

# **Draft Final Modification Report**

# **CMP333:**

# BSUoS – charging Supplier Users on gross demand (TCR)

**Overview:** On 21<sup>st</sup> November 2019, The Authority published a direction for ESO to raise a CUSC Modification Proposal (CMP) which will give effect to their decision to levy BSUoS to Suppliers on a gross volumetric basis

# **Modification process & timetable**

- Proposal form
- •12 December 2019
- Workgroup Consultation
- •06 February 2020 27 February 2020
- Workgroup Report
- •19 March 2020
- Code Administrator Consultation (3)
- •28 August 2020 07 September 2020
  - Draft Final Modification Report
- •08 September 2020
  - Final Modification Report
  - •18 September 2020
  - Implementation
  - •01 April 2021

Have 5 minutes? Read our Executive summary

Have 20 minutes? Read the full **Draft Final Modification Report** 

Have 30 minutes? Read the full <u>Draft Final Modification Report and annexes</u>.

**Status summary:** This Report will be submitted to the CUSC Panel for them to carry out their Recommendation Vote on whether this change should happen.

This modification is expected to have a: High impact	Supplier Users and Embedded Generators		
Governance route	This modification has been assessed by a Workgroup and is now awaiting Ofgem's decision on whether it should be implemented.		
Who can I talk to about the change?	Proposer: Jenny Doherty National Grid ESO Email: Jennifer.doherty@n ationalgrideso.com	Code Administrator: Kavita Patel National Grid ESO Email: Kavita.patel@nationalgridESO.com	



# **Executive Summary**

On 21st November, The Authority published a <u>Direction</u> requiring National Grid Electricity System Operator to raise changes to the CUSC giving effect to their Decision to levy Balancing System Use of System (BSUoS) charges to Suppliers on the basis of their gross demand ("the Decision").

Following the approval of CMP281 'Removal of BSUoS Charges From Energy Taken From the National Grid System by Storage Facilities' some amendments were made to the legal text and were consulted on as part of the Second Code Administrator Consultation. Following a respondent, to the Second Code Administrator Consultation, raising concerns with parts of the legal text we consulted for a third time (the "Third Code Administrator Consultation") on sections 14.30.2, 14.30.8 and 14.31.8 only of the legal text for CMP333. The final legal text is set out in Annex 8 of this Report.

# What is the issue?

Suppliers' balancing services charges are currently levied on a 'net' demand basis at the point the transmission network meets the distribution network. In some cases, suppliers effectively receive a discount on their balancing services charges for contracting with smaller distributed generators as this has the effect of reducing their net demand. The majority of these discounts are passed onto smaller distributed generators in the form of payments from suppliers.

# What is the solution and when will it come into effect?

Proposer's solution: Supplier's liability will be based on its gross demand volumes.

**Implementation date**: As directed by the Authority this change needs to be implemented to be effective from 1 April 2021.

### Summary of potential alternative solution(s) and implementation date(s):

No alternatives were raised as part of the Workgroup process.

### **Workgroup conclusions**

The Workgroup unanimously agreed that this change better facilitates the CUSC charging objectives and should be implemented.

# What is the impact if this change is made?

### Who will it impact?

This change will impact Suppliers and Generators who receive BSUoS as an Embedded Benefit.

### Interactions

This is one of a suite of modifications raised to discharge the Authority's directions as part of the Targeted Charging Review. More information on these can be found in the ESO Code Administrator <u>Modification tracker</u>. A <u>BSUoS Taskforce</u> has been established as requested by the Authority in their decision.



## Introduction

This document is the CMP333 **Draft Final Modification Report.** This document outlines:

- What is the issue?
- What is the solution?
  - o Proposer's solution
  - Workgroup considerations and consultation summary
  - Alternative solutions
  - Legal text
- What is the impact of this change?
  - Workgroup vote
  - Code Administrator Consultation summary
- When will the change taken place?
- Acronym table and reference material
- Annexes

# What is the issue?

#### What is the issue?

The full rationale for this change can be found in Ofgem's <u>Targeted Charging Review</u> <u>decision</u>. The ESO has raised this change to comply with "The Direction" issued following that Review.

