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

ESO Operational Transparency Forum

07 September 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

System Events
Demand review
Costs for last week
Constraints
Questions from last week

Sign posts:

Demand Flexibility Service webinar

Electricity System Restoration Competitive Procurement Webinar

ESO's Markets Forum

Future deep dive/ response topics

Upcoming soon:
ESO Trading on Interconnectors - 14th September.

Items we have taken away and will come back to this forum on in the future
REMIT obligations on ESO

Feedback welcomed on our proposed deep dive topics

System Events

On 5th September At 06:45 hours an interconnector tripped whilst exporting 1GW. The frequency increased to 50.25Hz and returned to operational limits within 4 minutes. The interconnector returned to service at 19:10 hours with a capability of 500MW.

Demand Flexibility Service

- On 1st September we launched a consultation on a new Demand Flexibility Service. The full consultation on terms and conditions for the service can be found on our website EBR Article 18 Demand Flexibility Terms and Conditions | National Grid ESO
- On Monday we hosted a webinar outlining the details of the service so **we will not be discussing the details on this call and will take any questions on this topic away.**
- An industry open event will take place on Tuesday13th September. To register your interest in attending please email DemandFlexibility@nationalgrideso.com
- A recording of Monday's webinar along with the slides and a frequently asked questions document will be available on the National Grid ESO website https://www.nationalgrideso.com/industry-information/balancing-services/demand-flexibility
- All formal responses to the consultation must be submitted by emailing the proforma to DemandFlexibility@nationalgrideso.com by the 3rd October 2022 when the consultation formally closes
- The consultation will be reviewed by Ofgem and once approved all details will be published on the National Grid ESO website https://www.nationalgrideso.com/industry-information/balancing-services/demand-flexibility

Throughout the consultation we'll be offering opportunities for you to speak to our Demand Flexibility Service team. If you would like to be included on our mailing list, please email DemandFlexibility@nationalgrideso.com

Electricity System Restoration Competitive Procurement Webinar
15th September 2022
Northern region tenders

The Northern tender for restoration services includes DNO licensed areas 13 (Merseyside, Cheshire, North Wales & North Shropshire), 15 (North East England), 16 (North West England), 17 (North Scotland), 18 (Central & Southern Scotland), 23 (Yorkshire) will be launching in October 2022.

Our stakeholder webinar on 15th September 2022 at 10:00-11:00 am will provide an overview of the tender timescales, technical requirements, the process through to service go-live and what's different this time round with the ESR procurement. We welcome all technology types to take part in the restoration tenders. This tender will also include Distributed ReStart services to supplement any full service provisions for the Northern Region.

Please register your details here and we will send you a placeholder for the session. We look forward to seeing you on 15th September 2022.

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ESO's Markets Forum on 28th September will include the OTF

We welcome the opportunity to invite you to our upcoming Markets Forum event. This hybrid event is being held in London and will also be streamed online.

The day will be structured along three themes:

- **Short term priorities, which will incorporate the Operational Transparency Forum agenda (same time as usual @11:00)**
- Medium term priorities
- Long term priorities

The OTF will still run as usual on Microsoft Teams for those not attending the Markets Forum.

If you have any questions or feedback from previous Market Forum events, please email box.market.dev@nationalgrideso.com

Key information

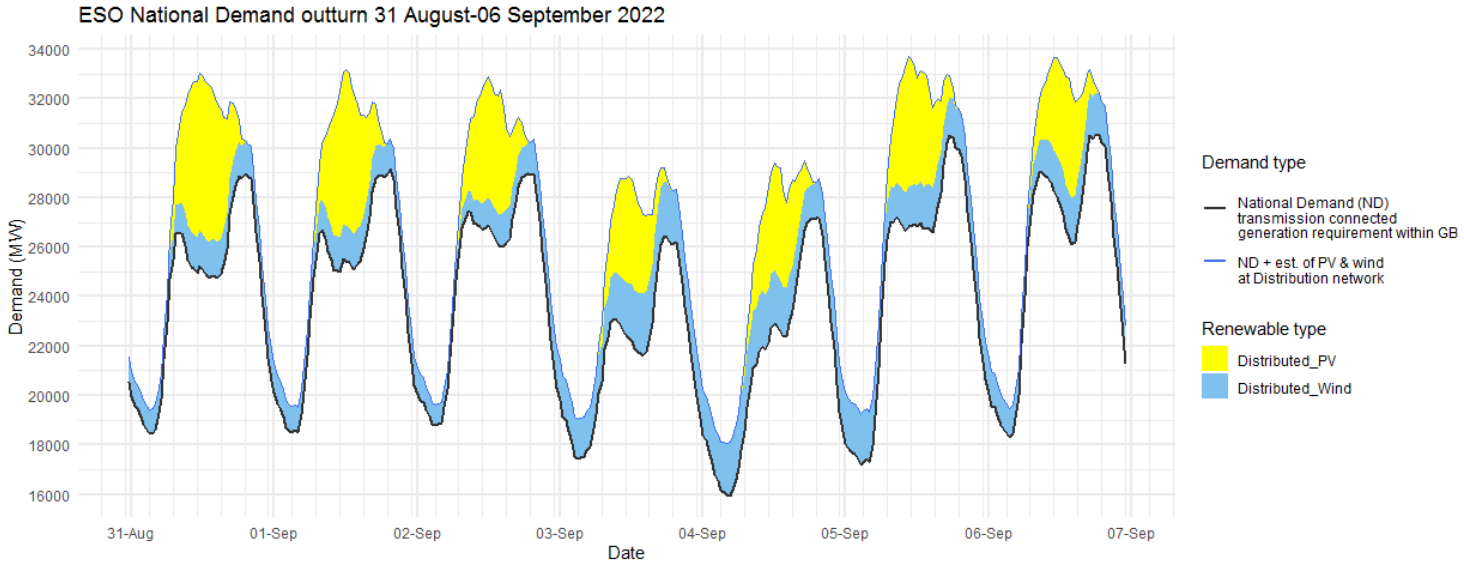
Date: 28th September

Venue: etc.venues 133 Houndsditch, Liverpool Street, London, EC3A 7BX

Time:
9:15-10:00: arrival
10:00-17:00: event
17:00-18:30: networking

Sign up:

Demand | Last week demand out-turn



		FORECAST (Wed 31 Aug)		OUTTURN	
Date	Forecasting Point	National Demand (GW)	Dist. wind (GW)	National Demand (GW)	Dist. wind (GW)
31 Aug 2022	Evening Peak	28.9	1.3	28.9	1.4
01 Sep 2022	Overnight Min	18.5	1.0	18.5	1.1
01 Sep 2022	Evening Peak	29.9	1.1	28.9	1.2
02 Sep 2022	Overnight Min	18.6	0.8	18.8	0.8
02 Sep 2022	Evening Peak	28.2	1.3	29.0	1.2
03 Sep 2022	Overnight Min	17.0	1.6	17.4	1.6
03 Sep 2022	Evening Peak	24.4	2.5	26.4	2.2
04 Sep 2022	Overnight Min	15.1	2.4	15.9	2.1
04 Sep 2022	Evening Peak	25.4	2.4	27.1	1.4
05 Sep 2022	Overnight Min	16.5	1.8	17.2	2.1
05 Sep 2022	Evening Peak	29.1	2.4	30.5	1.6
06 Sep 2022	Overnight Min	17.5	1.9	18.3	1.2
06 Sep 2022	Evening Peak	29.2	2.0	30.6	1.7

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

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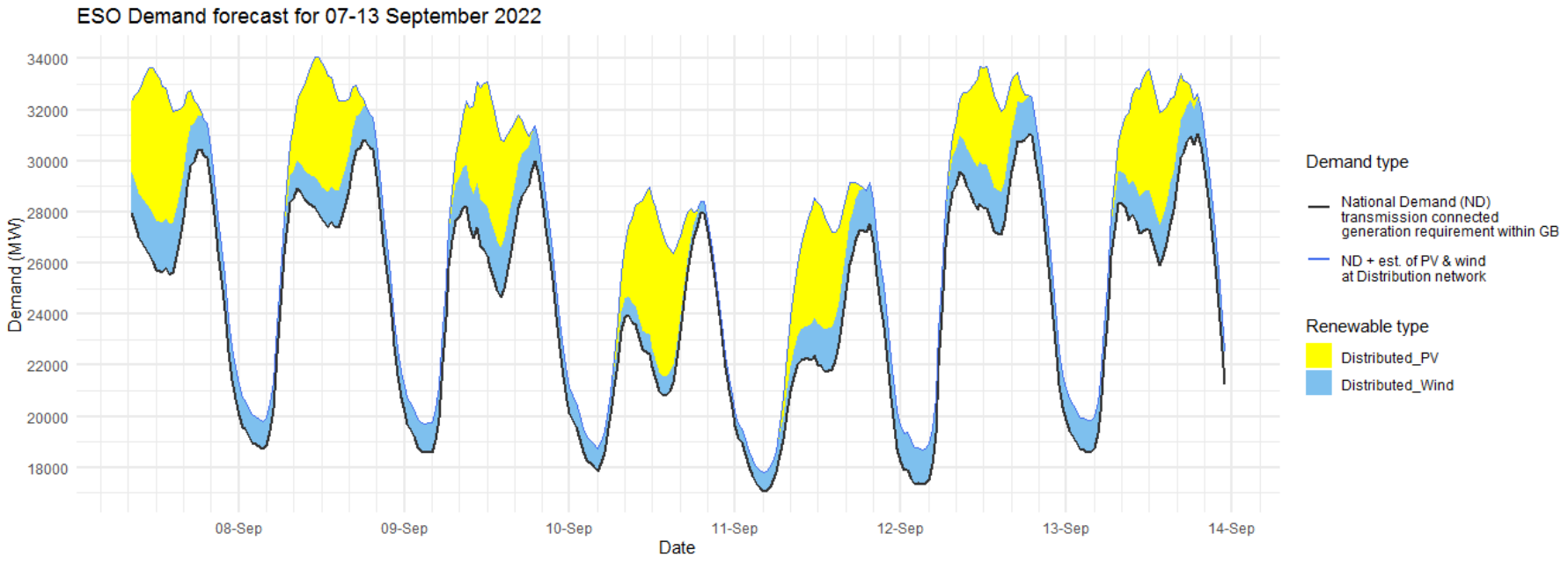
Demand | Week Ahead



		FORECAST (Wed 07	
Date	Forecasting Point	National Demand (GW)	Dist. wind (GW)
07 Sep 2022	Evening Peak	30.4	1.4
08 Sep 2022	Overnight Min	18.7	1.1
08 Sep 2022	Evening Peak	30.8	1.3
09 Sep 2022	Overnight Min	18.6	1.1
09 Sep 2022	Evening Peak	29.6	1.4
10 Sep 2022	Overnight Min	17.9	0.9
10 Sep 2022	Evening Peak	27.4	0.5
11 Sep 2022	Overnight Min	17.1	0.7
11 Sep 2022	Evening Peak	27.3	1.6
12 Sep 2022	Overnight Min	17.3	1.4
12 Sep 2022	Evening Peak	31.0	1.5
13 Sep 2022	Overnight Min	18.6	1.2
13 Sep 2022	Evening Peak	31.0	1.4

