



ESO Operational Transparency Forum

29 Sep 2021

You have been joined in listen only mode,
please ensure your cameras are turned off

Introduction | Sli.do code #OTF

Please visit www.sli.do and enter the code #OTF to ask questions & provide us with post event feedback.

We will answer as many questions as possible at the end of the session. We may have to take away some questions and provide feedback from our expert colleagues in these areas during a future forum. **Ask your questions early in the session to give more opportunity to pull together the right people for responses.**

These slides, event recordings and further information about the webinars can be found at the following location:

<https://data.nationalgrideso.com/plans-reports-analysis/covid-19-preparedness-materials>

Regular Topics

- Questions from last week
- Business continuity
- Demand review and outlook
- Costs for last week
- Constraints

Questions outstanding from last week

Q: Can we clarify the BSUoS outturn for 9 September in light of the large volume of high priced SO-SO trades undertaken?

A: The SO-SO trades will be reflected in the SF BSUoS run.

SO-SO trades on BMRS

SO-SO trades do feed into imbalance and are published on the BMRS webpage.

There was an error with the BSAD data which meant the IC trades were not sent to Elexon for publication. This has been resolved and they are now included. Thank you for your patience on this.

Please note that the BMRS webpage is owned by Elexon and any queries about how to interpret this data, or about the imbalance calculation should be directed to them.

Future forum topics

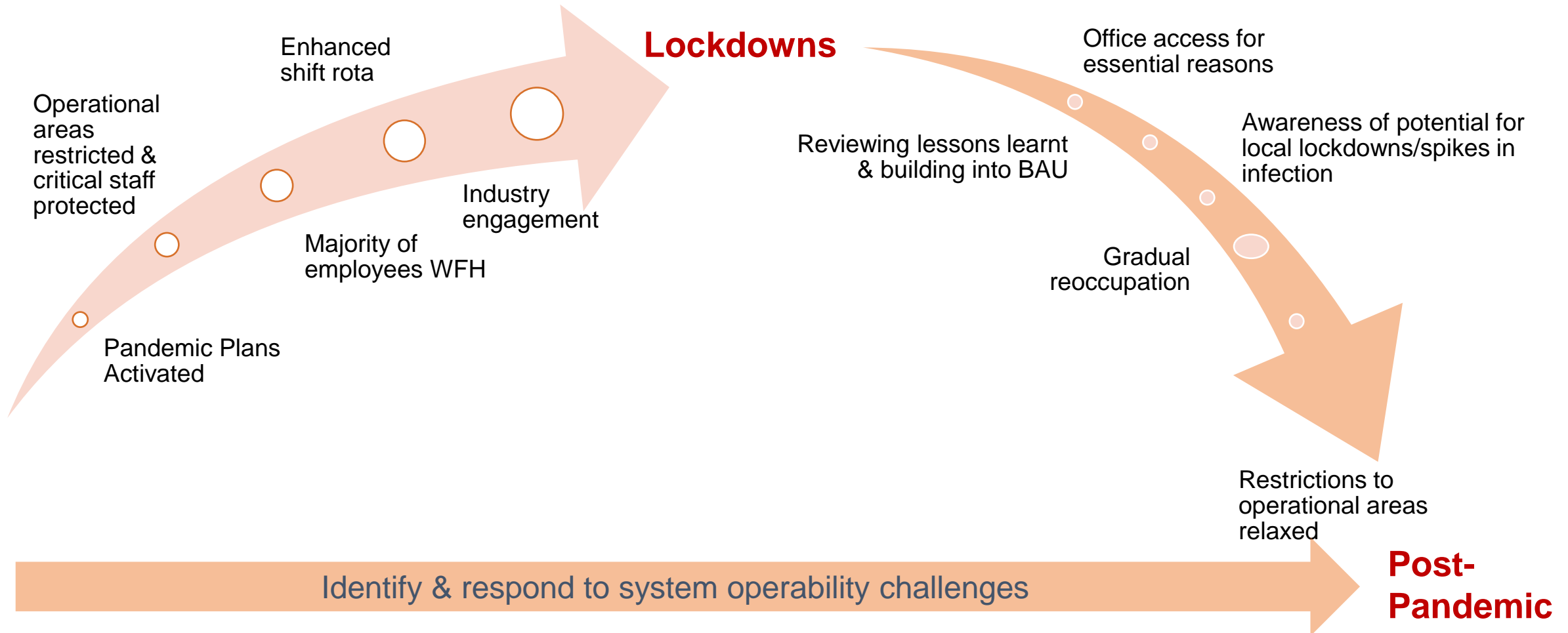
While we want to remain flexible to provide insight on operational challenges when they happen, we appreciate you want to know when we will cover topics.

