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

ESO Operational Transparency Forum

22 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

ESO news: Winter operation for 2022-23

Signpost to BSUoS Fixed Tariff Model Webinar

Signpost to Reserve Reform event

ESO user research

ESO news

Winter operation for 2022-23

We will be giving an early view of winter in July and publishing the Winter Outlook in early Autumn.

Contingency Contracts

As per BEIS' request, the ESO has recently entered into a bilateral agreement with EDF, for West Burton A to provide additional coal powered generation this winter if required.
This generation will not be available to the open market, and will be dispatched at the request of the ESO.

BSUoS forecast impact

We are still in talks with other generators so are unable to provide a forecast of costs at this stage.

We will provide further information in due course. We will be unable to answer further questions on this at today's forum.

Questions outstanding from previous weeks

Q: On Monday 13th June a number multiple BMU's were offered on over the evening peak at prices above the cost of buying back energy through the interconnectors (how ESO has been balancing the system across the last few weeks). Is there any reason why on Monday higher priced BMU's were used instead?

A: For some context, on Monday 13 June, the wind was shortfalling against forecast, IFA2 went on outage that morning, Eleclink was returning from outage and we suffered 2 large plant losses in the morning. This all led to quite significant uncertainty.

We had warmed a unit to cover the evening peak for margin. Then closer to real-time traded significant volume on the interconnectors for the majority of the afternoon and evening for both energy and system reasons. Having done this, we still had a requirement to run the warmed machine for margin.

Q: Slide 6 - SE tender - as per GC0156 discussion will ESO require all tender respondents to fully comply with Grid Code (1) re-energisation procedure (2) re-synchronisation procedure and (3) frequency deviation management?

A: This is being discussed as part of the GC0156 working group and queries should be directed to that forum.

Q: Noted a high-priced STOR run on Friday - what was the reason behind this?

A: This unit was run to resolve a system constraint as shown on BMRS through the use of the SO-flag. This was the only option available to resolve the constraint, so this unit would have been used whether it was a STOR unit or otherwise.

Questions outstanding from previous weeks

Q: I believe the Emergency assistance should feed into cash out. it was not reported on the day in the cash out call. This appears to be a recurring issue?

A: Where SO-SO trades volumes, including Emergency Assistance, are agreed by telephone then these trades are not included as part of the automated BSAD trade volume submission on the day. Instead, a post event review is undertaken and BSAD is updated once the trade has been agreed.

Q: When was the 10/06 emergency request by ESO to TO made (what time exactly) and what time exactly was the system notice placed on BMRS issued?

A: As per code requirements a BMRS message was issued notifying the market that a circuit was recalled within its ERTS. The emergency request was at 11:00 am and the message was put on BMRS at 11:03 (10:03 is GMT)

Warning Date/Time (GMT)	Warning Text
2022-06-10 10:03	NGESO has requested a Transmission Owner discontinue an outage within relevant Emergency Return to Service time, under STC Section C Part 2 (7). Issued by Brendan Lyons at 11:04 on 10/06/2022

Questions outstanding from previous weeks

Q: To Lisa's question about REMIT obligations on the ESO please can the ESO look specifically at the GC0109 proposal defect (pages 3-4) for the REMIT legal obligations on the ESO, such as Article (2)(7), Article 2(1) (b) and (d)

A: In this context the REMIT requirements are broadly about making sure that no parties have a competitive advantage by having access to information that is not freely available to all market participants. The link to GC0109 is just to access the references.

Q: Where can I find more information about the review of the construction planning assumptions undertaken by the ESO and the 3 onshore TOs?

A: The review was communicated at the March Customer Forum. There is a recording at the link provided and a link to attend future forums: Customer Connection events | National Grid ESO

Q: Last week I asked a question about the DC Forecast. I highlighted its inaccuracy & asked whether there would be any improvements. The last two days have seen an average error of 46% & 71%. With these level of inaccuracies are there any immediate plants to improve the forecast?

A: We are proactively reviewing the model and data that drive the medium term forecasting and the DA forecasting and would hope to come back with a conclusion soon. In the meantime, please be aware the uncertainties in system condition outlook have a significant effect on the DC requirements differences in different timescales.

Questions outstanding from previous weeks

Q: Eleclink has been live for over a week. Are data flows coming through correctly? i.e. Planned exports via eleclink feeding through into TSDF?

A: We can confirm that ElecLink data is coming through into NGESO systems correctly and since commercial go live on the 25th May 2022 this data is published and feeds into the TSDF every 30 minutes. There has been a change in the timing of the data coming in from ElecLink by a few hours which if you were expecting the data to be published at a certain time this would look like something was not right. Please note that ElecLink only has one gate and submits this at day ahead stage and this will not change after the fact.

Question below answered live in forum on 15 June but included here for clarity

Q: Traditional measure of Demand was NDF and INDO but NDF was only routinely updated 5 times per day. Now TSDF is a better measure, is it still only based on 5 updates per day and does it capture regular changes in interconnector demand?

A: Demand data is sent out to the market every 30 minuets by NGESO systems automatically. We are required to assess the national demands forecast (NDF) several times a day however, this is the minimum requirement and we will update the demands at other times if we feel that we need to do so. When the NDF are updated, this will be automatically published in the next market update. The update will amend any NDF that is published if we have made any changes.

In relation to the TSDF data this is affected by changes on the interconnectors as an export would cause us to have our GB consumer demand plus the export of the interconnector or interconnectors. The interconnector data is sent out to the market at the same time as the demand data every 30 minutes. This data will include the latest data we have been sent by the interconnectors and therefore changing the TSDF if needed. Interconnectors are not the only thing that will change the TSDF there are other factors that for example pumping on pump storage units.

Questions outstanding we are still working on

Q: Changes in interconnector generation “PNs” reflect through into INDGEN on a zonal and national basis every quarter to and quarter past the hour. Does the same also happen to interconnector demand “PNs” to INDEM on a zonal and national basis. Might be BMRA data flows but data comes from ESO! Thanks C

We have asked Elexon this question.

Q: On 10th of June 2022, in SPs 32 and 33, winds plants such as AKGLW-3 were reversed at expensive prices up to £99,999?

Please note we are still looking into this as it doesn’t appear to be as simple as bids being reversed.

OTF Questions and Answers document

A new document with questions and answers from previous OTF will be published soon (expected next week).

