

Final Modification Report

CMP425: Billing Demand Transmission Residual by Site

Overview: This modification is to provide clarity within the CUSC on how the residual demand charges should be divided between multiple Suppliers at one Connection Site.

Modification process & timetable

1	Proposal Form 24 October 2023
2	Workgroup Consultation 10 November 2023- 15 November 2023
3	Workgroup Report 22 November 2023
4	Code Administrator Consultation 24 November 2023 – 29 November 2023
5	Draft Final Modification Report 04 December 2023
6	Final Modification Report 06 December 2023
7	Implementation 01 April 2025 / as soon as practical

Have 5 minutes? Read our [Executive summary](#)

Have 30 minutes? Read the full [Final Modification Report](#)

Have 90 minutes? Read the full Final Modification Report and Annexes.

Status summary: This report has been submitted to the Authority for them to decide whether this change should happen.

Panel Recommendation: The Panel recommended unanimously that the Proposer's Original solution should be implemented.

This modification is expected to have a: High Impact to parties on demand sites with TO connection(s) that may wish to have separate Suppliers at the same site. **Low impact** on ESO's billing.

Governance route Urgent modification to proceed under a timetable agreed by the Authority (with an Authority decision).

Who can I talk to about the change?

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Executive summary

Transmission connected demand sites with multiple users wish to choose their own Suppliers without being penalised and discriminated against by the CUSC charging arrangements.

The change is required so that customers are charged in line with the Authority's [Targeted Charging Review \(TCR\)](#) principles of fairness, practicality, and transparency.

The Authority approved that this proposal be treated as [Urgent](#). As a result, it is progressing at pace and there will be a period shorter than normal for industry consultation.

What is the issue?

The CUSC does not specify how residual charges should be applied in circumstances where a single Connection Site has more than one Supplier across multiple BMUs associated with it.

Without clarification, there is the risk that in this situation, where there are different Suppliers for each of the BMUs, the current ESO billing system would charge customers the demand residual as if each BMU were a Connection Site rather than charging the Connection Site as a whole, as was the intent of the Authority's Targeted Charging Review.

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

Proposer's solution: To amend 14.17.13 of the CUSC, and other minor consequential amendments.

Implementation date: 01 April 2025, or as soon as practical.

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

No alternative solutions have been raised.

Workgroup conclusions: The Workgroup concluded unanimously that the Original better facilitated the Applicable Objectives than the Baseline.

Panel recommendation: The Panel recommended unanimously that the Proposer's Original solution should be implemented.

What is the impact if this change is made?

This modification is expected to have a high impact to parties on demand connection sites which are connected to the GB transmission system that may wish to have separate Suppliers and a low impact on ESO's billing.

Interactions

This modification has no interaction with other live modifications.

However, there are a number of other TCR related issues being discussed within the Distribution Connection Use of System Agreement (including [DCP328](#): Use of system

ESO

charging for private networks with competition in supply and DCP388: Amendments to Facilitate Appropriate Residual Charging for Sites with a Mix of Final and Non-Final Demand).

What is the issue?

Section 14.17 of the Connection and Use of System Code (CUSC) states that Transmission Demand Residual charges are billed to the Lead Party of a Balancing Mechanism Unit (BMU) with Final Demand. Most Transmission Owner (TO) connected demand Connection Sites only have one Supplier, so are effectively charged residual charges per site.

However, also within Section 14 it describes how these charges are made to each TO Connection Site with Final Demand.

Additionally, the CUSC does not specify what should happen in circumstances where a single Connection Site (or customer on a site) has more than one BMU associated with it.

Without clarification, there is the risk that where there are multiple BMUs and/or different Suppliers for each of the BMUs at a site, the current ESO billing system would charge customers as if each BMU were a Connection Site rather than charging the Connection Site as a whole, as was the intent of the Targeted Charging Review (TCR).

For customers this incentivises them to have only one Supplier and one BMU, reducing competition in supply to the detriment of customers.

The Proposer's site will have 2 large customers connected at the same Connection Site who would currently pay 2 x TD4 residual band. If they shared a Supplier, they would only pay 1 x TD4 residual band. If they happened to be Distribution Network Operator (DNO) connected they would pay EHV4 residual band.

This means customers that are TO connected are charged more than DNO connected parties, despite using the same capacity, and are incentivised to have the same Supplier to keep costs down, limiting customer choice and competition in Supply.

