

Introduction | Sli.do code #OTF

Please visit <u>www.sli.do</u> 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

BP2 Consultation Update

Questions outstanding from previous weeks

Q: Have you renewed or tendered for "Reactive Power Mersey" after the last one run out on 31st March 2022?

A: To date the Pathfinders we have run for voltage requirements are the Mersey long and short term and the Pennines pathfinder. Within these contracts there is an option to extend on a rolling month by month basis to cater for any delays in pathfinder delivery.

Q: Is there an update on the legal assessment of whether the availability of transmission assets can be published?

A: We do not have an update to share yet. When we have something we are able to share more widely we will bring it to this forum.

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

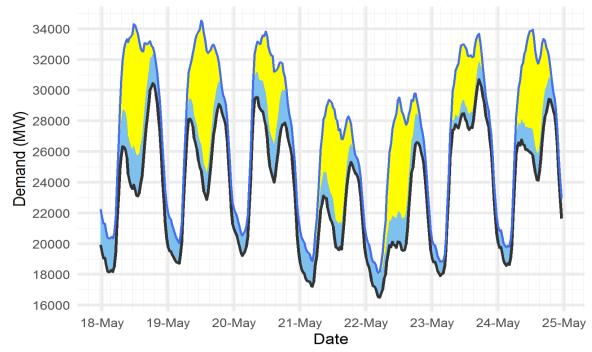
- In the current system, these quantities are neither 'National' nor 'Demand'
- We want to **engage with stakeholders** to explain what we are forecasting
- To explore what stakeholders would find most useful
- To discuss how forecasts interact with the market mechanisms, and what constraints it puts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





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 <u>does not include</u> 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 <u>ESO Data Portal</u> in the following data sets: Historic Demand Data & Demand Data Update

Demand type

- National Demand (ND) transmission connected generation requirement within GB
- ND + est. of PV & wind at Distribution network

Renewable type

Distributed_Wind

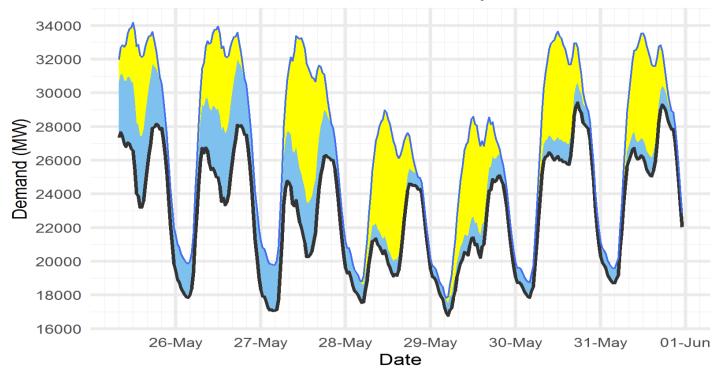
Distributed PV

			FORE	CAST (Wed 18	May)		OUTTURN	
	Date	Forecasting Point	National Demand (GW)	Dist. wind (GW)	Dist. PV (GW)	National Demand (GW)	Dist. wind (GW)	Dist. PV (GW)
	18 May 2022	Afternoon Min	23.5	2.6	8.0	23.1	2.7	7.9
	19 May 2022	Overnight Min	18.2	1.9	0.0	18.7	1.3	0.0
	19 May 2022	Afternoon Min	23.1	1.9	8.2	22.9	1.8	7.9
	20 May 2022	Overnight Min	19.1	1.1	0.0	19.2	1.3	0.0
	20 May 2022	Afternoon Min	25.4	2.0	4.0	24.0	2.5	4.7
/	21 May 2022	Overnight Min	17.0	1.9	0.1	17.2	1.6	0.0
	21 May 2022	Afternoon Min	19.3	2.3	6.2	19.6	1.7	6.1
	22 May 2022	Overnight Min	16.7	1.2	0.3	16.5	1.5	0.2
	22 May 2022	Afternoon Min	20.1	1.8	5.5	19.6	2.1	6.8
	23 May 2022	Overnight Min	17.6	1.1	0.0	17.9	0.9	0.0
	23 May 2022	Afternoon Min	25.4	1.7	5.4	27.4	1.0	3.8
	24 May 2022	Overnight Min	18.2	1.4	0.0	18.6	1.2	0.0
	24 May 2022	Afternoon Min	24.8	2.0	5.8	24.1	1.8	5.8

