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NESO Operational Transparency Forum

30 April 2025

NESO
National Energy System Operator

Introduction | Sli.do code #OTF

To ask questions live & give us post event feedback go to Sli.do event code #OTF

- **Ask your questions as early as possible** as our experts may need time to ensure a correct answer can be given live.
- **Please provide your name or organisation**. This is an operational forum for industry participants therefore questions from unidentified parties will not be answered live. If you have reasons to remain anonymous to the wider forum, please use the advance question or email options below.
- **The OTF is not the place to challenge the actions of individual parties** (other than the NESO), and we will not comment on these challenges. This type of concern can be reported to the Market Monitoring team at: marketreporting@nationalenergyso.com
- **Questions will be answered in the upvoted order whenever possible**. We will take questions from further down the list when: the answer is not ready; we need to take the question away or the topic is outside of the scope of the OTF.
- **Sli.do will remain open until 12:00**, even when the call closes earlier, to provide the maximum opportunity for you to ask questions. After that please use the advance questions or email options below.
- **All questions will be recorded and published.** Questions which are not answered on the day will be included, with answers, in the slide pack for the next OTF.
- **Ask questions in advance** (before 12:00 on Monday) at: https://forms.office.com/r/k0AEfKnai3
- **Ask questions anytime** whether for inclusion in the forum or individual response at: box.nc.customer@nationalenergyso.com

Stay up to date on our webpage: https://www.neso.energy/what-we-do/systems-operations/operational-transparency-forum (OTF Q&A is published with slide packs)

Note: to access previous OTF webinars from Slido click on the three lines to the left of forum title

Future deep dive / focus topics

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Today's Focus Topics/deep dives

Introduction to contracts for Difference (CfD)

Future

Weekend overview from 26/27 April – 7 May

Partial Solar Eclipse on 29 March 2025 – 14 May

April Balancing Costs – 21 May

Submission of offer prices in the BM: wind & solar – 28 May

If you have questions/suggestions of areas to cover during above presentations or ideas for deep dives or focus topics you would like us to consider, please send them to us at: box.nc.customer@nationalenergyso.com

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Spain/Portugal Power Incident

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Great Britain's electricity network was not affected by the power system incident on the European electricity network on Monday.

We are working closely with our counterparts across Europe to understand the cause of the power system incident and to offer our support.

It is too early to comment further on these events and whilst investigations are still ongoing.

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Publication of Long-Term Forecasts for DC/DM/DR Requirements

- The monthly forecast for DC/DM/DR requirements for the next 12 months has been published since 14 April on NESO's data portal (Long-Term Forecasts for DC, DM and DR Requirements | National Energy System Operator).
- The long-term DC forecast model is an enhancement of the existing day-ahead DC forecasting model. It incorporates forecasted demand, inertia, and response volumes, along with an analysis of the largest potential losses in the system, to estimate DC requirements.
- A dashboard for visualising these results will be available soon.

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Response Reform May Webinar: Static Reform

Join us for the Response Reform webinar on **15 May, 10am – 11am.**

As a follow on from previous webinars and 1-2-1 sessions held over the past few months, we will be presenting current thinking on service design topics that are being explored for reform of Static Firm Frequency Response (SFFR)

Sign up here.

If you have any questions, please contact:
box.futureofbalancingservices@nationalenergyso.com

Future Event Summary

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Event	Date & Time	Link
Skip Rate In-Person Forum	1st May (09:30-15:00) **Registration closed 22nd April**	Registration closed
Response Reform Webinar: Static Reform	15th May (10:00-11:00)	Sign up
Balancing Programme Event	24th June (09:00-17:30)	Register here

Check out the NESO Events Calendar for more...

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Public

Introduction to Contracts for Difference

30th April 2025

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Contracts for Difference (CfD) Overview

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- The Contracts for Difference (CfD) scheme is the government's main mechanism for supporting the deployment of low-carbon electricity generation. Decarbonising the power sector is a vital part of the UK's efforts to meet its world-leading net zero target.
- Contracts for Difference incentivise investment in renewable energy and reduce the cost of capital by providing developers of projects with high upfront costs and long lifetimes with direct protection from volatile wholesale electricity prices.
- This also protects consumers from paying increased support costs when electricity prices are high as it is a condition that generators pay consumers back when the 'reference price' exceeds the 'strike price'.
- Renewable projects located in Great Britain and meeting the eligibility requirements can apply for a CfD.

CfD's are designed to:

- Deliver the low-carbon electricity we need to meet the UK's climate change targets at least cost to consumers.
- Do this by attracting new investment into low carbon generation, and at the lowest cost.
- A CfD guarantees that the low carbon generator will receive a fixed price for the electricity it sells into the market. This gives generators and their investors price certainty throughout the length of the contract, usually 15 years.
- A variety of low carbon technology type are eligible e.g. Offshore Wind, Solar PV, Tidal etc.

What is a CfD?

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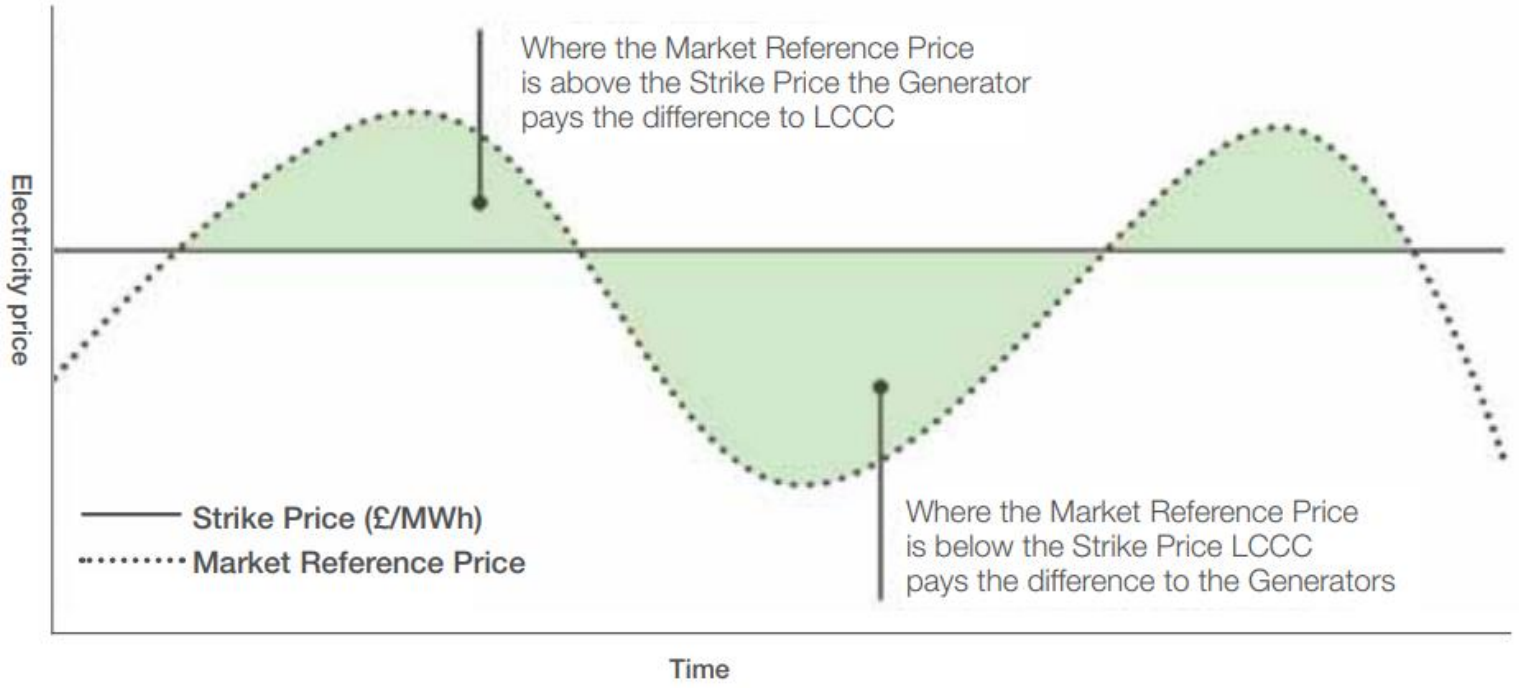
- A long-term contract between a low-carbon / renewable electricity generator and the Low Carbon Contracts Company (LCCC).
- The contract enables the generator to stabilise its revenues at a pre-agreed level (Strike Price) for the duration of the 15-year contract.
- Payment to CfD generators is funded by a statutory levy on all UK-based licensed electricity suppliers (Supplier Obligation)



Strike price

The price for electricity in £/MWh determined through a sealed bid process during the auction. Should reflect the cost of investing in a particular low carbon technology

Market reference price (Either Baseload or intermittent)

The average market price for electricity at the relevant point in time.

What is an Allocation Round (AR)

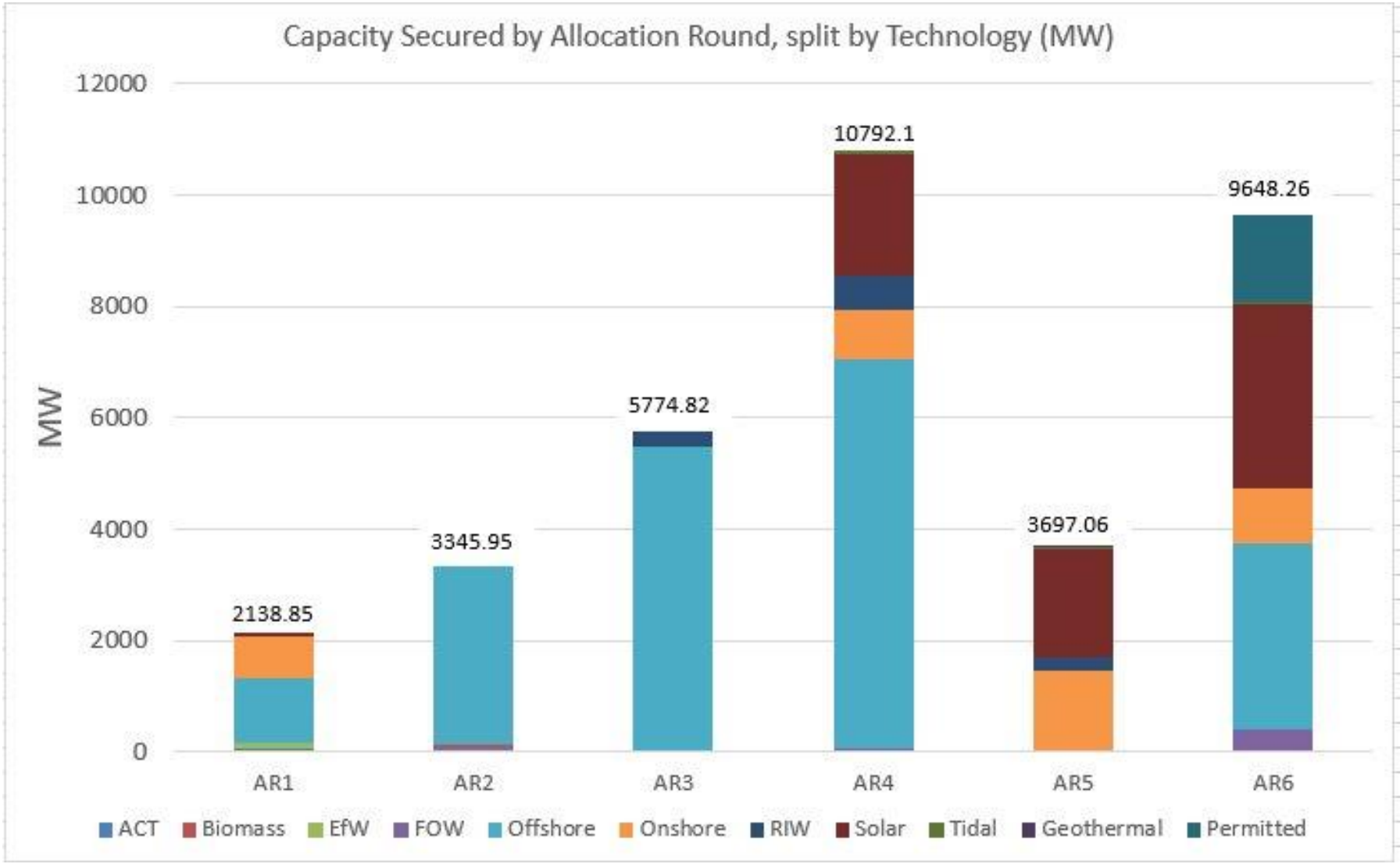
- An Allocation Round refers to the application process and competitive auction via which CfD contracts are awarded.
- 6 allocation rounds to date (2015, 2017, 2019, 2021, 2023 & 2024). AR7 is due to open in summer 2025 (exact dates to be confirmed)
- CfDs are allocated with a delivery year (i.e. the year in which the project is commissioned).
- Historically, ahead of each Round, DESNZ publishes core parameters of the upcoming Allocation Round, the data on this notification includes the relevant technologies, pot structure, delivery years and administrative strike prices (ASPs).
- DESNZ usually also publishes the Budget Notice for the Allocation Round that sets out the CfD budget (in monetary terms)

Core Parameters from AR6

Pots	Technologies	Delivery Years
1	Energy from waste (with CHP), Hydro (>5MW and <50MW), Landfill Gas, Onshore Wind (>5MW), Remote Island Wind (>5MW), Sewage Gas, Solar PV (>5MW)	2026/2027, 2027/2028
2	Advanced Conversion Technologies, Anaerobic Digestion (>5MW), Dedicated Biomass with CHP, Floating Offshore Wind, Geothermal, Tidal Stream and Wave	2027/28, 2028/29
3	Offshore Wind	2027/28, 2028/29

CfD Capacity Awarded by Allocation Round

The below chart show the total capacity secured in each Allocation Round.



