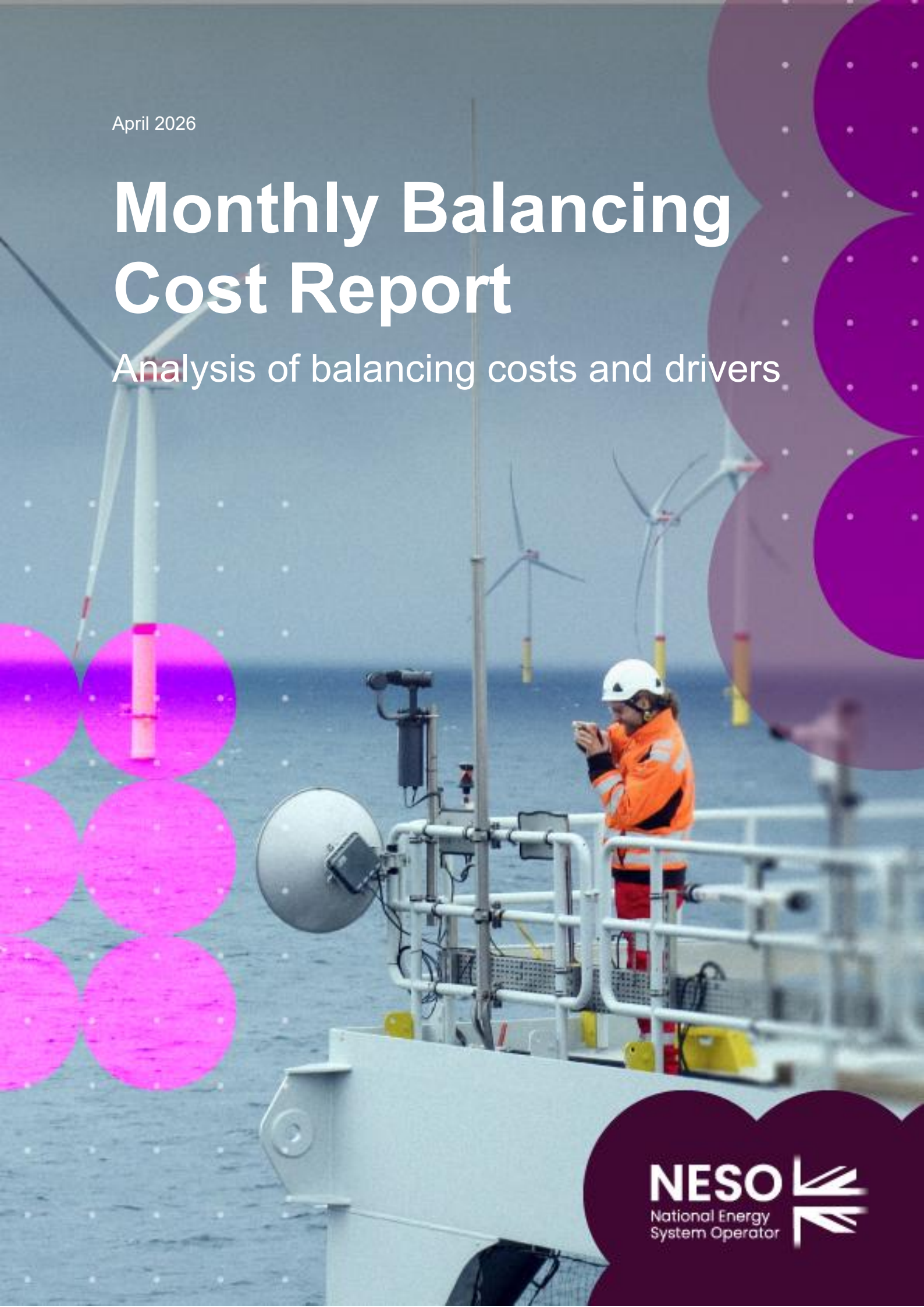
April 2026

Monthly Balancing Cost Report

Analysis of balancing costs and drivers



NESO
National Energy System Operator

Monthly Balancing Costs Report – April 2026

Executive Summary

The total balancing cost for April was £304m, which is £5m (~1.6%) above the benchmark.

After the highest recorded wind outturn for a March, April saw a drop in wind outturn from 7.1 TWh to 5.6 TWh, with a greater share of the decrease being in Scotland. April saw days with high wind outturn during the beginning of the month partly due to Storm Dave which impacted Scotland and North England. But as the month progressed the wind outturn fell with some days requiring no curtailment. This led to a drop in the total monthly cost.

With warmer temperatures, longer daylight hours and school/bank holidays, demand levels significantly decreased in April compared with March. Although there was slightly higher demand during the day compared to April.

Due to lower wind outturn, the level of curtailment this month was 1.1 TWh, lower than the 1.5 TWh in March. This is seen in the lower constraint costs in Scotland compared with March. April saw some high-cost days due to ongoing outages applying pressure to constraints in the North of England which is reflected in the increase in constraint cost in England &Wales.

Voltage constraints increased since March to £22.2m from £15.3m. This is due to the lower demand on the system this month meaning there were less self-dispatching units that provide reactive power support. This meant more synchronous units were procured through the Balancing Mechanism, with the highest volumes in the southwest. For the same reasons as the voltage cost increase there was an increase spend on inertia due to lower demand compared with March.

Non constraint costs have increased from £65.7m to £82.3m. This accompanies an increase in clearing prices for all frequency response services and a lower wholesale price in April. Lower inertia on the system and low demand led to higher procurement for these dynamic services which raised the prices. There was also an increase in non-constraint volumes which also contributed to the higher costs this month.

Average wholesale prices have decreased this month despite the geopolitical developments in the Middle East. Due to lower demand with warmer temperatures and holidays and the return of GB's nuclear to 100% capacity which produced a downward pressure on prices. The volume

weighted average (VWA) price of bids in April was -£8.72/MWh, which more expensive than March's price which was -£7.92/MWh. This negative bid price reflects that most of the bid actions taken were to curtail wind. The volume weighted average (VWA) price of offers dropped to £139.33 from £144.94 which follows from the drop in power and gas prices.

Total Balancing Costs (£m) and Balancing Volume (GWh) monthly vs previous year

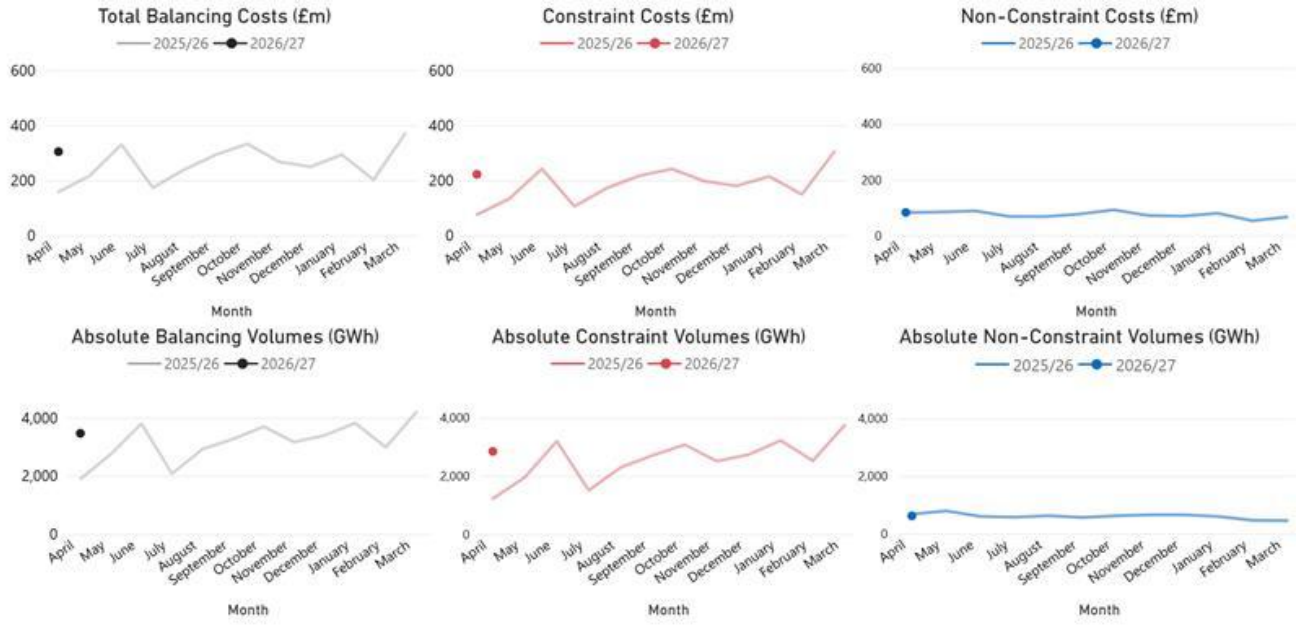


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Table 1: 2026-27 Monthly breakdown of balancing costs benchmark and outturn

