BSUoS Fixed Tariff 5 and Draft Tariff 6 Webinar

11th July 2024

ESO

Agenda

Supporting the webinar today + others!

					
Nick Everitt	**Katie Clark**	**Rebecca Knight**	**Ben Sloman**	**Al-Marwah Az-zahra**	**Nicky White**
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Post Webinar Updates

- We recorded this session – available **HERE**
- Questions and answers have been captured on slide 20 – **HERE**
- If you have any questions or feedback, please email us at bsuos.queries@nationalgrideso.com

BSUoS Fixed Tariff Recap

BSUoS Fixed Tariff
Final Tariff 4 - Oct 2024 - Mar 2025
Draft Tariff 5 - Apr 2025 – Sep 2025

Published 22nd December 2023

Introduction

From 1st April 2023 BSUoS costs have been recovered under a new fixed tariff methodology as defined by CMP361. The CMP361 decision determined that the tariff should be fixed for 6 months with 9 months' notice of the tariff values being provided by the ESO. This report defines the final BSUoS tariff for the Oct 2024 to Mar 2025 period as well as providing a draft view of the Apr 2025 to Sept 2025 tariff period. We are calling these BSUoS Fixed Tariffs 4 and 5 respectively.

Background

The costs of balancing the system change and are difficult to predict. This makes the BSUoS charge also difficult to predict.

CMP361 introduced an ex-ante fixed volumetric BSUoS tariff set over a total fixed and notice period of 15 months which was designed to deliver the recommendations of the Second BSUoS Task Force. The decision on implementing CMP361 was made by Ofgem on the 15th December 2022.

The decision was made to implement WACM3 (Workgroup Alternative CUSC Modification) from the 1st April 2023. WACM3 fixed BSUoS for 6 months with 9 months' notice and defined that there would be no BSUoS fund to support the tariff.

Final BSUoS tariffs for Apr 2023 to Sep 2023 (Fixed Tariff 1) and Oct 2023 to Apr 2024 (Fixed Tariff 2) were published at the end of January 2023.

Final BSUoS tariff for Apr 2024 to Sep 2024 (Fixed Tariff 3) was published at the end of June 2023.

Webinar – 11th January

We will be running a webinar on the 11th January to discuss this final and draft tariff and answer any questions that you may have about it.

Click the button below to register for the webinar.

Register for the BSUoS Tariff Webinar Here

1. BSUoS Fixed Tariffs Overview/Calculation

The forecasting model we have developed is used to determine balancing costs for the fixed tariff period ahead. The central forecast number determines the cost that goes into the tariff.

1

Document or Webpage	Links
CMP308 – BSUoS charged on final demand only from 2023/24	Web link
BSUoS Fixed Tariff Model Methodology	Download
BSUoS Fixed Tariff Model Q&A	Download
BSUoS Fixed Tariff Model Consultation 2	Download
CMP361/362 – Ofgem minded-to 21/09/2022	Web link
CMP361/362 – Ofgem update on minded-to 15/11/2022	Web link
Draft BSUoS Fixed Tariff Published 31/10/2022	Download
CMP406/407 – Raised but rejected	Web link
Draft Tariff Webinar Held 23/11/2022	Download
Ofgem Decision CMP361	Download
CMP408 Raised – Change tariff notice period to 3 months	Web Link
Final BSUoS Fixed Tariff Published 31/01/2023	Download
Final Tariff Webinar Held 07/02/2023	Download
BSUoS Fixed Tariff 3 Published 30/06/2023	Download
BSUoS Fixed Tariff 4 Published 22/12/2023	Download
BSUoS Forecast Model, Revenue vs Costs and Tariff Updates Webinar 17/04/2024	Download
BSUoS Fixed Tariff 5 Published 28/06/2024	Download

Final Fixed Tariff 5

	Financial Year 2025/26 - Tariff 5 - Final	
	Description	Final Tariff
Fixed Tariff 5 Apr-Sep	Balancing Costs (Central) £m	1,225.5
	Internal Costs £m	271.9
	Cumulative forecast over-recovery by end of FT 3, less any adjustment already made in FT 4 £m	-215.0
	CMP398 Claims £m	4.3
	Total BSUoS £m	**1,286.6**
	Estimated BSUoS Volume TWh	119.8
	BSUoS Tariff £/MWh	**£10.74**

Draft Fixed Tariff 6

	Financial Year 2025/26 - Tariff 6- Draft	
	Description	Draft Tariff
Fixed Tariff 6 Oct-Mar	Balancing Costs (Central) £m	1,320.1
	Internal Costs £m	270.4
	Cumulative forecast over-recovery by end of FT 4, less any adjustment already made in FT5 £m	-85.6
	CMP398 Claim Forecast £m	4.3
	Interest Repayment £m	-52.0
	NESO Framework Internal Cost Estimate £m	236.4
	Winter Security of Supply £m	0.0
	Total BSUoS £m	**1,693.5**
	Estimated BSUoS Volume TWh	141.2
	BSUoS Tariff £/MWh	**£11.99**

