



ESO Operational  
Transparency Forum  
16 March 2022

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

## Introduction | Sli.do code #OTF

Please visit [www.sli.do](http://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](mailto: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>

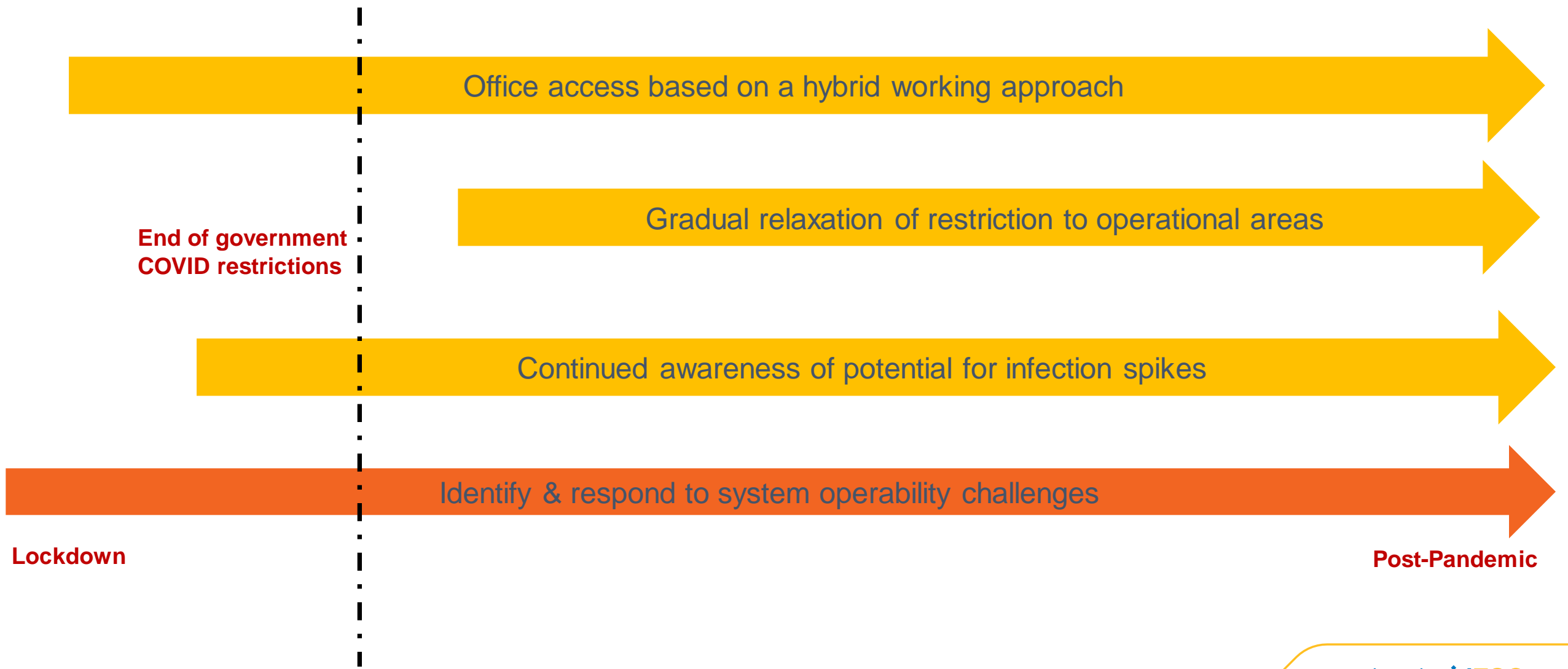
### Regular Topics

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

### Focus Areas

- Dynamic Moderation & Dynamic Regulation update
- Domestic Reserve Scarcity trial update
- 5 point plan webinar signpost

## Protecting critical staff to maintain critical operations



End of government  
COVID restrictions

Office access based on a hybrid working approach

Gradual relaxation of restriction to operational areas

Continued awareness of potential for infection spikes

Identify & respond to system operability challenges

Lockdown

Post-Pandemic

## 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:

Managing constraints in real-time – voltage, inertia, RoCoF

## Questions outstanding from previous weeks

**Q: Does REMIT data always take priority over PN/MEL data? E.g. with Keadby currently, we should ignore FPN/MEL's because REMIT says 0MW even though FPN/MEL may not. I.e. does this hierarchy always prevail?**

A: Where a change in total available generation capacity is 100MW or greater for any BMU, there is a Grid Code obligation [OC2.4.7] to publish this through the REMIT transparency platform within 1 hour to act as disclosure of inside information. This should be done as soon as possible by any BMU as any trading actions taken by the EMC of this unit could be considered in breach of acting on inside information.

MEL has the 'highest priority' as this should be a real time declaration of the availability of power for a BMU (kept accurate at all times) and is operational information.

The Keadby unit specifically asked about had a commissioning profile with a REMIT in place for planned energy unavailability in line with the requirements under Grid Code. The available energy on the REMIT was declared along side changes in MEL which reflected the real-time available power output of the unit. A block PN profile such as this instance is justified through commissioning activity.

**Q: Is there any further update on the 4 day ahead forecast for DC services especially with DM/DR going live soon. Previously we have been advised this will be delivered in Q1 so is it still expected for delivery soon?**

A: We still plan to start publishing our DC forecast this quarter. Changes to associated tools required for the DR/DM launch have complicated the process, but we are now in the final stages of testing and would expect to go live soon.

**Q: Great to hear about B6 LCM. Will you be specifically excluding deliberate energy waste from this market?**

A: Thank you for the question, as we are currently consulting on this service, please could you submit a consultation response with any questions and feedback so we can use this in the design of the service? [Link to consultation email.](#)

## Questions outstanding from previous weeks

Outstanding questions we are still working on

Q: Clarity on BMU data: This is the data. A lot of wind units outturn data doesn't get published: Actual Generation Output Per Generation Unit (B1610) <https://www.bmreports.com/bmrs/?q=actgeneration/actualgeneration>

