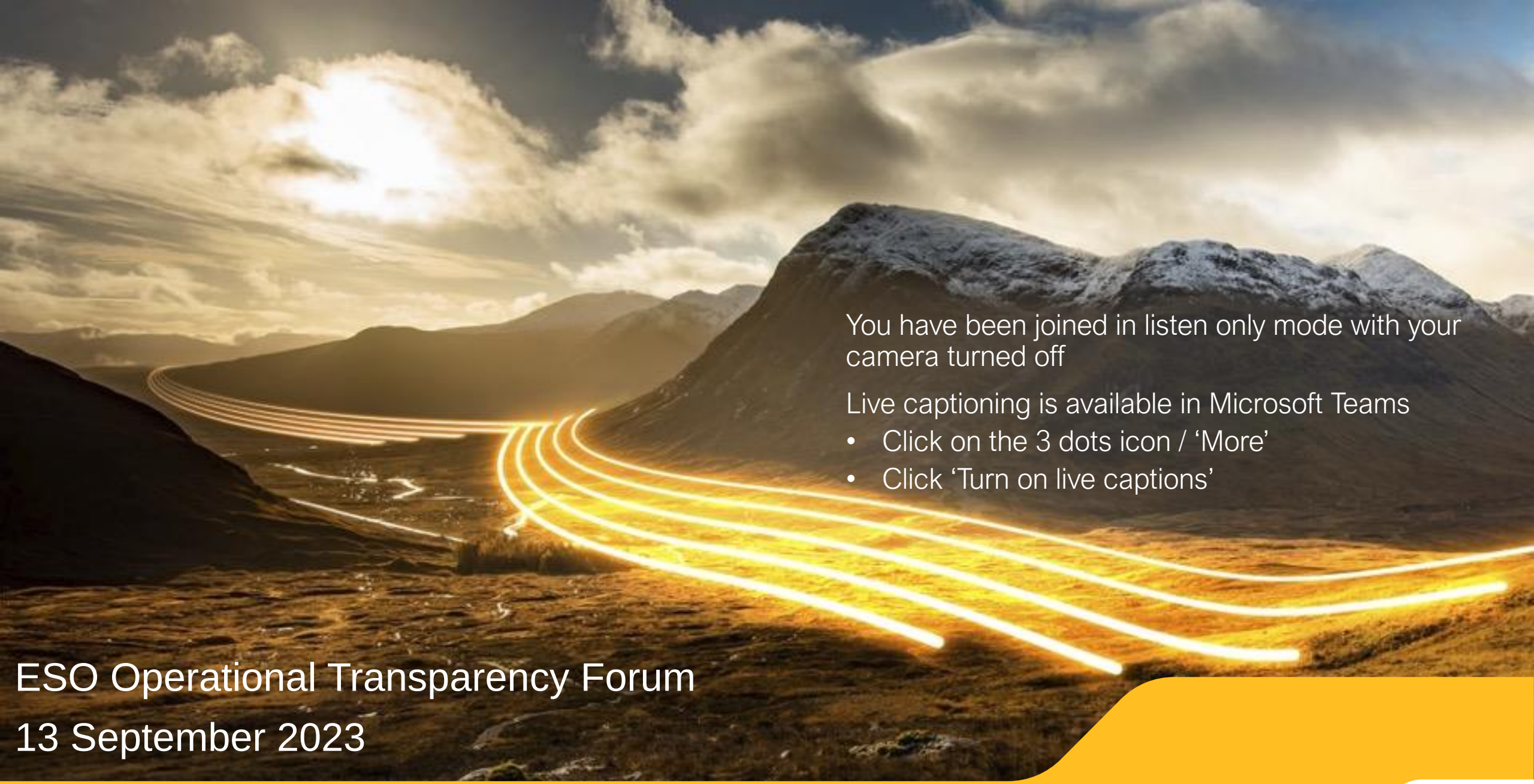

You have been joined in listen only mode with your camera turned off

Live captioning is available in Microsoft Teams

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

ESO Operational Transparency Forum

13 September 2023

ESO

Introduction | Sli.do code #OTF

To ask questions live and provide us with post event feedback go to Sli.do and join 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 given on the next slide.
- **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.
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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.

Stay up to date on our webpage: https://www.nationalgrideso.com/OTF

Future deep dive / focus topics

Planned

Network Constraints – 20 September

Future

Scottish Oscillations – following conclusion of current investigative work

Data Portal update from DEP (Digital Engagement Platform) perspective – October (postponed from this week)

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

Please note: **there won't be a forum on Wednesday 27 September** due to availability. Regular content will be included in the slide pack for **4 October 2023**.

C16 Additional Consultation 2023

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 and ABSVD Statement.*

Our official consultation is open from the **1st September 2023**. Please respond by **5pm on 29th September 2023**.

Please find the consultation documents on our C16 web page

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

Any questions, please contact balancingservices@nationalgrideso.com

Response reform webinar

We are hosting a response reform webinar on Thursday 21 September, 13:00 – 14:00.

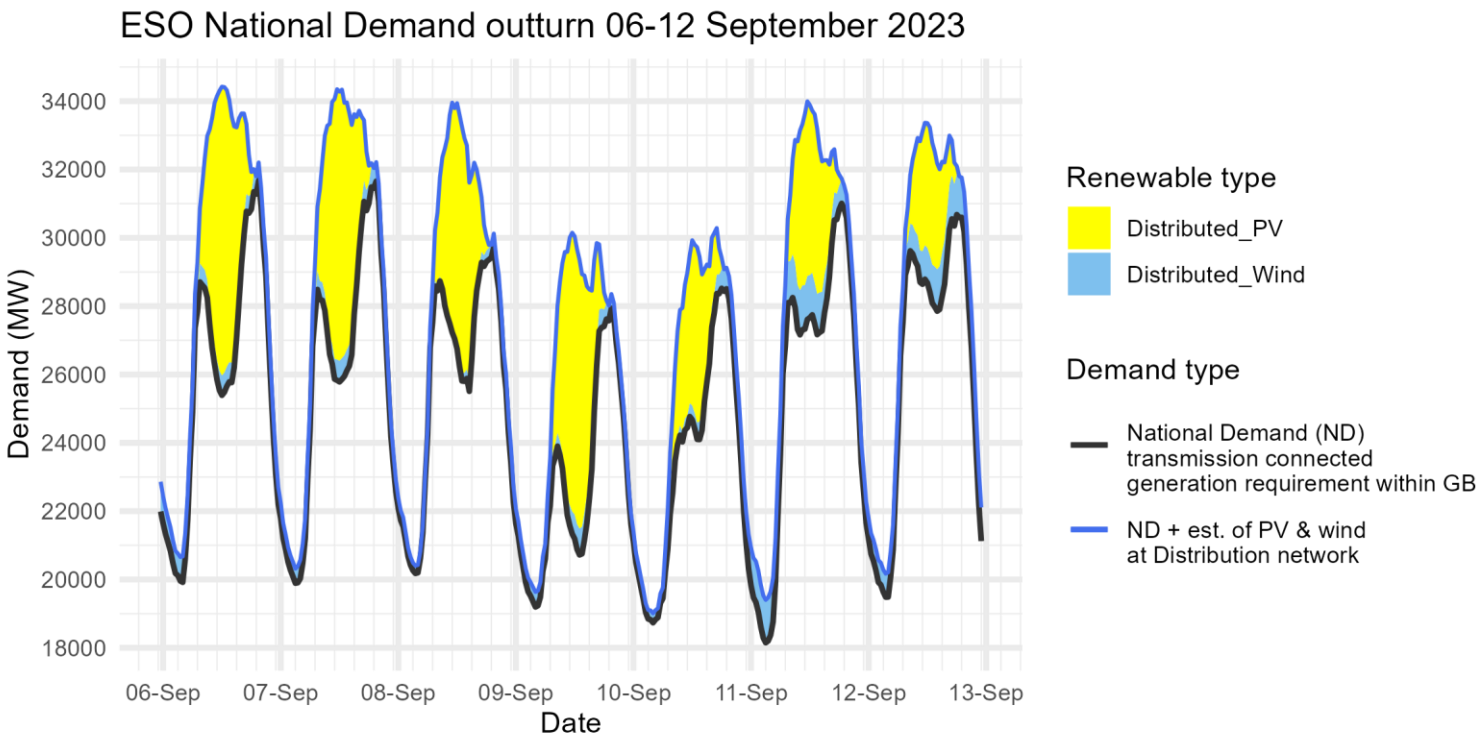
The webinar will cover topics around the Response Release 2 consultation feedback as well as sharing an update on our future plans and engagement.

