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- Click 'Turn on live captions'

ESO Operational Transparency Forum  
23 August 2023

## 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.
- **Sli.do 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.** 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

### Future

Data Portal update from DEP (Digital Engagement Platform) perspective – 13 September

Scottish Oscillations – following conclusion of current investigative work. Likely to be September.

Constraints – September

If you have suggestions for future deep dives or focus topics please send them to us at:  
[.box.NC.customer@nationalgrideso.com](mailto:.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 30 August** due to availability. Regular content will be included in the slide pack for **6 September 2023**.

## Balancing Reserve webinar – postponed until 24<sup>th</sup> August

After careful consideration, and in order to align more closely with our schedule for launching the EBR Article 18 consultation for Balancing Reserve we have taken the difficult decision to **postpone our Industry Webinar** until **Thursday 24th August**.

The Balancing Reserve team have been working hard to simplify the service design, address areas of concern around the cap on reimbursement and further alignment across ESO reserve services.

For those already registered you will have received an updated invitation and for those yet to sign up a link is available on the right.

If you have any further questions or concerns, please email us on:

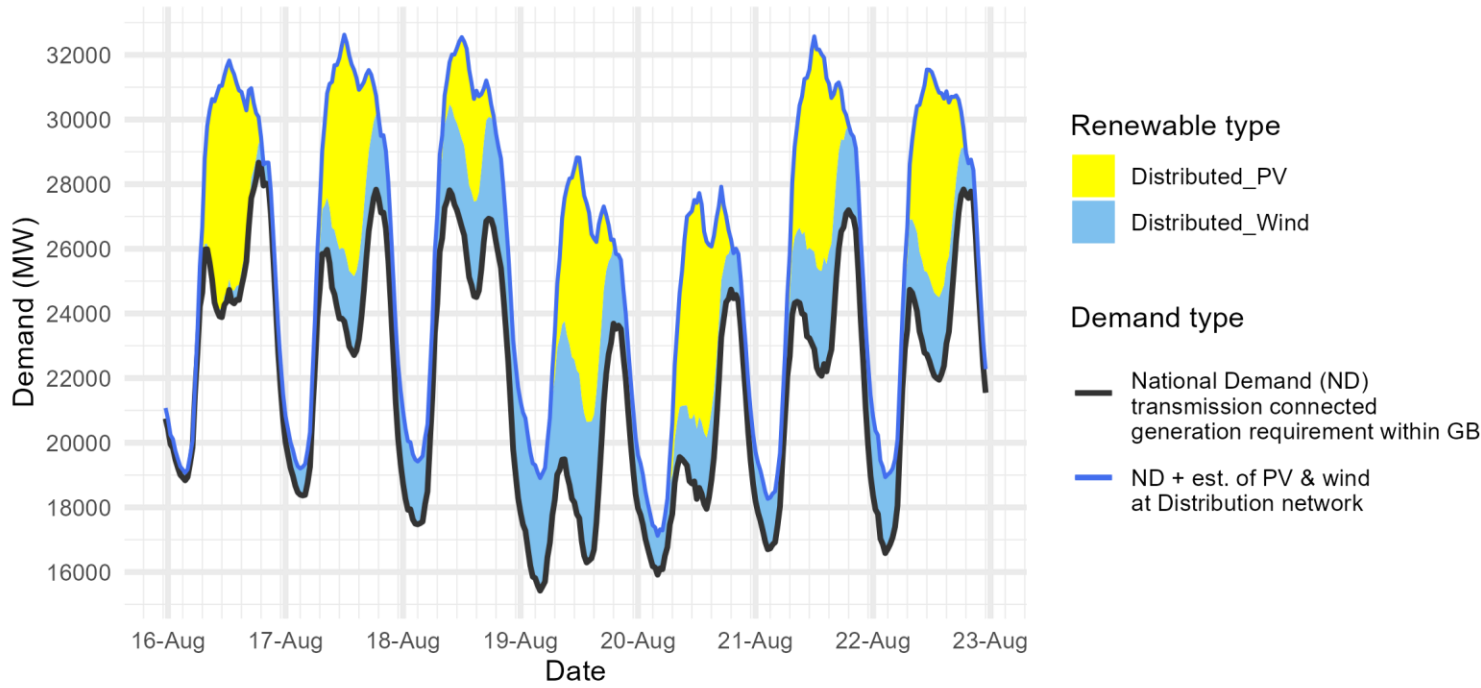
[box.futureofbalancingservices@nationalgrideso.com](mailto:box.futureofbalancingservices@nationalgrideso.com)

**Sign up for the  
webinar here**

[Microsoft Virtual Events Powered  
by Teams](#)

# Demand | Last week demand out-turn

ESO National Demand outturn 16-22 August 2023



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

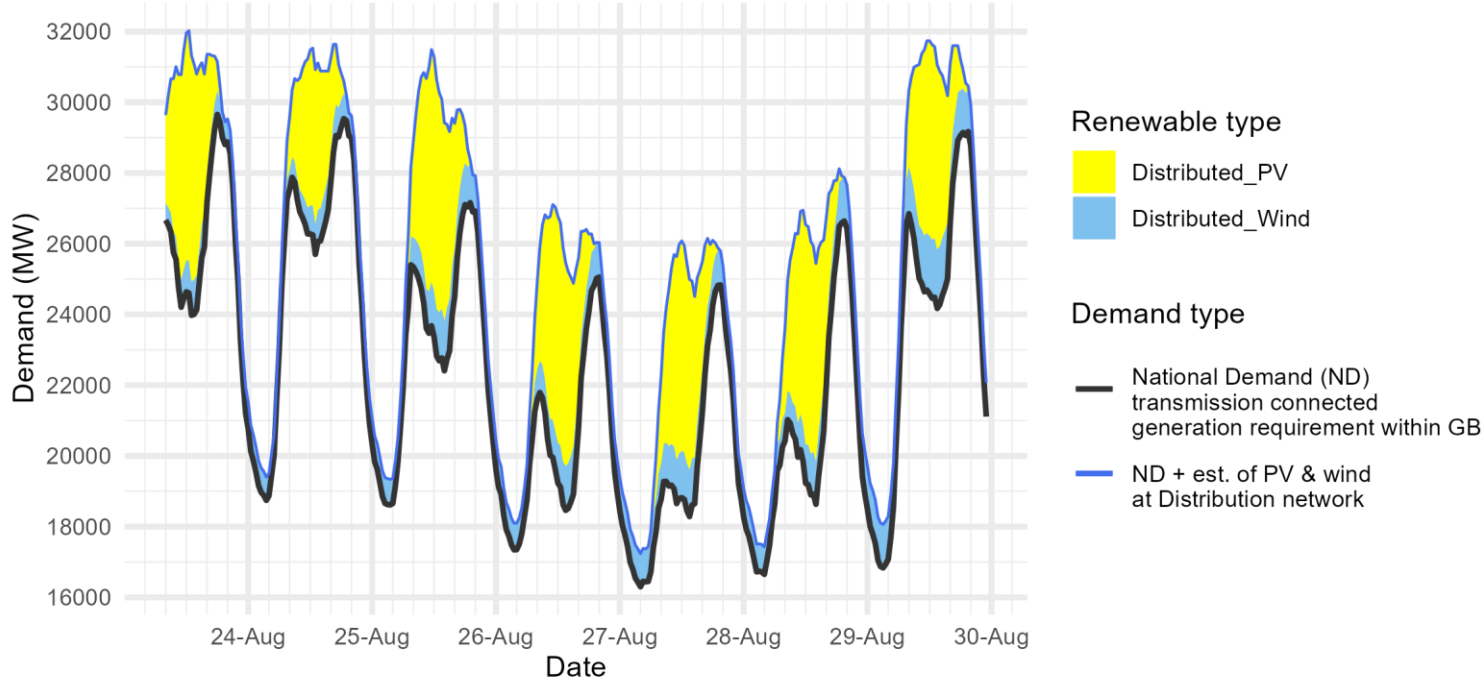
Blue line serves as a proxy for total GB customer demand. It includes demand supplied by the distributed wind and solar sources, but it **does not include** demand supplied by non-weather driven sources at the distributed network for which ESO has no real time data.

