

BSUoS Fixed Tariff 2023-24 Final

31st January 2023

Introduction

Under the existing Balancing Services Use of System (BSUoS) methodology, the daily costs of operating the system are recovered through the BSUoS charge on an ex-post basis. The costs that need to be recovered each day determine what the half hourly tariff is for the BSUoS charge.

The tariff (also called BSUoS price) changes each settlement period and is a function of the cost that needs to be recovered in each settlement period being divided by the chargeable volume. The costs of balancing the system are volatile and difficult to predict and this makes the BSUoS charge also difficult to predict.

CMP361 introduces an ex-ante fixed volumetric BSUoS tariff set over a total fixed and notice period of 15 months which is 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 from Ofgem was to implement WACM3 (Workgroup Alternative CUSC Modification) from the 1st April 2023. WACM3 fixes BSUoS for 6 months with 9 months' notice and defined that there would be no BSUoS fund to support the tariff.

Since CMP361 was first raised we have been preparing to implement a fixed tariff and the publication of this final tariff is the latest step in that process. We have been developing a model for forecasting balancing costs and ran two webinars to seek feedback on the model and ran a further webinar after publishing the BSUoS draft tariff in November 2023.

We will be running a webinar on the 7th February to discuss this final tariff and answer any questions that you may have about it.

Click the button below to register for the webinar.

[Register for the BSUoS Final Tariff Webinar Here](#)

CMP308 which has already been approved for implementation on the 1st of April 2023 removes the burden of BSUoS charges from generation and levies the charge on final demand energy volumes only.

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.

Before a tariff can be calculated, there are other non-balancing costs that need to be included. These are provided as a single central forecast only. The additional costs can be subject to change but sit outside of the capabilities of the current model, external influences affect them rather than parameters within the model.

ESO

The forecast for these additional costs is added to the central forecast for the balancing costs to calculate the total BSUoS Costs. These total BSUoS Costs are then divided by the BSUoS volumes to get to the final BSUoS tariff estimation for the fixed period.

Under WACM3 the process described above is carried out for each 6-month period that a tariff is fixed over.

Financial Year 2023/24 - Tariff 1			Financial Year 2023/24 - Tariff 2		
Description		Final Tariff	Description		Final Tariff
Apr - Sep	Balancing Costs (Central) £m	1387	Oct - Mar	Balancing Costs (Central) £m	1803
	Internal Costs £m	215.95		Internal Costs £m	215.95
	CMP395 Recovery	Included in Balancing Costs		CMP395 Recovery	Included in Balancing Costs
	Winter Security of Supply £m	87.5		Winter Security of Supply £m	87.5
	Total BSUoS £m	1690.45		Total BSUoS £m	2106.45
	Estimated BSUoS Volume TWh	126.1		Estimated BSUoS Volume TWh	150.1
	BSUoS Tariff £/MWh	£13.41		BSUoS Tariff £/MWh	£14.03

2. Internal Costs - £431.9m

Internal costs (allowed revenue) are calculated in the Price Control Financial Model (PCFM) process as determined by the current RII0-2 price control period.

The costs for the 2023/24 charging year have decreased by £3.7m since the draft tariff was published.

The small reduction in Internal ESO costs since draft tariffs is the net effect of two larger movements. Firstly, inflation that applies to 23/24 has increased from 3.4% to 5.7%. This is based on the Office for Budget Responsibility OBR forecasts which were published in November, too late for inclusion in the draft tariff but which were included in the final.

Secondly, offsetting this increase, there is a drop in the amount of cost incurred by the ESO during 22/23 that is reflected in final tariffs – final tariffs use an updated view of costs for that year, as submitted in our annual Regulatory Reporting Pack (RRP).

For further information on the PCFM process please visit the Ofgem PCFM ESO webpage [HERE](#)

For further information on our BP2 submission please visit our webpage [HERE](#) or check out [the Final BP2 Delivery Plan 2023-2025](#) or for the overview the [BP2 Executive Summary](#)

3. CMP395 Costs – Included in Balancing costs (forecast £20m)

CMP395 caps the BSUoS price at £40/Mwh for every Settlement Period from 6 October 2022 to 31 March 2023 and defers the costs associated with it to the 2023/24 charging year. The modification places a limit of £250m on the deferral that can be moved into the 2023/24 charging year.