All costs in £m	Apr-25	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	YTD
Unconstrained Wind Penetration	0.13	0.21												0.21
Average Day Ahead	81	79												n/a

Baseload (£/MWh)														
Benchmark*	N/A	299												299
Outturn balancing costs[1]	**152**	**304**												**304**

Previous months' outturn balancing costs are updated every month with reconciled values. Figures are rounded to the nearest whole number, except outturn wind which is rounded to one decimal place.

For more information on our balancing costs benchmark please see our monthly incentives reporting.

What is NESO doing to help reduce Balancing Costs?

NESO is continually identifying opportunities to minimise balancing costs. We are working closely with DESNZ, Ofgem and industry to explore, develop and assess cost saving initiatives and develop new initiatives and enhance existing services from our Balancing Cost Strategy to support lower costs.

Thermal constraints currently make up the largest share of balancing costs (~60%). The Government's Summer 2025 Review of the Electricity Market Arrangements (REMA) set out the decision to move forward with RNP. Through this programme, we're working with DESNZ and Ofgem to prioritise and progress constraint management initiatives with the greatest potential for cost reduction, while ruling out less effective options. We are also working closely with Network Operators and other industry participants to optimise outage placement and drive improvements to the overall planning process - enabling system access for vital reinforcement work, whilst driving down the cost of thermal constraints.

As part of the Balancing Cost Strategy, we are also progressing initiatives to further reduce non-thermal constraint costs through strategies to manage voltage and inertia. Between April 2025 and March 2026, we delivered £536m in savings across key initiatives. These savings are calculated by comparing the cost of actions taken through these initiatives with known counterfactuals (which in most cases is taking equivalent actions in the BM). This includes £128m

[1] Outturn balancing costs excludes Winter Contingency costs for comparison to the benchmark as agreed with Ofgem. However, in the rest of this section we continue to include those costs for transparency and analysis purposes.

from Network Services, £207m from trading actions, and £164m from reduced inertia requirements under FRCR. £37m in further savings have also been delivered through DFS and Balancing Reserve.

For further details on ongoing work to reduce balancing costs please see our latest Annual Balancing Cost Report.

NESO Operational Transparency Forum: High-cost days and balancing cost trends are discussed every week at the Operational Transparency Forum to give ongoing visibility of the operability challenges and the associated NESO control room actions. It also gives industry the opportunity to ask questions to our System Operations panel. Details of how to sign up and recordings of previous meetings are available here.

If you would like to find out more about balancing costs and our initiatives, visit the balancing costs website here; or click on the links below:

- Annual Report
- Portfolio
- Performance Reporting

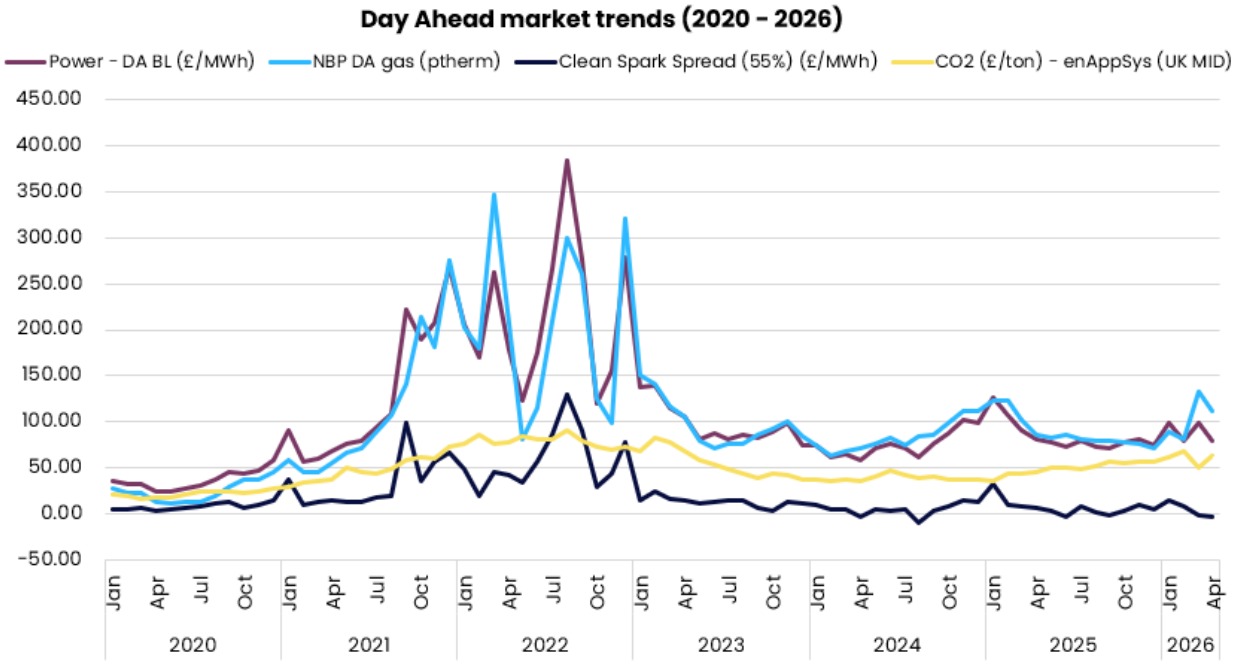
System and Market Conditions

Market trends

In April, power and gas prices dropped sharply compared to the previous month which had risen in the previous month due to heightened geopolitical uncertainty following the closure of the Strait of Hormuz. Prices fell to £78.91/MWh and £112.60/therm. Carbon prices saw a significant increase to £63.02/ton from £50.90/ton.

April saw many periods of variable wind outturn and high volatility due to ongoing developments to the conflict in the Middle East which placed an upward pressure on power prices. Despite this, there was an overall price decrease this month due to strong wind during the middle of the month, and an improvement on sentiment in the market regarding the conflict in the Middle East. There was also an increase in GB's nuclear capacity as it returned to 100% of its total capacity which applied a downward pressure on power prices.

The volume weighted average (VWA) price of bids in April was -£8.72/MWh, which is more expensive than March's price which was -£7.92/MWh. This negative bid price reflects that most of the bid actions taken were to curtail wind. The volume weighted average (VWA) price of offers dropped to £139.33 from £144.94 which follows from the drop in power and gas prices. The clean spark spread increased from -£5.09/MWh to -£2.64/MWh, indicating an improvement in the profitability of gas-fired generation, although it remained negative due to higher carbon prices.



