



ESO Operational
Transparency Forum
24th Nov 2021

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

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.**

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>

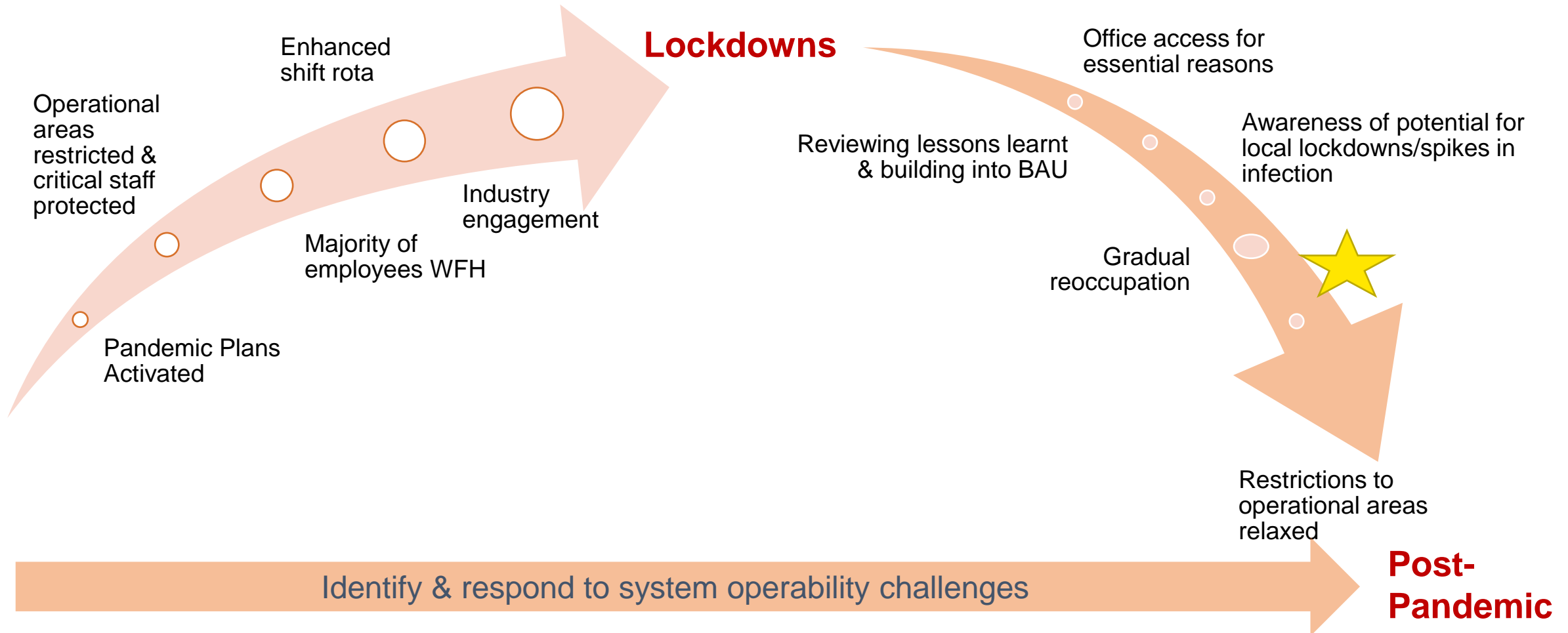
Regular Topics

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

Focus Areas

ENCC Transparency Roadmap

Protecting critical staff to maintain critical operations



Questions outstanding from last week

Q: Can you confirm when the last week ahead ffr tender will be, considering how little month ahead ffr you bought can you not extend this?

A: The last weekly FFR auction will take place on Friday 26th November. There is no plan to extend this at the moment as we focus on ensuring our DC requirements are met through December.

Q: Are you hiding the true costs of constraints by not including the cost of replacing the energy constrained especially with current high prices? How are these costs directed to improving network capacity or reducing new generation connecting in constrained areas?

A: The cost reports include the cost of replacing the energy to give a true reflective cost of each action. Costs are paid to generators. We do not retain the money, so cannot spend it, even on improving network capacity, which would be a TO responsibility.

Q: Will the DISBSAD trade data be added to the NGENSO Data Portal in due course?

A: We (trading) are looking into this and will cover this topic at the same time as doing the trading deep dive requested last week.

Q: You haven't answered the question on FFR. Why is a 20MW asset available 24/7 for <£20/MW/hr rejected whereas an asset tendering for 1/2, 3/4 and 5/6 at an average price of >£21/MW/hr is accepted 24/7? Are you prioritising FFR from non-BM assets as this is something we should be made aware of?

A: The specific asset referenced was rejected due to the overholding that would have resulted from accepting this tender in merit order. The tenders accepted at a slightly higher cost (£/MW/hr) were smaller and didn't result in overholding. There is no prioritisation of BM/non-BM assets.

Questions outstanding from last week

Q:For the other data set like the System Operating Plan (SOP) that is given per CP are you also planning on publishing it at for all the periods?