EODECAST (Mod 25 May)

Demand | Week Ahead

ESO Demand forecast for 25-31 May 2022



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

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Demand type

National Demand (ND)
 transmission connected
 generation requirement within GB

ND + est. of PV & wind at Distribution network

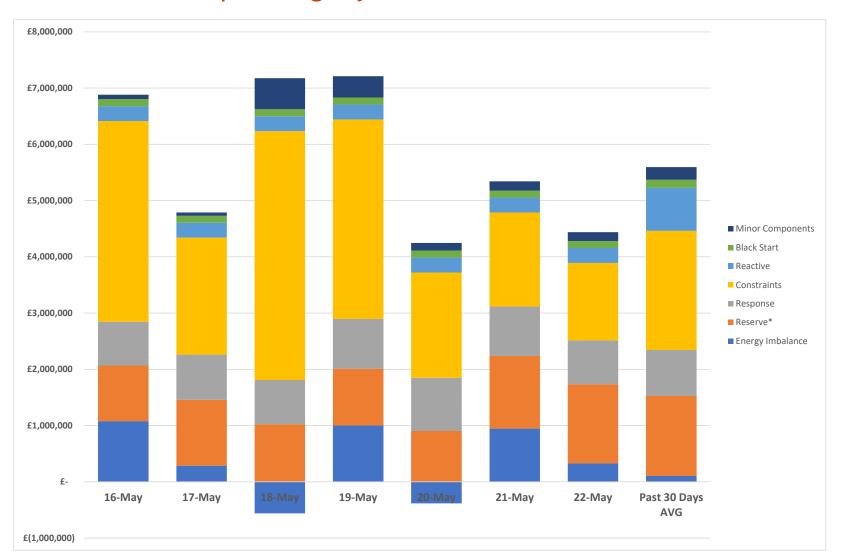
Renewable type

Distributed_Wind

Distributed PV

		FORECAST (Wed 25 May)					
Date	Forecasting Point	National Demand (GW)	Dist. wind (GW)	Dist. PV (GW)			
25 May 2022	Afternoon Min	23.2	4.3	4.7			
26 May 2022	Overnight Min	17.8	2.0	0.0			
26 May 2022	Afternoon Min	23.3	4.3	4.6			
27 May 2022	Overnight Min	17.1	2.7	0.0			
27 May 2022	Afternoon Min	20.3	3.2	8.0			
28 May 2022	Overnight Min	17.5	1.1	0.2			
28 May 2022	Afternoon Min	19.1	0.9	7.1			
29 May 2022	Overnight Min	16.8	0.8	0.3			
29 May 2022	Afternoon Min	20.2	1.3	5.3			
30 May 2022	Overnight Min	17.9	0.9	0.0			
30 May 2022	Afternoon Min	25.7	1.2	4.7			
31 May 2022	Overnight Min	18.7	0.9	0.0			
31 May 2022	Afternoon Min	25.1	1.1	5.5			

ESO Actions | Category costs breakdown for the last week



Date	Total (£m)
16/05/2022	6.9
17/05/2022	4.8
18/05/2022	6.6
19/05/2022	7.2
20/05/2022	3.9
21/05/2022	5.3
22/05/2022	4.4
Weekly Total	39.1

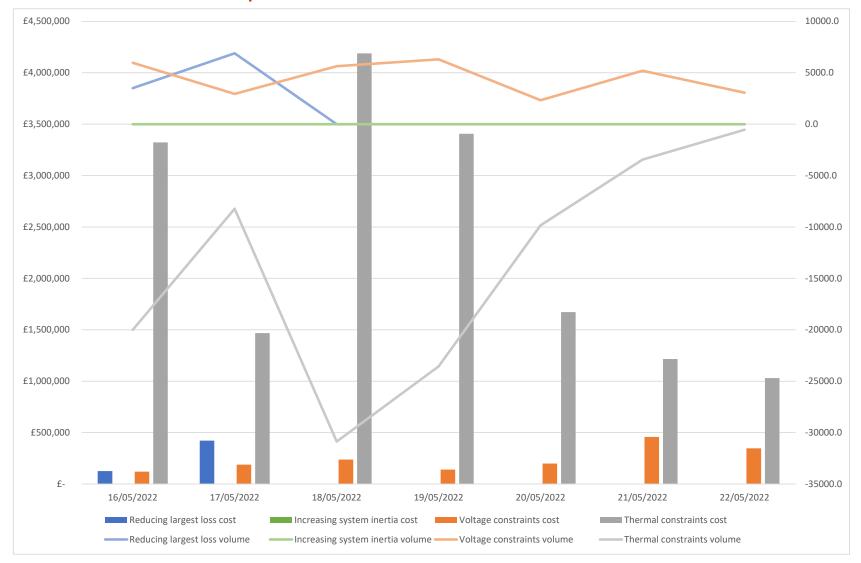
Key driver of costs was Constraints category