DA BL: Day Ahead Baseload **NBP DA:** National Balancing Point Day Ahead

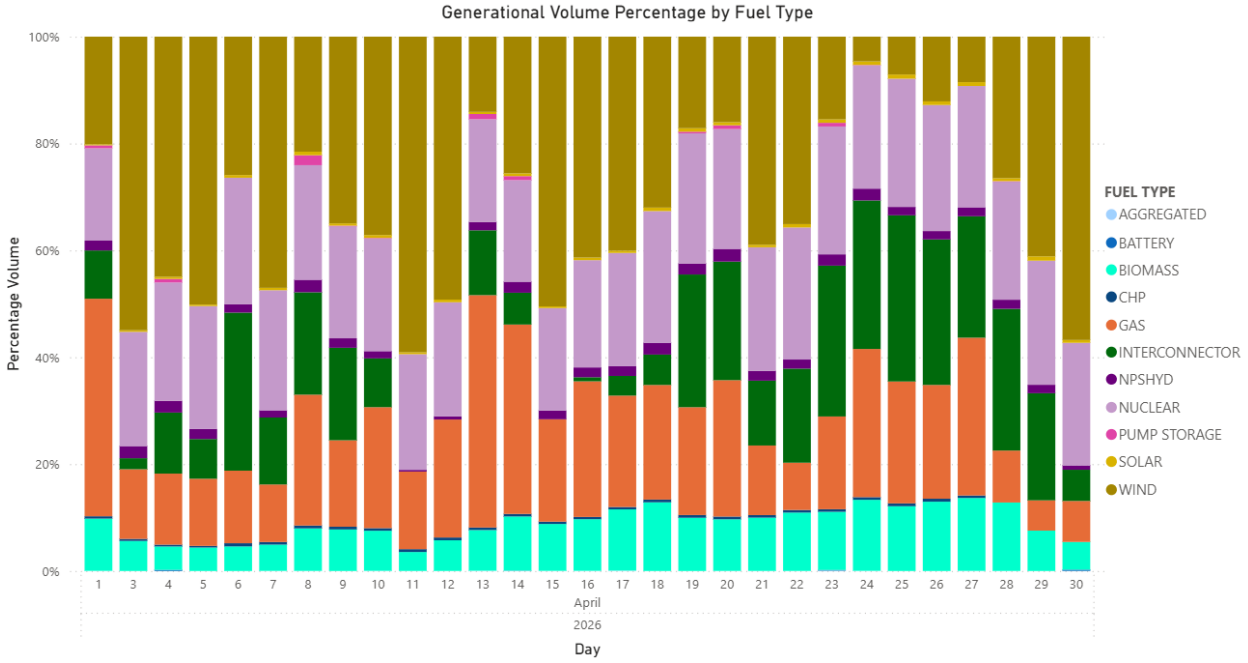
Generation Mix

In April, wind was the largest contributor to electricity generation, making up 32.0% of the total mix. This was followed by Nuclear at 22.0% and Gas at 20.4%. The pattern is consistent with March, where wind, CCGTs and Nuclear also held the top three positions in the generation mix (however in March we relied more on Gas).

The chart below shows that we had days with high wind generation throughout the month. We had 4 days where wind generation was over 50% (3rd, 11th, 15th and the 30th) and 10 days where wind generation was less than 25%, there was low wind output near the end of the month, where on the 24th April wind made up 4.6%.

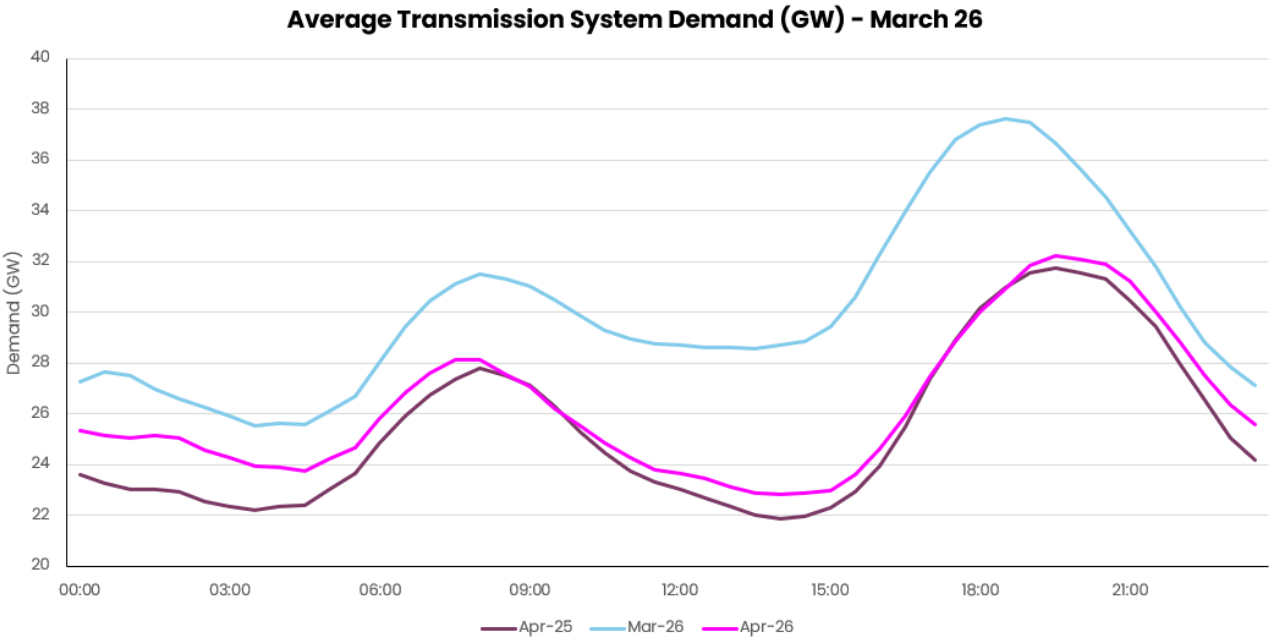
There were also days where a greater percentage of the generation mix was met by gas (1st and 13th) and the share of nuclear is much greater than March reflecting the return of nuclear capacity to 100%.

*Generation mix includes exports from interconnectors.



Transmission System Demand

In April 2026 the average Transmission System Demand (TSD) was higher throughout most of the day with a small overlap between 8am-9am and 5pm-6.30pm. Comparing April to last month, the demand was much lower throughout the whole day which can be expected due to longer days, warmer temperatures, higher level of embedded solar generation during the day and the school and bank holidays throughout this month. The higher levels of embedded solar generation (reducing the reliance on the transmission system) alongside lower heating demand can be reflected in the greater gap observed in the graph during daytime hours.

