Public

Workgroup Consultation

CMP453: To Bill BSUoS on a net basis at BSC Trading Units

Overview: The move to gross billing of Balancing Services Use of System (BSUoS) means that customers forming part of a Balancing and Settlement Code (BSC) Trading Unit are paying BSUoS when the net flows at the point of connection are exports, so the customers are not using the system and should not pay BSUoS.

Modification process & timetable

1. **Proposal Form**
   30 April 2025
2. **Workgroup Consultation**
   14 July 2025 - 04 August 2025
3. **Workgroup Report**
   18 September 2025
4. **Code Administrator Consultation**
   29 September 2025 17 October 2025
5. **Draft Final Modification Report**
   23 October 2025
6. **Final Modification Report**
   11 November 2025
7. **Implementation**
   01 April 2026

Have 5 minutes? Read our Executive summary
Have 40 minutes? Read the full Workgroup Consultation
Have 60 minutes? Read the full Workgroup Consultation and Annexes.

Status summary: The Workgroup are seeking your views on the work completed to date to form the final solution to the issue raised.

This modification is expected to have a: Medium impact Suppliers and Directly connected transmission demand by altering the BSUoS liabilities between final demand but improving cost reflectivity.

Governance route	Standard Governance modification with assessment by a Workgroup.	
Who can I talk to about the change?	**Proposer:** Matthew Foster matthew.foster@tritonpower.co.uk Phone: 07549026586	**Code Administrator Chair**: Prisca Evans prisca.evans@neso.energy
How do I respond?	Send your response proforma to cusc.team@neso.energy by **5pm** on **04 August 2025**	

Public

Contents

Executive Summary

CMP453 proposes to change how Balancing Services Use of System (BSUoS) charges are applied by billing them on a net basis for BSC Trading Units. This modification was raised because under the current gross billing approach, final demand customers within Trading Units are charged BSUoS even when the net flows are exports—meaning they are not actually using the system—resulting in a charge that is not cost reflective.

What is the issue?

When BSUoS charges became gross rather than net, customers who don't always contribute to balancing costs were still charged. Although energy imbalance charges account for the net impact of co-located generation and demand through Trading Units, BSUoS charges do not, leading to unfair cost allocation.

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

Proposer's solution: Where a demand Balancing Mechanism Unit (BMU) forms part of a transmission connected Trading Unit, where all BMU's within that Trading Unit connect to the Transmission Network at the same connection point, BSUoS will be billed on a net basis, i.e. when the site is importing it will pay BSUoS, but when it is exporting it will not.

Implementation date: 01 April 2026.

What is the impact if this change is made?

This modification would make BSUoS charges more cost-reflective by exempting sites where net flows do not contribute to system balancing costs—typically where generation and demand are co-located. While this would slightly increase costs for other customers, the impact is expected to be minimal, especially since many affected sites are Energy Intensive Industries (EIIs) that already pay reduced or no BSUoS. The change targets only specific configurations and avoids broader system impacts, aligning with how energy imbalance charges are already calculated.

Interactions

Possible interaction with the Balancing and Settlement Code as it defines Trading Units.

What is the issue?

What is the defect the Proposer believes this modification will address?

When BSUoS charging moved to being a gross charge it resulted in customers who are demonstrably not always causing balancing costs being incorrectly charged. The idea of a Trading Unit is that it recognises that where generation companies (Genco's) and demand are co-located on the transmission system it is their net impact on the system that drives balancing costs. This is reflected for energy imbalance charges, but not BSUoS.

Why change?

It is not cost reflective to charge customers for energy balancing costs when they are not using the system and contributing to the cost drivers, i.e. they do not cause Balancing Services Activity as the generation meter next to their demand meter counter acts their impact on the system. In fact, it may be the case that the at that point of connection the site is providing ancillary services, as many have Mandatory Services Agreements (MSAs) given their size and technology types. Without this change the customers will be forced to pay to rewire their connections putting them "behind the meter". While this would remove the BSUoS costs, it would create additional costs for no reason, as their impact on the total system will remain the same.

The Original Proposal form can be found in **Annex 01**.

Workgroup considerations

The Workgroup convened two times to discuss the issue as identified by the Proposer within the scope of the defect, develop potential solutions, and evaluate the proposal in relation to the Applicable Code Objectives.