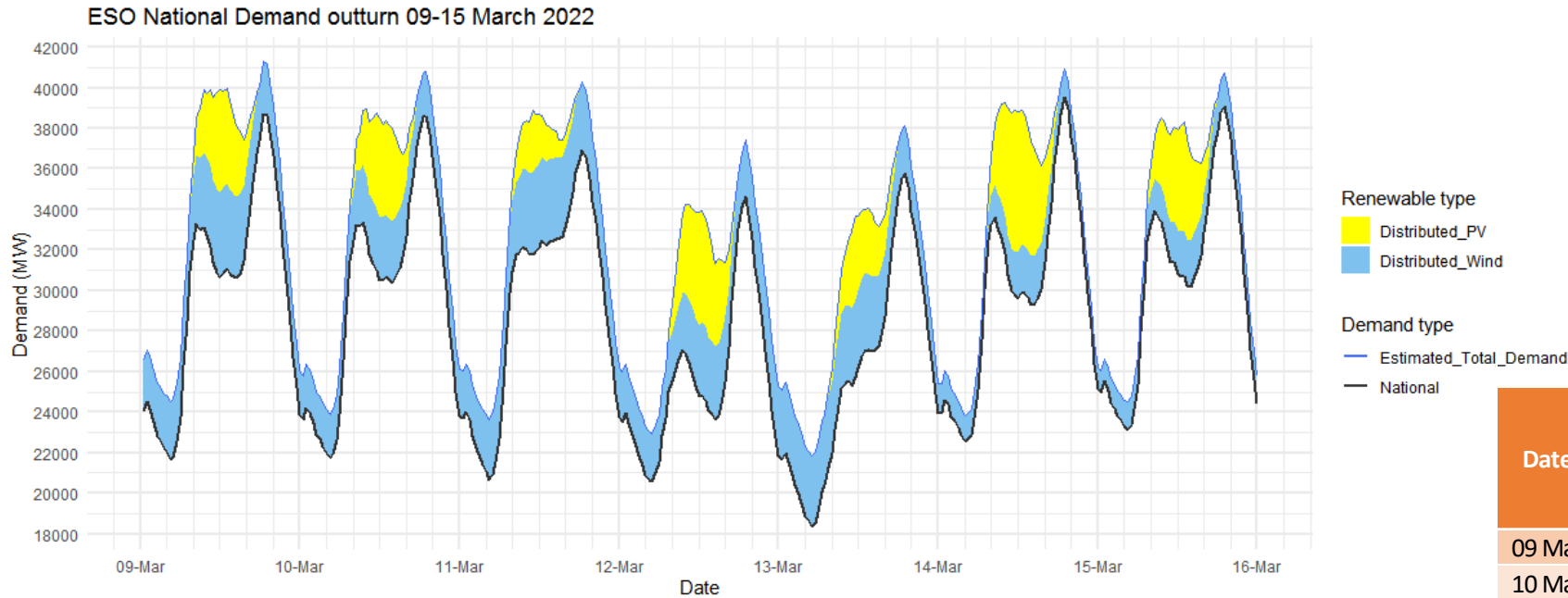
Referring to: There are a lot of wind BMUs that don't submit outturn meter data. Why is that? And can we get this data published please?

Q: Are Eleclink export volumes included in DATF during its commissioning period? I.e. it has no PN but are Grid still aware of its expected export volumes from REMIT and including those in dem fc. *Answered partially, we will confirm what is the approach when I/C is still going through commissioning at a future forum*

Q: So it sounds like the LCM will result in costs to bid back generation but you still haven't addressed why you don't bid pumped storage to pump, often at lower cost than eg bidding back wind?

Q: The LCM presentation acknowledges barriers to entry and inefficient processes for BM parties, what work are you doing to address those?

# Demand | Last week demand out-turn

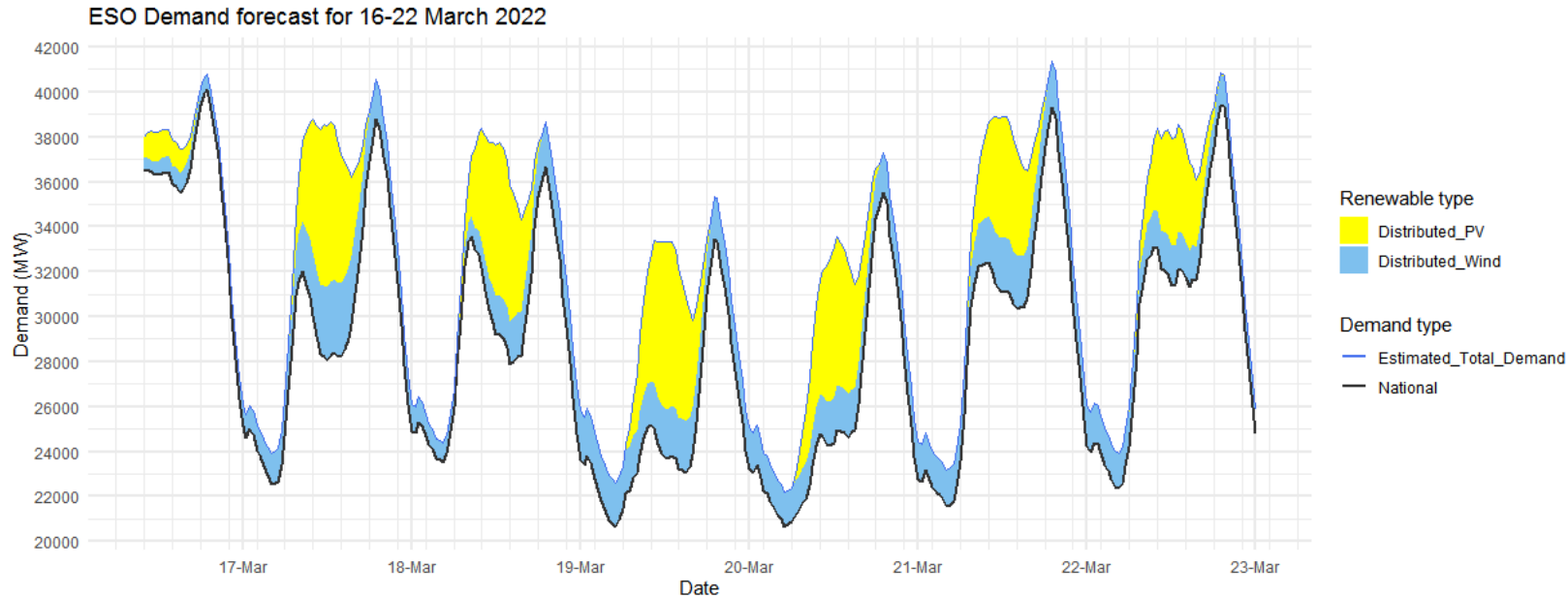


The black line (National Demand) is the measure of portion of total GB customer demand that is supplied by the transmission network.

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.

Date	Forecasting Point	FORECAST (Wed 09 Mar)		OUTTURN	
		National Demand (GW)	Dist. wind (GW)	National Demand (GW)	Dist. wind (GW)
09 Mar	Evening Peak	38.9	2.7	38.7	2.6
10 Mar	Overnight Min	21.8	2.1	21.7	2.2
10 Mar	Evening Peak	38.5	2.5	38.6	2.2
11 Mar	Overnight Min	20.2	3.3	20.7	2.9
11 Mar	Evening Peak	37.1	3.1	36.9	3.4
12 Mar	Overnight Min	20.6	1.7	20.6	2.4
12 Mar	Evening Peak	33.2	3.5	34.7	2.8
13 Mar	Overnight Min	18.2	3.4	18.4	3.5
13 Mar	Evening Peak	35.3	2.5	35.8	2.4
14 Mar	Overnight Min	20.8	1.9	22.6	1.3
14 Mar	Evening Peak	40.1	1.7	39.5	1.4
15 Mar	Overnight Min	21.3	2.5	23.1	1.4
15 Mar	Evening Peak	39.0	2.6	39.1	1.7