Date	Forecasting Point	FORECAST (Wed 16 Aug)			OUTTURN		
		National Demand (GW)	Dist. wind (GW)	Dist. PV (GW)	National Demand (GW)	Dist. wind (GW)	Dist. PV (GW)
16 Aug	Afternoon Min	24.0	0.4	6.9	24.3	0.4	6.7
17 Aug	Overnight Min	18.4	0.9	0.0	18.4	0.9	0.0
17 Aug	Afternoon Min	22.6	2.2	6.6	22.7	2.4	6.4
18 Aug	Overnight Min	17.5	1.7	0.0	17.5	1.9	0.0
18 Aug	Afternoon Min	24.3	2.7	4.0	24.5	3.0	3.4
19 Aug	Overnight Min	15.8	2.5	0.0	15.4	3.5	0.0
19 Aug	Afternoon Min	16.6	3.0	6.5	16.3	4.4	6.8
20 Aug	Overnight Min	16.2	1.5	0.0	15.9	1.2	0.0
20 Aug	Afternoon Min	17.8	2.1	6.8	18.0	2.2	6.1
21 Aug	Overnight Min	17.3	1.3	0.0	16.7	1.6	0.0
21 Aug	Afternoon Min	22.7	1.9	6.5	22.1	3.2	6.7
22 Aug	Overnight Min	18.4	1.1	0.0	16.6	2.4	0.0
22 Aug	Afternoon Min	23.3	1.7	5.4	21.9	2.6	6.3

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

# Demand | Week Ahead

ESO Demand forecast for 23-29 August 2023



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

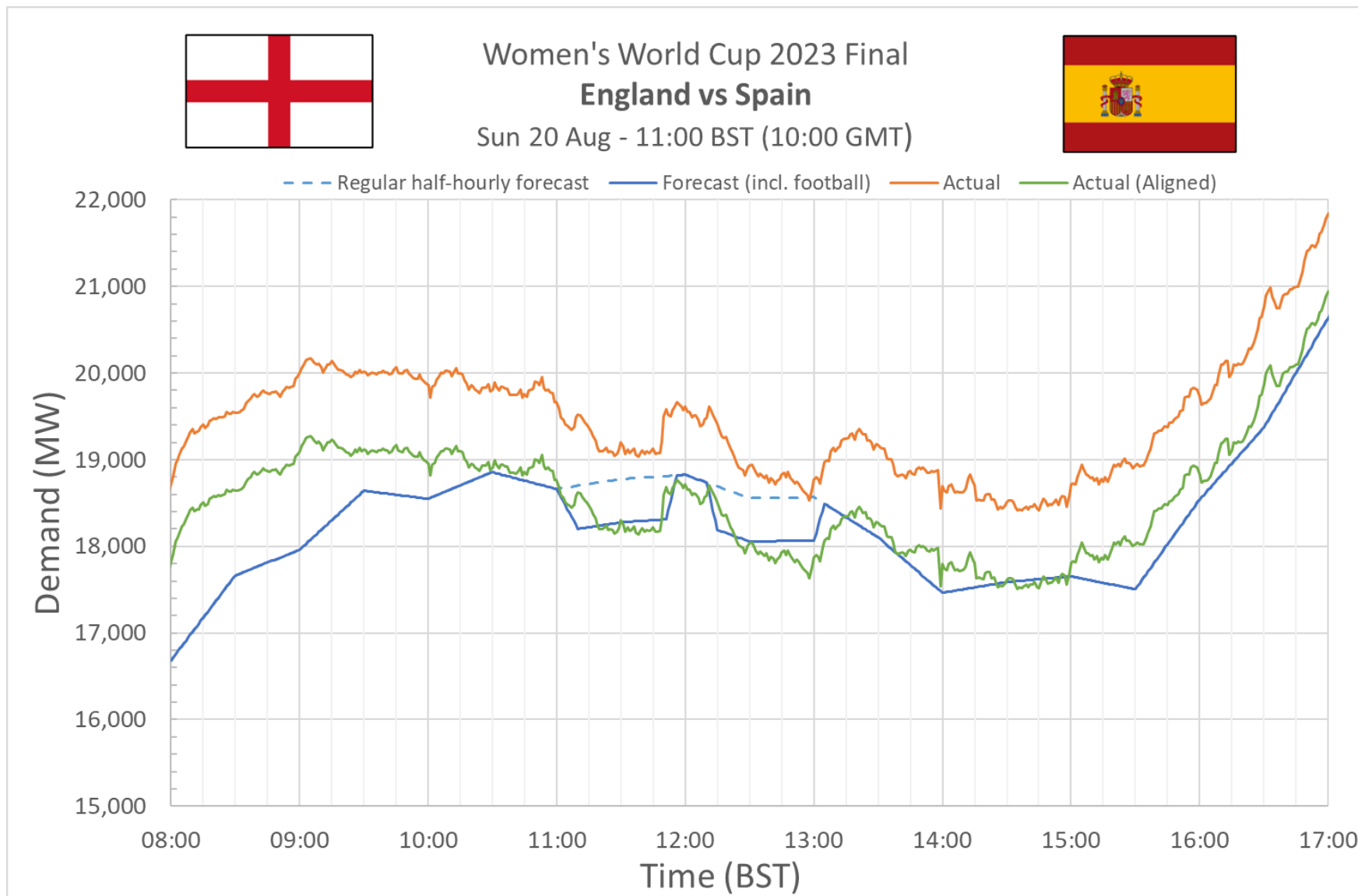
ND values **do not include** export on interconnectors or pumping or station load

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.