For further information please contact
National Grid ESO box.futureofbalancingservices@comms.nationalgrideso.com

Microsoft Virtual Events Powered by Teams

Click here to sign up

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.

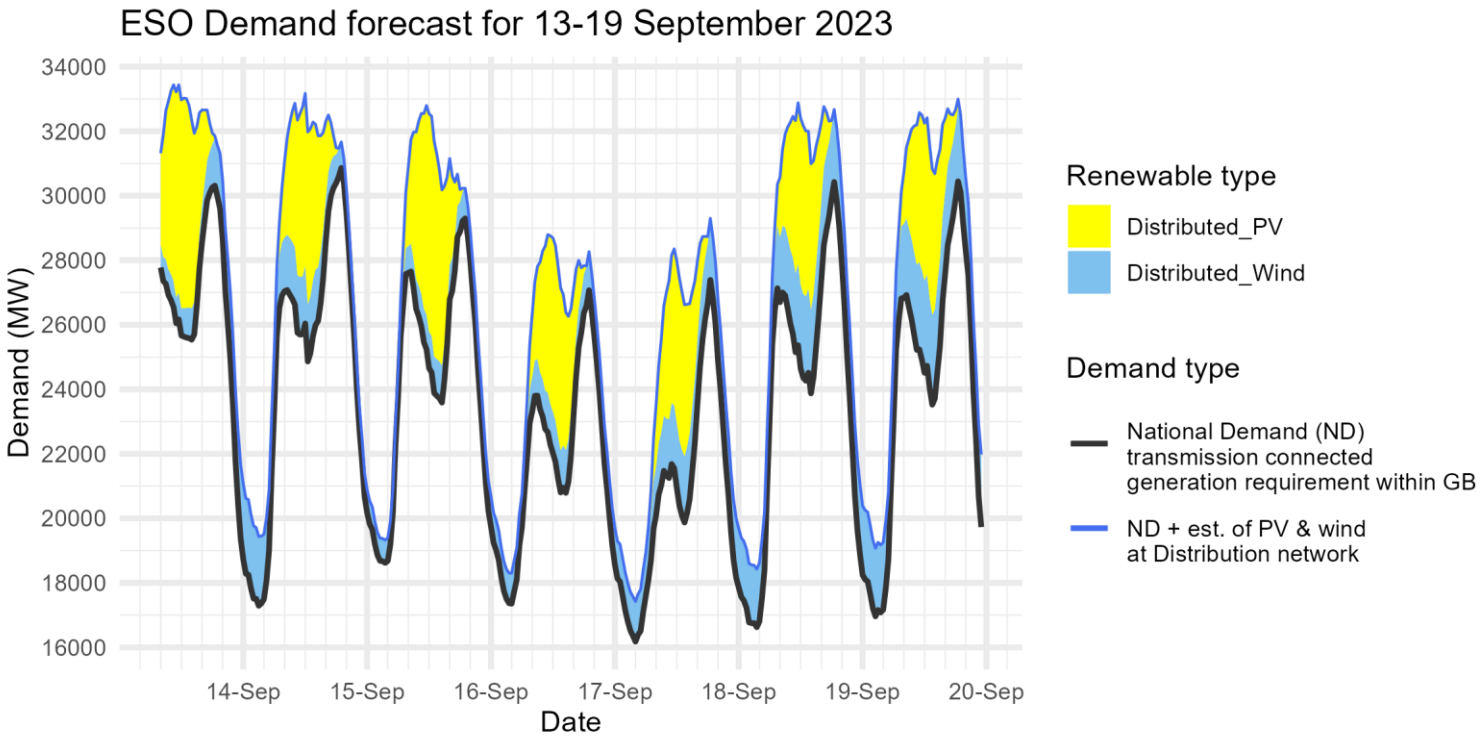
ND values **do not include** export on interconnectors or pumping or station load

Blue line serves as a proxy for total GB customer demand. It includes demand supplied by the distributed wind and solar sources, but it 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 ESO Data Portal in the following data sets: Historic Demand Data & Demand Data Update

		FORECAST (Wed 06 Sep)		OUTTURN	
Date	Forecasting Point	National Demand (GW)	Dist. wind (GW)	National Demand (GW)	Dist. wind (GW)
06 Sep	Evening Peak	31.6	0.5	31.3	0.5
07 Sep	Overnight Min	20.4	0.6	19.9	0.4
07 Sep	Evening Peak	31.0	0.6	31.5	0.6
08 Sep	Overnight Min	20.5	0.2	20.2	0.2
08 Sep	Evening Peak	30.7	0.3	29.4	0.4
09 Sep	Overnight Min	19.6	0.3	19.2	0.4
09 Sep	Evening Peak	28.5	0.5	27.6	0.5
10 Sep	Overnight Min	18.8	0.4	18.7	0.3
10 Sep	Evening Peak	28.4	0.6	28.5	0.6
11 Sep	Overnight Min	19.4	0.5	18.1	1.3
11 Sep	Evening Peak	31.4	0.8	31.0	0.7
12 Sep	Overnight Min	19.3	1.0	19.5	0.7
12 Sep	Evening Peak	30.5	1.3	30.7	1.2