# Demand | Week Ahead



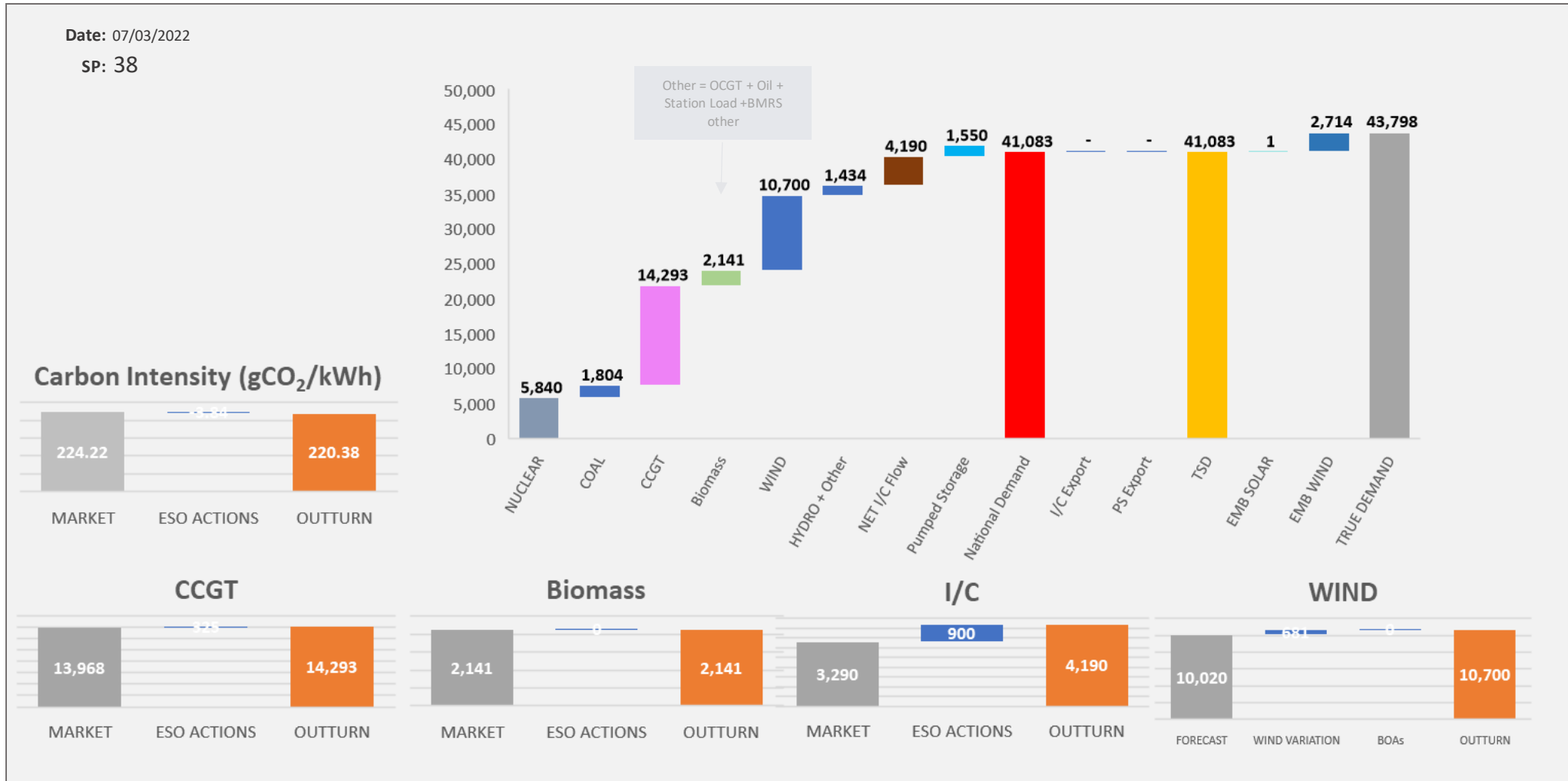
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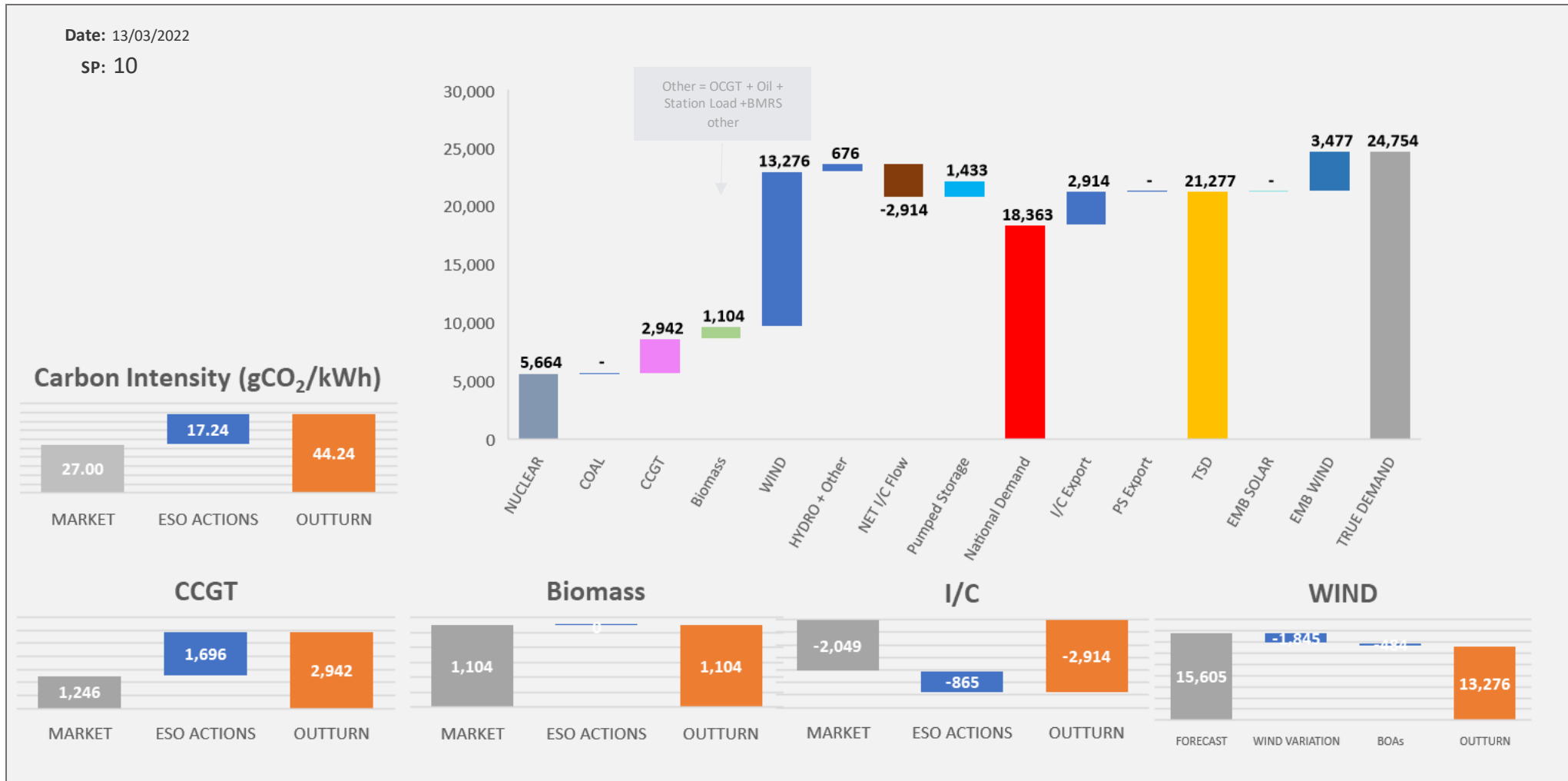
		FORECAST (Wed 16 Mar)	
Date	Forecasting Point	National Demand (GW)	Dist. wind (GW)
16 Mar 2022	Evening Peak	40.1	0.7
17 Mar 2022	Overnight Min	22.5	1.3
17 Mar 2022	Evening Peak	38.8	1.8
18 Mar 2022	Overnight Min	23.5	0.8
18 Mar 2022	Evening Peak	36.6	2.0
19 Mar 2022	Overnight Min	20.7	1.9
19 Mar 2022	Evening Peak	33.4	1.9
20 Mar 2022	Overnight Min	20.7	1.5
20 Mar 2022	Evening Peak	35.5	1.8
21 Mar 2022	Overnight Min	21.6	1.6
21 Mar 2022	Evening Peak	39.3	2.1
22 Mar 2022	Overnight Min	22.3	1.6
22 Mar 2022	Evening Peak	39.4	1.4



