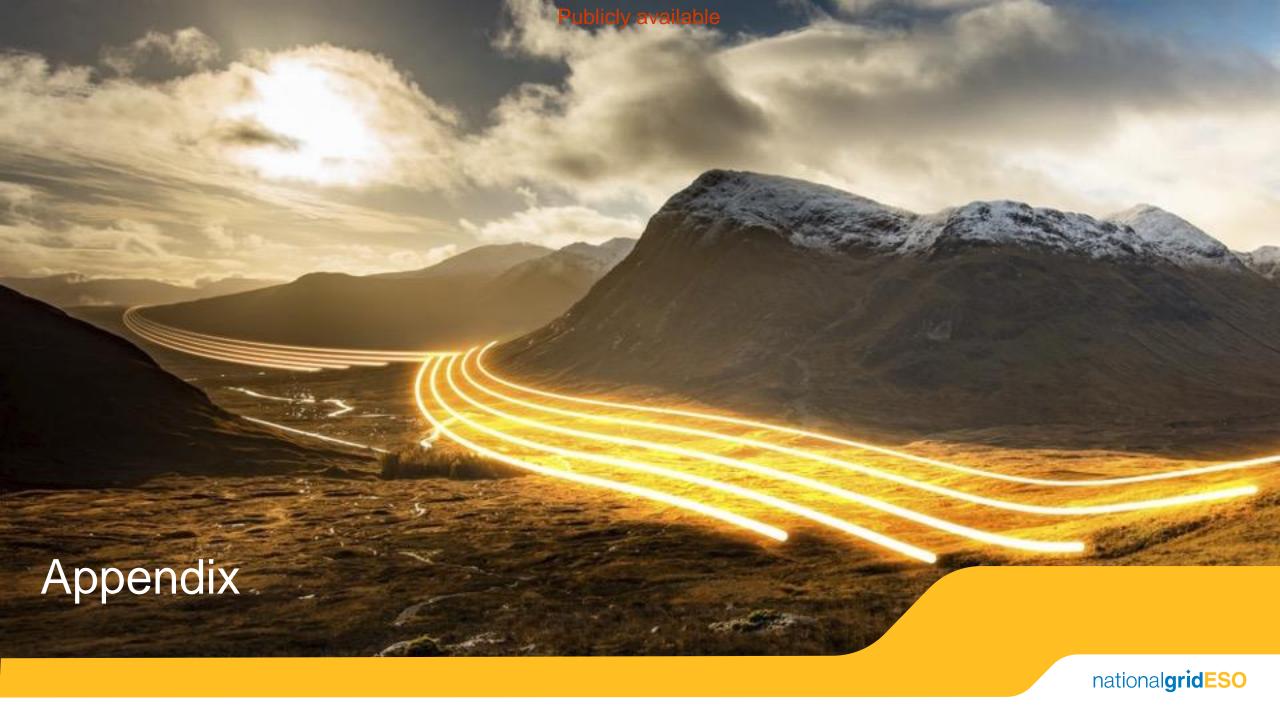
⁽i) Start presenting to display the audience questions on this slide.

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 <u>box.NC.Customer@nationalgrideso.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 | 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.