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# ESO Operational Transparency Forum 28 September 2022



### Introduction

### The ESO Markets Forum replaces the Operational Transparency Forum this week only.

To make sure you are kept up to date, we are sharing our standard slide-pack with the demand outturn and forecast, balancing costs breakdown and constraints data. We also aim to answer some questions that were taken away and signpost some upcoming events.

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

These slides, event recordings and further information about the webinars can be found at the following location: <a href="https://data.nationalgrideso.com/plans-reports-analysis/covid-19-preparedness-materials">https://data.nationalgrideso.com/plans-reports-analysis/covid-19-preparedness-materials</a>

### Regular Topics

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

### Sign posts and focus material:

Demand Flexibility Service consultation Dispatch Transparency ("Skip Rate") Event Frequency Response Reform consultation OTF stakeholder event – feedback



# Future deep dive/ response topics

### Upcoming soon:

ESO Trading on Interconnectors – rearranged for 5<sup>th</sup> October Winter Contingency Contracts – rearranged for 5<sup>th</sup> October

### 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



# **Demand Flexibility Service**

- On 1<sup>st</sup> 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 <u>EBR Article 18 Demand Flexibility Terms</u> and Conditions | National Grid ESO
- On Monday 5 September, we hosted a webinar outlining the details of the service. On Tuesday13<sup>th</sup> September, an industry open event took place.
- A recording of previous webinars along with the slides and a frequently asked questions document is available on the National Grid ESO website <u>https://www.nationalgrideso.com/industry-information/balancing-</u> <u>services/demand-flexibility</u>
- All formal responses to the consultation must be submitted by emailing the proforma to DemandFlexibility@nationalgrideso.com by the 3<sup>rd</sup> 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 <u>https://www.nationalgrideso.com/industry-information/balancing-services/demand-flexibility</u>

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



# Dispatch Transparency ("Skip Rate") Event – Friday 14 October

We would like to invite you to Wokingham for a transparent discussion about how we dispatch and "Skip Rates".

The event will take place in person at our Wokingham offices on Friday 14 October. Lunch will be provided and a visit to the control room viewing gallery will be organised. Link for registration:

Register for Dispatch Transparency ("Skip Rate") (office.com)

A Skip refers to the event when a BOA is instructed at a higher cost than an alternative option. The ESO strive to have zero skip rates, unless not preventable. We would like to invite you to discuss our dispatching process (including some examples) as well as the dispatch transparency data available on our portal. This event will also be an opportunity to share your questions regarding skip rates.

We very much look forward to seeing you at this event.

### Key information

Date: Friday 14 October Venue: National Grid ESO Wokingham Office Time: 10:00 – 14:30



# Frequency Response Reform consultation - Release 1

Today (28 Sept) we will be launching our Response Reform consultation which will include the following changes:

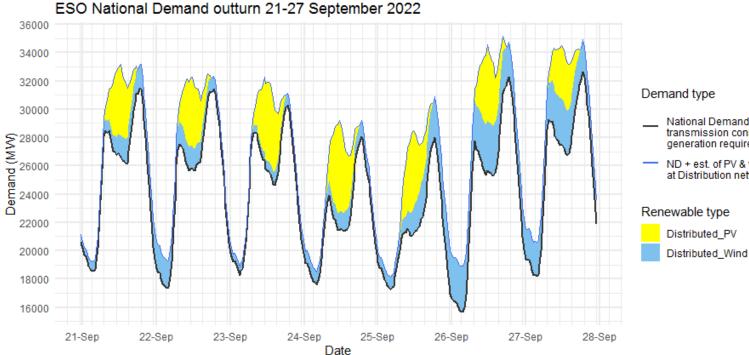
- Static FFR moving to day-ahead procurement
- DC updated to allow GSP group aggregation
- Dynamic FFR separated from static and remaining with monthly procurement
- Consolidation of DC/DM/DR terms
- Updates to DC/DM/DR regarding performance monitoring and state of energy

The consultation will run until the 28 Oct during which time the consultation documents will be accessible online with the response proforma. A notification including a link to documents will be circulated today.