In summary, the direction identifies that removing the Embedded Benefit will increase competition between embedded and transmission connected generators. Charging Suppliers for BSUoS on a gross basis will remove the incentive for Suppliers to contract with Embedded Generators, paying them a so-called "embedded benefit", for their services in reducing that Supplier's BSUoS liabilities. This will increase competition in the generation of electricity and should lead to cost savings to consumers.

# What is the solution?

**Proposer's Solution:** A Supplier's liability will be based on its gross demand volumes.

The solution will be calculated as follows:

- To calculate the overall BSuoS cost per settlement period, the costs for each settlement period will be divided by the total BSUoS chargeable volumes in that half hour. The total BSUoS chargeable volumes will be calculated by the sum of BSUoS liable transmission connected sites\* net Trading Unit positions and Supplier BM Units gross demand positions all adjusted for the Transmission Loss Multiplier.
- Transmission Connected sites\* will be charged BSUoS on the net position of their trading units in a settlement period which may be in delivering or exporting mode.
- **Supplier BM Units** will be charged BSUoS on a gross demand basis for each Supplier BM Unit per settlement period and not on a Trading Unit basis



 Exempt Export BM Units (both SVA and CVA) will be treated in the same way as Supplier BM Units and therefore will not receive an embedded benefit or be charged when exporting but will be charged BSUoS when importing.

The Proposer noted that the concept of Trading Units allows users to net their overall usage. Removing the Trading Unit concept from transmission connected generators would have broader implications than those referred to directly in the direction, the proposer did not take forward this approach at this time. The Workgroup agreed that the TCR Direction was clear regarding the changes required and recognised that it did not direct any changes to Trading Unit concepts for Transmission connected assets.

# **Workgroup Considerations**

The Workgroup considered how this would differ from the current arrangements.

**Table 1** below shows how BSUoS is treated at present

Table 2 illustrates how this would change under the proposed solution to CMP333

### Table 1:

Current Situation (Baseline)	Net Direction of Trading Unit/Base Trading Unit*		
Direction of BM Unit	Offtaking (importing)	Delivering (exporting)	
Offtaking (importing)	Pays	Credit	
Delivering (exporting)	Credit	Pays	

<sup>\*</sup>A trading unit will always have an overall charge for BSUoS based on its net position. For example, a trading unit that is exporting overall, will receive a credit against any importing BMUs to offset the payments made against exporting BMU in the same trading unit.

#### Table 2:

### **CMP333**

Type of BM Unit	Direction of BM Unit	Basis of charging
Transmission Connected Generators		As Baseline*
Embedded Generators with BEGA and not Exempt Export BM Units		As Baseline*
Transmission Connected Demand		As Baseline*
Distribution Connected Demand Sites (Supplier BM Units)	BM Unit Gross Demand is positive (gross import)**	Pays

<sup>\*</sup> including sites with a BEGA that are not Exempt Export BM Units



	BM Unit Gross Demand is zero	No liability
Distribution connected	Offtaking (importing)	Pays***
Exempt Export BM Units	Delivering (exporting)	No liability***

### Notes:

- \* BM Unit pays or receives credit based on its direction compared with that of its Trading Unit
- \*\* Gross Demand (Import) data as provided to ESO in the TNUoS report as set out in Table 7 of Section V of the BSC
- \*\*\* Consistent treatment to Supplier BM Units

# The orange cells indicate arrangements that change under this proposal

The Workgroup discussed how this would work in Trading Units. The impact on the BSUoS charge within seven scenarios of Trading Units is illustrated in Annex 4.

The Workgroup also discussed how Exempt Export BM Units should be treated to be aligned with Ofgem's direction. Exempt Export BM Units may contain either SVA or CVA registered meters however by default are assigned to the Base Trading Unit for the GSP Group. Generally, this means that an Exempt Export BM Unit will currently receive a credit when Delivering (exporting) and the GSP Group is importing. The proposer's solution removes the credit for these units treating them in the same way as Supplier BM Units.