This Q&A document will be available on the following location (with slides and event recordings):
https://data.nationalgrideso.com/plans-reports-analysis/covid-19-preparedness-materials

Note that answers are often provided live on the date of the OTF and should therefore be considered accordingly.

We thank you for your patience while we have worked on this.

The objective in the future is to update this document regularly with new questions and answers.

BSUoS Fixed Tariff Model Webinar

We would like to invite you to a webinar that we are holding to discuss the inputs and methodology that we will use should a move to a fixed BSUoS tariff be approved.

Monday 27 June 10:00 – 12:00

We sent out details of the webinar to our BSUoS mailing list last week

You can sign up directly for the event here

Ahead of this event we will be sharing a document with further details of the model.

The event will be recorded and shared afterward for any parties unable to attend

Please contact BSUoS.queries@nationalgrideso.com with any queries.

Reserve Reform – Show & Listen event

We are arranging our **Show & Listen** session on **Thursday 23rd June 13:00 – 14:30** where we will present our initial proposal for **Quick Reserve** design, the second product in our suite of new Reserve services.

The event will be held on MS Teams with the opportunity to provide live feedback via Mural. Please sign-up using the link below:

Show & Listen 3
Quick Reserve

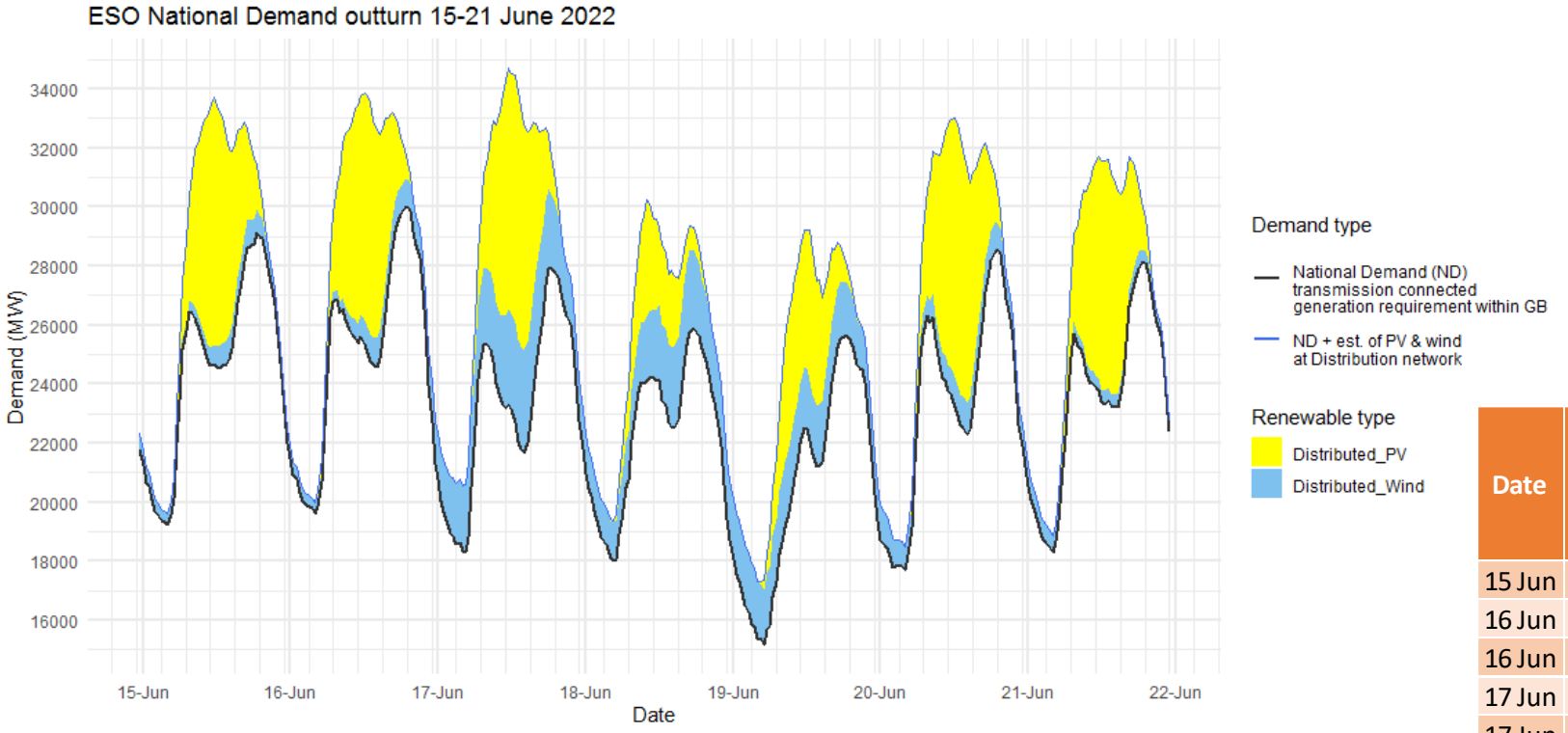
All the information we presented at our Show & Listen sessions can be found on our Future of Balancing Services webpages, alongside a Q&A document which will be kept up to date following each engagement session.

Show & Listen 1
Slow Reserve

Show & Listen 2
Slow Reserve

Show & Listen
Q&A

Demand | Last week demand out-turn



		FORECAST (Wed 15 Jun)			OUTTURN		
Date	Forecasting Point	National Demand (GW)	Dist. wind (GW)	Dist. PV (GW)	National Demand (GW)	Dist. wind (GW)	Dist. PV (GW)
15 Jun	Afternoon Min	23.9	0.9	6.3	24.5	0.8	8.0
16 Jun	Overnight Min	19.2	0.4	0.0	19.6	0.4	0.0
16 Jun	Afternoon Min	24.5	0.9	6.9	24.6	1.0	7.0
17 Jun	Overnight Min	18.0	1.8	0.0	18.3	2.3	0.0
17 Jun	Afternoon Min	21.1	3.3	7.2	21.7	3.5	7.7
18 Jun	Overnight Min	17.7	1.1	0.1	18.0	1.3	0.0
18 Jun	Afternoon Min	21.1	2.1	4.3	22.5	2.7	2.6
19 Jun	Overnight Min	15.4	2.0	0.1	15.2	1.9	0.3
19 Jun	Afternoon Min	21.0	1.9	4.3	21.2	2.1	4.2
20 Jun	Overnight Min	17.2	1.1	0.0	17.7	0.8	0.0
20 Jun	Afternoon Min	25.5	1.3	5.2	22.3	1.1	7.9
21 Jun	Overnight Min	18.7	0.7	0.0	18.3	0.6	0.0
21 Jun	Afternoon Min	25.2	0.9	6.1	23.2	0.4	7.3