We will also be conducting 1:1s to discuss the documents and gather informal feedback, this can be requested via <u>box.futureofbalancingservices@nationalgrideso.com</u> for the attention of Gus Clunies-Ross.

### Sli.do code #OTF

# 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 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** 

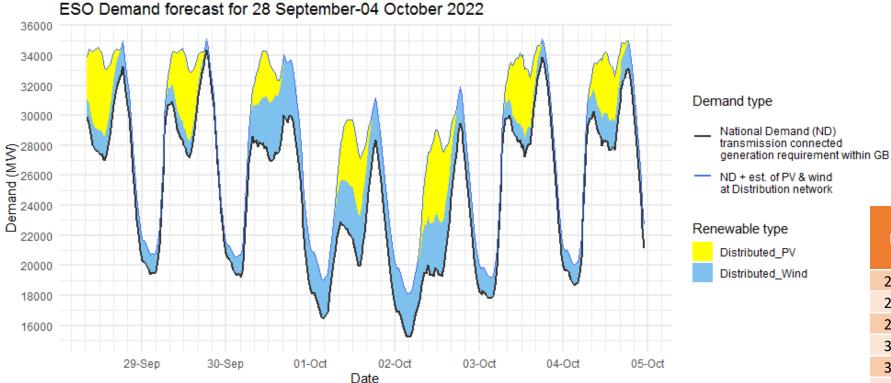
National Demand (ND) transmission connected generation requirement within GB

ND + est. of PV & wind at Distribution network

		FORECAST (Wed 21 Sep)		OUTTURN		
đ	Date	Forecasting Point	National Demand (GW)	Dist. wind (GW)	National Demand (GW)	Dist. wind (GW)
	21 Sep	<b>Evening Peak</b>	30.8	1.7	31.4	1.7
	22 Sep	Overnight Min	17.5	2.0	17.4	1.9
	22 Sep	<b>Evening Peak</b>	31.5	1.0	31.4	0.9
	23 Sep	Overnight Min	19.1	0.7	18.3	0.6
	23 Sep	<b>Evening Peak</b>	30.5	0.7	30.3	0.9
	24 Sep	Overnight Min	17.9	0.8	17.6	1.0
	24 Sep	<b>Evening Peak</b>	28.1	1.1	28.1	1.1
	25 Sep	Overnight Min	17.2	0.8	17.3	0.9
	25 Sep	<b>Evening Peak</b>	28.8	2.1	28.0	2.8
	26 Sep	Overnight Min	16.0	2.6	15.7	3.2
	26 Sep	<b>Evening Peak</b>	31.9	2.5	32.3	2.4
	27 Sep	Overnight Min	17.6	2.2	18.2	2.4
	27 Sep	<b>Evening Peak</b>	32.5	2.2	32.6	2.2

### Sli.do code #OTF

## Demand | Week Ahead



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

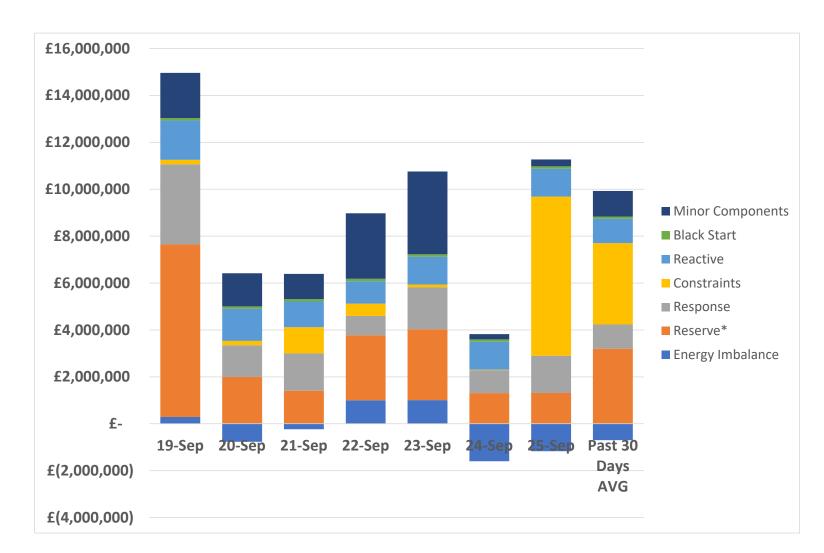
ND values do not include export on interconnectors or pumping or station load