A:The system operating plan is published per cardinal point, we do not have plans to publish this for all settlement periods

Q: Can you publish a breakdown of response providers by type (eg battery/wind/ccgt etc) and carbon intensity of that response service?

A: We currently publish asset type with our FFR results and we intend to bring this to Dynamic Containment as well. We don't have any plans at the moment to publish carbon intensity information in addition.

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:

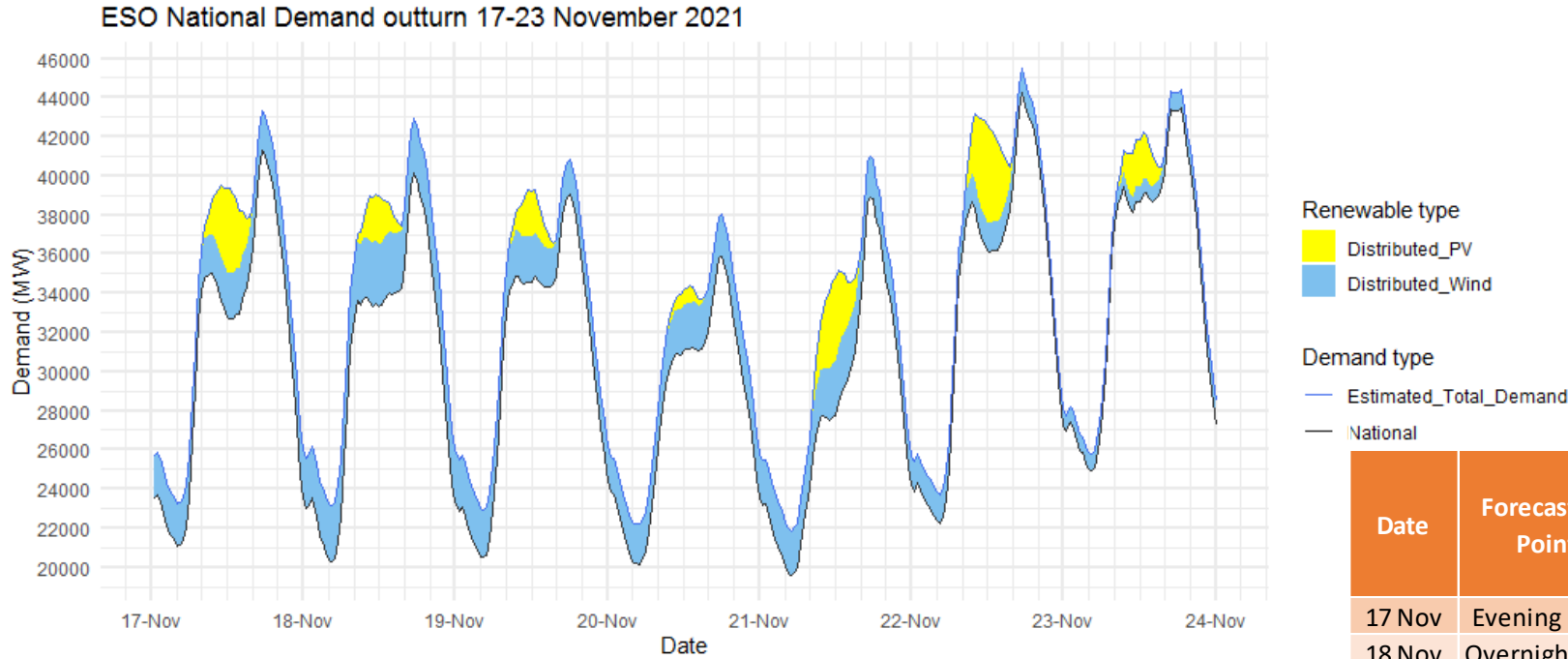
December

1 December – Trading Overview

January

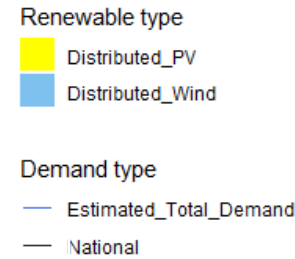
Balancing Services Adjustment Data (BSAD) Overview

