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

ESO Operational Transparency Forum

1 June 2022

nationalgridESO

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.

To tailor our forum and topics further we have asked for names (or organisations, or industry sector) against Sli.do questions. If you do not feel able to ask a question in this way please use the email: box.NC.Customer@nationalgrideso.com

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
Demand review
Costs for last week
Constraints

Focus Areas

Response Reform Webinar Link

Questions outstanding from previous weeks

Q: When will you provide us a Dynamic Regulation (DR) excel tool for performance monitoring?

A: The DR (low and high) and Dynamic Moderation (DM) (low and high) performance monitoring excel calculations have been uploaded on the ESO website. If you are a service provider, you should have been contacted by us informing the recent upload. Please also find the relevant templates from the hyperlinks:

DR: Dynamic Regulation – document library | National Grid ESO

DM: Dynamic Moderation – document library | National Grid ESO

If you have any queries regards to the calculators, please get in touch with settlement.queries@nationalgrideso.com

Q: Can you please publish live frequency response signals?

A: Thanks for bringing this up for us again. We are unable to publish these with our current systems and we are looking into alternative options that could be available.

Q: Not a question - the system events slide from the previous weeks were very useful can we get these back?

A: Thanks for the suggestion, we will include this slide for any significant system events in the future.

Questions outstanding from previous weeks

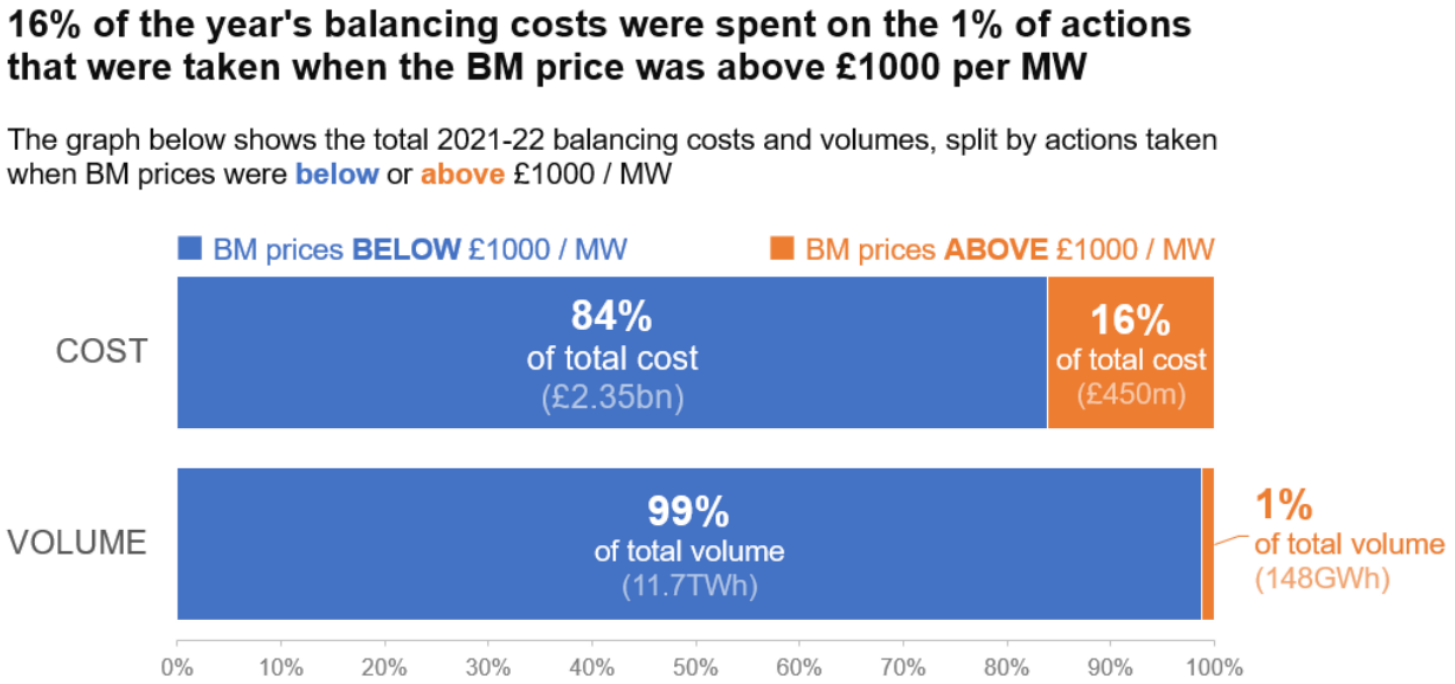
Q: Is the Q+A log any closer to becoming a reality?

A: Yes, we hope to have something to share with you shortly. We are currently working through our internal governance processes having spent time collecting questions and answers from the last 2 years.

Q: Balancing costs reached an all time high of £3.4bn in the last year to Apr.22. How much of this was from increase in Volumes and how much from higher power prices (from higher gas prices?)

A: More information on Balancing Costs can be found in Metric 1A and throughout the 2021-23 Mid Scheme Report.

Included in there is a graphic showing the proportion of actions taken when BM prices were high which goes some way to answering this question. If it would be of benefit for us to talk through any of the content within this metric then please get in touch with us and we can arrange a session.



Questions outstanding we are still working on

Q: Re ESO interconnector register: how did you arrive at the 'MW Effective From' dates? These seem v optimistic, with a further 24GW of interconnectors coming on by 2029. E.g. Neuconnect online from Dec 2023 in register but on Neuconnect website they say not operational until 2028?

Wind Record on 25th May

It's been a record-breaking week for wind generation!

On Wednesday, 25 May we saw 19.835GW of wind on the system – the highest amount ever recorded.