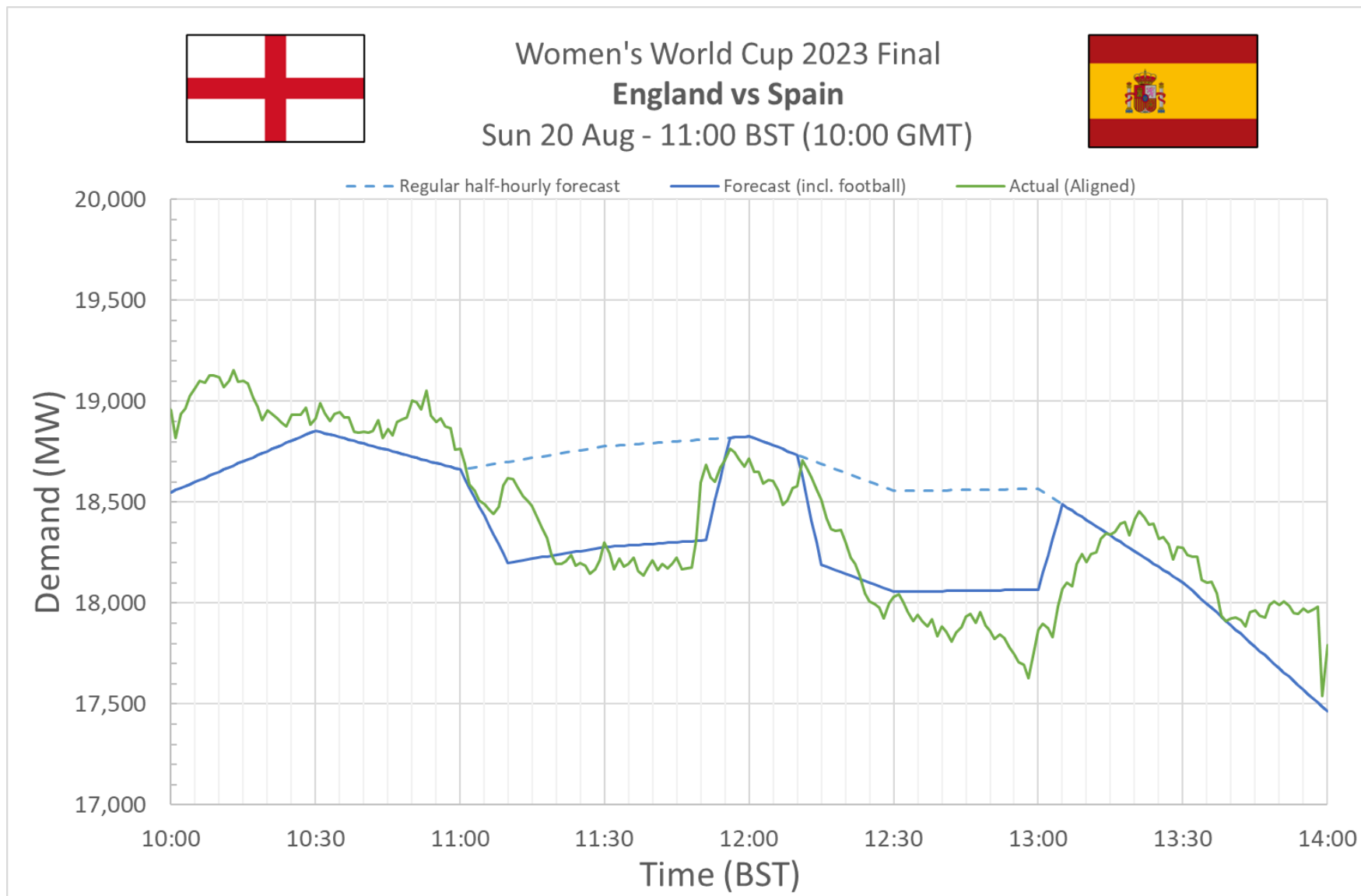
Date	Forecasting Point	FORECAST (Wed 23 Aug)		
		National Demand (GW)	Dist. wind (GW)	Dist. PV (GW)
23 Aug 2023	Afternoon Min	24.0	1.0	6.4
24 Aug 2023	Overnight Min	18.7	0.7	0.0
24 Aug 2023	Afternoon Min	25.7	0.9	4.4
25 Aug 2023	Overnight Min	18.6	0.7	0.0
25 Aug 2023	Afternoon Min	22.4	1.4	5.6
26 Aug 2023	Overnight Min	17.3	0.8	0.0
26 Aug 2023	Afternoon Min	18.5	1.2	5.8
27 Aug 2023	Overnight Min	16.3	0.9	0.0
27 Aug 2023	Afternoon Min	18.3	1.3	5.4
28 Aug 2023	Overnight Min	16.6	0.8	0.0
28 Aug 2023	Afternoon Min	18.6	1.2	5.6
29 Aug 2023	Overnight Min	16.8	1.2	0.0
29 Aug 2023	Afternoon Min	24.2	1.7	5.2