Demand | Week Ahead



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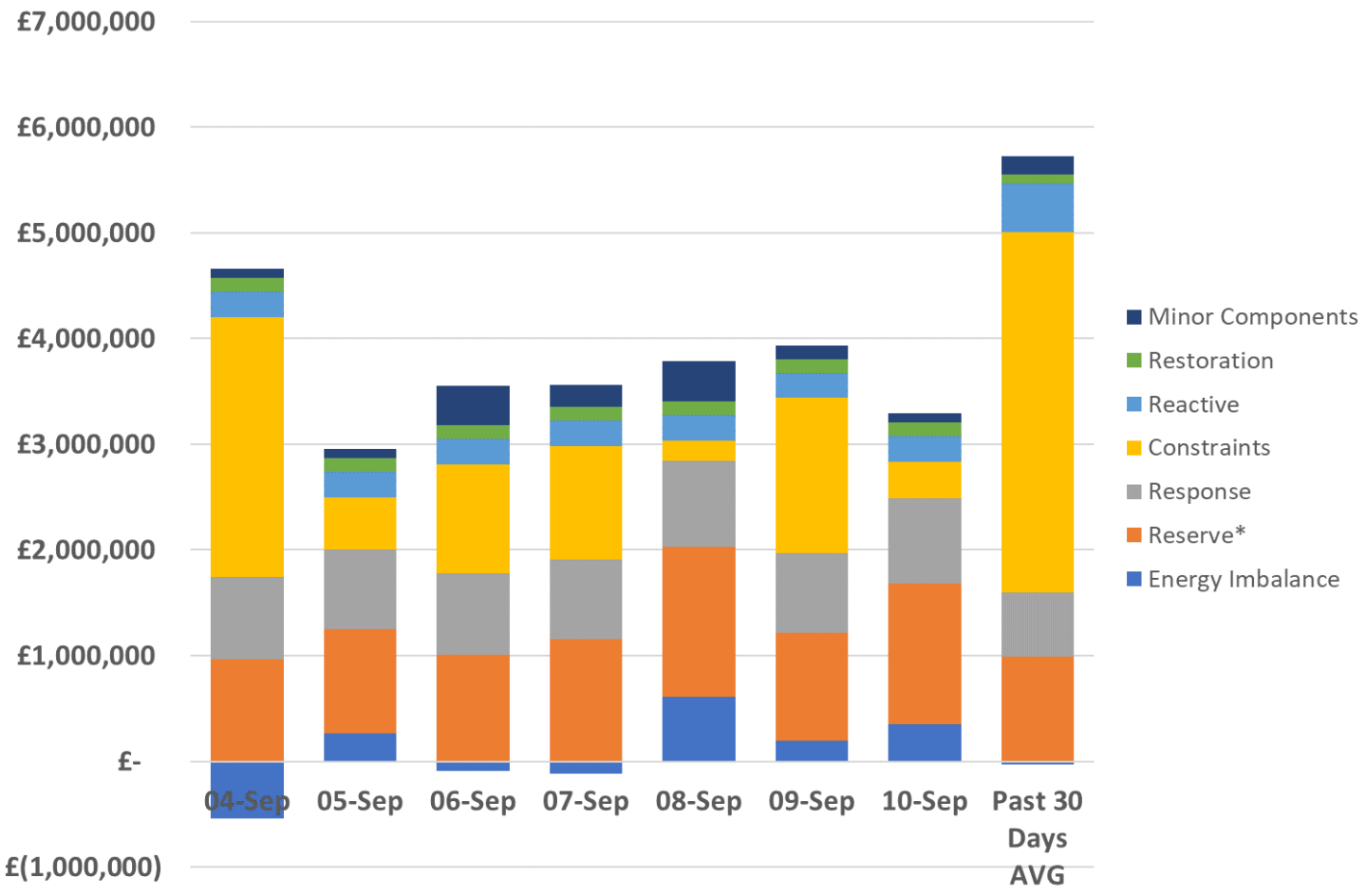
Historic out-turn data can be found on the ESO Data Portal in the following data sets: Historic Demand Data & Demand Data Update

		FORECAST (Wed 13 Sep)	
Date	Forecasting Point	National Demand (GW)	Dist. wind (GW)
13 Sep 2023	Evening Peak	30.3	1.5
14 Sep 2023	Overnight Min	17.3	2.2
14 Sep 2023	Evening Peak	30.6	0.8
15 Sep 2023	Overnight Min	18.6	0.7
15 Sep 2023	Evening Peak	29.2	0.9
16 Sep 2023	Overnight Min	17.4	0.9
16 Sep 2023	Evening Peak	26.6	1.2
17 Sep 2023	Overnight Min	16.2	1.2
17 Sep 2023	Evening Peak	27.4	1.9
18 Sep 2023	Overnight Min	16.6	1.8
18 Sep 2023	Evening Peak	30.4	2.2
19 Sep 2023	Overnight Min	17.0	2.1
19 Sep 2023	Evening Peak	30.4	2.3

ESO Actions | Category costs breakdown for the last week



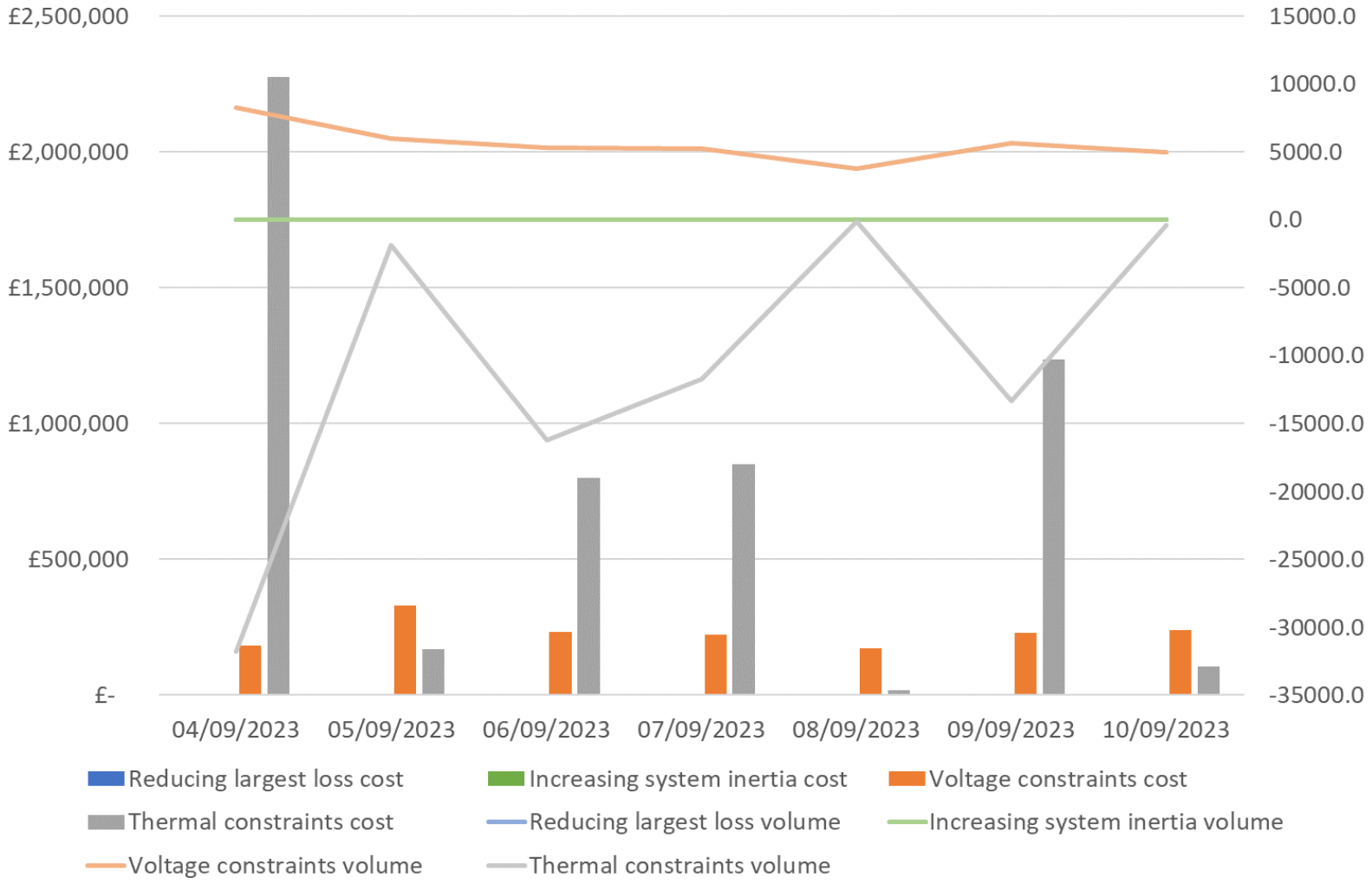
Date	Total (£m)
04/09/2023	4.1
05/09/2023	3.0
06/09/2023	3.5
07/09/2023	3.4
08/09/2023	3.8
09/09/2023	3.9
10/09/2023	3.3
Weekly Total	25.0
Previous Week	30.8

Constraints and Reserve costs were the key cost component for the week.

