

Draft BSUoS Fixed Tariff for 2023-24

11th October 2022

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 seeks to introduce an ex-ante fixed volumetric BSUoS tariff set over a total fixed notice period of 15 months which is designed to deliver the recommendations of the Second BSUoS Task Force. The decision on whether to implement CMP361 currently sits with Ofgem and they published a [minded to document on the 21st September 2022](#)

The “minded to position” from Ofgem suggested WACM5 (Workgroup Alternative CUSC Modification) as the most likely to be implemented. WACM5 fixes BSUoS for 12 months with 3 months’ notice and defined that a BSUoS fund at the P99 level be built up over 5 years.

Since CMP361 was first raised we have been preparing to implement a fixed tariff and this draft tariff is part of that preparation. We have been developing a model for forecasting balancing costs and ran two webinars to seek feedback on the model.

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 Tariff Overview

Below are the numbers for the key components that make up the BSUoS draft tariff for the 2023/24 charging year which determines a main tariff of **£17.22 per MWh** and a fund tariff of **£1.52 per MWh**.

If Ofgem gave approval for WACM5 of CMP361 these rates would be chargeable from the first settlement period of the 1st April 2023 until the final settlement period of 31st March 2024

It is important to note at this point that this is a draft tariff. CMP361 has not been approved and the final tariff, that we intend to publish by the end of December 2022, could be very different to the numbers below with revised forecast data and potentially different parameters depending on final decision by Ofgem.

Fund Recovery Period (Yrs)	Balancing Costs (£m)	Internal Costs (£m)	CMP395 Costs (£m)	Main Tariff Cost (£m)	Fund Tariff Cost (£m)	Volume Forecast (TWh)	Main Tariff (£/MWh)	Fund Tariff (£/MWh)
5	4,184	435.6	137.5	4,757	2,100	276.2	£17.22	£1.52

2. Balancing Costs - £4,184m

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 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 10 months our modelling team have been working on a model to forecast these costs and we also sought industry feedback via two webinars. We continue to look for ways to improve our model and ability to forecast balancing costs as this will be a key component of whether a fixed tariff is successful.

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

3. Internal Costs - £435.6m

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

The costs for the 2023/24 charging year have increased since the last BSUoS forecast that we published in the middle of October. The increase in costs is to account for the Future System Operator (FSO) activities expected under the Electricity System Operator Business Plan cycle 2 (BP2)

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](#)

4. CMP395 Costs - £137.5m

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.

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% (£137.5m) will be recovered through the BSUoS fixed tariff scheme from final demand with the remaining 45% (£112.5m) 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.

For this draft tariff, the deferral cost we have used is the maximum deferral that the CMP395 scheme allows (£250m) with the intention that we will be able to revise this number by the end of October when more data is available.

5. 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. This will be further refined on conclusion of the ongoing declaration of final demand being managed by Elexon and by the ESO, which is due to finish before April 23.

6. Tariff Calculation

The forecasting model we have developed is used to determine balancing costs for the year ahead. The central forecast number determines the cost that goes into the main tariff and drives the fund tariff dependent on the P level of coverage that is determined, P99 for this draft tariff.

Before a tariff can be calculated, there are other non-balancing costs that need to be included. For example:

- Estimated Internal ESO costs
- Deferred Costs associated with Connection and Use of System Code (CUSC) modifications, e.g., CMP395

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.

The forecast for the above additional costs is then 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 (see Table 2 for example tariff).

Description	Financial Year 2023/24
Balancing Costs (Central) £m	4184
Internal Costs	435.6
CMP395 Recovery	137.5
Total BSUoS £m	4757.1
Estimated BSUoS Volume TWh	276.2
BSUoS Main Tariff £/MWh	17.22

7. BSUoS Fund - £2,100m

As articulated in the [CMP361 and CMP362 Final Modification Report \(8th March 2022\)](#), there are several Workgroup Alternative CUSC Modifications (WACMs) options associated with introduction of an ex ante fixed volumetric BSUoS tariff, several of which include a BSUoS Fund. This would be an industry-funded, ring-fenced fund used to cover an agreed probability of tariffs being reset, which would be calculated using the BSUoS fixed tariff model.

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.

Along with the tariff, the fund is calculated on an annual basis and recovery set for the year ahead. Under WACM5 the fund level is currently calculated at £2,100m. For recovery purposes this figure is divided by the recovery period (5 years) and then further divided by the forecast volume to determine a tariff of £1.52 per MWh

Description	Financial Year 2023/24
BSUoS Fund	2100
BSUoS Fund Recovery Period Yrs	5
Estimated BSUoS Volume TWh	276.2
BSUoS Fund Tariff £/MWh	1.52

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 comms channels.

9. Next Steps

As already stated, this is a draft tariff publication and as this is the inaugural BSUoS fixed tariff publication we would welcome feedback on how we can enhance future publications.

In the next two weeks we will be running a webinar to discuss the BSUoS draft tariff and will be issuing comms in the next few days to advise the date and time of this webinar.

Please subscribe to our mailing list to receive notification about the webinar 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

Many thanks

Nick Everitt

Revenue Manager
Tariff Setting & Change Management
Market Services

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/
Mods 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
	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-70A7FD34A13A9F032540EF23F30FEDED
	CMP395 Data	https://data.nationalgrideso.com/balancing/current-balancing-services-use-of-system-bsuos-data