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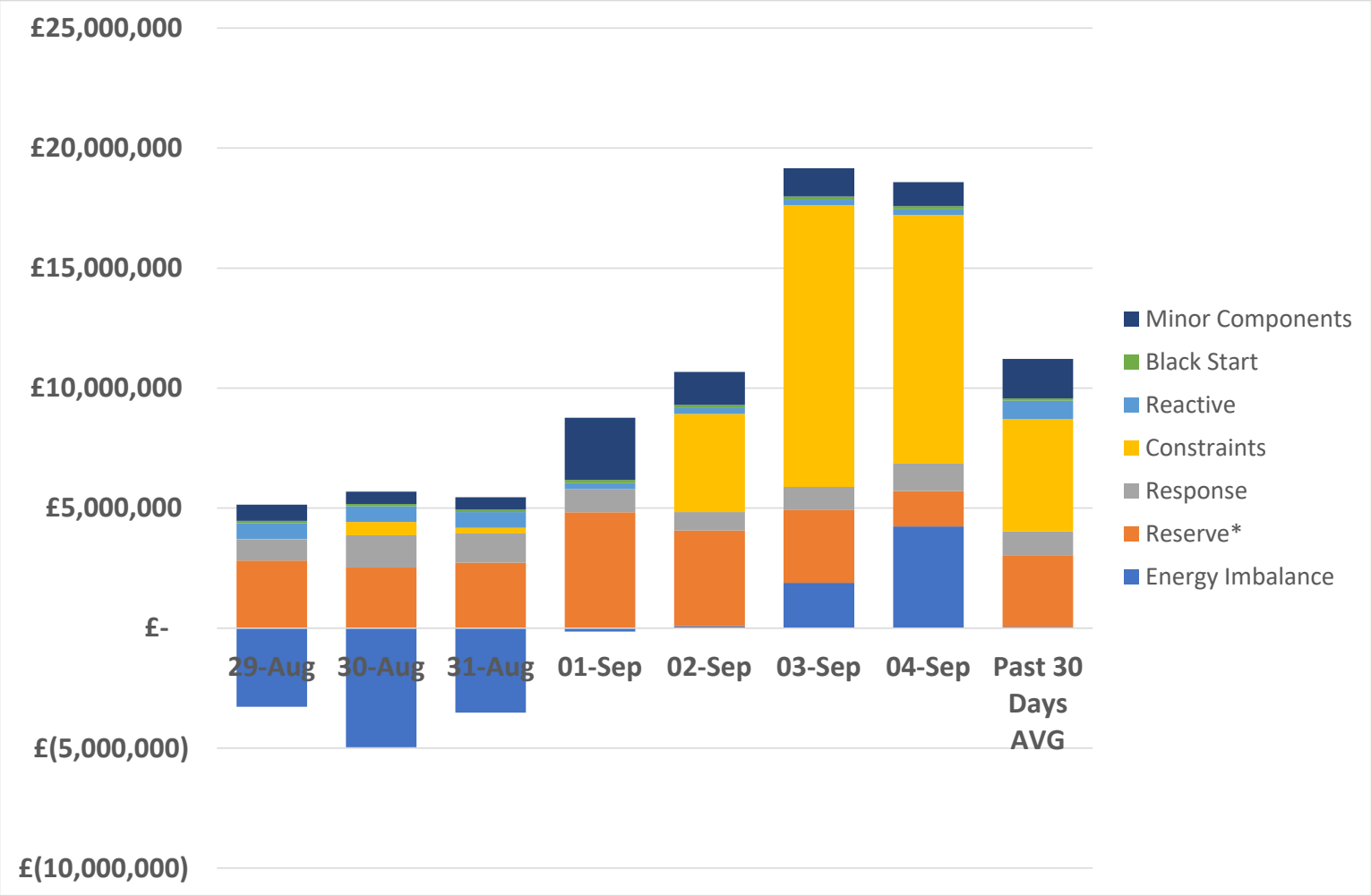
ESO Actions | Category costs breakdown for the last week