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Historic Delivery Years

AR1: 2015/16 2016/17, 2017/18, 12018/19, 2019/20, 2020/21

AR2: 2021/2022, 2022/2023

AR3: 2023/24, 2024/25

AR4: 2023/24, 2024/25, 2025/26, 2026/27

AR5: 2025/26, 2026/27, 2027/28

AR6: 2026/27, 2027/28, 2028/29

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AR7 Policy Changes

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Confirmed:

- Repowering (Onshore Wind)
- Introduction of phases for Floating Offshore Wind
- Clean Industry Bonus (CIB) Offshore Wind

Consultation items for consideration (not exhaustive) - AR7 Consultation

- Changes to the information the Secretary of State uses to inform the final budget for fixed-bottom offshore wind, including greater visibility over sealed bid information.
- Reduced planning requirements for fixed-bottom offshore wind, allowing applications at an earlier stage of the planning process.
- Longer duration Contracts to reflect increased construction costs and longer expected project lifespans.
- Changes to the Target Commissioning Window (TCW) for Solar PV from 3 to 6 months (the majority of CfD technologies have a 12 month TCW)
- Remove the ability to apply surrendered capacity from previous rounds (aka Permitted Reductions) with an enduring solution planned for AR8

CfD Delivery Partners

National Energy System Operator (NESO)

Responsible for administering and delivering key elements of the scheme:

- Application, qualification and tier 1 Disputes
- Submission of sealed bids
- Valuation of applications to determine whether an auction is required
- Allocation process (i.e. auctions)
- Issuing of CfD notifications to LCCC, for contracts to be awarded

Department for Energy Security & Net Zero (DESNZ)

Set the policy and governance arrangements for the scheme, including:

- Policy proposals & consultations to amend the scheme
- Allocation rules
- Budget parameters for each allocation round
- Administrative Strike Prices

Ofgem

Regulates the Contracts for Difference scheme, and is responsible for handling Tier 2 application appeals.

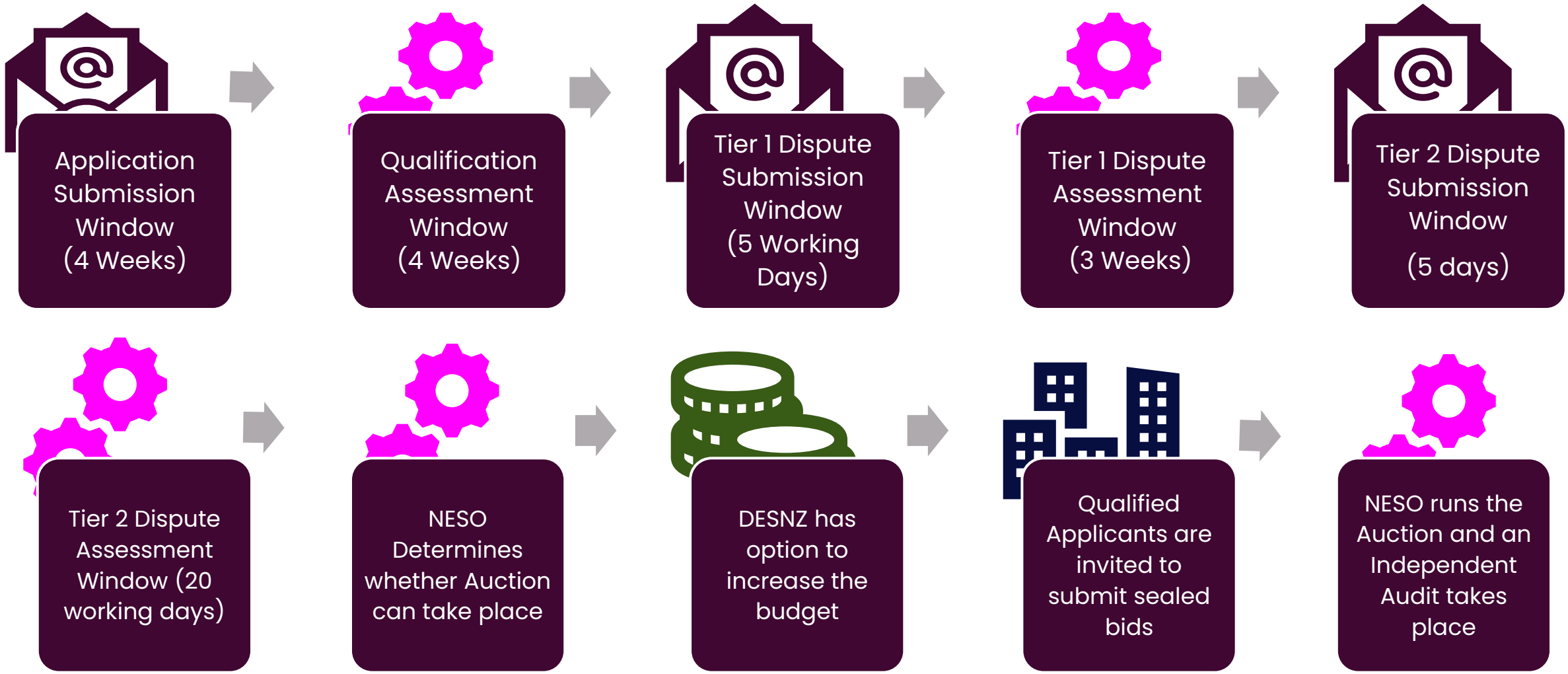
The Low Carbon Contracts Company

The CfD Counterparty, responsible for:

- Issuing CfD contracts
- Managing CfD contracts / projects through various milestones during the project delivery phase
- Making CfD payments during the operations phase

Allocation Round Process

Based on AR6 timescales. AR7 process and timings are yet to be confirmed by DESNZ



More Information

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Information presented in this pack is from AR6 to demonstrate how the Allocation Round functions. However, be advised that the timings, Legislation and guidance for AR7 have not yet been released.

Further Information

- Contracts for Difference DESNZ Webpage

This page will hold the AR7 CfD Regulations, Allocation Framework and Core Parameter documentation once published before the Round

- Contracts for Difference NESO webpage

All guidance documents/videos can be found on this page for AR7 (once we have confirmation of the policy from DESNZ). Webinar recordings will be held here also

- Contracts for Difference Delivery Partner Portal

This page is a central resource page for all CfD Round Information

- AR7 Consultation (now closed)

Contact Us:

E-mail: box.emr.cfd@nationalenergyso.com

Phone: 01926 655 300 (option 3)

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Demand | Last week demand out-turn

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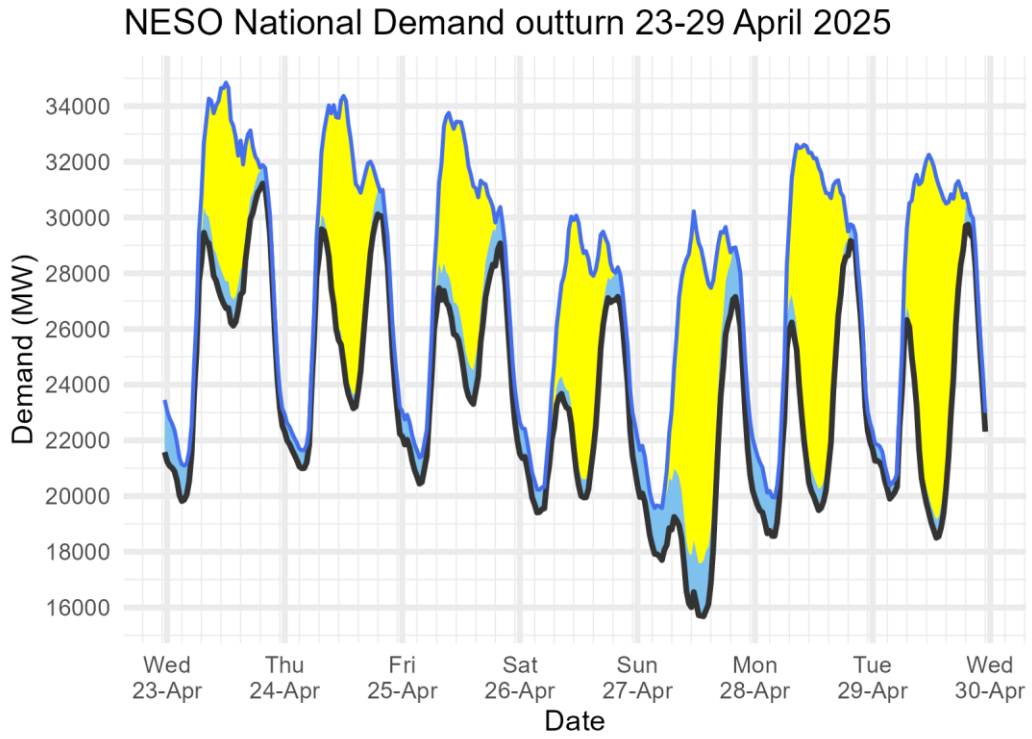

Distributed generation

Peak values by day

Date	OUTTURN	
	Daily Max Dist. PV (GW)	Daily Max Dist. Wind (GW)
23 Apr 2025	7.1	1.9
24 Apr 2025	9.7	1.0
25 Apr 2025	7.4	1.3
26 Apr 2025	8.8	1.5
27 Apr 2025	11.8	2.1
28 Apr 2025	11.6	1.9
29 Apr 2025	12.4	0.8

National Demand

Minimum Demands

Date	Forecasting Point	FORECAST (Wed 23 Apr)			OUTTURN		
		National Demand (GW)	Dist. wind (GW)	Dist. PV (GW)	National Demand (GW)	Dist. wind (GW)	Dist. PV (GW)
23 Apr 2025	Afternoon Min	25.6	0.9	6.4	26.1	0.9	6.2
24 Apr 2025	Overnight Min	20.6	0.6	0.0	21.0	0.6	0.0
24 Apr 2025	Afternoon Min	24.7	0.5	8.4	23.1	0.5	8.4
25 Apr 2025	Overnight Min	19.7	1.2	0.0	20.4	0.9	0.0
25 Apr 2025	Afternoon Min	22.2	1.6	7.5	23.3	1.2	6.6
26 Apr 2025	Overnight Min	18.7	1.0	0.0	19.4	0.8	0.0
26 Apr 2025	Afternoon Min	18.7	1.0	8.2	20.0	0.7	8.1
27 Apr 2025	Overnight Min	17.1	1.7	0.0	17.7	1.9	0.0
27 Apr 2025	Afternoon Min	16.8	2.0	9.0	15.7	2.0	10.8
28 Apr 2025	Overnight Min	18.6	0.8	0.0	18.6	1.4	0.0
28 Apr 2025	Afternoon Min	21.1	1.1	10.4	19.5	0.8	11.5
29 Apr 2025	Overnight Min	18.7	1.3	0.0	19.9	0.5	0.0
29 Apr 2025	Afternoon Min	22.1	1.4	7.7	18.5	0.7	12.3

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 NESO has no real time data.

Historic out-turn data can be found on the NESO Data Portal in the following data sets: Historic Demand Data & Demand Data Update

Demand | Week Ahead

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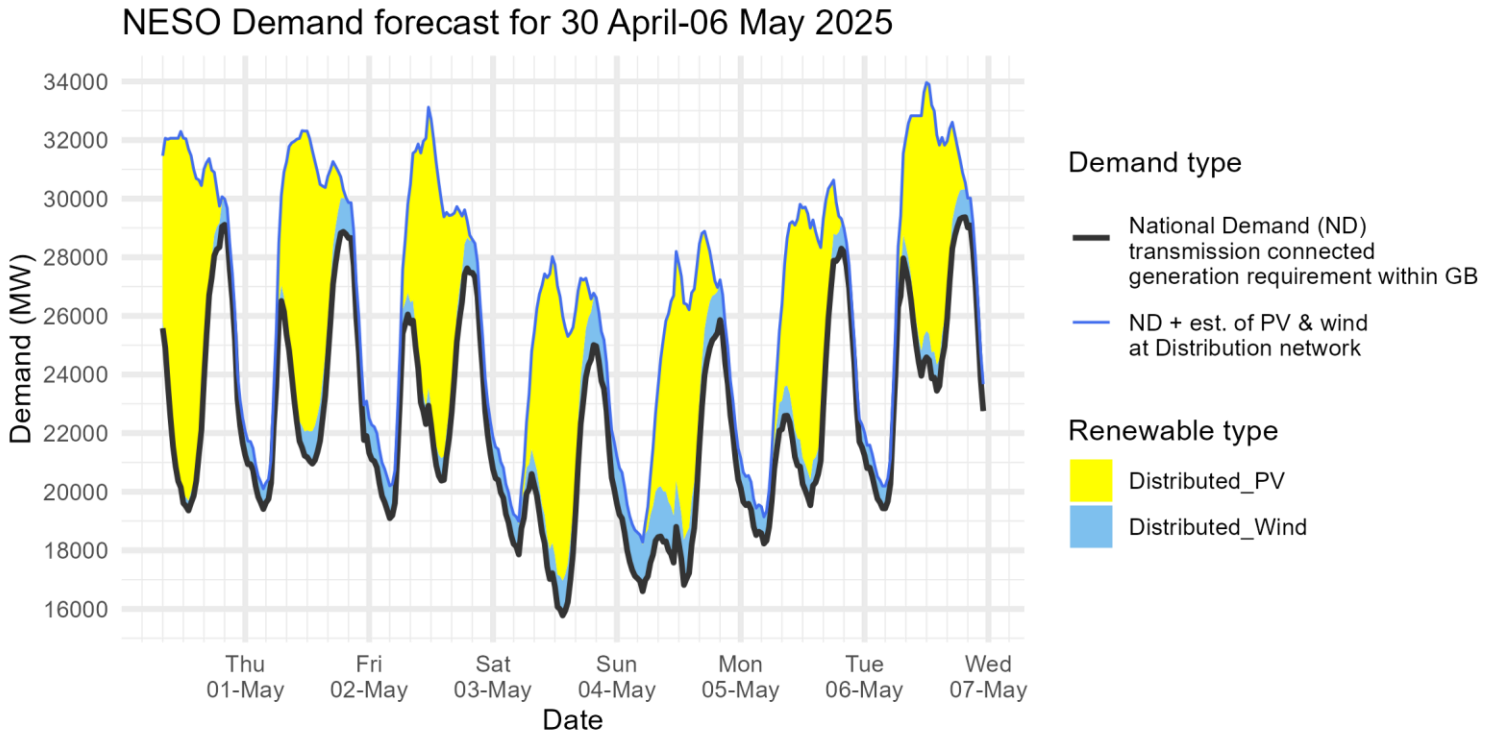

National Demand

Minimum Demands

		FORECAST (Wed 30 Apr)		
Date	Forecasting Point	National Demand (GW)	Dist. wind (GW)	Dist. PV (GW)
30 Apr 2025	Afternoon Min	19.4	0.3	12.0
01 May 2025	Overnight Min	19.4	0.7	0.0
01 May 2025	Afternoon Min	21.0	1.1	9.6
02 May 2025	Overnight Min	19.1	1.1	0.0
02 May 2025	Afternoon Min	20.4	0.8	8.8
03 May 2025	Overnight Min	17.9	1.0	0.1
03 May 2025	Afternoon Min	15.8	1.2	9.0
04 May 2025	Overnight Min	16.6	1.6	0.1
04 May 2025	Afternoon Min	16.8	1.6	8.1
05 May 2025	Overnight Min	18.2	0.9	0.0
05 May 2025	Afternoon Min	19.5	0.9	8.6
06 May 2025	Overnight Min	19.4	0.8	0.0
06 May 2025	Afternoon Min	23.4	0.9	7.8

