

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:

Advanced question can be asked here: https://forms.office.com/r/k0AEfKnai3

Stay up to date on our new webpage: https://www.nationalgrideso.com/OTF

New Website

Our new website has gone live this week but is a work in progress.

It may take longer than usual to upload the slides and recording this week.

Please let us know if you cannot find anything by contacting us at:

box.NC.Customer@nationalgrideso.com



Future deep dive / focus topics

Future

Response markets deep dive

Feedback welcomed on our proposed deep dive topics

Winter Enhanced Actions

Service instructions

The following BM Start-Up instructions were issued over this period:

BMU ID	Instruction Issued	Instruction Cancelled	Notes

Demand Flexibility Service Advanced Anticipated Requirements Notice

BMU ID	Instruction Issued	Instruction Cancelled	Notes
DFS	27/03/2023 10:00	N/A	BMRS - Test 18:00 - 19:00 on 28 th March

For avoidance of doubt, both the DFS contract and the Coal contracts finish at the end of March.

Winter Contingency Units

Non-Proving Run

30th March 2023 - Drax

In accordance with the winter contingency service contract terms, Drax is undertaking a planned non-proving run for DRAXX-5 tomorrow (30th March 2023).

• DRAXX-5 is scheduled between 07:55 and 14:25 with a maximum 300MW output.

To facilitate this non-proving run, NGESO will issue BOAs to the unit to follow a pre-agreed profile (the unit will be instructed from zero to ramp up to SEL (300MW) and then held at this level until de-syncing to zero).

These BOAs will be priced at £0/MWhr and will be removed from settlement via a BSCP18 form. NGESO issued a BMRS market message 24hrs ahead (i.e. this morning) of this planned non-proving run.

ESO Markets Roadmap 2023

The **ESO Markets Roadmap 2023** to be published on Friday 31 March 2023.

Link: https://www.nationalgrideso.com/research-and-publications/markets-roadmap

On **Tuesday 25 April at 11am**, we will be discussing the highlights of the report at a webinar.

This includes:

- Highlights of the reforms introduced in 2022
- The vision for 2023 and beyond
- Why we are implementing these reforms
- Q&A session

To register for the webinar sign up here: Markets Roadmap Webinar or scan the QR code:



Dynamic Containment (DC) Requirements Update

March 2023

- Following a review of market and system conditions, we have revised our requirements for DC low and high resulting in an increase in overall requirements.
- This change went live on 27th of March and is reflected in the <u>rolling 4-day</u> forecasts. The 12 month forecast data has been updated to reflect this change and can be found from <u>ESO Market Information Report</u>.
- We continually review the requirements for our response products to reflect potential market growth and changing system conditions and proactively communicate any changes to the market via this publication and the 4 day rolling DC requirements forecast.

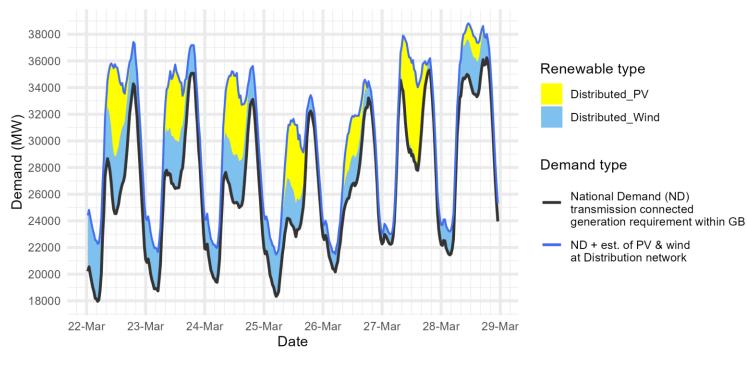
If you would like to talk about the change please contact:

box.futureofbalancingservices@nationalgrideso.com

OUTTURN

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.