*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

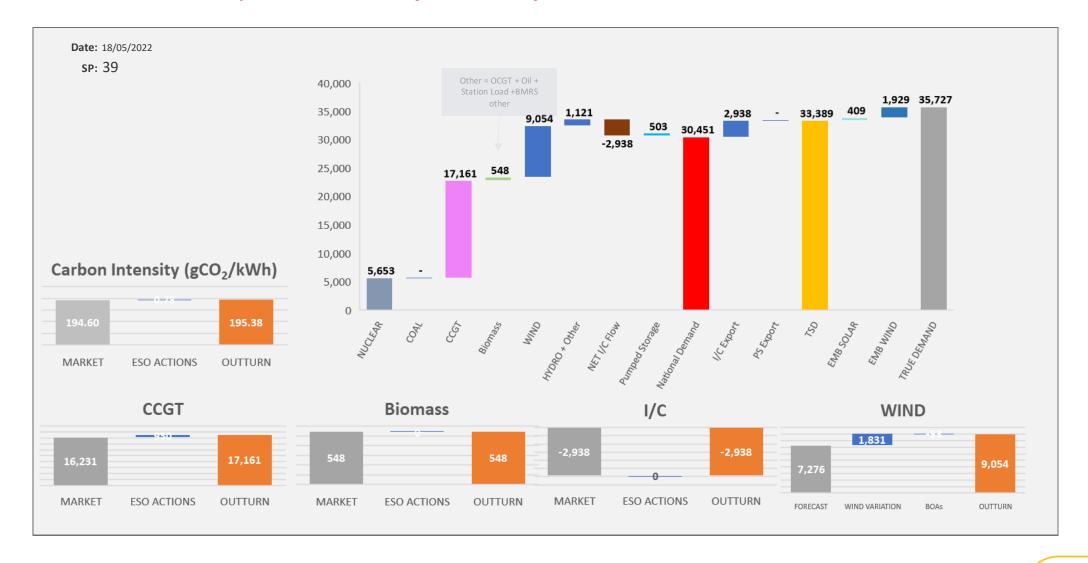
Actions taken to synchronise generation to meet voltage requirements were required throughout the week

Managing largest loss for RoCoF Intervention required to manage largest loss on Monday and Tuesday.

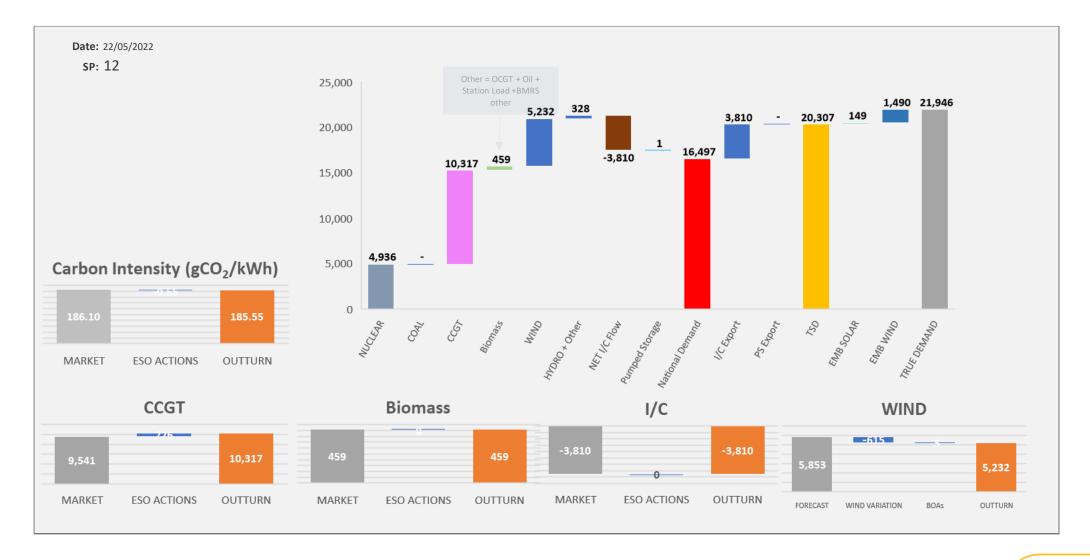
Increasing inertia No Intervention required:

No Intervention required to increase minimum inertia

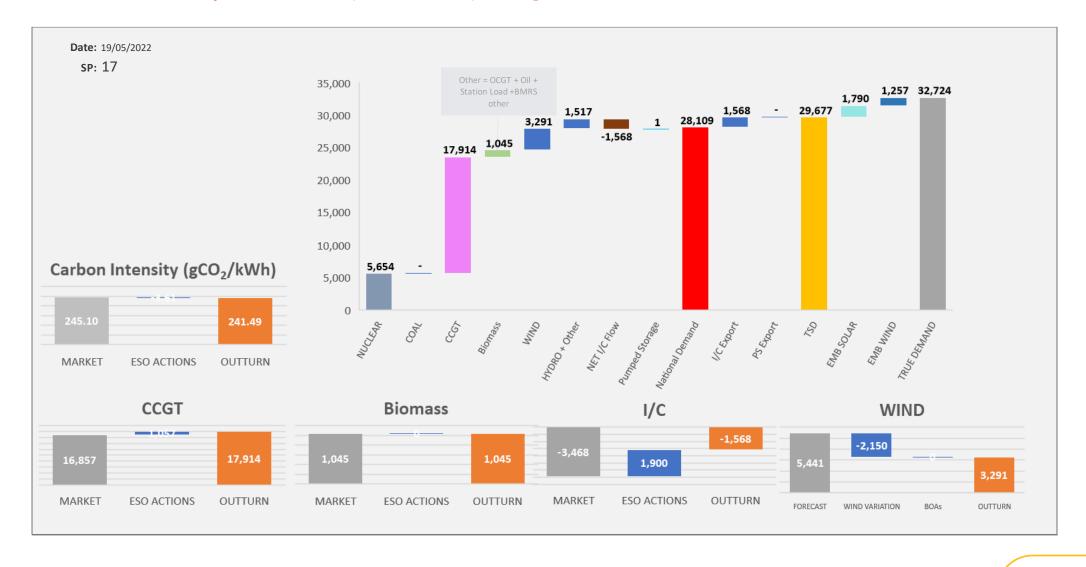
ESO Actions | Wednesday 18 May Peak



ESO Actions | Sunday 22 May Minimum

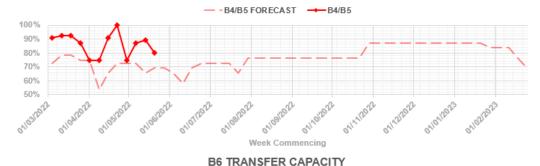


ESO Actions | Thursday 19 May Highest Spend ~£0.3m



Transparency | Network Congestion

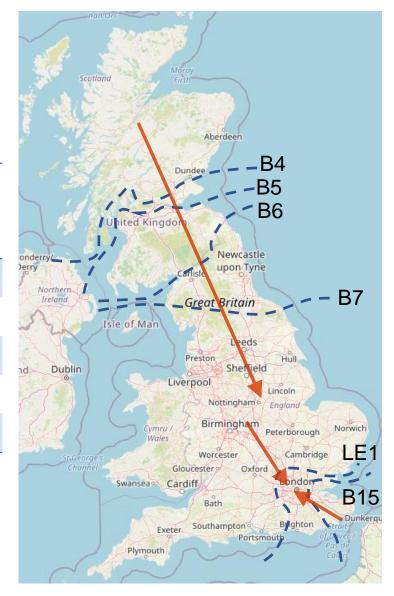




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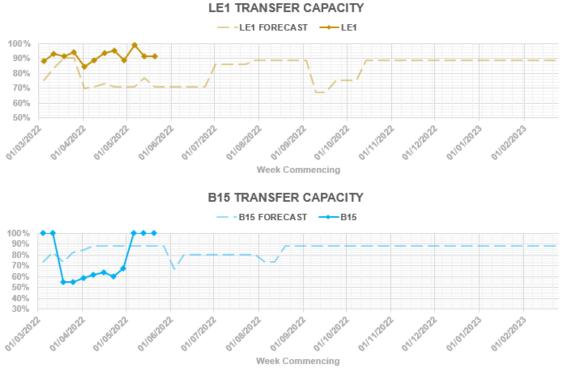
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					W	eek Comm	nencing					