### **Workgroup Consultation summary**

The Workgroup Consultation was carried out from 13 February 2020-5 March 2020 and six responses were received. The Workgroup considered the responses. The full responses can be found in Annex 5.

The questions below were asked as part of the Workgroup consultation:

Consultation Question	Summary of responses
Does this solution discharge the direction from the Authority?	<ul> <li>Five respondents agreed that the solution would discharge the Authority's direction but some concerns raised around whether this is economic or efficient.</li> <li>One respondent stated that without greater transparency, it is not clear whether the outcome of the solution will discharge the Direction from the Authority in alignment with the objectives of the TCR.</li> </ul>
Do you have any other comments?	<ul> <li>A respondent recommended awaiting the conclusions of the BSUoS Task Force and working on BSUoS charging as a whole as the best way to proceed.</li> <li>One respondent stated that the impact of not amending the baseline Trading unit set up was not fully explained.</li> </ul>



The Workgroup considered the comment by ESB asking for more info on how embedded generation could continue to receive credits under the CMP333 solution. The workgroup agreed that in theory a licensable generating station BM Unit connected to the distribution system could receive a credit if it forms part of a Trading Unit which is importing overall. However, this would essentially be in situations where the generating station's import exceeds its generating output, and both measured in different BM Units.

It was noted that a supplier BM Unit cannot form part of such a Trading Unit, unless it is an exempt export BM Unit. Section K4.7.2(a) of the Balancing and Settlement Code requires all supplier BM Units to be automatically assigned to the base Trading Unit of the relevant GSP group. Supplier BM Units which represent demand customer volumes are unable to opt out of this requirement. Please note that the baseline arrangements for a Trading Unit in Table 1 has been updated to provide clarity and Annex 6 has been added detailing the historical data used when assessing the impact of the change.

#### Alternative solutions

The Workgroup considered the direction provided by the Authority and concluded that they did not want to raise any other solutions for consideration. They also noted that there were no alternative requests as part of the Workgroup Consultation as outlined below.

The Workgroup also considered, as part of their Terms of Reference, the ongoing work in modification <a href="Mailto:CMP308">CMP308</a> 'Removal of BSUoS charges from Generation'. The Workgroup concluded that while the work undertaken to date as part of this Workgroup was useful, this change should be standalone and CMP333 should only make the changes directed by the Authority.

Consultation Question	Summary of responses
Do you wish to raise a Workgroup Consultation Alternative Request for the Workgroup to consider?	No respondents wanted to raise an alternative request.

# Legal text

Following the approval of CMP281 'Removal of BSUoS Charges From Energy Taken From the National Grid System by Storage Facilities' some amendments were made to the legal text and were consulted on as part of the Second Code Administrator Consultation. Following a respondent, to the Second Code Administrator Consultation, raising concerns with parts of the legal text we consulted for a third time (the "Third Code Administrator Consultation") on sections 14.30.2, 14.30.8 and 14.31.8 only of the legal text for CMP333. The final legal text is set out in Annex 8 of this Report.



# What is the impact of this change?

## Who will it impact?

Suppliers and generators who receive the BSUoS Embedded Benefit

## What are the positive impacts?

An assessment of BSUoS price based on the 2018/2019 charging year was completed and can be found in **Table 3** below.

On average, we would expect to see around a 10% drop in the BSUoS price across the year due to the increase in the BSUoS liable chargeable volume. This would differ per settlement period.

The previous data used to arrive at this figure can be found in Annex 6. This has been added to provide greater transparency in how these figures were arrived at based on a Workgroup Consultation response.

Table 3:

Net der Averag			Demand ge Price	Variance, £	Diff, %
£	3.24504	£	2.91426	£-0.33	-10.2%

The partial removal of the distortion between Embedded and Transmission connected generators should result in higher competition across the market. As well as lower network charges, this should result in lower costs for the end consumer. The Authority carried out an impact assessment as part of their Targeted Charging Review.