Demand | Last 7 days outturn



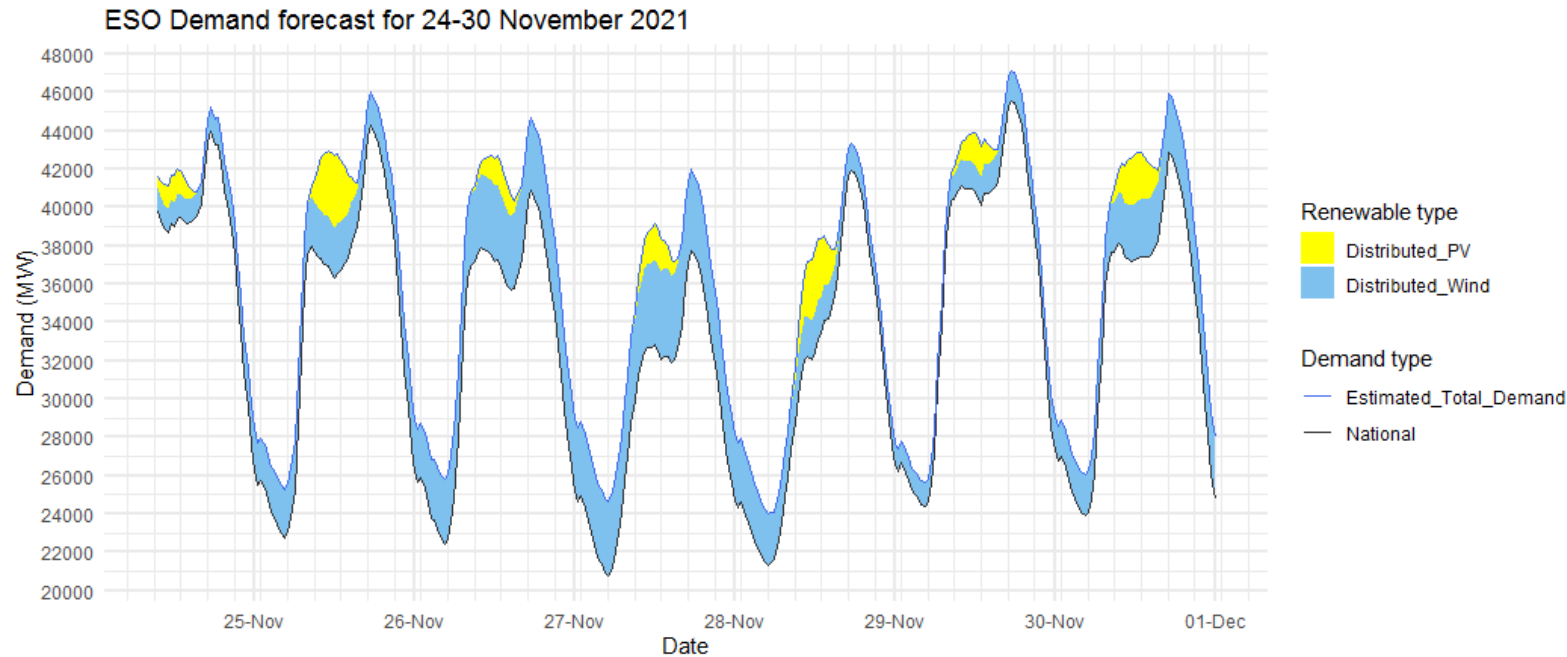
The black line (National Demand) is the measure of portion of total GB customer demand that is supplied by the transmission network.

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 17 Nov)		OUTTURN			
		National Demand (GW)	Dist. wind (GW)	National Demand (GW)	Triad Avoidance est. (GW)	N. Demand adjusted for TA (GW)	Dist. wind (GW)
17 Nov	Evening Peak	41.3	2.1	41.3	0.0	41.3	2.0
18 Nov	Overnight Min	20.5	2.9	20.3	n/a	n/a	2.9
18 Nov	Evening Peak	39.8	2.8	40.1	0.0	40.1	2.8
19 Nov	Overnight Min	20.5	2.6	20.5	n/a	n/a	2.5
19 Nov	Evening Peak	39.7	1.9	39.1	0.0	39.1	1.7
20 Nov	Overnight Min	20.7	1.4	20.2	n/a	n/a	2.0
20 Nov	Evening Peak	37.2	1.5	35.9	0.0	35.9	2.2
21 Nov	Overnight Min	20.1	1.7	19.6	n/a	n/a	2.3
21 Nov	Evening Peak	38.3	2.4	38.9	0.0	38.9	2.1
22 Nov	Overnight Min	21.0	2.1	22.2	n/a	n/a	1.5
22 Nov	Evening Peak	43.4	1.8	44.2	0.0	44.2	1.3
23 Nov	Overnight Min	23.3	1.5	24.9	n/a	n/a	0.9
23 Nov	Evening Peak	44.0	1.5	43.4	0.0	43.4	1.0

Demand | Week Ahead



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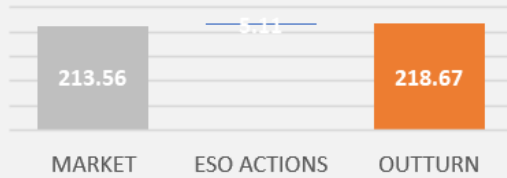
Date	Forecasting Point	FORECAST (Wed 24 Nov)	
		National Demand (GW)	Dist. wind (GW)
24 Nov 2021	Evening Peak	44.0	1.3
25 Nov 2021	Overnight Min	22.8	2.5
25 Nov 2021	Evening Peak	44.3	1.8
26 Nov 2021	Overnight Min	22.4	3.4
26 Nov 2021	Evening Peak	40.9	3.8
27 Nov 2021	Overnight Min	20.8	3.9
27 Nov 2021	Evening Peak	37.8	4.2
28 Nov 2021	Overnight Min	21.3	2.7
28 Nov 2021	Evening Peak	42.0	1.4
29 Nov 2021	Overnight Min	24.4	1.2
29 Nov 2021	Evening Peak	45.6	1.6
30 Nov 2021	Overnight Min	23.9	2.2
30 Nov 2021	Evening Peak	42.9	3.0