The forecast deferred costs into the 2023/24 changing year have decreased since the draft tariff was produced as CMP395 deferrals have been lower than originally forecast. £20m is included in the final tariffs for the 2023/24 charging year but it's important to note that this amount is now included in our forecasting model so is no longer a separate line item in the total costs calculation.

Due to the impact of CMP308 (BSUoS charges from 1st April 2023 will be levied on final demand volumes only) the total deferral from CMP395 will be split and recovered through two different mechanisms.

Approximately 55% (£20m) will be recovered through the BSUoS fixed tariff scheme from final demand with the remaining 45% (£16m) being recovered from generators via a separate charging mechanism due to be charged monthly from April 2023 to December 2023.

For further details on the background of the CMP395 modification, please visit the webpage [HERE](#) and you can find our last communication on the implementation of the modification [HERE](#)

Prior to the recovery of the generation scheme starting, we will be issuing more detailed information regarding its implementation, including timing of monthly invoicing.

4. Winter Security of Supply

In 2022 the Secretary of State requested ESO to undertake enhanced actions to ensure ongoing security of supply across Winter 2022/23. There is currently uncertainty on any requirement for enhanced actions in Winter 2023/24. In anticipation of any potential requirement to put additional enhanced actions in place for Winter 2023/24 a cost of £175m has been included within BSUoS which will be recovered across the period from April 2023 to March 2024.

This cost could cover the need to make additional non-gas generation available to the ESO outside of the market, a shift of some coal procurement costs from 2022/23 BSUoS charges and the continuation of a mechanism to access demand flexibility.

The deferral of some coal procurement costs from the previous year is based on a forecast of market prices for March 2023. This deferral will be mirrored by a reduction in BSUoS 2022/23 charges in the final (RF) reconciliation run if the coal has not been sold to the market following the conclusion of the Winter Contingency Contracts in March 2023.

5. Balancing Costs - £3,190m

The biggest portion of the costs to be recovered through the BSUoS charge are the costs to balance the system. These costs have increased significantly over the last three years. Several factors have contributed to the rising costs including the increased contribution of renewable generation, the suppression of demand due to COVID-19 restrictions, the corresponding reduction in system inertia, and more recently the increase in wholesale electricity prices driven to a large extent by Russia's invasion of the Ukraine.

As well as being the largest portion of the BSUoS cost and therefore biggest component of the tariff, the balancing costs are also the hardest to forecast.

Over the last 12 months our modelling team have been working on a model to predict these costs and we also sought industry feedback via two webinars. For further information on the methodology used in our model please refer to the [BSUoS fixed tariff model consultation document](#).

One of the key drivers of balancing costs in the model is the wholesale electricity price. Over the last few months there has been a significant change in the forward curve of GB wholesale electricity for the financial year 23/24. For example, since the draft tariff was produced in October and the latest forecast in early January, there has been a drop in the wholesale electricity prices for 23/24 of approximately 35%. This is reflected in the updated final tariff.

For further information on the methodology used in our model please refer to the [BSUoS fixed tariff model consultation document](#).

6. BSUoS Chargeable Volume - 276.2 TWh

From April 2023, the code reform CMP308 will come into effect which will move the charging of BSUoS from generation and demand to "Final Demand" only. Final Demand is currently defined as electricity consumed other than for the purposes of generation or export onto the electricity network. The BSUoS chargeable volume has therefore been estimated using a simple linear regression using the NGENO national demand forecast as the explanatory variable.

7. BSUoS Fund - £0

In Ofgem's minded-to decision (21st September 2022) it was indicated that WACM5 would likely be chosen for implementation. The WACM5 option included a BSUoS fund set at P99 level with recovery taking place over a 5-year period.

Due to the above we included a BSUoS fund of £2,100m to be recovered over 5 years in the draft tariff.

Following publication of Ofgem's final decision on the 15th December WACM3 was chosen to be implemented which doesn't include a BSUoS fund so this has been removed from the final tariff.