Please note that all the categories are presented and explained in the MBSS.

Data issue: Please note that due to a data issue on a few days over the last few months, the Minor Components line in Non-Constraint Costs is capturing some costs on those days which should be attributed to different categories. It has been identified that a significant portion of these costs should be allocated to the Operating Reserve Category. Although the categorisation of costs is not correct, we are confident that the total costs are correct in all months. We continue to investigate and will advise when we have a resolution.

ESO Actions | Constraint Cost Breakdown



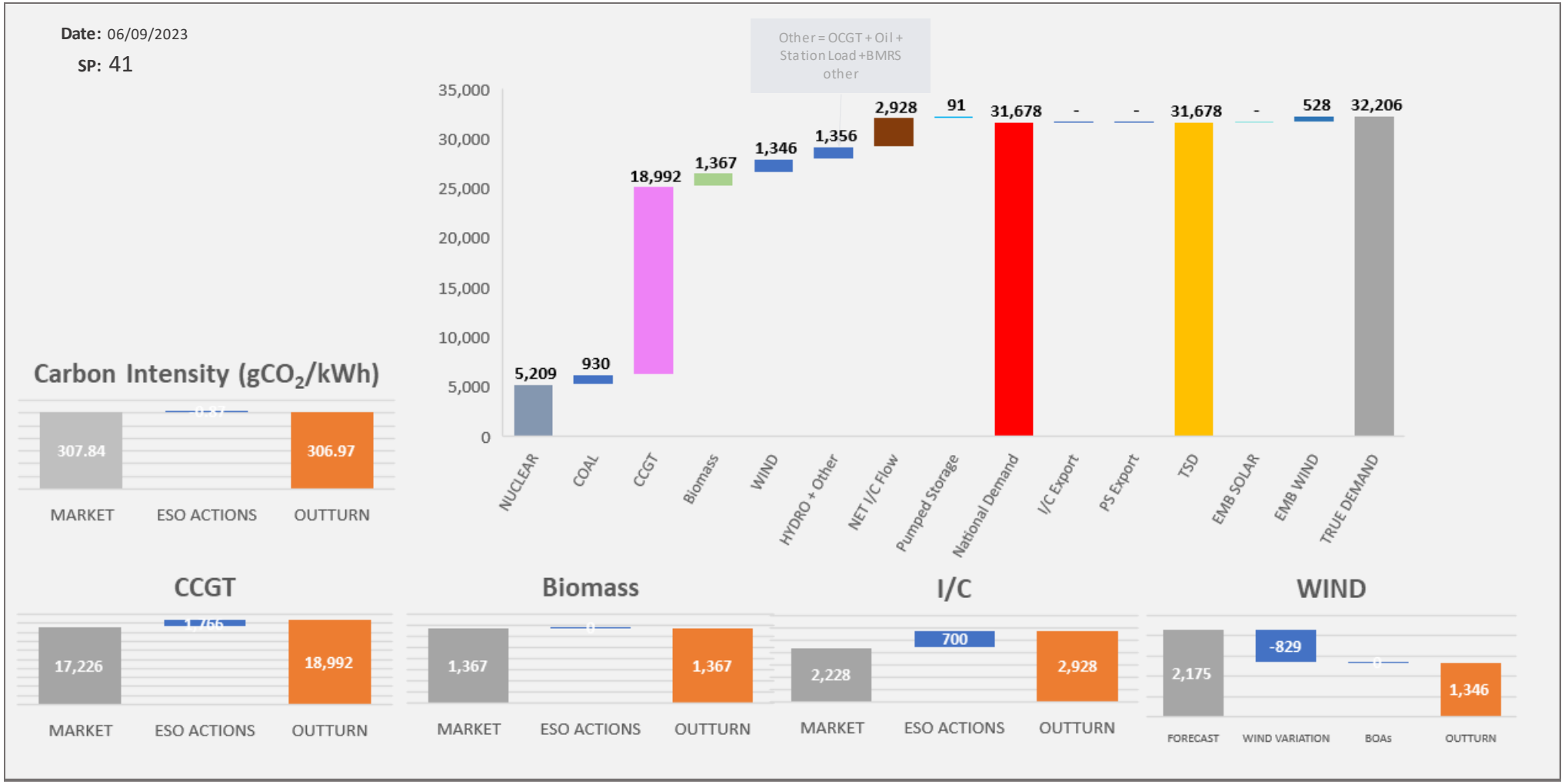
Thermal – network congestion
Actions were required to manage thermal constraints throughout the week with the most significant costs on Monday.

Voltage
Intervention was required to manage voltage levels throughout the week.

Managing largest loss for RoCoF
No intervention was required to manage largest loss.

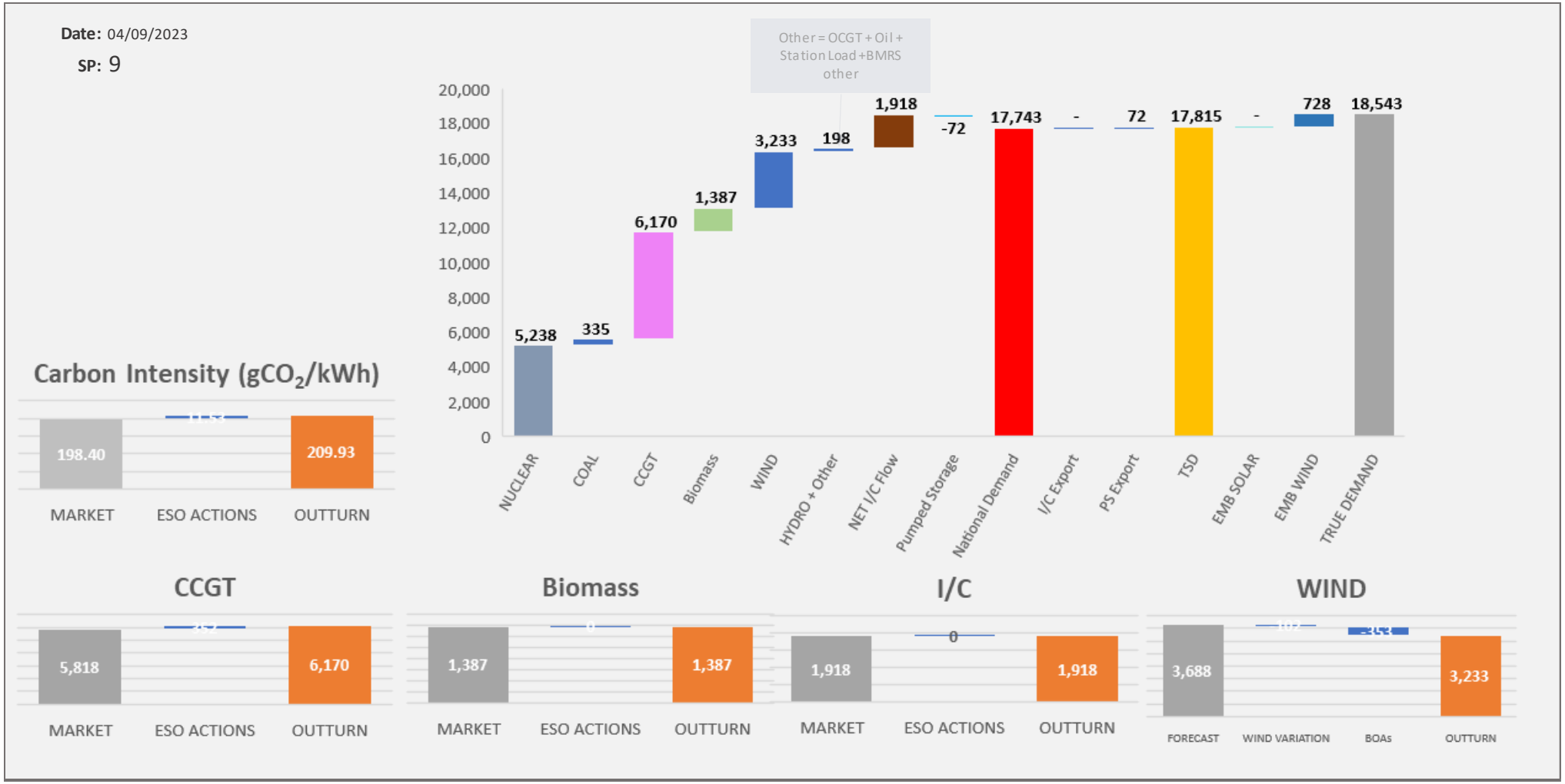
Increasing inertia
No intervention was required to manage System Inertia.