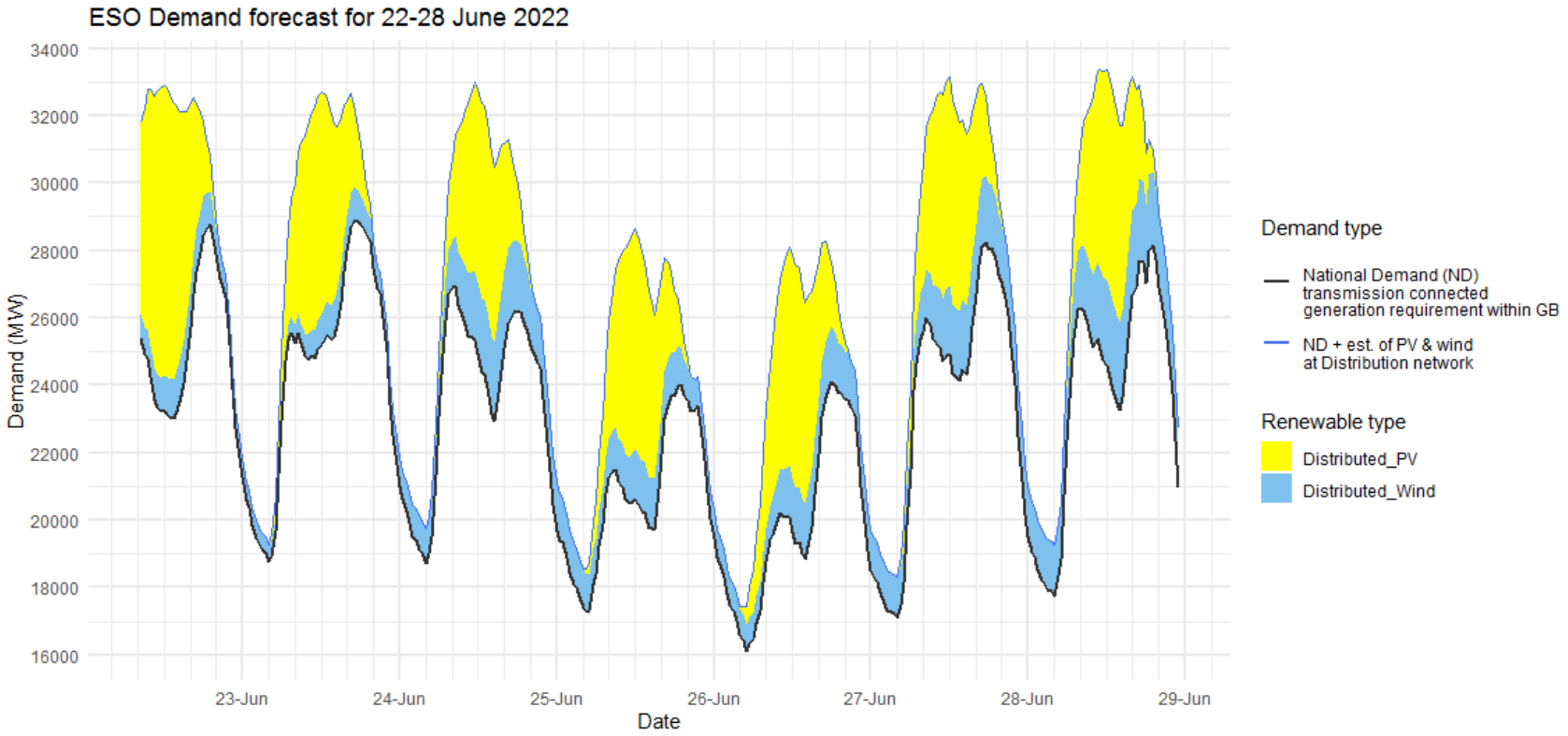
The black line (National Demand ND) is the measure of portion of total GB customer demand that is supplied by the transmission network.

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 22 Jun)		
Date	Forecasting Point	National Demand (GW)	Dist. wind (GW)	Dist. PV (GW)
22 Jun	Afternoon Min	23.0	1.2	8.2
23 Jun	Overnight Min	18.8	0.5	0.0
23 Jun	Afternoon Min	25.4	1.0	5.6
24 Jun	Overnight Min	18.7	1.0	0.0
24 Jun	Afternoon Min	22.9	2.4	5.2
25 Jun	Overnight Min	17.3	1.1	0.1
25 Jun	Afternoon Min	19.7	1.5	4.8
26 Jun	Overnight Min	16.1	0.8	0.5
26 Jun	Afternoon Min	18.8	1.7	5.9
27 Jun	Overnight Min	17.1	1.2	0.0
27 Jun	Afternoon Min	24.1	2.1	5.6
28 Jun	Overnight Min	17.7	1.5	0.0
28 Jun	Afternoon Min	23.3	2.6	5.8