We have the following deep dives planned:

Worked examples for response efficiencies decision making – 6 October

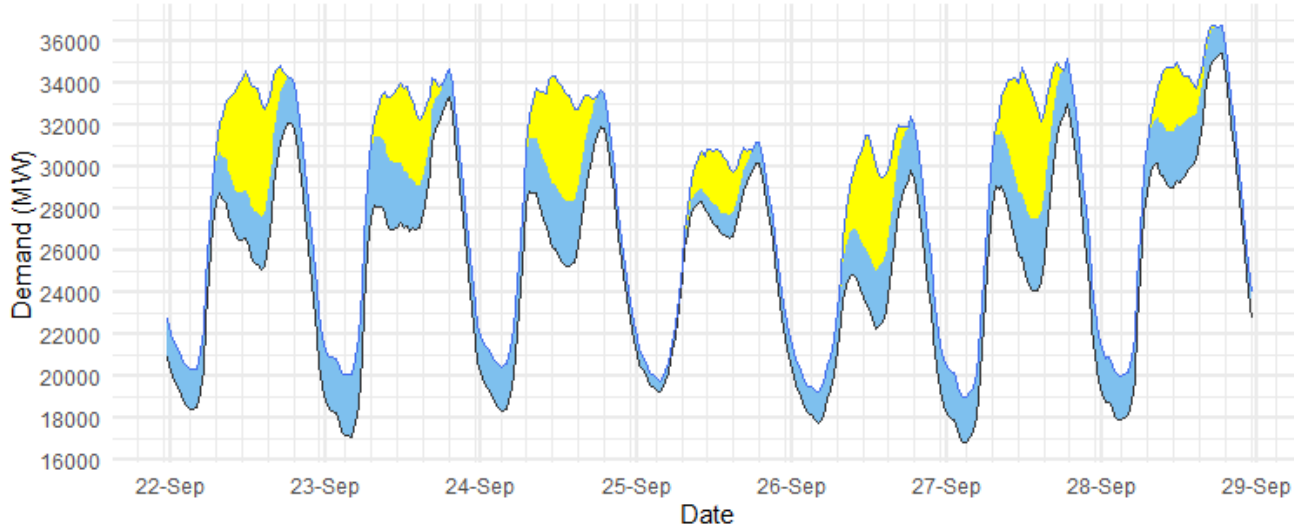
Deep dive into how carbon intensity is calculated – delayed from this week to 6 October