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	Record	Date	Value	Notify
	Max Wind	May 25 2022	19916 MW	
	Max Solar	Apr 20 2020	9680 MW	
	Max No Coal	Jun 16 2020	1630.5 Hours	
	Min Carbon Intensity	Apr 05 2021	39 gCO2/ kWh	
	Max Zero Carbon	Aug 17 2019	85.2 %	

Upcoming events

OTF Stakeholder workshop

Come and meet the face behind the voice on the OTF

- We would like to gather ideas and feedback to continue improving the OTF
- Lunch will be provided
- Visit to control room viewing gallery with some of our regular OTF experts

24 June 1100-1300

In person at our Wokingham offices

Sign up by 17 June

https://forms.office.com/r/G1M277Eqng

Demand Forecasting Consultation

For historical reasons, the Grid Code requires ESO to publish forecasts of quantities called National Demand and Transmission System Demand

- In the current system, these quantities are neither 'National' nor 'Demand'
- We want to **engage with stakeholders** to explain what we are forecasting
- To explore what stakeholders would **find most useful**
- To discuss how forecasts interact with the market mechanisms, and what constraints it puts on forecasting
- To discover routes to realising an **improved service**

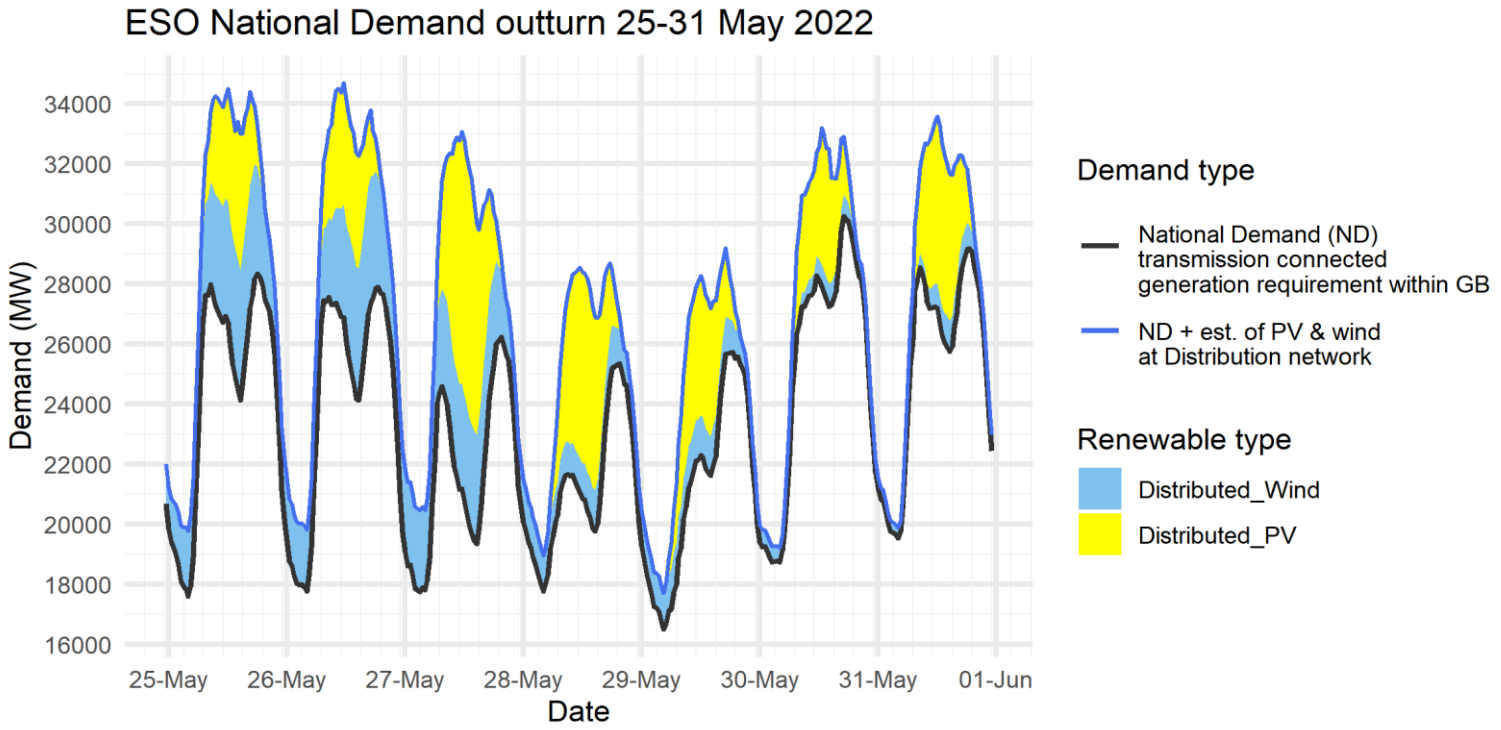
24 June 1330-1530

In person at our Wokingham offices

Sign up by 17 June

https://forms.office.com/r/k1baP8k2Yb

Demand | Last week demand out-turn



		FORECAST (Wed 25 May)			OUTTURN		
Date	Forecasting Point	National Demand (GW)	Dist. wind (GW)	Dist. PV (GW)	National Demand (GW)	Dist. wind (GW)	Dist. PV (GW)
25 May 2022	Afternoon Min	23.2	4.3	4.7	24.1	4.3	4.5
26 May 2022	Overnight Min	17.8	2.0	0.0	17.8	2.1	0.0
26 May 2022	Afternoon Min	23.3	4.3	4.6	24.1	4.4	3.7
27 May 2022	Overnight Min	17.1	2.7	0.0	17.7	2.7	0.0
27 May 2022	Afternoon Min	20.3	3.2	8.0	19.3	3.7	7.0
28 May 2022	Overnight Min	17.5	1.1	0.0	17.8	1.2	0.0
28 May 2022	Afternoon Min	19.1	0.9	7.1	19.8	1.4	5.7
29 May 2022	Overnight Min	16.8	0.8	0.0	16.5	1.2	0.0
29 May 2022	Afternoon Min	20.2	1.3	5.3	21.6	1.3	4.3
30 May 2022	Overnight Min	17.9	0.9	0.0	18.7	0.5	0.0
30 May 2022	Afternoon Min	25.7	1.2	4.7	27.2	0.8	4.5
31 May 2022	Overnight Min	18.7	0.9	0.0	19.5	0.3	0.0
31 May 2022	Afternoon Min	25.1	1.1	5.5	25.7	1.0	4.9