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

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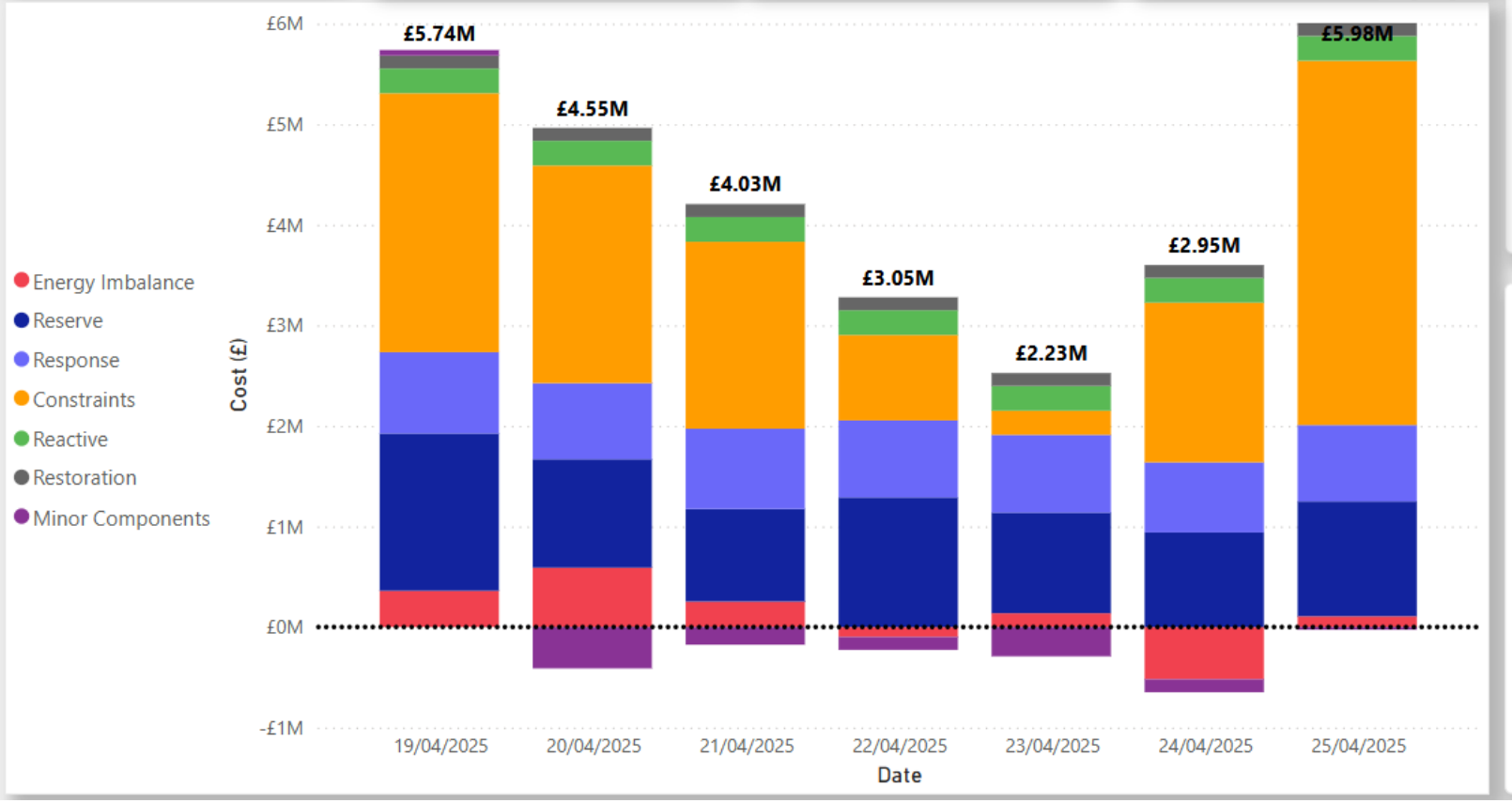
Historic out-turn data can be found on the NESO Data Portal in the following data sets: Historic Demand Data & Demand Data Update

NESO Actions | Category Cost Breakdown

Slido code #OTF

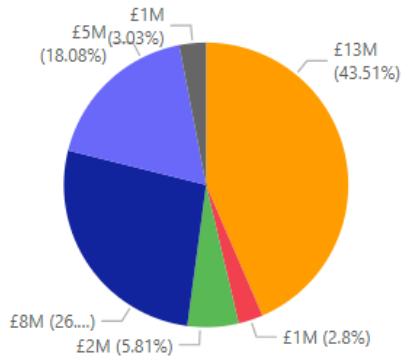
Date
19/04/2025 25/04/2025

Weekly Total Costs (£)	Last Week Total Costs (£)	Past 30-Day Average Costs (£)
£28.5M	£31.7M	£5.8M



Date	Total Outturn Cost
19/04/2025	£5,738,338
20/04/2025	£4,552,344
21/04/2025	£4,029,955
22/04/2025	£3,051,640
23/04/2025	£2,234,329
24/04/2025	£2,951,763
25/04/2025	£5,979,617
Total	£28,537,986

Weekly Cost (£) and Share (%)



NESO Actions | Constraint Cost Breakdown

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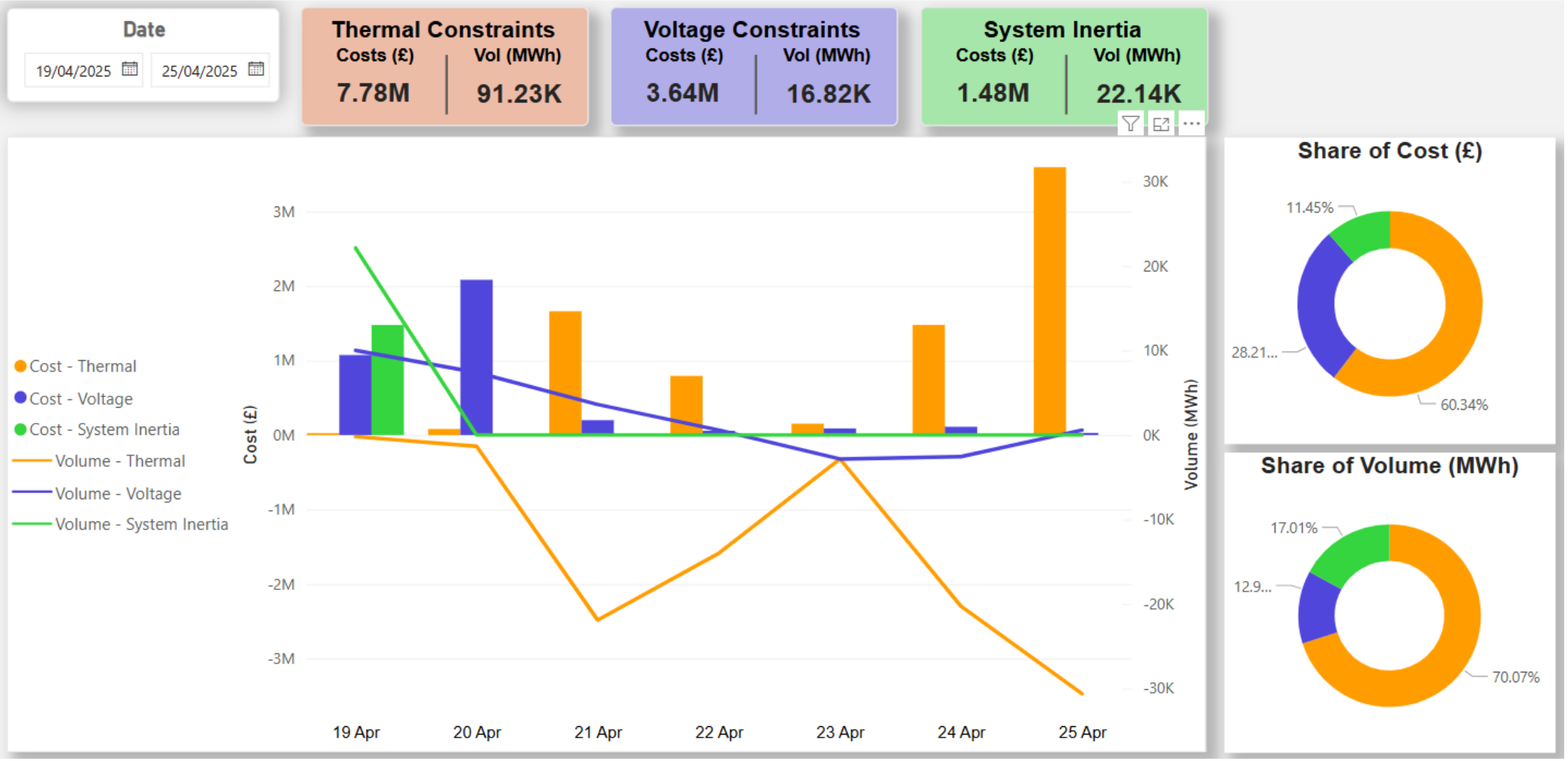

NESO Actions | Peak Demand – SP spend ~£24k Wednesday 23rd April

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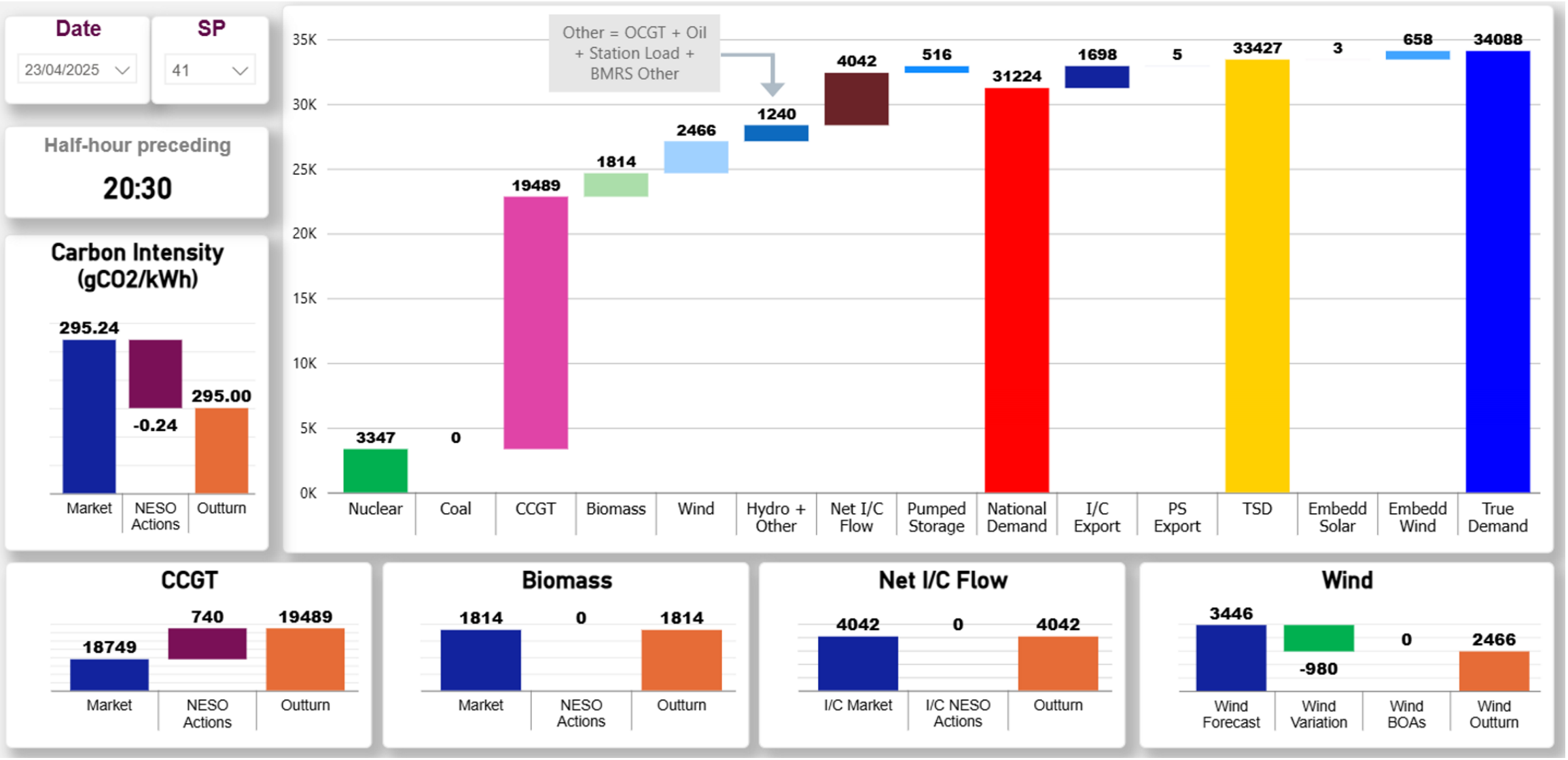