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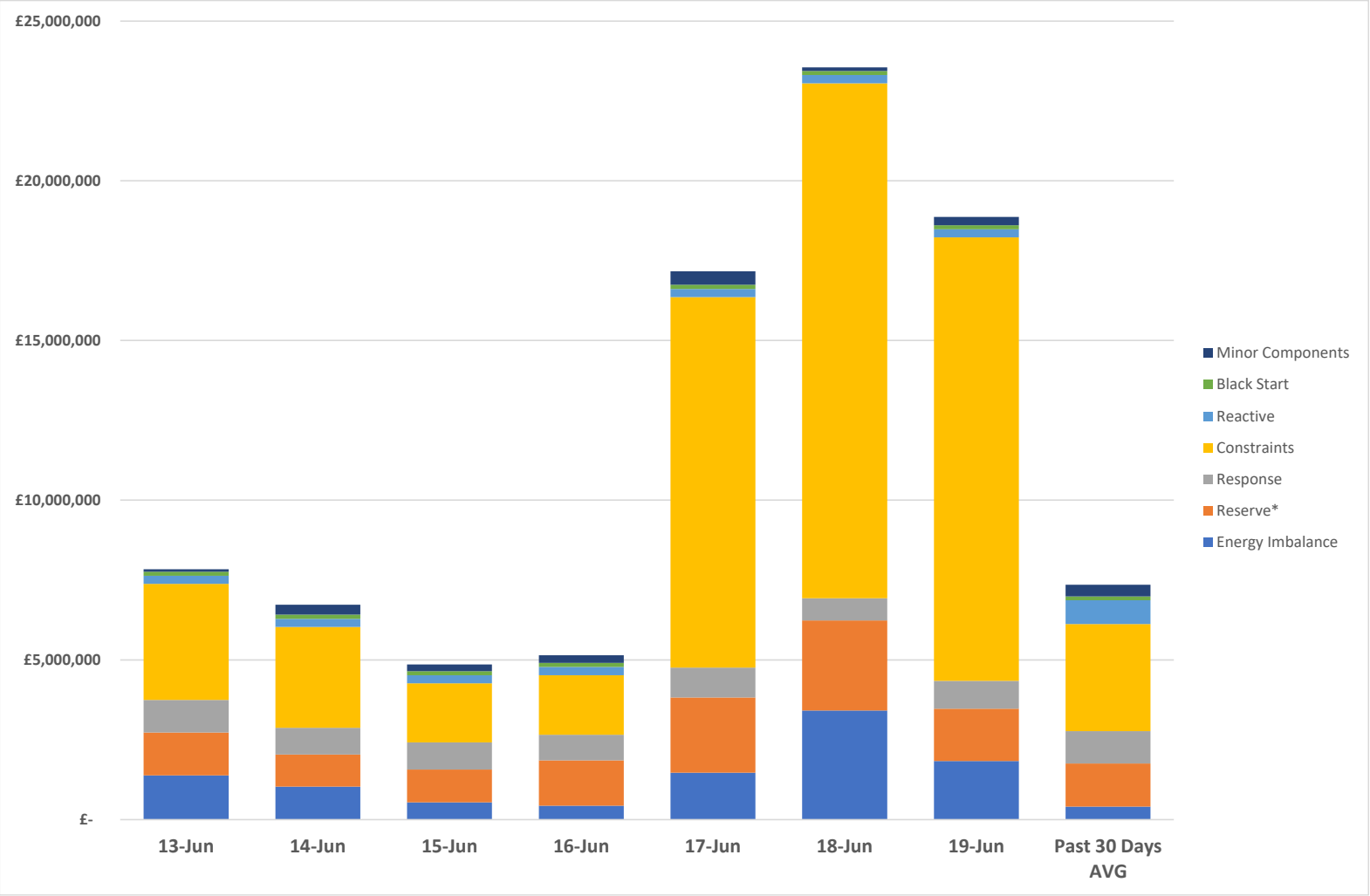
ESO Actions | Category costs breakdown for the last week



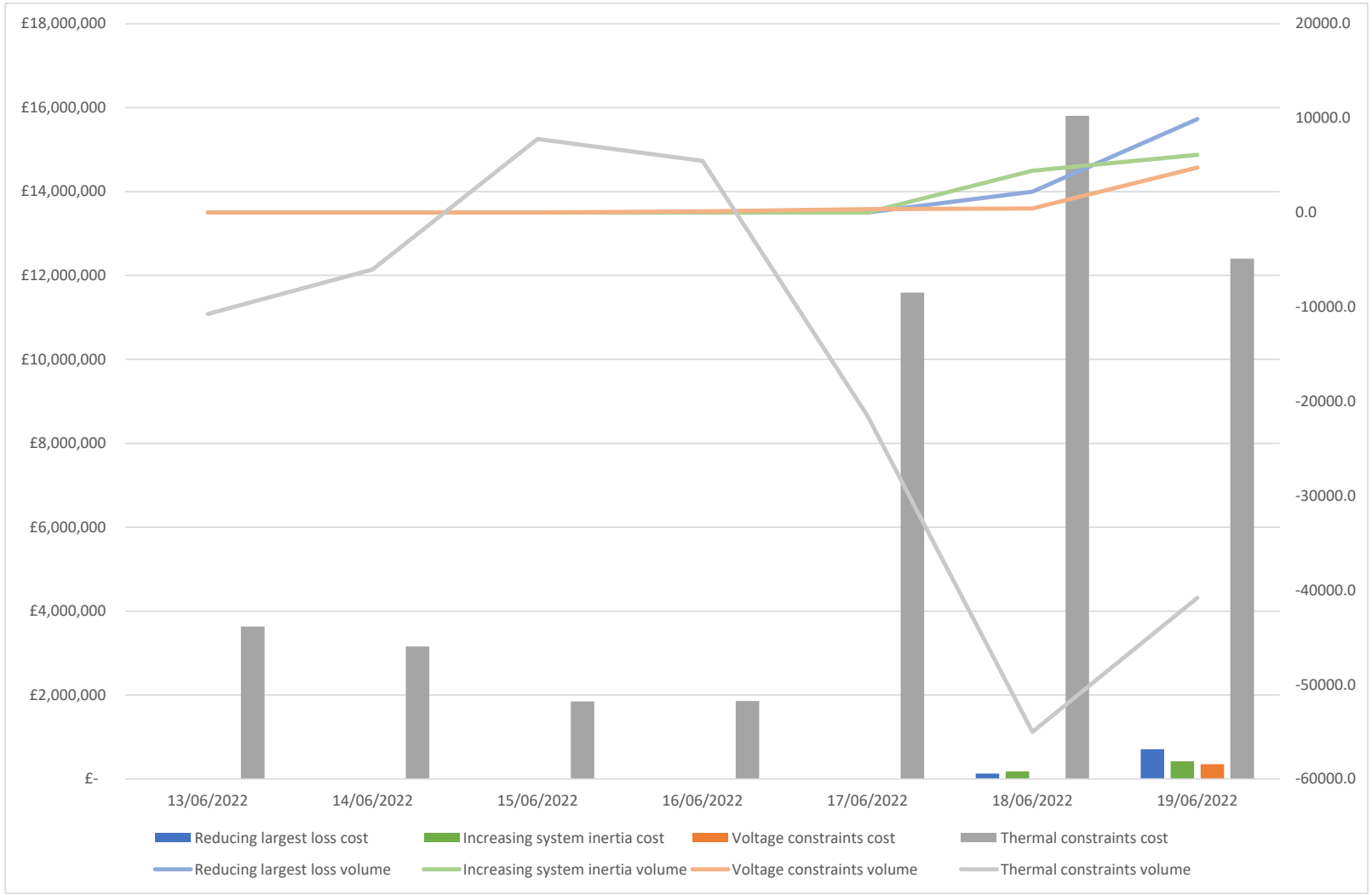
Date	Total (£m)
13/06/2022	7.8
14/06/2022	6.7
15/06/2022	4.9
16/06/2022	5.1
17/06/2022	17.2
18/06/2022	23.5
19/06/2022	18.9
Weekly Total	84.1

Constraint category was the key cost component from Wednesday.