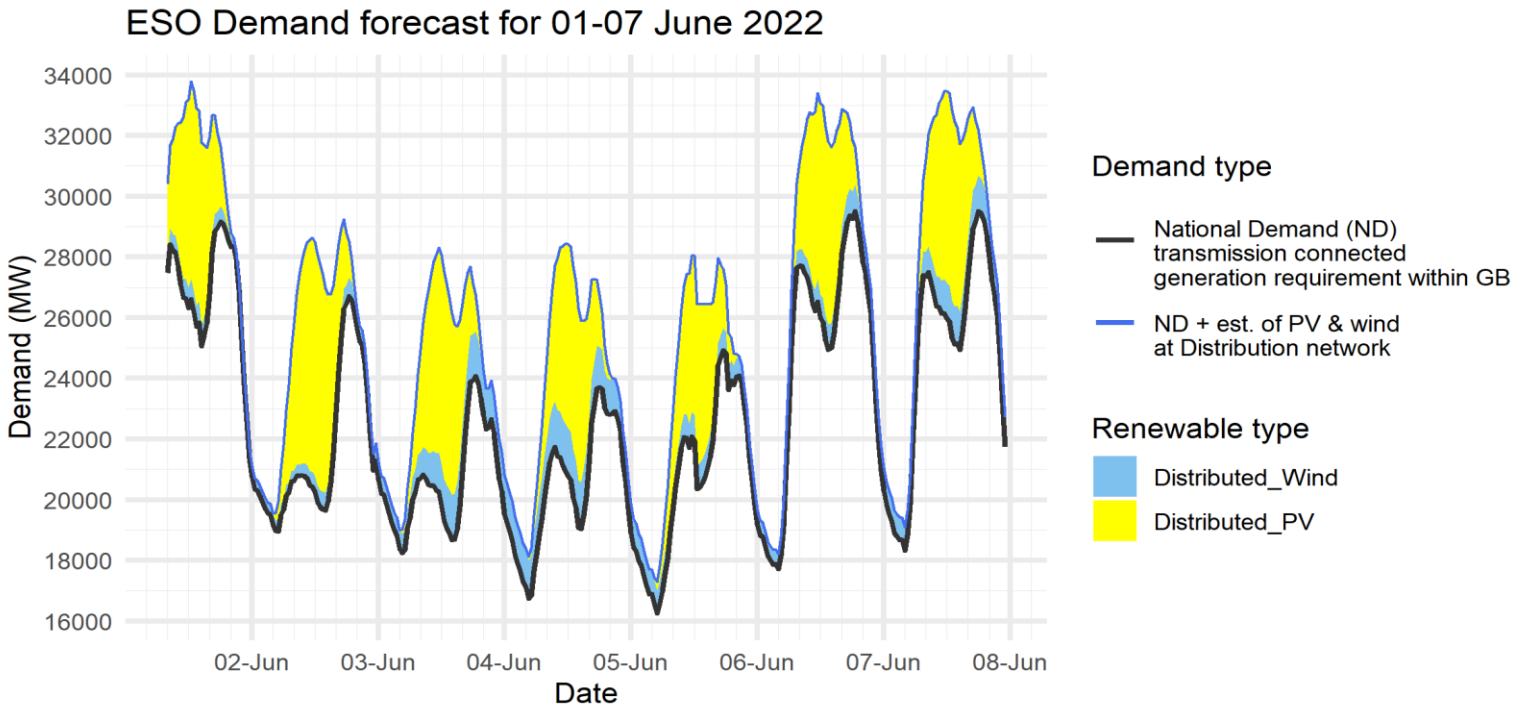
The black line (National Demand ND) is the measure of portion of total GB customer demand that is supplied by the transmission network.

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

Demand | Week Ahead



		FORECAST (Wed 01 Jun)		
Date	Forecasting Point	National Demand (GW)	Dist. wind (GW)	Dist. PV (GW)
01 Jun 2022	Afternoon Min	25.1	0.7	6.0
02 Jun 2022	Overnight Min	18.9	0.4	0.0
02 Jun 2022	Afternoon Min	19.6	0.6	6.7
03 Jun 2022	Overnight Min	18.2	0.6	0.0
03 Jun 2022	Afternoon Min	18.7	1.5	6.0
04 Jun 2022	Overnight Min	16.7	1.3	0.0
04 Jun 2022	Afternoon Min	19.0	1.5	5.3
05 Jun 2022	Overnight Min	16.2	0.8	0.0
05 Jun 2022	Afternoon Min	20.3	0.8	5.3
06 Jun 2022	Overnight Min	17.7	0.5	0.0
06 Jun 2022	Afternoon Min	24.9	0.8	6.0
07 Jun 2022	Overnight Min	18.3	0.7	0.0
07 Jun 2022	Afternoon Min	24.9	1.3	5.5