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: <u>Historic Demand Data &</u> <u>Demand Data Update</u>

FORECAST (Wed 28 Sep)			
Date	Forecasting Point	National Demand (GW)	Dist. wind (GW)
28 Sep	<b>Evening Peak</b>	33.2	1.8
29 Sep	Overnight Min	19.4	1.3
29 Sep	<b>Evening Peak</b>	34.4	0.7
30 Sep	Overnight Min	19.2	1.5
30 Sep	Evening Peak	30.0	3.8
01 Oct	Overnight Min	16.5	2.6
01 Oct	Evening Peak	28.4	2.9
02 Oct	Overnight Min	15.2	2.8
02 Oct	Evening Peak	29.5	2.4
03 Oct	Overnight Min	17.8	1.4
03 Oct	<b>Evening Peak</b>	33.9	1.2
04 Oct	Overnight Min	18.7	1.3
04 Oct	<b>Evening Peak</b>	33.1	1.7

### ESO Actions | Category costs breakdown for the last week

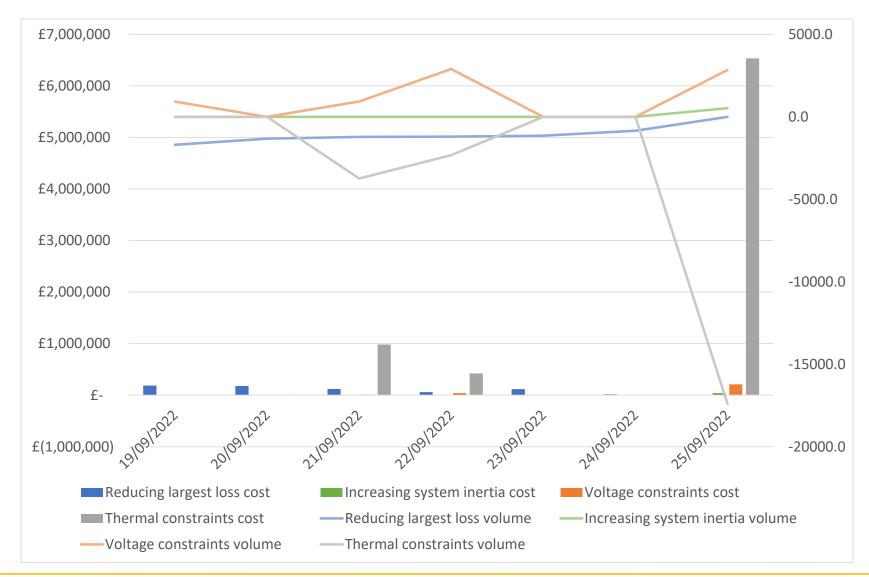


Date	Total (£m)
19/09/2022	15.0
20/09/2022	5.6
21/09/2022	6.2
22/09/2022	9.0
23/09/2022	10.8
24/09/2022	2.2
25/09/2022	10.1
Weekly Total	58.8

Reserve was the key cost component most of the week. Response costs were relevant on Monday due to managing demand uncertainties for the queens funeral. Constraints costs (mostly thermal) were relevant on Sunday due to high wind output.

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 Wednesday, Thursday and mostly Sunday.

#### Voltage

Intervention to manage the voltage levels Thursday and Sunday.