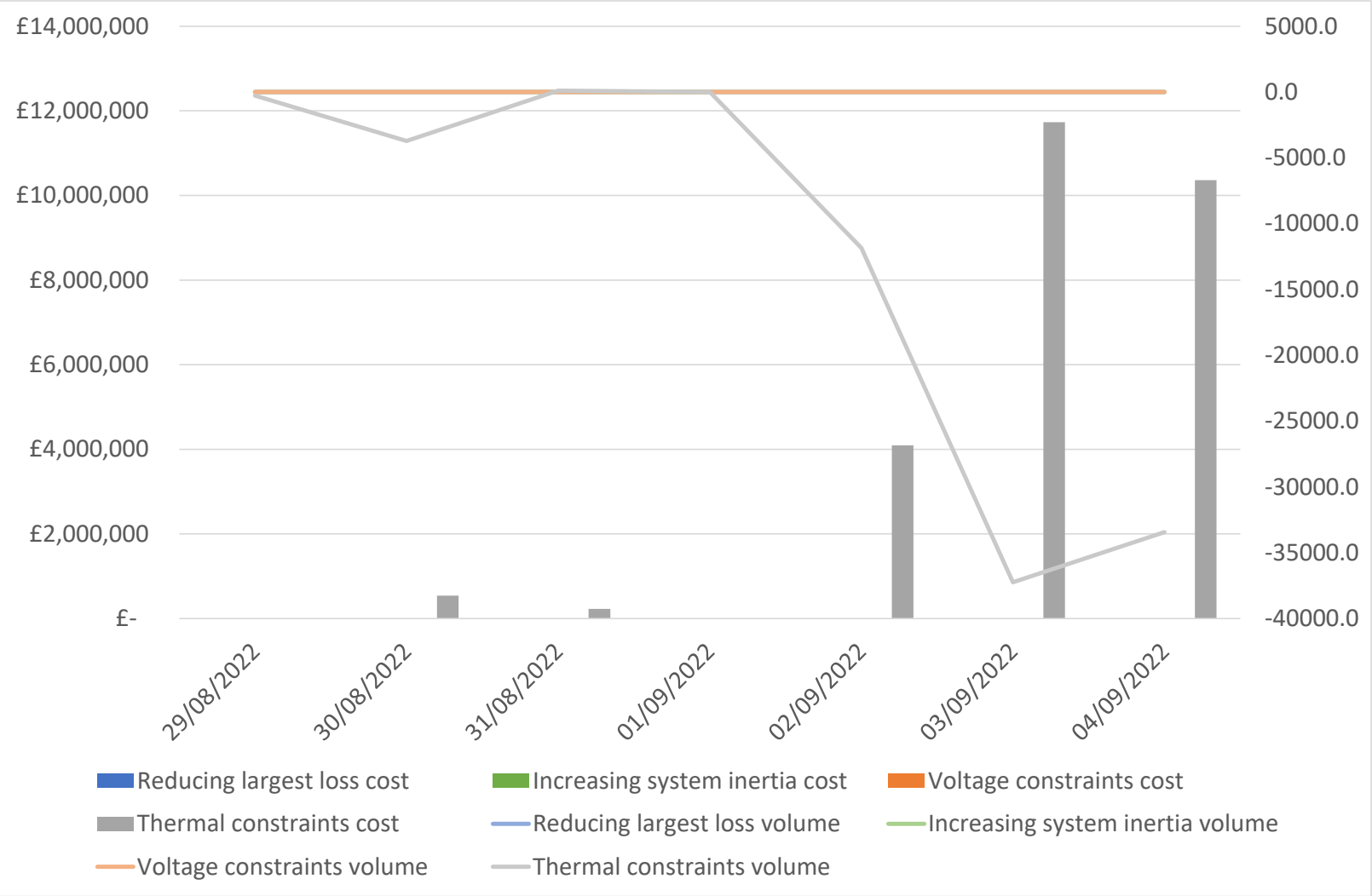


Date	Total (£m)
29/08/2022	1.9
30/08/2022	0.7
31/08/2022	1.9
01/09/2022	8.6
02/09/2022	10.7
03/09/2022	19.2
04/09/2022	18.6
Weekly Total	61.6

Reserve was the key cost component on the first part of the week. Constraint costs were predominant costs over the weekend.

Please note that all the categories are presented and explained in the MBSS.

ESO Actions | Constraint Cost Breakdown



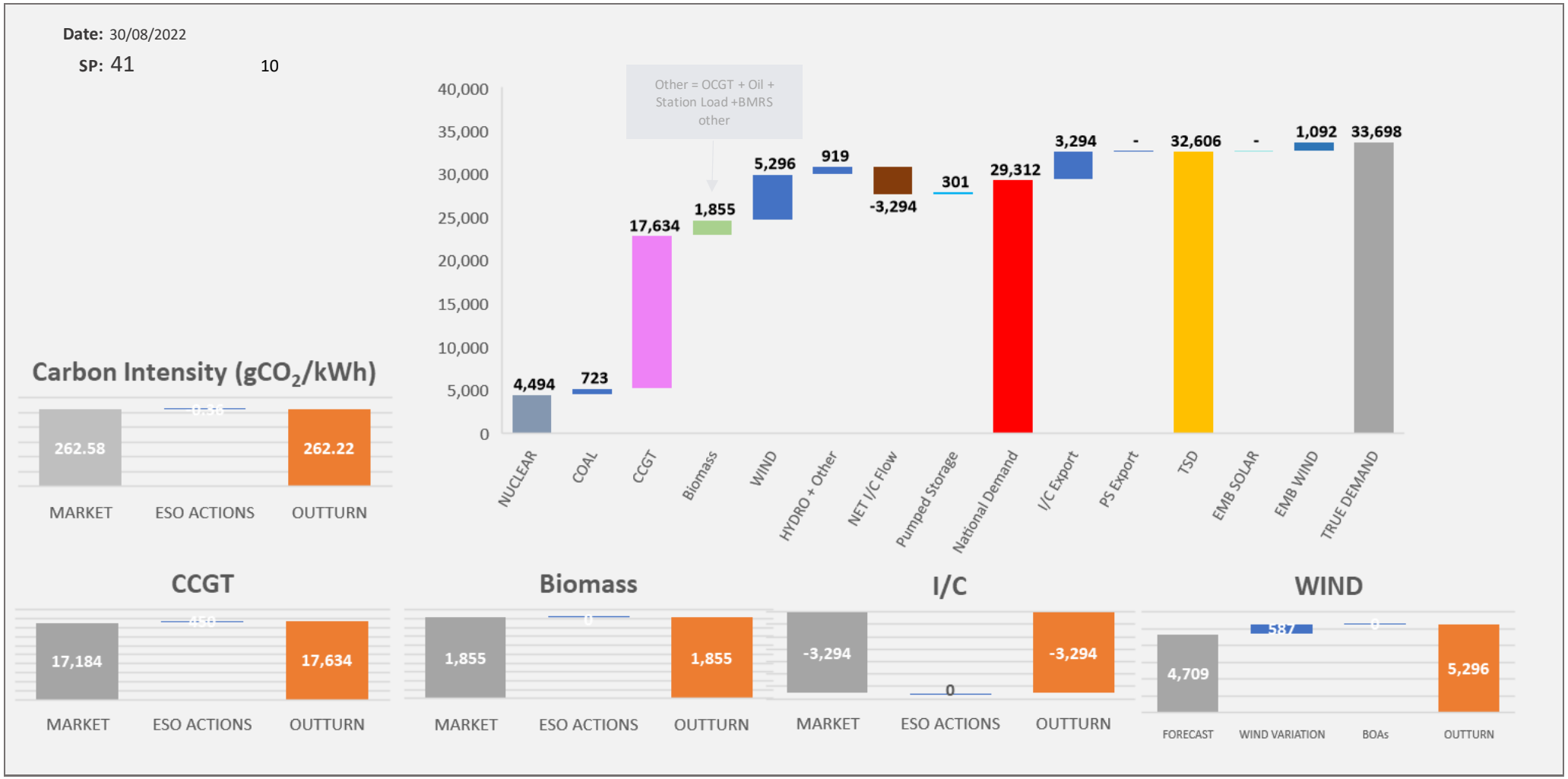
Thermal – network congestion
Actions required to manage Thermal Constraints all days except Monday and Thursday

Voltage
No Intervention to manage the voltage levels.