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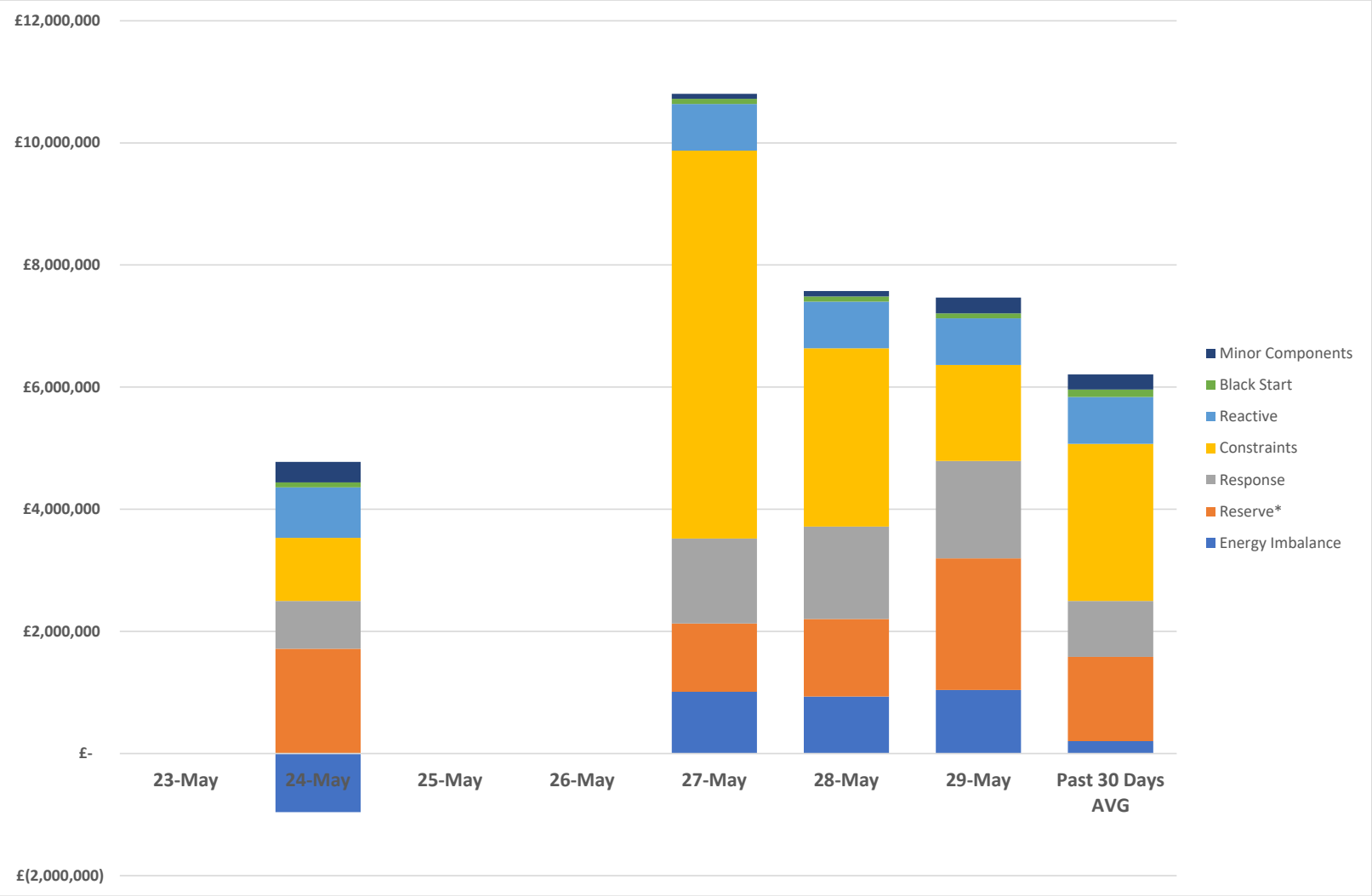
ESO Actions | Category costs breakdown for the last week



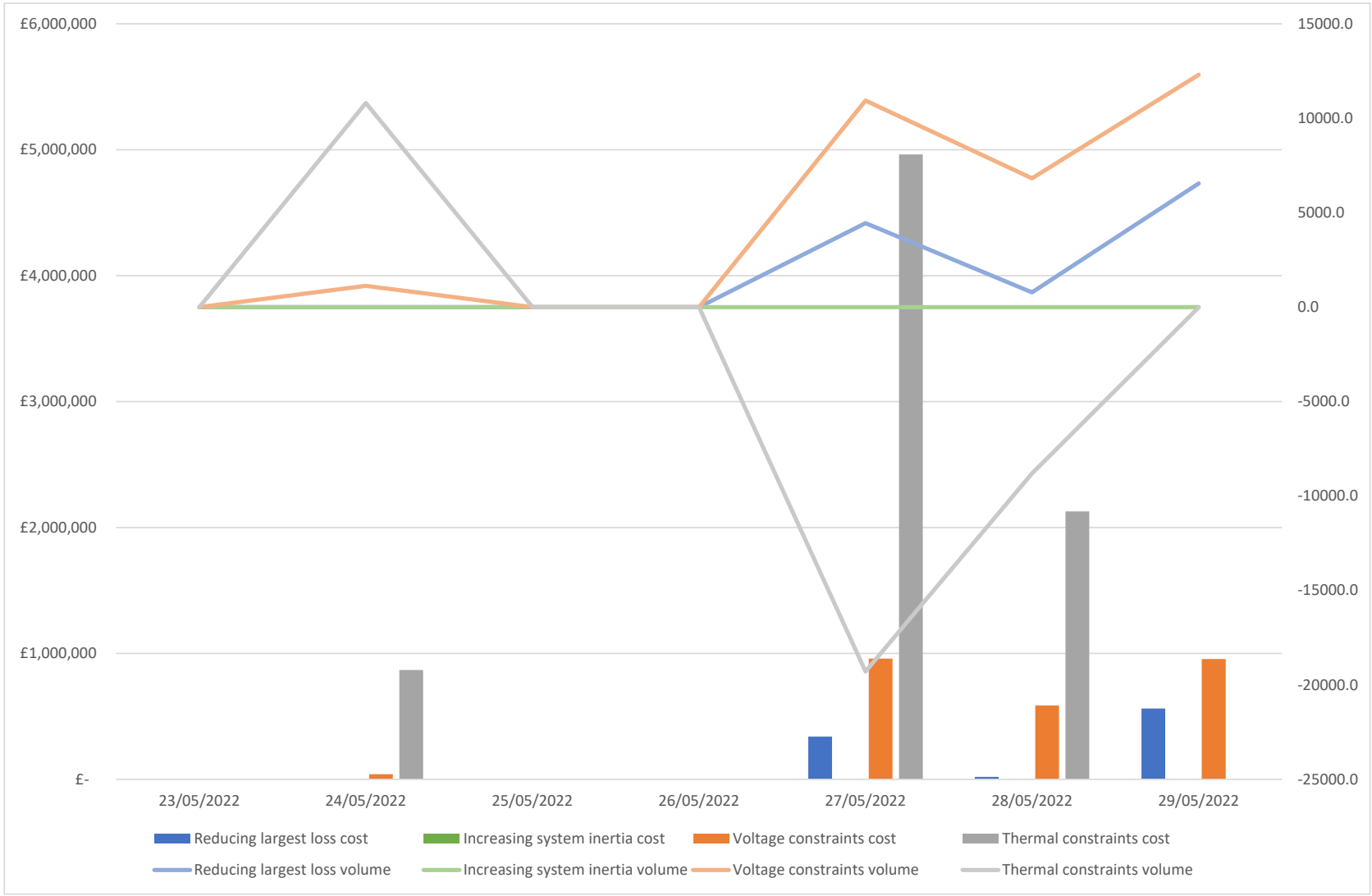
Date	Total (£m)
23/05/2022	5.9
24/05/2022	3.8
25/05/2022	7.1
26/05/2022	11.6
27/05/2022	10.8
28/05/2022	7.6
29/05/2022	7.5
Weekly Total	54.3