8. BSUoS Reporting

We have committed to providing industry with visibility of upcoming costs and the potential for tariffs to be reset. To fulfil this, we will provide the following reporting:

1. Quarterly forecasts of the upcoming BSUoS tariff
 - This would include information on model inputs (inc. data sources and availability) and their values
2. Monthly updates on the tariff and usage of funds available (ESO WCF & BSUoS Fund). This would include:
 - Model inputs (inc. data sources and availability) and their values
 - What the ESO has spent on balancing costs this period
 - What the ESO has recovered this period
 - Use of WCF and BSUoS fund (subject to Ofgem decision)
 - Narrative to support figures
3. Monthly publications of balancing service forecast cost over a 2-year time horizon (as today)
4. In the event of tariff reset during a fixed period looking likely, we would provide notice to industry as soon as practicably possible via our usual communication channels.

9. Next Steps

On the 7th February we will be running a webinar to discuss the BSUoS final tariff, you can register for the webinar [HERE](#)

Please subscribe to our mailing list to receive further updates about the BSUoS fixed tariff implementation and anything else BSUoS related if you are not already a subscriber. [Click here to Join Our Mailing List](#)

If you have any immediate questions about this publication or anything else BSUoS fixed tariff related, please contact us at BSUoS.queries@nationalgrideso.com

10. Appendix

	Description	Link/Source
Model Consultation Info.	BSUoS Fixed Tariff Model Consultation - June 2022	https://www.nationalgrideso.com/electricity-transmission/document/262041/download
	BSUoS Fixed Tariff Model Consultation - Webinar Slides June 2022	https://www.nationalgrideso.com/electricity-transmission/document/262326/download
	BSUoS Fixed Tariff Model Consultation - Webinar Q and A June 2022	https://www.nationalgrideso.com/document/262531/download
	BSUoS Fixed Tariff Model Consultation - Webinar Recording	https://players.brightcove.net/867903724001/default_default/index.html?videoId=6308766047112
	BSUoS Fixed Tariff Model Consultation 2 - Webinar Slides August 2022	https://www.nationalgrideso.com/document/265571/download
Model Inputs	Plexos constraint forecast	https://data.nationalgrideso.com/constraint-management/24-months-ahead-constraint-cost-forecast
	Historic daily balancing costs	https://data.nationalgrideso.com/balancing/daily-balancing-costs-balancing-services-use-of-system
	Future energy scenarios	https://www.nationalgrideso.com/future-energy/future-energy-scenarios
	Weather data	https://gmao.gsfc.nasa.gov/reanalysis/MERRA-2/
Modes Info.	CMP361 and CMP362 Final Modification Report (8th March 2022)	https://www.nationalgrideso.com/document/246486/download
	Ofgem's minded-to decision (21st September 2022)	https://www.ofgem.gov.uk/sites/default/files/2022-09/CMP361 Minded-to final PDF - Publication.pdf
	Ofgem's final decision (15th December 2022)	https://www.ofgem.gov.uk/publications/cmp361-and-cmp362-decision
	CMP61 and CMP362 Modification WebPage	https://www.nationalgrideso.com/industry-information/codes/connection-and-use-system-code-cusc-old/modifications/cmp361-cmp362
	CMP308 Modification WebPage	https://www.nationalgrideso.com/industry-information/codes/connection-and-use-system-code-cusc-old/modifications/cmp308-removal
Cost Info.	Ofgem PCFM ESO webpage	https://www.ofgem.gov.uk/publications/eso-price-control-financial-model
	ESO BP2 Webpage	https://www.nationalgrideso.com/our-strategy/riio
	Final BP2 Delivery Plan 2023-2025	https://www.nationalgrideso.com/document/266156/download
	BP2 Executive Summary	https://www.nationalgrideso.com/document/266151/download
General	ESO Main BSUoS Webpage	https://www.nationalgrideso.com/industry-information/charging/balancing-services-use-system-bsuos-charges
	ESO BSUoS Queries Email	BSUoS.queries@nationalgrideso.com
	Join the ESO BSUoS Mailing List	https://subscribers.nationalgrid.co.uk/h/d/BB2F9EBE89031B0C
CMP395	CMP395 Code Page	https://www.nationalgrideso.com/industry-information/codes/connection-and-use-system-code-cusc-old/modifications/cmp395-cap-bsuos
	CMP395 Implementation Comms	https://subscribers.nationalgrid.co.uk/t/d-70A7FD34A13A9F032540EF23F0FEDED
	CMP395 Data	https://data.nationalgrideso.com/balancing/current-balancing-services-use-of-system-bsuos-data