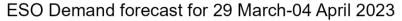
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Date	Forecasting Point	National Demand (GW)	Dist. wind (GW)	National Demand (GW)	Dist. wind (GW)
22 Mar	Evening Peak	34.7	2.9	34.3	3.1
23 Mar	Overnight Min	19.3	2.7	18.7	2.9
23 Mar	Evening Peak	35.5	2.3	35.1	2.1
24 Mar	Overnight Min	19.7	2.3	19.4	2.6
24 Mar	Evening Peak	33.5	2.6	33.1	2.5
25 Mar	Overnight Min	18.7	2.6	18.3	3.1
25 Mar	Evening Peak	32.5	1.3	32.2	1.1
26 Mar	Overnight Min	20.0	1.5	20.2	1.4
26 Mar	Evening Peak	30.8	2.1	33.2	1.2
27 Mar	Overnight Min	22.0	1.6	22.2	0.8
27 Mar	Evening Peak	36.3	1.2	35.1	0.7
28 Mar	Overnight Min	22.7	1.8	21.4	1.8
28 Mar	Evening Peak	35.6	2.0	36.2	1.8

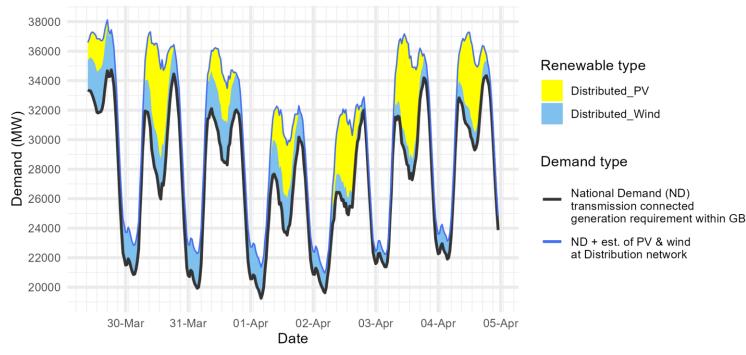
FORECAST (Wed 22 Mar)

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 29 Mar)

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

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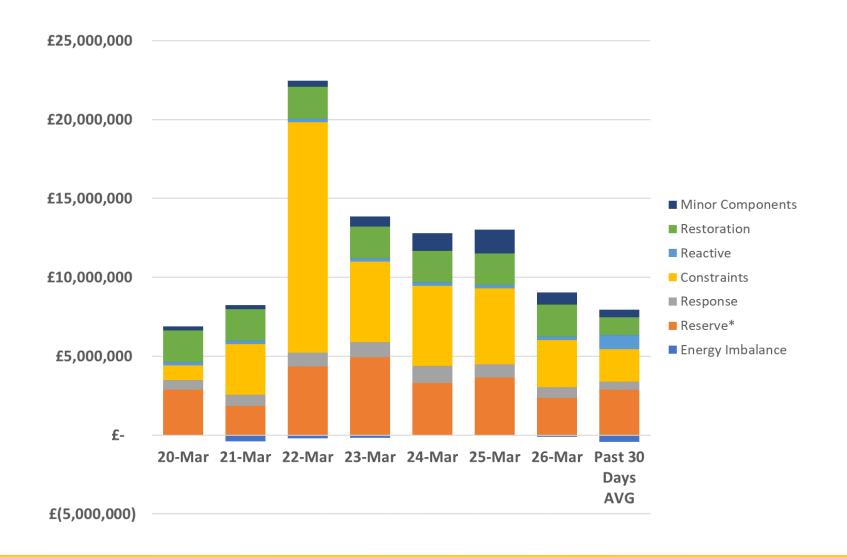
Date	Forecasting Point	National Demand (GW)	Dist. wind (GW)
29 Mar 2023	Evening Peak	34.7	2.7
30 Mar 2023	Overnight Min	20.9	2.0
30 Mar 2023	Evening Peak	34.5	1.8
31 Mar 2023	Overnight Min	19.9	2.3
31 Mar 2023	Evening Peak	32.0	2.4
01 Apr 2023	Overnight Min	19.2	2.1
01 Apr 2023	Evening Peak	30.2	2.0
02 Apr 2023	Overnight Min	19.6	1.3
02 Apr 2023	Evening Peak	31.2	0.9
03 Apr 2023	Overnight Min	21.4	0.9
03 Apr 2023	Evening Peak	34.2	1.4
04 Apr 2023	Overnight Min	21.9	1.2
04 Apr 2023	Evening Peak	34.3	1.0

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>

Margin Update

As explained last week, following the clock change we will no longer be providing an update on Margins.