Inputs for Final Tariff 5 and Draft Tariff 6

Balancing Costs

- Based on an average of forward price curve derived between 31st of May to the 6th of June 2024
- Key drivers in our balancing cost forecast include wholesale market prices and the proportion of demand met by renewables, therefore there is the potential for further change in advance of Fixed Tariff 6 setting (due to be set in December 2024)

Internal ESO Costs

- Based on December 2023 PCFM

Forecast Over/Under-Recovery Adjustment

- Based on our forecast over-recovery position as of 17th June 2024
- Final over/under-recovery to be included within Fixed Tariff 6 will be determined based on the latest over/under-recovery position as at Final Fixed Tariff 6 setting (December 2024)
- There remains the possibility of a tariff reset should forecast recovery position fall between now and the end of Fixed Tariff 5

CMP398/412 Costs

- This modification was required to implement Grid Code Mod 0156 by providing a cost recovery mechanism for CUSC parties who do not hold contracts with the ESO to provide Restoration Services.
- We are currently forecasting 10% of total claims to be submitted in the September 2024 with repayment from April 2025. This has been split evenly between Fixed Tariff 5 and Draft Tariff 6.

Volume

- The BSUoS chargeable volume has been estimated using a simple linear regression using the ESO national demand forecast as the explanatory variable.

Additional Inputs and Uncertainties for Draft Tariff 6

Additional NESO Framework Costs

- We have included £236.4m which is a high-level estimate of the impact of the new regulatory framework that will apply to the new National Energy System Operator (NESO).

- All the details of the implementation and the funding of NESO have yet to be agreed, however we continue to discuss the enduring framework with Ofgem and at this stage the figure should only be used as a high-level estimate.

Interest Repayment

- There is the potential to include a legacy term within the NESO license, which would enable interest on over-recovery within the 2023/24 charging year to be repaid.
- The earliest this could be included is Draft Tariff 6, however this is dependent on the timing of the publication of the NESO license.

Winter 24/25 Security of Supply

- For winter 2022/23 and 2023/24 the ESO has received requests from the Secretary of State to undertake enhanced actions to ensure ongoing security of supply across the winter period.
- In Draft Tariff 6, a winter security of supply cost has not been included for winter 2025/26. This will be reviewed ahead of Fixed Tariff 5 setting in December 2024.

Uncertainties - Modifications

CMP408

- CMP 408 looks to change the BSUoS notice period from 9 months to 3 months. If approved, the proposer's preferred option would be to reset any tariffs that fall within the current 9 months' notice period and the revised 3 month notice period that this modification would enforce.

CMP415

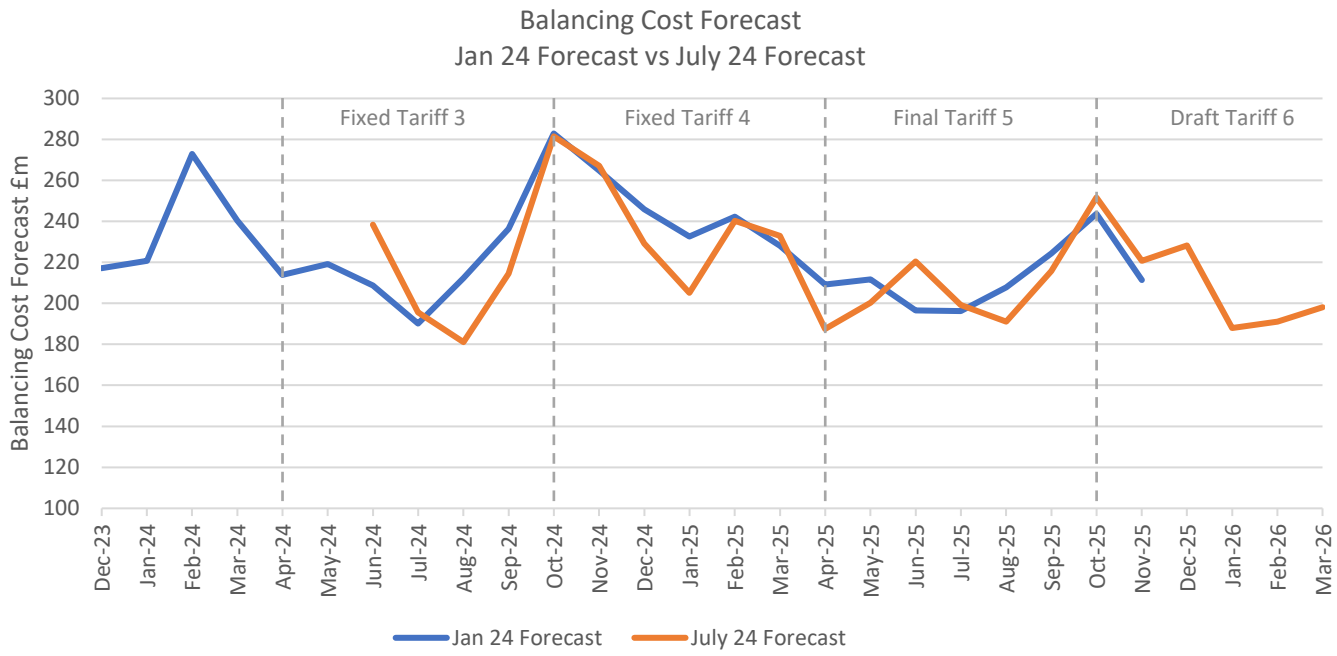
- CMP415 is a consequential modification for CMP408, which looks at a change to a definition in Section 11. Amending the Fixed Price Period from 6 months to 12 months.