Protecting critical staff to maintain critical operations



Demand | Last 7 days outturn

ESO National Demand outturn 22-28 September 2021



Renewable type

- Distributed_PV
- Distributed_Wind

Demand type

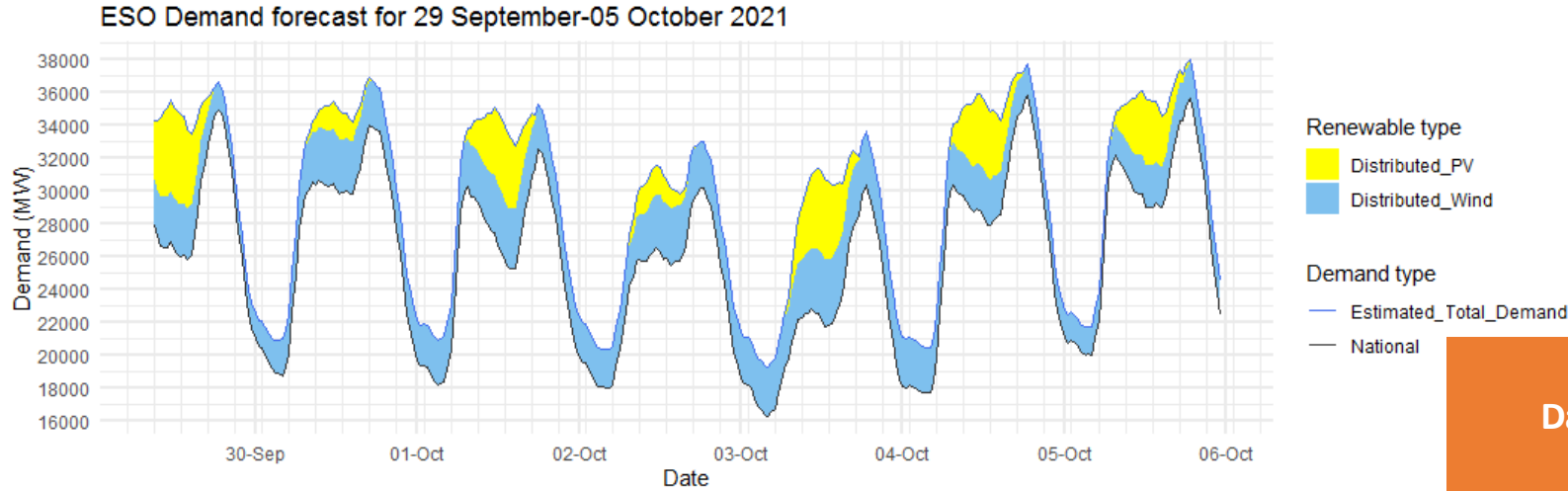
- Estimated_Total_Demand
- National

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

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.

		FORECAST (Wed 22 Sep)		OUTTURN	
Date	Forecasting Point	National Demand (GW)	Dist. wind (GW)	National Demand (GW)	Dist. wind (GW)
22 Sep	Evening Peak	31.7	2.2	32.1	2.2
23 Sep	Overnight Min	16.9	2.8	17.1	3.0
23 Sep	Evening Peak	32.4	1.8	33.0	1.3
24 Sep	Overnight Min	17.7	2.5	18.3	2.1
24 Sep	Evening Peak	31.8	1.6	32.0	1.7
25 Sep	Overnight Min	18.9	0.6	19.3	0.5
25 Sep	Evening Peak	30.0	0.9	30.2	1.0
26 Sep	Overnight Min	17.1	1.4	17.8	1.5
26 Sep	Evening Peak	29.5	2.4	29.9	2.6
27 Sep	Overnight Min	17.2	2.2	16.8	2.1
27 Sep	Evening Peak	34.1	1.8	33.0	2.2
28 Sep	Overnight Min	19.6	1.1	17.9	2.1
28 Sep	Evening Peak	34.7	1.2	35.4	1.3

Demand | Week Ahead



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		FORECAST (Wed 29 Sep)	
Date	Forecasting Point	National Demand (GW)	Dist. wind (GW)
29 Sep 2021	Evening Peak	34.9	1.7
30 Sep 2021	Overnight Min	18.8	2.2
30 Sep 2021	Evening Peak	34.0	2.8
01 Oct 2021	Overnight Min	18.2	2.7
01 Oct 2021	Evening Peak	32.6	2.7
02 Oct 2021	Overnight Min	18.1	2.3
02 Oct 2021	Evening Peak	30.2	2.9
03 Oct 2021	Overnight Min	16.3	3.0
03 Oct 2021	Evening Peak	30.3	3.3
04 Oct 2021	Overnight Min	17.7	2.8
04 Oct 2021	Evening Peak	35.8	2.0
05 Oct 2021	Overnight Min	20.0	1.7
05 Oct 2021	Evening Peak	35.6	2.2

ESO Actions | Thursday 23 September Peak

Date: 23/09/2021

SP: 40

Carbon Intensity (gCO₂/kWh)