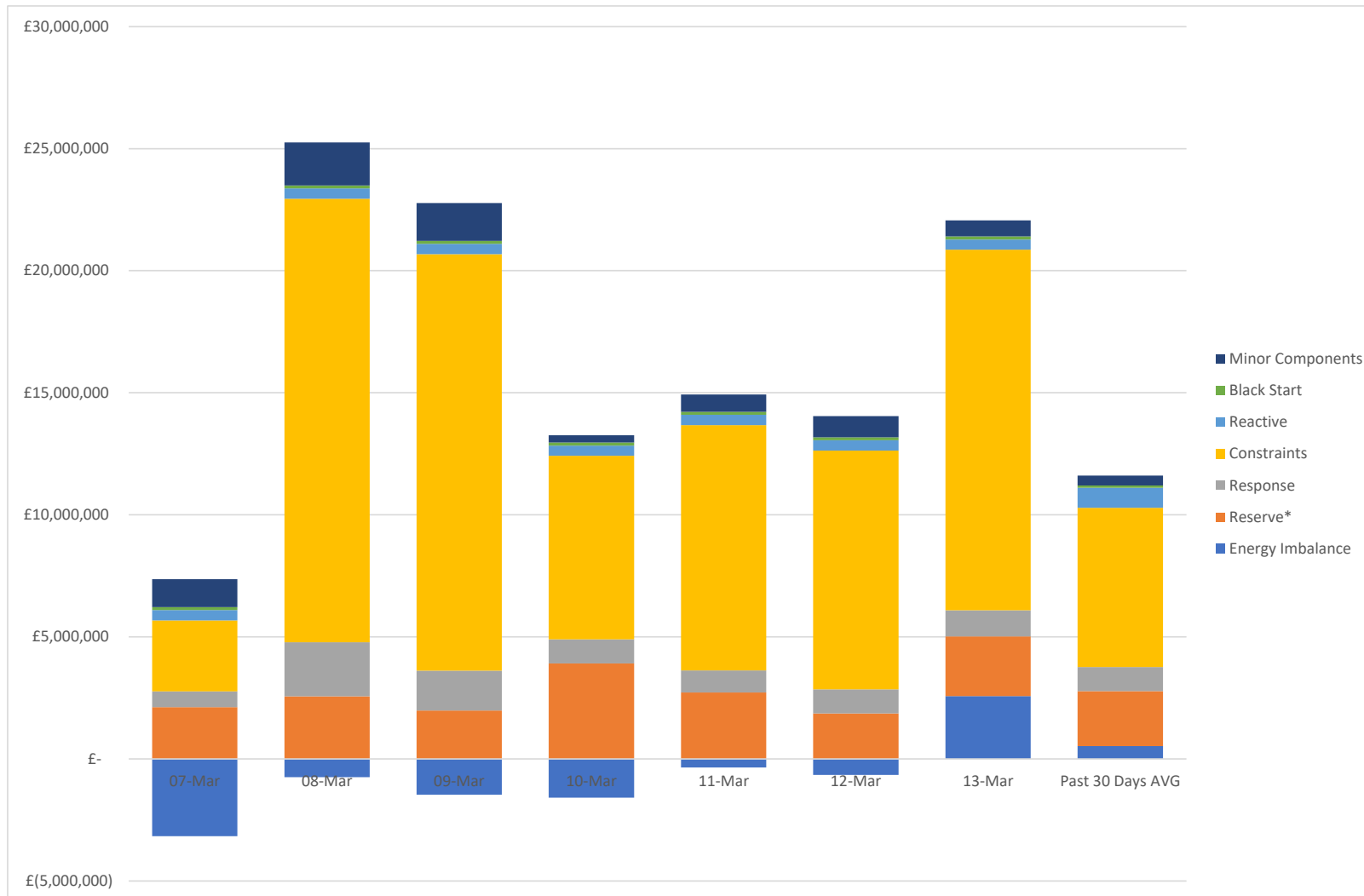
# ESO Actions | Monday 07 March Peak



# ESO Actions | Sunday 13 March Minimum



## Transparency | Category costs breakdown for the last week

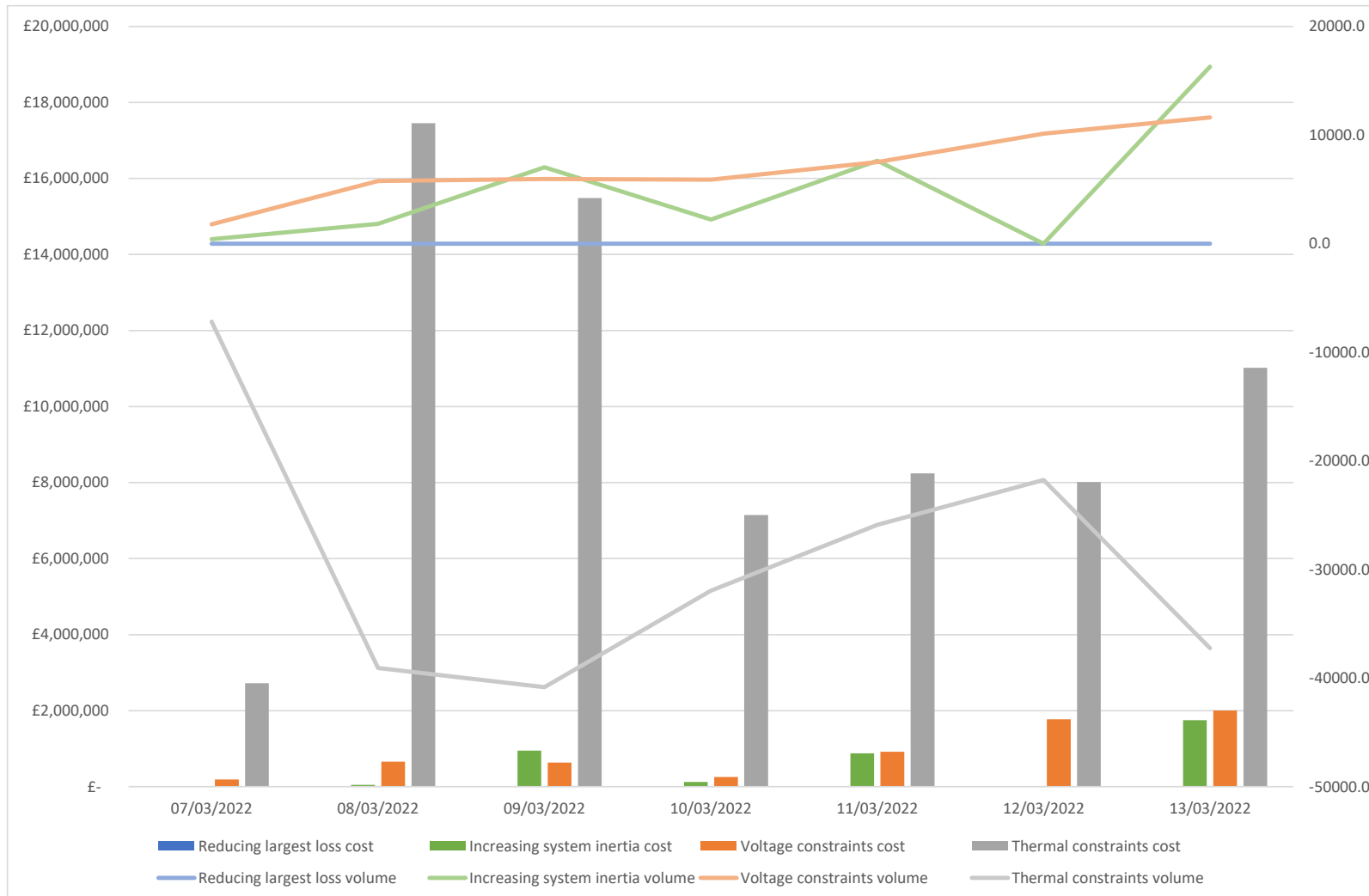


Tuesday 8<sup>th</sup> was the most expensive day with a spend of £24.5m. Wednesday 9<sup>th</sup> and Sunday 13<sup>th</sup> the daily spend was of £22m and £21m respectively.

The main component of the daily spend throughout the week were costs associated to constraint actions.

**Past 30 Days Average is displayed in the chart**

# Transparency | Constraint Cost Breakdown



**Thermal – network congestion**  
 Actions were required to manage Thermal Constraints all days.

**Voltage**  
 Action taken to synchronise generation to meet voltage requirements were required all days.

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

**Increasing inertia**  
 Between Tuesday and Sunday intervention required to increase minimum inertia