Workgroup Discussion ahead of the Workgroup Consultation

The Proposer presented the solution to the Workgroup and discussions were held on the proposal.

Issue Presented:

- **Billing on a Gross Basis**: The current issue involves the billing of the host site with final demand on a gross basis. This means that customers forming a trading unit are charged pursuance when net flows at the site are export.

Proposed Solution:

- **Net Basis Billing**: The Proposer, suggests that the billing should be on a net basis. This means that when the site is importing, it uses the system and should be charged. However, when it is exporting (i.e., the adjacent connected demand is coming from their generation with no impact on the system), it should not be charged.

  A Workgroup Member highlighted that the billing and subsequent charges are a commercial issue between the Generator and its customers. Noting that the Generator, who owns the BMU, faces the charges, and how these charges are passed on is a matter of commercial arrangements.

- **Technical Configuration**: The Proposer acknowledges that while a change to the wiring configuration is technically possible, it would be incredibly complex and unnecessary since there is no change in the impact on the system. The Workgroup Members agreed to focus on addressing the billing and charging issues through the proposed modifications rather than making physical changes to the wiring.

Specific Example of a Trading Unit that has both Generation and Demand within that Trading Unit:

- **Site Configuration**: The Proposer provided an example of their site, constructed between 1997 and 2000, which includes generation units Saltend Cogeneration Company Limited (SCCL 1 to 3) and a demand unit (SCCL 4). The demand is serviced from the generation units, and the current wiring configuration results in charges that are not cost-reflective. The Workgroup Members decided that the site configuration was not the primary focus and instead chose to concentrate on addressing the billing and charging issues.

- **Cost Reflectiveness**: The Proposer argues that the current charges are not cost-reflective for the impacted industrial customers and that the proposed solution of billing on a net basis would better reflect their actual impact on the system. A Workgroup Member raised concerns about the necessity and practicality of the proposed calculations, suggesting that the current setup might already address the issue adequately.

Legal Text Update

The NESO representative delivered an update on the legal text, elaborating on the proposed amendments to section 14.30.3 to charge BMUs on a net basis. The NESO representative introduced new terms to support this modification and provided examples to clarify how the new terms and proposed changes would be implemented in practice, including scenarios involving multiple demand BMUs.

Terms of Reference Discussion

The Terms of Reference were presented in Workgroup 1 and a Workgroup Member proposed adding a comparison of how similar setups are handled at the distribution level to ensure consistency and identify any anomalies. After review the Workgroup agreed that this is reflected in the TOR.

The NESO Representative, suggested including a reference to competition within the Terms of Reference, highlighting the importance of promoting competition within the industry. It was noted, however, a Workgroup Member clarified that the modification impacts customers and not competition between suppliers and Generators.

There were no new Terms of Reference put forward, and the Workgroup Members agreed to the existing Terms of Reference agreed by the CUSC Panel.

Discussion on Workgroup Consultation Questions

The Workgroup Members debated the relevance of the question, "Do you believe this modification will create a collocated benefit that could create a barrier to entry for other generators?" A Workgroup Member suggested replacing it with, "Do you agree that the modification results in more cost reflective charging of BSUoS for customers who do not use the Total System by virtue of their connection agreement?

The second question, "Do you believe this modification creates a benefit for the entire industry that outweighs the collocated benefit to the trading unit?" was also debated. A

Workgroup Member suggested that the focus should be on cost reflectivity rather than benefits. Another Workgroup Member suggested that the two concepts are not mutually exclusive and that the question should remain to ensure due diligence.

A Workgroup Member was concerned that the change proposed could create a new collocated benefit to a small group of customers. This benefit to some, at the expense of other customers, may not be to the benefit of the majority. However, one Workgroup Member believed the obligation on NESO to have cost reflective changing was more important and It was not for the Workgroup to consider what the impact was on other customers.

The Workgroup Members decided to include the concerns and discussions in the Work group considerations section of the document, reflecting both perspectives.