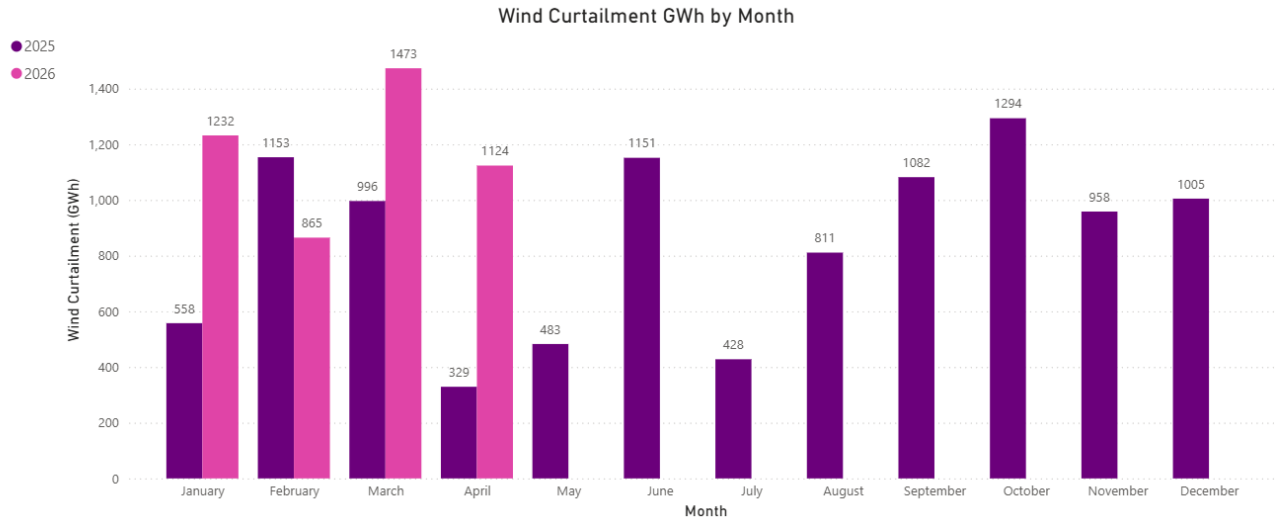


Wind Outturn

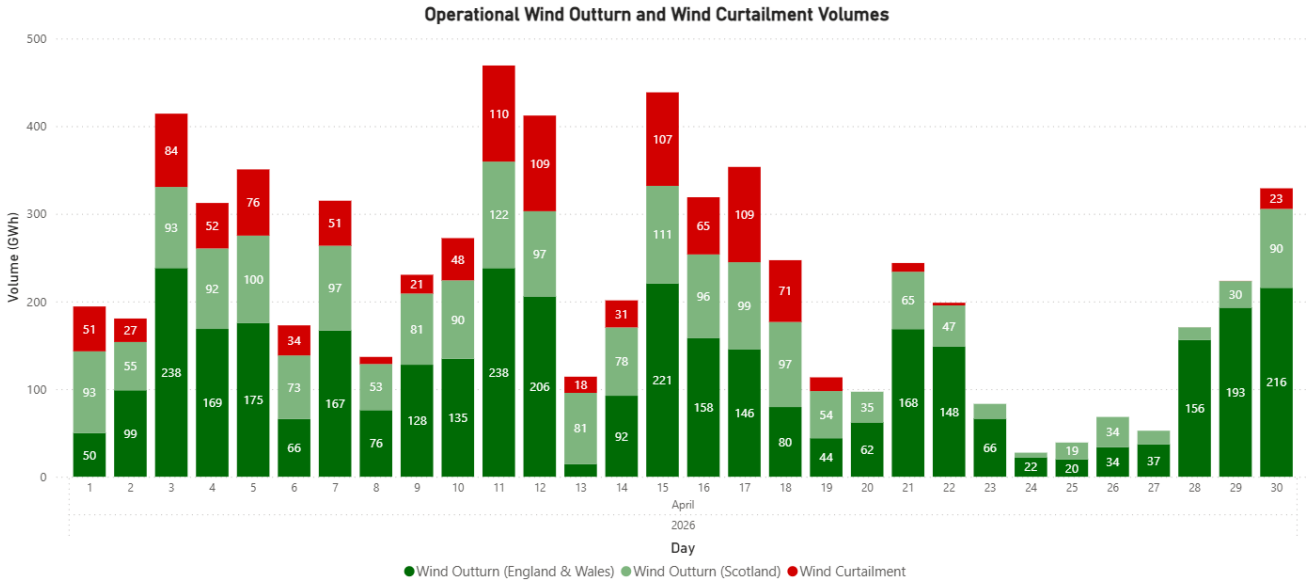
Early April wind outturn was influenced by Storm Dave on the 4th -5th April, where significant rainfall and wind speeds hit across Scotland and Northwest driving up wind generation. However, as the month progressed the weather settled resulting in an overall mild April with occasional warm spells during mid-late April.

Overall wind outturn dropped from 7.1 TWh in March to 5.7 TWh in April, with a 10% decrease in England & Wales (from 4.0 TWh to 3.6TWh) and a 35% decrease in Scotland (from 3.1 TWh to 2.0 TWh) compared to the previous month, giving a 21% decrease overall. There was a 27% decrease in the volume of wind curtailment, which follows given the decrease in hypothetical wind outturn since last month.

Late April saw low wind outturn and subsequently low wind curtailment during this part of the month, including 5 days which required no wind curtailment.



The day with the highest volume of wind curtailment occurred on Saturday 11 April with 110 GWh. There was a total wind outturn of 360 GWh on this date, the highest outturn this month. This was the third highest costing day.



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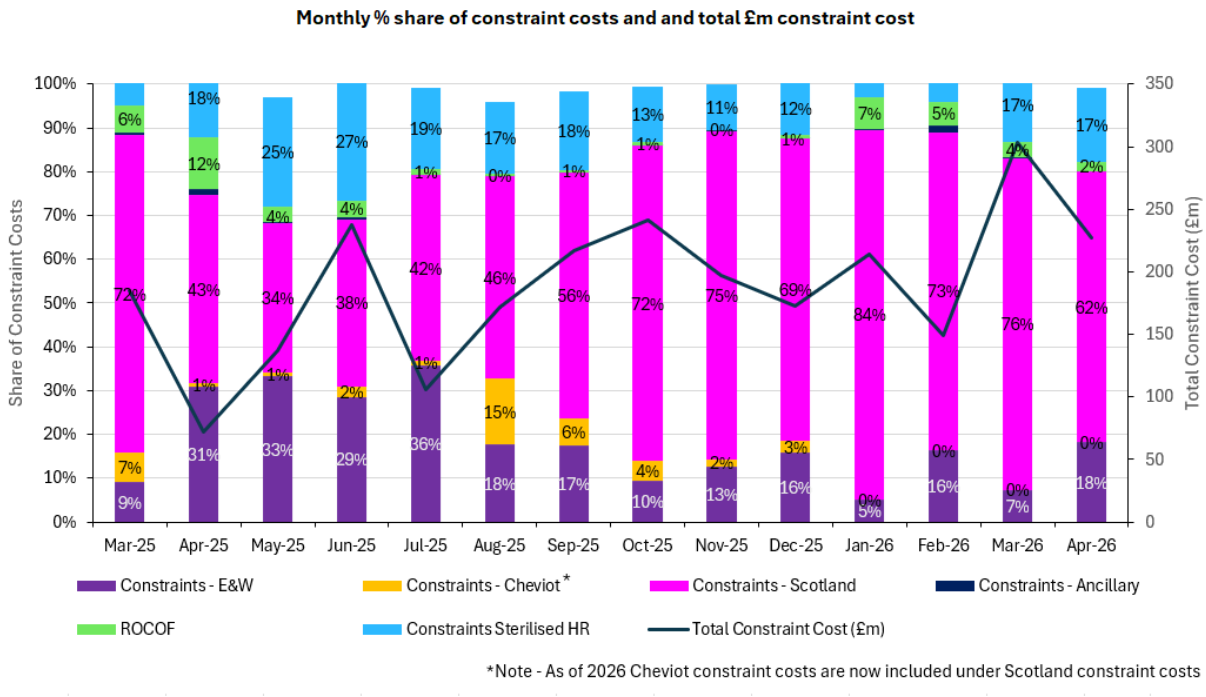
Constraints

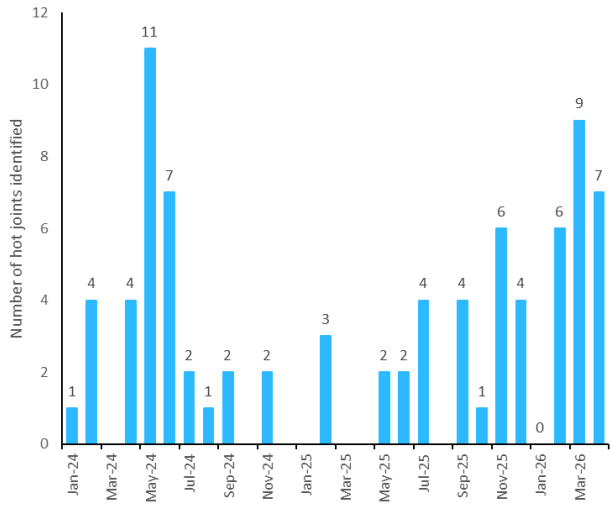
Constraint costs decreased from £303.3m in March to £227.5m in April, a decrease of £75.8m. England and Wales saw a large increase in constraint costs of £19.2m and ROCOF increased by £5.2m. There was a small increase in ancillary services. All other areas saw a decrease with the most influential area for this reduction being Scotland with an £89.3m reduction.

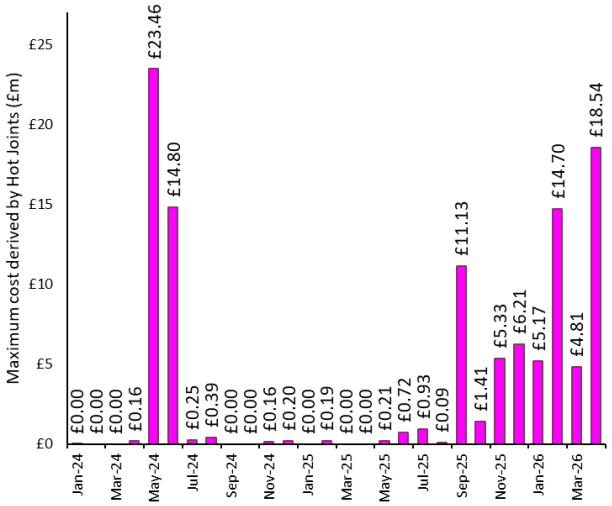
Wind curtailment levels dropped since last month and power prices dropped significantly this month. These conditions resulted in lower spending on constraints on the network this April as we had more useable wind generation, and lower curtailment costs.