# **BSC** impact

An amendment to the BSC will be required to ensure the transfer of data under BSUoS charging timescales. This modification will be raised at the April 2020 BSC Panel meeting and is expected to be a minor change to the current arrangements.

# System changes

#### **ESO**

 It is noted that this change will require some amendments to the ESO Charging and Billing System

### **Suppliers**

It is expected that there will be minimal change required to systems for suppliers

# **Workgroup Vote**

The workgroup met on the 10 March to carry out their workgroup vote. The full Workgroup vote can be found in Annex 7. The table below provides a summary of the Workgroup members view on the best option to implement this change.

# The Applicable CUSC Objectives (Charging) are:

(a) That compliance with the use of system charging methodology facilitates effective competition in the generation and supply of electricity and (so far as is



consistent therewith) facilitates competition in the sale, distribution and purchase of electricity; Facilitating effective competition in the generation and supply of electricity, and (so far as consistent therewith) facilitating such competition in the sale, distribution and purchase of electricity;

- b) That compliance with the use of system charging methodology results in charges which reflect, as far as is reasonably practicable, the costs (excluding any payments between transmission licensees which are made under and accordance with the STC) incurred by transmission licensees in their transmission businesses and which are compatible with standard licence condition C26 requirements of a connect and manage connection);
- (c) That, so far as is consistent with sub-paragraphs (a) and (b), the use of system charging methodology, as far as is reasonably practicable, properly takes account of the developments in transmission licensees' transmission businesses;
- (d) Compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency. These are defined within the National Grid Electricity Transmission plc Licence under Standard Condition C10, paragraph 1 \*; and
- (e) Promoting efficiency in the implementation and administration of the CUSC arrangements.
- \*Objective (d) refers specifically to European Regulation 2009/714/EC. Reference to the Agency is to the Agency for the Cooperation of Energy Regulators (ACER).

# Which option is the best? (Baseline or Proposer solution (original))

Workgroup Member	BEST Option?	Which objective does the change better facilitate? (if baseline not applicable)
Jenny Doherty – National Grid ESO	Original	(a) and (c)
Simon Vicary – EDF Energy	Original	(a) and (c)
Paul Jones – Uniper Energy	Original	(a)
Simon Lord - Engie	Original	(a) and (c)
Grace March – Sembcorp	Original	(a) and (c)
Robert Longden – Cornwall Insight	Original	(a) and (c)
George Moran - Centrica	Original	(a) and (c)



Andy Colley – SSE Generation Ltd	Original	(a) and (c)
Karl Mayron – Haven Power Ltd	Original	(a) and (c)

The Workgroup unanimously agreed that CMP333 better facilitates the CUSC charging objectives and that the change should be implemented.

The Workgroup also asked respondents for their view on whether the change would better facilitate the CUSC Charging objectives and the following was received:

Consultation Question	Summary of responses
Do you believe that the CMP333 Original Proposal better	Five out of six respondents believe that CMP333 better facilitates applicable objective (a) and three respondents stated that it better facilitated objective (c).
facilitates the Applicable CUSC Objectives?	One respondent said they did not believe that it would be economic or efficient to make this change whilst the work for the second BSUoS Task Force is still ongoing and therefore that it does not better facilitate the objectives.

# First Code Administrator Consultation Summary

The First Code Administrator Consultation was issued on the 20 April 2020 and closed on 15 May 2020. We received 4 responses and a summary of these responses can be found in Annex 9 with the full responses in Annex 10.

We received 4 responses and they were all supportive of the change. Some concerns were noted on Implementation; namely the lack of alignment of BSUoS and TNUoS Residual reforms for Generators and that there was a 'scattered approach' to implementing changes to BSUoS charging.

However, Ofgem approved CMP281 <u>'Removal of BSUoS Charges From Energy Taken From the National Grid System by Storage Facilities'</u>. whilst the First Code Administrator Consultation was running. CMP281 makes changes to the CUSC in the same section (14.30) as CMP333 introducing wording to reflect the new treatment of Storage BMUs. Therefore, the legal text for CMP333 needed to be updated accordingly and Panel agreed that we consult on this proposed change for a second time.