ESO Actions | Wednesday 17 November Peak

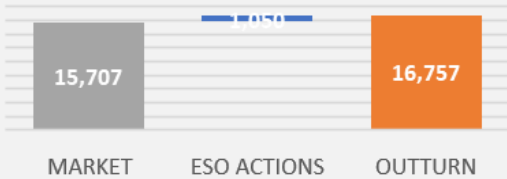
Date: 17/11/2021

SP: 35

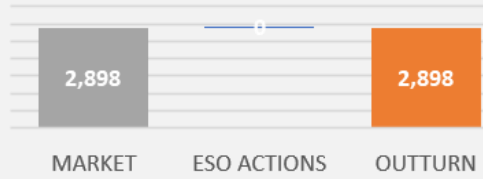
Carbon Intensity (gCO₂/kWh)



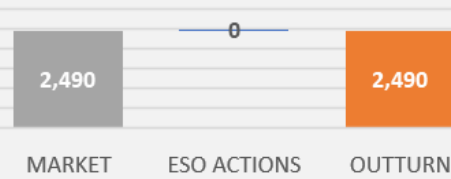
CCGT



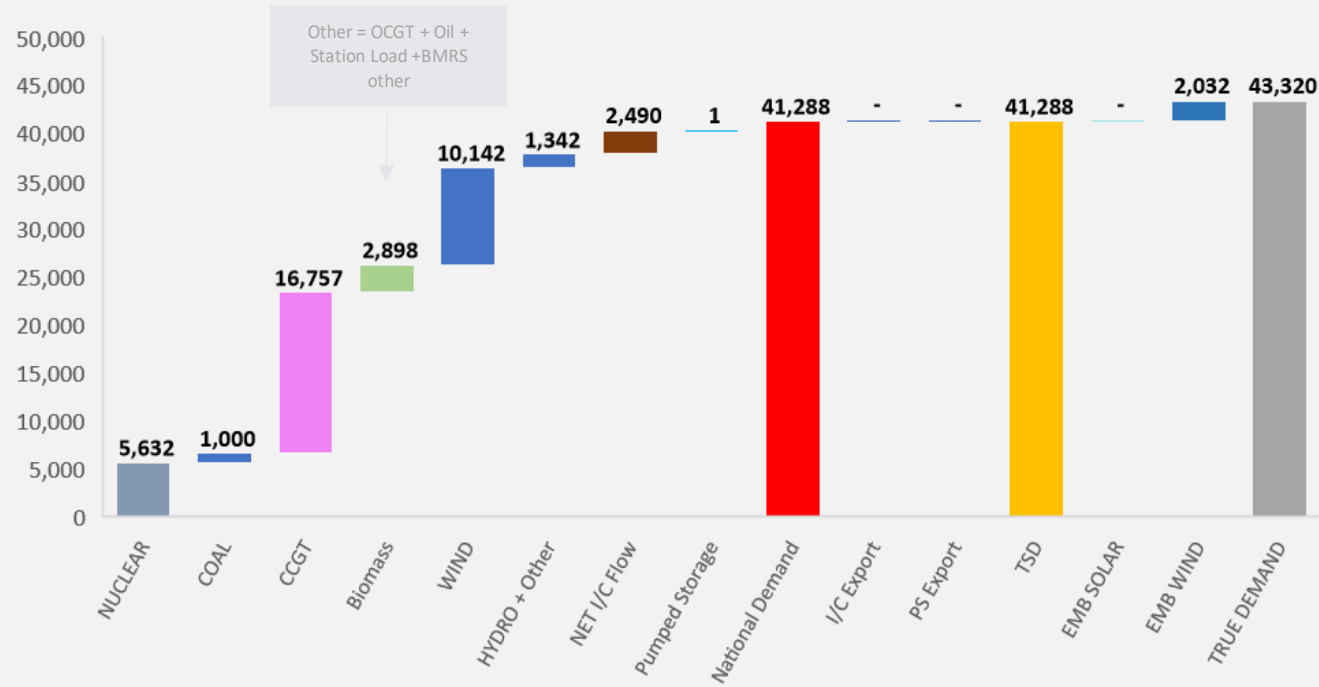
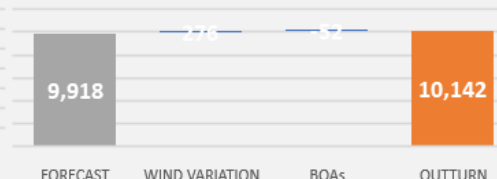
Biomass