Network Availability

Hot joints refer to transmission equipment that tends to overheat during normal operational conditions. Transmission Owners are responsible for notifying NESO of any service reductions associated with this equipment. Hot joints in the system have both operational and economic impacts. In April 2026, seven hot joints were identified: five in the north-west of England, one in the north-east and an additional one around east Anglia. The estimated maximum cost to the system for these hot joints was approximately £18.5 million in April.



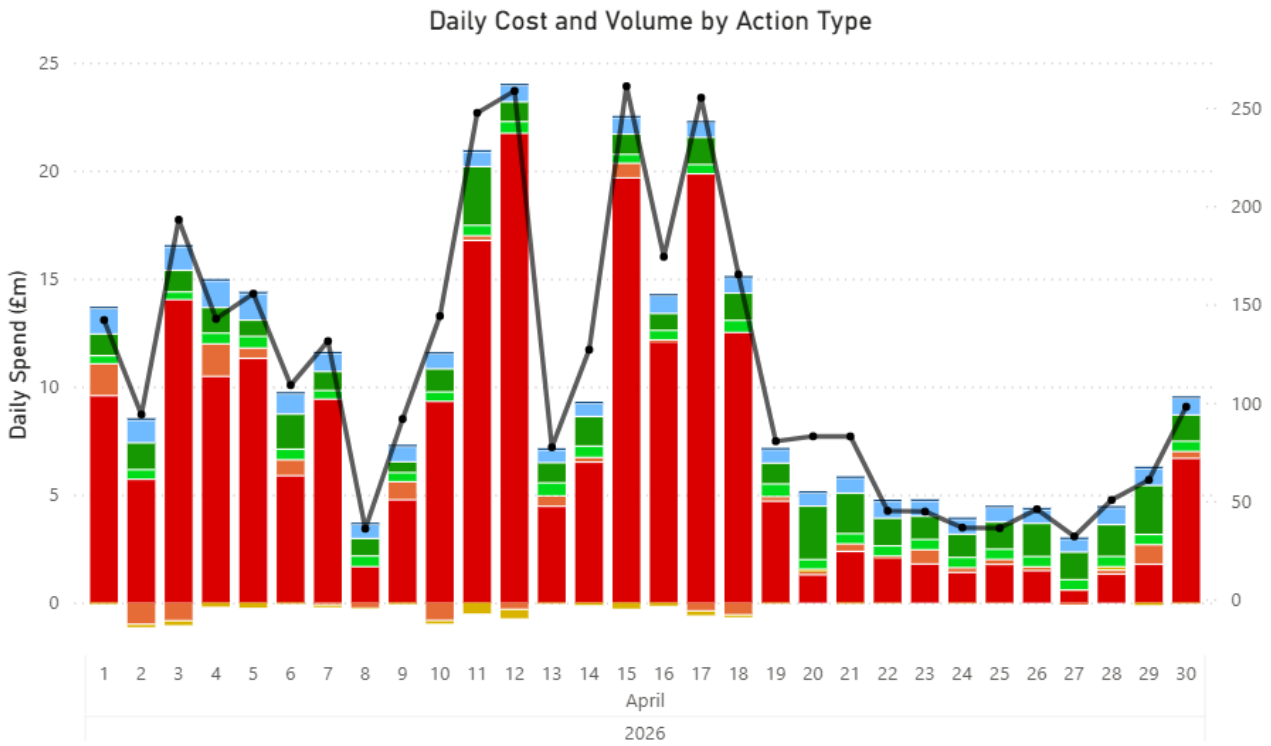


Daily Costs Trends

April's balancing costs were £304.2m which was lower by £65.4m than the previous month but was £146.2m greater than last April. April had a large amount of high-cost days which included six days with a total cost above £15m (3, 11, 12, 15, 17 and 18) although this was still lower than March which had ten. There were also a further seven days in April having a cost over £10m (1, 4, 5, 7, 10, 16, 18). The daily average cost decreased by £1.8, from £11.9m in April to £10.1m.

The highest cost day was Sunday 12th April, with a total cost of approximately £21.7m. 94% of this cost was spent on managing thermal constraints. These costs were largely driven by high levels of wind curtailment for constraint management particularly in Scotland and North England. This was due to an ongoing outage in Scotland that applied pressure along the B7 boundary.

The lowest cost day was Monday 27th April, with a total cost of approximately £1.07m. It coincides with a day where there was no wind curtailment. There were a few other low-cost days in late April which experienced no wind curtailment due to low wind.



High-Cost Day

The highest cost day of the month was the **12th April 2026.**

Breakdown of Cost and Volume

- Total cost: £23.3m
- Total Absolute Volume: 258.5GWh

Balancing Costs detailed breakdown

Comparison Between April 2026, March 2026 and April 2025

Constraint Non-Constraint Group	Month Change	Year Change
Constraints	**-£82.01**	**£146.12**
CONSTRAINED STERILISED HR	-£10.75	£21.62
CONSTRAINTS - ANCILLARY SERVICES	-£0.50	-£2.21
CONSTRAINTS - CHEVIOT	£0.00	-£0.39
CONSTRAINTS - ENGLAND & WALES	£19.22	£19.67
CONSTRAINTS - SCOTLAND	-£91.59	£109.85
ROCOF	£1.62	-£2.41
Non-constraints	**£16.62**	**£0.09**
ENERGY IMBALANCE	£7.01	£1.34
FAST RESERVE	-£8.19	£0.97
MINOR COMPONENTS	£0.18	-£8.39
NEGATIVE RESERVE	£0.45	-£0.20
OPERATING RESERVE	£11.56	£5.76
OTHER RESERVE	-£0.16	£0.47
REACTIVE	£2.31	-£2.56
RESPONSE	£3.80	-£0.88
RESTORATION	-£4.00	-£0.15
STOR	£3.66	£3.71
Total	**-£65.39**	**£146.21**

**Note – As of 2026 Cheviot constraint costs are included under Scotland constraint costs*

As shown in the totals from the table above, constraint costs decreased by £82.0m and non-constraint costs increased by £16.6m which results in an overall decrease in costs of £65.4m compared to March 2025.

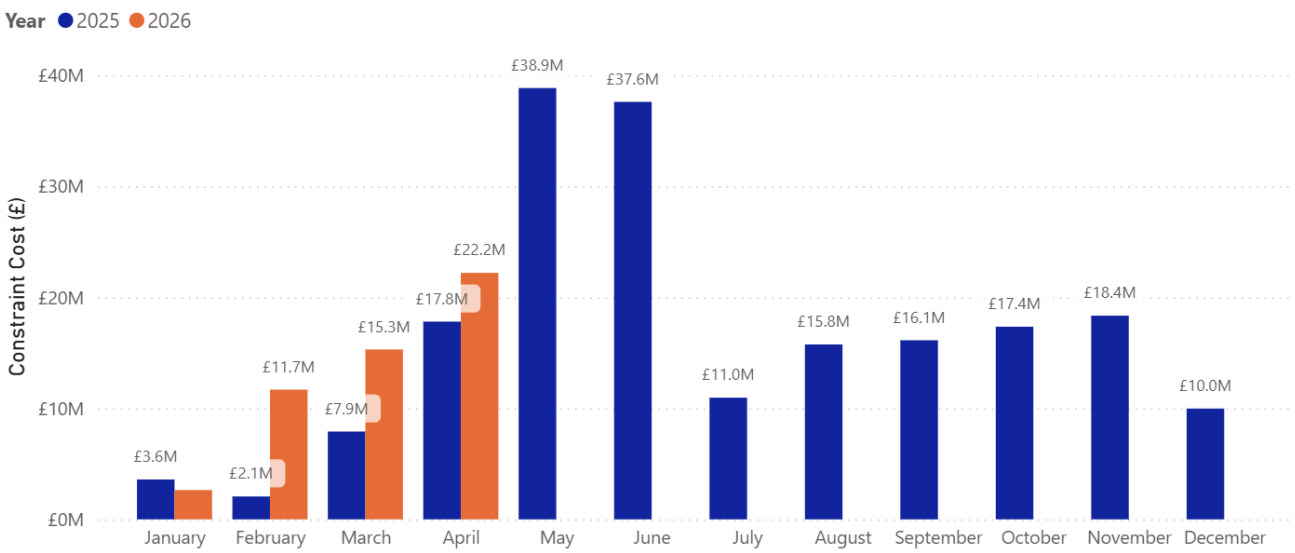
Constraint Costs/Volumes

Comparison versus previous month	Comparison versus same month last year
Constraint-Scotland & Cheviot: -£91.6m **Constraint – England & Wales: +£19.2m** **Constraint Sterilised Headroom: -£10.75m**	**Constraints – Scotland & Cheviot: +£109.9m** **Constraints – England & Wales: +£19.7m** **Constraints Sterilised Headroom: +£21.6m**