# Operational margins: week ahead

## How to interpret this information

This slide sets out our view of operational margins for the next week. We are providing this information to help market participants identify when tighter periods are more likely to occur such that they can plan to respond accordingly.

The table provides our current view on the operational surplus based on expected levels of generation, wind, imports and peak demand. This is based on information available to National Grid ESO as of 16 March and is subject to change. It represents a view of what the market is currently intending to provide before we take any actions.

The indicative surplus is a measure of how tight we expect margins to be and the likelihood of the ESO needing to use its operational tools.

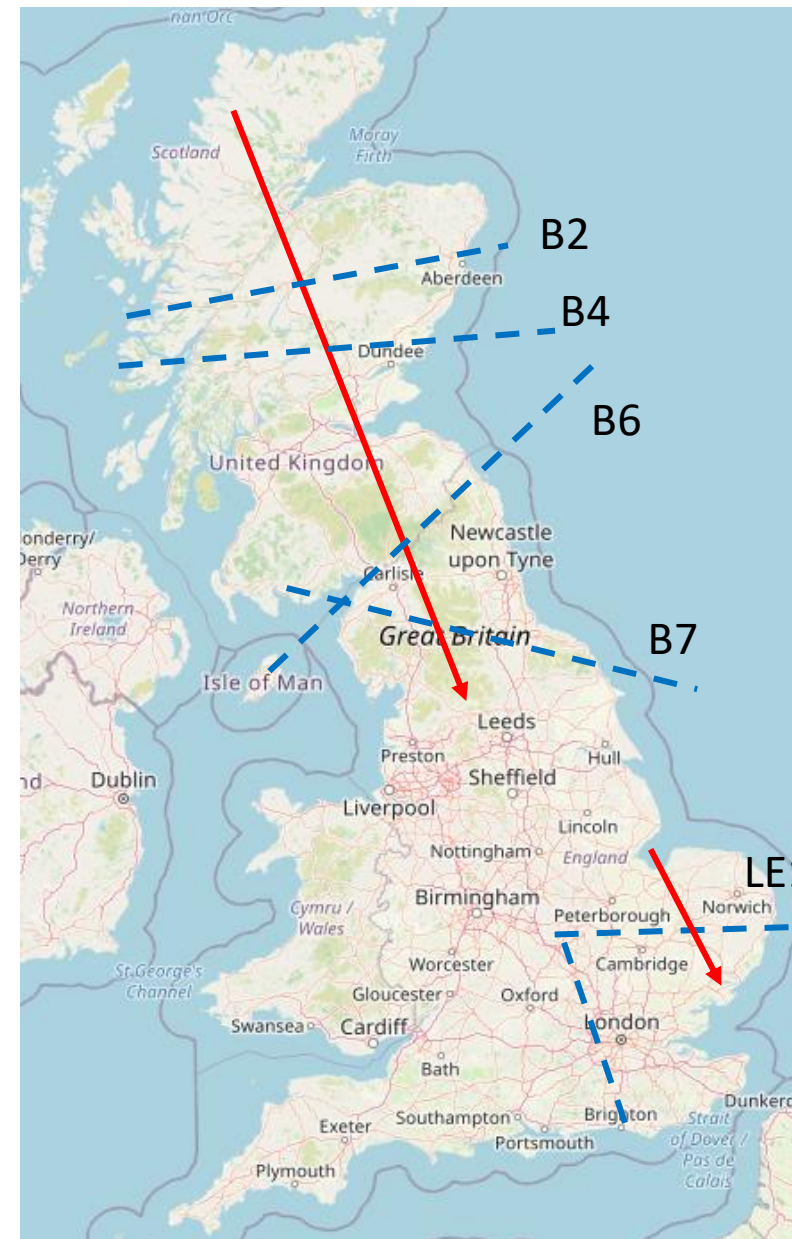
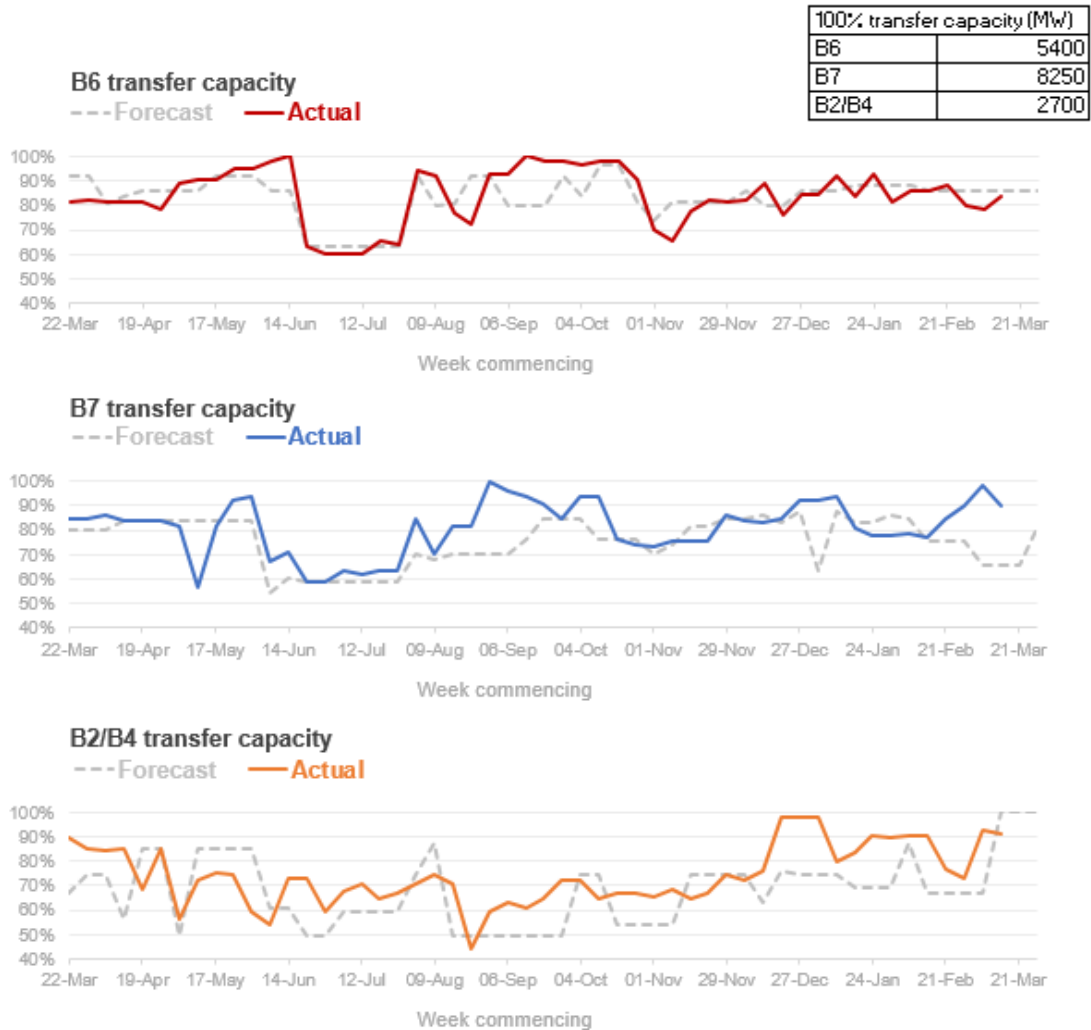
For higher surplus values, margins are expected to be adequate and there is a low likelihood of the ESO needing to use its tools. In such cases, we may even experience exports to Europe on the interconnectors over the peak depending on market prices.