Balancing costs

- Based on an average of forward price curve derived between 31st of May to the 6th of June 2024

- Since Draft Tariff 5, our balancing cost forecast for Fixed Tariff 5 has decreased (£1,225.5m)
- There has been a decrease in wholesale market prices (average 8%), increases in constraint costs, offset by positive reserve costs

- Draft Fixed Tariff 6 is forecasted to have Balancing Costs of £1,320.1m. For Fixed Tariff 6, balancing costs will be reforecast at tariff setting (December 2024).



Internal ESO Costs

- Internal costs (allowed revenue) are calculated in the Price Control Financial Model (PCFM) process as determined by the current RIIO-2 price control period.

- The costs for the 2025/26 charging year are currently based on the December 2023 PCFM.

Uncertainties for Draft Tariff 6

- Costs for 2025/26 are currently based on the December 2023 PCFM.

- In April 2022, Ofgem and the Department for Energy Security and Net Zero (DESNZ) jointly decided to proceed with the creation of a new, independent Future System Operator (FSO), subsequently named National Energy System Operator (NESO).

- We have included £236.4m which is a high-level estimate of the impact of the new regulatory framework that will apply to the new NESO.

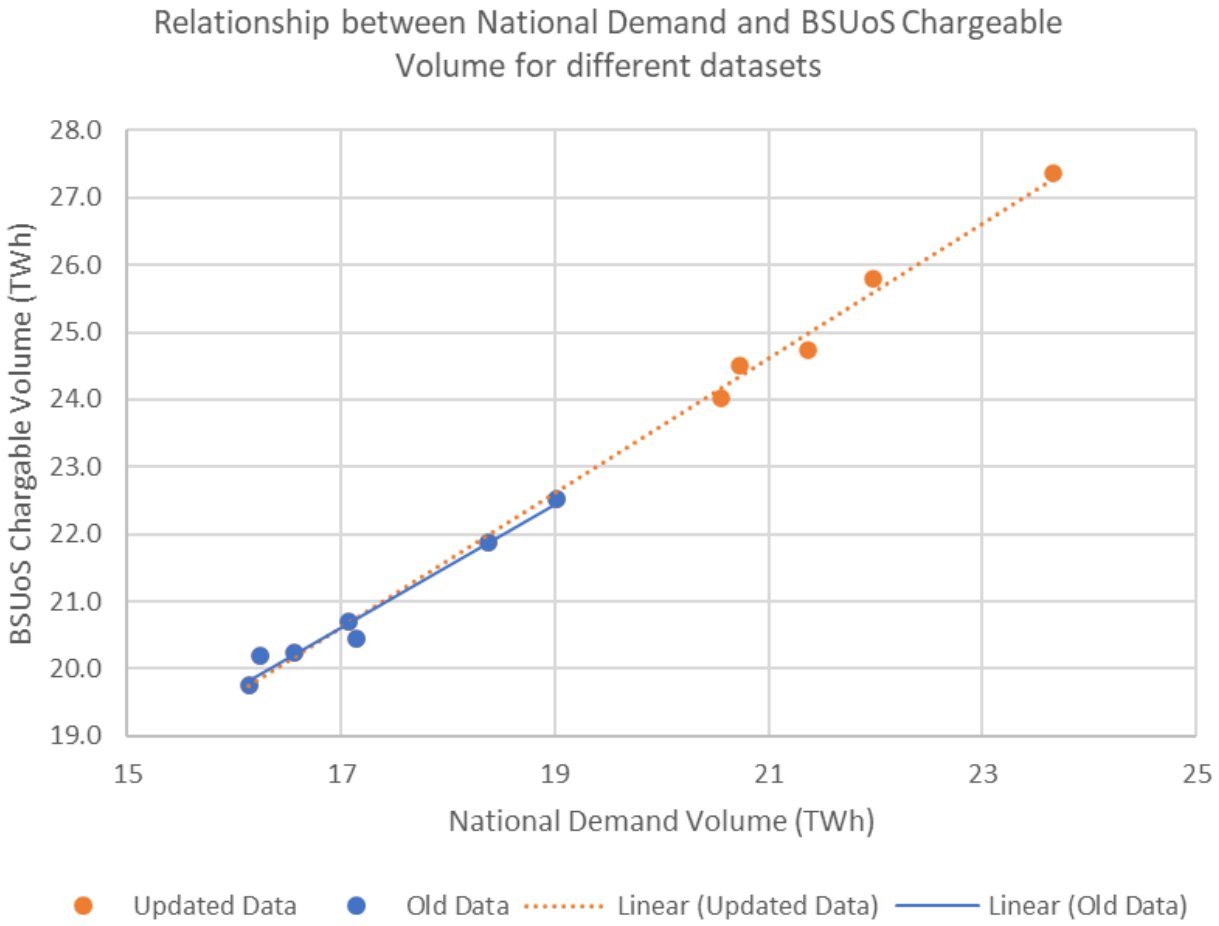
Volume Forecast Update

BSUoS chargeable volume is estimated using a simple linear regression, with the ESO national demand forecast as the explanatory variable.