NESO Actions | Minimum Demand – SP spend ~£143k Saturday 19th April

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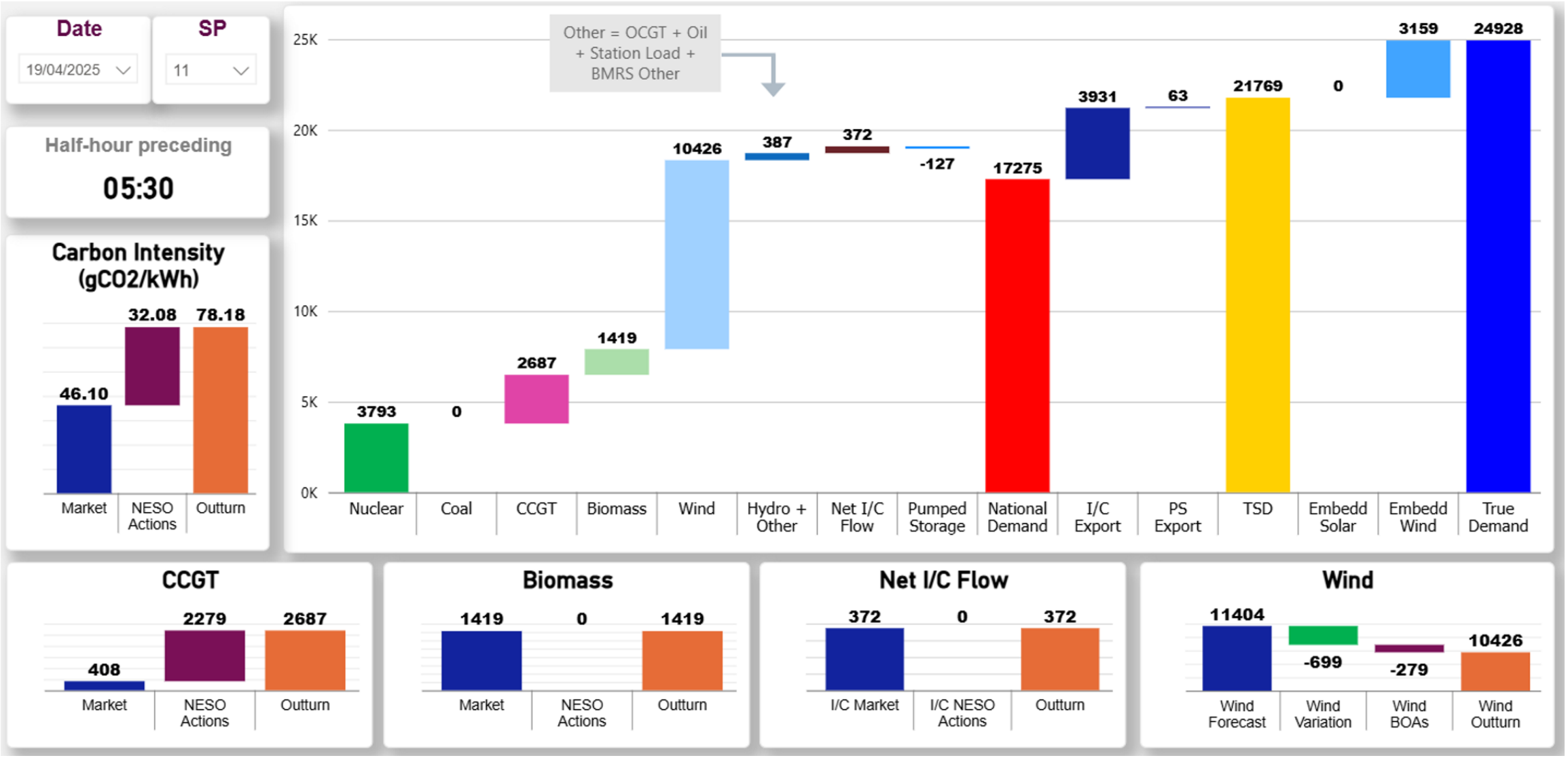
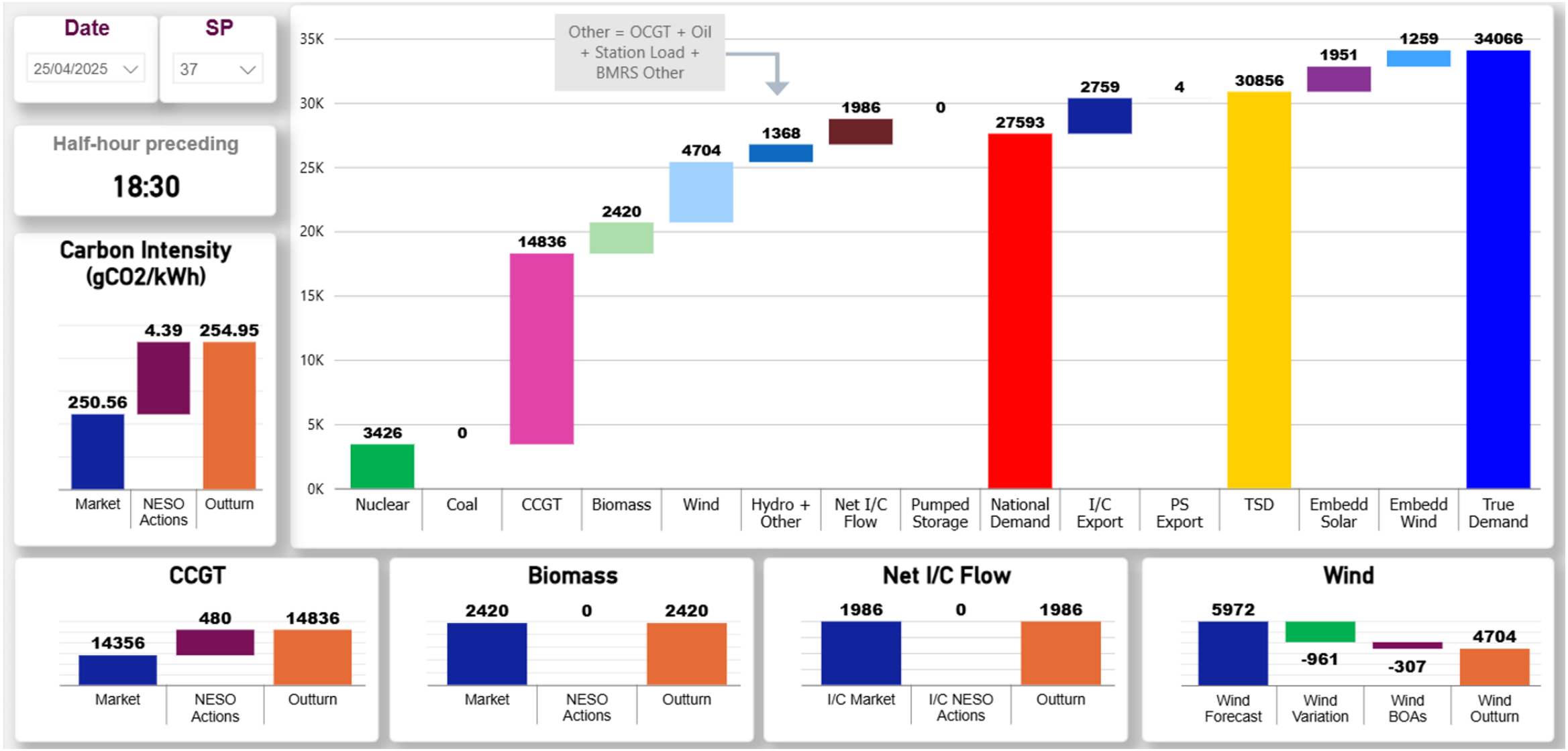
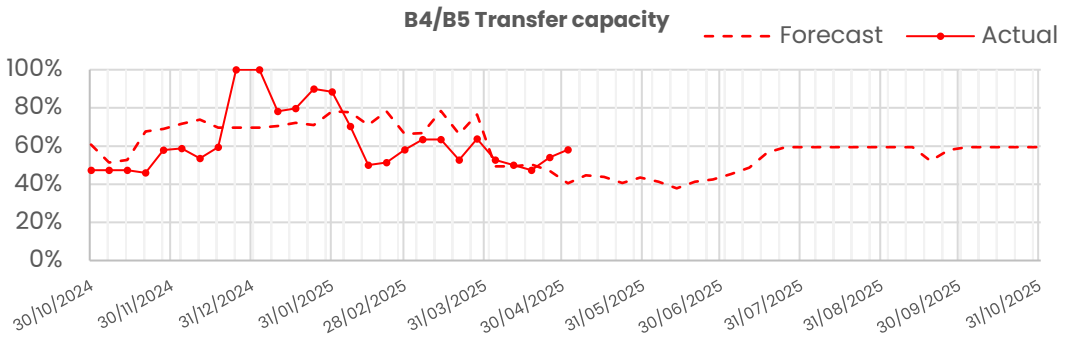


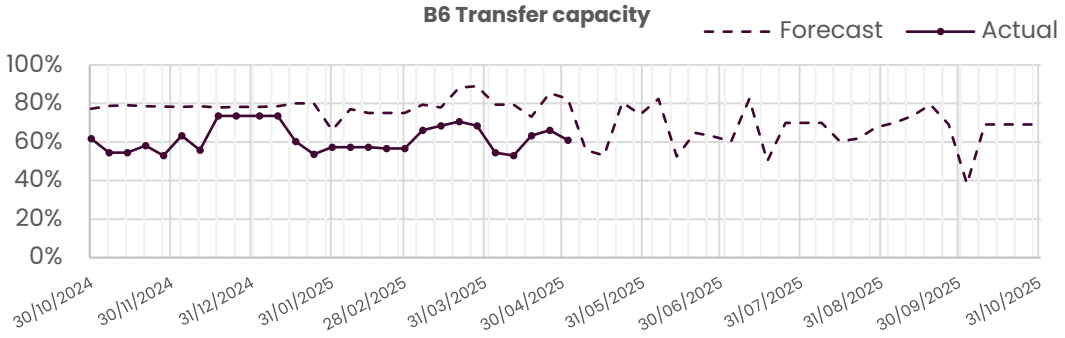
NESO Actions | – Highest SP spend ~£178k
Friday 25th April

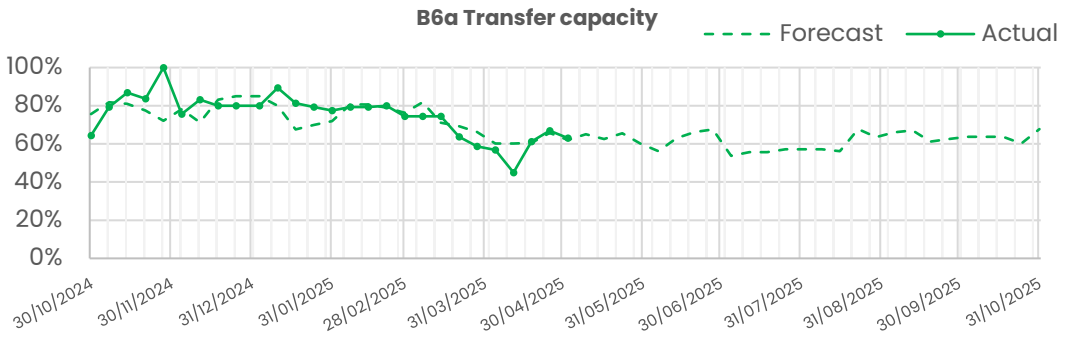
Slido code #OTF



Transparency | Network Congestion

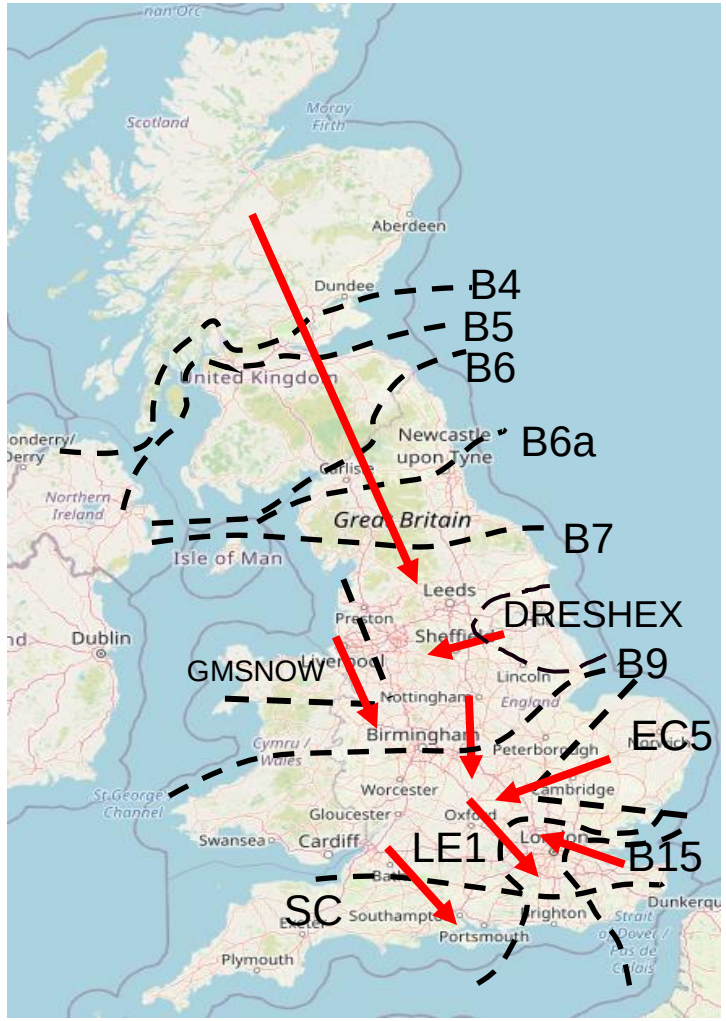






Boundary	Max. Capacity (MW)	Current Capacity (%)
B4/B5	3400	58%
B6 (SCOTEX)	6800	61%
B6a	8000	63%
B7 (SSHARN)	9850	69%
GMSNOW	5800	44%
FLOWSTH (B9)	12700	79%
DRESHEX	9675	80%
EC5	5000	55%
LE1 (SEIMP)	8750	51%
B15 (ESTEX)	7500	91%
SC1	7300	51%

Slido code #OTF



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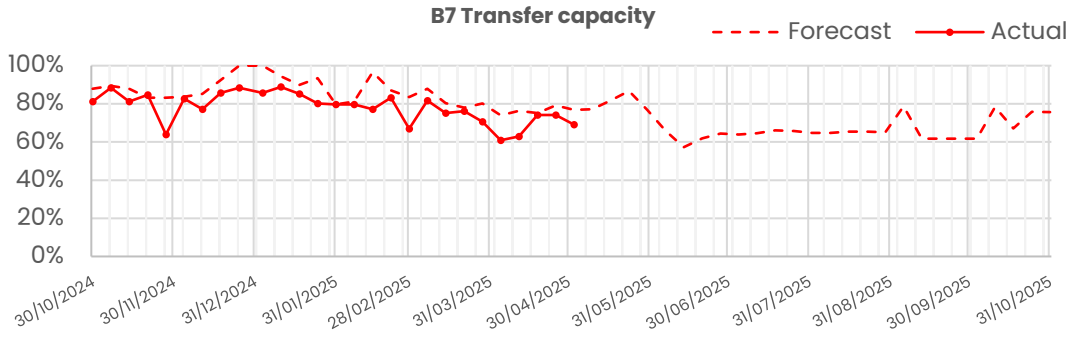
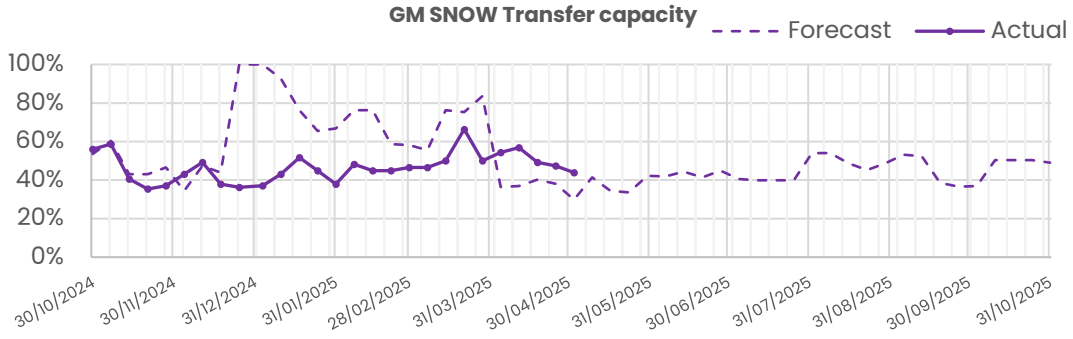
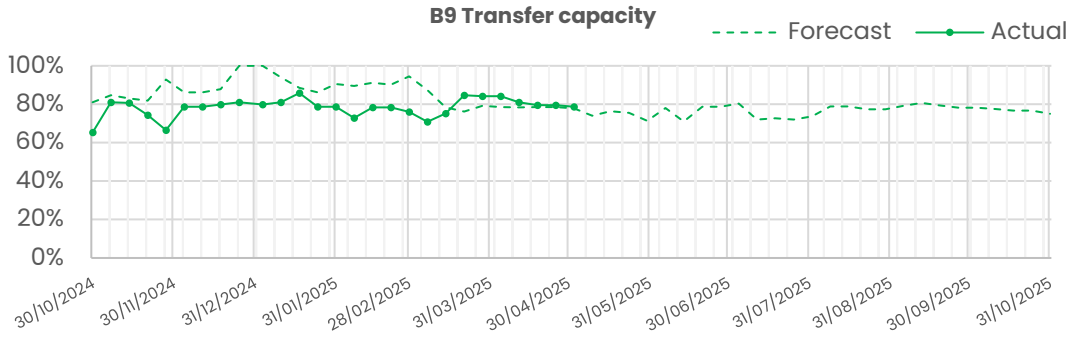
Transparency | Network Congestion