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

# Demand | Special Event

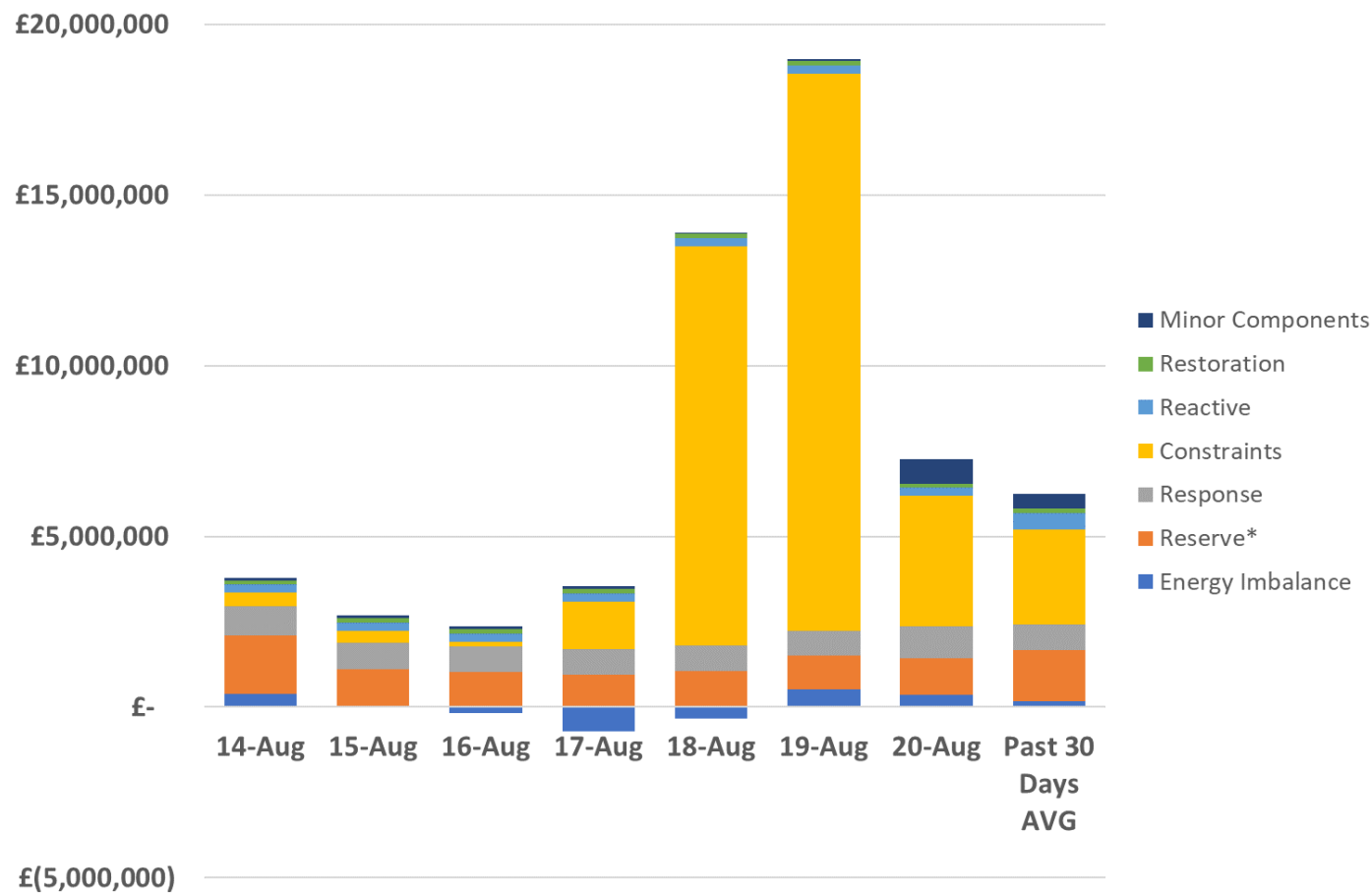


# Demand | Special Event





# ESO Actions | Category costs breakdown for the last week



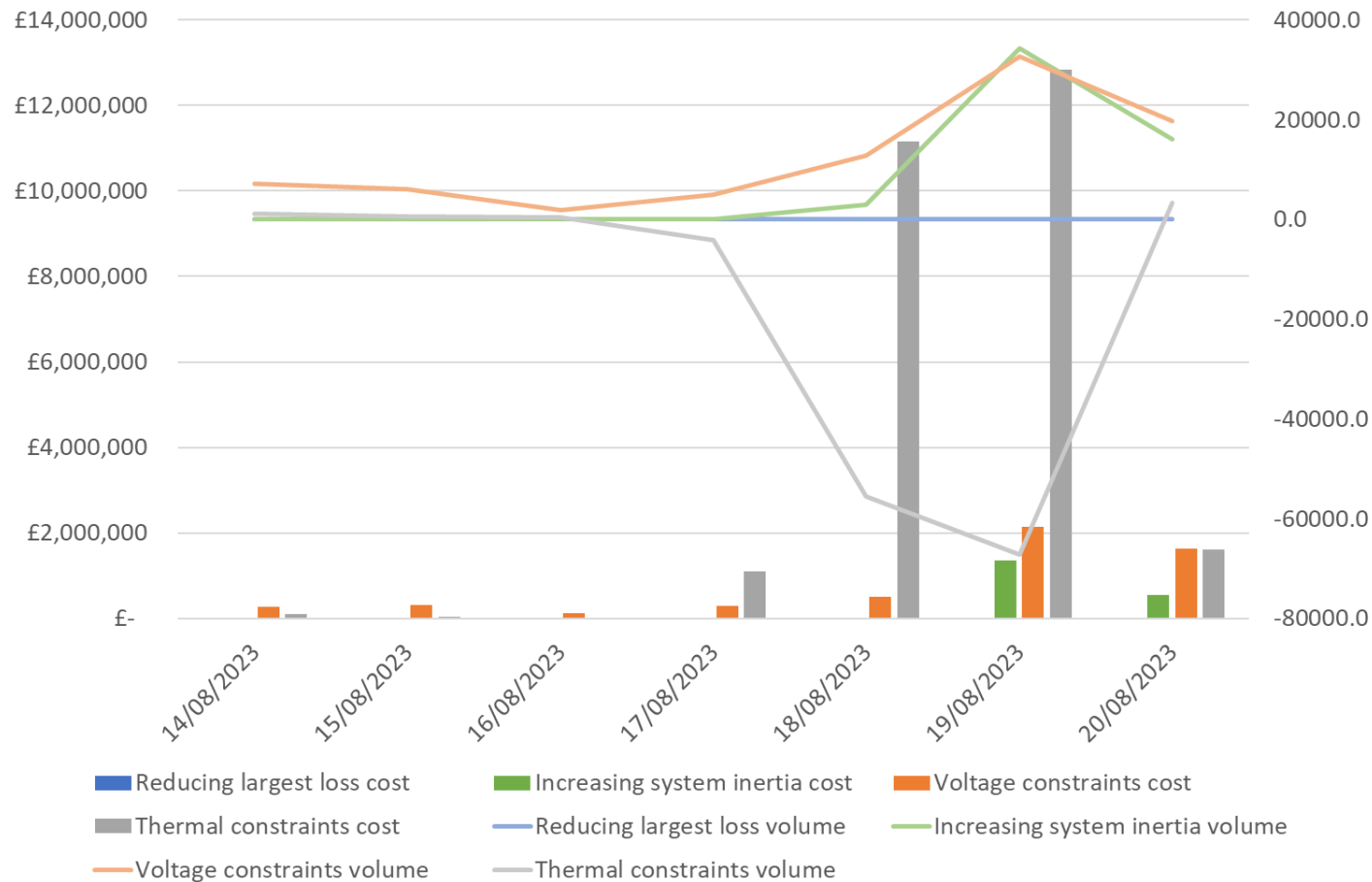
Date	Total (£m)
14/08/2023	3.8
15/08/2023	2.7
16/08/2023	2.2
17/08/2023	2.8
18/08/2023	13.5
19/08/2023	19.0
20/08/2023	7.3
<b>Weekly Total</b>	<b>51.2</b>
<b>Previous Week</b>	<b>44.9</b>

Constraints 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



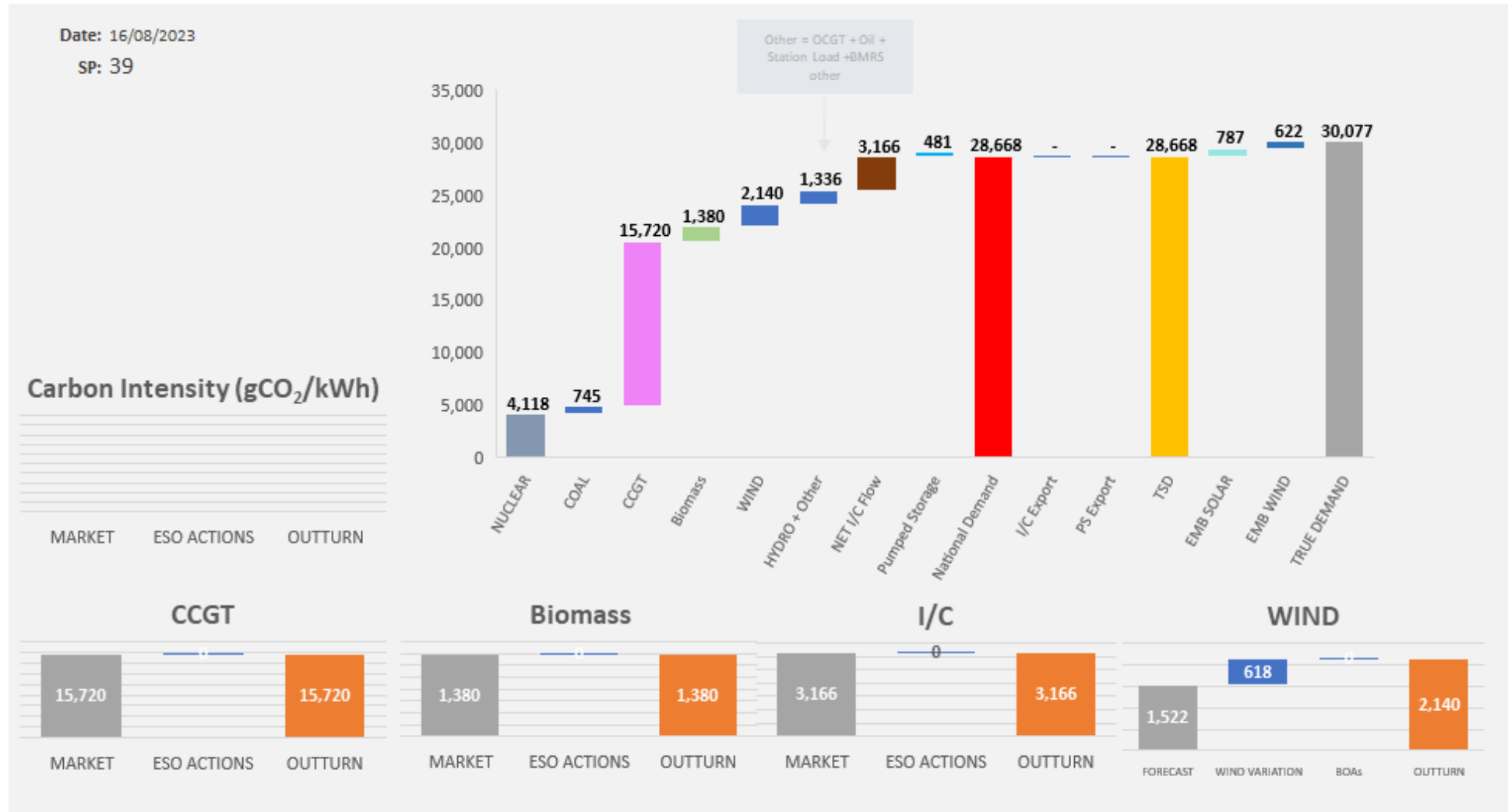
**Thermal – network congestion**  
 Actions were required to manage thermal constraints throughout the week expect Wednesday. The most significant costs were on Saturday.

