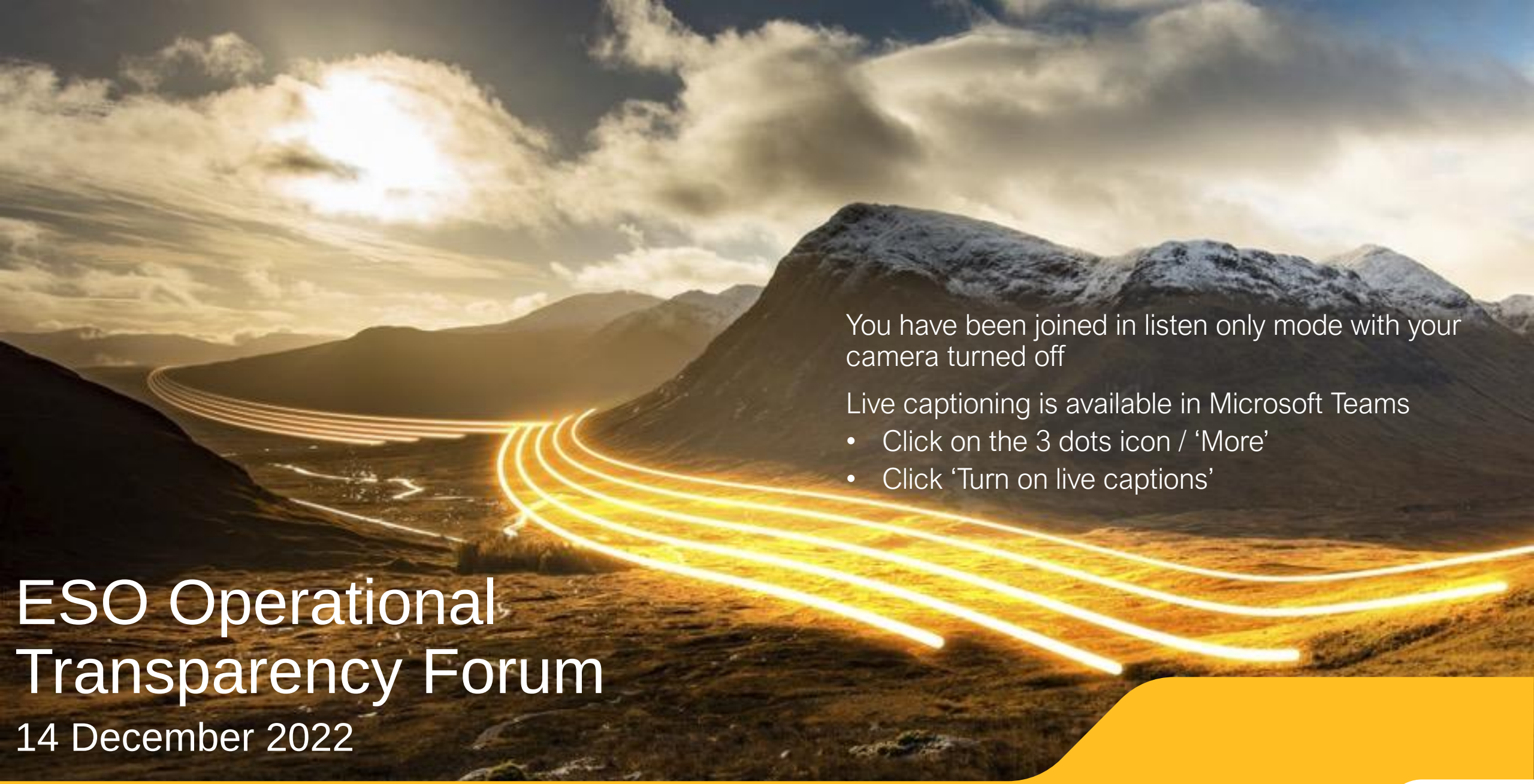


You have been joined in listen only mode with your camera turned off

Live captioning is available in Microsoft Teams

- Click on the 3 dots icon / ‘More’
- Click ‘Turn on live captions’

ESO Operational Transparency Forum

14 December 2022

ESO

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:

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

Future deep dive/ response topics

Today:

Operational Insight from 12th December

Demand Flexibility Service: Results from the first tests

Coming soon:

Local Constraint Markets update – 21st December

Reserve Reform update - January

Response markets deep dive – to be rescheduled due to winter workloads in the team

Feedback welcomed on our proposed deep dive topics

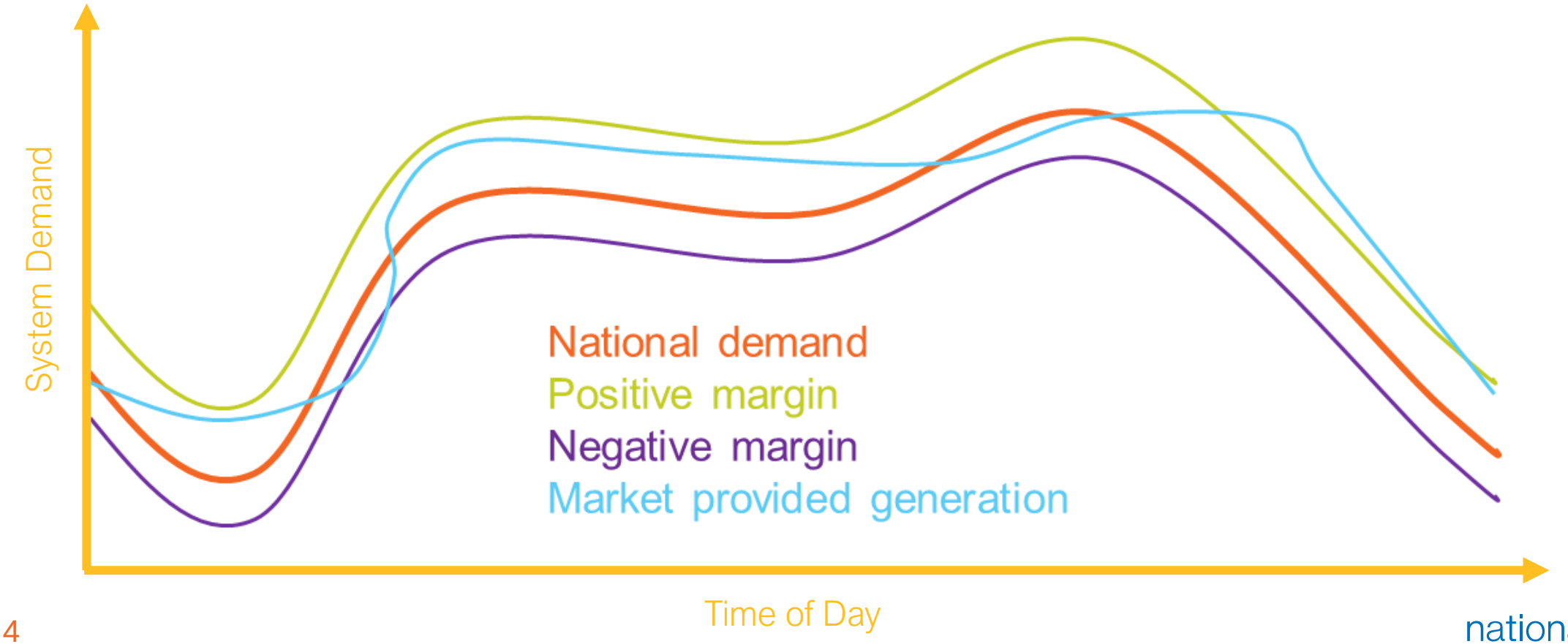
Other dates for your diary

28th December - no OTF planned in Christmas week

4th January – provisional booking for an abbreviated OTF

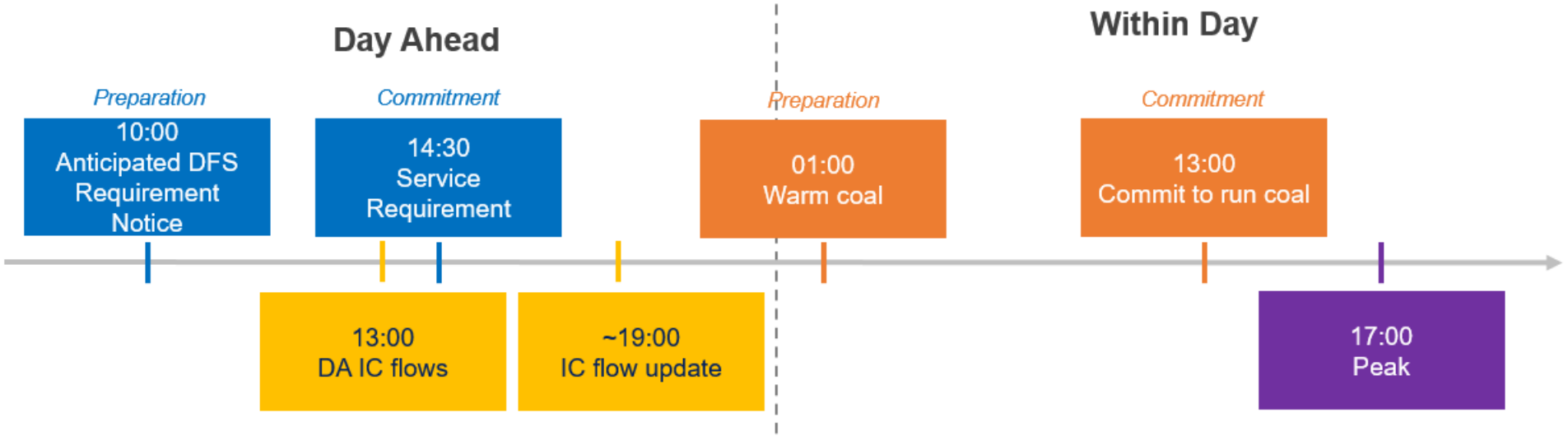
Transparency | Why do we hold Operating Margin?

NGESO must ensure that there is sufficient Operating Margin held to meet system security requirements due to variety of factors, such as loss of generation, normal fluctuations in national demand and variance from forecast.



Context and background

- Winter contingency contracts and the Demand Flexibility Service (DFS) have been implemented as **enhanced actions** for this Winter
- These services are intended for use when we anticipate we will exhaust our **every day actions**
- Each service has two key stages: *preparation* and *commitment*

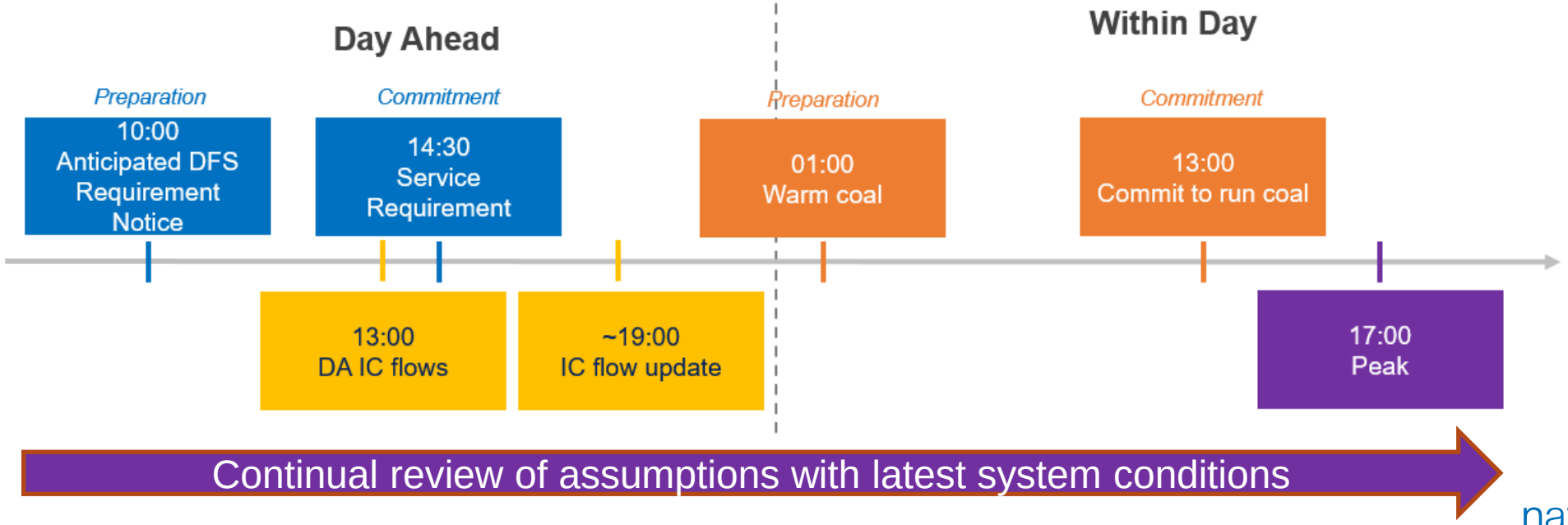


- A key aspect of the DFS service design is the use of tests to maximise learning from the service throughout Winter and to maximise operational confidence ahead of a true system need for the service
- All DFS providers are entitled to two tests per month, plus an additional onboarding test

5 For more information on our Order of actions Policy see https://www.nationalgrideso.com/document/268116/download

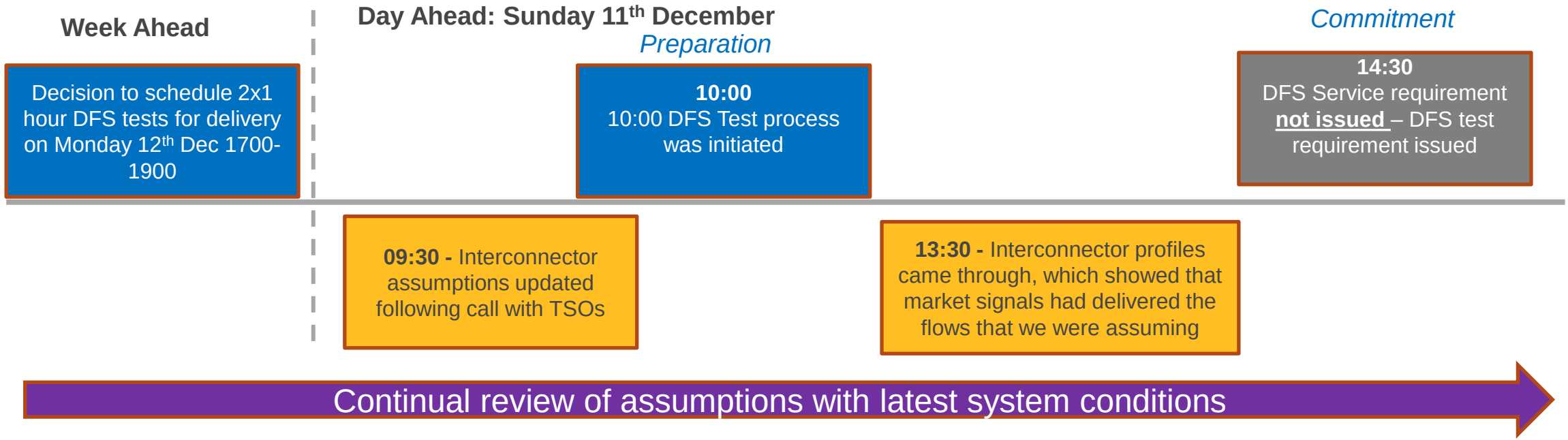
Navigating uncertainty

- When taking decisions at these lead times, as ESO we will always be navigating uncertainty with respect to the assumptions that impact our requirement calculations such as:
  - Available generation including access to constrained generation
  - Interconnector flows and status of other TSOs
  - Demand, including risk of triad avoidance and demand suppression
  - Reserve requirements e.g. contingency reserve requirement erodes as you get closer to real time
- All decisions are made with the most up to date data available at the time alongside engineering judgment to minimise uncertaintv



For more information on our Order of actions Policy see https://www.nationalgrideso.com/document/268116/download

Day Ahead Timescales



- At 1430 we needed to decide to commit to a ‘live’ DFS requirement or to proceed with the test.
- Commitment to an enhanced action at this point requires a high level of confidence that our use of everyday actions would be insufficient to secure the system.
- At 1430 on Sunday, there was still a level of uncertainty for the Monday DP on whether there was a substantial margin deficit, and so we did not call a ‘true’ service requirement and continued to proceed with the test.