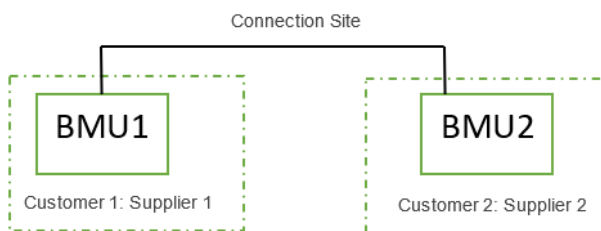


Figure 1. the desired Supplier set up for the Proposer.

If it were the case that Supplier 1 had registered two 2 BMUs both serving to Customer 1, and Supplier 2 only 1 BMU to Customer 2, then the 2 BMUs servicing one customer would be aggregated to ensure their proportion of site offtake is correctly measured.

Why change?

TO connected demand sites with multiple users wish to choose their own Suppliers without being penalised and discriminated against by the CUSC charging arrangements.

This change is required so that customers are charged in line with the Authority's Targeted Charging Review principles of fairness, practicality, and transparency.

The current arrangements have some further impacts, such as forcing the customers to compromise over the type of Supplier they must agree to. For example, one customer may want green energy, and another may not, but they are forced to compromise with their neighbours to keep their total cost of supply down. For large energy users such as Nissan and AESC UK this is a critical cost in maintaining their competitiveness in international markets.

For larger customers there is often a very limited choice of Suppliers due to few being willing to take on the risk of such large demand profiles. By allowing the parties to choose their own Suppliers this is likely to make it easier for each customer to find the right Supplier to meet their business needs.

Nissan and AESC UK do not believe that bandings are meant to distort competition in the manner identified, as historically most TO connected customers have been interrelated customers, such as industrial gases and chemicals, often located behind the meter of generation that provides secure supplies to critical UK manufacturers. However, for Nissan and AESC UK with their new connection, that will not be the case. In the longer term, new customers may locate on the site and may also want to be able to choose their own Suppliers to best meet their own business needs.

Further, the Proposer suspects, now that Energy Intensive Industries (EIIs) are no longer facing Final Consumption Levies (FCLs) and may benefit from transmission charges discounts, some of them may also now wish to seek third party supplies and have been discouraged by the transmission charging regime. This proposed rule change would therefore see them pay no more than their current proportion of transmission charges if they choose to move their demand into a Supplier BMU in their own right.

Were Nissan and AESC UK'S new site connection to be classed as an IDNO Nissan would be charged at EHV4 (as now), as would AESC UK, and in the longer term potentially other customers on the site. This would give an aggregate charge of c.£2.5m between Nissan and AESC UK. However, the Proposer agrees with the Authority that the [IDNO model](#) is not envisioned within the commercial and codes regimes covering the transmission system. So, at least for now, the sites will be on a private network and will therefore have non-standard BSC metering aggregated up into a number of Supplier BMUs.

Nissan and AESC UK note that the current charging regime does create a significant distortion in competition by charging DNO and TO connected sites with the same demand, residual charges that are materially different. Nissan and AESC UK's site operates 24/7 for all but 2 weeks in the year. The Proposer struggles to understand why they are charged such different amounts for use of the same transmission capacity based on either their point of connection or their choice of Suppliers. They believe the Authority should consider this issue further, though it is not part of this modification proposal.

This change will have no impact on the total revenue ESO collects on behalf of the TOs, as each “site” will remain paying the same total charges. A new site connecting will increase the charging base from which the residual is connected, thus on average reducing residual charges on other customers. Any effect on bandings will be at the start of the new price control period.

What is the solution?

Proposer’s solution

The proposal is to alter section 14.17 Parties Liable for Demand Charges, and minor consequential amendments.

The Proposer’s initial solution was to amend 14.17.1 of the CUSC, however at the CUSC Panel on 27 October 2023, the Panel provided feedback to the Proposer that the proposed change would be better reflected within 14.17.13. The Proposer took this feedback and subsequently amended their proposed legal text ahead of being submitted to the Authority as part of the request for urgency. Both Proposal forms can be found in Annex 1.

Workgroup considerations

The Workgroup convened four times to discuss the issue, detail the scope of the proposed defect, devise potential solutions, and assess the proposal in terms of the Applicable Code Objectives.