*Reserve includes Operating Reserve, STOR, Fast Reserve, Negative Reserve, Other Reserve

Please note that the costs for 23th, 25th and 26th have been given as indicative figures as we have been unable to process due to an IT fault we are looking to resolve

Past 30 Days Average is displayed in the chart

ESO Actions | Constraint Cost Breakdown



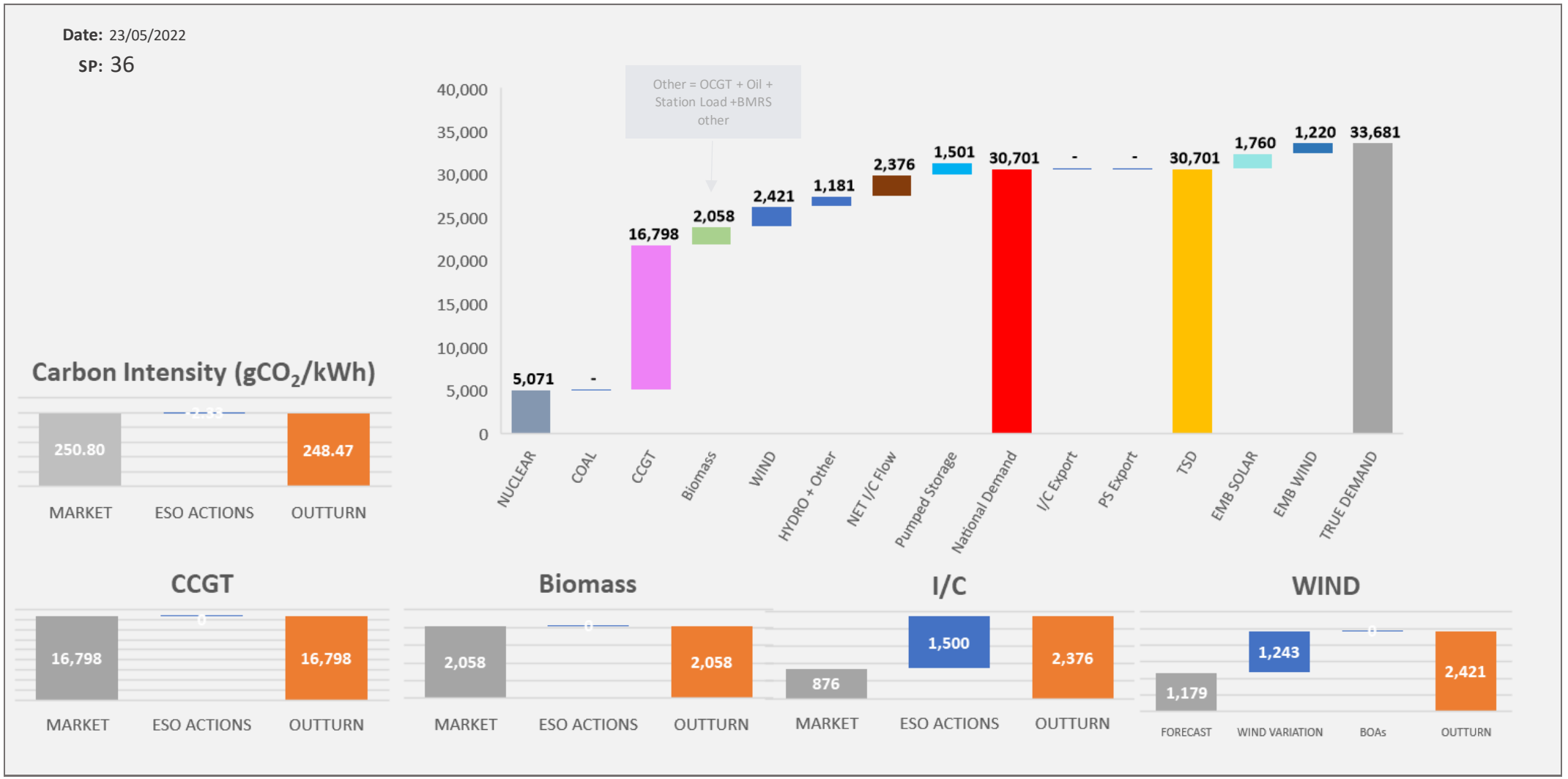
Thermal – network congestion
Actions required to manage Thermal Constraints throughout the week

Voltage
Actions taken to synchronise generation to meet voltage requirements were taken on most days of the week

Managing largest loss for RoCoF
Intervention required to manage largest loss between Friday and Saturday