#### Managing largest loss for RoCoF

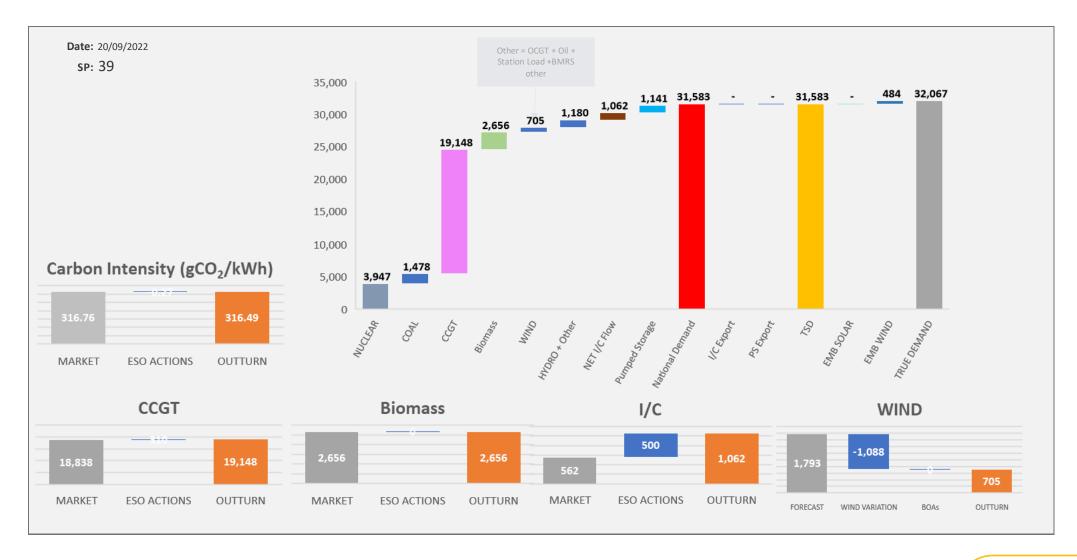
Intervention required to manage largest loss throughout the week except Sunday.

#### **Increasing inertia**

Intervention required to manage Inertia on Sunday.