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

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 Saturday and Sunday

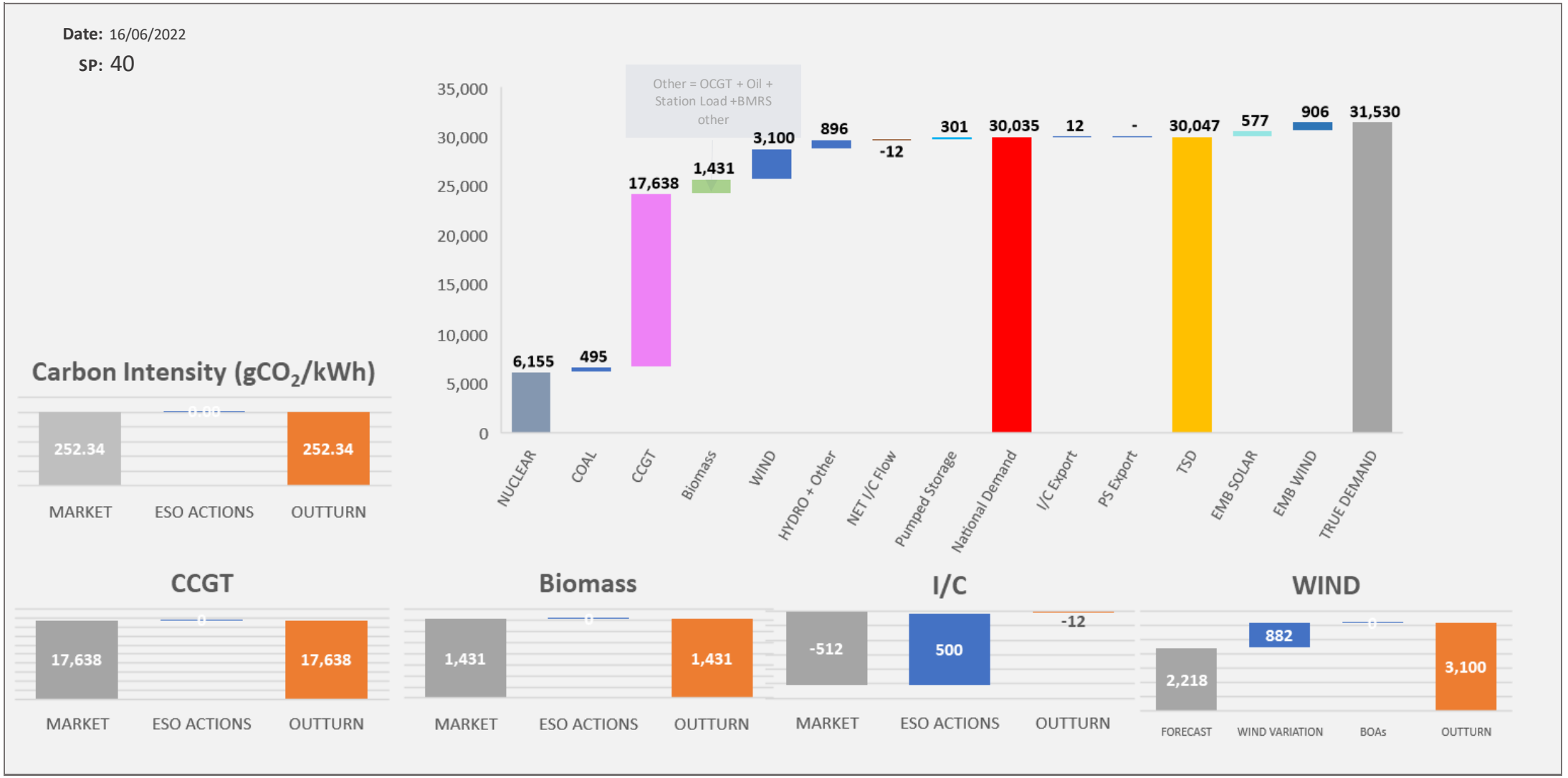
Managing largest loss for RoCoF
Intervention required to manage largest loss on Saturday and Sunday

Increasing inertia
Intervention required to increase minimum inertia on Saturday and Sunday