Day Ahead Timescales

Day Ahead: Sunday 11th December

Within day: Monday 12th December

Preparation

Commitment

16:00
DFS test auction – price cap applied is maximum of Guaranteed Acceptance Price or marginal BM unit

19:00
updated interconnector flows

01:00
Decision to warm winter contingency units

10:30 – 11:00
Decision to not run winter contingency units

Warming Decision Operating Plan

- Contingency requirement: 697MW
- Without DRAX-5 and 6 contingency available: 36MW
- With 1 x DRAX contingency available: 606MW
- With 2 x DRAX contingency available: 1176MW
- 23:55 DRAX-5 warmed
- 00:25 DRAX-6 warmed

Cancellation Decision Operating Plan

- Contingency requirement: 339MW
- Without DRAX-5 and 6 contingency available: 973MW
- 10:30 DRAX-5 warming cancelled
- 10:52 DRAX-6 warming cancelled

Continual review of assumptions with latest system conditions

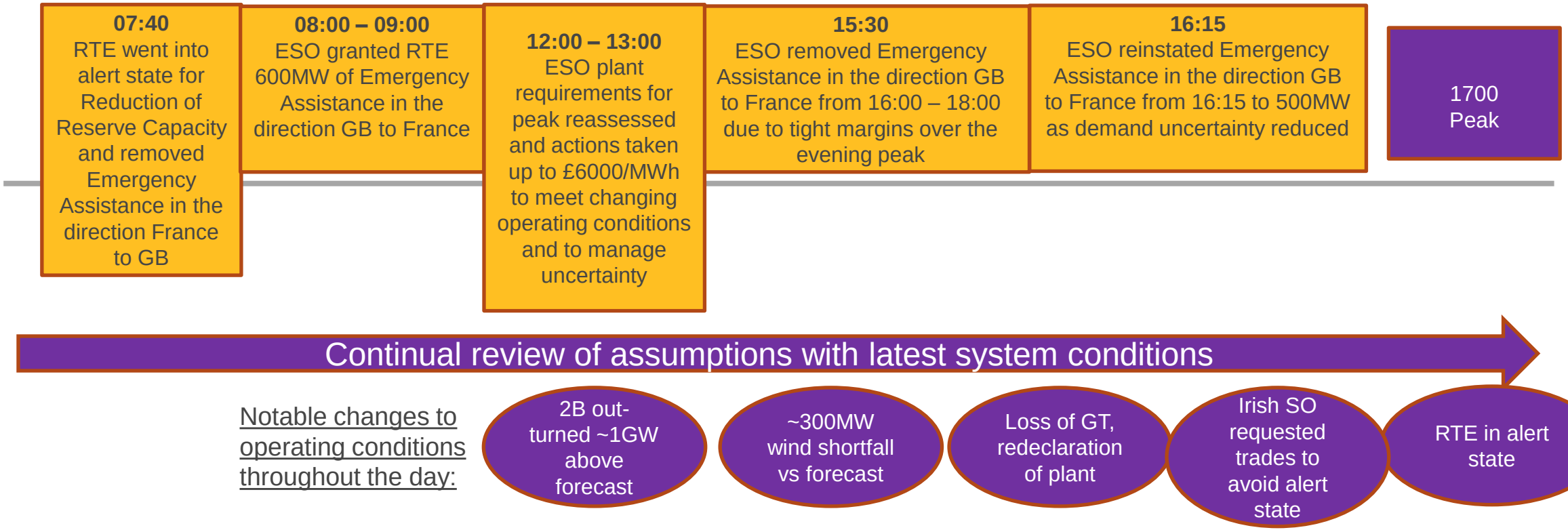
Notable changes between Operating Plans:

- Demand revised **downwards** by ~500MW
- Wind forecast **increased** by ~200MW
- ~600MW of plant gains
- Response/ reserve **optimised** by ~200MW

NOTE: the trigger point for NGESO to issue an Electricity Margin Notification (EMN) is below the full contingency requirement. This trigger was not met for the evening peak on Monday, so an EMN was not issued.

Within Day – Monday 12th December

Within day: Monday 12th December



NOTE: the trigger point for NGESO to issue an Electricity Margin Notification (EMN) is below the full contingency requirement. This trigger was not met for the evening peak on Monday, so an EMN was not issued.

Winter Contingency Service (coal)

As communicated at the 19th October OTF, if NGESO instructs any winter contingency unit either for proving runs or service instructions, we will inform the market by issuing a ‘market message’ via the BMRS.

Service instructions (12th December 2022)

The following Drax units were issued BM start-up instructions earlier this week. The BMRS messages issued are shown below:

2022-12-12 00:57:26

From : Power System Manager - National Grid Electricity Control Centre Issue of BM Start-Up Instruction. National Grid has issued the following BM Start-Up Instruction. Instruction issued: 11/12/2022 23:55 BMU ID: DRAXX-5 Estimated Capacity: 570MW Earliest Sync Time: 12/12/2022 11:55 Energy/System Flag: System Start-Up Price: ���0/hr Start-Up Cost:

2022-12-12 00:58:31

From : Power System Manager - National Grid Electricity Control Centre Issue of BM Start-Up Instruction. National Grid has issued the following BM Start-Up Instruction. Instruction issued: 12/12/2022 00:25 BMU ID: DRAXX-6 Estimated Capacity: 570MW Earliest Sync Time: 12/12/2022 12:25 Energy/System Flag: System Start-Up Price: ���0/hr Start-Up Cost:

2022-12-12 12:02:48

From : Power System Manager - National Grid Electricity Control Centre NATIONAL GRID NOTIFICATION Nature of Notification COAL CONTRACT WARMING DE-ACTIVATED Unit: DRAXX-5 Notification Issued at 12:00 hrs on 12/12/2022 Issued by Brendan Lyons National Grid Electricity Control Centre.

2022-12-12 12:03:06

From : Power System Manager - National Grid Electricity Control Centre NATIONAL GRID NOTIFICATION Nature of Notification COAL CONTRACT WARMING DE-ACTIVATED Unit: DRAXX-6 Notification Issued at 12:00 hrs on 12/12/2022 Issued by Brendan Lyons National Grid Electricity Control Centre.

Winter Contingency Service (coal)

Proving runs

16th December 2022 – DRAXX-6

In accordance with the contingency service contract terms, Drax is undertaking a planned proving run for DRAXX-6 this week on Friday 16th December 2022 between 07:55 and 13:30 with a maximum 300MW output.

19th - 20th December 2022 – RATS-1

Additionally, Uniper is also undertaking an initial proving runs for RATS-1 next week.

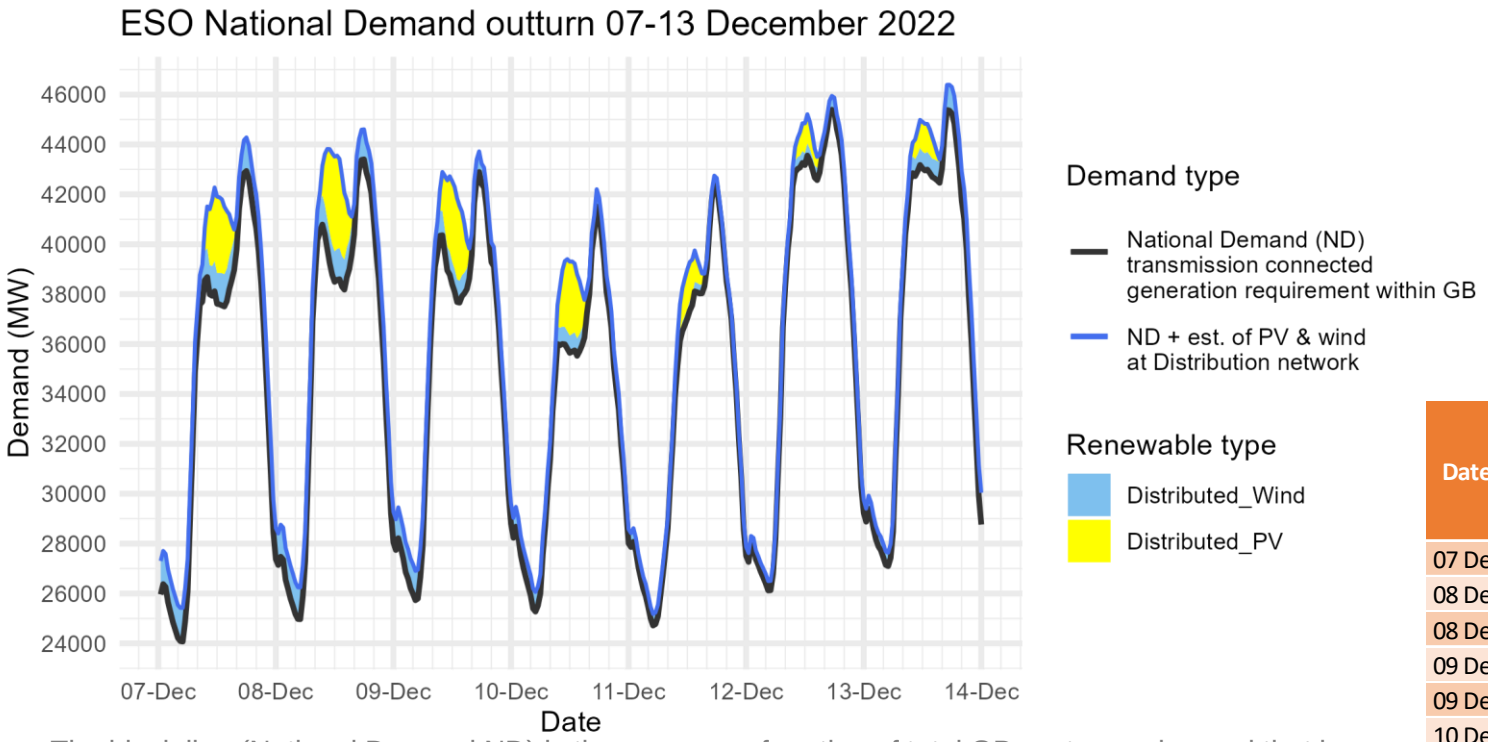
- Monday 19th December 2022 between 09:00 and 21:00 with a maximum output of 230MW.
- Tuesday 20th December 2022 between 05:00 and 23:00 with a maximum output of 480MW.

This is the current expected plan, subject to change. Note that there is a contingency day planned on Wednesday 21st December 2022 if required.

NGESO will issue the BMRS market message 24hrs ahead of each proving run.

For both proving runs, NGESO will issue BOAs to the units to follow a pre-agreed profile. These BOAs will be priced at £0/MWhr and will be removed from settlement via the BSCP18 process.

Demand | Last week demand out-turn



		FORECAST (Wed 07 Dec)		OUTTURN			
Date	Forecasting Point	National Demand (GW)	Dist. wind (GW)	National Demand (GW)	Triad Avoidance est. (GW)	N. Demand adjusted for TA (GW)	Dist. wind (GW)
07 Dec	Evening Peak	41.9	1.3	42.9	0.1	43.0	1.3
08 Dec	Overnight Min	25.2	1.2	25.0	n/a	n/a	1.3
08 Dec	Evening Peak	44.1	1.1	43.4	0.0	43.4	1.2
09 Dec	Overnight Min	25.7	1.0	25.7	n/a	n/a	1.2
09 Dec	Evening Peak	43.4	0.8	42.9	0.5	43.4	0.8
10 Dec	Overnight Min	25.0	0.7	25.3	n/a	n/a	0.8
10 Dec	Evening Peak	40.4	0.6	41.5	0.0	41.5	0.7
11 Dec	Overnight Min	24.9	0.4	24.7	n/a	n/a	0.5
11 Dec	Evening Peak	42.3	0.4	42.4	0.0	42.4	0.3
12 Dec	Overnight Min	25.6	0.6	26.1	n/a	n/a	0.4
12 Dec	Evening Peak	45.2	1.4	45.4	1.1	46.5	0.6
13 Dec	Overnight Min	24.6	2.0	27.1	n/a	n/a	0.5
13 Dec	Evening Peak	43.7	2.2	45.4	0.4	45.8	1.0

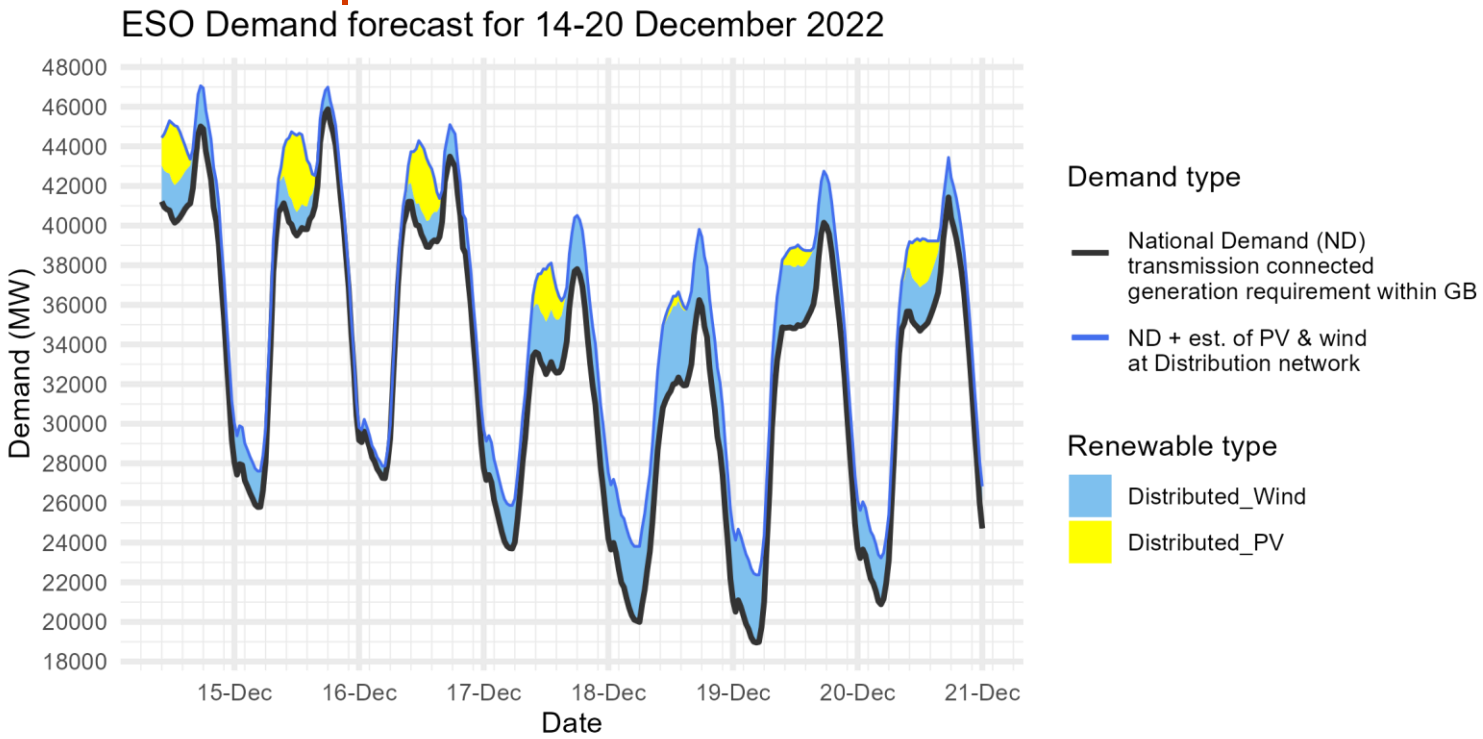
The black line (National Demand ND) is the measure of portion of total GB customer demand that is supplied by the transmission network.