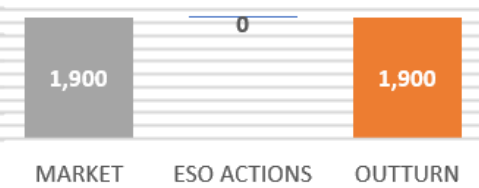
CCGT



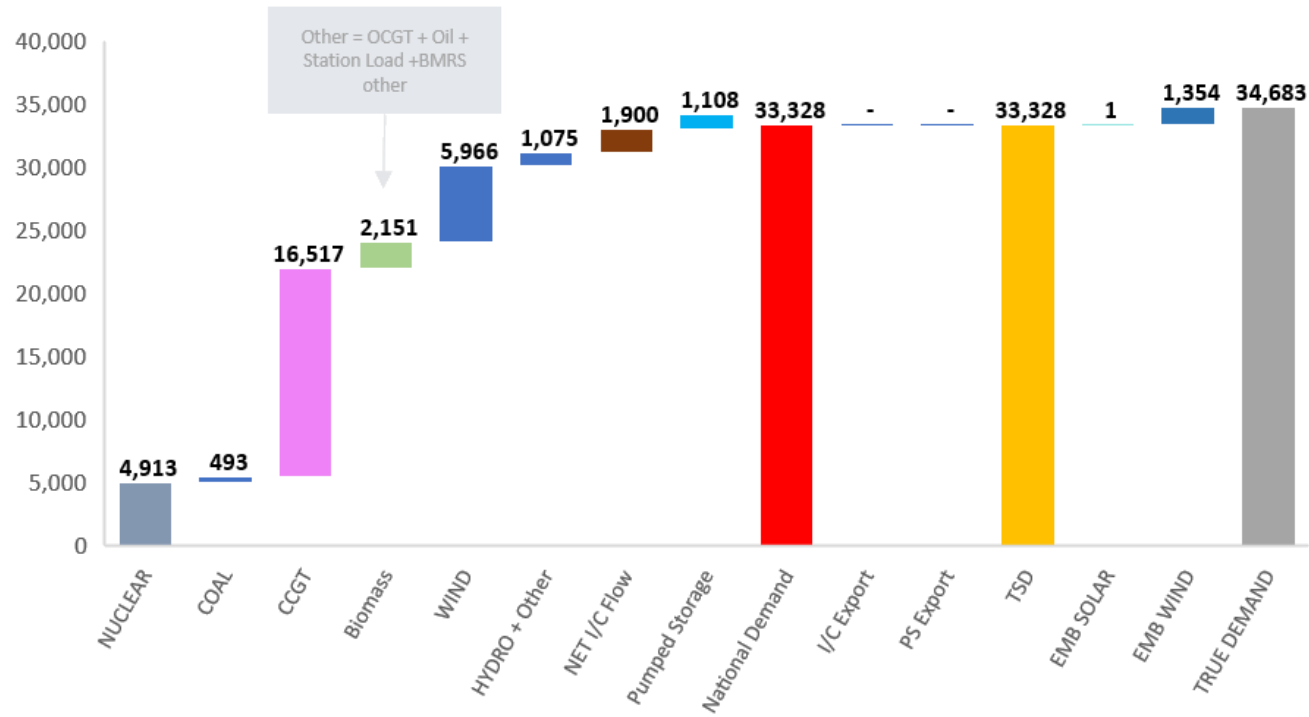
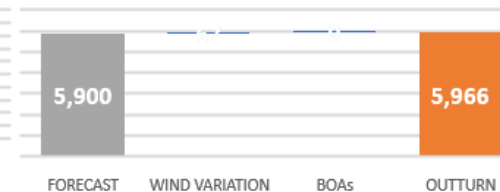
Biomass



I/C



WIND



ESO Actions | Thursday 23 September Minimum

Date: 23/09/2021

SP: 10

Carbon Intensity (gCO₂/kWh)