ESO Actions | Thursday 16 June - Peak

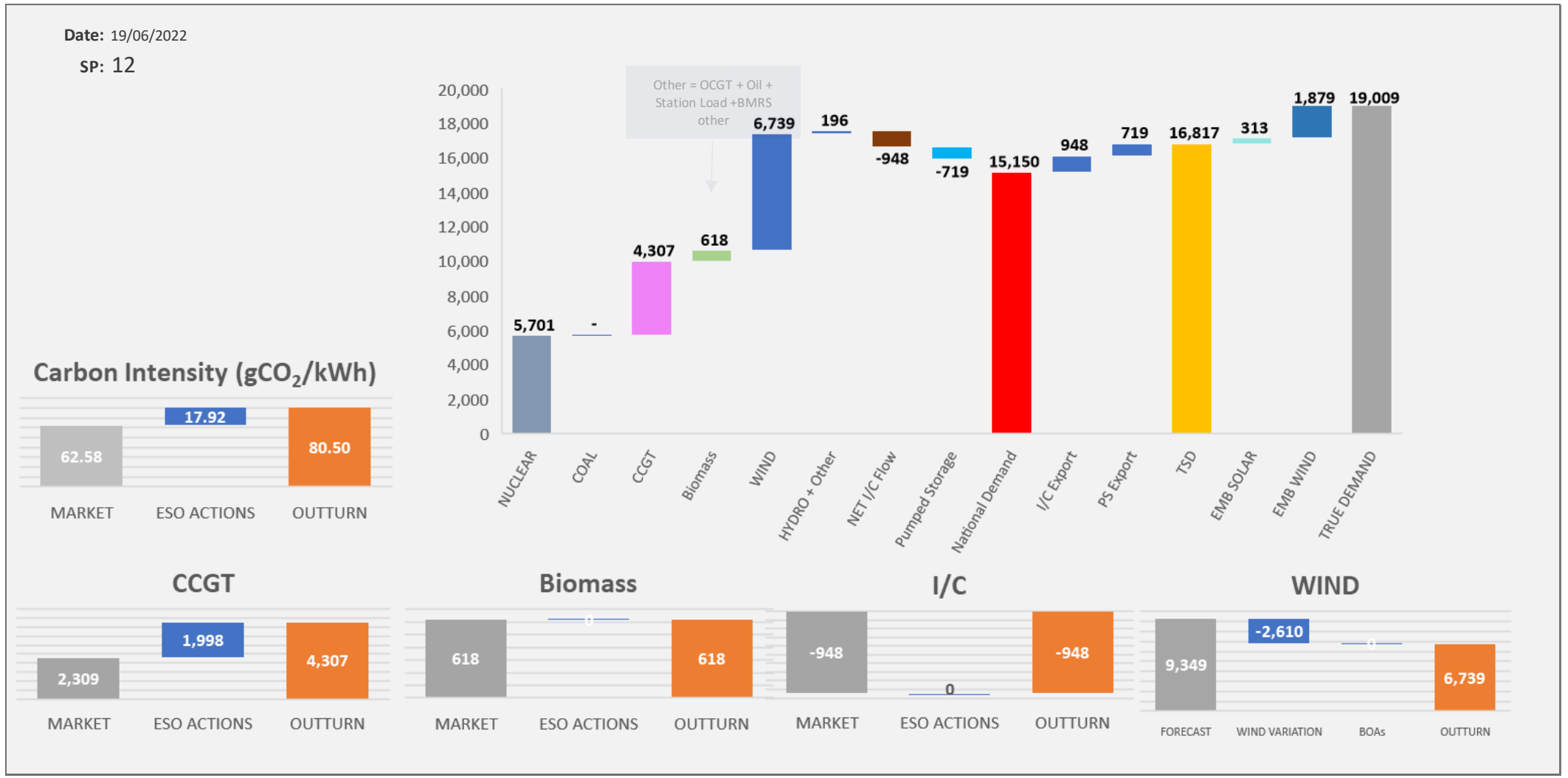
Date: 16/06/2022

SP: 40



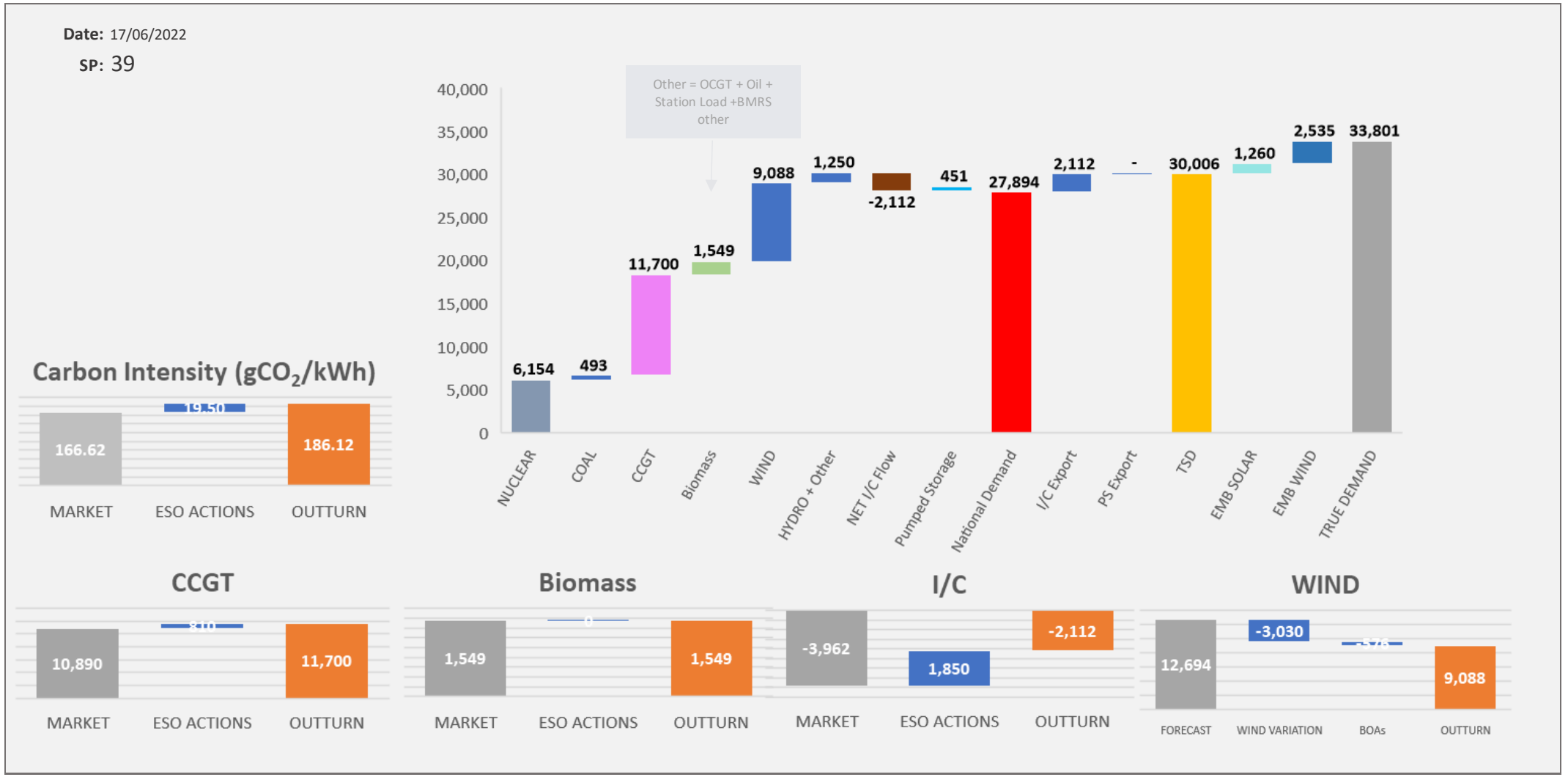
Carbon Intensity data on data portal: https://data.nationalgrideso.com/carbon-intensity1/carbon-intensity-of-balancing-actions