The NESO Representative raised concerns about the ambiguity in the definition of "Trading Units" and the potential for creating an incentive if the definition was not well-defined. A Workgroup member advised trading units consist of 6 classes:

- Class 1-3 Generators will always be collocated demand and production within the same site.
- Class 4 Trading Units are not transmission connected; they are embedded generation.
- Class 5 Trading Units are interconnector and not relevant regarding the proposal.
- Class 6 Trading Units are units that don't meet the definition 1-5, these Production and or Consumption BM Units that are included within Trading Unit Class 6 might use the system as a consequence they should be the process is managed through BSCP31. As only BSUoS charges are applied to final demand this needs to be considered, class 6 sites might not be suitable to include because they use the wider network, meaning that they are using the wider network and their current costs are cost reflective based on use.

Workgroup Consultation question: Do you agree that this modification has no impact on competition in generation?

What is the solution?

Proposer's Original solution

Where a demand BMU forms part of a transmission connected Trading Unit, BSUoS will be billed on a net basis, i.e. when the site is importing it will pay BSUoS, but when it is exporting it will not.

BSUoS cannot aggregate charges to a trading unit level. BSUoS is charged at a BMU level and specifically to the registrant of each BMU. Therefore, the net BSUoS charge will be allocated to each BMU based on their portion of total final demand for each half hourly settlement period.

Scenario 1: One final demand BMU. Registrant of that BMU will receive total BSUoS charge based on net final demand.

Scenario 2: One Generator producing 100mw. Two final demand BMUs. BMU A consumes 100mw and BMU B consumes 50mw.

As per legal text, BSUoS charge is calculated as (chargeable volume / total final demand) * BMU final demand.

BMU A will pay BSUoS on (50/150)*100 or 33.3mw

BMU B will pay BSUoS on (50/150)*50 or 16.6mw

Both BMUs have the same registrant so the registrant will receive the BSUoS charges for each BMU.

Scenario 3: As above but the final demand registrants are different entities. Each entity will receive a BSUoS charge based on their individual demand.

Workgroup Consultation question: Do you believe there is a risk that implementing this modification will create an incentive that others could use to reduce BSUoS (and therefore impose more BSUoS on a smaller group of payees)?

Workgroup Consultation question: How to better define who is eligible for this functionality. Do you prefer

a. Any trading unit defined as a class 1-3 or a class 6 trading unit.

or

b. Any trading unit that shares the same connection point?

Draft legal text

The draft legal text for this change can be found in **Annex 3**.

Workgroup Consultation question: Do you agree that the modification results in more cost reflective charging of BSUoS for customers who do not use the Total System by virtue of their connection agreement?

What is the impact of this change?

This change will improve the cost reflectivity of BSUoS charges by not charging points of connection where their net flows at that point are not contributing to system balancing costs. Their impact on the system of these sites is already recognised by the way energy imbalance charges are calculated under the BSC.

By the few impacted sites paying less BSUoS, other customers will pay more. However, we believe the impact is minimal as many of the customers at these sites are EIIs and therefore face either no, or lower, BSUoS costs. However, for some industrial customers these can still be material, so it would be in the interests of industrial policy not to charge them for costs that they are not driving.

The Proposer notes that there may be similar issues for Final Demand where it is collocated with generation at a Grid Supply Point (GSP) but registered into the Supplier Volume Allocation (SVA)system. However, Supplier BMUs at GSPs are usually made up of multiple points of connection across a Distribution Network Operator DNO network. Each individual meter therefore does have an impact on balancing costs across the network as a whole. This modification is only seeking to remove BSUoS from sites where the meter is importing directly next to a generation meter, so it is not impacting the operation of the system.

Implementation should not be difficult as these sites used to be charged on a net basis. However, Ofgem's BSUoS Task Force took the view that the netting at all GSPs was incorrect as the DNO connected customers being netted off against generation at the Suppliers' BMUs was not cost reflective. The reality is those customers and generation are spread over the DNOs. As NESO balances for the whole system, with customers on the DNO networks taking, for example, reactive power, reserve and response, all bought by NESO, this is a different "use of system" than those customers who are part of Trading Units, when the Trading Unit is exporting.

Proposer's assessment against CUSC Charging Objectives	
Relevant Objective	**Identified impact**
(d) 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;	Positive This modification would improve competition by correctly charging balancing costs to the parties responsible.
(e) 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 C11 requirements of a connect and manage connection);	Positive The system charging methodology works on the basis that charges should be cost reflective. This modification would improve cost reflectivity.
(f) 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 and the ISOP business*;	Positive It will not benefit the total system if these customers choose to rewire their sites, making no difference to their system impact, but adding costs to British business.
(g) Compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency **; and	Neutral n/a
(h) Promoting efficiency in the implementation and administration of the system charging methodology.	Positive The improved cost reflectivity improves efficiency.