ESO Actions | Category costs breakdown for the last week



Date	Total (£m)
20/03/2023	6.9
21/03/2023	7.9
22/03/2023	22.2
23/03/2023	13.7
24/03/2023	12.8
25/03/2023	13.0
26/03/2023	8.9
Weekly Total	85.3
Previous Week	60.1

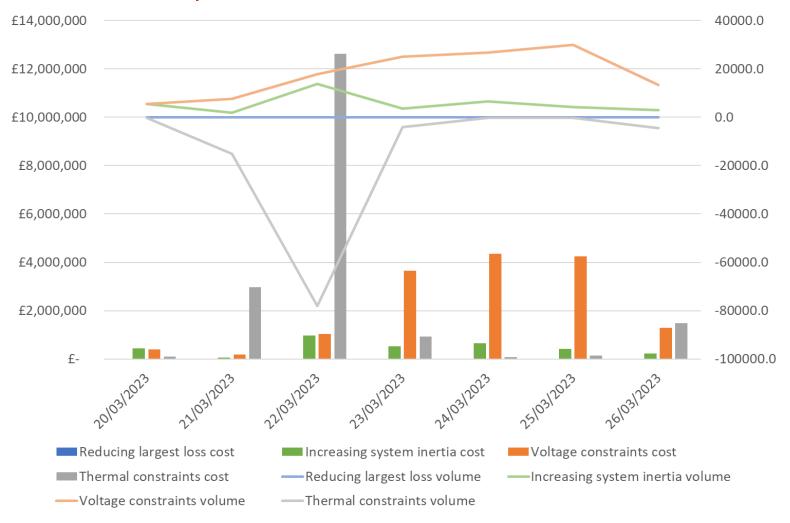
Constraints costs were the key cost component throughout the week.

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

Data issue: Please note that due to a data issue on a few days over the last few months, the Minor Components line in Non-Constraint Costs is capturing some costs on those days which should be attributed to different categories. It has been identified that a significant portion of these costs should be allocated to the Operating Reserve Category. Although the categorisation of costs is not correct, we are confident that the total costs are correct in all months. We continue to investigate and will advise when we have a resolution.

ESO

ESO Actions | Constraint Cost Breakdown



Thermal – network congestion

Actions required to manage Thermal Constraints throughout the week with the highest costs on Wednesday.

Voltage

Intervention was required to manage voltage levels throughout the week.

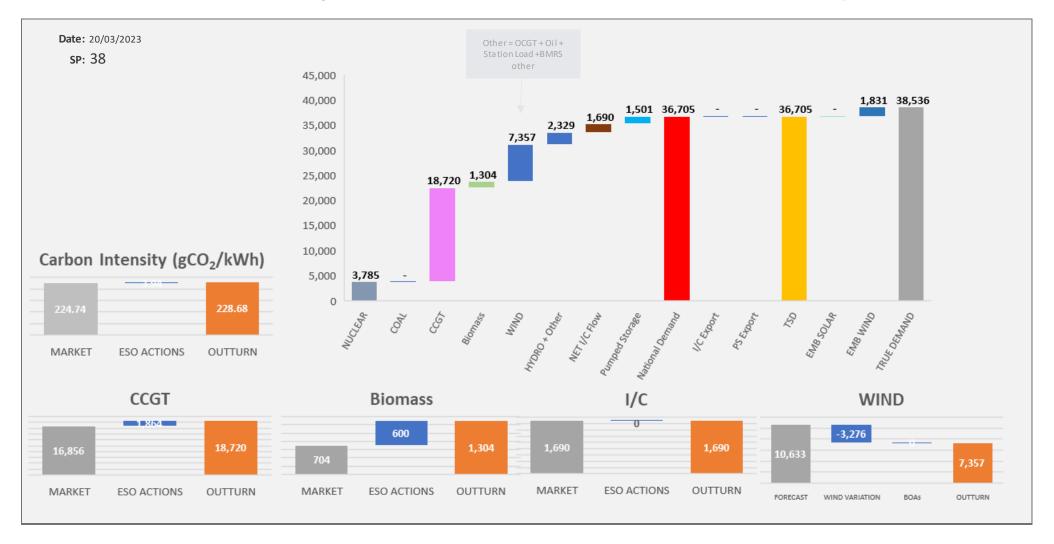
Managing largest loss for RoCoF No intervention was required to