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

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

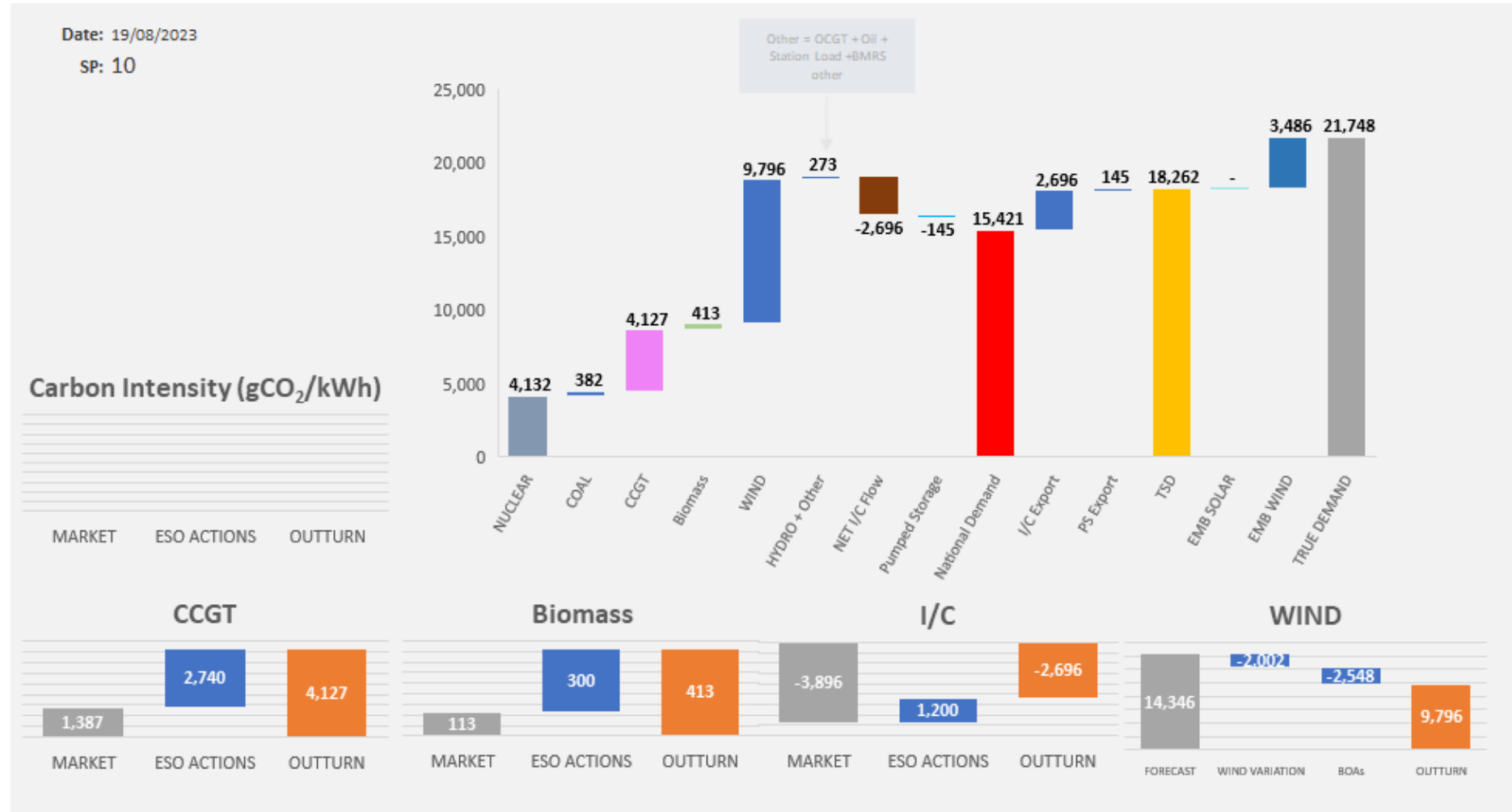
**Increasing inertia**  
 Intervention was required to manage system inertia on Sat and Sun.

# ESO Actions | Wednesday 16 August – Peak Demand – SP spend ~£19k

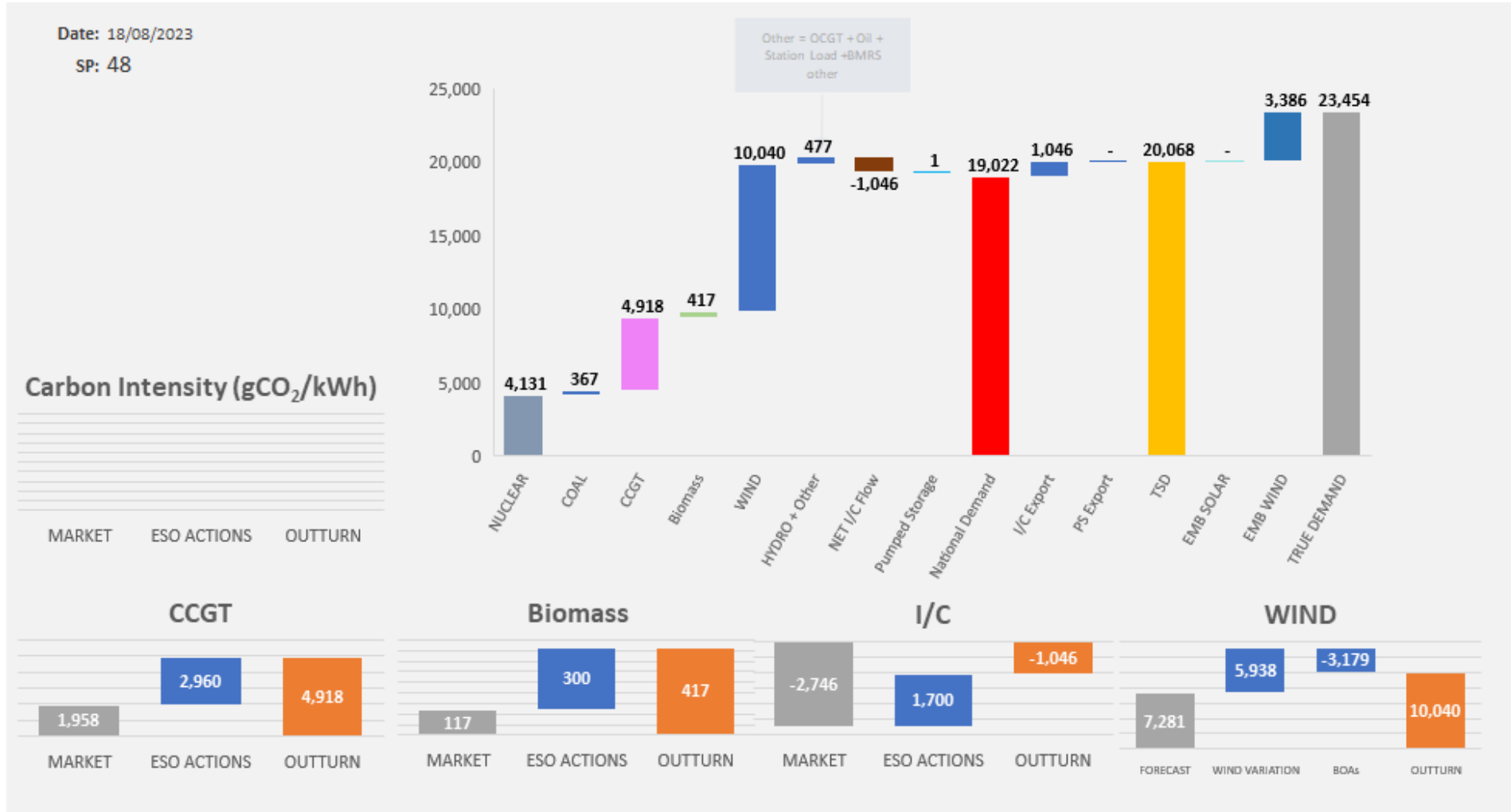


Carbon Intensity data on data portal: <https://data.nationalgrideso.com/carbon-intensity1/carbon-intensity-of-balancing-actions>