For lower (and potentially negative) surplus values, then this indicates operational margins could be tight and that there is a higher likelihood of the ESO needing to use its tools, such as issuing margins notices. We expect there to be sufficient supply available to respond to these signals to meet demand.

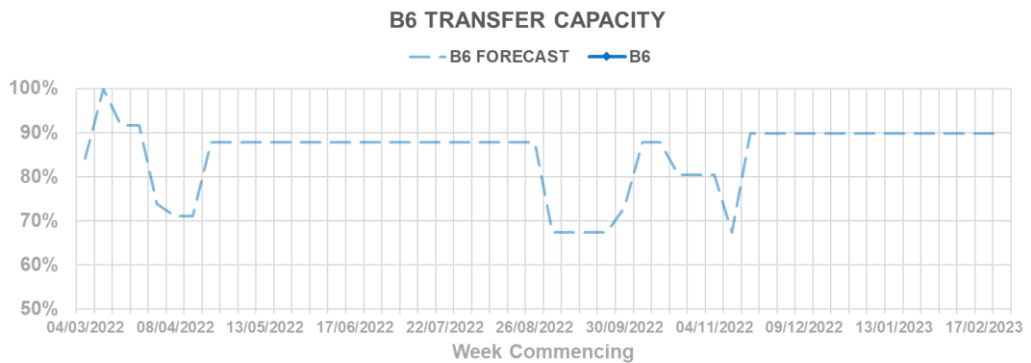
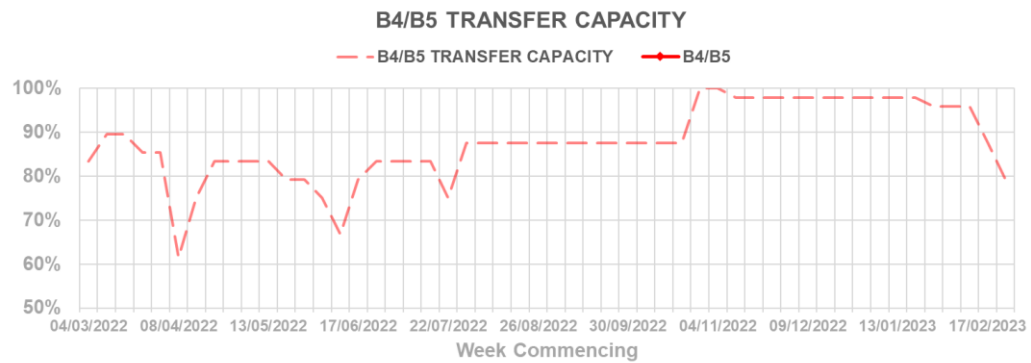
Margins are adequate for the next seven days.

Day	Date	Notified conventional generation (MW)	Wind (MW)	Interconnector availability (MW)	Peak demand (MW)	Indicative surplus (MW)
Thu	17/03/2022	41679	8015	3650	39281	9800
Fri	18/03/2022	41151	8583	3650	37140	11120
Sat	19/03/2022	39250	9629	3650	33979	14396
Sun	20/03/2022	40672	7932	3650	36123	11781
Mon	21/03/2022	42240	9825	4150	39817	11703
Tue	22/03/2022	42730	4544	4650	40307	6885
Wed	23/03/2022	42730	2696	4650	40113	5161