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

Demand | Week Ahead



		FORECAST (Wed 14 Dec)	
Date	Forecasting Point	National Demand (GW)	Dist. wind (GW)
14 Dec 2022	Evening Peak	45.0	2.0
15 Dec 2022	Overnight Min	25.8	1.8
15 Dec 2022	Evening Peak	45.9	1.1
16 Dec 2022	Overnight Min	27.2	0.6
16 Dec 2022	Evening Peak	43.5	1.6
17 Dec 2022	Overnight Min	23.7	2.2
17 Dec 2022	Evening Peak	37.8	2.7
18 Dec 2022	Overnight Min	20.0	3.8
18 Dec 2022	Evening Peak	36.2	3.6
19 Dec 2022	Overnight Min	19.0	3.4
19 Dec 2022	Evening Peak	40.1	2.6
20 Dec 2022	Overnight Min	20.9	2.3
20 Dec 2022	Evening Peak	41.4	2.0

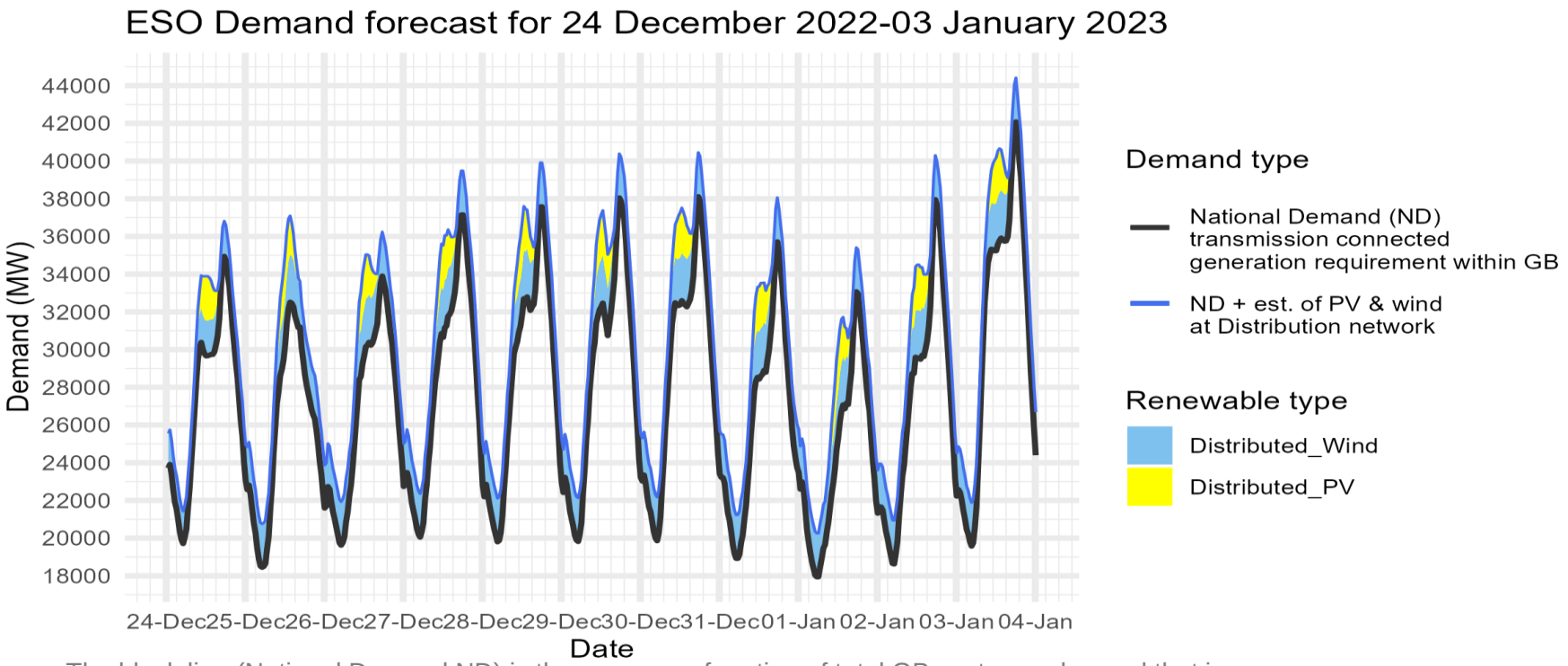
The black line (National Demand ND) is the measure of portion of total GB customer demand that is supplied by the transmission network.

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

Demand | Festive season forecast early view



Date	Forecasting Point	National Demand (GW)	Dist. wind (GW)
24 Dec 2022	Overnight Min	19.7	1.7
24 Dec 2022	Evening Peak	34.9	1.9
25 Dec 2022	Overnight Min	18.4	2.3
25 Dec 2022	Evening Peak	30.1	2.3
26 Dec 2022	Overnight Min	19.6	2.3
26 Dec 2022	Evening Peak	33.9	2.3
27 Dec 2022	Overnight Min	20	2.3
27 Dec 2022	Evening Peak	37.2	2.3
28 Dec 2022	Overnight Min	19.8	2.3
28 Dec 2022	Evening Peak	37.6	2.3
29 Dec 2022	Overnight Min	19.8	2.3
29 Dec 2022	Evening Peak	38	2.3
30 Dec 2022	Overnight Min	19.9	2.3
30 Dec 2022	Evening Peak	38.1	2.3
31 Dec 2022	Overnight Min	18.9	2.3
31 Dec 2022	Evening Peak	35.7	2.3

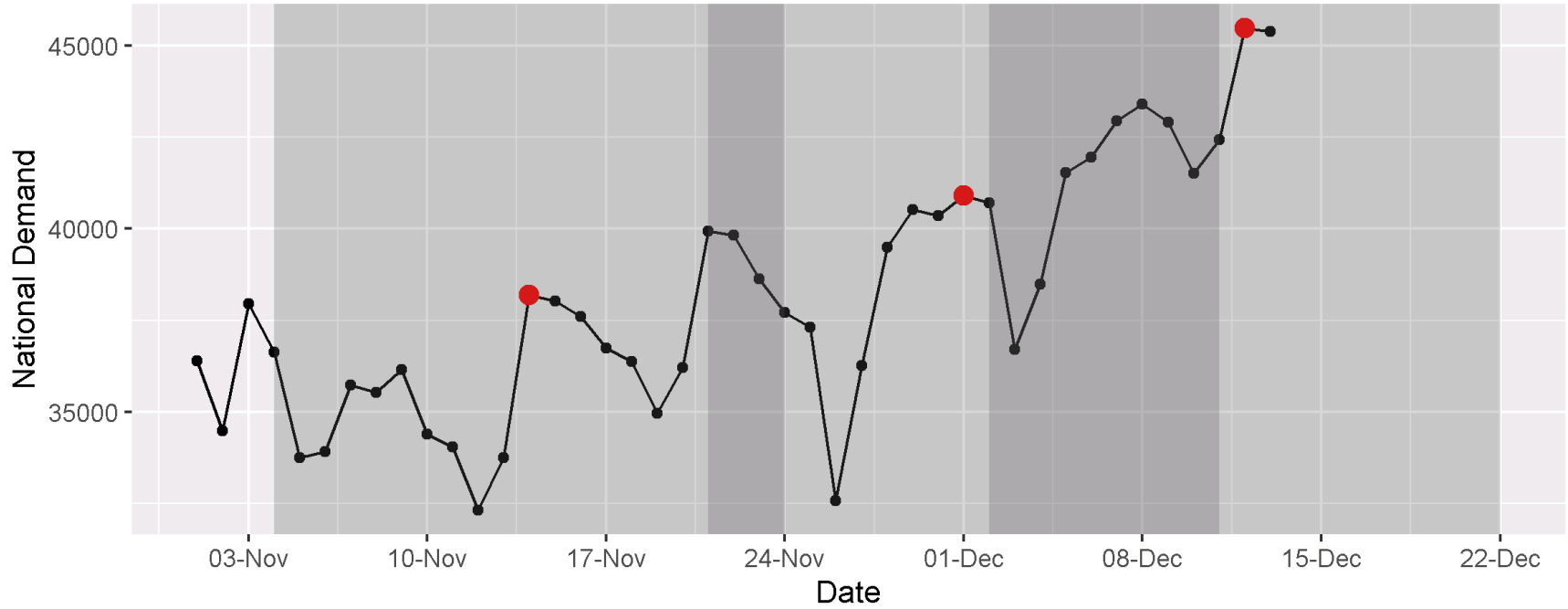
The black line (National Demand ND) is the measure of portion of total GB customer demand that is supplied by the transmission network.

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

Triad avoidance: indicative triad data based on operational metering

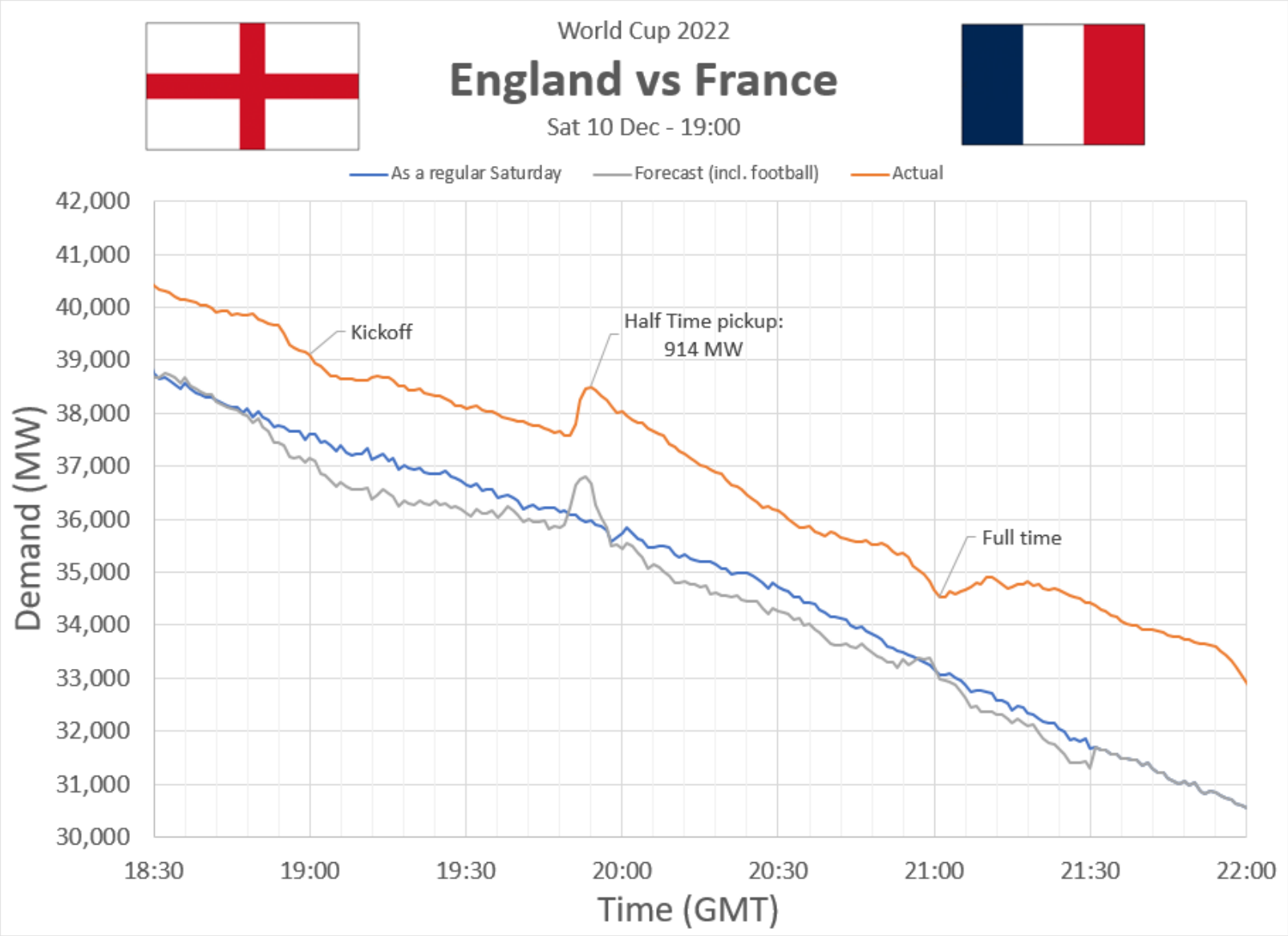


ESO operational metering			
Date	Time (HH ending)	National Demand (MW)	Estimated triad avoidance (HH corresponding with the time of the peak) (MW)
12/12/2022	1730	45470	1100
01/12/2022	1800	40909	200
14/11/2022	1800	38193	0

ESO does not include station load.

Indicative triad demand on Elexon's BMRS website quotes "GB Demand" which is based on the Transmission System Demand definition (it adds 500MW of station load onto the National Demand). Also, it shows time as half hour **beginning**.