Overall constraint costs decreased by £82.0m, which coincided with a decrease in the absolute volume of actions taken. This was due to lower unconstrained wind outturn we witnessed this month which led to lower wind curtailment.	Constraint costs across GB have increased by £146.1m compared to April 2025, largely driven by a rise in wind output (56%) and the resulting increase in curtailment (241%) and balancing actions taken to manage this. Outages additionally applied pressure on constraints in England & Wales which contributed to the increase in cost compared to last year.

Voltage – Monthly system cost of synchronisation actions for voltage control across 2025 and 2026:

In April, the system synchronisation costs for voltage (what it costs to the system, which factors in energy replacement and headroom among others) were £22.2m. This represents an increase of approximately £6.9m compared to March 2026 and is £4.4m higher than the same period last year (April 2025).



Voltage spending is usually higher overnight: lower demand means that some synchronous units (mostly CCGTs) that usually provide reactive support are not self-dispatched, which forces NESO to procure those services through the Balancing Mechanism.

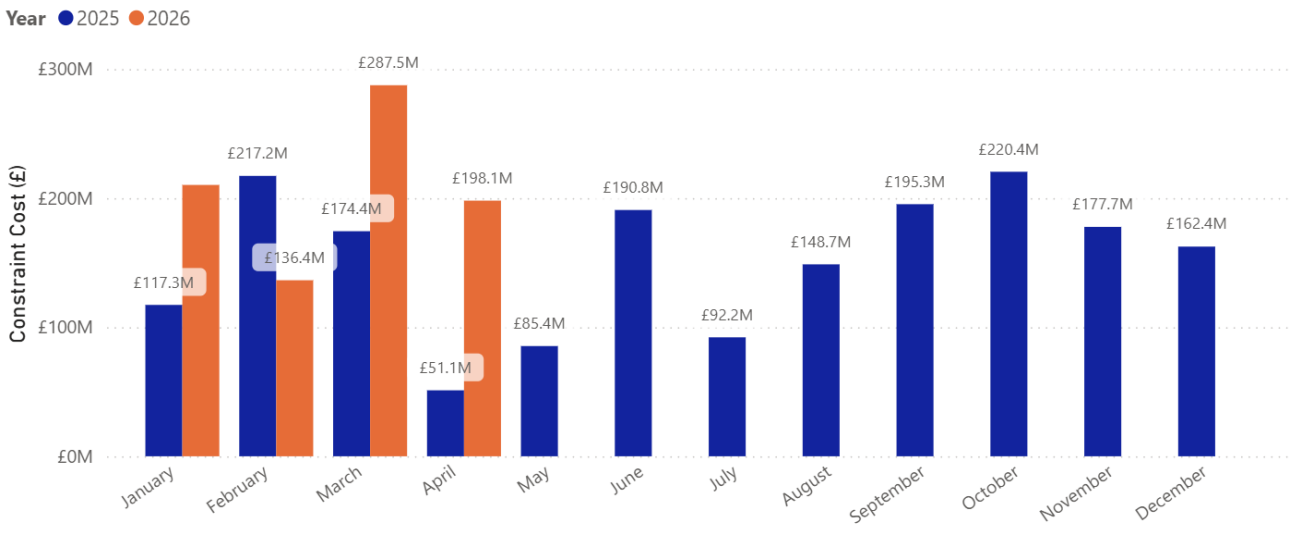
Most voltage costs arise from the South-West region of Great Britain, where the system relies on Combined Cycle Gas Turbines (CCGTs) for voltage management; however the system operational condition and outages in other areas also influence the system spending. Due to

lower demand this month, there were fewer self-dispatched synchronous units that provide reactive support available on the system. This forces NESO to procure these services through the Balancing Mechanism which results in higher spend on voltage constraints.

Some units that would have provided reactive support out of service which drove up the absorption requirement and therefore contributed to the high spend on voltage.

Thermal – Monthly system cost of actions for thermal management across 2025 and 2026:

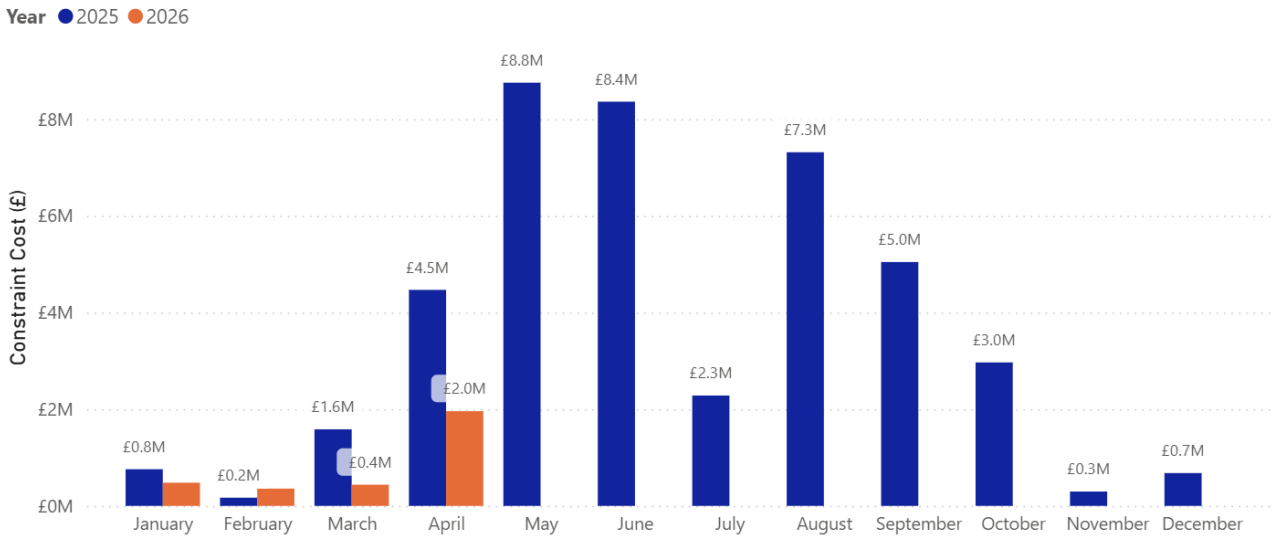
In April, the system thermal constraint cost (which includes factors such as energy replacement and headroom) amounted to £198.1m, reflecting a decrease in costs of over £89.4m compared to the previous month (£287.5m). When compared to the same period last year (£51.1m in April 2025), the cost rose by £147m.



April 2025 saw a reduction in wind curtailment compared with March which had a high wind outturn in Scotland. The low wind outturn this month is in proportion to the drop in thermal constraint costs and reflects in the lower constraint costs this month.

Inertia / ROCOF – Monthly system cost of actions for inertia management across 2025 and 2026:

In April, the system inertia constraint cost (which includes factors such as energy replacement and headroom) amounted to £2.0m, resulting in an increase of £1.6m compared to March 2026 and £2.5m lower than April 2025.



The inertia expenditure rose in April compared to March due to the same reasons for increased spending on voltage constraints. This is expected as we move further into the summer period where we see lower demand and higher renewable generation (particularly solar). This means that there would be fewer self-dispatching units available to provide inertia on the system. As a result, additional units would be required to manage system inertia leading to higher costs this month.