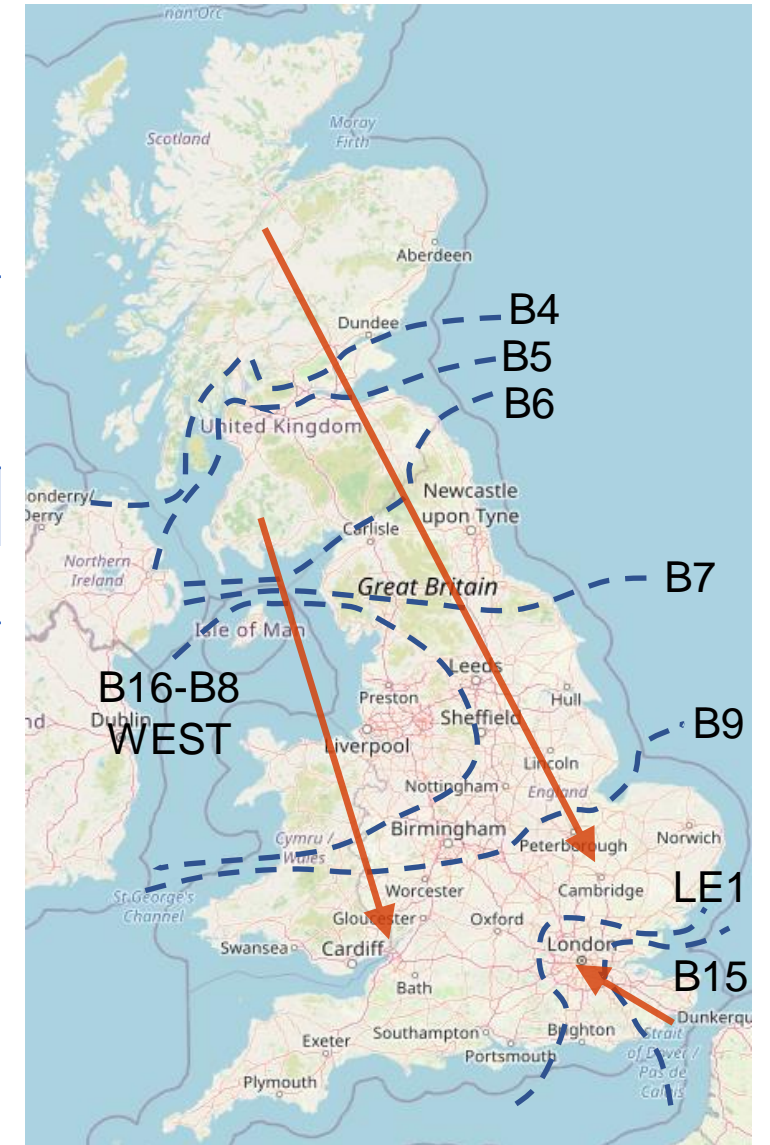
# Transparency | Network Congestion



# Transparency | Constraint Capacity 2022/23

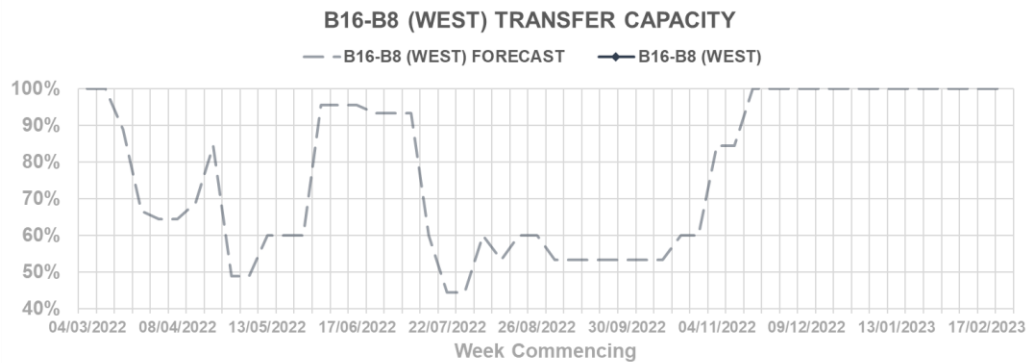
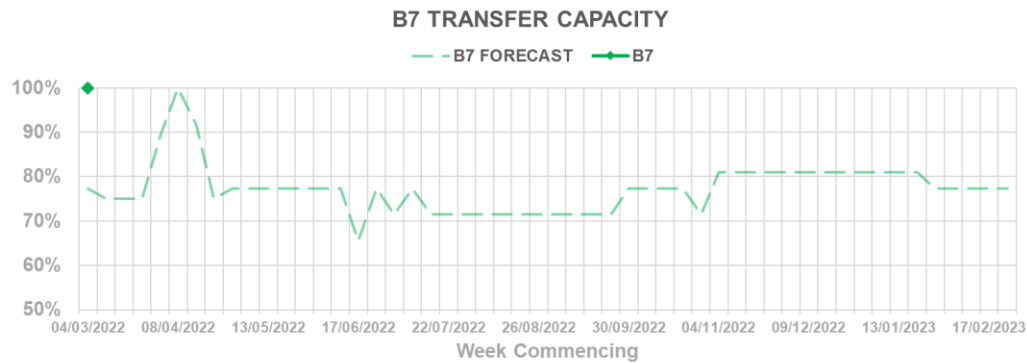


Boundary	Max. Capacity (MW)
B4/B5	2400
B6	5350

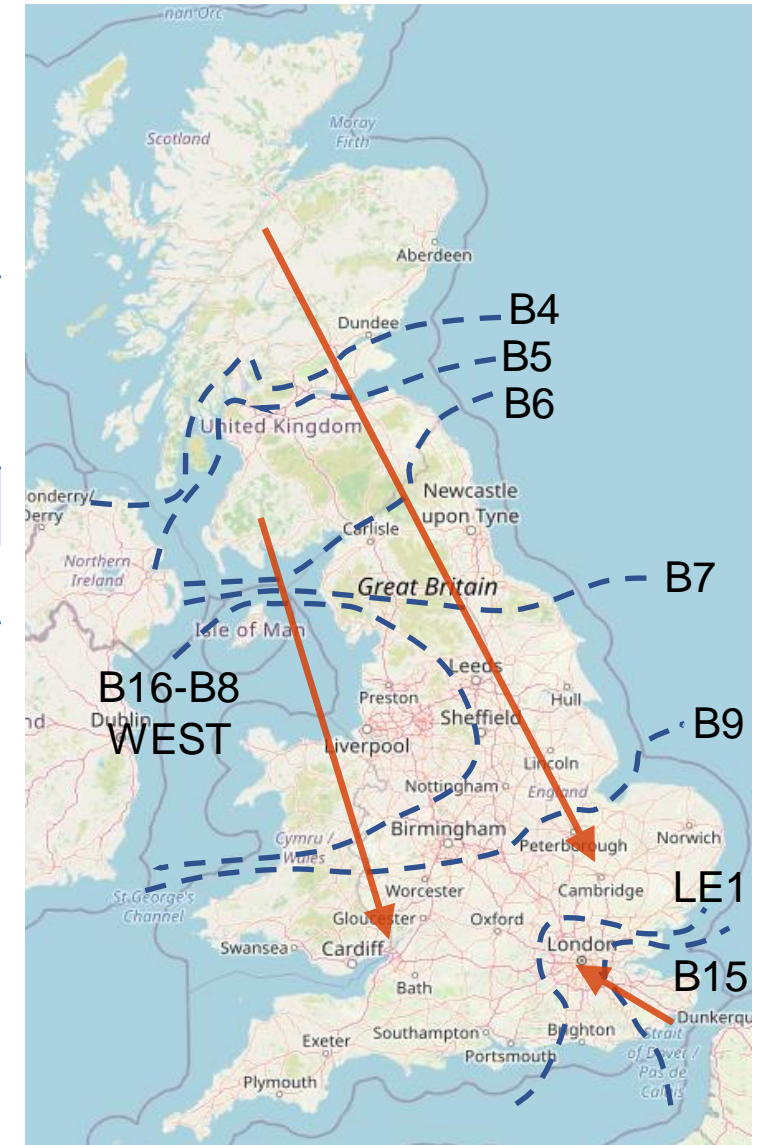


Day ahead flows and limits, and the 24 month constraint limit forecast are published on the ESO Data Portal: <https://data.nationalgrideso.com/data-groups/constraint-management>