TV Pickup: World cup 2022 – Sat 10 Dec



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 and peak demand. This is based on information available to National Grid ESO as of 14 December and is subject to change. It represents a view of what the market is currently intending to provide before we take any actions. The interconnector flows are equal to those in the Base case presented in the Winter Outlook.

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. This is based on our current assessment and is subject to change.

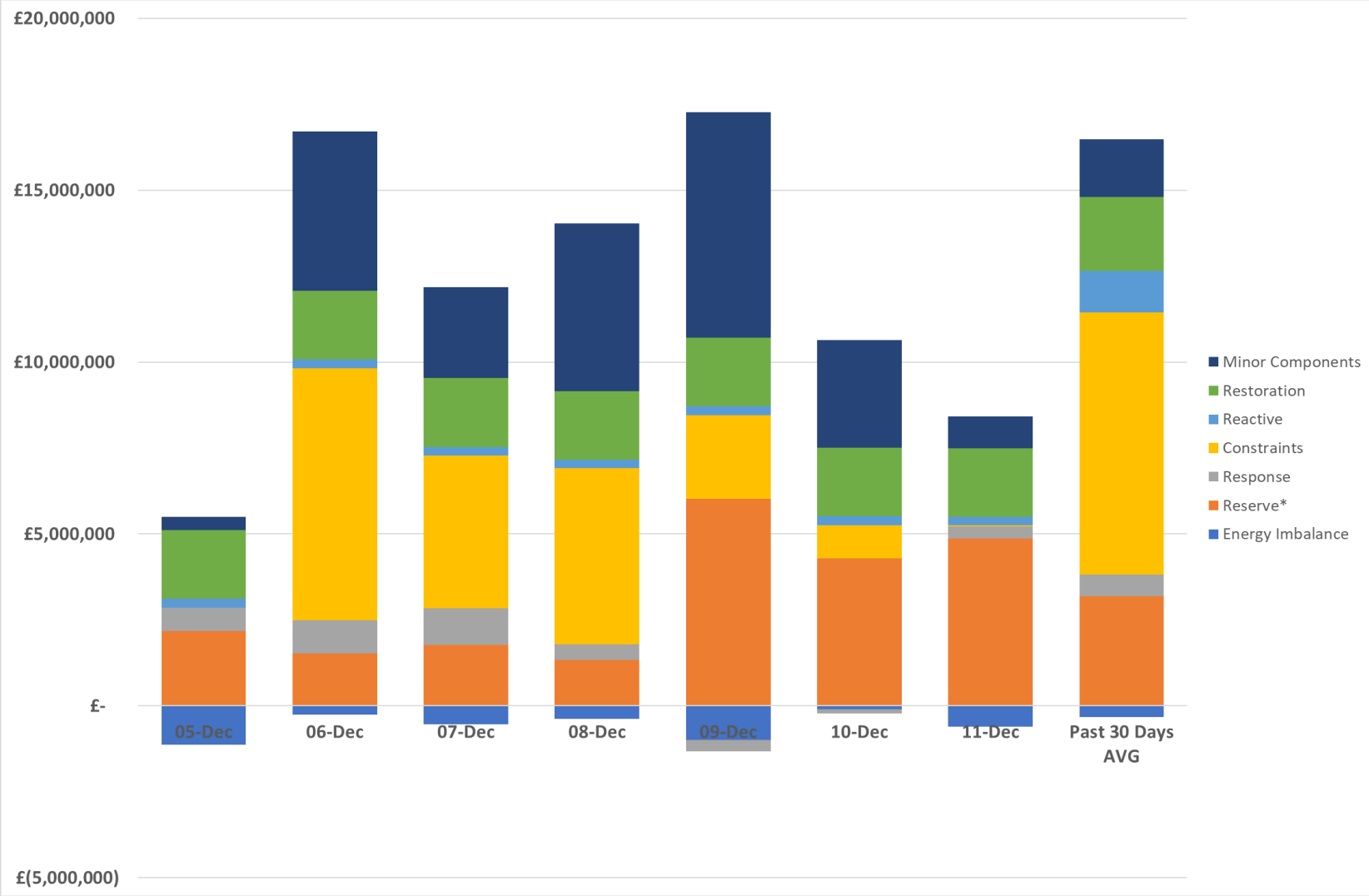
Day	Date	Notified Generation (MW)	Wind (MW)	IC Flows* (MW)	Peak demand (MW)	Indicative surplus (MW)
Thu	15/12/2022	42587	4860	4020	45600	1330
Fri	16/12/2022	42158	6730	4020	43970	4430
Sat	17/12/2022	41513	14650	4020	38520	16390
Sun	18/12/2022	43004	17490	4020	36740	21070
Mon	19/12/2022	42889	14690	4020	41010	15680
Tue	20/12/2022	42889	10710	4020	41970	10870
Wed	21/12/2022	42942	11870	4020	42190	11850

*Interconnector flow in line with the Winter Outlook Report Base Case but will ultimately flow to market price

Margins do not include NGESO enhanced or emergency actions (Outlined here: download (nationalgrideso.com))

Adequate when Indicative Surplus >= 1000 MW

ESO Actions | Category costs breakdown for the last week

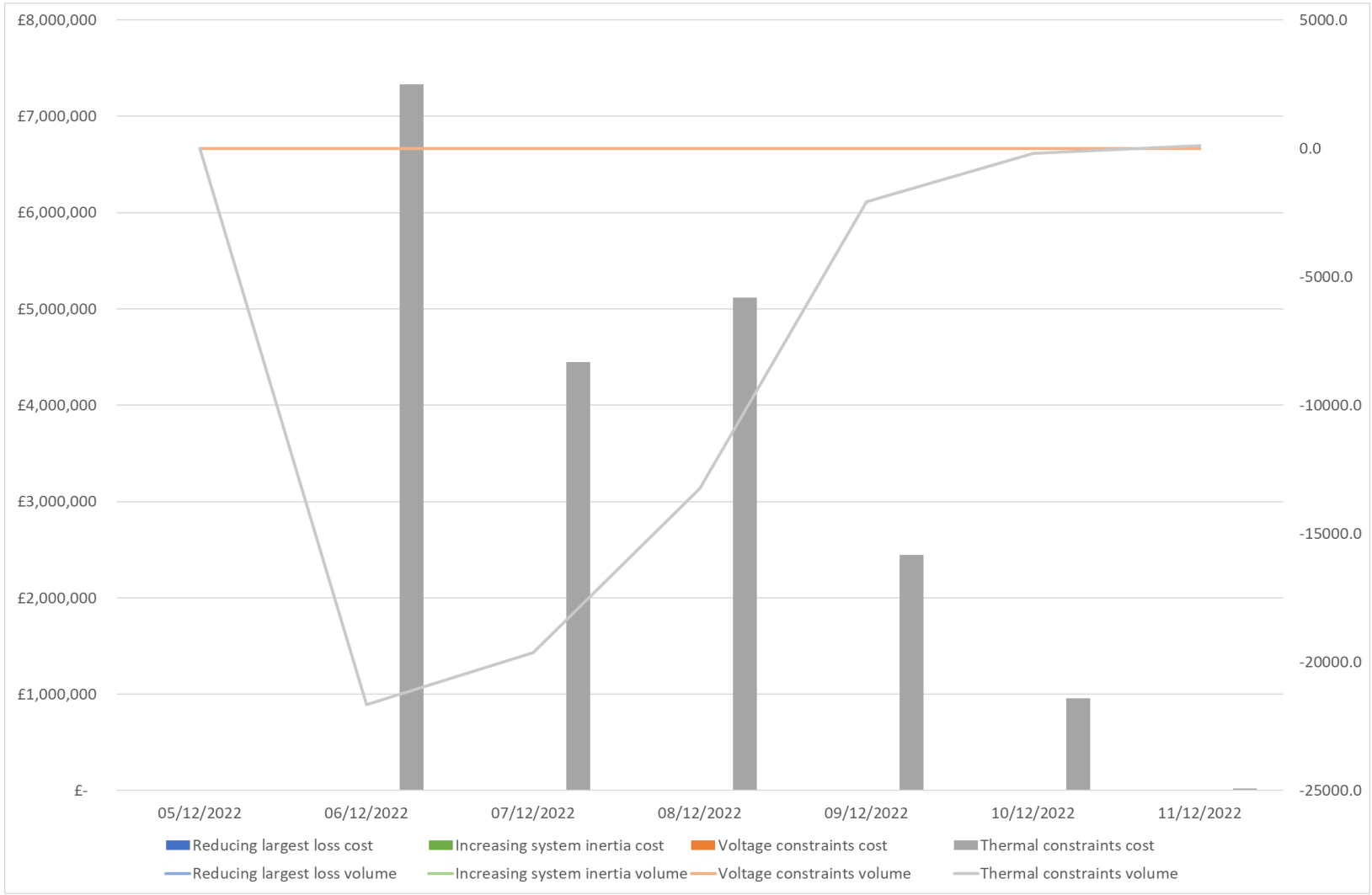


Date	Total (£m)
05/12/2022	4.4
06/12/2022	16.4
07/12/2022	11.6
08/12/2022	13.7
09/12/2022	15.9
10/12/2022	10.4
11/12/2022	7.8
Weekly Total	80.3

Reserve and Constraints costs were the key cost component throughout the week.

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

ESO Actions | Constraint Cost Breakdown



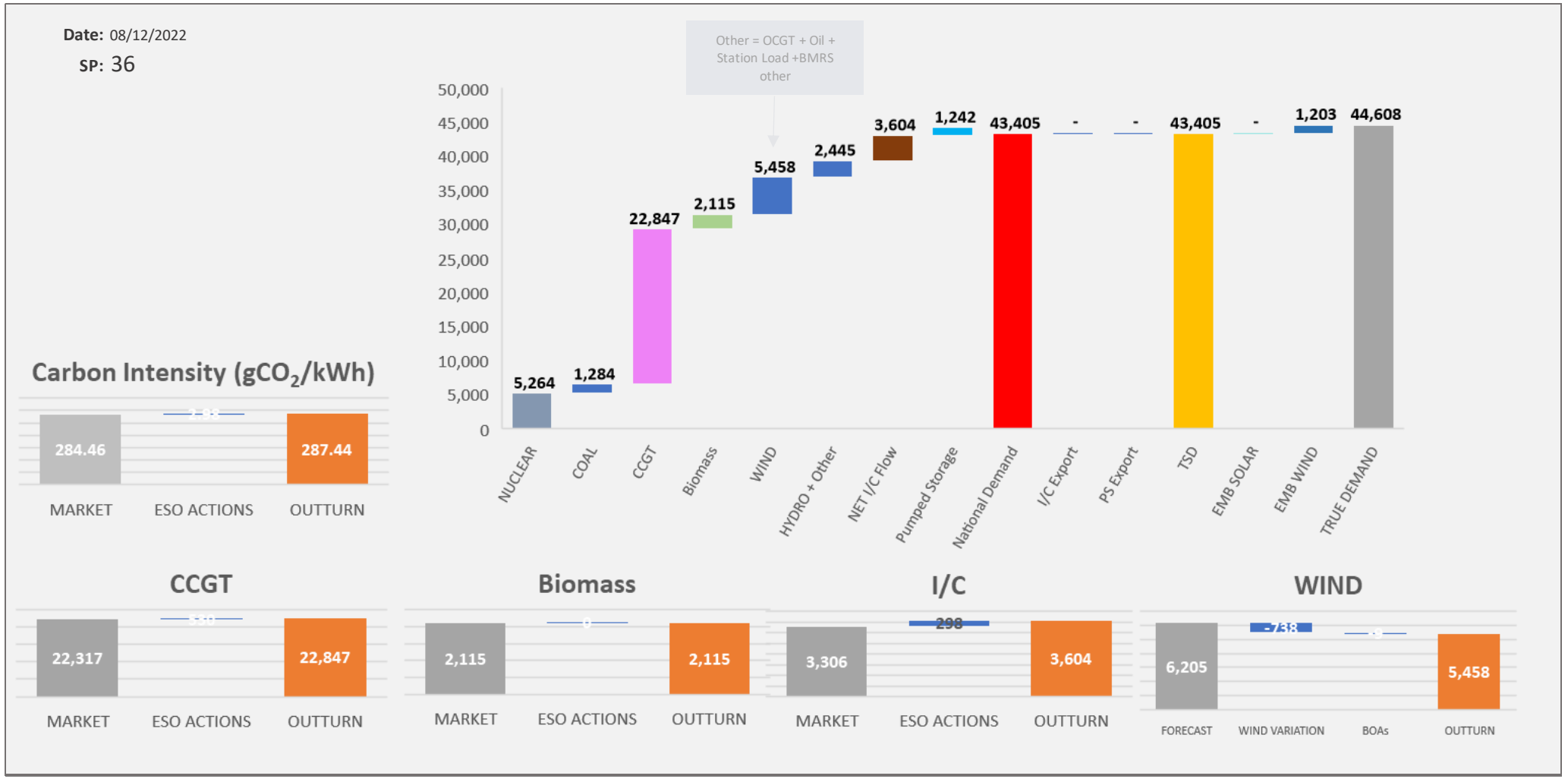
Thermal – network congestion
Actions required to manage Thermal Constraints between Tuesday to Saturday.

Voltage
No intervention was required for voltage control.

Managing largest loss for RoCoF
No intervention was required to manage largest loss.