ESO Actions | Sunday 19 June - Minimum



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

ESO Actions | Friday 17 June - Highest SP Spend ~£0.6m



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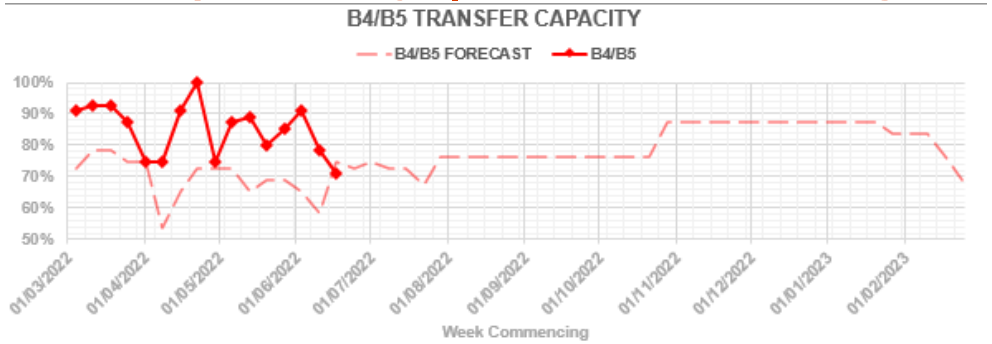
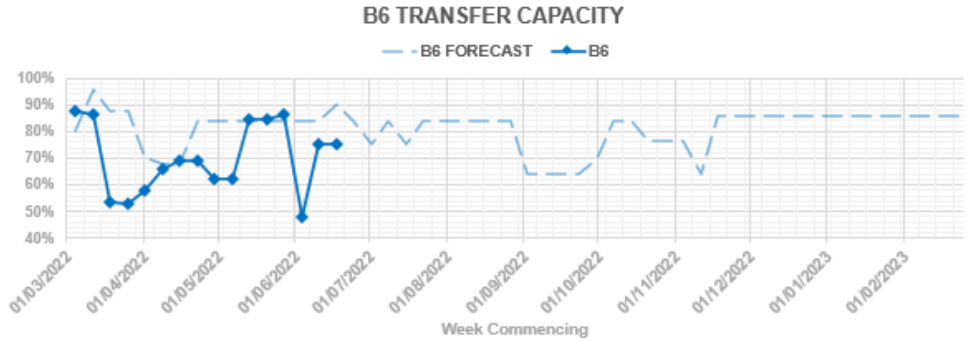
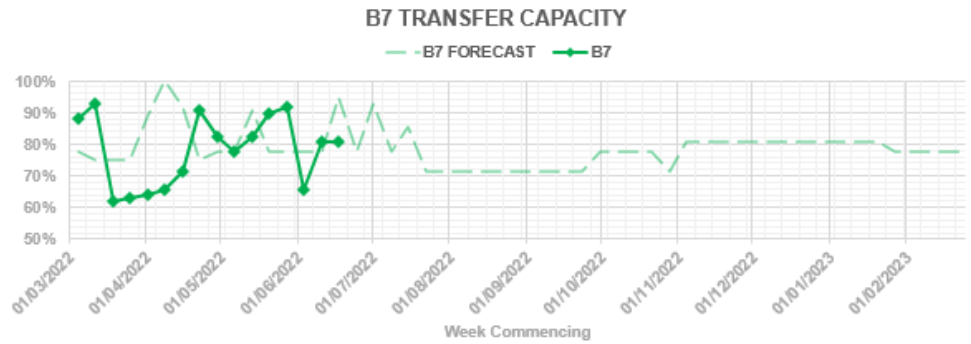
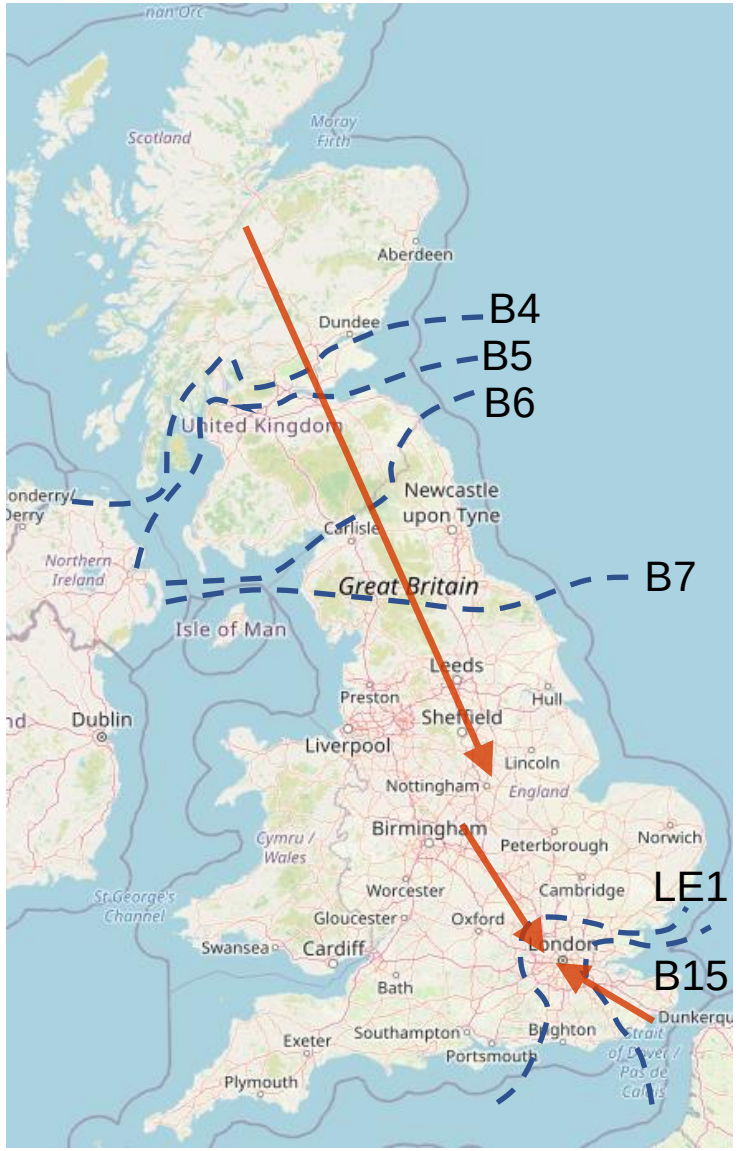
Transparency | Network Congestion