CCGT



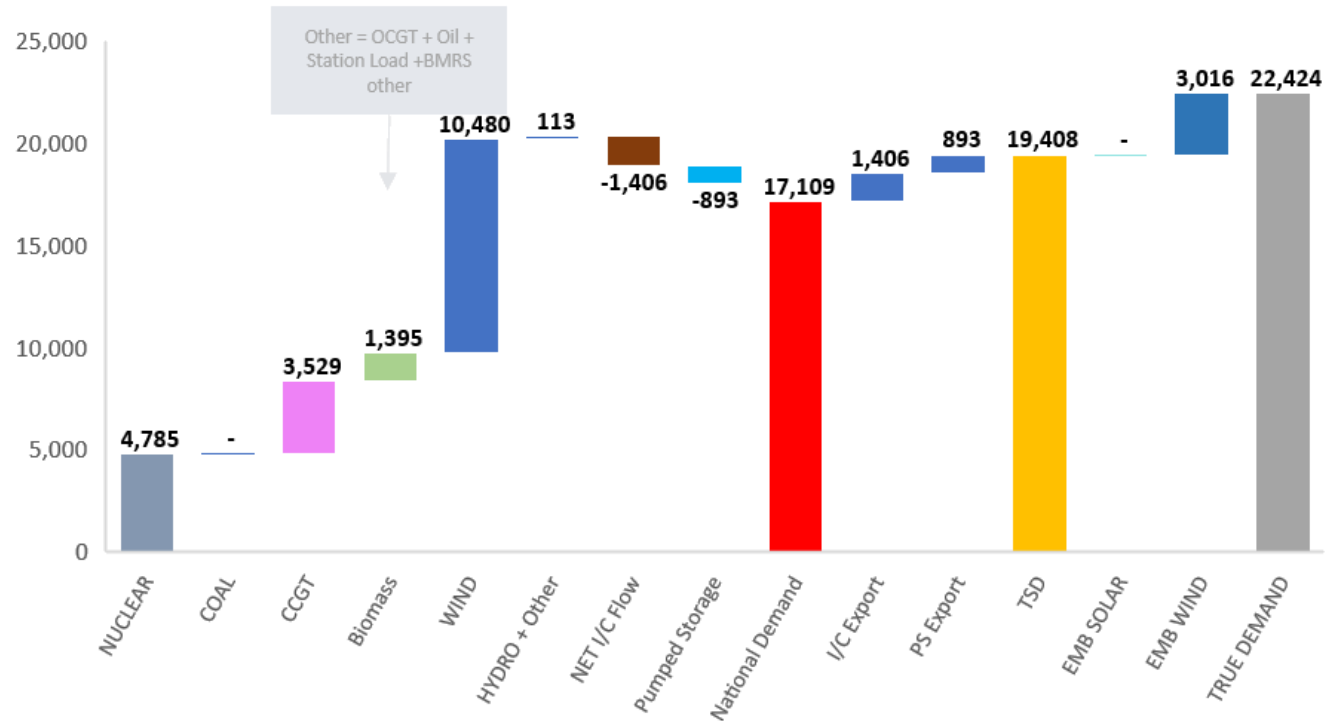
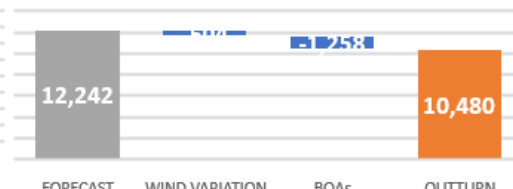
Biomass