For the previous tariff setting in Jan-24, we switched to using only BSUoS chargeable volume and national demand from after Apr-23 (i.e. settlement outturns since the definition change[1]).

In the latest forecast, used for this tariff setting, we have now extended the data set used to cover Apr-23 to Mar-24. This has allowed us to re-estimate the relationship between BSUoS chargeable volume and national demand.

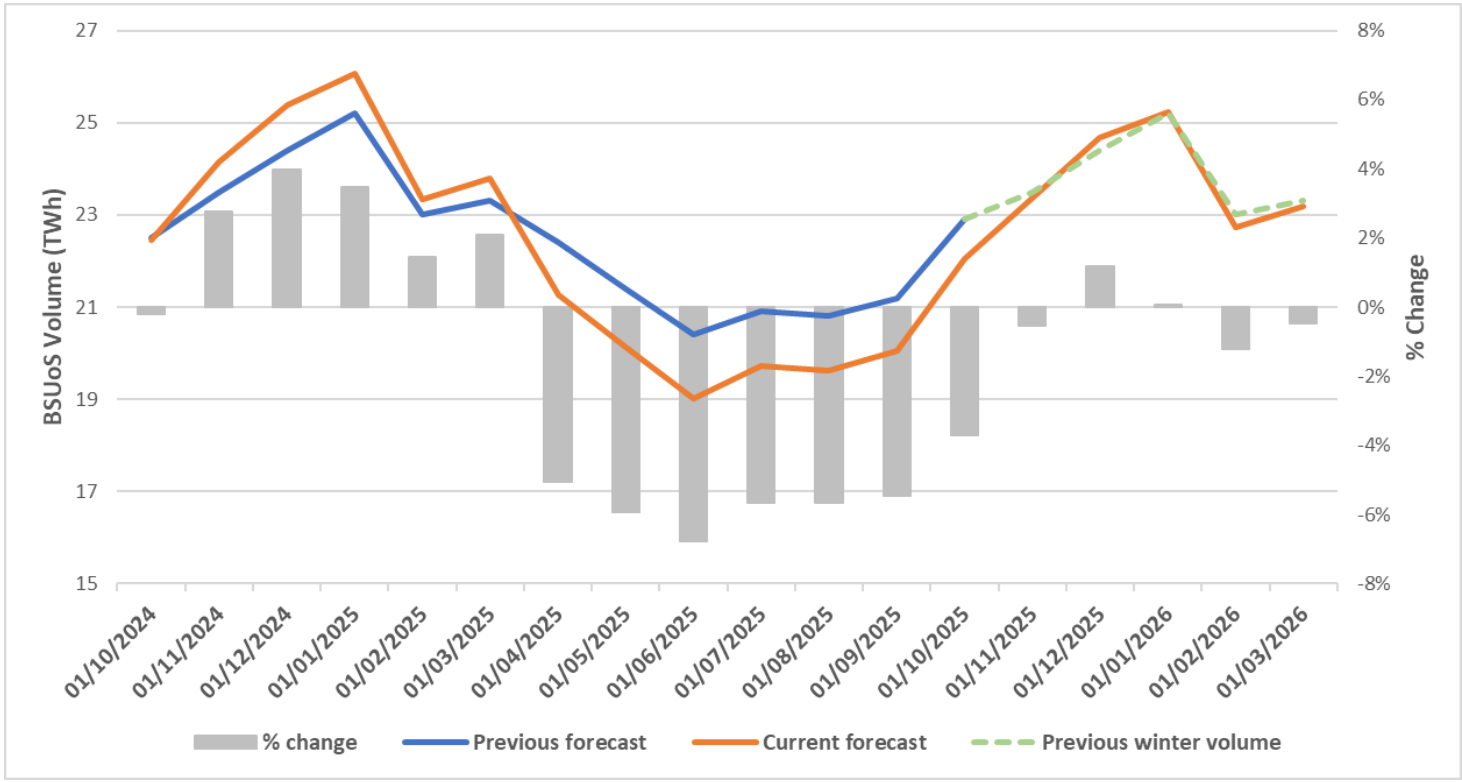
The impact of this data refresh is to increase volumes in winter and slightly decrease volumes in summer.



1: From Apr-23, the charging of BSUoS moved onto "Final Demand"1 only, defined as electricity consumed other than for the purposes of generation or export onto the electricity network.