Managing largest loss for RoCoF
No Intervention required to manage largest loss

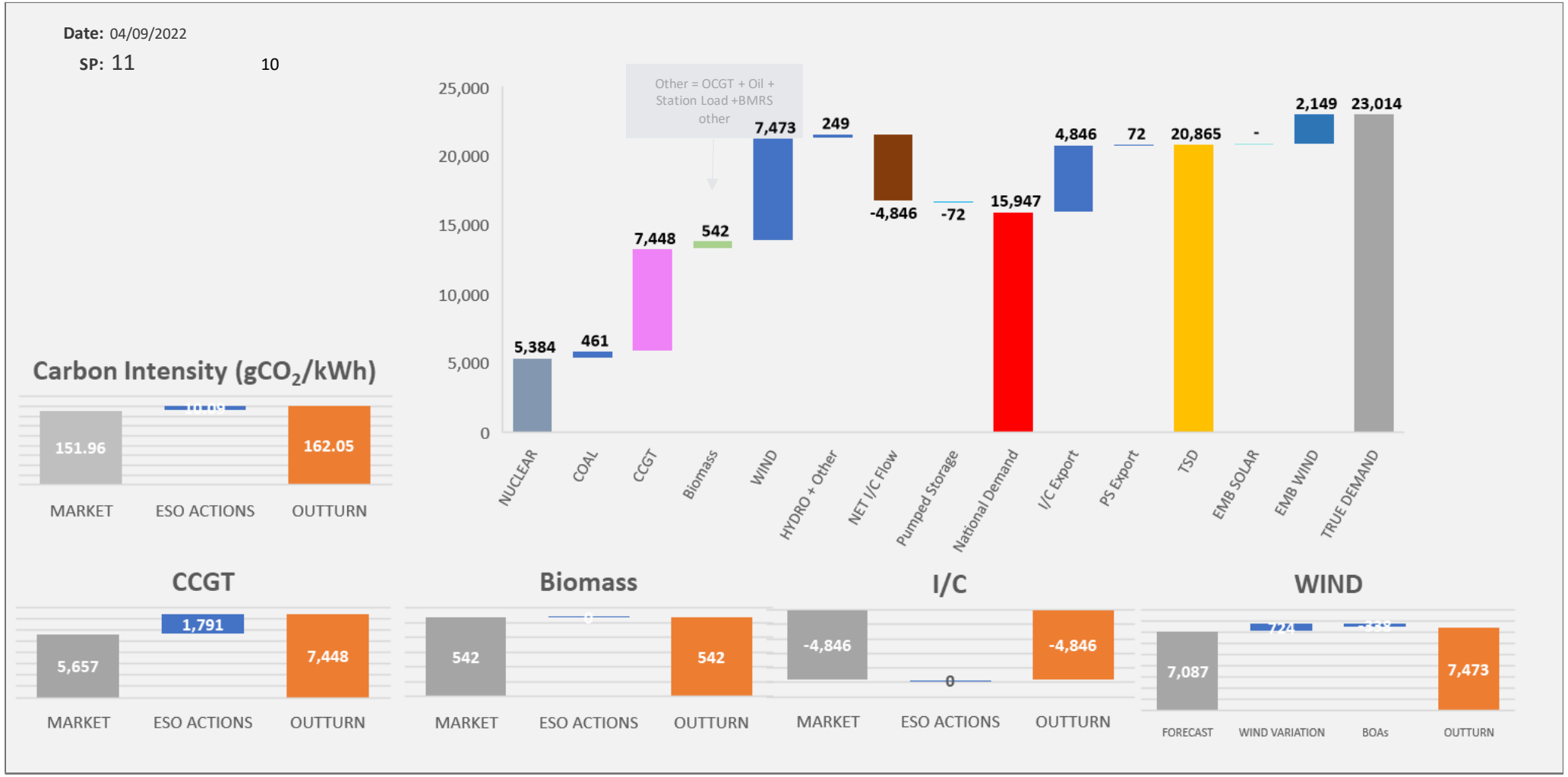
Increasing inertia
No Intervention required to manage Inertia