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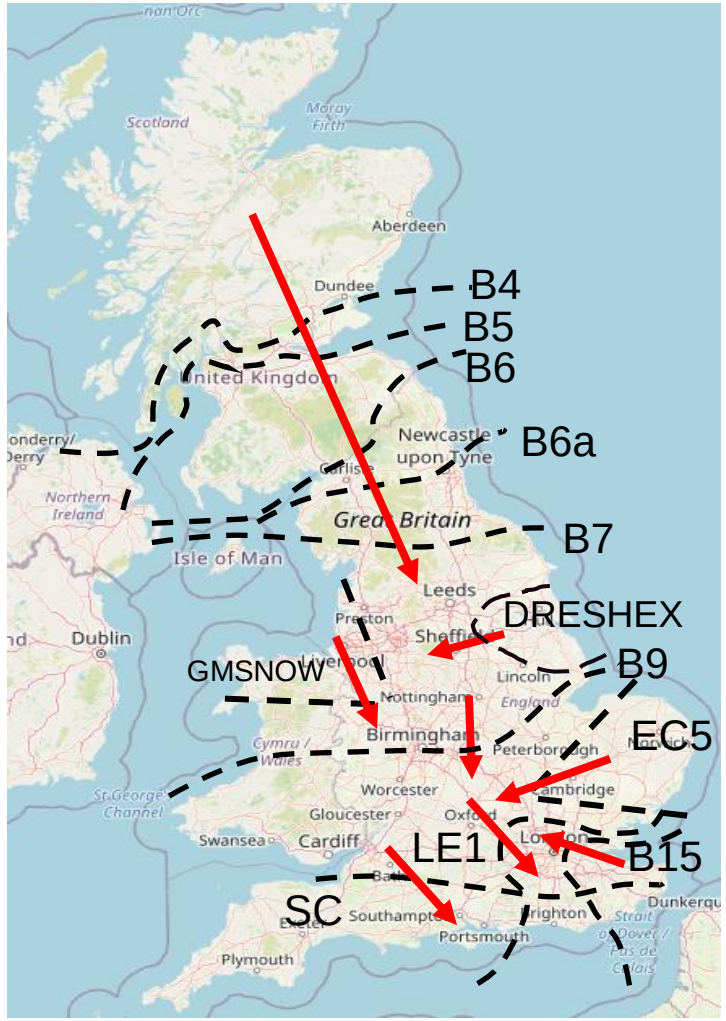

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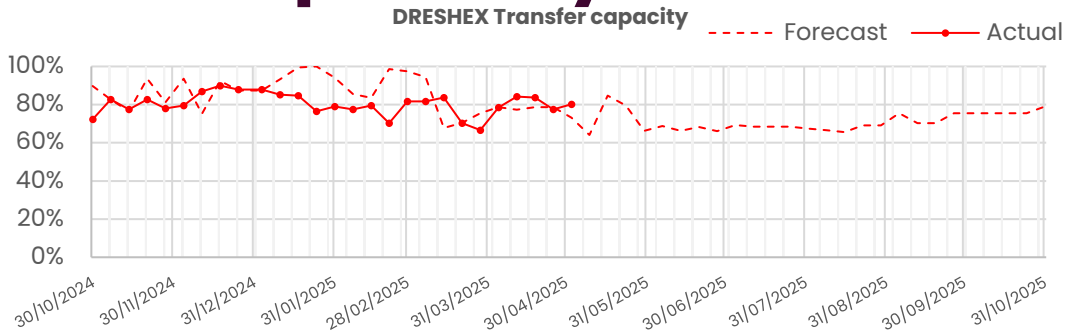

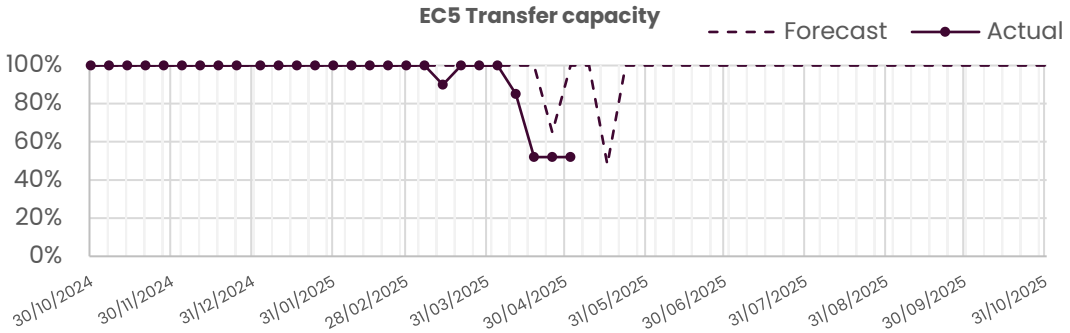

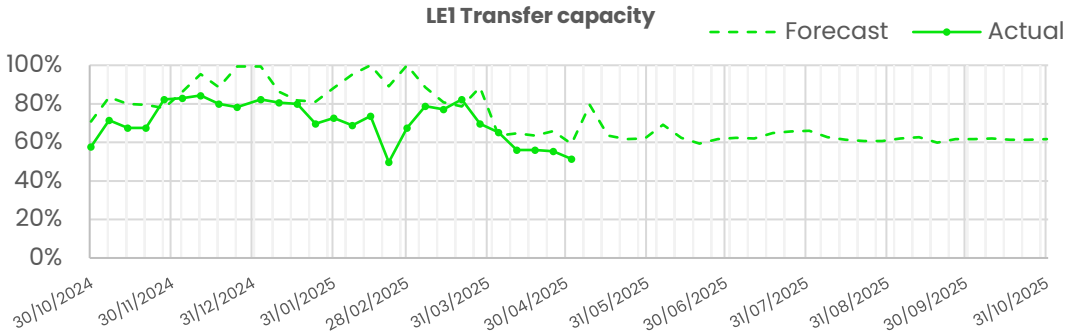

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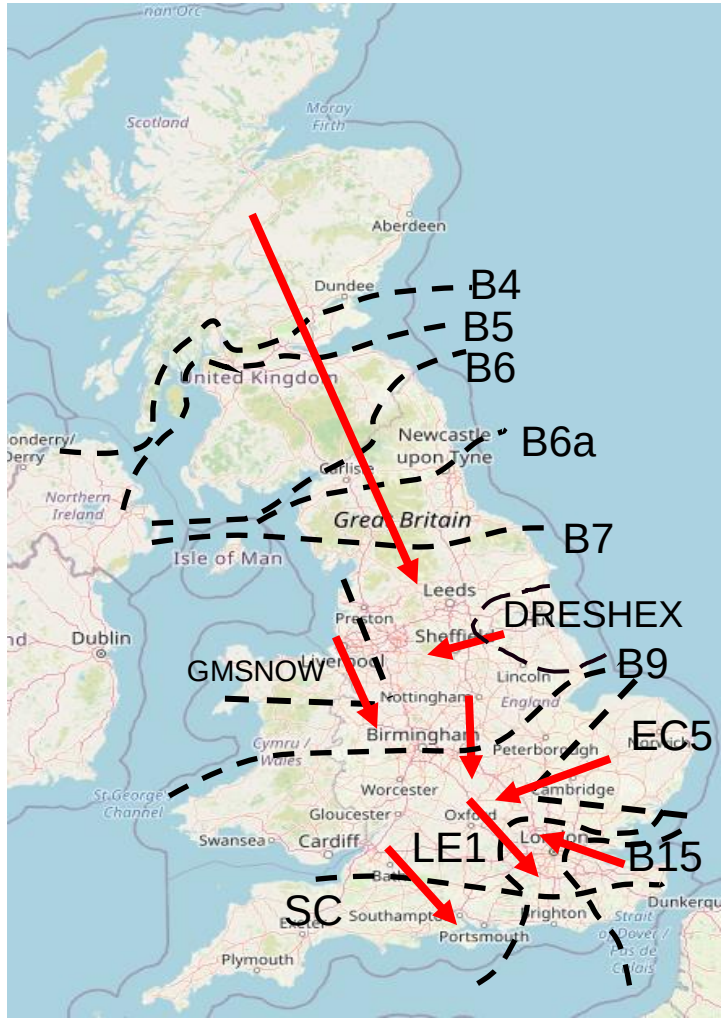
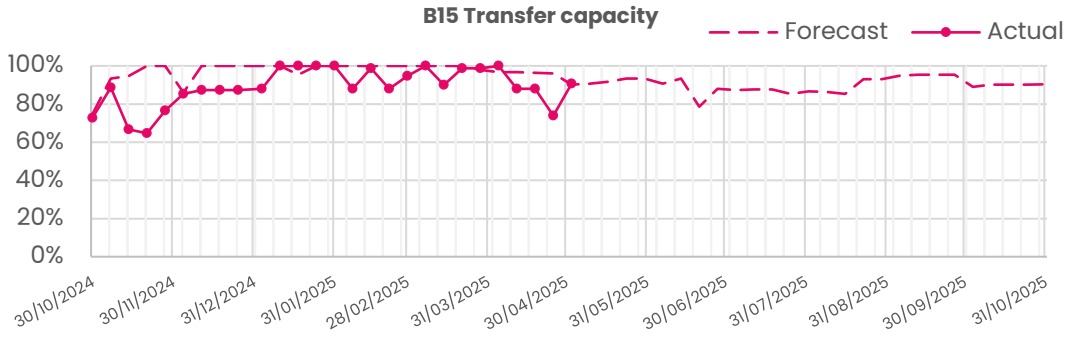
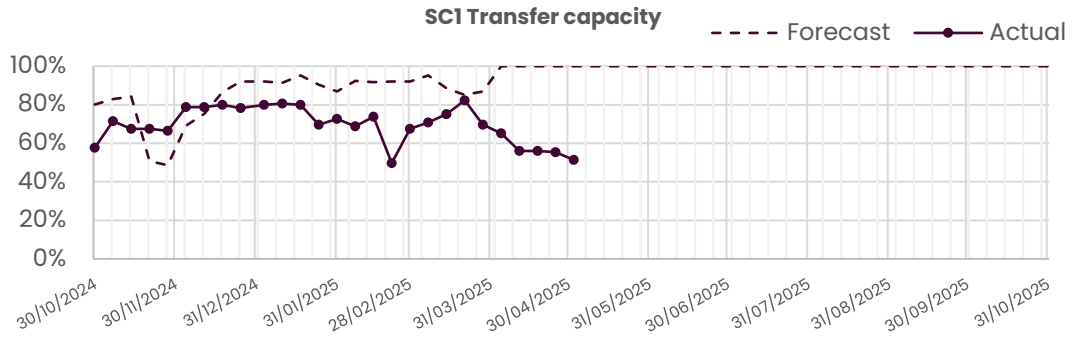


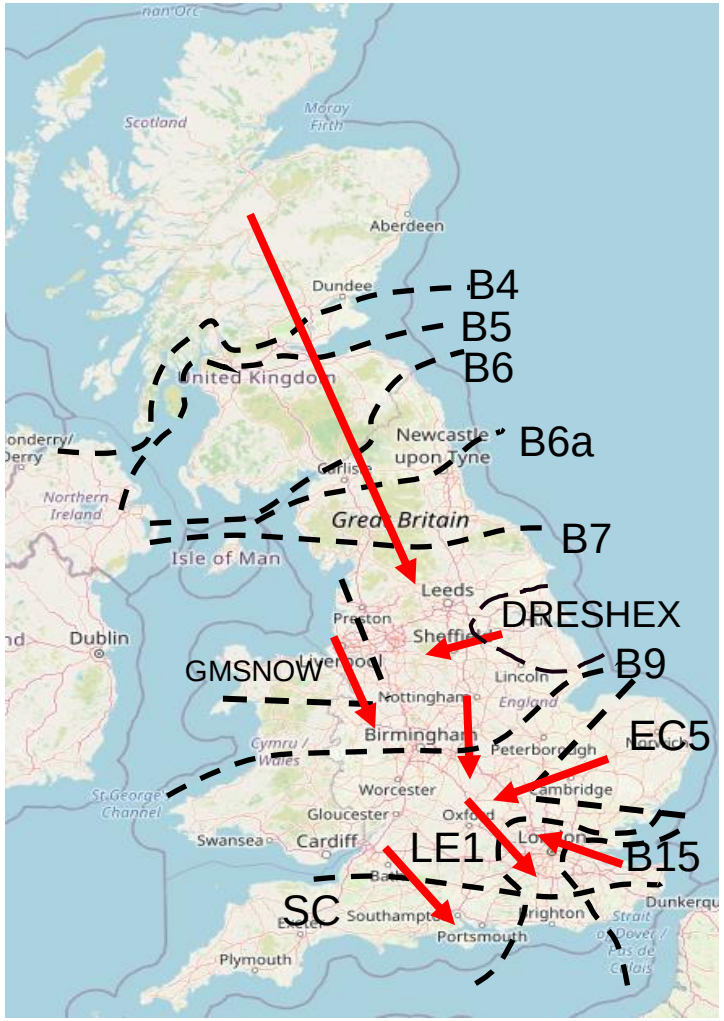
Transparency | Network Congestion





Boundary	Max. Capacity (MW)	Current Capacity (%)
B4/B5	3400	58%
B6 (SCOTEX)	6800	61%
B6a	8000	63%
B7 (SSHARN)	9850	69%
GMSNOW	5800	44%
FLOWSTH (B9)	12700	79%
DRESHEX	9675	80%
EC5	5000	55%
LE1 (SEIMP)	8750	51%
B15 (ESTEX)	7500	91%
SC1	7300	51%