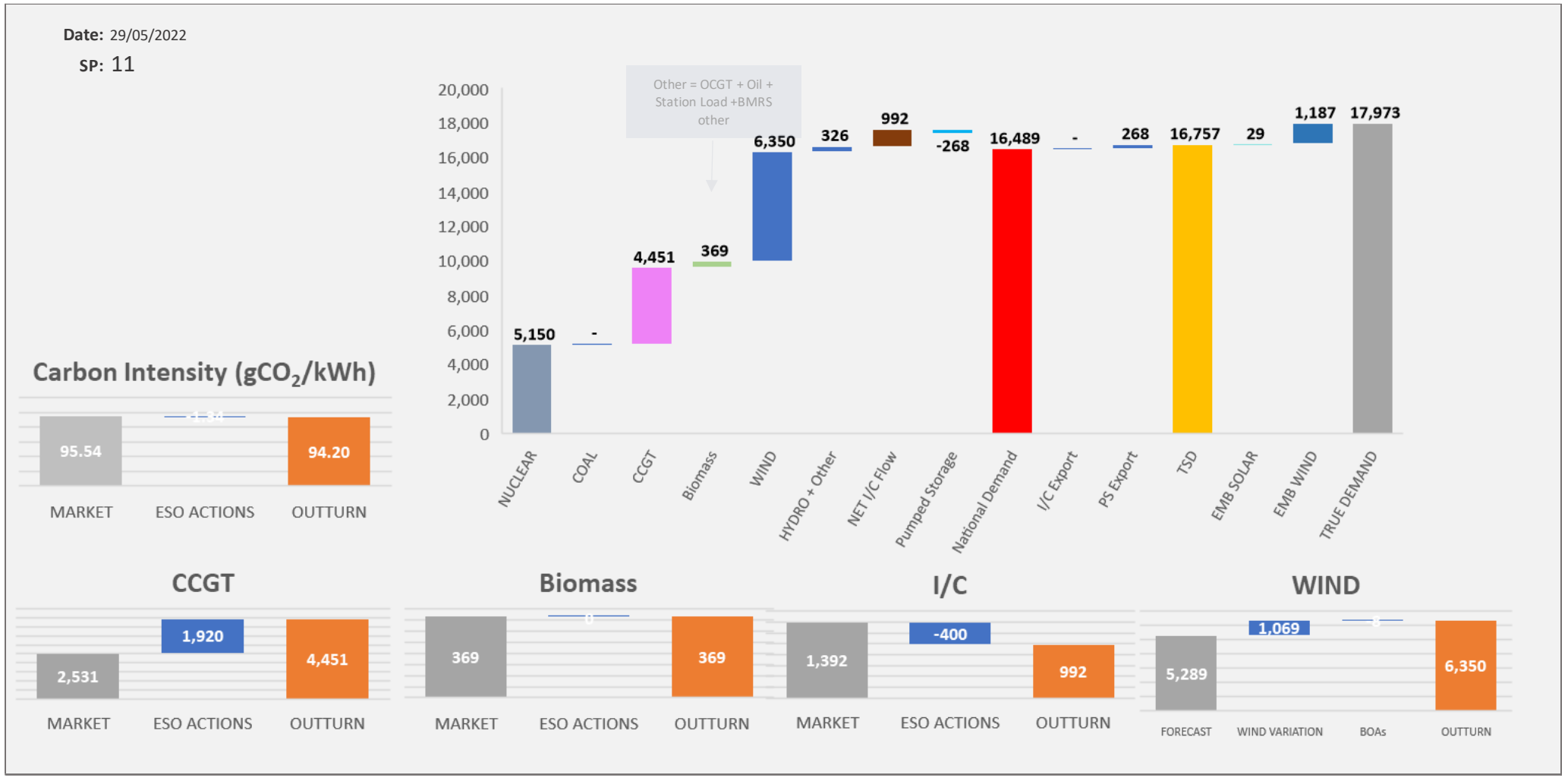
Increasing inertia
No Intervention required to increase minimum inertia

ESO Actions | Monday 23 May Peak



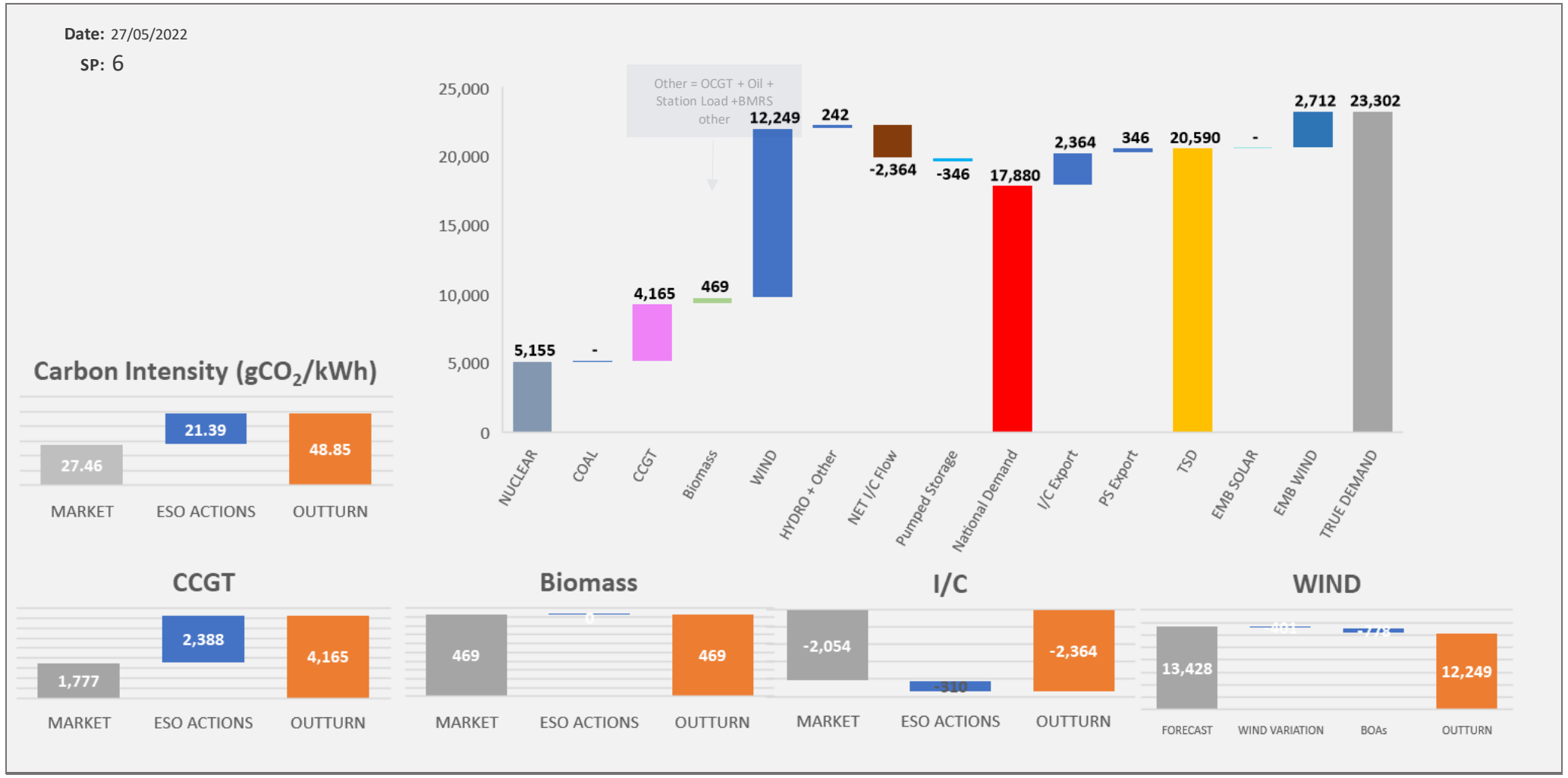
Carbon Intensity data on data portal: https://data.nationalgrideso.com/carbon-intensity1/carbon-intensity-of-balancing-actions