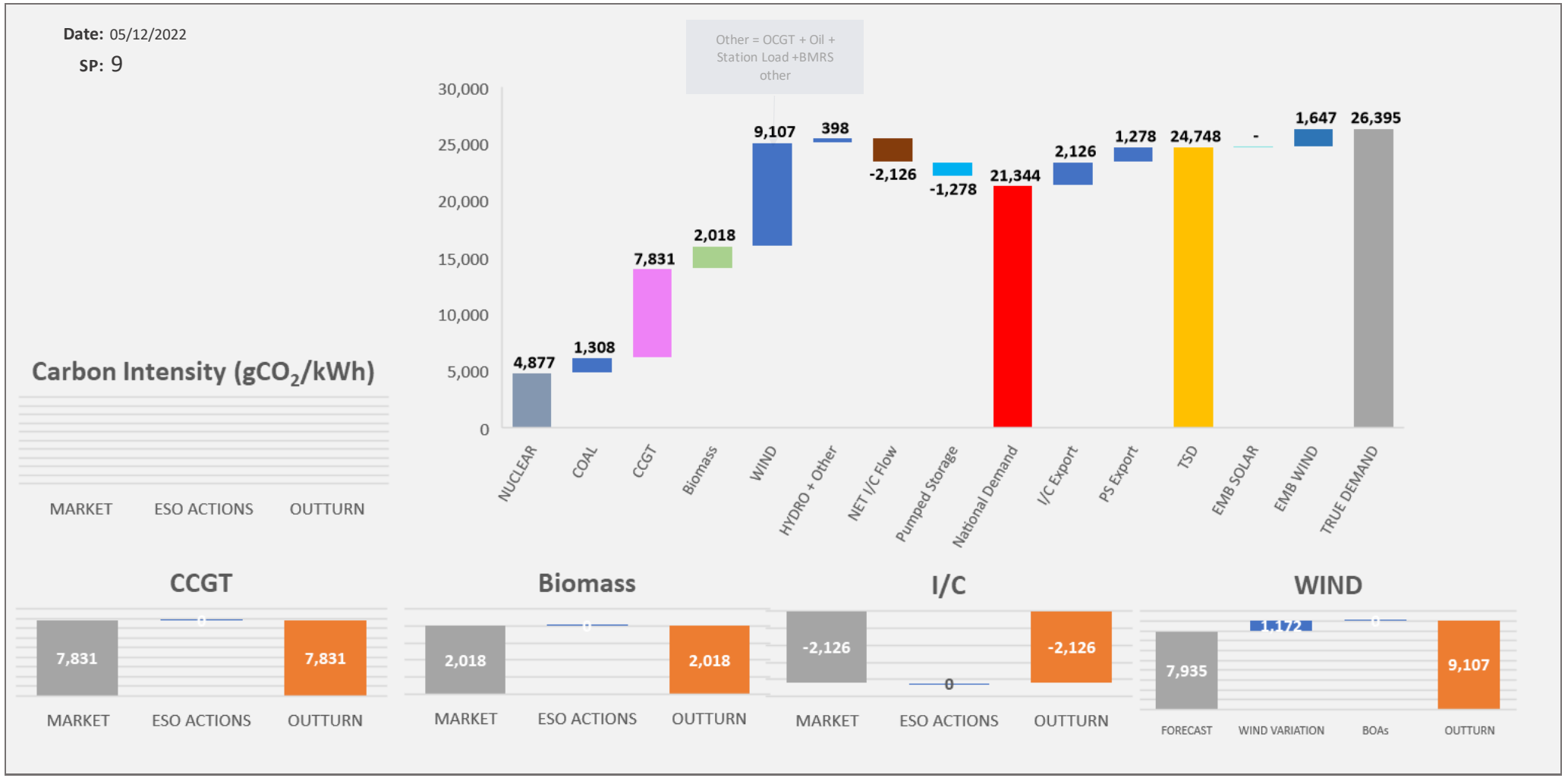
Increasing inertia
No intervention required was to manage system inertia.

ESO Actions | Thursday 8 December – Peak Demand – SP spend ~£237k



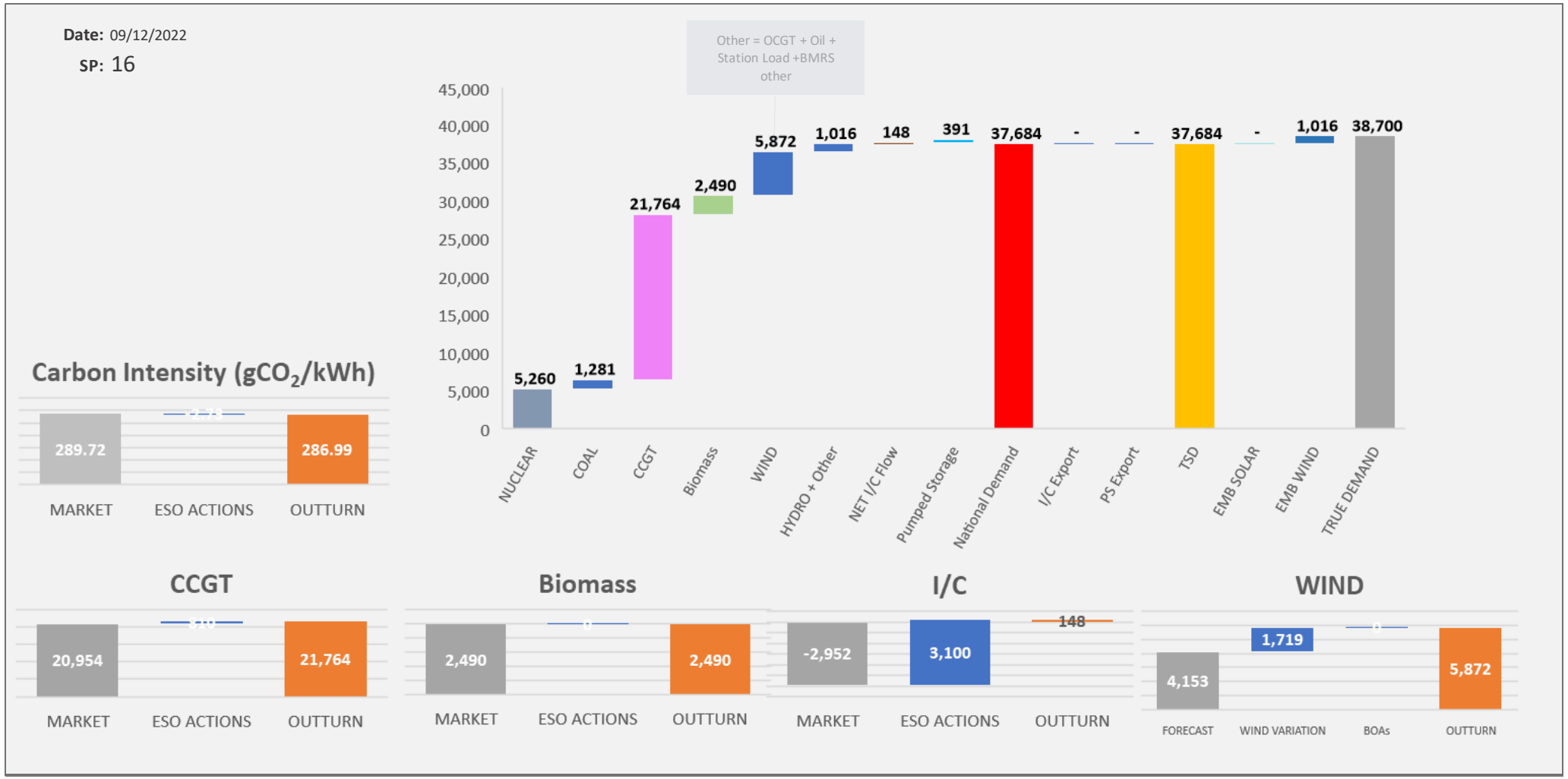
Carbon Intensity data on data portal: https://data.nationalgrideso.com/carbon-intensity1/carbon-intensity-of-balancing-actions

ESO Actions | Monday 5 December – Minimum Demand – SP Spend ~ -£52k



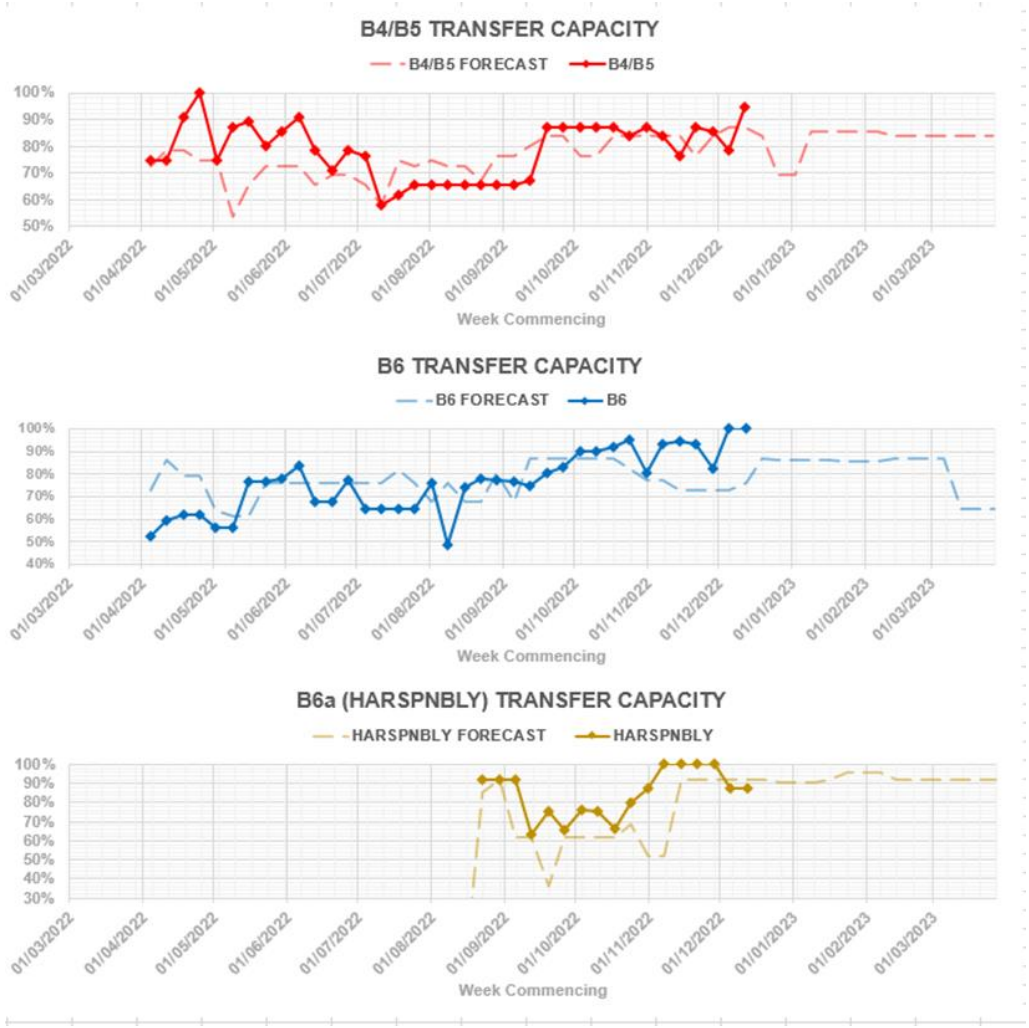
Carbon Intensity data on data portal: https://data.nationalgrideso.com/carbon-intensity1/carbon-intensity-of-balancing-actions

ESO Actions | Friday 9 December – Highest SP Spend ~£680k almost

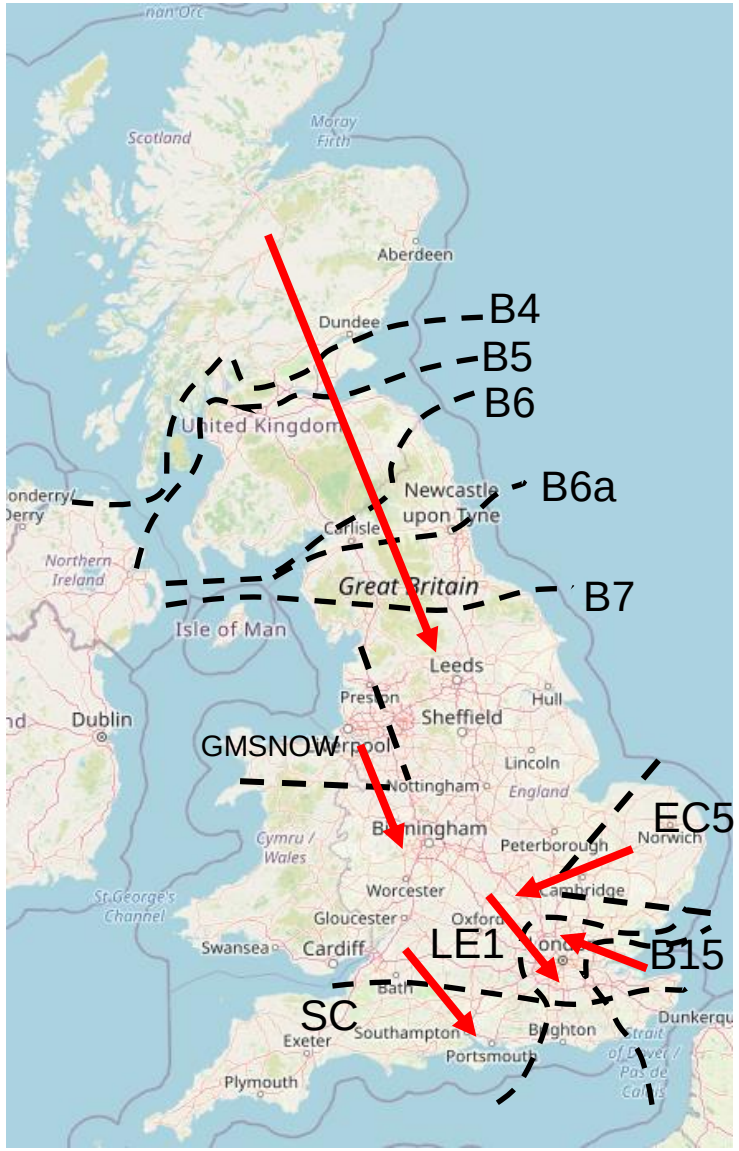


Carbon Intensity data on data portal: https://data.nationalgrideso.com/carbon-intensity1/carbon-intensity-of-balancing-actions

Transparency | Network Congestion

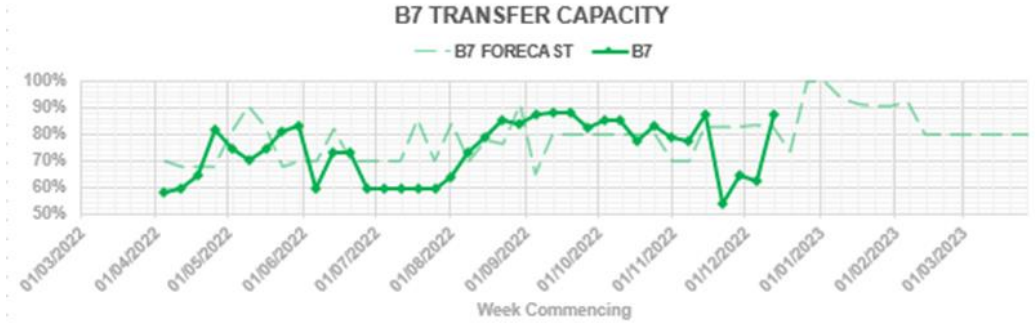


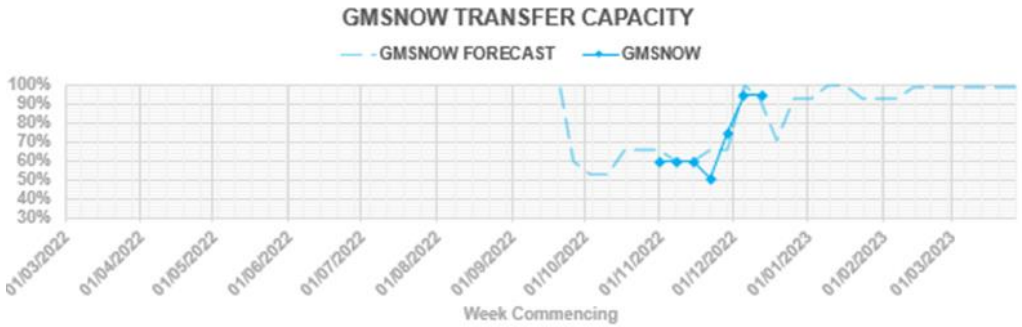
Boundary	Max. Capacity (MW)
B4/B5	2750
B6	6200
B6a	6300
B7	9300
GMSNOW	4550
EC5	5000
LE1	8500
B15	7500
SC	7000