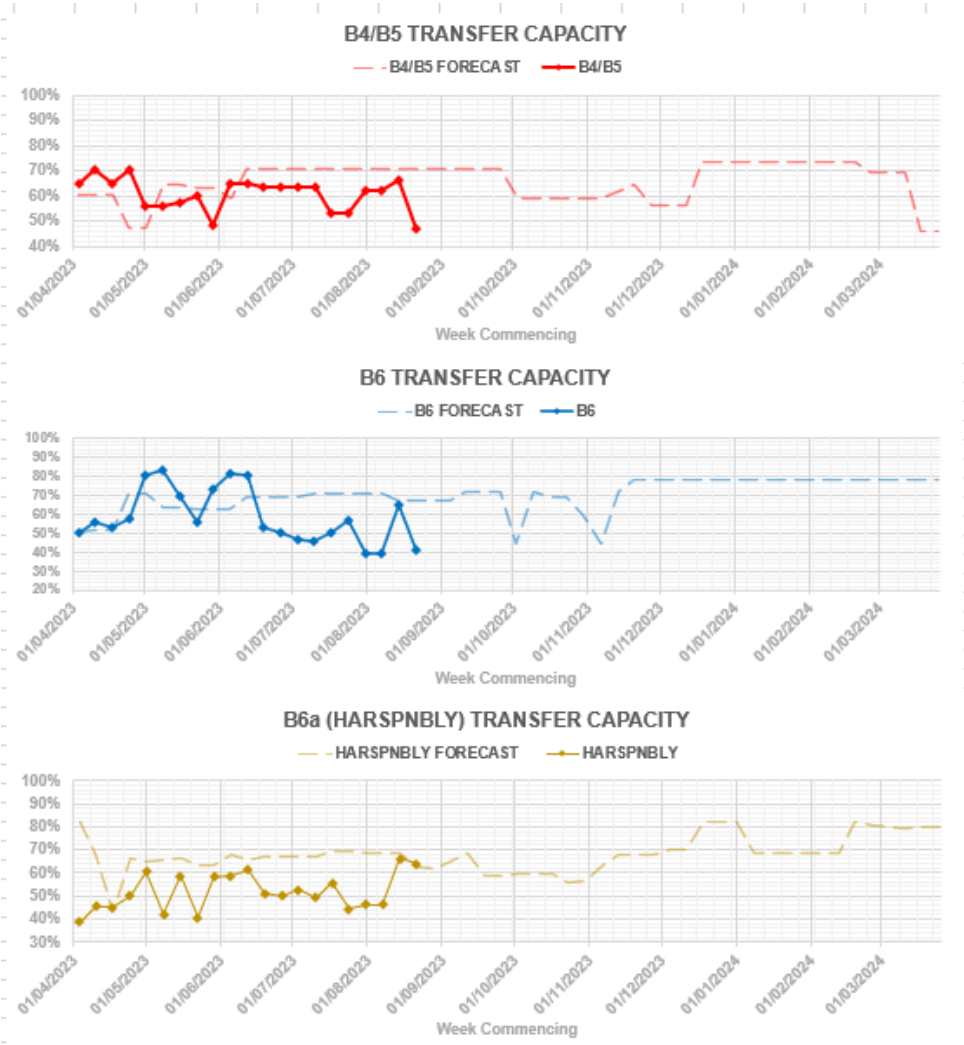
# ESO Actions | Saturday 19 August – Minimum Demand – SP Spend ~£465k



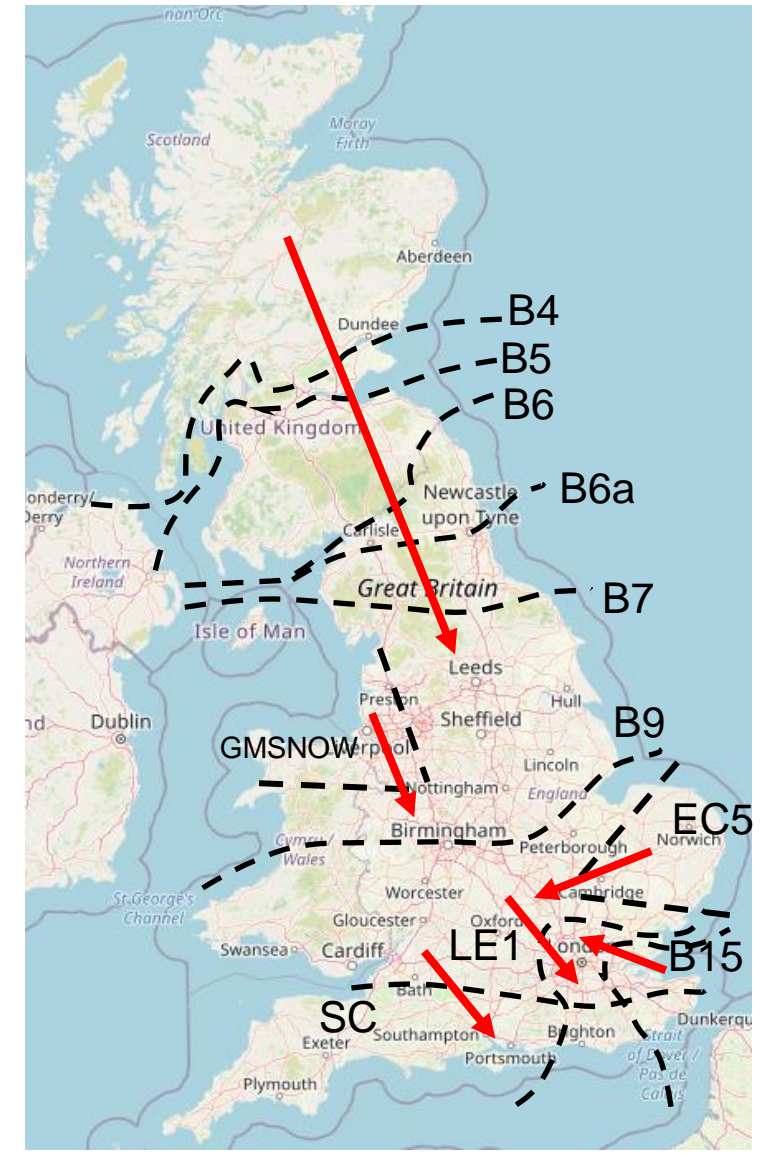
# ESO Actions | Friday 18 August – Highest SP Spend ~£619k