ESO Actions | Sunday 29 May Minimum



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

ESO Actions | Friday 27 May Highest Spend ~£0.3m



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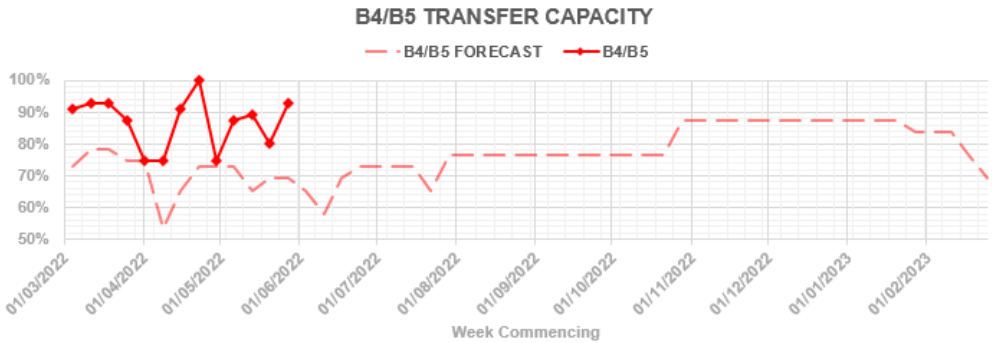
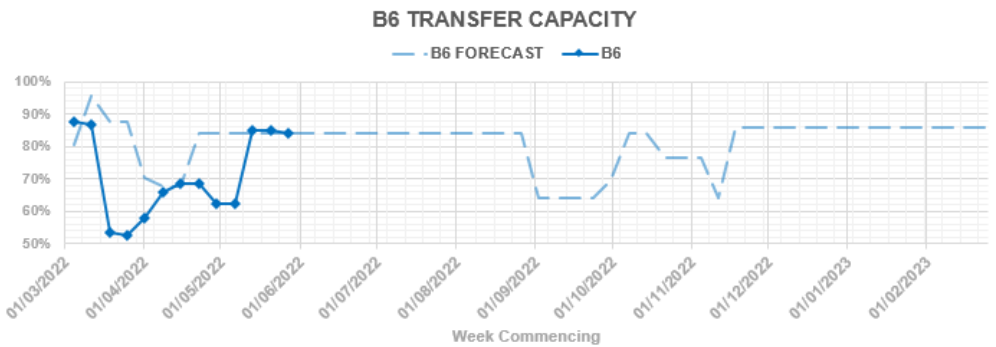
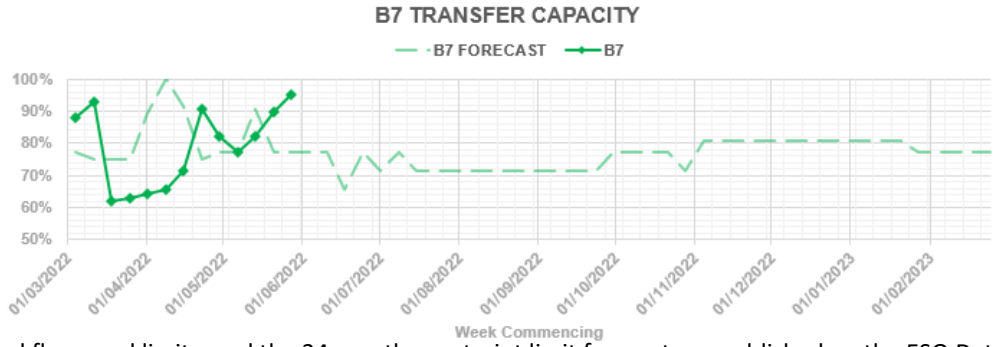
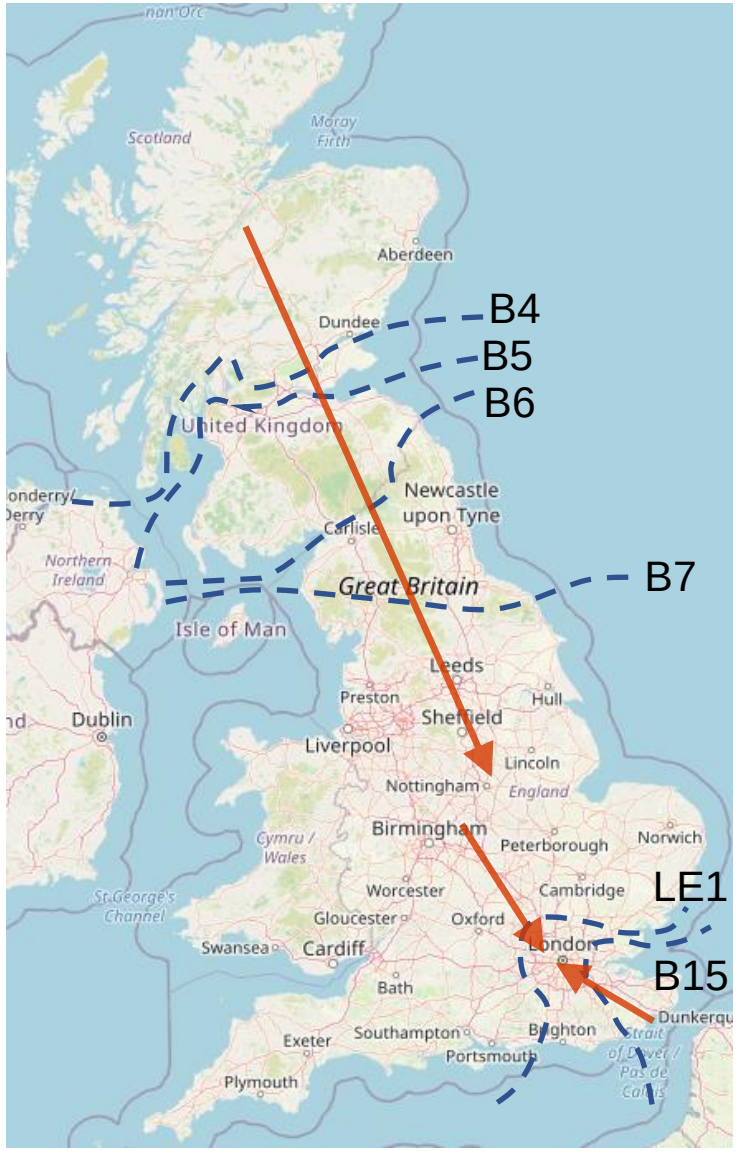
Transparency | Network Congestion