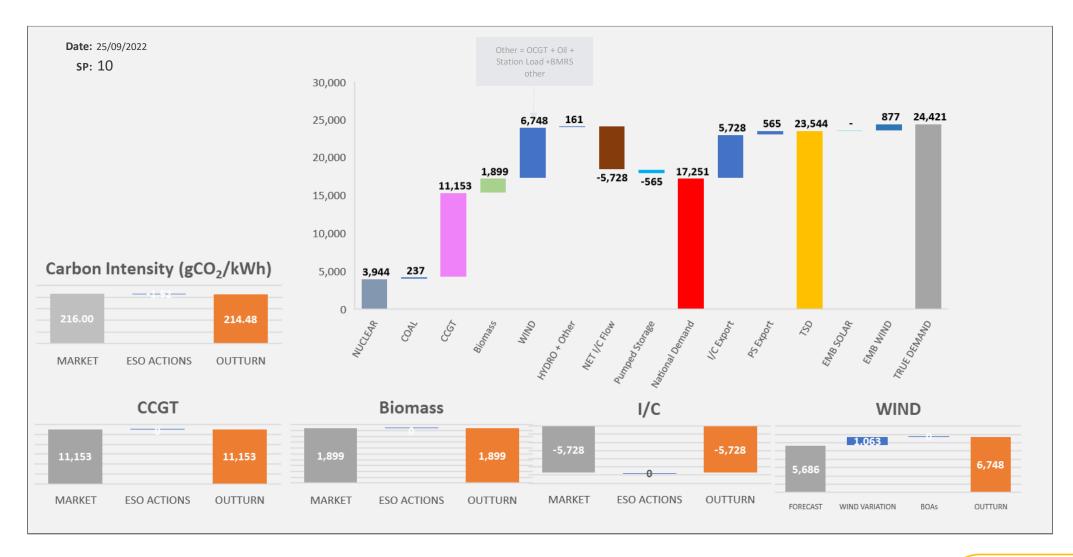


## ESO Actions | day 20 September – Peak Demand – SP spend ~£102k



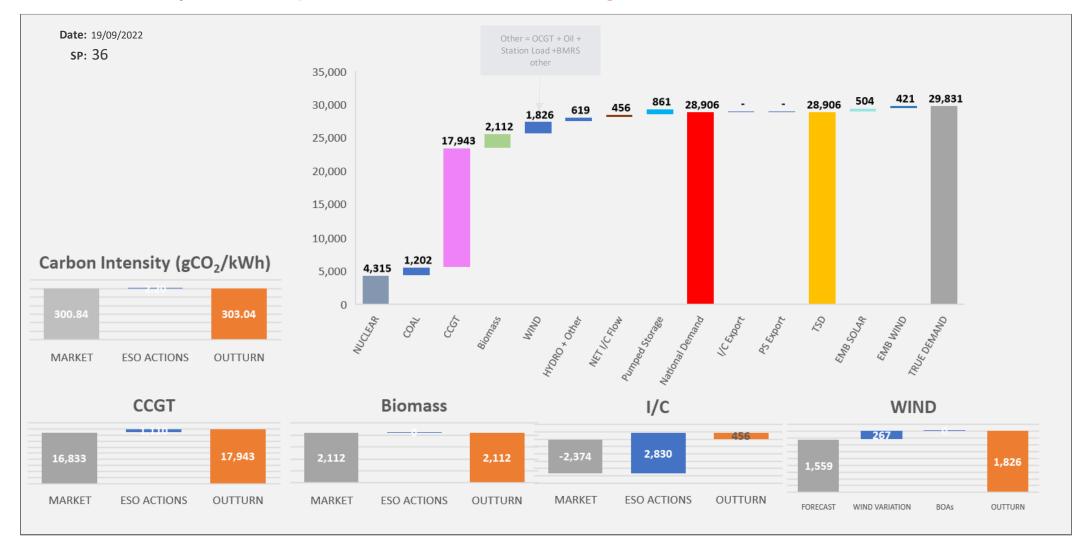
Carbon Intensity data on data portal: https://data.nationalgrideso.com/carbon-intensity1/carbon-intensity-of-balancing-actions

# ESO Actions | Sunday 25 September – Minimum Demand – SP Spend ~ -£41k



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

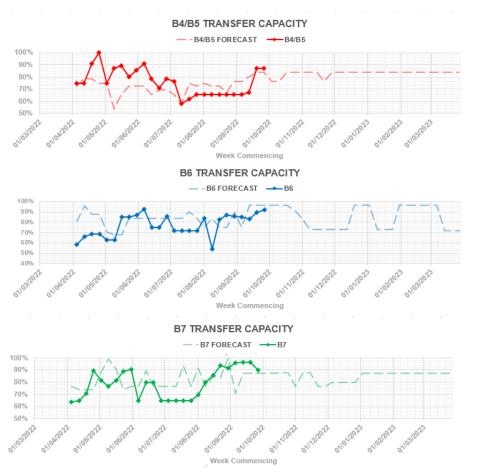
# ESO Actions | Monday 19 September – Highest SP Spend ~£682k



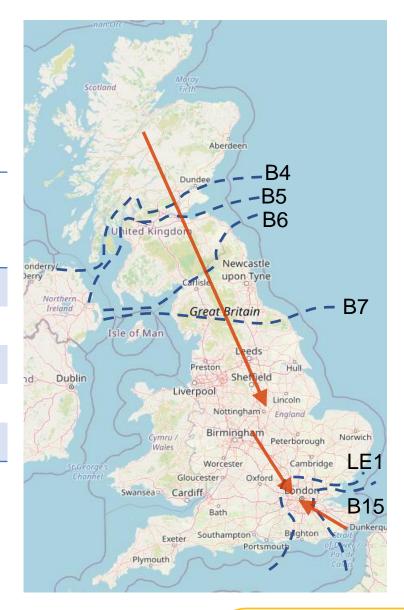
Carbon Intensity data on data portal: <u>https://data.nationalgrideso.com/carbon-intensity1/carbon-intensity-of-balancing-actions</u>