manage largest loss.

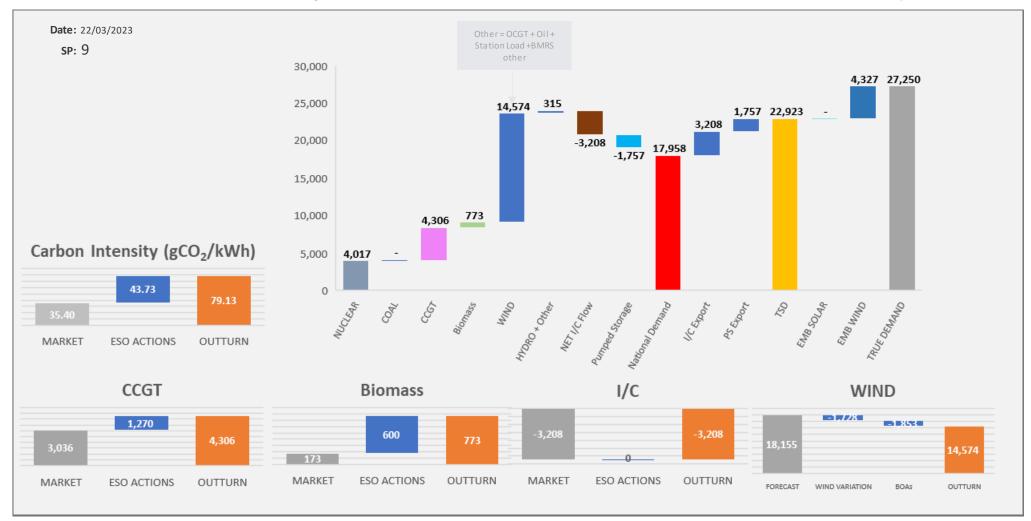
Increasing inertia

Intervention was required to manage system inertia throughout the week.

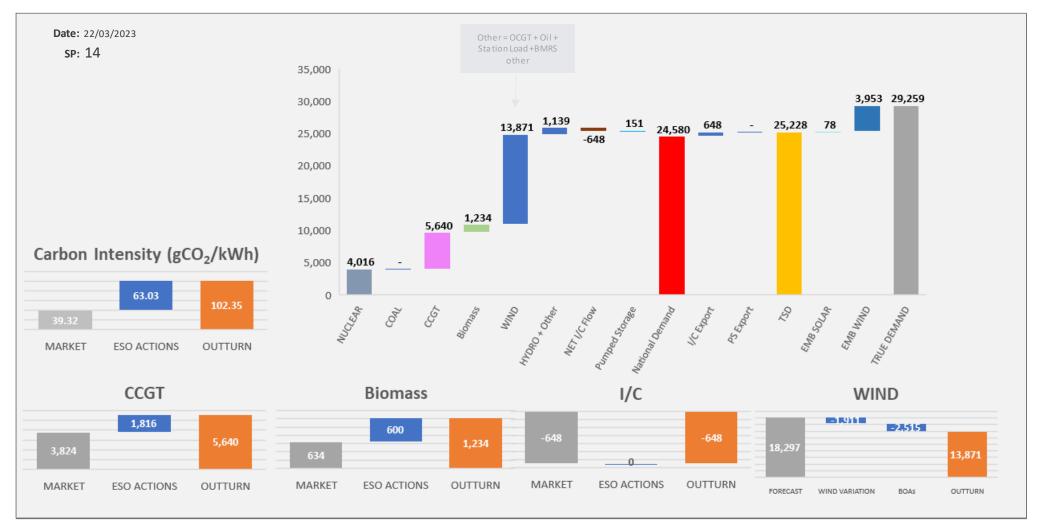
ESO Actions | Monday 20 March - Peak Demand - SP spend ~£108k