# Transparency | Constraint Capacity 2022/23



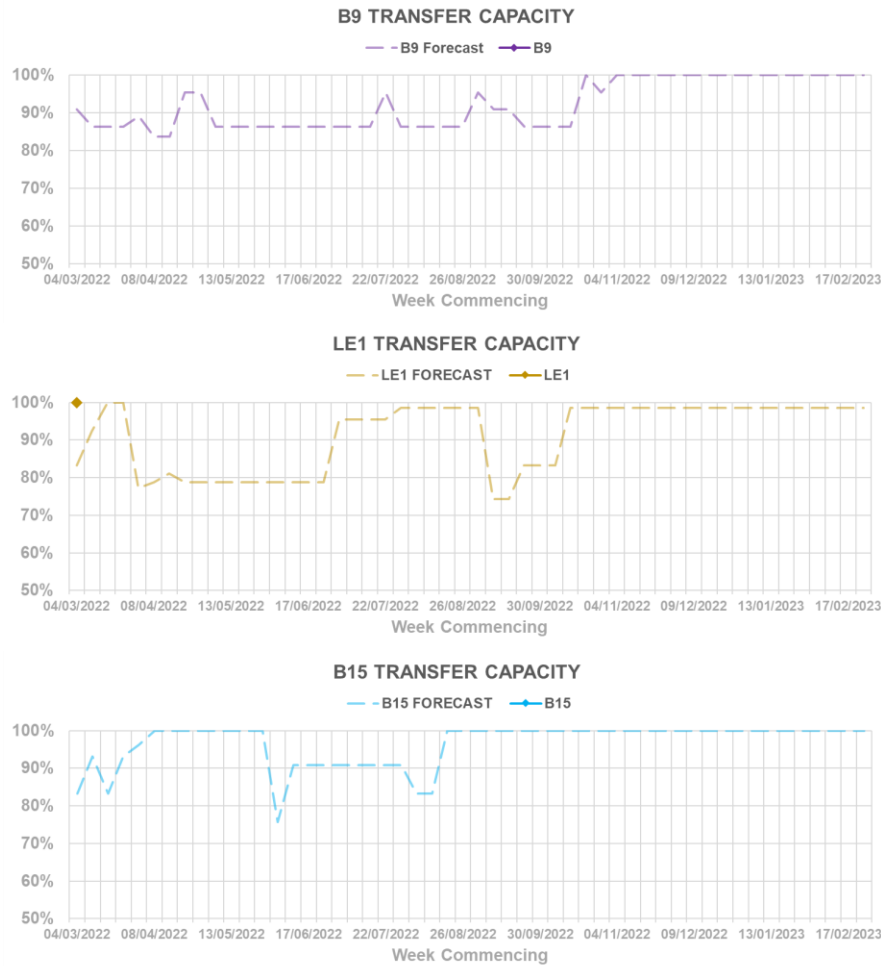
Boundary	Max. Capacity (MW)
B7	8400
B16-B8	4500



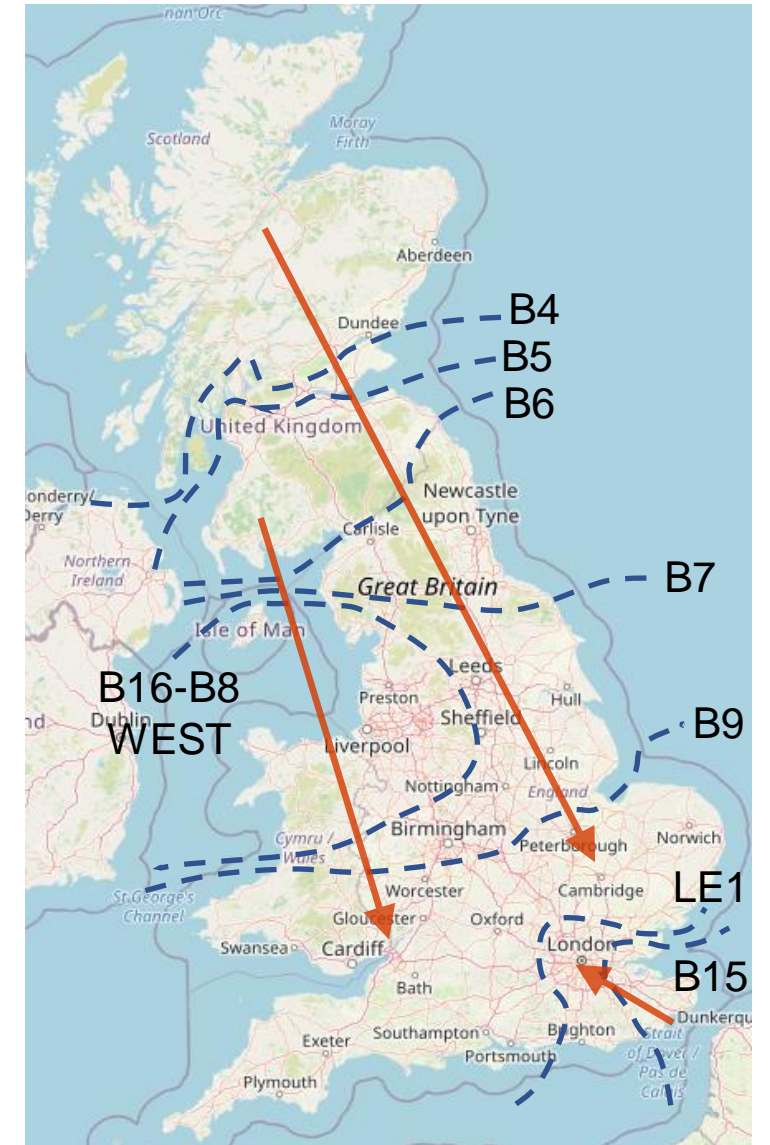
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# Transparency | Constraint Capacity 2022/23



Boundary	Max. Capacity (MW)
B9	11000
LE1	6600
B15	6600



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# Dynamic Moderation and Dynamic Regulation

## DR launch dates

- DR EPEX go live - 17:00 on Thu 24 March
- DR first auction - 14:30 on Fri 8 April

## DM launch dates

- DM EPEX go live - 00:00 on Thu 21 April
- DM first auction - 14:30 on Fri 6 May

- EBR Article 18 consultation for DM and DR approved
- DR derogation on Clean Energy Package Art. 6(2) approved
- Information on the systems for BM & non-BM providers can be found on the ESO website
- DR Testing Analysis Tool

Latest information can be found on [DM](#) and [DR](#) webpages

Contact the team at: [box.futureofbalancingservices@nationalgrideso.com](mailto:box.futureofbalancingservices@nationalgrideso.com)

# Domestic Reserve Scarcity trial - update

## Recap

- NG ESO have collaborated with Octopus Energy on a trial exploring domestic flexibility within the suppliers smart meter customer base.
- Domestic households will be incentivised to reduce their demand across a 2-hour time period.
- Demand turn down events will be initiated at the day ahead stage, based on thresholds set in publicly available data.
- The trial period will run until the end of March 2022, and look to enact up to 10 separate events.

## Update

- 2 events have taken place so far, with over 25,000 customers participating in each event.
- Due to current market conditions, revision to thresholds have not resulted in enough events taking place. To ensure trial events take place and to maximise the learning we can take from the trial period, we have decided to alter approach for triggering events. For the remainder of the trial, the following dates and windows have been pre-selected.
- Time windows for events haven't changed.
- Forecasted volumes of demand reduction of up to 40 MW.

Date	17/03	18/03	21/03	22/03	23/03	24/03	25/03	28/03	29/03	30/03	31/03
00:00 – 02:00											
09:00 – 11:00											
16:30 – 18:30											

### Useful Links

- [Original OTF presentation](#) (02.02.2022)
- [Octopus Energy Blog](#)

## 5 Point Plan Update

In February 2021 the ESO announced a 5 Point Plan to look at ways to mitigate constraint costs.

On the **29 March 13:00 – 14:00** Julian Leslie (Head of Networks) will host an update webinar to run through the progress of the plan.

Eventbrite -

<https://www.eventbrite.co.uk/e/296586948547>

Details will be published in the ESOs Plugged In Newsletter as well.



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