Volume Forecast Update

- The estimated BSUoS volume is set to decrease by an average 6% for FT5 since tariffs were set in December 2023 for DT5
- For DT6 there is an average 1% decrease in volume between the FT4 winter tariff period and DT6 volume forecast
- Since Fixed Tariff 4 was set, volume forecast for FT4 is forecasted to increase by around 2% which is in line with the over recovery forecasted positions and data refresh assumptions

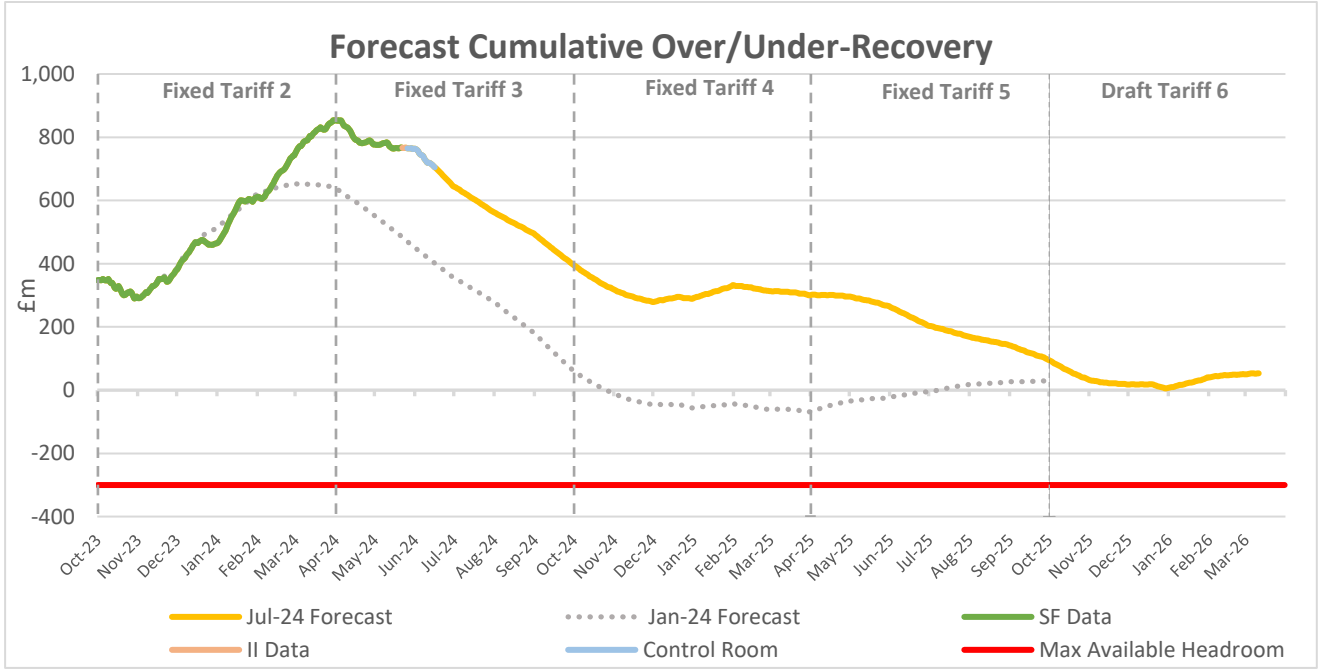


Volume Forecast Impact	% Change
Oct-24 tariff volume	2%
Apr-25 tariff volume	-6%
Oct-25 tariff volume	-1%

Forecast Over Recovery Adjustment

Since Draft Tariff 5, the forecast over-recovery has increased across all Fixed Tariffs:

- Fixed Tariff 2
  - Constraints for Jan, Feb and Mar were £90m below forecast
  - Wholesale prices 30% below Jan-24 forecast
  - Offset by a 3% reduction in outturn volume
- Fixed Tariff 3 and Fixed Tariff 4
  - Decrease in balancing cost forecast, as shown on slide 11



Over-Recovery Tariff Adjustments

We have continuation the approach used with Draft Tariff 5 for adjustments for over-recovery

- Tariff 5 includes forecast over-recovery to the end of Fixed Tariff 3, less any adjustment within Fixed Tariff 4
- Tariff 6 includes forecast over-recovery to the end of Fixed Tariff 4, less any adjustment within Fixed Tariff 5

	Starting Cash Position	Over-Recovery Adjustment in Tariff	Within Tariff Over/(Under)-Recovery	Forecast Cash Position at End of Tariff
Fixed Tariff 1	349.3	0.0	349.3	**349.3**
Fixed Tariff 2	349.3	0.0	504.9	**854.3**
Fixed Tariff 3	854.3	-504.0	46.8	**397.0**
Fixed Tariff 4	397.0	-182.0	85.6	**300.7**
Fixed Tariff 5	300.7	-215.0	11.2	**96.9**
Draft Tariff 6	96.9	-85.6	41.7	**53.0**

Please note, the methodology for over/under-recovery used in Final Tariff 6 will be dependent on our forecast cash position as of tariff setting (December -2024)