ESO Actions | Wednesday 6 September – Peak Demand – SP spend ~£60k



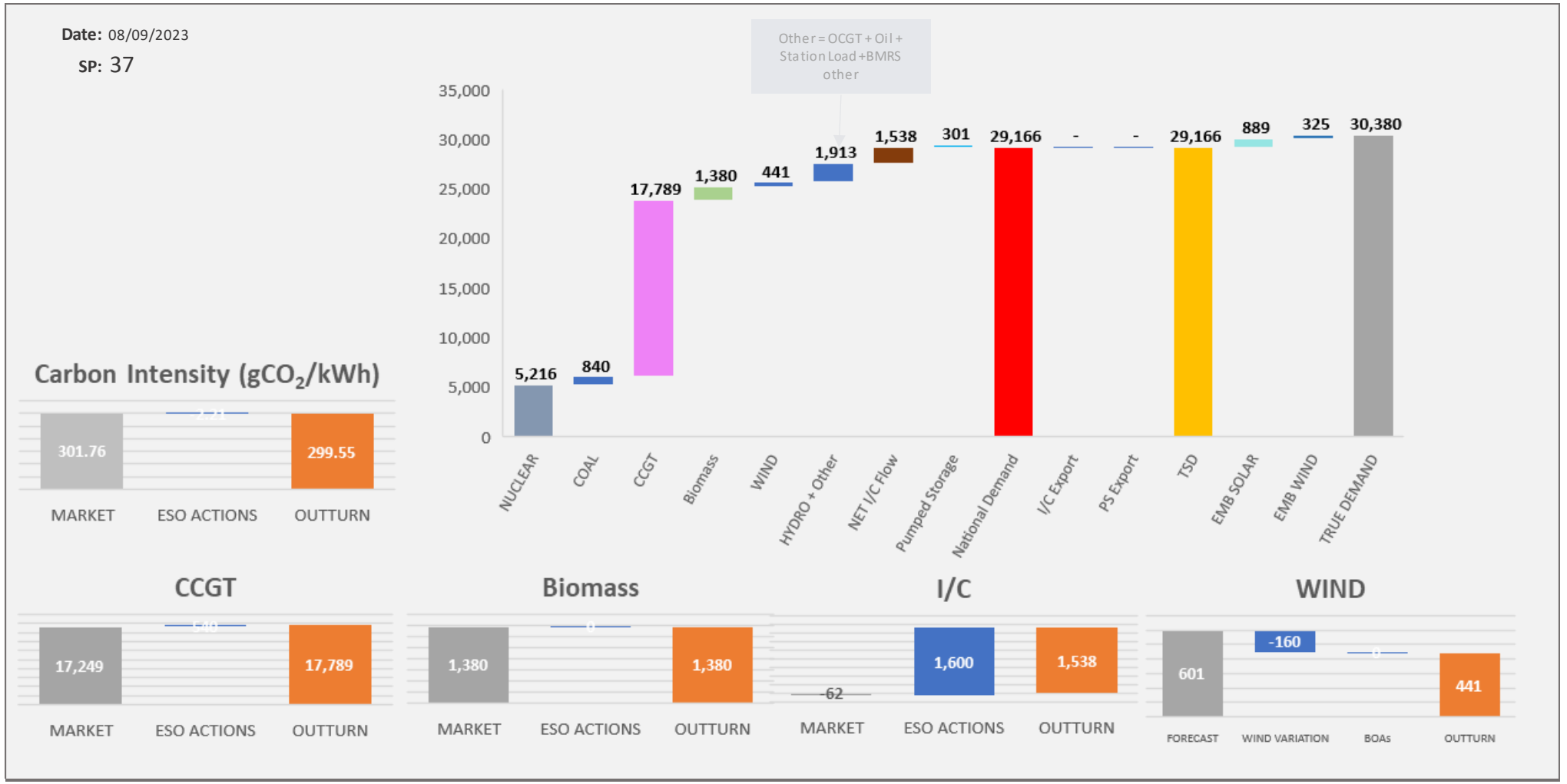
Carbon Intensity data on data portal: https://data.nationalgrideso.com/carbon-intensity1/carbon-intensity-of-balancing-actions

ESO Actions | Monday 4 September – Minimum Demand – SP Spend ~£79k



Carbon Intensity data on data portal: https://data.nationalgrideso.com/carbon-intensity1/carbon-intensity-of-balancing-actions