# **Second Code Administrator Consultation Summary**

Following the decision on CMP281, the Legal text for CMP333 was changed to reflect the approval by Ofgem on 14 May 2020 of CMP281. CMP281 made changes to the CUSC in the same section (14.30) as CMP333 introducing wording to reflect the new treatment of Storage BMUs.

A Second Code Administrator Consultation was therefore issued on 17 June 2020 for 15 Working Days closing on 8 July 2020. 3 responses were received.

• 2 responses supported the change, 1 respondent didn't and cited issues with the legal text.



 2 respondents supported the proposed implementation approach. 1 respondent didn't support the proposed implementation approach and believe that the BSUoS Task Force should implement a full solution that addresses equitable treatment of all exports and imports to and from the system.

# Third Code Administrator Consultation Summary

As part of the Second Code Administrator Consultation, we received industry comments on the legal text for CUSC 14.30.2, 14.30.8 and 14.31.8. The CUSC Panel, on 31 July 2020, directed the CMP333 Workgroup to assess these changes and agreed to run a further Code Administrator Consultation for 5 working days with the scope limited to the proposed changes to the CMP333 legal text.

These changes were agreed with the CMP333 Workgroup and are set out below with the red text showing the changes between the legal text issued with the Second Code Administrator Consultation and the Third Code Administrator Consultation:

- 14.30.2 "SGQM j refers to the Gross Demand BM Unit Volume for Settlement Period j minus imports for Settlement Period j to registered SVA storage facilities where those imports are solely for the purposes of operating that Storage Facility."
- 14.30.2 "TQM<sub>j</sub> refers to the total Transmission Connected Site BM Unit Metered Volume for Settlement Period j minus imports for Settlement Period j to registered CVA storage facilities where those imports are solely for the purposes of operating that Storage Facility"
- 14.30.8 The User, shall inform The Company as soon as is reasonably practicable and in any event no fewer more than 5 Working Days from the date on which the facility ceased to be a CVA Storage Facility
- 14.31.8 TQM "The BM Unit Metered Volume for BSUoS liable users with a
  Bilateral Agreement with The Company, excluding Exempt Export BM Units,
  excluding BM Units included in the Transmission Connected Site BM Unit
  Metered Volume, minus imports to registered CVA storage facilities where those
  imports are solely for the purposes of operating that Storage Facility, which is
  multiplied by the TLM and Trading Unit Delivery Mode Multiplier"
- 14.31.8 Add "Transmission System Boundary As defined in the Balancing and Settlement Code"
- Export Exempt BM Unit" should read as "Exempt Export BM Unit"

The Third Code Administrator Consultation was issued on the 28 August 2020 and closed at 5pm on 7 September 2020 and we received 1 response. The respondent was supportive of the changes to the legal text. The full response can be found in Annex 12.

# When will this change take place?

# Implementation date:

This change must be implemented so that it takes effect on 1 April 2021, as per Ofgem's Direction.



The Workgroup noted the concerns around the Implementation date. They also discussed that there are also benefits from removing a distortion from the market now and that there was a journey being undertaken to arrive at the desired outcome. The system changes required have been addressed by the Workgroup in the impact section of this document.

# Acronym table and reference material

Acronym	Meaning
BSUoS	Balancing System Use of System
ESO	Electricity System Operator
BM Unit	Balancing Mechanism Unit
TNUoS	Transmission Network Use of System
BEGA	Bilateral Embedded Generation Agreement
TCR	Targeted Charging Review

### Reference material:

## Annexes

Annex	Information
Annex 1	Proposal Form
Annex 2	Terms of Reference
Annex 3	Urgency letter and response from Ofgem
Annex 4	Trading Unit analysis spreadsheet
Annex 5	Workgroup Consultation responses
Annex 6	Impacts - historical data
Annex 7	Workgroup Vote
Annex 8	Legal text
Annex 9	First Code Administrator Consultation responses summary
Annex 10	First Code Administrator Consultation responses
Annex 11	Second Code Administrator Consultation responses
Annex 12	Third Code Administrator Consultation responses