Revenue vs Cost Report

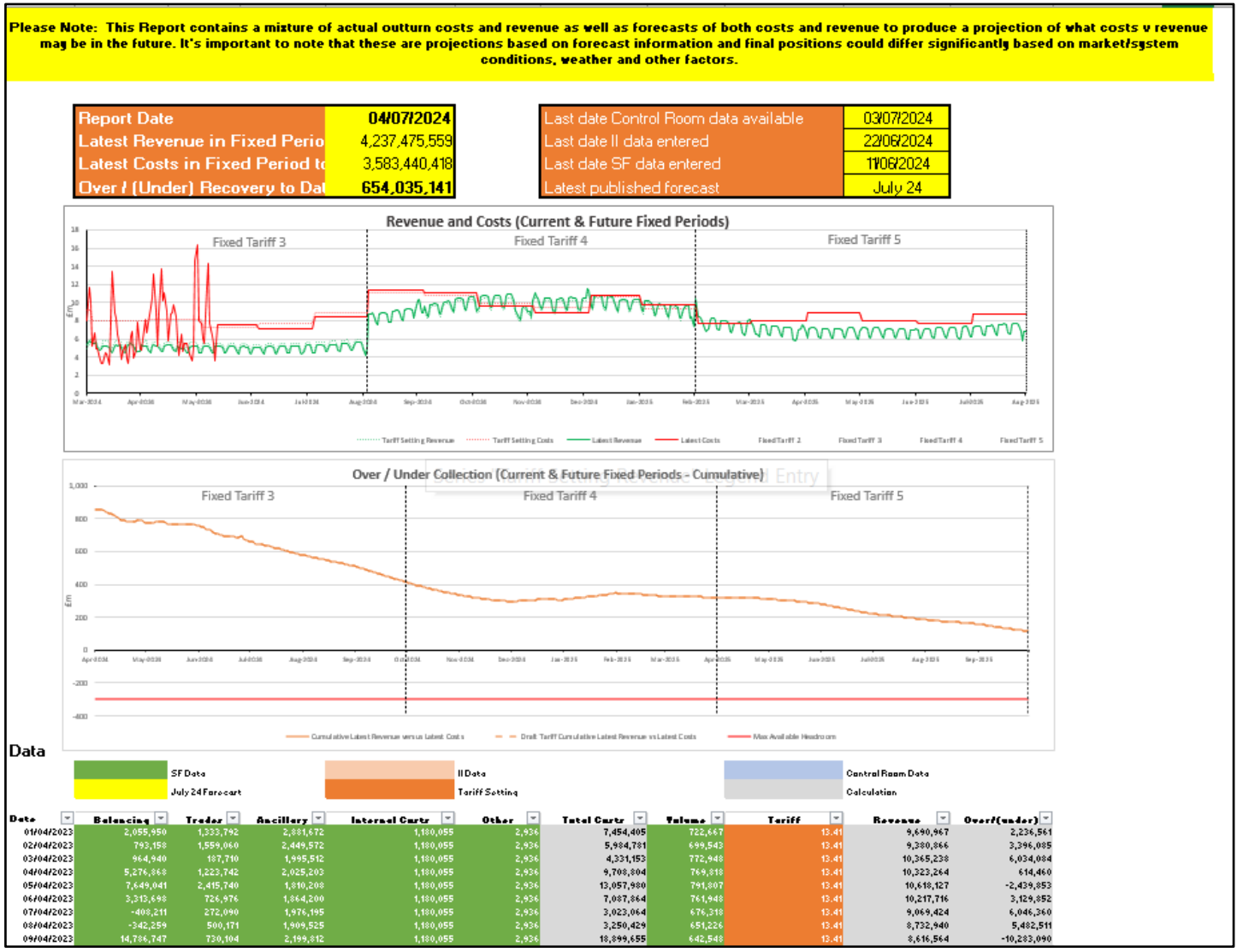
Weekly report is available on the ESO website

Shows the latest forecast over/under recovery position based on:

- Control Room Data (+1 WD)
- II Cost and Volume Data (+5 WD)
- SF Cost and Volume Data (+16 WD)
- Monthly BSUoS Forecast (15th of each month)

Costs at daily granularity are also available through our web prices file for II and SF Data

Illustrative Revenue vs Cost Report



Please Note: This Report contains a mixture of actual outturn costs and revenue as well as forecasts of both costs and revenue to produce a projection of what costs v revenue may be in the future. It's important to note that these are projections based on forecast information and final positions could differ significantly based on market/system conditions, weather and other factors.

Report Date	04/07/2024
Latest Revenue in Fixed Perio	4,237,475,559
Latest Costs in Fixed Period t	3,583,440,418
Over / (Under) Recovery to Dat	654,035,141

Last date Control Room data available	03/07/2024
Last date II data entered	22/06/2024
Last date SF data entered	11/06/2024
Latest published forecast	July 24

Data

SF Data
July 24 Forecast
II Data
Tariff Setting
Control Room Data
Calculation

Date	Balancing	Trader	Ancillary	Internal Costs	Other	Total Costs	Volume	Tariff	Revenue	Over/(under)
01/04/2023	2,055,950	1,333,792	2,881,672	1,180,055	2,936	7,454,405	722,667	13.41	9,690,967	2,236,561
02/04/2023	793,158	1,559,060	2,449,572	1,180,055	2,936	5,984,781	699,543	13.41	9,380,866	3,396,085
03/04/2023	964,940	187,710	1,995,512	1,180,055	2,936	4,331,153	772,948	13.41	10,365,238	6,034,084
04/04/2023	5,276,868	1,223,742	2,025,203	1,180,055	2,936	9,708,804	769,818	13.41	10,323,264	614,460
05/04/2023	7,649,041	2,415,740	1,810,208	1,180,055	2,936	13,057,980	791,807	13.41	10,618,127	-2,439,853
06/04/2023	3,313,698	726,976	1,864,200	1,180,055	2,936	7,087,864	761,948	13.41	10,217,716	3,129,852
07/04/2023	-408,211	272,090	1,976,195	1,180,055	2,936	3,023,064	676,318	13.41	9,069,424	6,046,360
08/04/2023	-342,259	500,171	1,909,525	1,180,055	2,936	3,250,429	651,226	13.41	8,732,940	5,482,511
09/04/2023	14,786,747	730,104	2,199,812	1,180,055	2,936	18,899,655	642,548	13.41	8,616,564	-10,283,090