Transmission Charging Review (TCR) and CMP425 Scoping

The Workgroup discussed the link with the [Targeted Charging Review \(TCR\)](#), published by the Authority in November 2021; where the Authority directed the ESO to bring forward modification proposals around Residual Charges and confirmed that Transmission Demand Residual (TDR) charges should be levied on a ‘per site’ basis. The subsequent TDR modifications were implemented into the CUSC on 1 April 2023¹.

The Workgroup noted that the Distribution Connection and Use of System Agreement (DCUSA) DCP328 – ‘Use of system charges for private networks with competition in supply’ modification, which sought to address a similar issue in the context of distribution network charges, took 5 years to progress and was [rejected by the Authority](#) due to too many complex issues trying to be addressed within one modification.

The Workgroup agreed that, whilst CMP425 looks to address a loosely similar issue, the difference between the modifications is that CMP425 is around providing clarity rather than a fundamental change. To this end and given the timeline and commercial considerations of the Proposer, CMP425 has been granted Urgency status by the Authority.

Connection Point versus Connection Site

Initially the Proposer’s solution referred to where a connection point has more than one Supplier BMU. Through Workgroup discussion it was agreed to be changed to

¹ See ‘Reference Material’ for the suite of the Transmission Demand Residual modifications.

‘Connection Site’ as this is an existing defined term² within the CUSC and better represented the Proposer’s intent.

In the discussions the Workgroup also noted that some TO connected sites have more than one point of connection, often for security reasons given the nature of their demand.

Capacity Usage versus Consumption

The Proposer was clear that the intent of the modification was to promote competition and that the demand residual charges should be split proportionally based on the consumption data supplied via the Balancing Settlement Code (BSC). However, the solution initially referred to dividing between the relevant Supplier BMUs in proportion to their capacity usage.

A Workgroup member explained that the TDR bands are set by consumption at site level and therefore for a consistent approach using the consumption at BMU(s) level was a logical approach to calculate the ratio of charges. It was agreed that the solution for CMP425 should be based on consumption rather than capacity.

The Workgroup noted that to allocate the demand residual charge of the overall band to a site, the idea of proportioning by volume is a pragmatic approach but this would need to be an annual exercise to proportion the Connection Site demand residual charge according to the BMU(s) consumption.

Codifying the Proportionality of Consumption

Some Workgroup members suggested that the method of splitting the proportionality of the demand residual charge should be through contracting between the Supplier and relevant parties; and that this had commonality with Bilateral Contract Agreements (BCAs) and not doing so would remove the flexibility for customers.

However, the Proposer disagreed, stating that the proportionality should be based on consumption data as the likelihood of Suppliers openly sharing data with their Users was slim. Where Suppliers are willing to share data, the Proposer suggested other commercial arrangements could be made separate to the charging by the ESO. This modification has arisen from where two customers on the same Connection Site want different types of supply deals and therefore want very clear rules on how the connection will work and how they will each be billed the demand residual charge.

The Proposer also noted that at the current time the ESO does not bill parties who are the BCA holder for these types of demand charges. The ESO bill for connection charges, but not charges related to use of the TO networks. It may therefore be more difficult, costly and take more time to implement such arrangements. Further, where the BCA is held by a third party, such as a private network owner, those parties may seek credit from the

² “each location more particularly described in the relevant Bilateral Agreement at which a User’s Equipment and Transmission Connection Assets required to connect that User to the National Electricity Transmission System are situated (or, in the case of OTSDUW Build, each location that will become such from the Page 17 of 87 v1.90 – 1 April 2023 OTSUA Transfer Time and, until the OTSUA Transfer Time, is the location where the User’s Equipment connects to the OTSUA). If two or more Users own or operate Plant and Apparatus which is connected at any particular location that location shall constitute two (or the appropriate number of) Connection Sites;”

customers for those charges before the ESO rebill them to the customers. This may therefore add cost and complexity for the customers.

ESO Views

The ESO representative provided the Workgroup with an explanation on the current processes in relation to TDR charges.