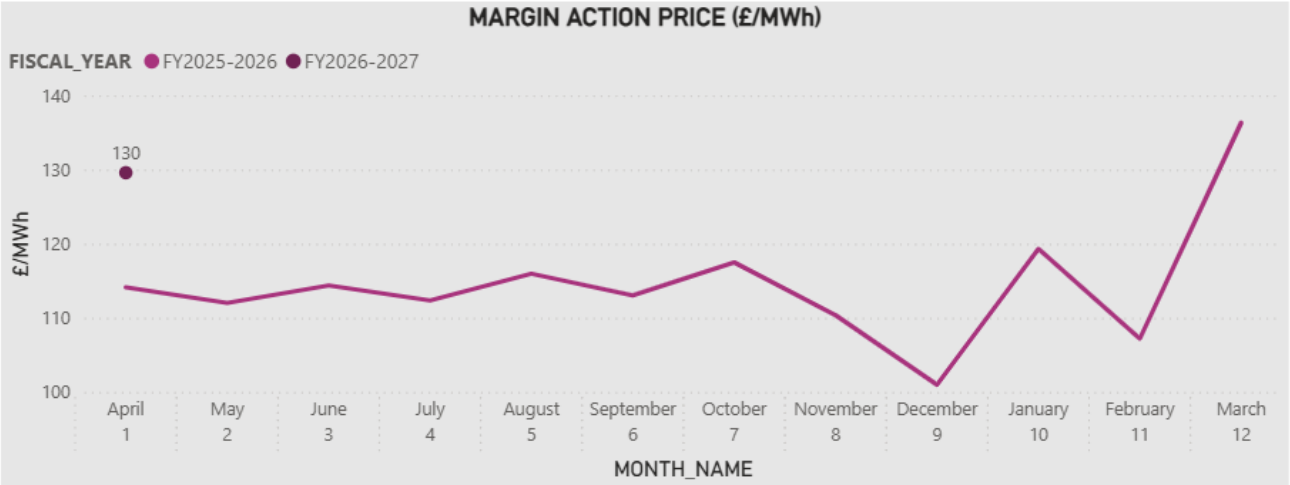
Reactive Costs/Volumes

Comparison Versus Previous Month	Comparison Versus Same Month Last Year
+£2.3m Reactive costs have increased on last month reflecting an increase in the volume of actions taken.	**-£2.6m** Reactive costs have dropped on last year reflecting a decrease in volumes of reactive power required to maintain voltage.

Reserve Costs/Volumes

Reserve prices decreased to £129.6/MWh in April from £136.3/MWh in March 2026, breaking the upward trend witnessed last month.

Note: From this report we have implemented a more robust method for reporting the volume-weighted average price for margin actions. The calculation now considers only offer prices and volumes, excluding imbalances, which we believe better reflects actual market conditions.



Comparison Versus Previous Month	Comparison Versus Same Month Last Year
Operating Reserve: +11.6m **Fast Reserve: -£8.2m** There was a 282 GWh decrease in volume of operating reserve to secure the system compared to March.	**Operating Reserve: +£5.8m** **Fast Reserve: +£1.0** There was a 22 GWh increase in the volume of operating reserve required to secure the system compared to April 2025 which is proportionate to the increase in spend.

Response Costs/Volumes

Our Dynamic Services for response, Dynamic Containment (DC), Dynamic Moderation (DM) and Dynamic Regulation (DR) continue to benefit from more competitive and more liquid markets and the continued development of the Single Market Platform.

Comparison Versus Previous Month	Comparison Versus Same Month Last Year
+£3.8m There was an 8 GWh decrease in the absolute volume of actions compared to	**-£0.9 m** The volume of actions taken for response decreased by 89 GWh compared to April

March. Clearing prices for DC, DM, DR services were all higher this month than last.	2025. Clearing prices for DM and DR were the same as last year while DC saw a drop.

Dynamic Services Average Clearing Prices (£/MW): April 2026 vs March 2026

		(a) Apr-26	(b) Mar-26	(b) - (a) Variance	decrease ◄► increase Variance chart
Dynamic Services	DC	2.3	2.0	0.3	
	DM	5.1	3.2	1.9	
	DR	6.0	5.1	0.9	

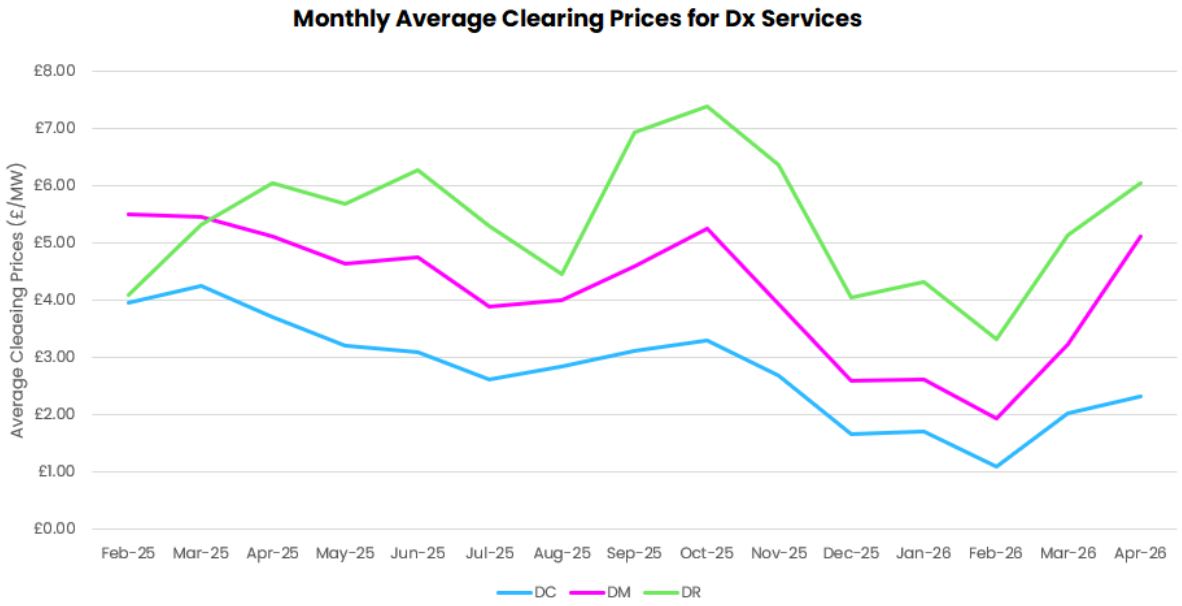
Dynamic Services Average Clearing Prices (£/MW): April 2026 vs April 2025

		(a) Apr-26	(b) Apr-25	(b) - (a) Variance	decrease ◄► increase Variance chart
Dynamic Services	DC	2.3	3.7	(1.4)	
	DM	5.1	5.1	0.0	
	DR	6.0	6.0	0.0	

Average clearing prices for Dynamic Containment (DC), Dynamic Moderation (DM), and Dynamic Regulation (DR) increased in April, following the upward trend observed since February. This increase is largely driven by lower inertia levels due to high solar and wind generation and relatively low demand. This results in a higher level of procurement for these services which drove up prices. There was also high procurement of DC further raising prices.