ESO Actions | Friday 8 September – Highest SP Spend ~£180k



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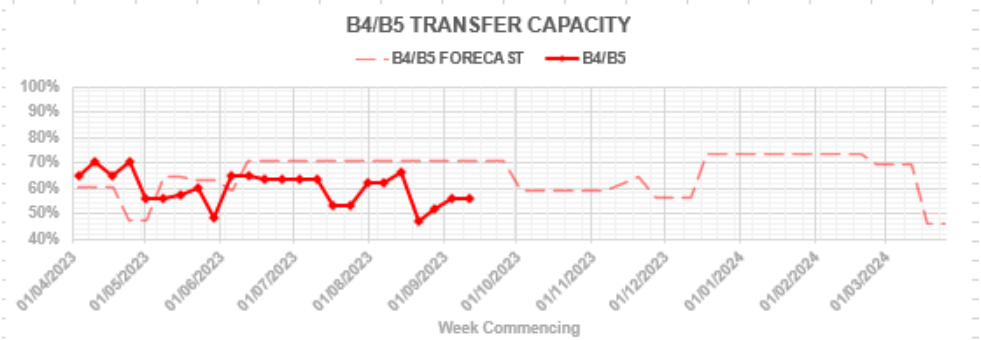
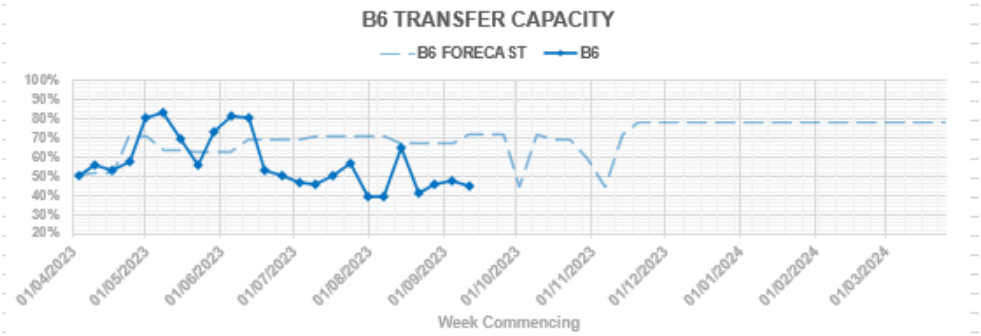
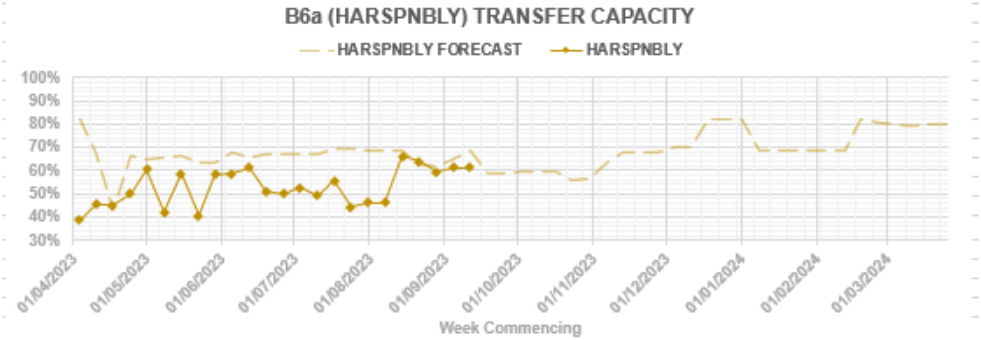
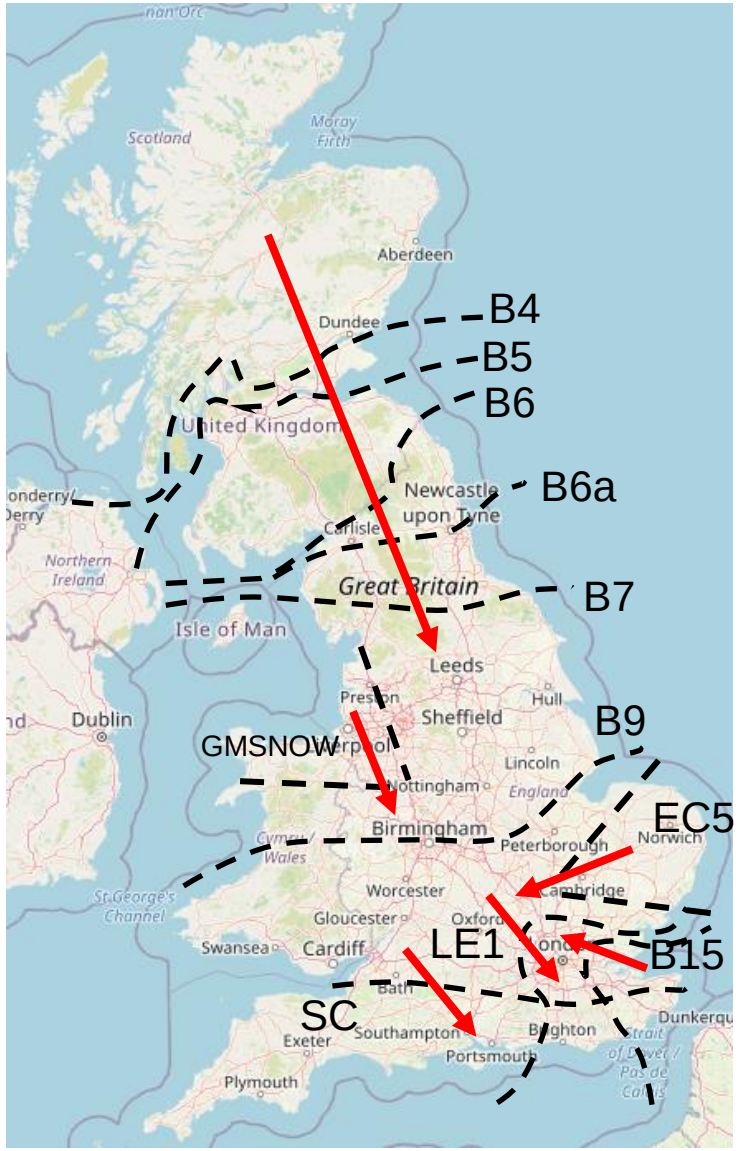
Transparency | Network Congestion





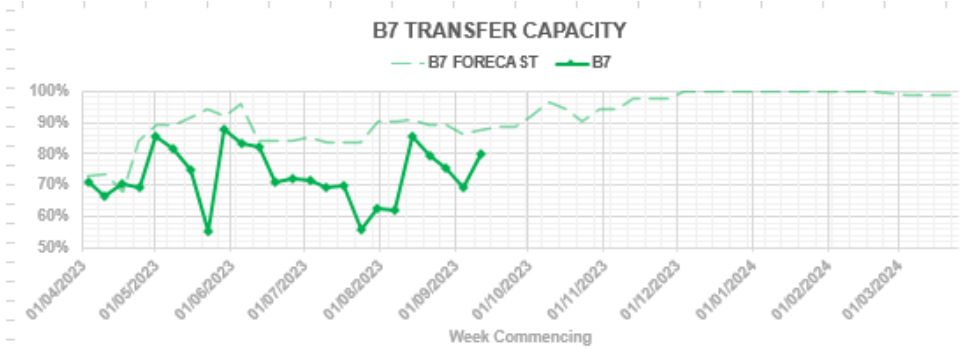


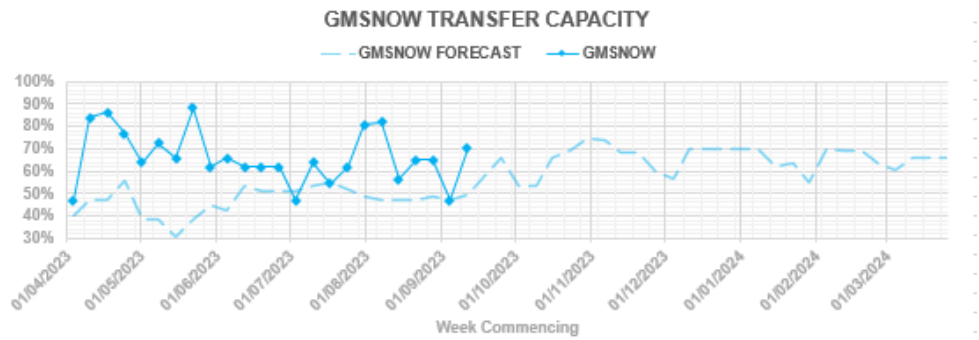
Boundary	Max. Capacity (MW)
B4/B5	3400
B6	6800
B6a	8000
B7	8325
GMSNOW	4700
B9	10600
EC5	5000
LE1	8500
B15	7500
SC	7300

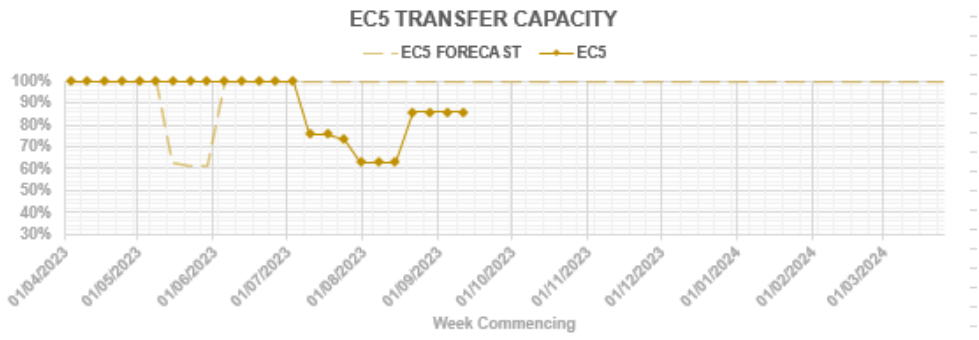


Day ahead flows and limits, and the 24-month constraint limit forecast are published on the ESO Data Portal:
https://data.nationalgrideso.com/data-groups/constraint-management