I/C

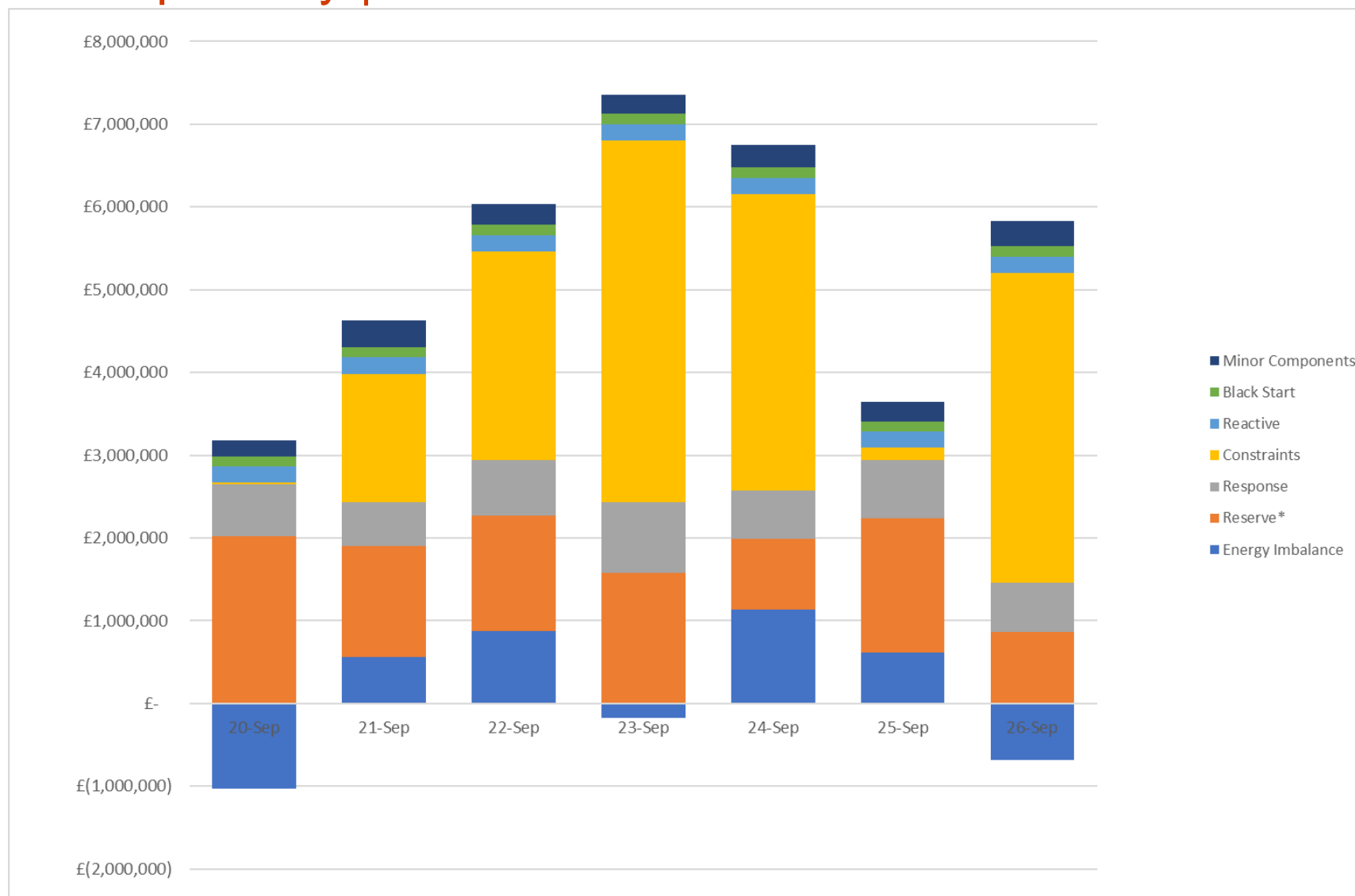


WIND



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

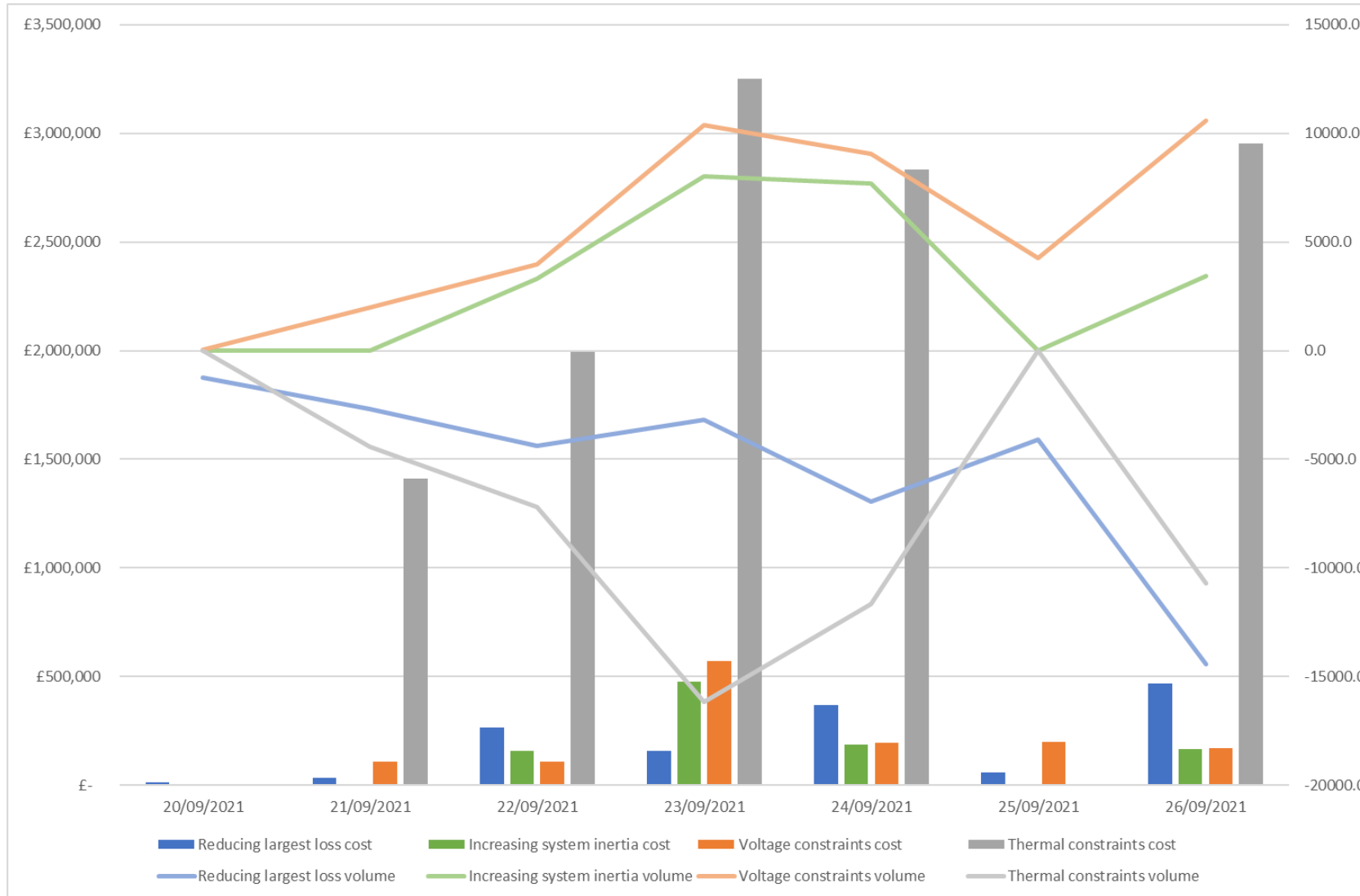
Transparency | Costs for the last week



Constraints

Constraints costs was the key driver of balancing spend for the week. Increased wind levels meant that additional action was required to manage thermal constraints. Increased wind generation displaced conventional generation meaning greater levels of intervention to ensure the voltage and inertia requirements were met.

Transparency | Constraint cost breakdown



Thermal

Large volumes of action required to manage thermal constraints, particularly in Scotland.

Voltage

Some action required to synchronise generation to meet our voltage requirements throughout the week