Report Specifics

Invoices/Backing Sheet	Fund recovery shown as a separate line item, as will RF interest
BPA Report	Additional information added for fixed tariff
Web Prices	Additional columns for main tariff, fund tariff and volume were added
BCR Report	Currently produced by the system for old methodology (RF runs only)
Monthly Forecast	Continue to be provided for costs
Monthly Outturn	Continue to be provided for costs
Daily Cost Report	Continue to be provided for costs
Weekly Rev v Costs	That we are publishing weekly to show Revenue v Costs

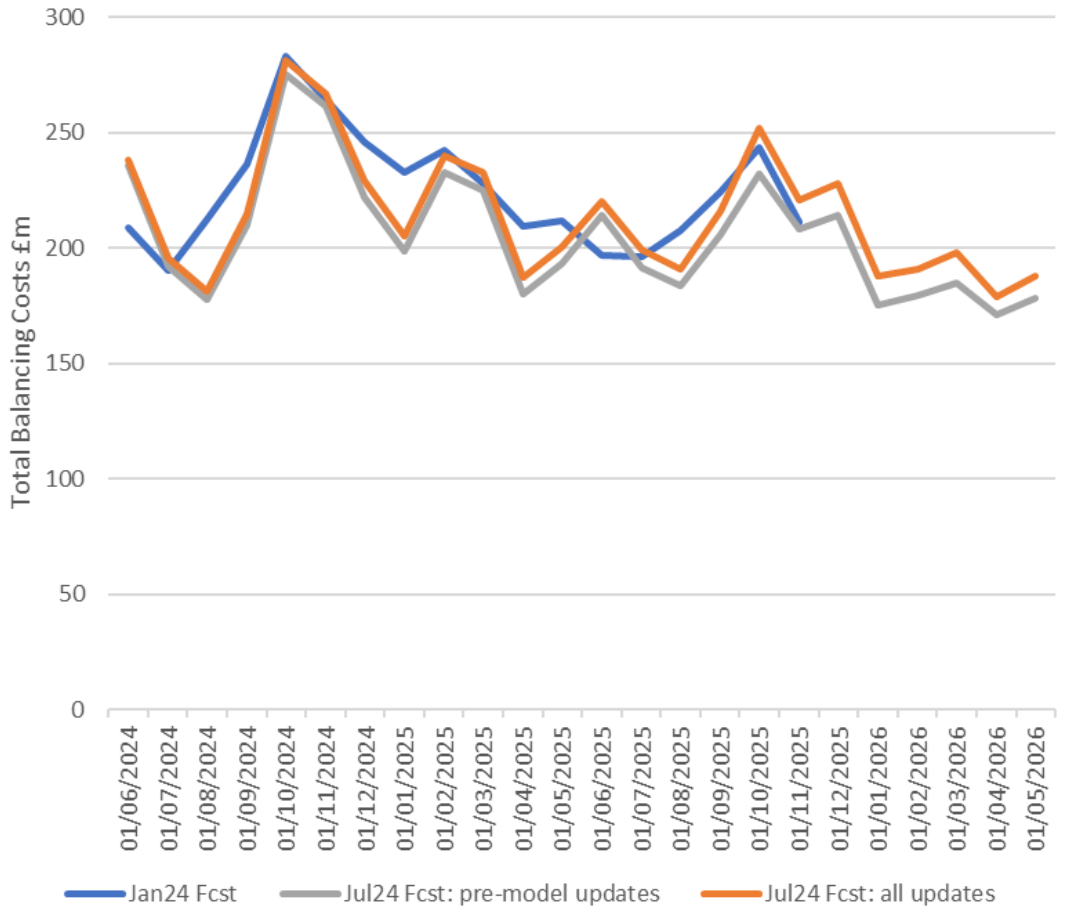
Balancing Cost Model Updates

The last major model methodology update went live in the May BSUoS forecast when we implemented the 'Prophet'[1] modelling package. To find out more, see the slides from our April webinar here.

Since then, there have been no methodology changes, but this tariff forecast does include some updated data sources and parameters.

The impact of these updates is to slightly increase balancing costs, particularly for summer 2025 onwards. This offsets the overall drop in the forecast since the last tariff setting.

Balancing Cost Impact Jan24 to Jul24 forecast	% change pre-model updates	% change post-model updates
Oct-24 tariff	-6%	-3%
Apr-25 tariff	-7%	-4%



1: https://facebook.github.io/prophet/

Balancing Cost Model Updates: NOA

The Network Option Assessment (NOA) provides a recommendation for which network reinforcement projects should receive investment, but also includes a view of constraint costs against the different FES scenarios. In this model update we have moved to using the NOA7 refresh view of constraint costs[1]

The model uses the NOA constraint cost scenarios as part of the Monte Carlo sampling in the Long Term Model. By sampling between these scenarios (acting as a proxy for different types of network upgrades), a range of possible costs are created. Because of the way the NOA assessment is used in the modelling, it does not significantly impact the central case, but does affect the other percentiles. The impact of this update is to widen the Upper-Lower balancing cost risk range (P90-P10).