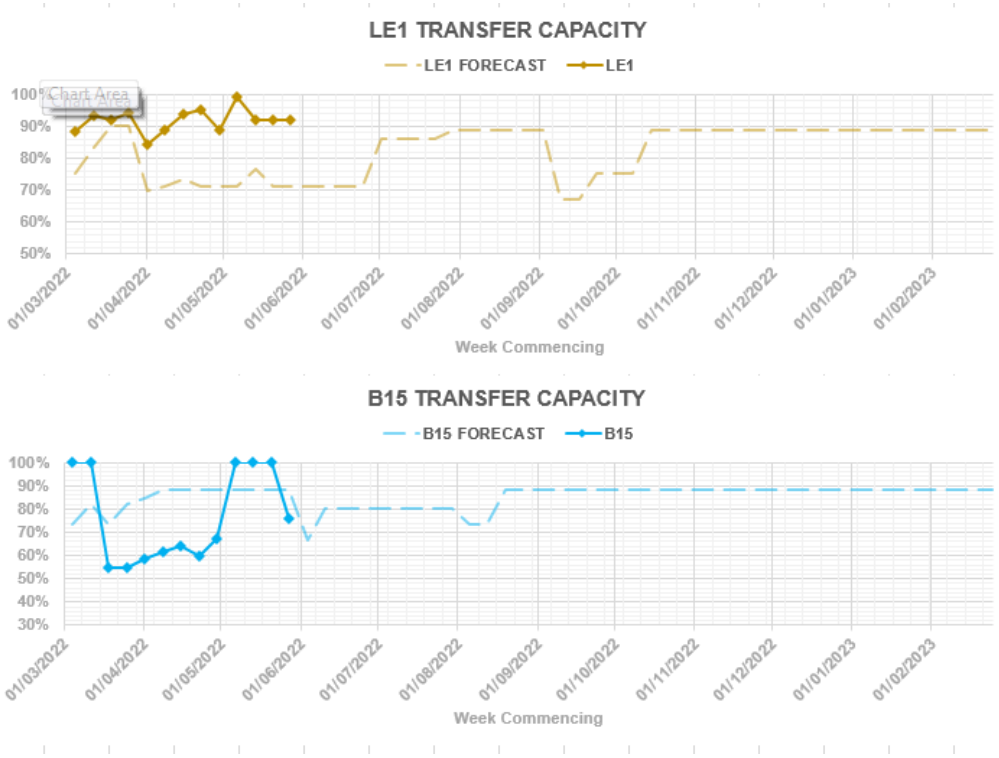


Boundary	Max. Capacity (MW)
B4/B5	2750
B6	5600
B7	8400
LE1	7000
B15	7500



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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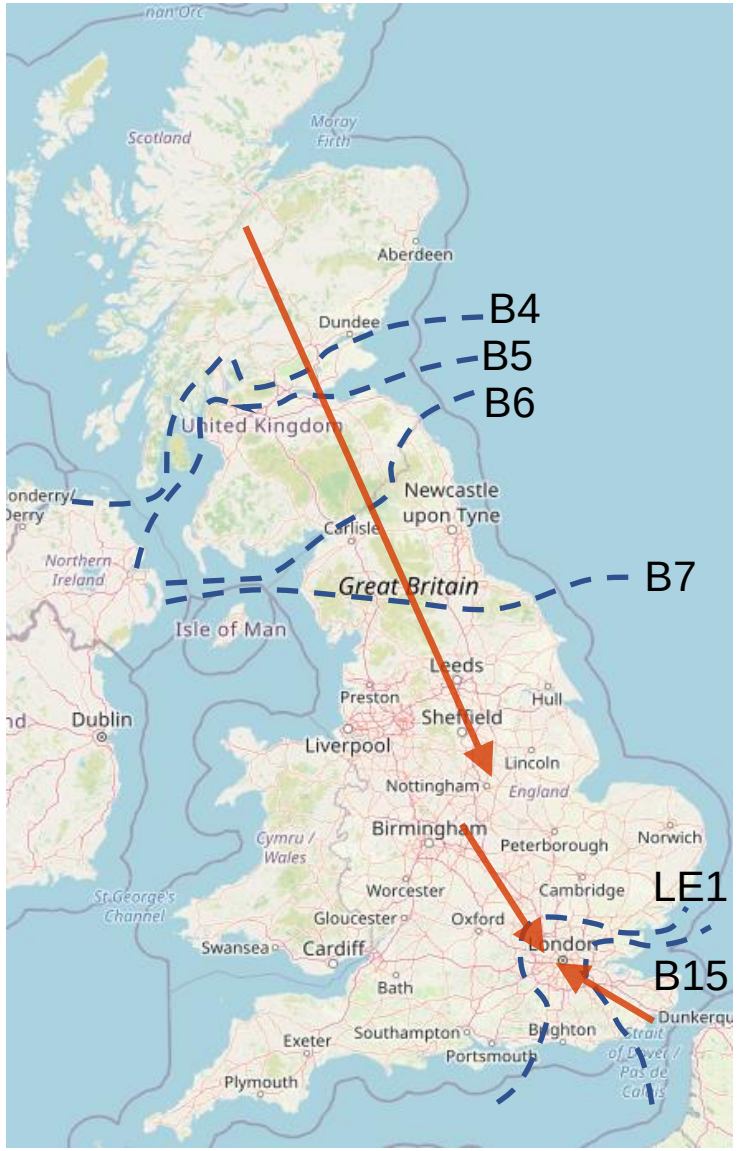

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Response Reform Webinar

Webinar Link: Frequency Response Reform Market Insights and Procurement Webinar May 2022 (brightcove.net)

You can also navigate to out Upcoming Events page to download the slide pack: Upcoming and past events | National Grid ESO

slido

Audience Q&A Session

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

Q&A

Please remember to use the feedback poll after the event. We welcome feedback to understand what we are doing well and how we can improve the event ongoing.

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

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