### Sli.do code #OTF

# Transparency | Network Congestion



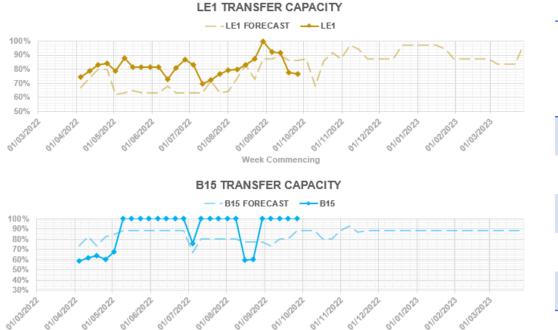
Max. Capacity (MW)
2750
5600
8500
8250
4500



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

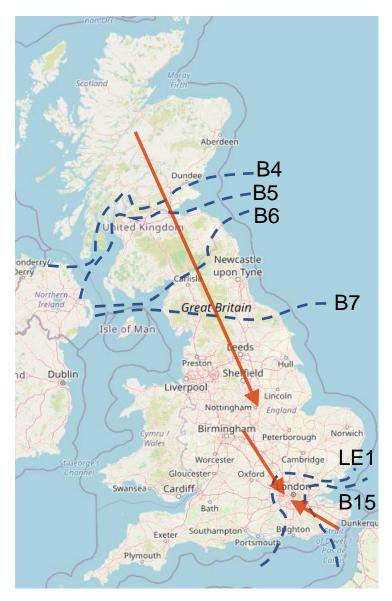
### Sli.do code #OTF

# Transparency | Network Congestion



Week Commencing

Max. Capacity (MW)
2750
5600
8500
8250
4500



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

End of June, we held a stakeholder event in our Wokingham office. We would like to thank everyone who participated for their constructive input.

We have looked at your comments and identified some key improvements and actions.

We welcome any further feedback, please contact the email address: <u>box.NC.Customer@nationalgrideso.com</u>.

You said	Where it's going
<b>Boundary capacity explanation</b> <i>"More text about why Boundary Capacities are so low/lower than forecast… given the input on costs."</i>	We propose to include in the standard slides a generic text with some explanation of the boundary capacities. We also will add some ad hoc explanation of a low boundary capacity when this occurs.
<b>Bring constraints to life</b> <i>"What % of Gen is behind B6/B7 e.g 75% Wind</i> <i>in B6 95% Wind in B7"</i>	We are investigating different possibilities: a constraints deep-dive, weekly additional statistics and numbers, etc.



### Demand turn-out and forecast

You said	Where it's going
Demand forecasting explanation "More info on the demand forecasting process & methodology" "More detail on what drives the forecast" "More information on how regulatory demand forecasts are updated during the day and how" "More on what were the drivers for actual demand (especially when very different from forecast)." "More on the low/peaks why so low etc "	We propose to hold a demand forecasting deep-dive to explain the demand forecasting methodology, the forecasting errors, the process, etc.
<b>Demand error</b> "More info on why forecast performance in past week was not good/lacking" "Commenting on Short term demand error" "Start commenting on maximum demand errors - what caused them etc."	We are looking at adding information regarding the biggest error (e.g. in the past 7 days) and provide some explanation. We are also investigating how to share the evolution of the forecasting data over the week.
<b>Longer term forecasting</b> <i>"More info on longer term forecasting thoughts - 52 weeks forecast "</i> <i>"Demand forecast for fully 14 days, not just 7 days "</i>	OTF is an operational forum focussing on weekly data, so we will not add this in the weekly OTF. However, we are investigating the possibility of having an update on the longer-term forecasting e.g. every month. We will also share the link to the data portal for the wider forecasting data.
<b>Total demand</b> <i>"can do a bit more on the solar &amp; Embedded Wind as that's the future"</i>	We are investigating different possibilities: a constraints deep-dive, weekly additional statistics and numbers, etc.
<b>Other</b> <i>"Would like to see actual demand (not including generation/Ic's) per zone."</i>	This is an interesting suggestion but we currently don't have the data. This could be part of future improvement.