Slido code #OTF



Day ahead flows and limits, and the 24-month constraint limit forecast are published on the ESO Data Portal: [Constraints Management]

(The forecast and day ahead limits may vary due to changes in the outage plan. The plan is reviewed periodically throughout the year to ensure we are optimising system conditions, whilst managing any necessary outage plan changes)

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Public

Skip Rates

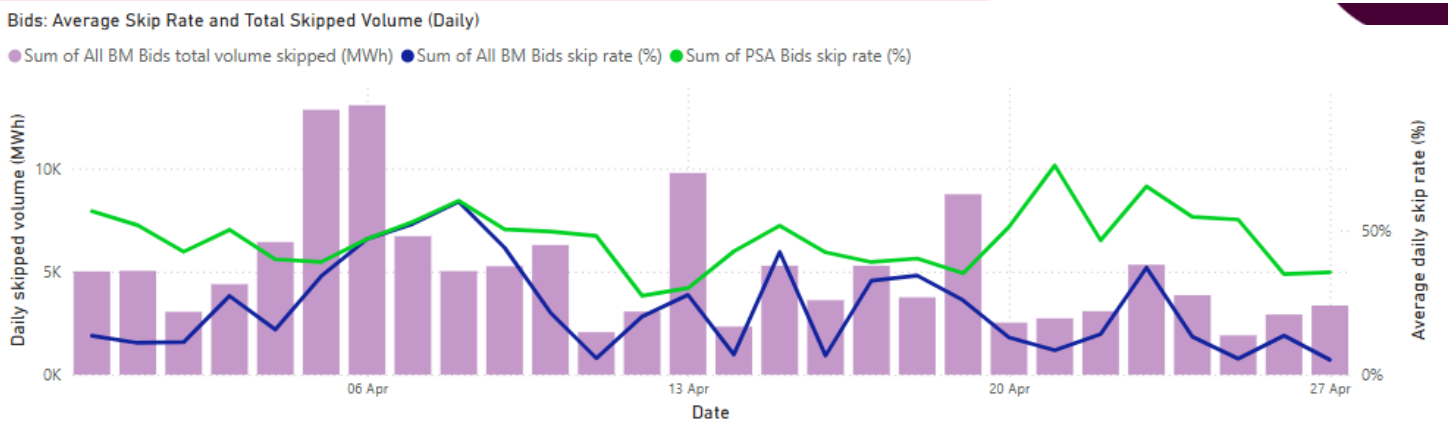
Interconnectors: There has been significant interest in the inclusion of interconnectors. Whilst there is no immediate plan to include them in the skip rate methodology, we are planning a wider dispatch process review which will include interconnectors.

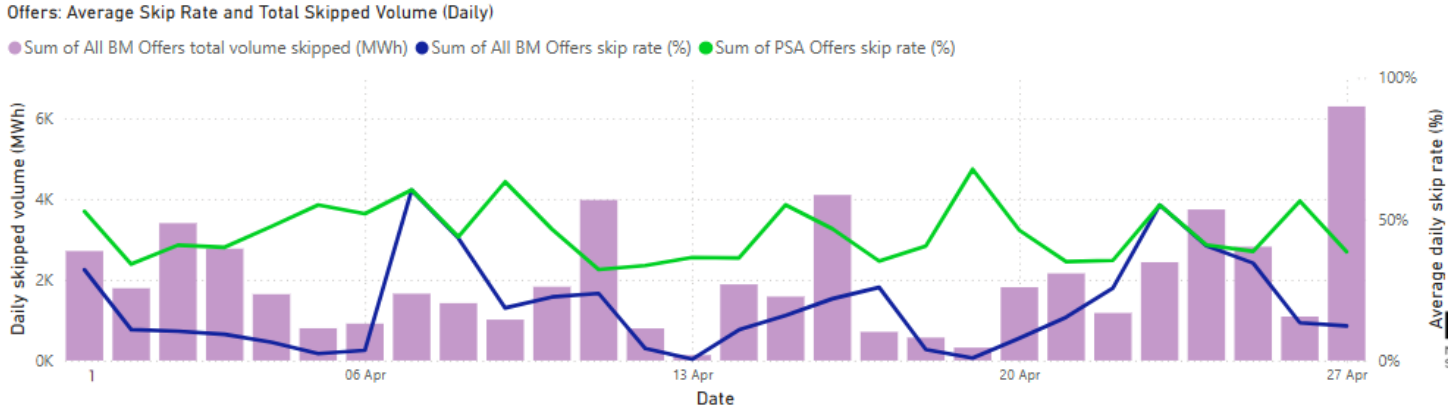
Slido code #OTF

We are now sharing the summary skip rate data on a rolling 4-week basis. We welcome your comments on if you find this valuable and feedback on how we present this data.

Weekly Average w/e	Offers - All BM	Offers - PSA	Bids - All BM	Bids - PSA
06/04	8%	43%	21%	45%
13/04	13%	41%	27%	41%
20/04	9%	44%	17%	41%
27/04	20%	41%	11%	49%

Monthly Average	Offers - All BM	Offers - PSA	Bids - All BM	Bids - PSA
January	18%	34%	11%	53%
February	15%	33%	5%	49%
March	15%	29%	7%	47%
April (MTD)	11%	42%	19%	43%





box.SkipRates@nationalenergyso.com

Skip rate data and more info on skip rates and battery storage including methodology.

April MTD: PSA offer skip rate is high due to reduced demand (high embedded solar), leading to more system actions for voltage and inertia, and few energy actions.
27th April: High skipped offer volume – large volume of offers required for energy and voltage due to two interconnectors tripping

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PSA: Post System Action

Previously Asked Questions

Q: (09/04/25) What was the reason for several fast reserve bids being accepted at over £3000/MWh in March? (22nd SPs 1-3, 31st SP48, plus a few other occasions)

A: Thank you for bringing our attention to these dispatches, at this point we believe that there were one or more high priced Optional Fast Reserve dispatches which were not in merit. This has highlighted a particular scenario which we have been working with the provider to understand the situation leading to these untypical prices and are working to ensure that we reduce the likelihood of an out of merit dispatch in this situation reoccurring. We do not anticipate a change in the data.

Q: (16/04/2025) Are NESO concerned about the risk transmission or distributed generation tripping on over voltage during periods of low demand, especially given the uncertainty highlighted in GC0178: Temporary Overvoltage - Specification of Limits and Clarification of Obligations .

A: There have been some events over the past few years where some windfarms have tripped due to temporary overvoltage that took place post fault. The issue was managed as a compliance issue and the affected generation was back on the system within several days.

NESO have not experienced a widespread disconnection of generation due to temporary overvoltage. The issue is not widespread and is managed through the compliance enforcement mechanism.

Previously Asked Questions

Slido code #OTF

Q: (16/04/25) This may have been asked previously but will NESO include the skip rates for different technologies in the OTF?

Also, just wondering if there is a reason why the dates for the demand last week and week ahead run wed to wed whereas NESO actions run fri to fri?

A: Skip Rate technologies: We are working on providing a breakdown of skip rate by fuel type and this will be shared at OTF when it is available. It will also be discussed in detail at the forum on 1st May.

OTF data timeframes: For the regular content slides (Demand, Operational Margins, NESO Actions, Network Congestion and Skip Rates) we aim to provide the most up-to-date view for the live forum each week, using a consistent timespan and presentation for each section to ensure the data is comparable week on week.

The differences between section timespans reflect when data becomes available to the respective team and how much processing (combining datasets, quality testing, analysis, etc) is required to produce the slide content ahead of the live forum.

We have considered using a consistent timespan for all sections but decided that backdating all sections to match the NESO Actions (Friday to Friday of previous week) would be unhelpful.

Advance Questions

Slido code #OTF

Q: (23/04/2025) On the BMRS there are numerous BMUs whose Dynamic Details are not visible to the market as they presumably have never been declared via EDL or the Wider Access API.
To correct this asymmetry in information between Lead Party and the rest of the market, will NESO:
a) enhance its BMU registration process such that new BMUs declare their Dynamic parameters via EDL / Wider Access API when the BMU goes live in the relevant system?
b) Identify any current BMUs with 'missing' data items on BMRS vs NESO despatch systems and liaise with the Lead Parties of those BMUs to get these items redeclared to NESO, hence triggering a flow to Elexon?

A:

a) We recognise that some of our customers may need more support during the BM Registration process with understanding the requirements for submission of unit data including dynamic and physical parameters. We are reviewing our Registration processes to align with the Single Markets Platform and this includes considering what additional support would be useful for customers and how best to make this available.

b) We are looking to run a dedicated project this year on data accuracy as market monitoring following the success and learning from the feedback of the PN improvement work conducted on wind. We recognise that null values are an issue alongside numerous other issues with market submitted data to NESO. The scale of the problems means this is something that will be difficult to achieve bilaterally. We expect to initiate this with a call for input from industry on how best to resolve this and will come to the OTF with an update when this is launched.

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Advance Questions

Slido code #OTF

Q: (28/04/2025) The presentation at the OTF on March 12 , 2025, highlighted the activities and responsibilities required to meet the SORT upload requirement, as indicated on Slide 13. It was noted that the HVSCC needs to be completed by the TOs before the Static SORT upload for the user. Previously, TOs would delay the HVSCC until later in the process to minimise obstacles such as permits. However, with the process outlined in the presentation, BMUs ready for energisation would have to wait until work is nearly finished on-site for the HVSCC and SORT upload, potentially causing a delay of up to 2 months in the energisation date.
Can NESO confirm the need for the change and whether a site can be issued EON without the Static SORT upload, as suggested by some TOs. Clarification on these points would help address concerns and confusion on the process/ potential delays that may arise from it.

A: Generally, the conditions for EON and energisation can be met ahead of the SORT Upload. However, you do need to clarify the specific requirements for your site with the NESO Compliance Engineer and your Transmission Owner.

Information about the Connections journey is available at: Your Connections journey | National Energy System Operator

For further questions related to the BM Registration process, please contact: bmu.registration@nationalenergyso.com

For the Operational Meter test, please contact: OpsMetering@nationalenergyso.com

EON – Energisation Operational Notification
BM – Balancing Mechanism

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Outstanding Questions

Slido code #OTF

Q: (29/01/25) NESO only send IPs to the BMU – this is a limitation of EDL - was this not meant to be resolved in the EBS1 2010 system refresh parties paid for?
A: We need clarification on some points in order to provide an answer to this question. If this was from you please contact us at: box.nc.customer@nationalenergyso.com

Q: (02/04/25) When you do an emergency return to service why do you not notify the market of what is returning? It would be useful to know at least the impacted region - gencos need to manage TCLC obligations.

Q: (09/04/25) We noticed several periods last week (e.g. SP23 on 06/04) where many of the wind bids were not SO-flagged. From what we can tell, they seemed to be taken for system reasons. Could you please clarify whether they were taken for system reasons or not? and if we can expect this behaviour to continue?

Q: (16/04/25) Why does NESO not raise a rule change to require DNOs to publish data on actual solar and wind output on their systems? Then we could see real demand not TO demand.

Reminder about answering questions at the NESO OTF

Slido code #OTF

- **Questions from unidentified parties will not be answered live**. If you have reasons to remain anonymous to the wider forum, please use the advance question or email options. Details in the appendix to the pack.
- **The OTF is not the place to challenge the actions of individual parties** (other than the NESO), and we will not comment on these challenges. This type of concern can be reported to the Market Monitoring team at: marketreporting@nationalenergyso.com
- **Questions will be answered in the upvoted order whenever possible**. We will take questions from further down the list when: the answer is not ready; we need to take the question away or the topic is outside of the scope of the OTF.
- **Slido will remain open until 12:00**, even when the call closes earlier, to provide the maximum opportunity for you to ask questions.
- **All questions will be recorded and published** All questions asked through Sli.do will be recorded and published, with answers, in the Operational Transparency Forum Q&A on the webpage: https://www.neso.energy/what-we-do/systems-operations/operational-transparency-forum
- **Takeaway questions** – these questions will be included in the pack for the next OTF, we may ask you to contact us by email in order to clarify or confirm details for the question.
- **Out of scope questions** will be forwarded to the appropriate NESO expert or team for a direct response. We may ask you to contact us by email to ensure we have the correct contact details for the response. These questions will not be managed through the OTF, and we are unable to forward questions without correct contact details. Information about the OTF purpose and scope can be found in the appendix of this slide pack

NESO National Energy System Operator

Feedback

Slido code #OTF

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@nationalenergyso.com

NESO National Energy System Operator

slido

Audience Q&A

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

Appendix

Purpose and scope of the NESO Operational Transparency Forum

Slido code #OTF

Purpose:

The Operational Transparency Forum runs once a week to provide updated information on and insight into the operational challenges faced by the control room in the recent past (1-2 weeks) and short-term future (1-2 weeks). The OTF will also signpost other NESO events, provide deep dives into focus topics, and allow industry to ask questions.

Scope:

Aligns with purpose, see examples below:

In Scope of OTF

Material presented i.e.: regular content, deep dives, focus topics
NESO operational approach & challenges
NESO published data

Out of Scope of OTF

Data owned and/or published by other parties
e.g.: BMRS is published by Elexon
Processes including consultations operated by other parties e.g.: Elexon, Ofgem, DESNZ
Data owned by other parties
Details of NESO Control Room actions & decision making
Activities & operations of particular market participants
NESO policy & strategic decision making
Formal consultations e.g.: Code Changes, Business Planning, Market development

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Managing questions at the NESO Operational Transparency Forum

Slido code #OTF

- OTF participants can ask questions in the following ways:
  - Live via Slido code #OTF
  - In advance (before 12:00 on Monday) at https://forms.office.com/r/k0AEfKnai3
  - At any time to box.nc.customer@nationalenergyso.com

- **All questions asked through Sli.do** will be recorded and published, with answers, in the Operational Transparency Forum Q&A on the webpage: Operational Transparency Forum | NESO
- **Advance questions** will be included, with answers, in the slide pack for the next OTF and published in the OTF Q&A as above.
- **Email questions** which specifically request inclusion in the OTF will be treated as Advance questions, otherwise we will only reply direct to the sender.
- **Takeaway questions** – we may ask you to contact us by email in order to clarify or confirm details for the question.
- **Out of scope questions** will be forwarded to the appropriate NESO expert or team for a direct response. We may ask you to contact us by email to ensure we have the correct contact details for the response. These questions will not be managed through the OTF, and we are unable to forward questions without correct contact details. Information about the OTF purpose and scope can be found in the appendix of this slide pack.