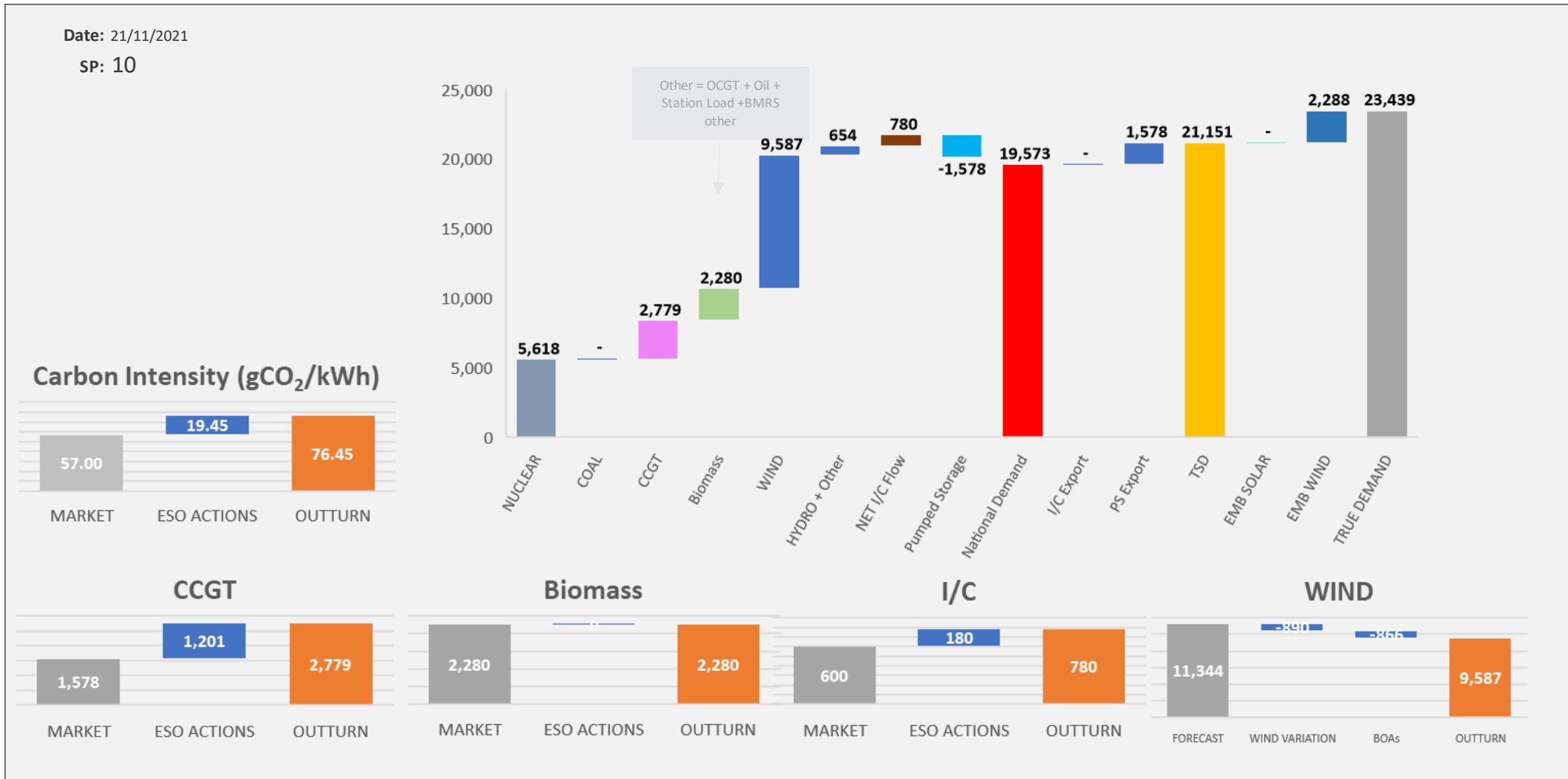
I/C



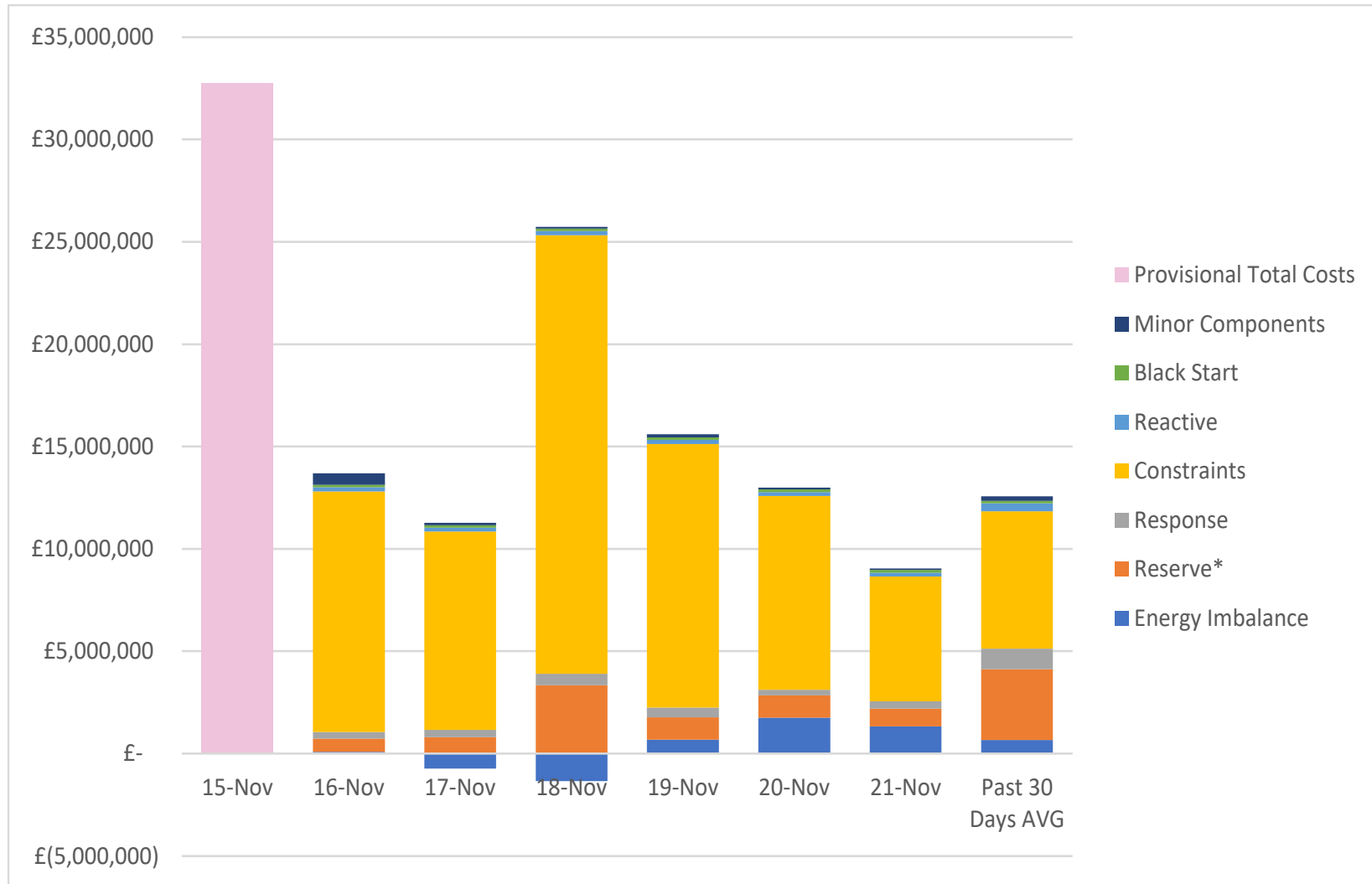
WIND



ESO Actions | Sunday 07 November Minimum



Transparency | Costs for the last week



Monday 15th and Thursday 18th were the most expensive days with a daily outturn of around £33m and £25m respectively

The main drive of high daily costs were the constraints actions, accounting for around 90% of the costs on each day. This was due to the windy weather that was requiring large volume of BM actions to reduce generation to manage thermal constraints.

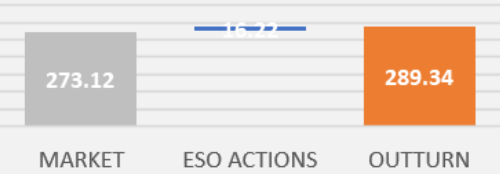
Past 30 Days Average added

Balancing Costs Review ESO Actions | Monday 15 November

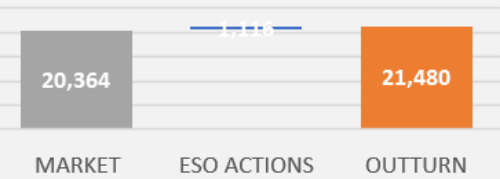
Date: 15/11/2021

SP: 35

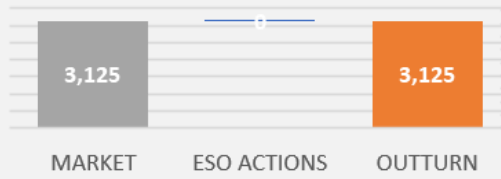
Carbon Intensity (gCO₂/kWh)