Transparency | Network Congestion







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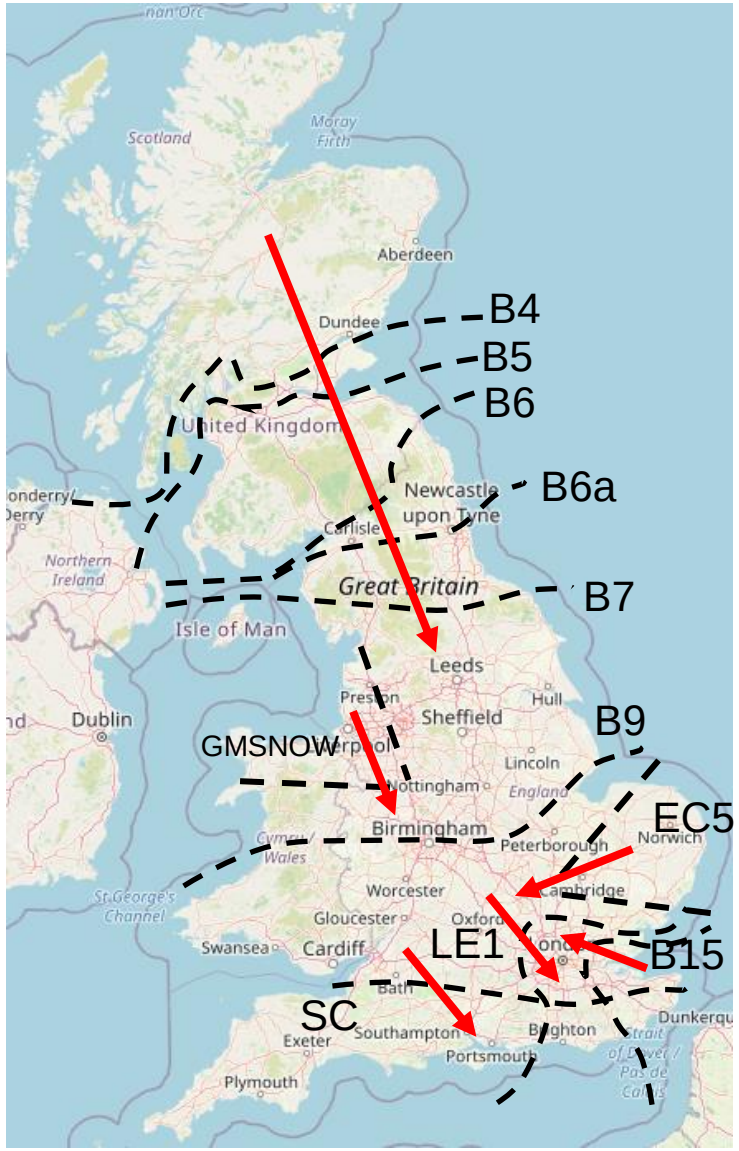

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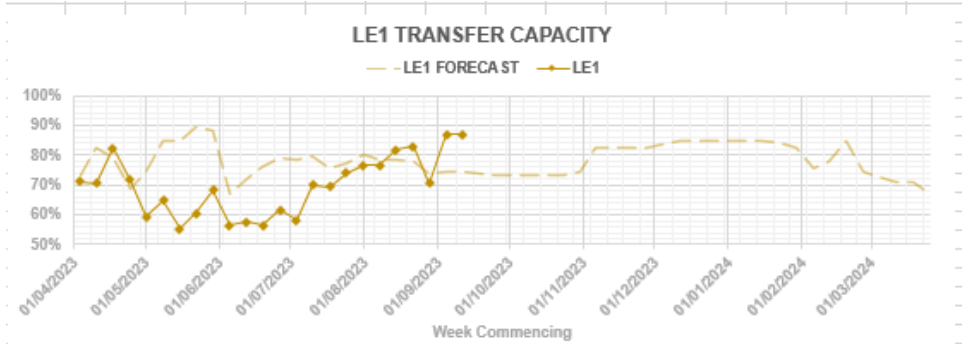
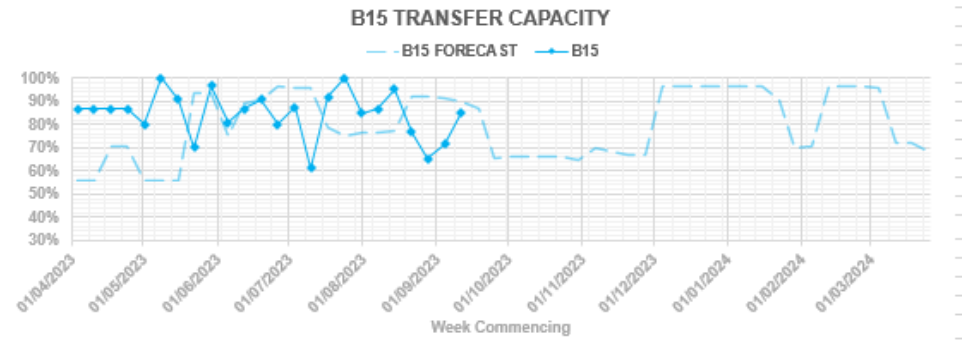
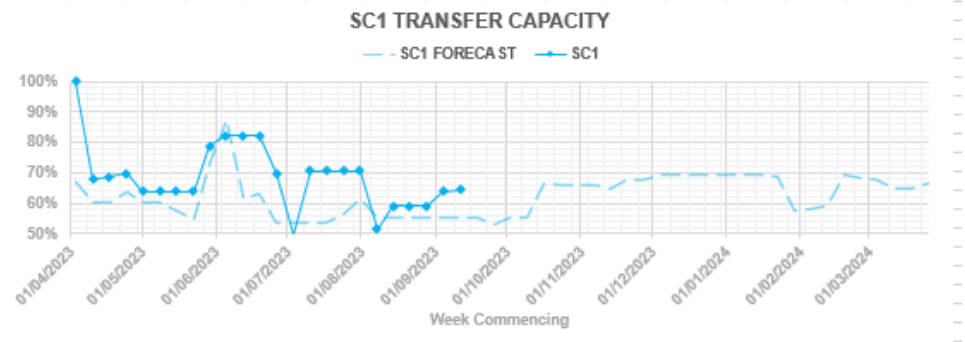
Transparency | Network Congestion