** See Electricity System Operator Licence*

***The Electricity Regulation referred to in objective (g) is Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity (recast) as it has effect immediately before IP completion day as read with the modifications set out in the SI 2020/1006.*

Proposer's assessment of the impact of the modification on the stakeholder / consumer benefit categories	
Stakeholder / consumer benefit categories	**Identified impact**
Improved safety and reliability of the system	**Neutral** n/a
Lower bills than would otherwise be the case	**Positive** It will lower the bills of large industrial customers who are currently being charged for costs they are not driving.
Benefits for society as a whole	**Positive** It is to the benefit of UK plc (a collective term to describe British commercial organisations) that industrial customers are correctly charged for the costs they are causing and that industrial users are not paying more for power than they need to.
Reduced environmental damage	**Positive** It would be of benefit to the environment if these customers do not use additional resources rewiring their sites to make their impact on the system better reflected in their charges.
Improved quality of service	**Neutral** n/a

When will this change take place?

Implementation date

01 April 2026

Date decision required by

September 2025

Implementation approach

Changes to CUSC Section 14 and identification of impacted sites. As noted above, this is how these sites used to be charged, so once identified it should not be difficult to go back to this way of charging.

Interactions

Possible interaction with the BSC as it defines Trading Units.

How to respond

Standard Workgroup Consultation questions

1. Do you believe that the Original Proposal better facilitate the Applicable Objectives versus the current baseline?
2. Do you support the proposed implementation approach?
3. Do you have any other comments?
4. Do you wish to raise a Workgroup Consultation Alternative request for the Workgroup to consider?
5. Does the draft legal text satisfy the intent of the modification?
6. Do you agree with the Workgroup's assessment that the modification does not impact the European Electricity Balancing Regulation (EBR) Article 18 terms and conditions held within the Code?

Specific Workgroup Consultation questions

7. Do you agree that this modification has no impact on competition in generation?
8. Do you believe there is a risk that implementing this modification will create an incentive that others could use to reduce BSUoS (and therefore impose more BSUoS on a smaller group of payees)?
9. How to better define who is eligible for this functionality. Do you prefer:
    a. Any trading unit defined as a class 1-3 or a class 6 trading unit.
    OR
    b. Any trading unit that shares the same connection point?
10. Do you agree that the modification results in more cost reflective charging of BSUoS for customers who do not use the Total System by virtue of their connection agreement?

The Workgroup is seeking the views of CUSC Users and other interested parties in relation to the issues noted in this document and specifically in response to the questions above.

Please send your response to cusc.team@neso.energy using the response pro-forma which can be found on the CMP453 modification page.

In accordance with Governance Rules if you wish to raise a Workgroup Consultation Alternative Request please fill in the form which you can find at the above link.

If you wish to submit a confidential response, mark the relevant box on your consultation proforma. Confidential responses will be disclosed to the Authority in full but, unless agreed otherwise, will not be shared with the Panel, Workgroup or the industry and may therefore not influence the debate to the same extent as a non-confidential response.

Acronyms, key terms and reference material

Acronym / key term	Meaning
BSC	Balancing and Settlement Code
BSUoS	Balancing Services Use of System
BMU	Balancing Mechanism unit
CMP	CUSC Modification Proposal
CUSC	Connection and Use of System Code
DNO	Distribution Network Operator
EBR	Electricity Balancing Guideline
EII	Energy Intensive Industries
GSP	Grid Supply Point
MSA	Mandatory Services Agreements
STC	System Operator Transmission Owner Code
SCCL 1 to 4	Saltend Cogeneration Company Limited generation/demand units (SCCL 1 to 4)
SVA	Supplier Volume Allocation

SQSS	Security and Quality of Supply Standards
T&Cs	Terms and Conditions

Annexes

Annex	Information
Annex 01	CMP453 Proposal form
Annex 02	CMP453 Terms of Reference
Annex 03	CMP453 Legal Text
Annex 04	CMP435 Elexon Trading Units Table