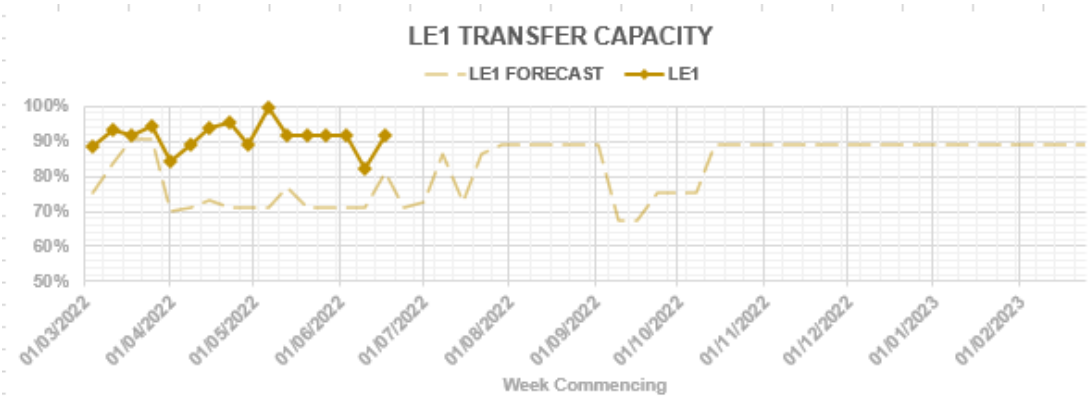


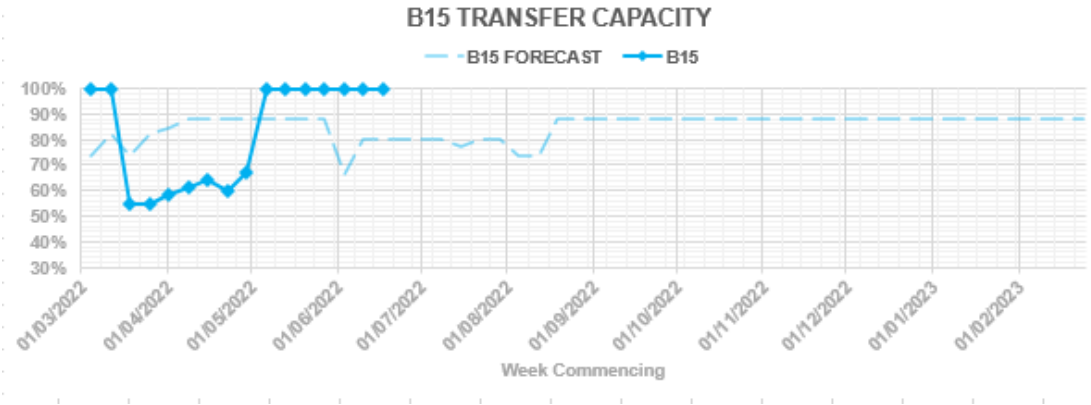
Boundary	Max. Capacity (MW)
B4/B5	2750
B6	5600
B7	8400
LE1	7000
B15	7500



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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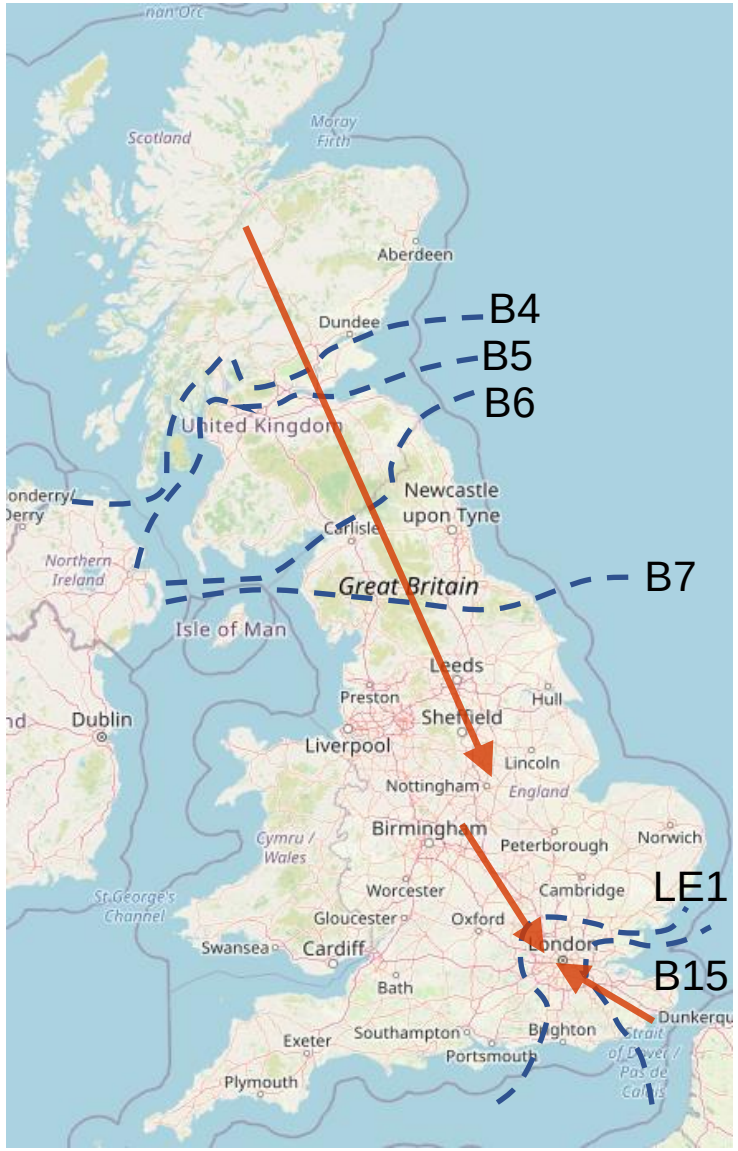

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ESO user research

Replatforming the ESO website with enhanced capabilities

Integrating the data portal capability with wider digital estate

Launching a data catalogue and triage process

Transforming the overall experience of doing business with the ESO

We are transforming the digital experience of doing business with the ESO

User requirements are a critical input into this work

We are looking for interested parties to take part in user research interviews on an ongoing basis

Interested parties contact: box.OpenData.ESO@nationalgrideso.com

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

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