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

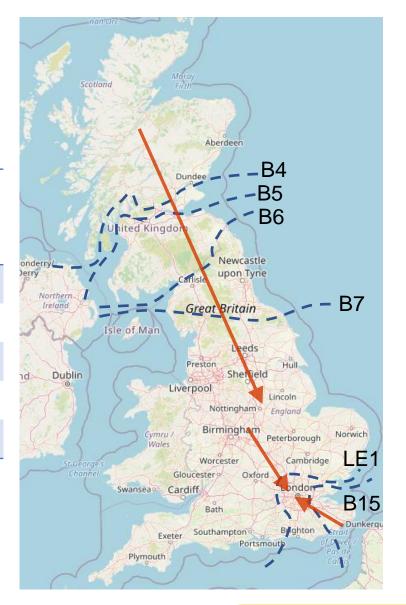


Day ahead flows and limits, and the 24 month constraint limit forecast are published on the ESO Data Portal: https://data.nationalgrideso.com/data-groups/constraint-management

Transparency | Network Congestion



Boundary	Max. Capacity (MW)
B4/B5	2750
B6	5600
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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





National Grid ESO's second RIIO-2 Business Plan (BP2)

Our 2019 RIIO-2 Business Plan set out ambitious goals for the five-year period 2021-2026.

Business Plan 2 (BP2) is a refresh of our RIIO-2 plans and details what we will deliver from **April 2023 – March 2025.**

We submitted our draft BP2 to Ofgem on Friday 29 April 2022
Consultation closes Friday 10 June
Consultation feedback will inform our final BP2, which we will submit in August 2022

We held an introductory webinar **Wednesday 4 May** – a recording of this is available on our <u>website</u>, along with the full BP2 plan and consultation details.

RIIO-2 web pages

https://www.nationalgrideso.com/our-strategy/riio

Consultation on our Updated Plan

All of our draft proposal documents can be found below within key publications, supporting documents and what we are planning to deliver sections. Please note that **Annex 4 - IT** will be published on **16 May 2022**. Ofgem have agreed to allow us additional time to meet the full requirements of their ESO BP2 IT Investment Plan Guidance Document.

We are now asking for stakeholder views of our draft plan which we will use to help inform the final publication of our plan in August 2022. Our consultation is open from 29 April to 10 June and there will be a variety of ways for stakeholders to feed back.

We recently hosted a webinar which launched our BP2 consultation and presented an overview of our second business plan, it also included a live Q&A. You can now view the recording, and download the slide pack.

Please use the <u>Consultation Proforma</u> to access and respond to the consultation questions, or contact us via box.eso.riio2@nationalgrid.com for any Business Plan queries.

Key Publications



RIIO-2 Draft Business Plan 2023-2025

BP2 is a full refresh of our RIIO-2 plans and sets out detailed proposals for years three and four of the original five-year framework, i.e. April 2023 – March 2025.



Executive Summary

No time? Download the executive summary of BP2.



Supporting documents



Annex 1- Supporting Information

Includes delivery roadmaps, an updated activity list and more information on Activity A22.



Annex 2 - Cost Benefit Analysis

We set out expected consumer benefit of the activities in BP2.



Annex 3 – Stakeholde engagement

A summary of the engagement carried out and feedback received so far for BP2.



Annex 4 - Technology Investment

Technology portfolio overview and breakdown of our latest investments, including costs, approach and solution options.





BP2 webinars you might be interested in

Thursday 26th May 3-4pm

<u>Facilitating</u> <u>distributed flexibility</u>

Tuesday 31st May 10:30-12:00

How can we empower consumers to participate in a flexible energy system?

How can you respond to the consultation?

- Complete the downloadable <u>consultation</u> proforma
- Alternatively, you can complete the <u>Microsoft</u>
 <u>Form survey</u>
- Or, send your feedback through directly to our .box: box.eso.riio2@nationalgrid.com
- ➤ Finally, if you'd like us to set up a bilateral meeting with you/your organisation, please email us using the address above and we'll be in touch

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Audience Q&A Session



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