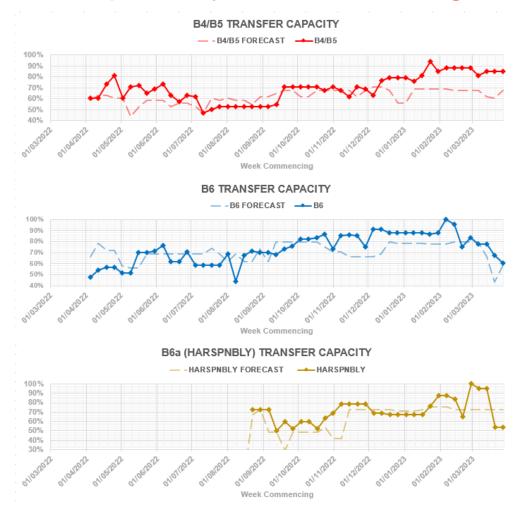
ESO Actions | Wednesday 22 March – Minimum Demand – SP Spend ~£509k



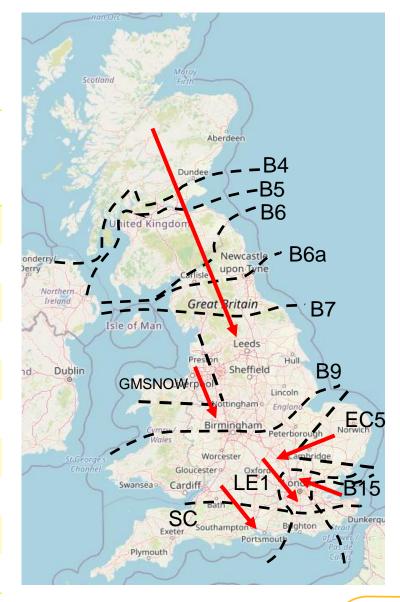
ESO Actions | Wednesday 22 March – Highest SP Spend ~£730k



Transparency | Network Congestion

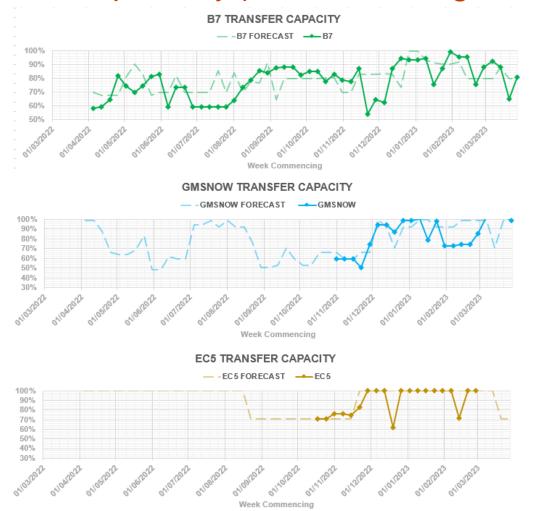


Boundary	Max. Capacity (MW)
B4/B5	2700
B6	4500
B6a	5800
B7	6050
GMSNOW	4500
B9	9800
EC5	5000
LE1	8500
B15	6600
SC	6700