Review of Costs and actions

You said	Where it's going
Most costly/difficult days "Do deep dive of the most costly days not HH perhaps unless the HH was really tricky or costly " "A Day in the life of balancing - pick a difficult day to walkthrough" "Comment on periods that were difficult to balance "	Thank you for the suggestion. We are now including ad-hoc additional slide on specific days that were expensive or when we believe there is some interesting insights to share.
<b>Dispatch transparency</b> <i>"Deep dive on despatch transparency"</i>	We will be holding a stakeholder event on dispatch transparency / skip rate on Friday 14 October (see previous sign-post slide)
Whole system planning "More information on where you have made a decision that covers off a number of issues system & energy"	We are looking at planning a deep dive on this topic.
<b>Constraint cost data</b> "Can you publish constraints costs per boundary to highlight how important/costly each point is. Or Scot v South to begin with" "Constraint costs are the biggest cost so can these be broken down by boundary or at least Scottish vs England might be useful for N2 market also"	We are investigating how to improve the constraint cost data. Our initial thinking is to split the constraints in OTF slides or on the data portal between 3 categories: Scotland, E&W and Cheviot.
<b>SP spend</b> "Add spend for min and max demand SP"	We have updated our regular slide on min and max demand settlement period to include the spend.
Inertia data "You publish inertia + volts actions costs, but not the associated cost of making room (turning wind down) so can this be added please? "	We have published a new dataset on the Data Portal here: <u>https://data.nationalgrideso.com/balancing/gb-system-inertia-bid-and-offer-costs</u>

### Other

You said	Where it's going
<b>Deep-dives</b> "More deep dives. They are really good/useful for industry" "Deep dives on various topics"	Thank you for the feedback, we will continue to plan relevant deep-dives in future OTFs.
<b>Q&amp;A management</b> "You spend lots of time answering questions you can't answer because of confidentiality, set this out up front" "Managing expectations when answering questions" "Sometimes answers and not really answering the question. Ability for asker to accept answer?" "Stop answering questions outside of scope or need follow up." "Make questions stop moving around when trying to answer" "Limit number of Q's to focus on" "Stop anonymous slido questions" "Too much "catch all" "we can't answer that"" "More conversational questions - often clarification is needed both ways"	Many thanks for all your feedback on how we are managing the Q&A session in OTF. We are currently reviewing our registration process as well as how we run the Q&A. More information will be shared shortly.
Market monitoring – individual units "Anonymised examples from the market monitoring team on the sort of thing that they are looking at/ or would be investigating" "More transparency on individual units action in Q&A" to commenting on individual units - especially when specific units crop up a lot –" "Allow more specific talk on a particular unit"	We will not comment on any specific units in the OTF. The ESO market monitoring team reviews the behaviour of all units within the markets affiliated by ESO every day.
In person OTF "F2F meetings again? " "Every 6 months have in-person OTF"	Thank you for the suggestion. We are looking at organising in- person OTFs more regularly.

# Questions outstanding from previous weeks

# Q: ESR tender - what feedback do you have for stakeholders on derogation you have said in GC156 working group ESO is seeking as this directly impacts on current South East tender - in terms of the min tech requirement tender parties have to meet to be compliant

A: GC0156 are making recommendation which are not part of SE Tender. In terms of minimum requirements, we would not accept any "derogation" to the minimum tech requirements as there is a risk this would distort the tender. The tender rules stipulates "If a potential provider has a limitation on one of the technical requirements, but can meet the others, we will allow Expressions of Interest to be submitted, and where possible will assess whether a provider could contribute, but it will be entirely at the discretion of the ESO to confirm whether a provider not meeting all of the requirements will be eligible to participate."

# 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?

### Request for clarification:

Q: You said a few weeks ago that this was a gas crisis not a capacity procurement crisis. This winters spark is £110-that is 21% of the winter contract value. Is it not capacity underprocurement? The system I understand is only secured for a 1 in 3 weather event or am I wrong where it was higher b4

We will come back to those questions in the future:

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.

# 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: <u>box.NC.Customer@nationalgrideso.com</u>







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