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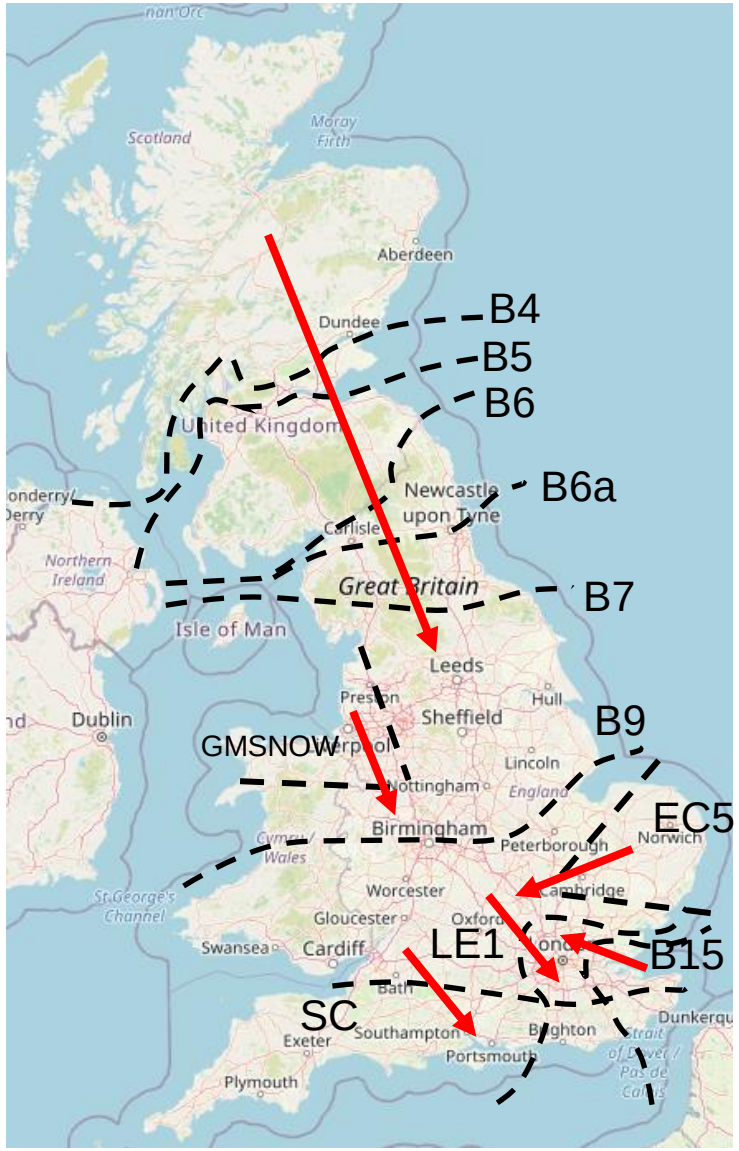

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https://data.nationalgrideso.com/data-groups/constraint-management

Advance Question

Q: Hello,

I've noticed that in the data you publish on day-ahead constraint limits and flows that new constraint boundaries appeared and old ones disappeared in May 2023. Would you be able to explain what happened and why there are new ones. Would it also be possible to get a visual indication of where the various constraint boundaries listed in this dataset are in GB.

Thanks very much.

A: Thank you for your question!

On the ESO Data Portal we publish the Day Ahead constraint data for standard constraints. As the network evolves and new assets are installed, this changes the topology of the network and can lead to a change in the system constraints. New constraints can be introduced for these system changes, and they replace older constraints that are no longer relevant. On the data portal there are also diagrams for England and Wales, and Scotland that indicate where these boundaries lie.

ESO Data Portal: Constraint Management | National Grid Electricity System Operator (nationalgrideso.com)

Advance Question

Q: Would you be able to provide clarity as to why bilateral trade costs rose on 22 August? Rising to around £780/MWh in Settlement Period 38, via trades across NEMO.

A: On 22nd August, ESO needed significant volume for system and margin reasons and power margins were tight across Europe. There was an active restriction at the time with a neighbouring TSO, limiting the available volume we could access over the interconnectors.

As with all our trading decisions we procured the energy in merit order given the options available to ESO at the time.

Previously Asked Questions

Q: Follow-on for question on non-BM balancing post-IT change: while auction results will be published, there's currently no publication of real-time dispatch. If IT systems are being upgraded to handle real-time data, can we please have real-time dispatch transparency (like we have for the BM)

A: Thank you for this feedback.

We are minimising any development to the PAS/ASDP non-BM dispatch systems as they will be replaced in due course by the Open Balancing Platform (OBP). Therefore, we are not planning to develop any real time data publication for Optional Fast Reserve and NBM Short Term Operating Reserve (STOR) instructions.

We currently publish Optional Fast Reserve instructions on the ESO data portal in near to real time although there is a slight lag and the instruction is only published after delivery is completed.

https://data.nationalgrideso.com/ancillary-services/non-bm-ancillary-service-dispatch-platform-asdp-instructions

Our new balancing platform (OBP) will have the data flows and functionality to enable real time publication of NBM reserve dispatch instructions.

Therefore, we will be considering how to enable this improved transparency and publish real time NBM dispatch of reserve services through the development of the Quick and Slow reserve services.

Previously Asked Questions

Q: It seems to take a long time to get responses for reconciliation where mistakes have been made by the ESO in performance monitoring. Can we get more transparency on expected timescales for response, and how many of these kind of tickets are outstanding, and the rate at which they are resolved.

A: Our settlements team have been working closely with the provider who asked this question over the past few weeks.

Our settlements team are working closely with the performance monitoring team, and we are tracking each query closely to get them resolved as quickly as we're able. We are reaching out to providers who are having ongoing issues to closely support them in resolving their issues. Please get in touch with settlement.queries@nationalgrideso.com for direct support resolving any issues you may have.

Q: Since March NGESO have not been able to provide backing data for DM/DC/DR services until the final invoice which is adding pressure to Parties validation processes. How much longer before NGESO have this issue resolved and provide the data in the Prelim files as per the Service Terms?

A: Thank you for this feedback. We are aware of performance issues with sharing backing data for DC/DM/DR services with providers. We are working on an enduring solution to resolve this.

Backing data for DC/DM/DR has been provided this month in the preliminary statements for August.

Previously Asked Questions

Q: We have observed acceptance of BM bids and offers from units providing Dynamic Containment, where the BOA results in erosion of DC response capability (e.g. Red Scar battery on 3 Aug 2023).

This scenario is outlined on page 6 of the Unlocking Stacking of BOAs with Frequency Response Services document (https://www.nationalgrideso.com/document/184466/download), but the scenario is described in this document as ""inactive"".

Can NGESO confirm that the control room is now able to issue BOAs to DC units with erosion of DC response capability? And has this been communicated to the market previously?

A: Thank you for highlighting this case, we will look into this instance in more detail. If you are aware of any other examples please share them with us at: .box.NC.customer@nationalgrideso.com

The scenario is not considered live and following our review it may be determined that further measures need to be taken to prevent this from being instructed going forward.

If any future changes are made to the status of this scenario 3b we will communicate this out and ensure that the document is updated to clearly reflect this.

Previously Asked Questions

Q: The max capacity available over some of the key constraint boundaries for this winter seem low compared to previous years. Is this a concern for the ESO and if so what is planned to improve this? Thanks

The GB transmission network is undergoing continuous improvements. At YA (Year Ahead) network outage requests are accepted into the plan based on assuming the worst-case scenario, system security, flows and cost. Hence this produces a conservative limit of boundary capacity. Where possible ESO's Network Access Planning (NAP) team tries to "nest" outage combinations to reduce the disruption they cause individually. Nest is where two outages have the same effect, and so having them together means that the system is no worse off than if you just took a single outage. This has the added advantage of reducing the overall cost of both outages together.

Constraints are optimised to reduce the impact to the cost of operating the network, but maintenance and other work does have to happen, and some costs are unavoidable. Where possible all avenues to increase limits have been pursued and the constraint limits are as optimised as possible.

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.
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- **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

slido

Audience Q&A Session

ⓘ 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

Appendix

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 Sli.do 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: Operational Transparency Forum | ESO (nationalgrideso.com)
- **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