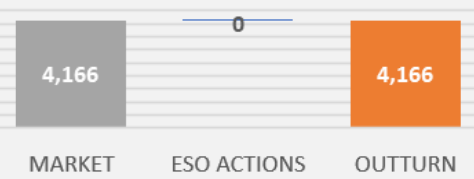
CCGT



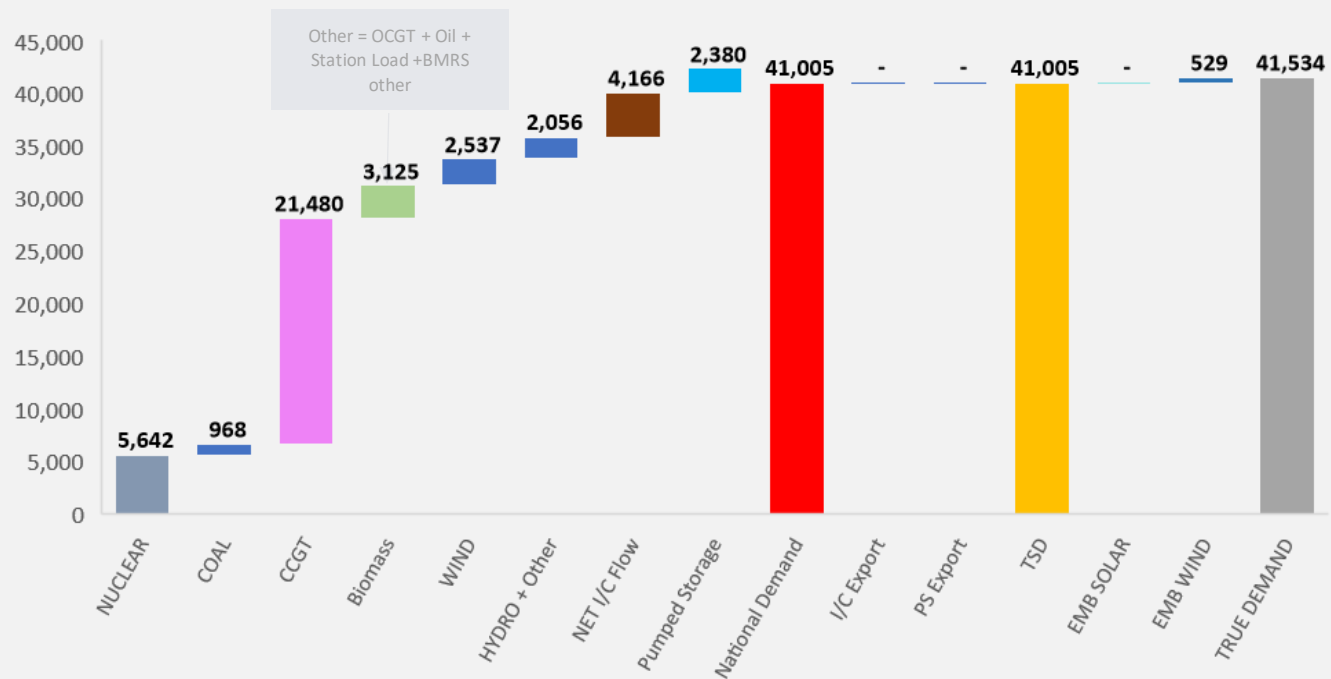
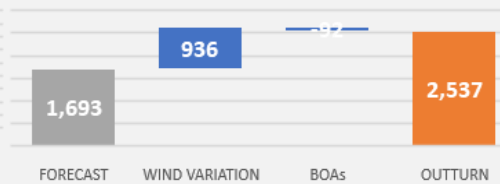
Biomass



I/C



WIND



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 23 November 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.