ESO Actions | Tuesday 30 August – Peak Demand – SP spend ~£121k



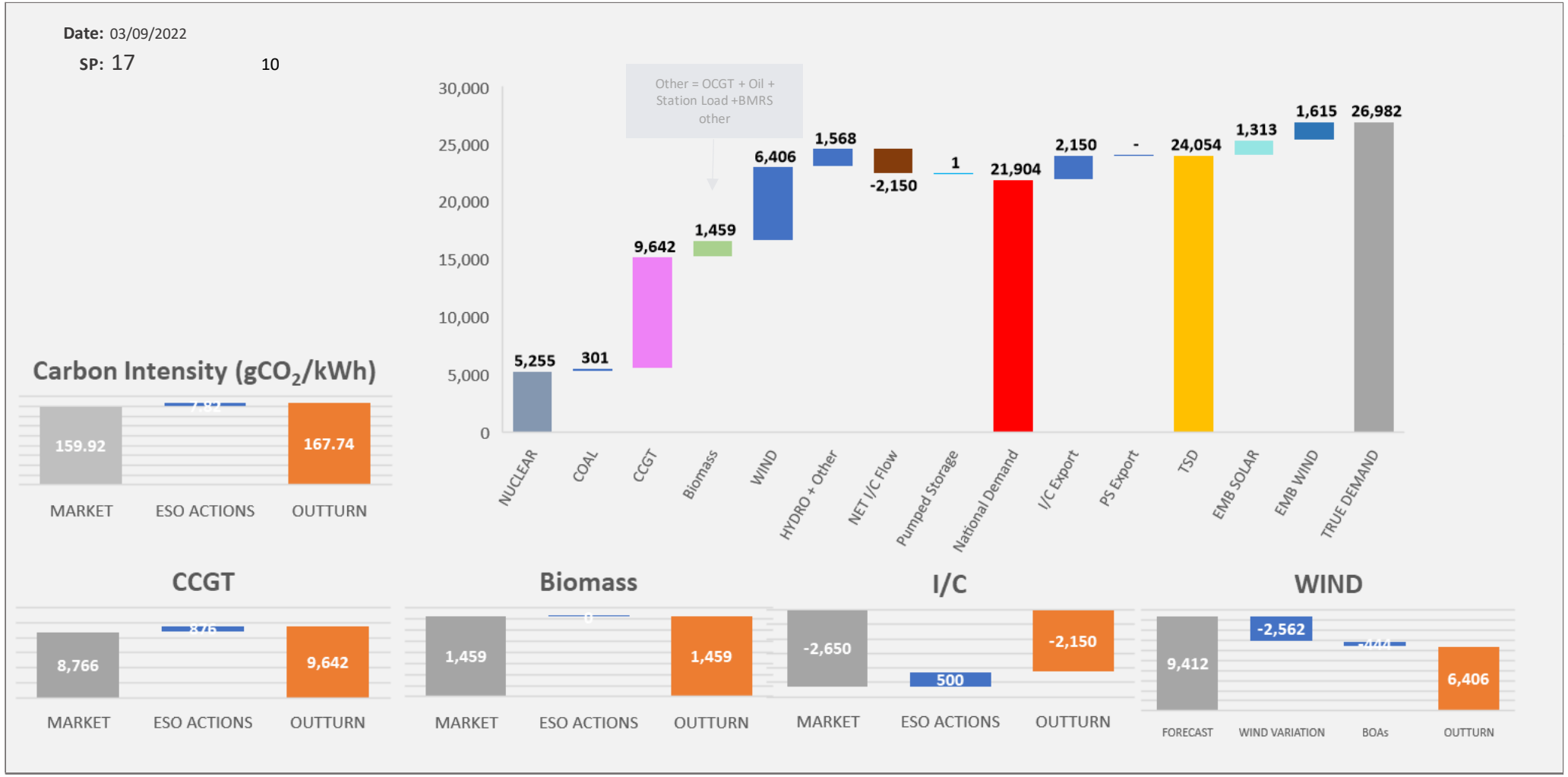
Carbon Intensity data on data portal: https://data.nationalgrideso.com/carbon-intensity1/carbon-intensity-of-balancing-actions

ESO Actions | Sunday 04 September – Minimum Demand – SP Spend ~£242k



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

ESO Actions | Saturday 03 September – Highest SP Spend ~£745k



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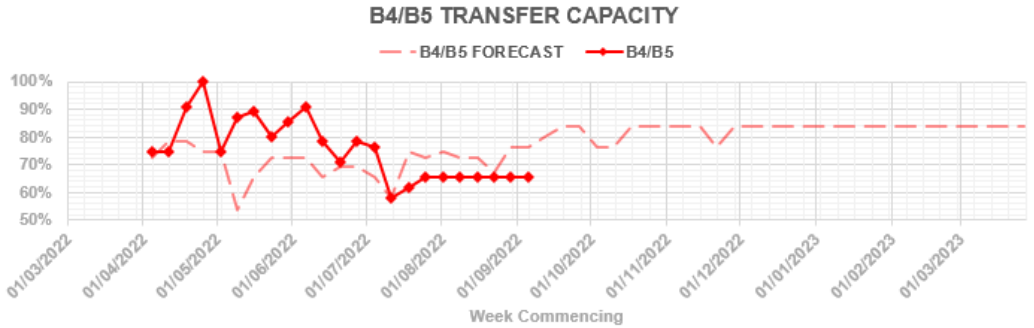
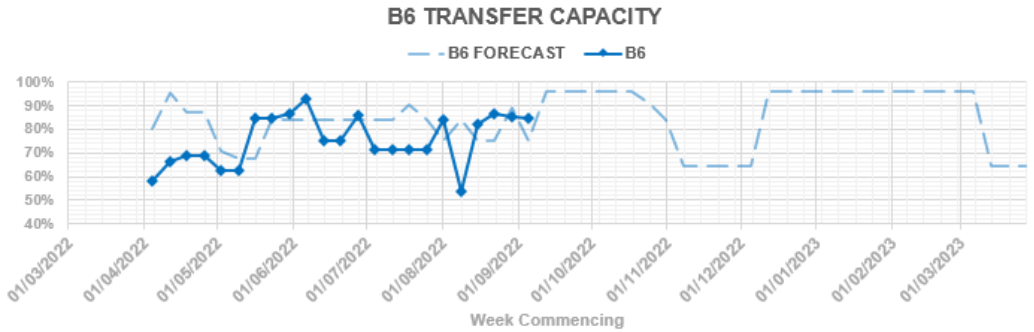
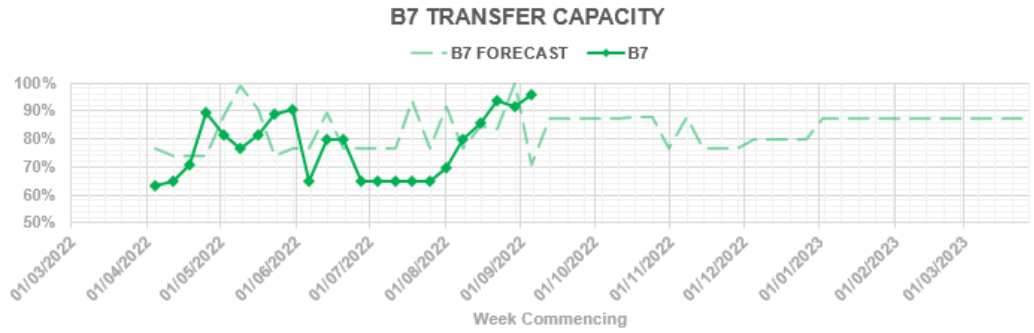
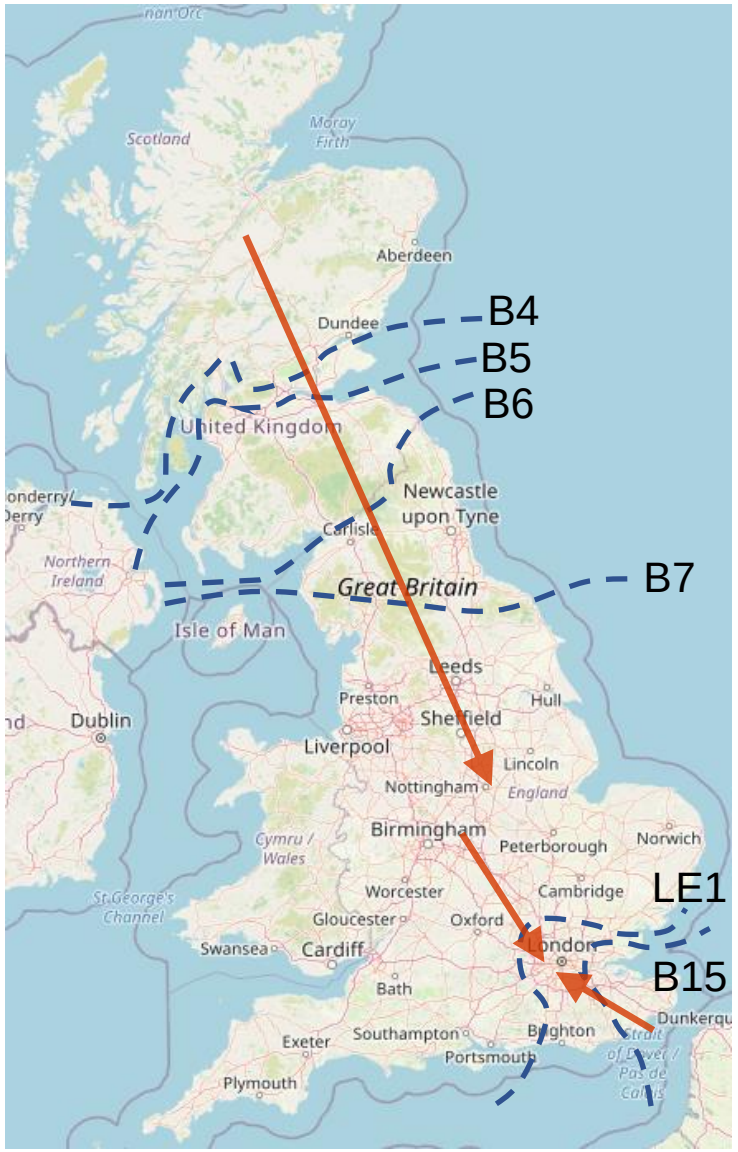
Transparency | Network Congestion