Managing largest loss for RoCoF

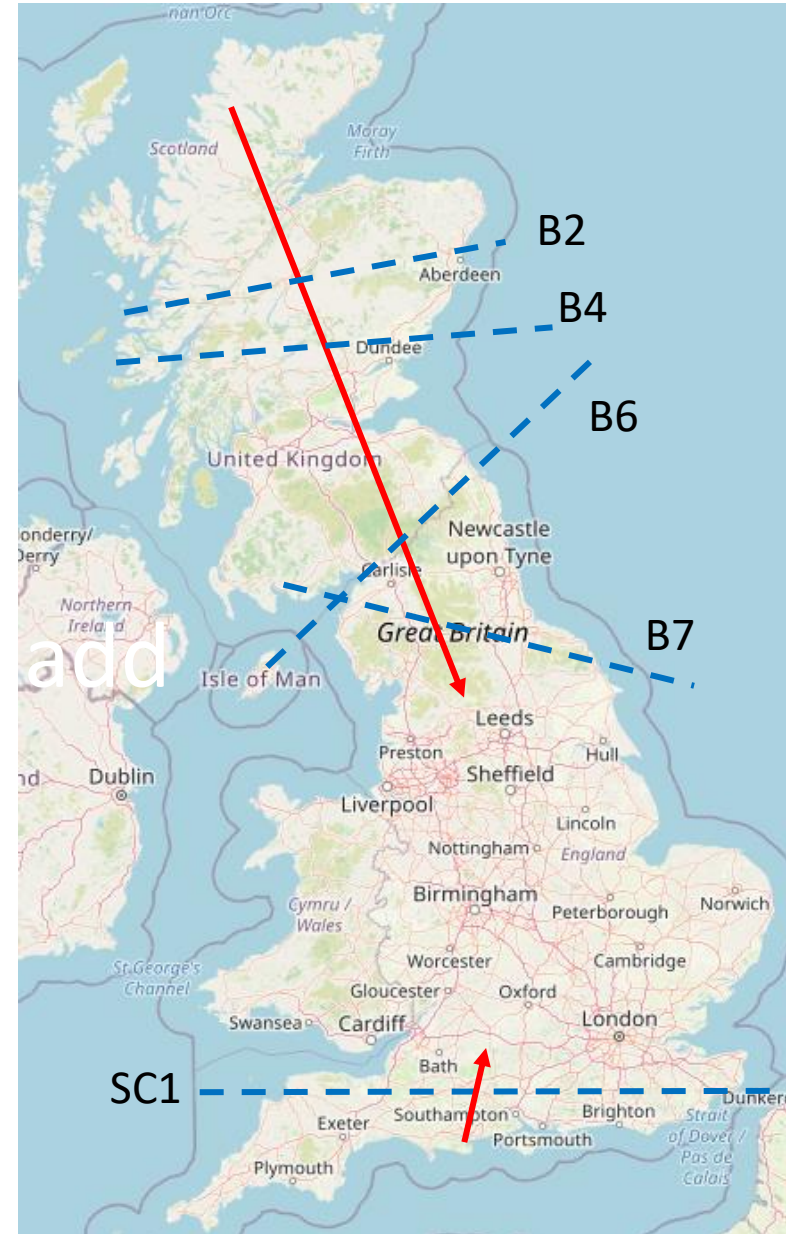
Action required to manage largest loss on interconnectors throughout the week. Varies due to varied inertia levels on the system and interconnector flows.


Increasing inertia

Intervention required to increase minimum inertia level on all days with high wind levels where conventional generation was displaced by wind generation.

<https://data.nationalgrideso.com/balancing/constraint-breakdown>

Transparency | Constraint Capacity





Podcast launch of final OST report
Thursday 30 September 2021
Organisational, Systems & Telecoms (OST)

**Distributed
ReStart**



**Energy restoration
for tomorrow**

In partnership with:



nationalgridESO

Update on Response Products

Please note that we have updated our response requirements and as a result we are signalling an additional static secondary response requirement from November 2021 going forward.

We have also provided an indicative requirement for Dynamic Containment Low Frequency for November 2021 and Summer 2022 with EFA blocks granularity.

We would also like to give you an indication for November 2021 and Summer 2022 of the Dynamic Containment High Frequency that is due to launch in October 2021. We will be communicating more specific DC HF requirement, including by EFA block, in the coming weeks and invite your feedback on how best to communicate our closer to real time requirements.

For further details, please refer to our [Market Information Report for Response Products](#) which was published on the 28th September 2021.

We commit to detailing this further and running a specific webinar for questions in the coming weeks.

Q&A

After the webinar, you will receive a link to a survey. We welcome feedback to understand what we are doing well and how we can improve the event ongoing.

Please ask any questions via Slido (code #OTF) and we will try to answer as many as possible now. If we are unable to answer your question today, then we will take it away and answer it at a later webinar.

Please continue to use your normal communication channels with ESO.

If you have any questions after the event, please contact the following email address:
box.NC.Customer@nationalgrideso.com

slido

Audience Q&A Session

 Start presenting to display the audience questions on this slide.

Q&A

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