# Transparency | Network Congestion

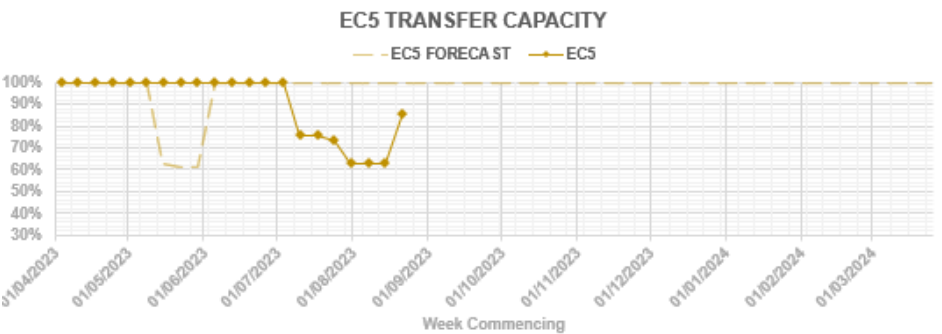
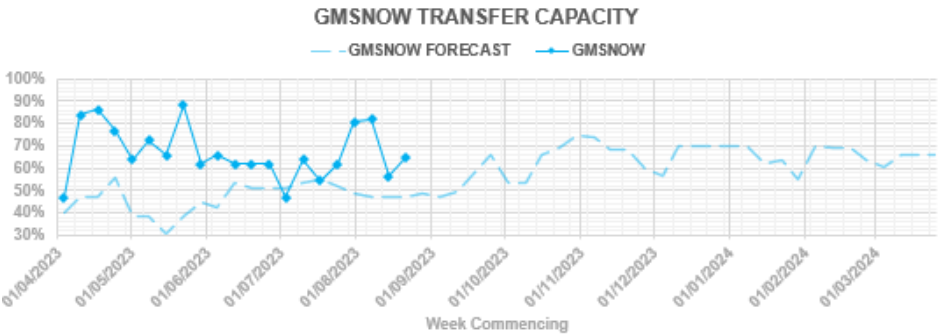
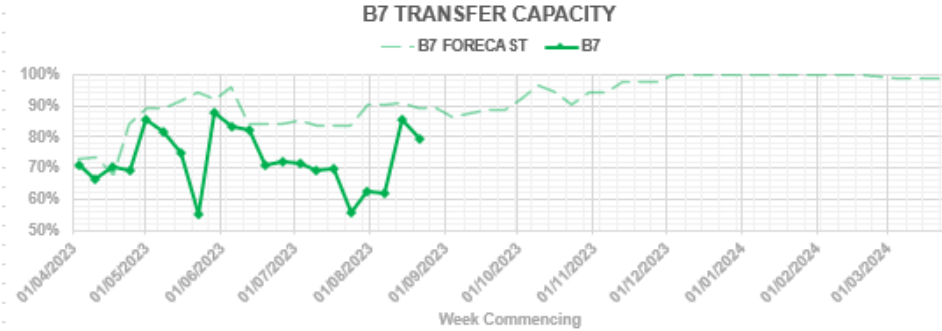


Boundary	Max. Capacity (MW)
B4/B5	3400
B6	6800
B6a	8000
B7	8325
GMSNOW	4700
B9	10600
EC5	5000
LE1	8500
B15	7500
SC	7300

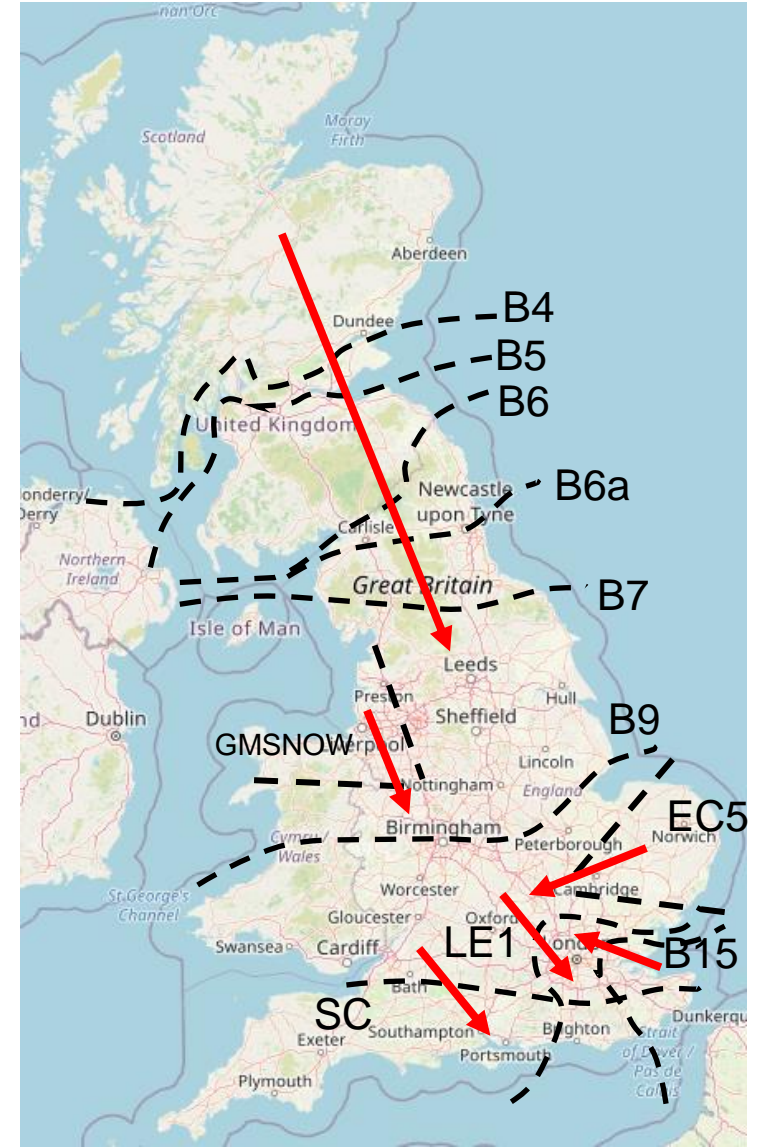


Day ahead flows and limits, and the 24-month constraint limit forecast are published on the ESO Data Portal: <https://data.nationalgrideso.com/data-groups/constraint-management>