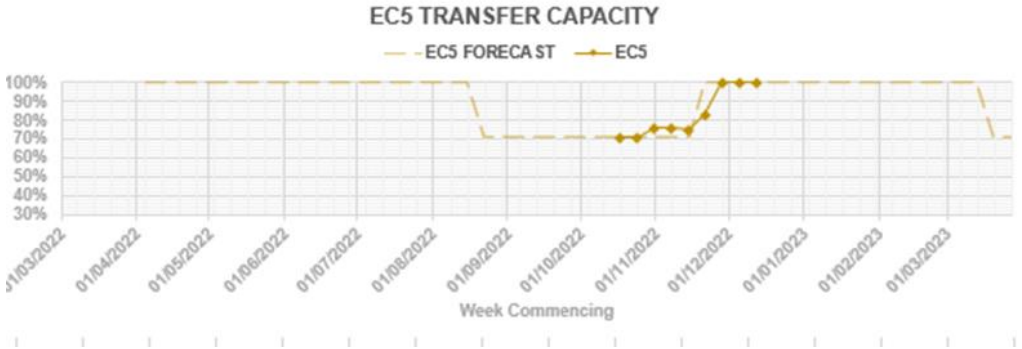


Day ahead flows and limits, and the 24 month constraint limit forecast are published on the ESO Data Portal:
https://data.nationalgrideso.com/data-groups/constraint-management

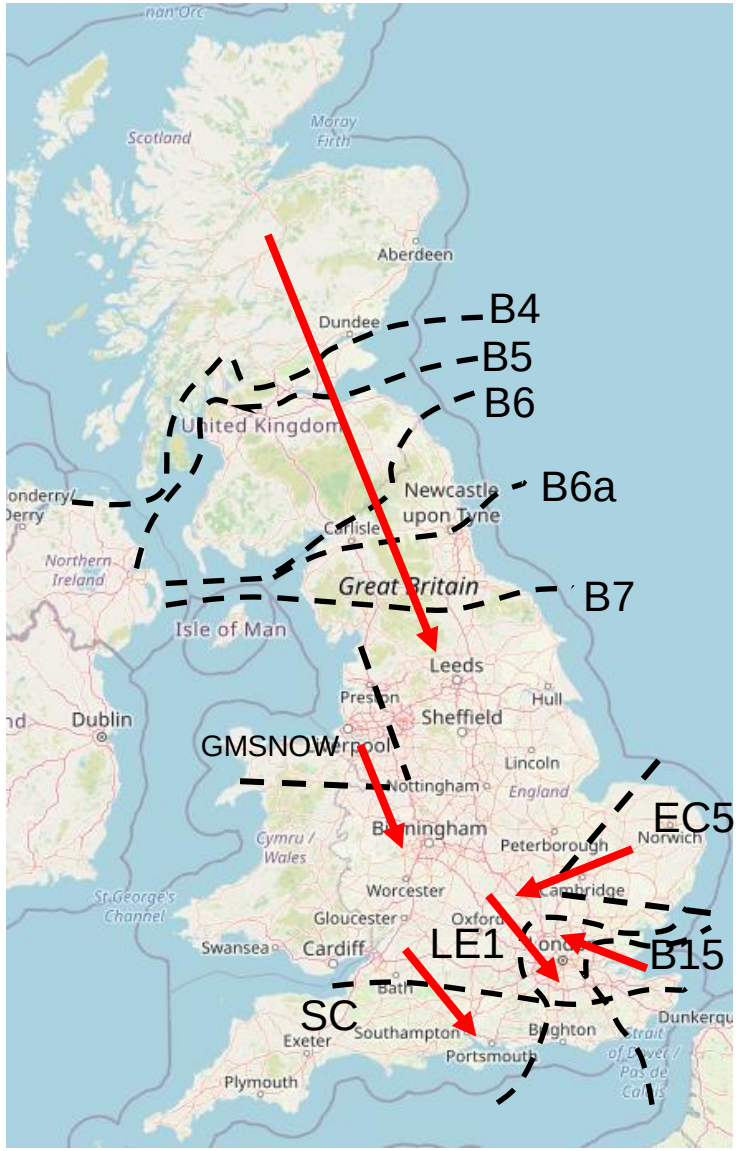
Transparency | Network Congestion





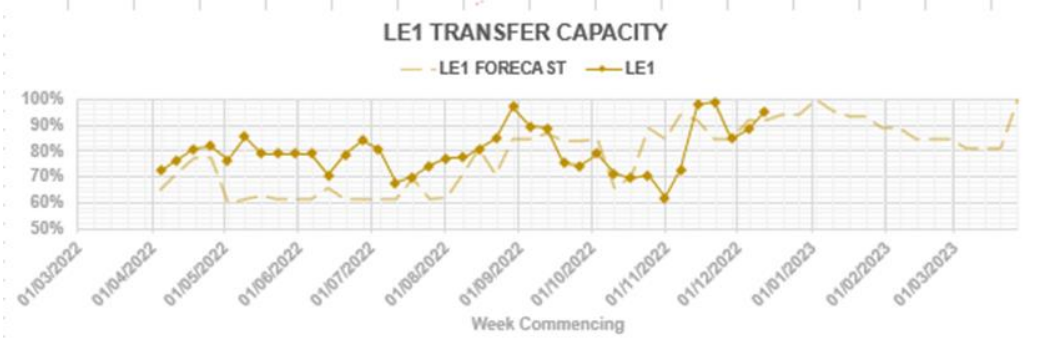


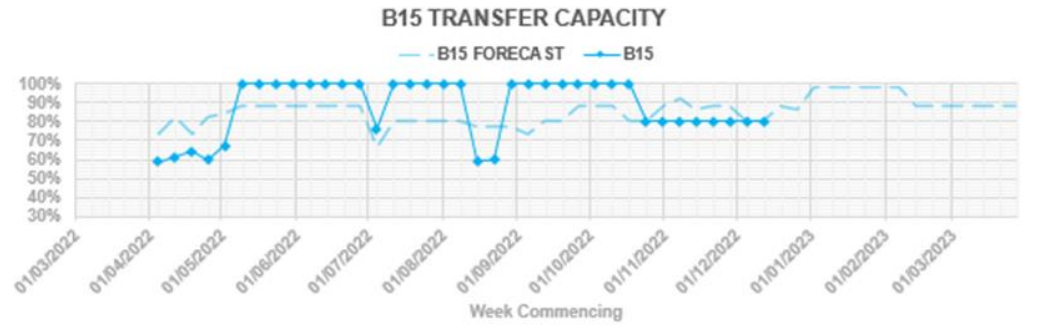
Boundary	Max. Capacity (MW)
B4/B5	2750
B6	6200
B6a	6300
B7	9300
GMSNOW	4550
EC5	5000
LE1	8500
B15	7500
SC	7000

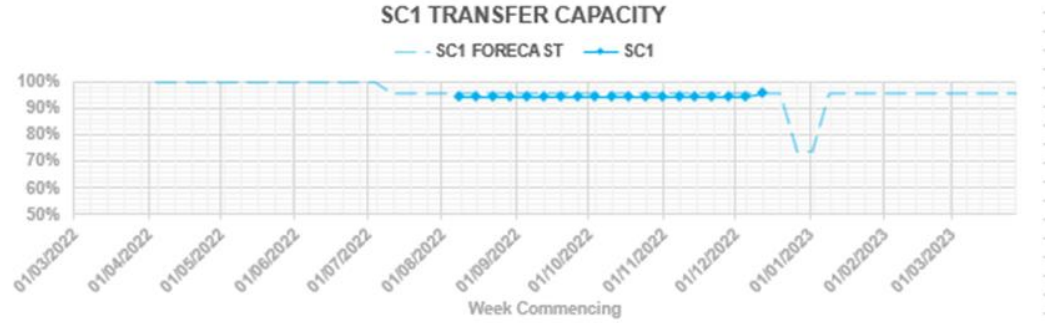


Day ahead flows and limits, and the 24 month constraint limit forecast are published on the ESO Data Portal:
https://data.nationalgrideso.com/data-groups/constraint-management

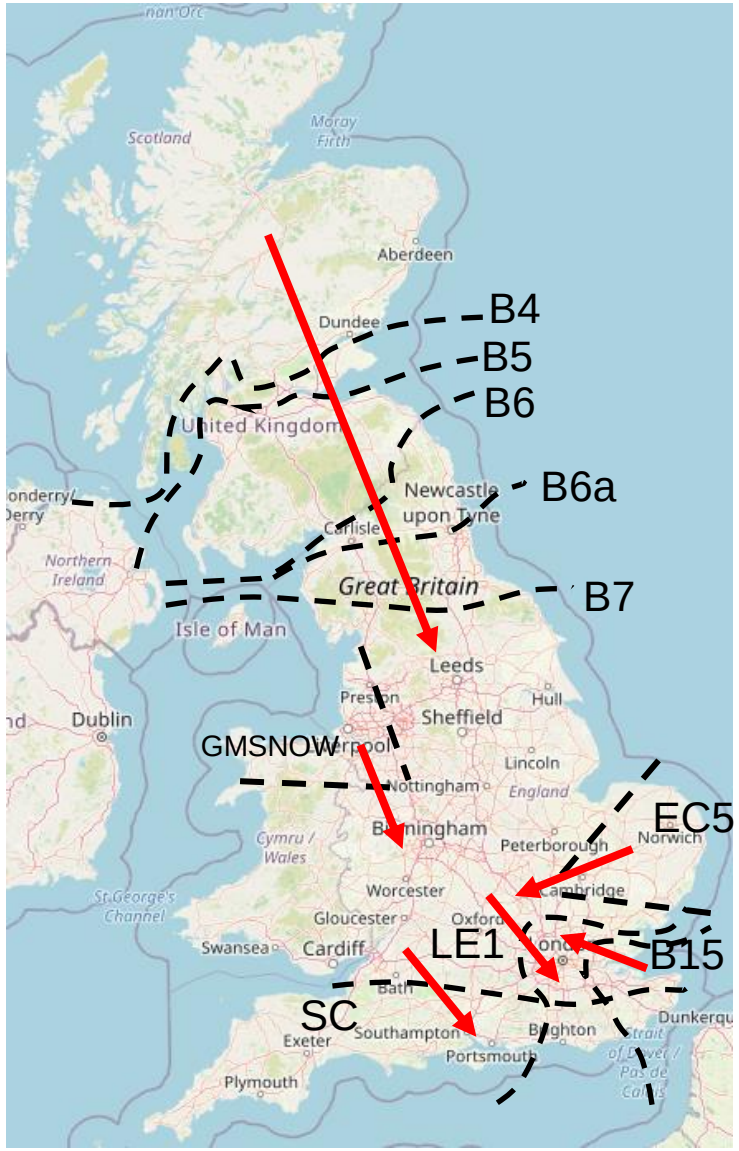
Transparency | Network Congestion







Boundary	Max. Capacity (MW)
B4/B5	2750
B6	6200
B6a	6300
B7	9300
GMSNOW	4550
EC5	5000
LE1	8500
B15	7500
SC	7000



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

Demand Flexibility Service (DFS) - OTF

14 December 2022

ESO

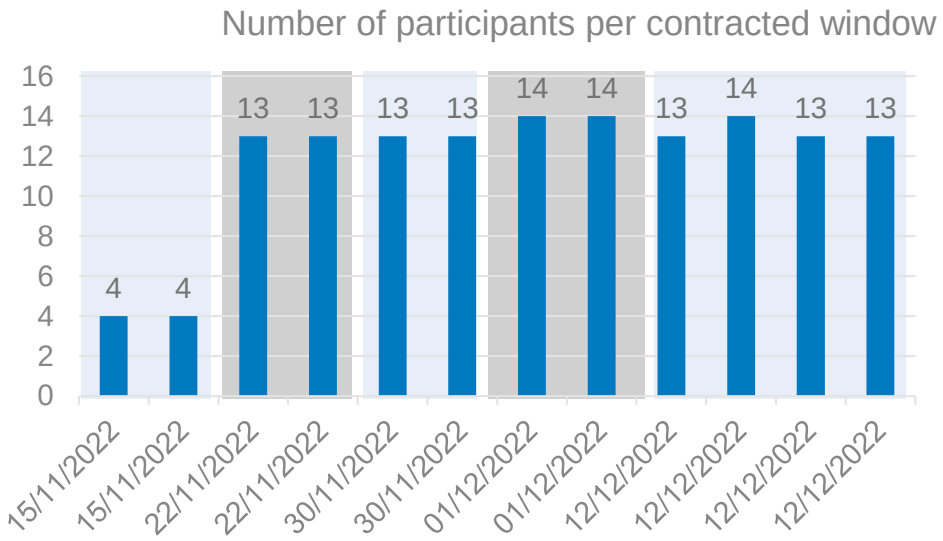
Demand Flexibility Service (DFS)

- As of today, 14-Dec, 2022, ESO has coordinated demonstration events on 5 days, covering a total of 6 one-hour DFS Tests, distributed as follows:

Date of Delivery	Period	Max Requested (MW)
15 November, 2022	17:00 to 18:00	200
22 November, 2022	17:30 to 18:30	200
30 November, 2022	17:30 to 18:30	250
1 December, 2022	17:00 to 18:00	250
12 December, 2022	17:00 to 18:00 18:00 to 19:00	300

Demand Flexibility Service (DFS)

- As of today, 14-Dec, 2022, ESO has coordinated demonstration events on 5 days, covering a total of 6 one-hour DFS Tests, the participants per each contracted window are shown below:



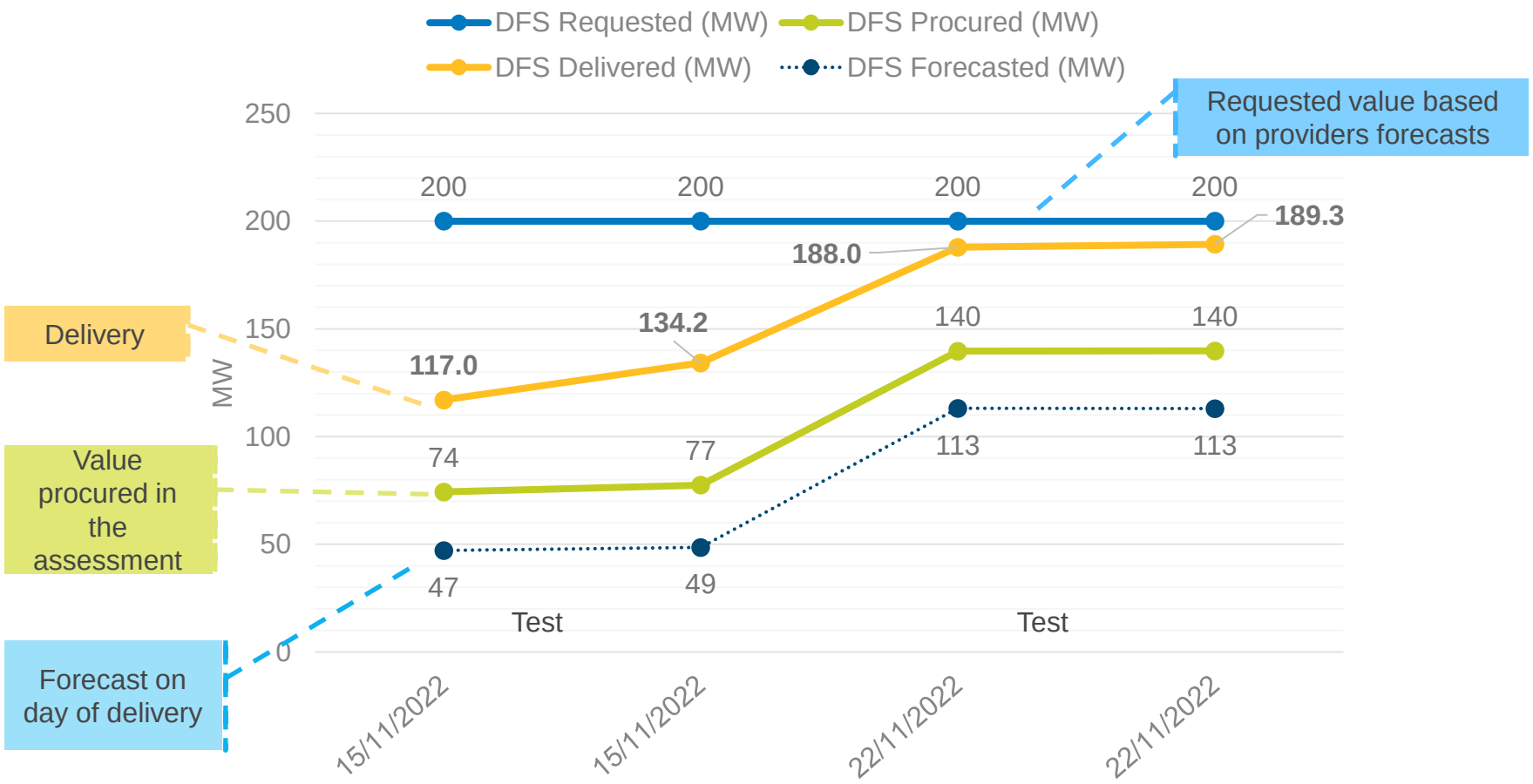
- More than **1 million** households and businesses have now signed up to DFS

The number of providers in events has been growing since the service launched with 26 providers now on our approved providers list*

 *https://www.nationalgrideso.com/industry-information/balancing-services/demand-flexibility/approved-provider-list

Demand Flexibility Service (DFS)

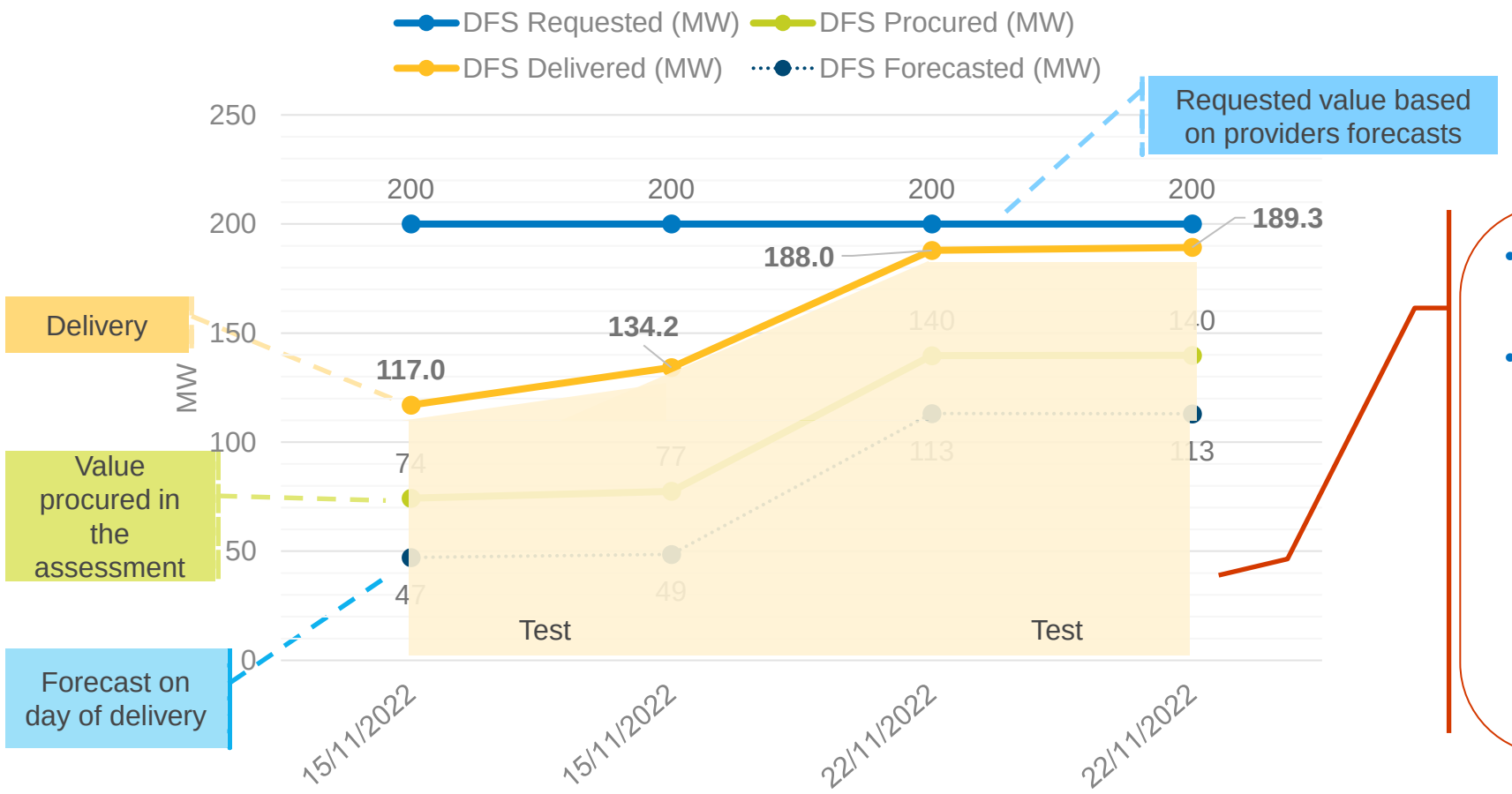
- Delivery data for the first two 1-hour DFS Tests are shown below.



ESO

Demand Flexibility Service (DFS)

- Delivery data for the first two 1-hour DFS Tests are shown below.



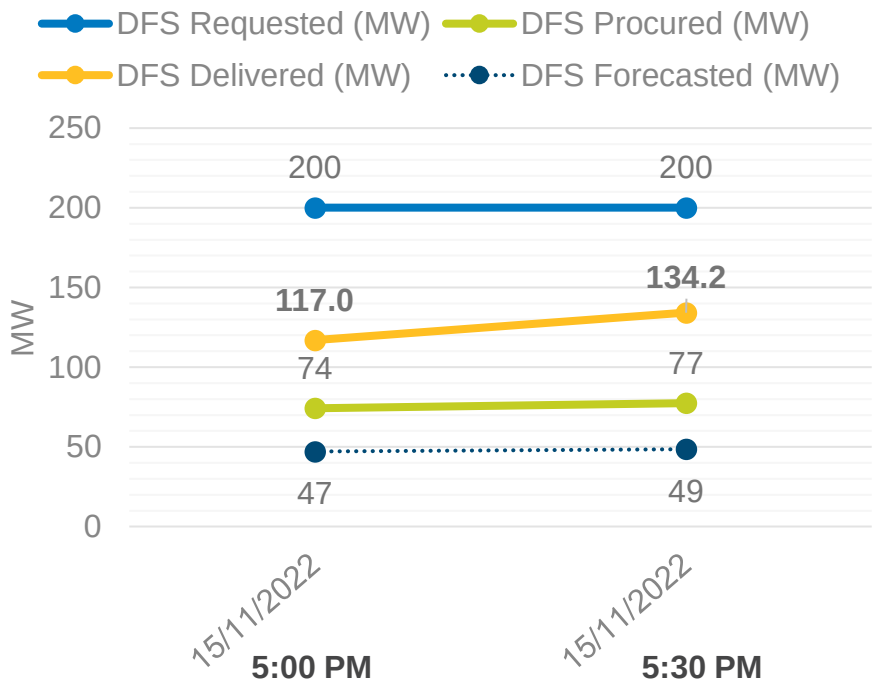
- Confirmed delivery from test events of the 15-Nov and 22-Nov amounts to **314.2 MWh**.
- This is equivalent to:
  - the amount of CO2 that a forest of more than 10,000 trees would absorb in a year.
  - the amount of electricity used by a kettle to boil water for more than 5 million cups of tea.
  - the amount of electricity used by a washing machine to wash more than 300,000 loads of laundry.

ESO

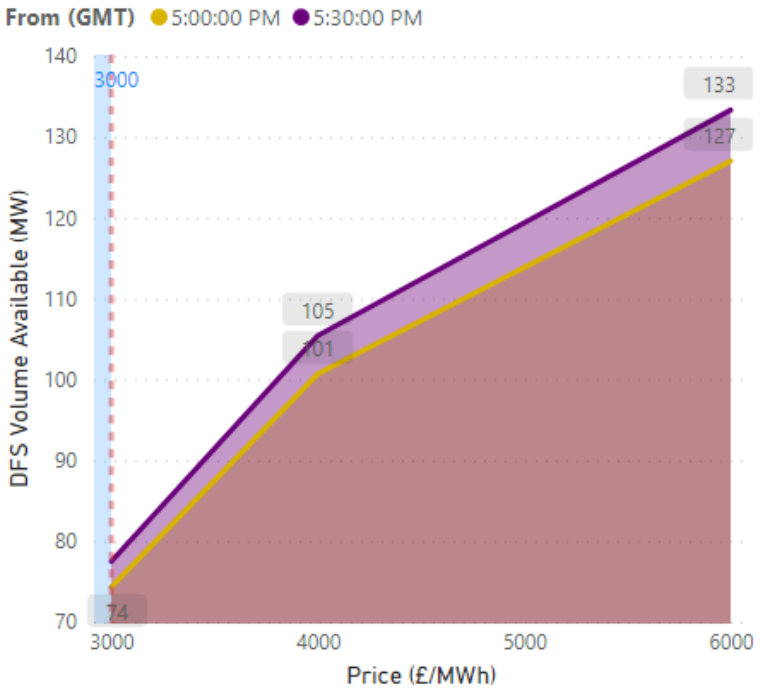
Demand Flexibility Service (DFS)

DFS Test – 15th November

- **AVG 76 MW** in accepted bids @ **£3000 MWh**
- **AVG 54 MW** in rejected bids ranging up to **£6000 MWh**
- **AVG 121 MW** delivered during the first test event for a total cost of **£376,800**
- **4** providers participated in this test



5:00 PM: 53MW rejected (>GAP)
5:30 PM: 56MW rejected (>GAP)



~66% avg. over-delivery (delivery vs request)

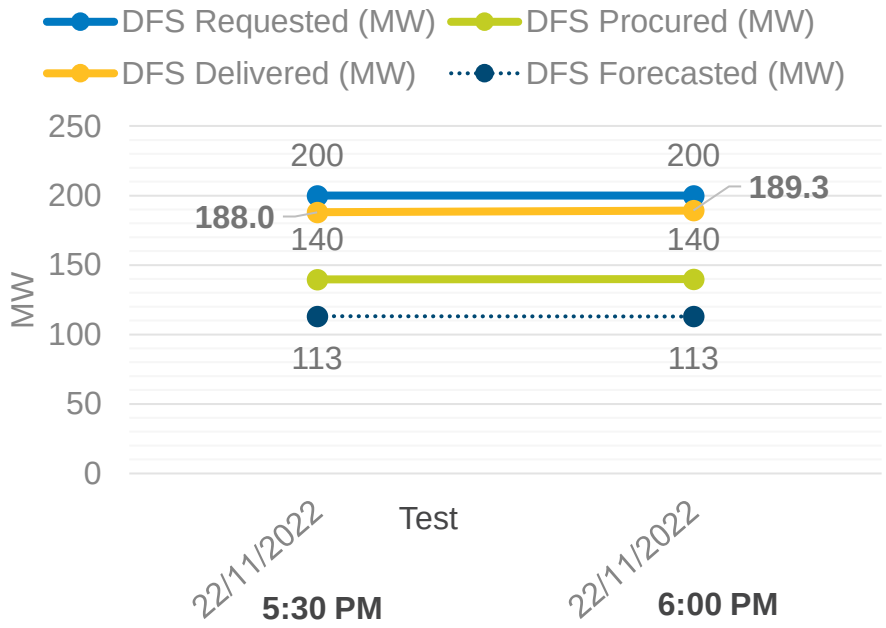
ESO

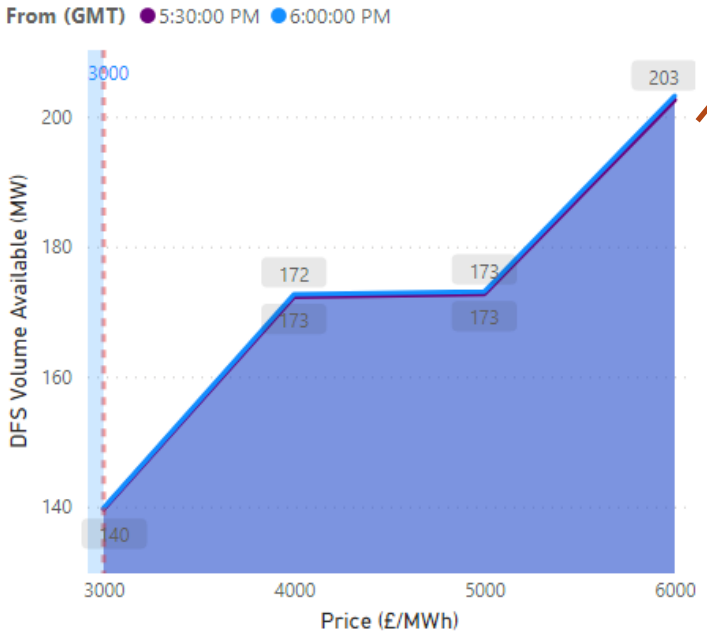
Demand Flexibility Service (DFS)