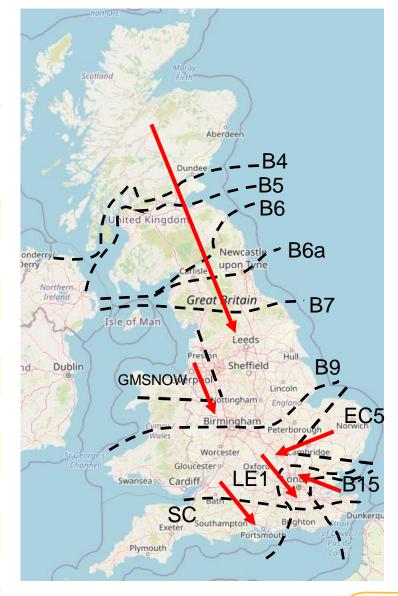


Day ahead flows and limits, and the 24-month constraint limit forecast are published on the ESO Data Portal: $\underline{ \text{https://data.nationalgrideso.com/data-groups/constraint-management} }$

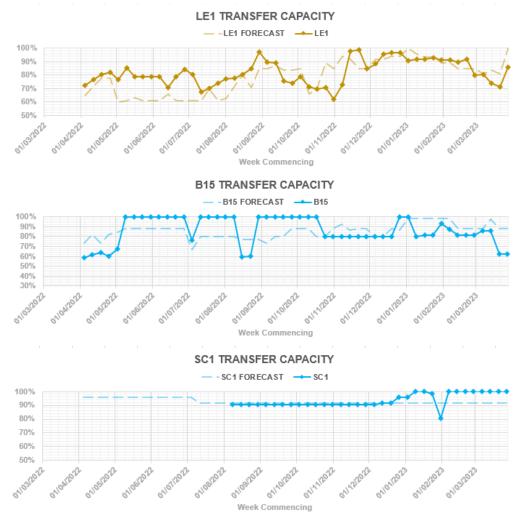
Transparency | Network Congestion



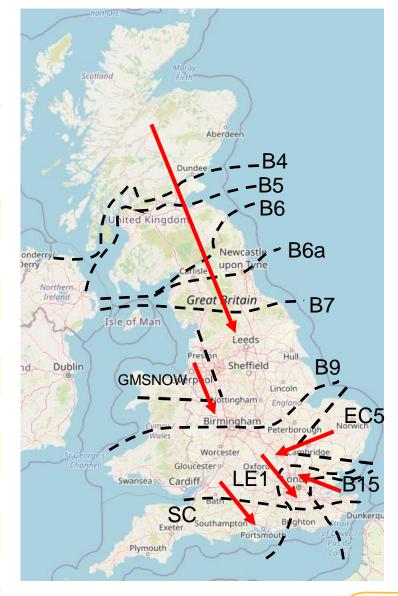
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Transparency | Network Congestion



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Advance Questions

Q: Why was the data presented in the winter balancing costs review different from that in the Monthly Balancing Services Statement?

The Monthly Balancing Services Statement (MBSS) includes ancillary service availability payments and activation payments whereas the numbers presented in the balancing cost review were the direct cost of bids, offers and trades conducted by ESO.

For the avoidance of doubt, where any ancillary service requires activation through the Balancing Mechanism for its energy MWh, the energy component would be within the numbers reported. However, the availability payment or utilisation payment would not be present in those numbers and instead would be included in the MBSS.

This data set represents a subset of the total costs to manage the electricity system as presented in the MBSS. These numbers were selected because it allows for analogous comparison between wholesale energy markets such as day ahead through to the balancing markets allowing for energy trend analysis.

Questions we are still working on

Q: Could you share the link to the content of the new Construction Planning Assumptions and storage modelling?

Q: I have few queries from today's session (8th March):

- The presenter mentioned that BALIT service is now called as "Excess Energy" service. I understood that service is still in use and only name is changed but it is mentioned in the ppt that ESO can not use this service (see snip). On a different slide: it is mentioned that Excess energy service is used by NGESO (see snip2).
- Please clarify can NGESO use "Excess Energy" service?
- If yes: What is the minimum notice period?
- If no what is the minimum notice period?
- Please explain in detail how, when & why "excessive Energy" service is used by NGESO.

slido

Audience Q&A Session

(i) 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