NESO National Energy System Operator

Skip Rates – 'In Merit' datasets

We recognise that these datasets aren't as intuitive as they could be – specifically the column headings. Please be reassured that we are looking at ways to improve this - we will update the documentation to include this information and will also discuss the datasets in more detail at the webinar on 27th February.

We will use 'accepted' and 'instructed' differently in this context, even though they are normally the same.

These datasets show the units that should have been instructed if decisions were solely based on price, rather than all units that were instructed. Therefore this dataset does not match the total accepted volume datasets in Elexon.

In Merit Volume = Accepted Volume + Skipped Volume

In Merit Volume
- This is the recreated in merit stack showing the lowest cost units that were available to meet the requirement, where the requirement is based on the volume of units that were actually instructed
- Therefore this is the volume that should have been accepted if decisions were solely based on price
- The sum of this column is the total instructed volume in the 5 minute period (subject to the relevant exclusions)

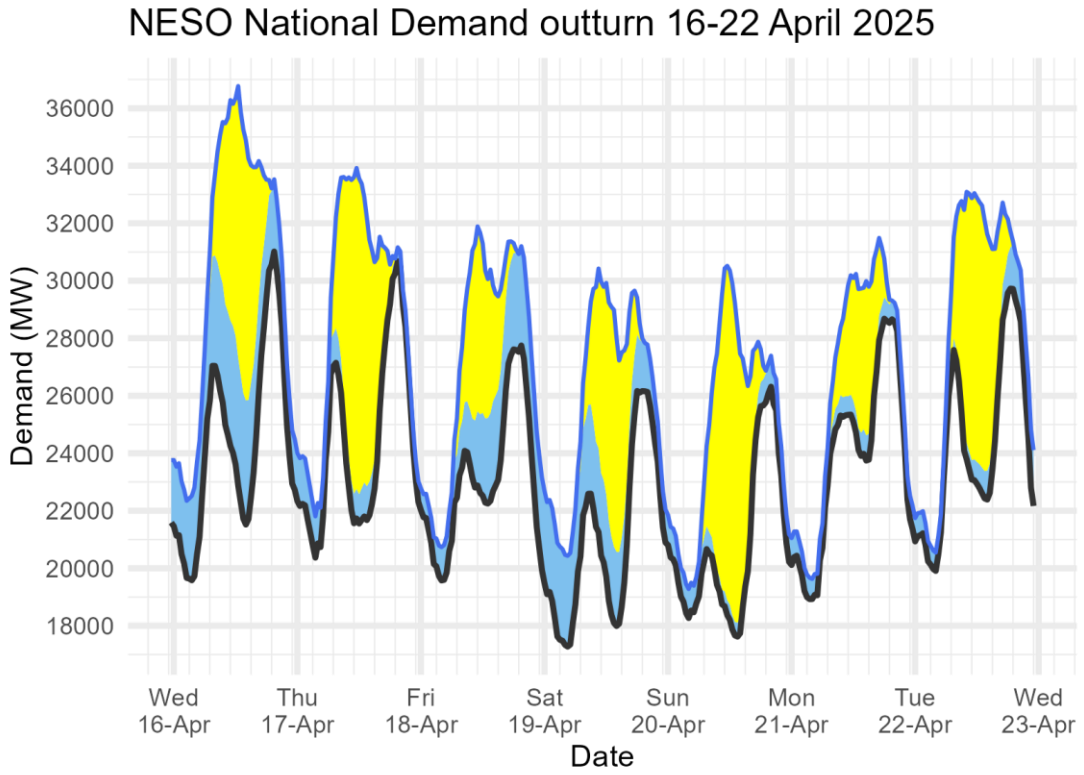
Accepted Volume
- This is the volume that was accepted in merit, as a subset of the 'In Merit Volume' column – i.e. how much volume was accepted in merit
- The sum of this column will be less than the sum of the 'In Merit Volume' column, unless there is no skipped volume
- Note: this column does not list all instructed units

Skipped Volume
- This is the volume that was skipped, as a subset of the 'In Merit Volume' column – i.e. of the volume that we should have instructed, how much was skipped

It's possible that the list of units increases, decreases, or stays the same between stages, but the total 'In Merit Volume' will always remain the same (or no volume is excluded) or decrease (due to exclusions).

Demand | Demand out-turn 16-22 April

Slido code #OTF



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 NESO has no real time data.

Historic out-turn data can be found on the NESO Data Portal in the following data sets: Historic Demand Data & Demand Data Update

Distributed generation

Peak values by day

Date	OUTTURN	
	Daily Max Dist. PV (GW)	Daily Max Dist. Wind (GW)
16 Apr 2025	9.4	4.5
17 Apr 2025	11.2	1.8
18 Apr 2025	6.4	3.5
19 Apr 2025	8.2	3.3
20 Apr 2025	11.6	1.1
21 Apr 2025	5.4	1.0
22 Apr 2025	9.3	2.1

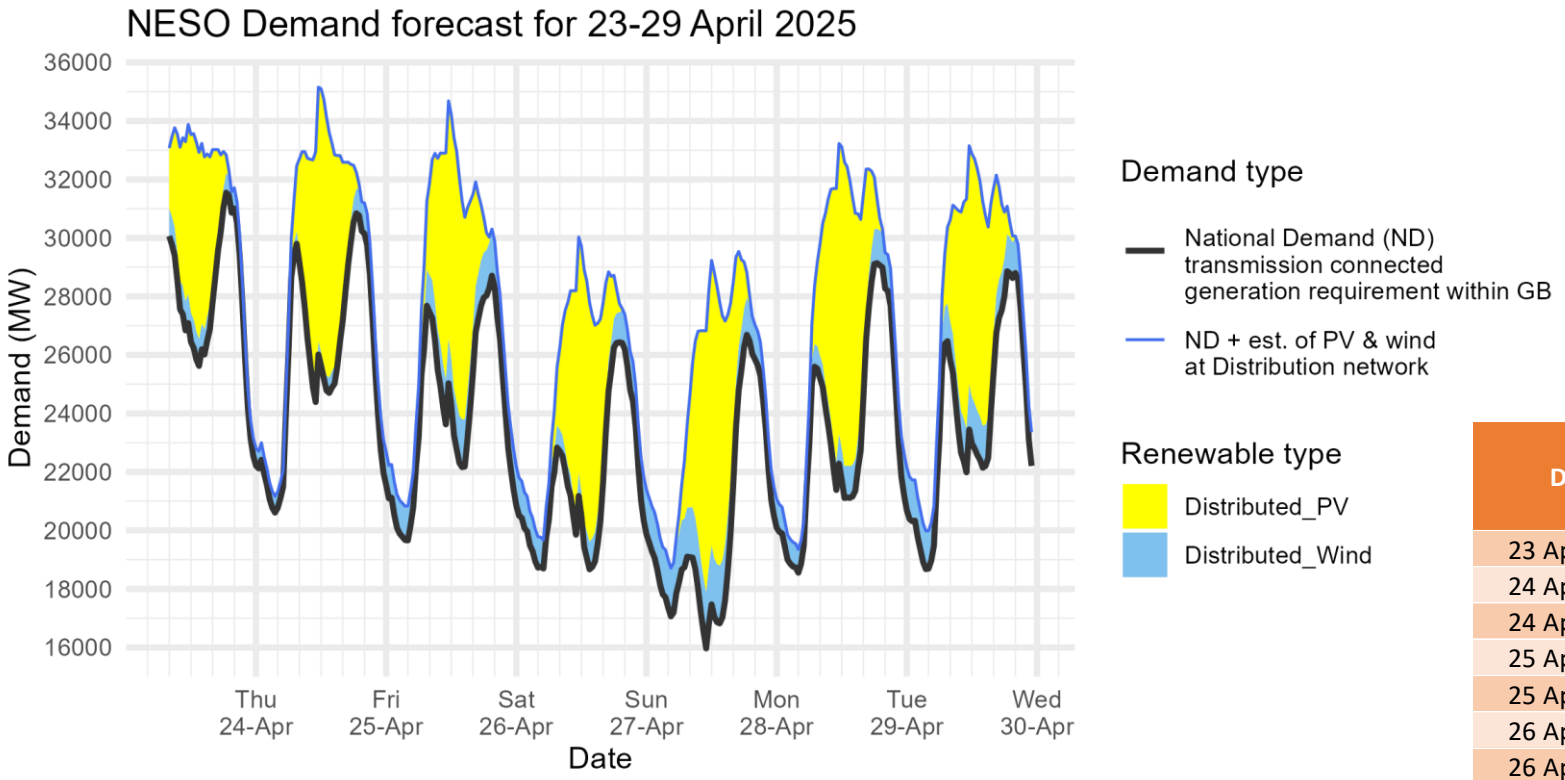
National Demand

Minimum Demands

Date	Forecasting Point	FORECAST (Wed 16 Apr)			OUTTURN		
		National Demand (GW)	Dist. wind (GW)	Dist. PV (GW)	National Demand (GW)	Dist. wind (GW)	Dist. PV (GW)
16 Apr 2025	Afternoon Min	20.7	4.4	9.0	21.5	4.3	9.0
17 Apr 2025	Overnight Min	20.6	1.7	0.0	20.4	1.4	0.0
17 Apr 2025	Afternoon Min	23.7	1.1	8.2	21.7	1.2	9.3
18 Apr 2025	Overnight Min	20.4	0.7	0.0	19.6	1.2	0.0
18 Apr 2025	Afternoon Min	17.0	2.0	8.7	22.2	3.0	4.8
19 Apr 2025	Overnight Min	17.2	2.6	0.0	17.3	3.2	0.0
19 Apr 2025	Afternoon Min	15.6	2.9	8.4	18.0	2.6	7.4
20 Apr 2025	Overnight Min	17.7	1.6	0.4	18.3	1.0	0.0
20 Apr 2025	Afternoon Min	18.4	1.5	7.3	17.6	0.5	10.2
21 Apr 2025	Overnight Min	18.4	1.3	0.0	18.9	0.7	0.0
21 Apr 2025	Afternoon Min	20.7	1.5	6.4	23.7	0.9	5.4
22 Apr 2025	Overnight Min	19.1	1.2	0.0	19.9	0.6	0.0
22 Apr 2025	Afternoon Min	23.3	1.3	7.5	22.4	1.0	8.2

Demand | Demand forecast 23-29 April

Slido code #OTF



National Demand

Minimum Demands

		FORECAST (Wed 23 Apr)		
Date	Forecasting Point	National Demand (GW)	Dist. wind (GW)	Dist. PV (GW)
23 Apr 2025	Afternoon Min	25.6	0.9	6.4
24 Apr 2025	Overnight Min	20.6	0.6	0.0
24 Apr 2025	Afternoon Min	24.7	0.5	8.4
25 Apr 2025	Overnight Min	19.7	1.2	0.0
25 Apr 2025	Afternoon Min	22.2	1.6	7.5
26 Apr 2025	Overnight Min	18.7	1.0	0.0
26 Apr 2025	Afternoon Min	18.7	1.0	8.2
27 Apr 2025	Overnight Min	17.1	1.7	0.0
27 Apr 2025	Afternoon Min	16.8	2.0	9.0
28 Apr 2025	Overnight Min	18.6	0.8	0.0
28 Apr 2025	Afternoon Min	21.1	1.1	10.4
29 Apr 2025	Overnight Min	18.7	1.3	0.0
29 Apr 2025	Afternoon Min	22.1	1.4	7.7

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 NESO has no real time data.

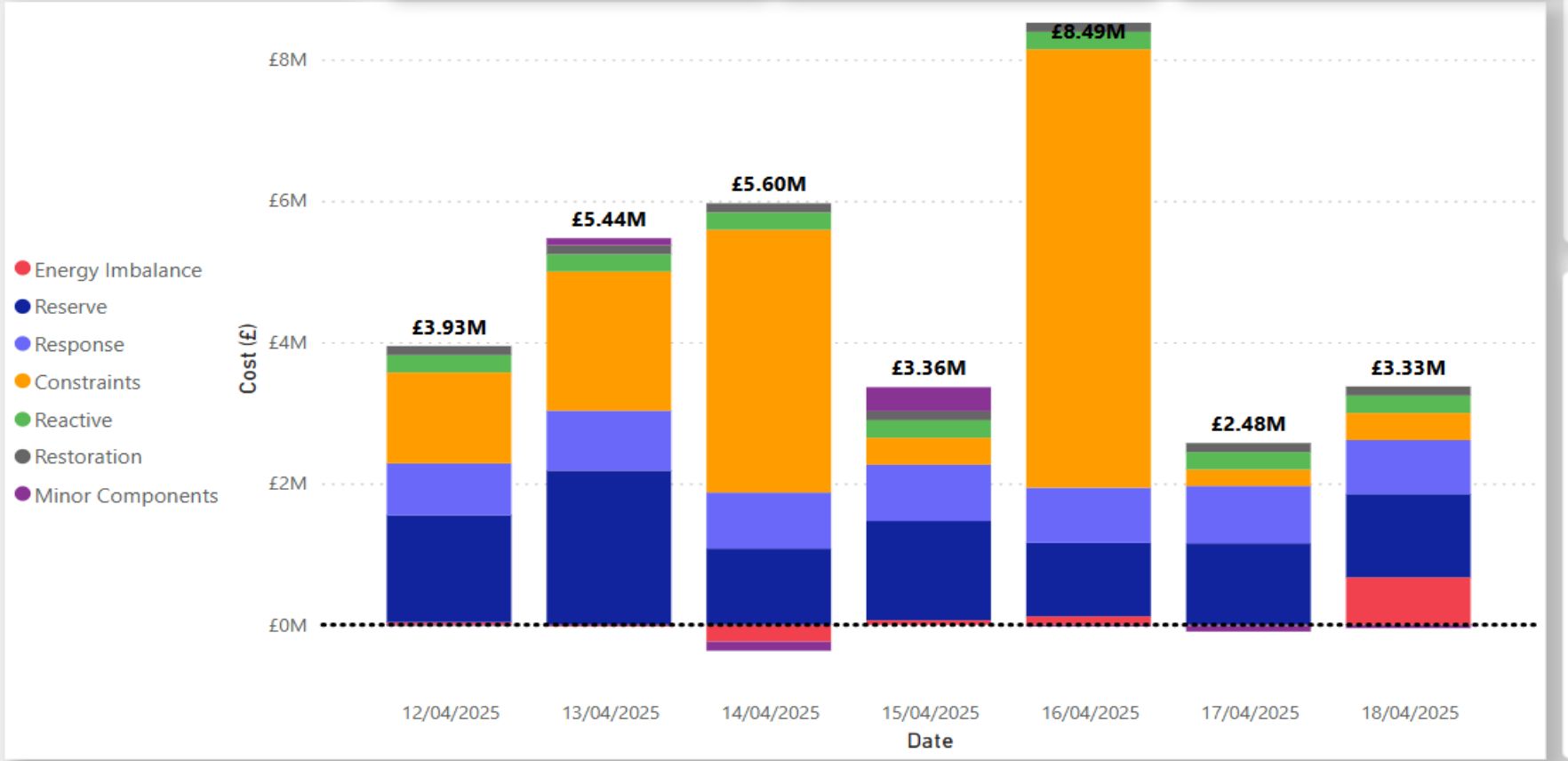
Historic out-turn data can be found on the NESO Data Portal in the following data sets: Historic Demand Data & Demand Data Update