DFS Test – 22nd November

- **AVG 140 MW** in accepted bids @ **£3000MWh**
- **AVG 63 MW** in rejected bids ranging up to **£6000**
- **AVG 188 MW** delivered during the second test event for a total cost of **£565,800.00**
- **13** providers participated in this test

5:30 PM: 63MW rejected (>GAP)
6:00 PM: 63MW rejected (>GAP)



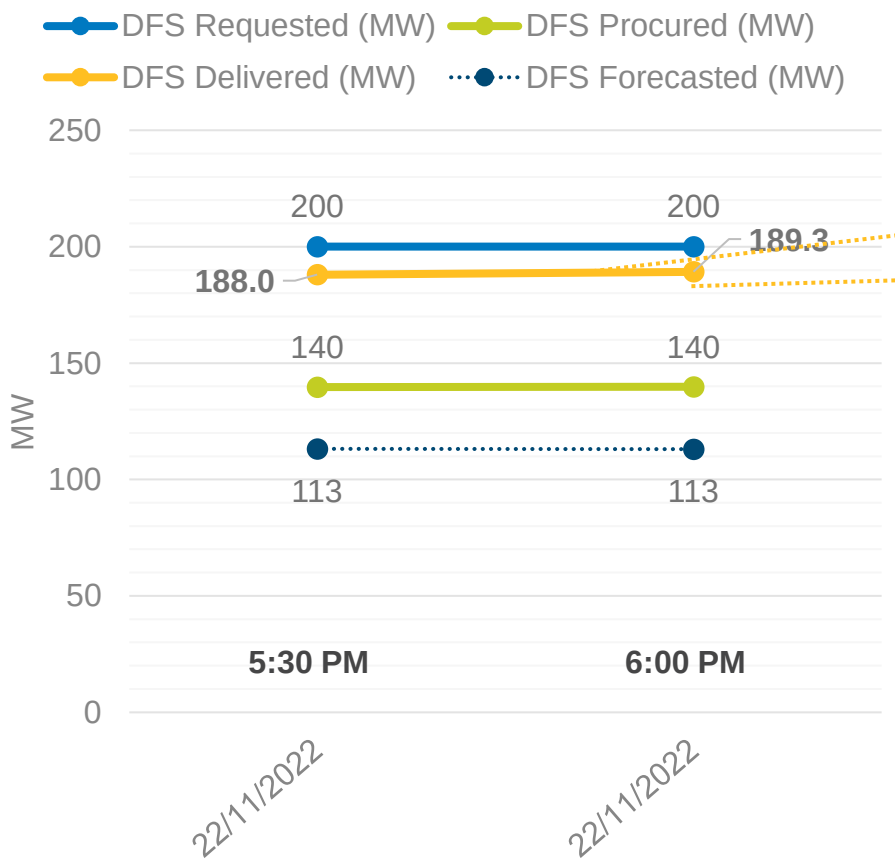


~35% avg. over-delivery (delivery vs request)

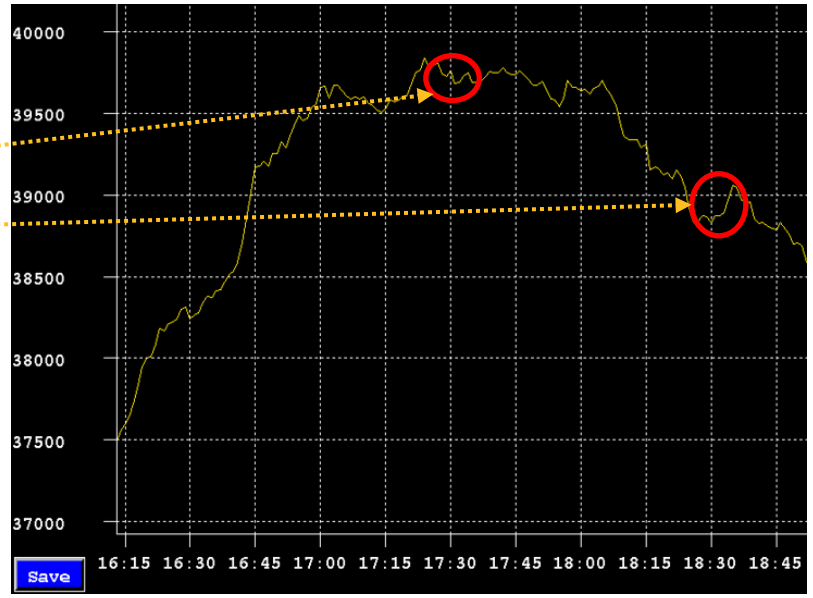
ESO

Demand Flexibility Service (DFS)

- How does DFS look in the Control Room?



Demand plot from 22 Nov, 2022, PM



ESO

Any questions?

- Further information can be found on Demand Flexibility Service webpage
- If you would like to speak to our Demand Flexibility Service team directly please email DemandFlexibility@nationalgrideso.com

Dispatch Transparency Event

- We committed to publish material and Q&A from the event on the OTF page on our website before the OTF on 14 December and provide a link
  - Slides can be found at: https://www.nationalgrideso.com/document/273316/download
  - We are still working on the Q&A from the event and will share when they are complete

Signpost – Balancing Reserve Consultation

Balancing Reserve (BR) Update

- The Article 18 EBR Consultation for the new Balancing Reserve service went live on 14 November. The documents can be found on our website here.
- The closing date for consultation responses is Wednesday 14 December at 17:00.
- We'd like to encourage people to submit responses early where possible as the ESO consultation review period falls over Christmas.
- Any providers who would like a 1-1, please contact vicci.page@nationalgrideso.com

Previous weeks questions

Q: Re the question about access to minute-by-minute data is there a way download historic minute by minute data? We have a use case where ideally; we would like even high time resolution, down to second-by-second. This related to load steps at settlement period boundaries.

A: We don't currently publish historic minute by minute data.

Q: Thanks for the update on NOA publication delay- this is a significant delay, has the impact of this delay on meeting offshore targets been fully assessed? TOs are not obliged to take forward investment plans with HNDFUE - am keen to understand impact on onshore Anticipatory Investments too.

A: We have been working closely with Ofgem on how we transition to a centralised strategic network plan (CSNP) which will proactively identify anticipatory network investments. We understand that delaying a NOA publication will mean that the ESO cannot give any recommendations on which reinforcements should be built. However, we believe that there will be greater value to our readers if we incorporate the inputs from HND-FUE into our analysis so we can ensure our publication reflects as best the scenarios and uncertainty these recommendations are based on. For this new planning regime to occur, we need derogations from our current publications which has been signalled in the NOA7 and NOA7 refresh. We have been working closely with the TOs on these changes.

Q: STOR has been under procured over the past few days (most notably for tomorrow), is the ESO holding enough reserve to cover its reserve requirements

A: As highlighted on the OTF call, we are aware STOR has been under-procured recently, we are working on our models to address the shortfall. When we do get a shortfall however, we secure reserve from elsewhere, normally in the BM.

Q: What was the reason for the high level of over procurement compared to forecast across both DC-H and DC-L yesterday? (06/12/2022)

A: Thanks for the comment and question. We noticed there have been some discrepancies between the DC 4-day forecasts and the day-ahead auction requirements, we are running a deep dive to understand the route causes within the forecasting model and make sure the processes aligned across various timescales. We shall communicate soon on this topic on OTF.

However, it is worth noticing that, there would always be differences between the forecasts and the actual procurement setting, due to the system volatilities caused by quickly changing demands, generation availabilities etc.

Previous weeks questions

Q: Would you renounce in calling for interconnectors requirements (schedule 7A trades) in case RTE deems there is too much tension on there side?
Clarification: Basically I was wondering if you were in contact with RTE before calling for volumes, sometimes more than 3GW?

A: Yes we do. We have daily calls with all the neighbouring TSOs to look at the upcoming days to see how we can support each other.

Q: Could you please provide a reason for the latest 2 frequency trips occurred (this morning)? (07/12)

A: Frequency excursions occur when the system frequency falls outside of our operational limits due to a temporary imbalance between supply and demand. We publish a monthly System Incidents Report is now available to download and indicates significant system incidents and losses of load or generation on transmission and/or distribution networks. https://www.nationalgrideso.com/industry-information/industry-data-and-reports/system-performance-reports

Q: How is the volume of flex down for DFS shown in the stacks? (This refers to the chart in the earlier slide)

A: DFS volume/cost is not included in the stacked bar chart as this only shows real time actions from the Control Room.

Q: Shouldn't an instruction under for voltage control be signalled under P305?

A: P305 was established to introduce demand control actions into the imbalance price, priced at the Value of Lost Load (VoLL), and an imbalance volume correction process to amend participants' positions to account for such actions. We don't apply this for the voltage control tests as no demand is actually disconnected and the test time duration is short. This methodology (including not issuing a MODIS for these tests) was agreed with OFGEM after the first test when the issues were raised.

Previous weeks questions

Q: On 16th November settlement period 35, 3 assets were bid at -£500, for energy. Why? There is nothing on dispatch transparency. Ignoring the positive prices available to NG during the time, bidding a windfarm would have been cheaper. Bids taken significantly out of merit over the peak appears BAU.

A: Thanks for pointing this out, please continue to do so when you see this.

Under normal circumstances Bids would not have been taken at those prices, unless it was to manage some system related event. Under those circumstances the action would be tagged as System.

In settlement period 34 the three (3) units had been bid back for balancing purposes as they were among the most economic. They were then automatically instructed for settlement period 35. This software is very useful element of the Balancing Mechanism, which we are continuing to improve. It does not currently detect price changes in the instructions it extends. Following this instance, manual checks are now in place by Control Engineers to ensure this does not occur. Future improvements to this software are due to be deployed in Spring 2023 which will reduce this type of error.

Q: Question about 16th November assets bid massively out of merit remains unanswered. This keeps on happening though. 2nd Dec SP33 and SP36 an asset bid at -£572. Why?

A: Thank you for raising this follow up question. This is a separate incident from the one above and a different reason – however, we aim to minimise both these occurrences and have put in place additional checks to ensure this does not happen in the future.

On this occasion a manual instruction was issued to assist with frequency control, and this instruction was missed due to the display layout. We have identified improvements to both systems used which will be deployed to reduce the risk of a reoccurrence.

Advance questions

Q: A number of wind farms submit MELs which equal their FPNs as opposed to the generation capacity of the site; this is at odds with the Grid Code. How do we encourage these wind farms to follow the definitions for MELs set out in the Grid Code?

(It feels a bit extreme to whine to Ofgem about this one as I think it is more ignorance than malice, so that's why I ask)

The reason we care is that this data is rubbish for wind forecasting and general interpretability of our wind generation landscape at any time.

A: All generation, regardless of type should be submitting and following correct dynamic data as per Grid Code requirements. The ESO Control Room regularly liaises with individual parties about accurate data submissions as this is an important element in our forecasting and daily operations.

Q: Is there any adjustment in ABSVD methodology for Triads? For example if a battery is performing DC High during the period that coincides with Triad, would the asset be charged at the Triad rate for any imports for providing the service?

A: Triads is used to charge TNUoS demand users. For the winter of 2022/23, a HH demand user will be charged on their actual (gross) demand volume during the Triads. A power station will only be liable for triads charge if they withdraw (net) demand during the triads. The charge will apply to actual volumes I.e ABSVD volumes will not be taken into account.

Q: Where should market participants look to find the details of any SO-SO trades between NGESO and other TSOs? For example the volume and price transacted on the morning of 12th Dec. There are pages on Elexon (under the 'Cross Border Balancing Data' heading) but these don't seem to be in use. Are they published on the NGESO Data Portal somewhere?

A: We don't publish SO-SO trades requested by other TSOs on BMRS. The majority of the trades carried out are not SO-SO but are instead market trades carried out by our trading team. These are published on the data portal. We are aware that there are ongoing discussions of this issue in the P443 workgroup.

Q: Are you still confident that the control measures in place are adequate to ensure rolling blackouts will not be required during this winter period?

A: Our expectations for winter are set out in our winter outlook, which is available on our website. As stated in the executive summary, overall, this is likely to be a challenging winter for energy supply throughout Europe. We have taken extensive measures to try to mitigate the impacts for British consumers and expect that, under our base case, margins will be adequate. We continue to operate to the assumptions set out in our base case.

Questions outstanding we are still working on

Q: SONAR notifications not working. No messages issued when Ratcliffe unit warmed on 23rd- 25th November. Doesn't give confidence it'll work when / if you actually warm winter contingency coal

Q: Re: David Lenaghan noted that the realtime demand service hosted on the extranet is not always reliable , and there is a lot that goes into producing it.

This figure is very useful for getting a real-time insight into national demand, unlike the 30 minutely figures available as the Initial Transmission System Demand Outturn, and can be used to inform future demand forecasting undertaken by BSC parties. So that we can interpret this number accurately, can you please confirm precisely how this demand value is produced (i.e. what specific data feeds in and what assumptions, if any, are made in producing it) so that we can interpret it correctly and appropriately heed David's warning by knowing in what instances it is most likely to be potentially misleading.

Furthermore, we'd ask if there's any way to get an extract of the historical values from this service (not what is currently on the data portal which is only 30-minutely). Our intended purpose would be training demand forecasting models and examining demand spikes during events like live sports. Even if it's not possible to offer a fully productionised solution like the data portal, in the meantime we'd appreciate if even a one-off extract in whatever format is easiest for the teams involved (even a CSV or Excel over email is fine to get us started).

Q: Was a penalty value applied in the optimisation to SCL not procured for the largest loss requirement? If so, what was the number/curve?

Q: How can we tell which assets (both successful and unsuccessful) had their capacity considered collectively for the largest loss calculations? If this is in an unpublished data set, please could the data be released?

Questions outstanding we are still working on

Q: Regarding the day-ahead wind forecast data published on the data portal https://data.nationalgrideso.com/demand/day-ahead-wind-forecast/r/day_ahead_wind_forecast:

1. What is meant by 'incentive forecast'? Why does it differ from the wind forecast published on BMRS https://bmreports.com/bmrs/?q=generation/windforcast/out-turn

2. Why is the capacity listed below the installed capacity and what we have seen in the real-time generation data (FUELINST) ?

Q: Regarding the 14 days ahead wind forecast published on the data portal:

1. Why is the capacity listed less than what we have seen in outturn?

2. Could you please publish the historical forecasts?

Q: I see through the RTE website that they requested some emergency interconnector flows across the IFA2 from the UK today (12th Dec 0800-0900), in previous instances, the provision of emergency assistance to a foreign TSO has been accompanied with a system warning through BMRS, why was this not the case today? Should we still expect volumes to turn up in the imbalance calculation as SO-flagged bids?

Q: Apologies if covered previously I am new to the forums. Since the increase in consumer energy prices has there been a notable reduction in demand figures, if so when did this occur, what was the reduction and does this appear to be holding?

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

ESO