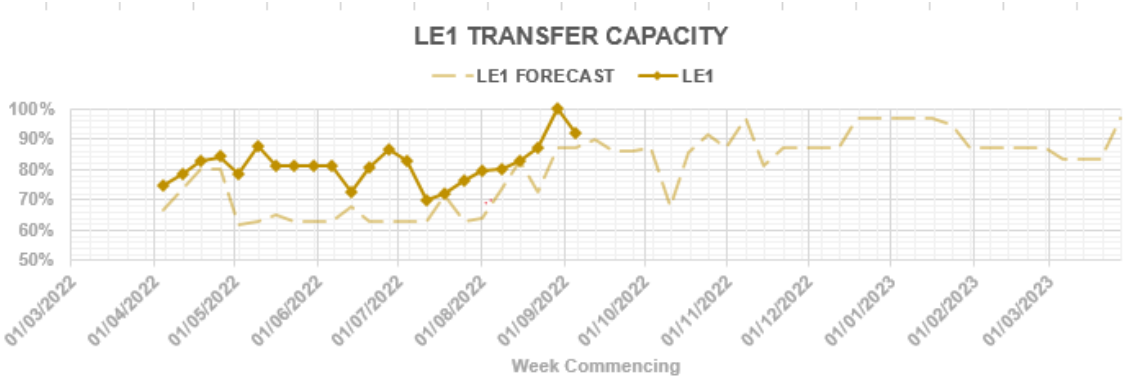


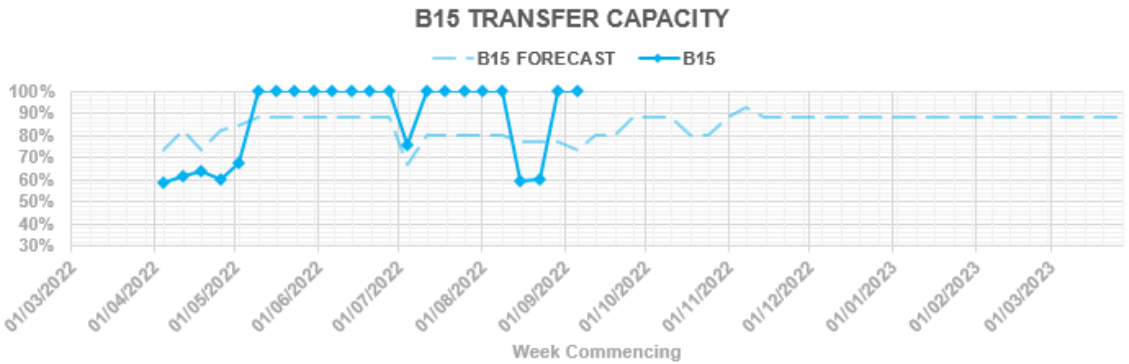
Boundary	Max. Capacity (MW)
B4/B5	2250
B6	4850
B7	7950
LE1	8250
B15	4500