NESO Actions | Category Cost Breakdown

Slido code #OTF

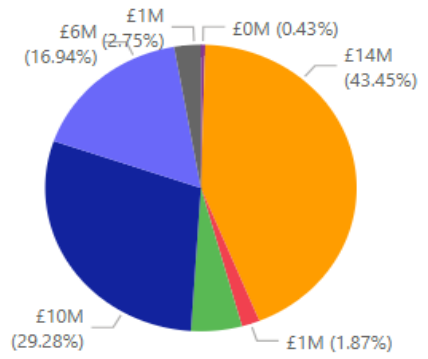
Date: 12/04/2025 – 18/04/2025

Weekly Total Costs (£)	Last Week Total Costs (£)	Past 30-Day Average Costs (£)
£32.6M	£28.7M	£6.6M



Date	Total Outturn Cost
12/04/2025	£3,929,270
13/04/2025	£5,444,649
14/04/2025	£5,597,698
15/04/2025	£3,363,041
16/04/2025	£8,494,361
17/04/2025	£2,475,459
18/04/2025	£3,325,729
Total	£32,630,206

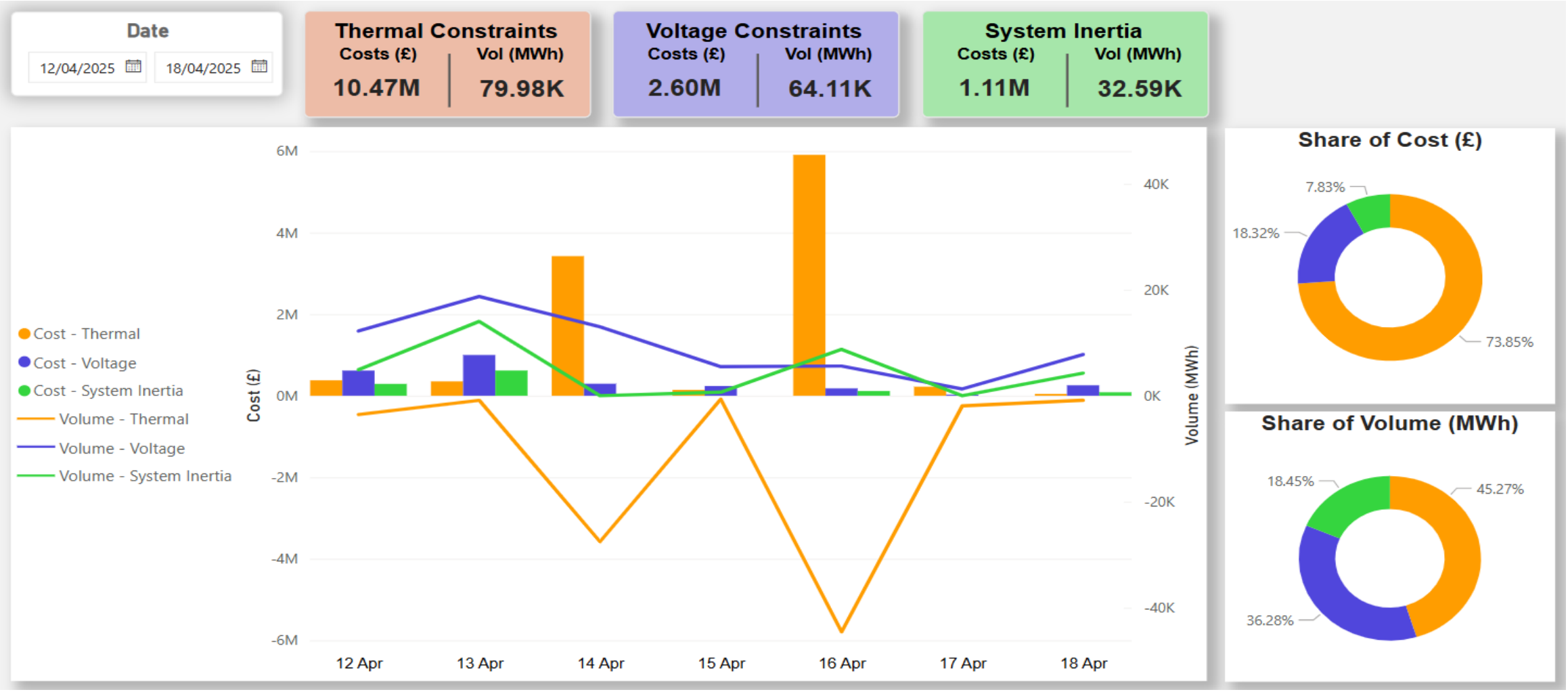
Weekly Cost (£) and Share (%)



January 2025 MBSS report update: please note this has now been published

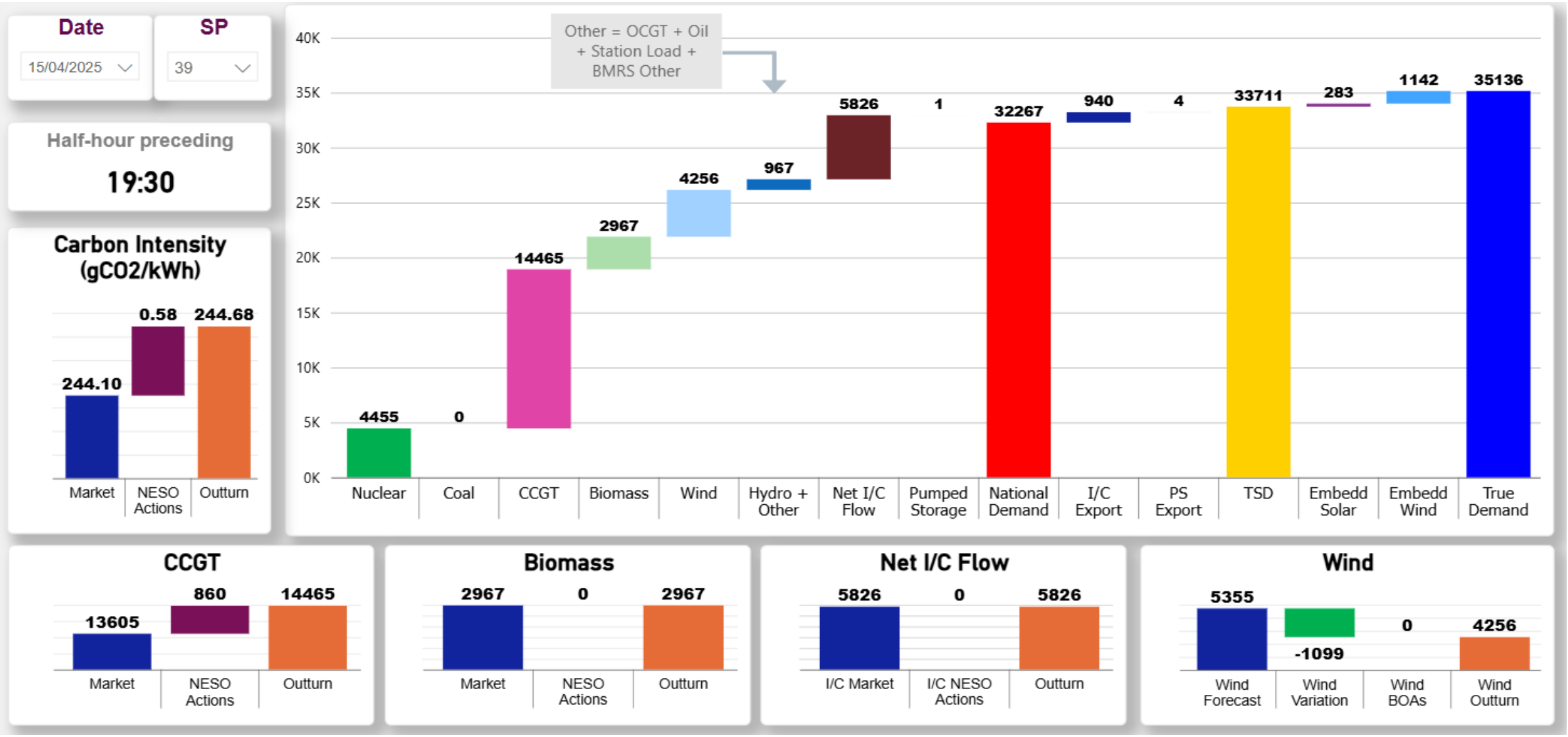
NESO Actions | Constraint Cost Breakdown

Slido code #OTF



NESO Actions | Peak Demand – SP spend ~ -£1k
Tuesday 15th April

Slido code #OTF



NESO Actions | Minimum Demand – SP spend ~ £113k
Saturday 12th April

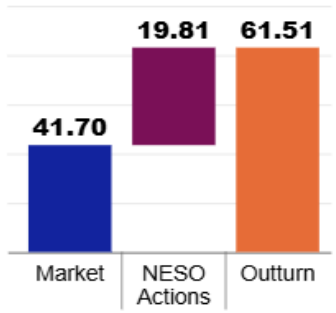
Slido code #OTF

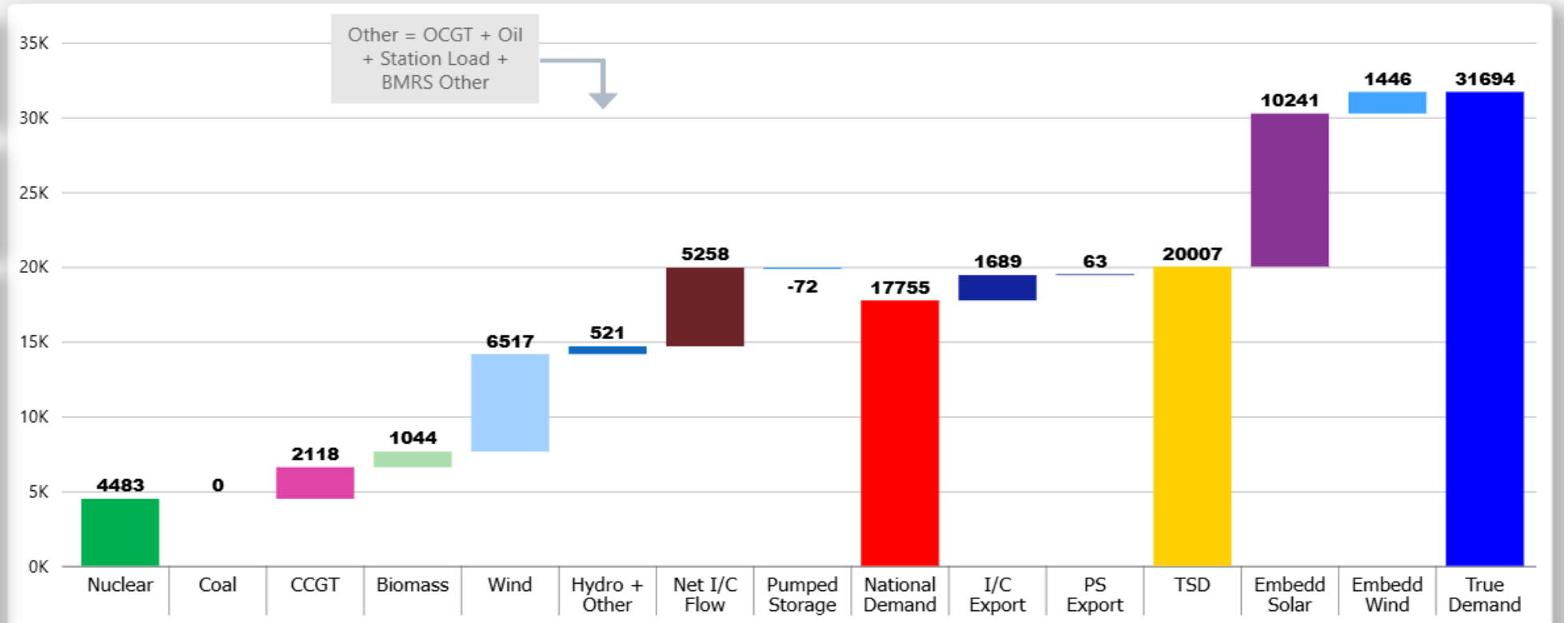
Date: 12/04/2025

SP: 27

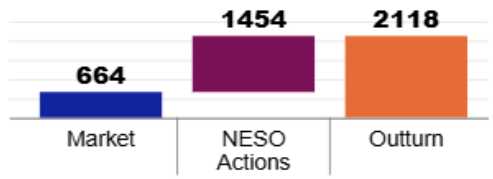
Half-hour preceding: 13:30

Carbon Intensity (gCO2/kWh)

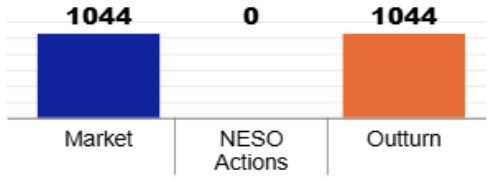




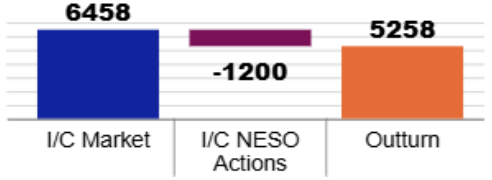
CCGT



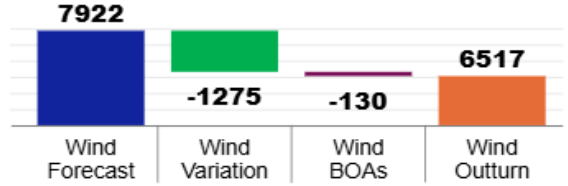
Biomass



Net I/C Flow



Wind



NESO Actions | – Highest SP spend ~ £240k
Wednesday 16th April

Slido code #OTF