# Transparency | Network Congestion



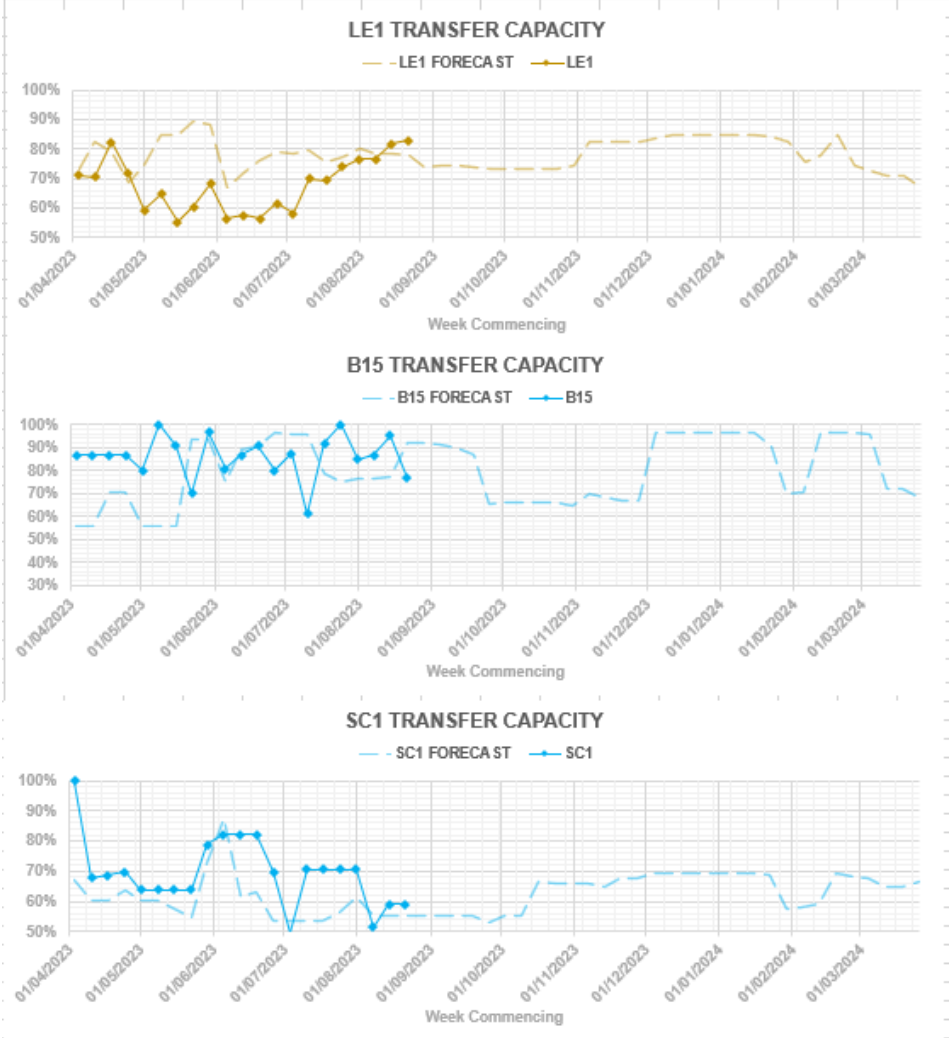
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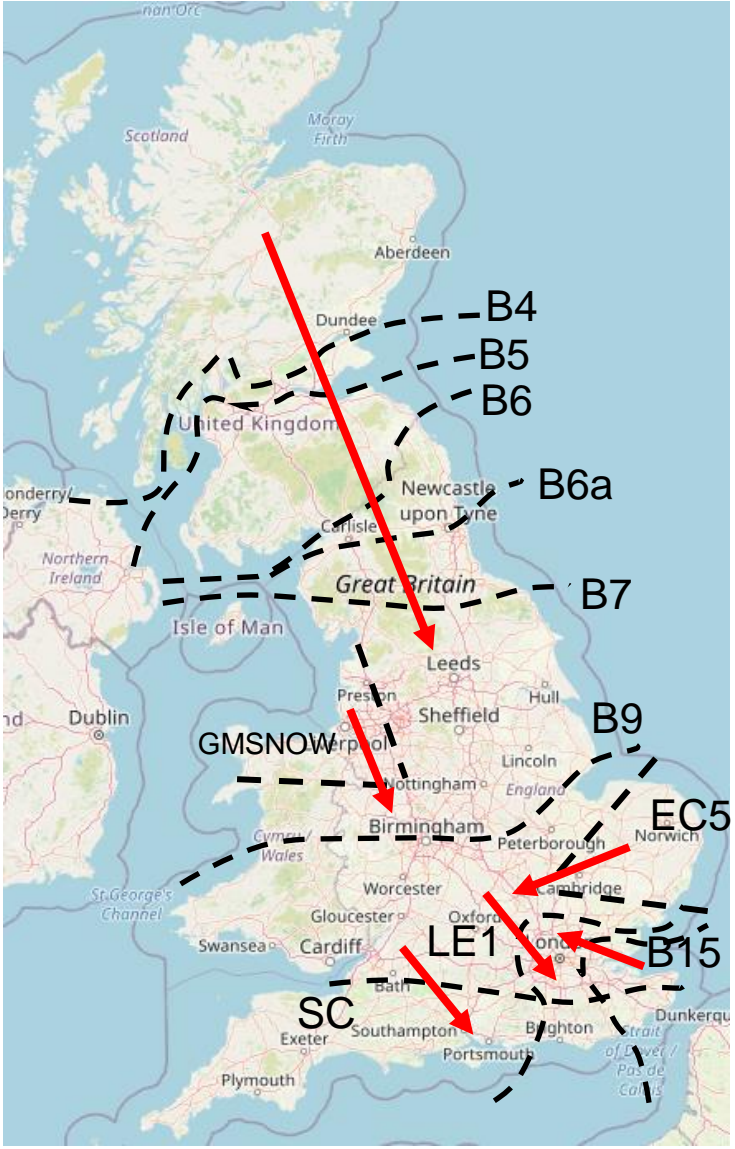
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# Transparency | Network Congestion



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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>



## Previously Asked Questions

Q: Did you publish any document about how the availability declaration will change in DC/DM/DR performance monitoring under EAC (in particular when clearing multiple products)?

A: Thank you for your question. Availability within performance monitoring for DC/DM/DR is covered in the "Performance Monitoring CSV File Format" Document published here <https://www.nationalgrideso.com/document/225776/download>. The section Availability status describes how the availability field works when adding different products together. This approach also covers the stacking of services under EAC.

EAC – Enduring Auction Capacity

Q: Are you prepared for carbon price impacts on GB>EU exports for this winter? Have you got a suitable range of carbon price forecasts for your winter outlook report?

A: In the Winter Outlook Early View we outlined our Base Case which assumes electricity imports from Europe are available at times when we need them to meet demand, delivering in line with their Capacity Market agreements. As with previous years, the report will include a view of the future wholesale electricity market price spreads to help inform possible interconnector positions on non-system stress days. Carbon prices will be considered within future wholesale prices and so will be factored into that view.

## Previously Asked Questions

Q: On Sunday 13/8/2023 0430, DCH forecast requirements for 14/8/2023 were advertised to be 803MW on average. At the auction later that day, NG procured an average of 1350MW, causing the DCL prices to spike to 3x their normal level. Please can NG explain the rationale for this drastic change in forecast requirements. Is there a disconnect between the methodology used for the D+1 - D+4 forecasts and the forecast used later in the day? Can the D+1 - D+4 volume requirements be trusted?

A: Thank you for the question, the dates given in the question don't correspond to any large forecast errors for DCL or DCH, so we believe that this question is referring to the DCL forecast and auction for the 7th of August where there was a significant difference between the forecast and the final auction requirement.

As we have presented before the requirements for DCL are driven by three key things, the size of the loss being secured, the system demand and system inertia. We forecast these drivers 4 days ahead on a rolling basis and publish to the market to try and guide the market with our expected requirements so that they can bid into the markets effectively. On the day of the auction the actual requirements for procurement are set based on the latest forecast data and real forward data used in the day ahead schedule along with the control engineer's view of the loss risk. The large forecast error on the 7th was caused by a different size loss risk in the forecast compared to the loss calculated in the day ahead requirement stage.

We continually review and update the forecasting process to ensure that we are as accurate as we can be however there will always be occasions where the data between these two processes differ.

## Advanced questions

Q: ESO have started bidding back over-generating wind farms as you see this as 'near zero cost'. Near zero cost to ESO will no doubt mean more cost / loss of income for market participants and probably lead to windfarms overforecasting on a more regular basis in order to try and prevent loss of CFD / ROC etc - so potentially less accurate PN submissions. Do you consider the effect on the traded market and imbalance price of bidding back these windfarms out of price order, sometimes significantly, tagged as energy? Should out of price order actions not be flagged as 'system' in order to avoid market distortions in the name of ESO saving money on balancing to the detriment of low carbon generators?

A: Thank you for pointing this out.

We will need to investigate what has happened before we can respond to your question in full. To ensure we fully address your concerns please provide any specific examples you have to:

[.box.NC.Customer@nationalgrideso.com](mailto:.box.NC.Customer@nationalgrideso.com)

Because you are concerned about the potential for market distortion we have also shared your question with the Market Monitoring team. This is the team responsible for investigating and raising concerns or reporting potential market abuse to Ofgem where appropriate. This function is independent from the wider business and able to investigate internal actions alongside external actions. You can contact them at: [MarketReporting@nationalgrideso.com](mailto:MarketReporting@nationalgrideso.com) or you can contact Ofgem directly with any concerns at [market.conduct@ofgem.gov.uk](mailto:market.conduct@ofgem.gov.uk)

## Outstanding 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: Thank you for providing additional detail about the outstanding queries. These have been passed to the appropriate ESO team for action and they will reply to you directly. We will also ask the team to provide a response to the second part of this question for the OTF.

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)

Q: The published Peak Demand Forecast (source OPMR) shows a significant decrease in weeks 44-45 33GW. Is this forecast correct?

A: Thank you for raising this – we are investigating further.

## Outstanding questions

Q: Could you please provide a brief explanation on how non-BMUs can participate in ancillary services (DC, DM, DR) via Ancillary Services Dispatch Platform (ASDP)?

Q: Is there an agreed definition of what constitutes a 'test' (i.e energy volume / frequency of test)? I understand the need for occasional ad-hoc tests but if it's done often and involves a 'significant' energy volume (cost > £10k? as per Grid Code) it seems reasonable that it should be made public.

## 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.
- **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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- **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](mailto: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](mailto: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