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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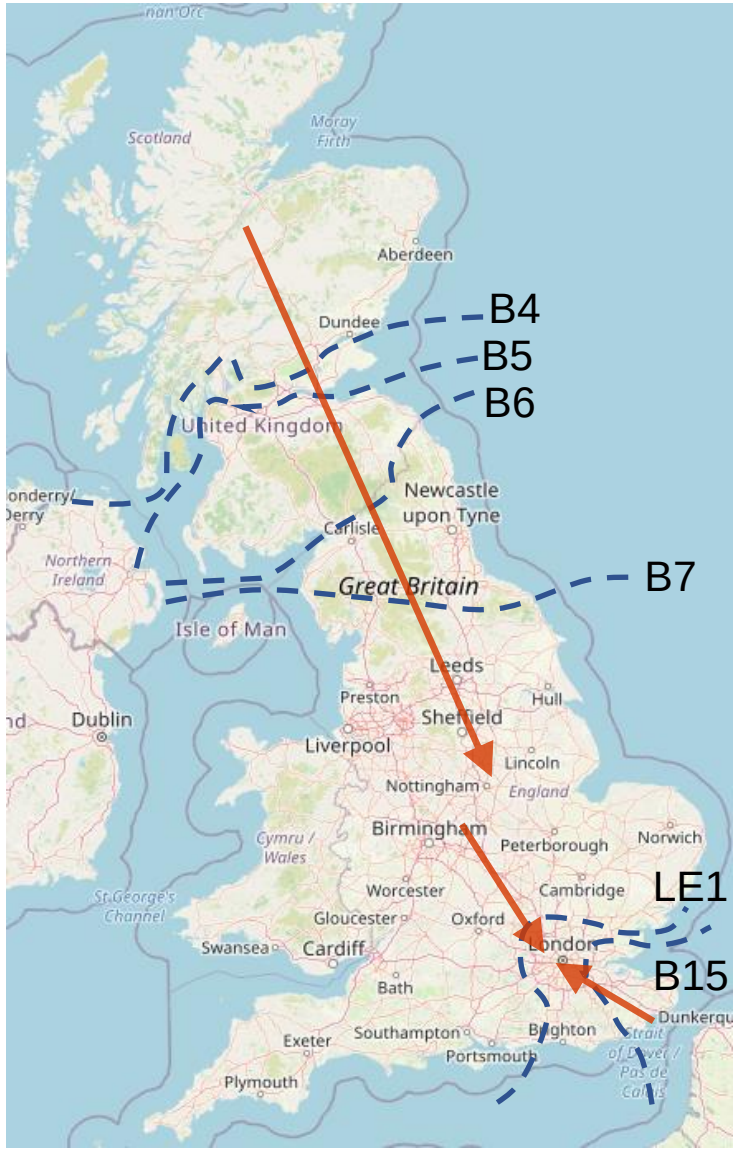

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Questions outstanding from previous weeks

Q: On REMA and the pool system being proposed. What guarantees are there that NG will respect Firm TEC owners. If NG can operate the market better than the market in dispatch does it suggest that NG wont have to take balancing actions and will instead just switch people off behind constraints as suits?

A: Under nodal pricing and zonal pricing, market clearing prices behind a constraint would be lower to reflect that the generation could not be transported across the constraint boundary. This clearing process, rather than the dispatch instruction, disincentivises the generator from dispatching.

Q: If you value DC more highly than DR/DM should you simply not pay more rather than artificially suppress competitor products? DC isn't undersubscribed so are you 'encouraging' the clearing price down?

A: The auctions for DC, DR and DM are run in parallel, providers need to decide in advance in which market they participate, we are not currently offsetting any other services with DR/DM and as such they are currently not relied upon to manage the system. Therefore, at times where the DC forecast may exceed our expectations of participation, it is important that we encourage volumes to be in the markets of most value to managing the system.

Q: Is the trend of capacity forecast gap growing or shrinking week on week? Do you publish weekly figures on this?

A: As a prudent system operator, we undertake various forecasting activities on a short, medium and long term basis. Our data shows that there is sufficient generation to meet demand and we are well within reliability standards. Can you clarify what you mean by "trend of capacity gap growing"? Where are you taking your figures from?

Questions outstanding from previous weeks

Q: Would scheduled rolling blackouts trigger CM obligations on generators?

A: Potentially still yes if there was a CMN and an SSE. Capacity Market Agreement holders are still obliged to deliver their "Adjusted Load Following Capacity Obligation" (ALFCO) during a System Stress Event. These obligations are triggered when a Capacity Market Notice is issued at least four hours before a System Stress Event.

Q: What impacts do you expect to the grid if the EU moves to cap Natural Gas prices, potentially leading to gas rationing/triage in those markets?

A: We are continuing to monitor developments across Europe and incorporate any new market information or intelligence in our modelling. Clearly, we are aware that the EU are discussing potential measures, and we are unable to speculate on the potential impact of these measures without understanding the full details.

Q: Why are some actions in the 'All BOAs' dataset flagged as '<< Missing NGC ID >>'? Is there additional information available on these actions and if so, where and if not can this be provided?

A: This is due to a delay for new units getting the NGC BMU IDs in the data. Thanks for your feedback and we will ask the registration team to update the database

Questions outstanding we are still working on

Q: The Irish ICs over July (Moyle basically all July, East-West 10th July) generated to a nomination profile completely away from their PNs. This is a semi-regular occurrence since ISEM. After several years why are PNs still not submitted correctly for Irish ICs?

Q: How many sites still need LoM changes? And what is the total MW capacity of these?

Q: Ref Q @ top of slide 25; could someone please explain exactly what “a requirement from ESO” where “such requirement being under ESEC” per footnote 3 of 2022 Direction is? Also, means ESEC has to be activated 1st before requirement for coal applies - otherwise this Direction does not legally apply.

Q: "Ensuring a minimum level of generation" just stated means that you understand that real inertia is needed. So why do you equate it with synthetic inertia in your contracts, Pathfinders, forecasts, plans and other actions?

Questions outstanding we are still working on

Q: Is ESO seeing significant ongoing issues with coincident tripping as covered by GC0151: Grid Code Compliance with Fault Ride Through, or is the situation improving?

Q: Can you provide clarity on whether SO-SO actions are published as BSAD? It was previously stated that SO-SO actions with SEMO do not show up as BSAD but there has been BSAD on trades across East-West before. What about emergency assistance requested from/by other TSOs?

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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