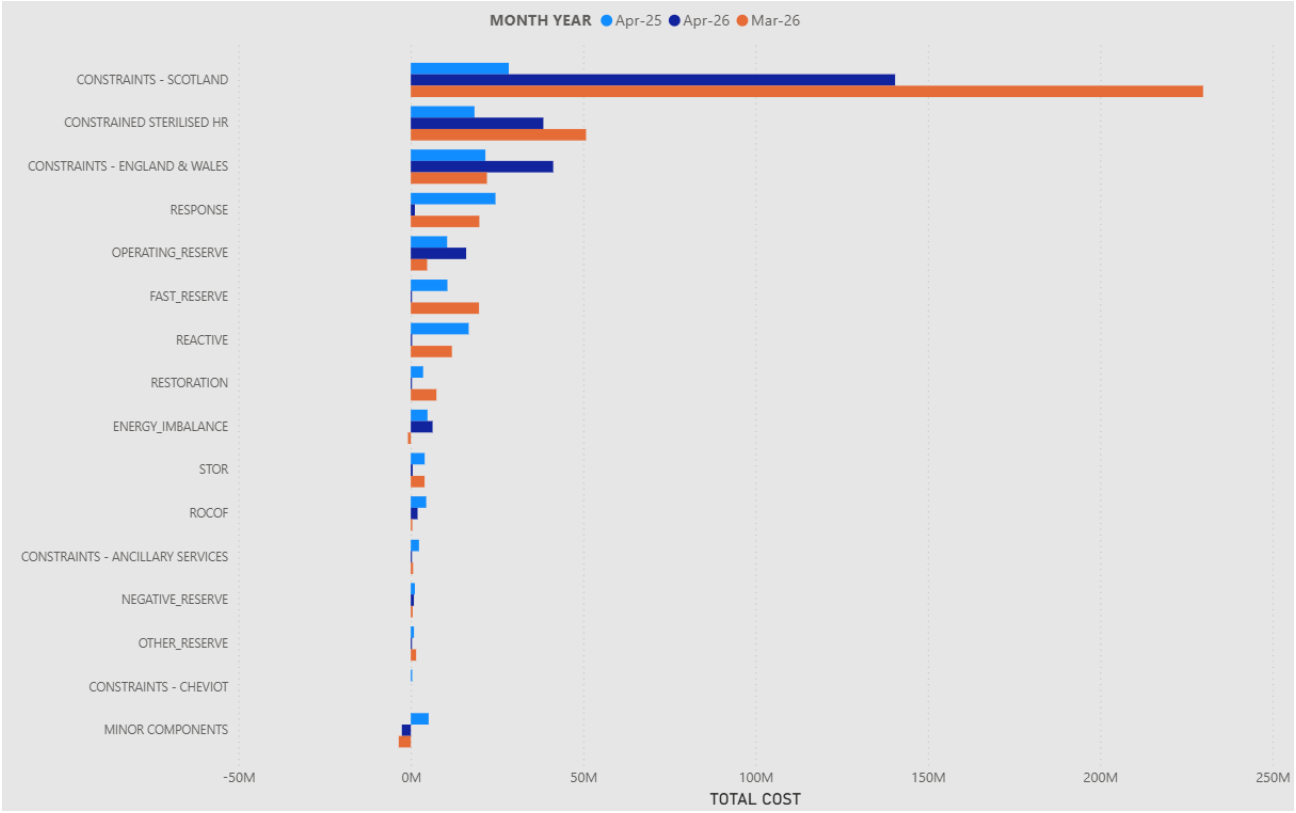
Compared to March last year, all three dynamic services have seen a rise in average clearing prices, reinforcing the upward trend we are seeing since February with DM and DR prices reaching

a similar level to April last year.



Comparison breakdown

The graph below provides a breakdown of cost components compared to the previous month and previous year.



Cost Savings

Outage Optimisation

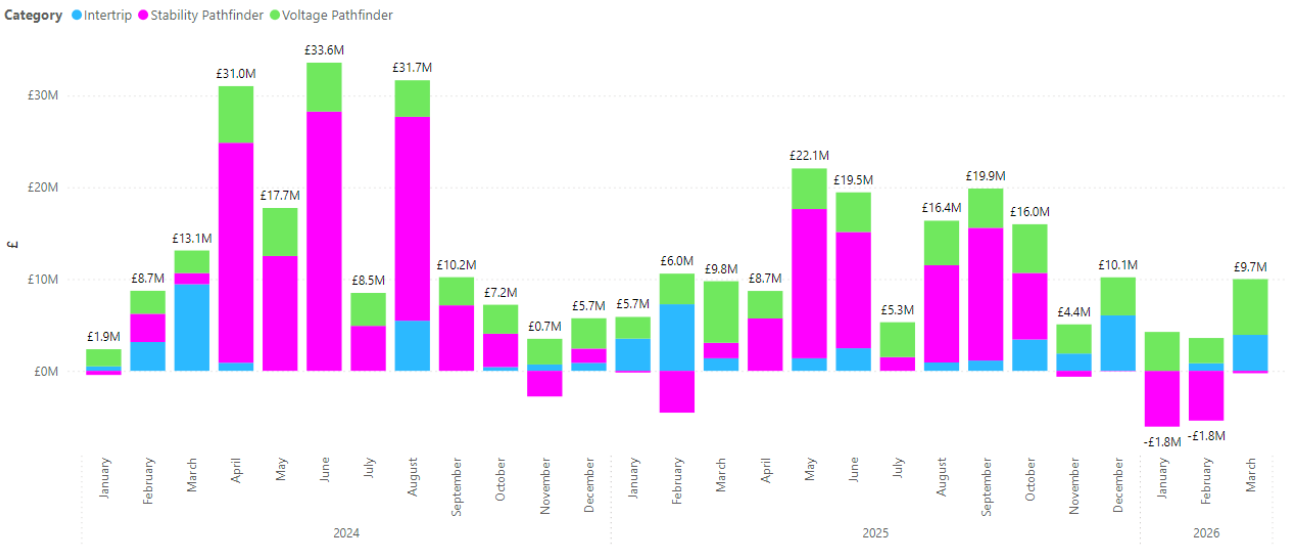
Total savings from outage optimisation were approximately £54m in April 2026. This is a decrease of roughly £275m relative to March 2026 (£329m). The most valuable action was the enhancement of three outages in the south-east region. Each of them would require the activation of an additional thermal unit for voltage support. Taking the three outages at the same time meant that only one time the additional unit was required, saving the grid from another two occasions when otherwise the same unit would have needed to be activated. The cost saving for this action is estimated in £7.1m.

Trading

The Trading team were able to make a total saving of £7.3m in April through trading actions as opposed to alternative BM actions, representing a 61% increase on the previous month (with March 2026 having been the lowest savings incurred via Trading over the previous 12 months). Similarly to March, trading savings were mainly driven by margin trades on the interconnectors, particularly due to large volumes of sell trades on the 26th, 29th and 30th, executed at times where there were high wind and solar penetration, and interconnectors were importing to GB. Voltage savings were at ~£0.5m, lower than the ~£2m-£3m that was seen over Q4 of 2025, highlighting the relative lack of opportunity for voltage savings at this time of year with less competition in the voltage groups. The day with the greatest trading savings was on 26 April at a cost of £2m with the greatest savings being made on Downward Regulation. The day with the greatest spends on trades was 16 April at a cost of £1.2m with the greatest component being for Margin.

Network Services

We are using Network Services to implement solutions to operability challenges in the electricity system. This includes the Constraint Management Intertrip Service, and Voltage & Stability pathfinders. We have calculated that the B6 and EC5 Constraint Management Intertrip Services, Voltage Mersey, Voltage Pennines, and Stability Phase 1 have delivered approximately £128.3 m in savings across 2025/26 to date (April 2025 – March 2026).



Further information

For further information please see our balancing costs website.

Appendix

Types of constraint costs

Voltage Synchronisation Costs

Synchronisation costs are associated with specific actions required to support voltage in the system. These actions involve units that are instructed to provide MVArs and maintain voltages within SQSS limits. It is a highly location-dependent issue, so only a limited set of assets are effective in voltage support.

Inertia Costs

Inertia refers to the resistance of the system to changes in its rotational speed. Inertia is primarily provided by the rotating mass of large synchronous generators, mainly CCGTs, but also includes hydro, pumped storage, biomass, and Combined Heat and Power (CHPs), among others. The costs associated with inertia tend to be marginal in the system compared to thermal or voltage constraints.

Thermal Constraint Costs

Thermal constraints are linked to operational limitations on transmission assets due to temperature-related factors. In Great Britain, these are generally linked to highly congested areas in the Scottish region, often referred to as the B4, B5, and B6 boundaries. The expenditure on thermal constraints is highly correlated with levels of curtailment in Scotland, as well as planned or forced outages in transmission assets that limit the grid's transfer capacity. Thermal constraints constitute most of the system constraints, accounting for a significant percentage of system actions.

National Energy System Operator
Faraday House
Warwick Technology Park
Gallows Hill
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