Balancing Cost Model Updates: Renewable Growth Assumptions

Another input to the constraints component of the long term model is an assumption of how much new capacity of renewable generation (Wind & Solar) will be installed over the forecast.

This assumption has been updated in the latest forecast, using a combination of the FES Five Year Forecast and our current view of installation projections for the bigger generators (e.g. offshore wind).

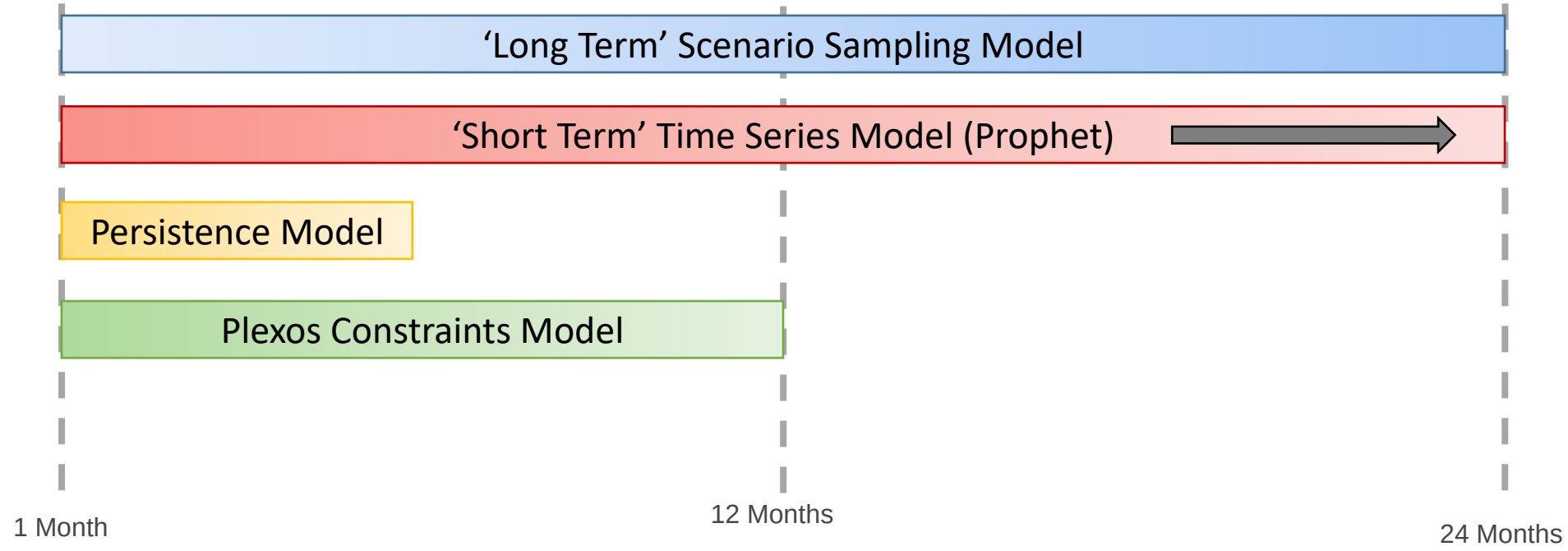
The impact of this update is to increase the constraints cost forecast, particularly after month 18 of the forecast when the Long Term forecast has a higher weight in our model blend.

1: https://www.nationalgrideso.com/research-and-publications/network-options-assessment-noa

Balancing Cost Model Updates: Blend Weights

To take advantage of model diversity benefits from different data sources and approaches, we blend together different models, with the weights changing depending on the lead time. In the latest forecast we have reviewed the weights and decided to increase slightly the weight of the 'Short Term' Time Series Model in the second year of the forecast.

The aim of this is to soften the switch between short and long term models between 12-18 months, and also get more model diversity benefit for months 18-24. The impact is to slightly increase the forecast in the second year.



Indicative Model Blending (for illustration only)

1: https://www.nationalgrideso.com/research-and-publications/network-options-assessment-noa

Next Steps

- Webinar recording and Q&A published next week
- Ongoing monitoring of current recovery v costs – see our weekly report
- Monitoring published future tariffs v revised forecasts
- Final Tariff for Oct 2025 to Mar 2026 by end of December 2024
- Any updates as a result of CUSC modifications:
  - CMP408 raised to change tariff notification period to 3 months
  - CMP415 raised to change tariff period to 12 months
- Continuous monitoring of forecast performance and updates as required
- We are currently reviewing the monthly forecasting process/report
- New system development and integration post go live
- Work has commenced on the new STAR system and further information about the changeover to the new system will be released as it becomes available

Q&A

The following question was asked and answered as part of the webinar:

Q: You have a high-level estimate of NESO costs of £236m. Do you have any estimate of an upper bound for that?

A: This is currently our best view and so have not provided an upper bound. We will provide an updated view as and when further information becomes available.

If you have any further questions or feedback please email us at bsuos.queries@nationalgrideso.com


Thank you!