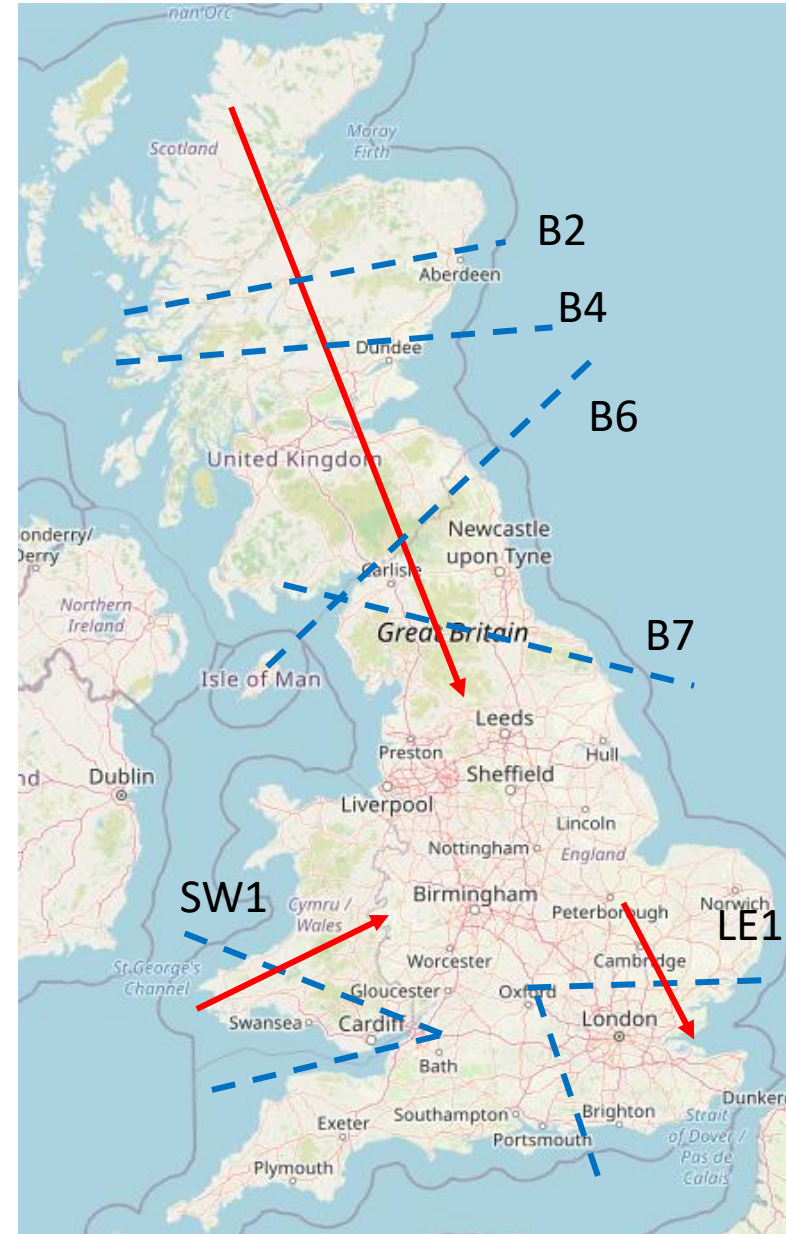
For higher surplus values, margins are expected to be adequate and there is a low likelihood of the ESO needing to use its tools. In such cases, we may even experience exports to Europe on the interconnectors over the peak depending on market prices.

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 week.

Day	Date	Notified conventional generation (MW)	Wind (MW)	Interconnector availability (MW)	Peak demand (MW)	Indicative surplus (MW)
Thu	25/11/2021	45043	8903	3900	44650	8796
Fri	26/11/2021	44582	14013	3900	41572	13321
Sat	27/11/2021	43525	14571	3900	38527	16462
Sun	28/11/2021	44649	7305	3900	42188	8943
Mon	29/11/2021	45566	5812	3900	44772	5682
Tue	30/11/2021	45634	12651	3900	43957	12115
Wed	01/12/2021	45414	12974	3900	44650	11891

Transparency | Constraint Capacity



ENCC Transparency Roadmap

This is updated every 6 months and published on the National Grid ESO website.

The latest revision includes:

- A new look, with content transferred for 20-21.
- Revised 21-22 for actual delivery dates.
- New 22-23 roadmap issued.

Key points for 22-23 will be:

- Continuation of increased transparency via the OTF, deep dives and dataset presentation.
- Development of single markets platform and data analytics platform.

The document is available here <https://www.nationalgrideso.com/our-strategy> .

ENCC Transparency Roadmap 2022-23

Channels for communication

	Q1	Q2	Q3	Q4
Transparency Roadmap	Transparency Roadmap refresh		Transparency Roadmap refresh	
Operational Transparency Forum	Transparency forum continues to maintain engagement with stakeholders			
	Continued deep dives in response to feedback received			
Data Portal	Agile approach to adding new datasets, automated through data platform functionality as data is migrated into platform.			
	Converting suitable datasets to a machine readable format & publishing under an open license where possible.			

Key: New dataset (green), Improved dataset (blue), Migrated to data portal (purple)

ENCC Transparency Roadmap 2022-23

Deliverables

	Q1	Q2	Q3	Q4
Transparency of Operational Actions	Dispatch Transparency stakeholder engagement ongoing to further improve clarity and transparency of our operational decision making			
Transparency of Preparatory Actions				New Response and Reserve services with increased market information
	Make OSP level demand, solar and wind power forecasts available for Market Participants			
Deep dive into inertia	Single Markets Platform			
	Data & Analytics Platform (DAP) – Proof of Concept(s) built, MDM strategy, data ingest & analytics development			DAP "live"
Outlook/ review/ data	Summer outlook report	Winter review and consultation	Winter outlook report	

Key: New dataset (green), Improved dataset (blue), Migrated to data portal (purple)

Dynamic Moderation and Dynamic Regulation

- **Consultation overview webinar** – recording, slides and FAQs available
- **Consultation technical deep dive webinar** – 30 November
- **For 1-2-1s**, contact: box.futureofbalancingservices@nationalgrideso.com

EBR Article 18 DM & DR consultation closes on 15 December

Q&A

After the webinar, you will receive a link to a survey. We welcome feedback to understand what we are doing well and how we can improve the event ongoing.

Please ask any questions via Slido (code #OTF) and we will try to answer as many as possible now. If we are unable to answer your question today, then we will take it away and answer it at a later webinar.

Please continue to use your normal communication channels with ESO.

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

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.

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