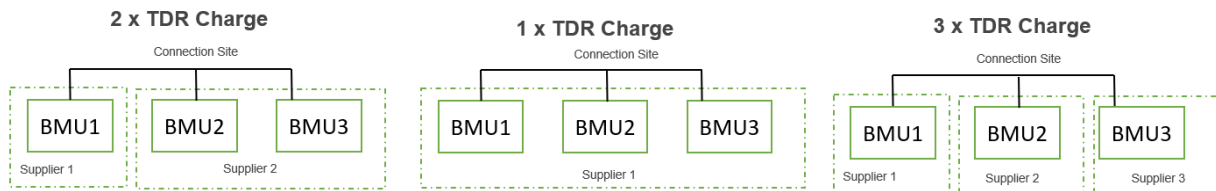


Figure 2. Examples of different TDR Charges

The ESO representative explained that, where there are multiple BMUs behind one “Connection Site” there is one charge, with the TDR being billed to each individual Supplier.

They stated that introducing multiple Suppliers at the same site introduces practical issues with how the charge is levied, with no existing sites doing this, and the ESO’s billing system for transmission charges (which includes the demand residual charge) only set up to operate as shown in the middle diagram above.

Any change to this would, in the short term need to be a manual workaround by the ESO and longer-term be a system change by the ESO. However, the ESO questioned if doing this would set any precedent or wider implications. The ESO representative confirmed there is currently no example of this, but asked whether the Workgroup should consider this encouraging larger private networks forming to reduce TDR payments. Workgroup members considered the issues but did not believe this was a risk, nothing that this the risk exists with the current system either through single Supplier private networks or behind the meter connections and had already been considered as part of the TCR.

Residual Banding and Allocation of charges

The ESO Representative discussed the process for changing the residual banding for a Transmission Connected Site, which will sit in one of four TDR bands. An existing Connection Site is allocated to its band based on average consumption and will remain in the same band for the duration of the price control period, unless there is a change of more than 50% to average consumption at this site.

In this situation the evidence for this should come from the Supplier or relevant site as detailed in 14.15.163 (2) so that the banding can be updated by the ESO. The Workgroup discussed that a situation where a 50% change in demand for the whole site occurs is unlikely to happen very often. The Workgroup noted the obligations under Operating Code 2 of the Grid Code for Suppliers to update the ESO on demand forecast for TO connected sites.

For new Connection Site banding will be based initially on forecast values, and in September of each year ESO carry out a review of all new Connection Sites that at that point have a full 12 months of consumption data to review the banding. For this one-off review the 50% threshold will not apply for any changes, and after that it will be treated as an existing Connection Site.

The allocation of charges between multiple Suppliers at a Connection Site is also proposed to be based on consumption data, but will differ from the banding process in that the split is updated every year. For BMUs without 12 months of consumption data available, the consumption will be estimated.

The ESO Representative proposed that this should take place in September using the previous 12 months of data. This offers the following benefits:

- Process aligns to New Site Review (while this is a different process it is logical to carry out at the same time as both assess consumption data for the previous 12 months to make updates to forecast TDR charges);
- It is completed ahead of the draft TNUoS publication for the following year; and
- Provides greater certainty of costs to customers ahead of time.

The ESO Representative discussed the following examples with the Workgroup to explain the differences between how the ESO billing system is currently set up and how this would change were the CMP425 solution implemented:

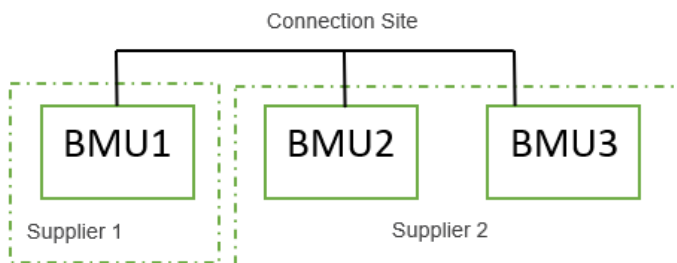
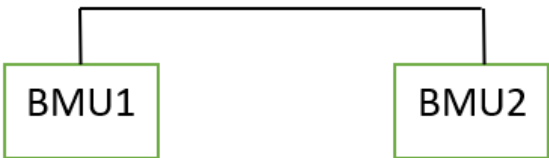


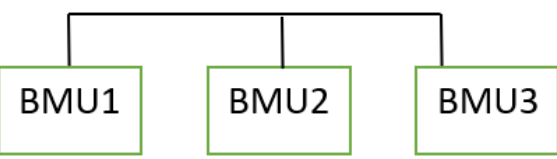
Figure 3. Example of allocation of charges

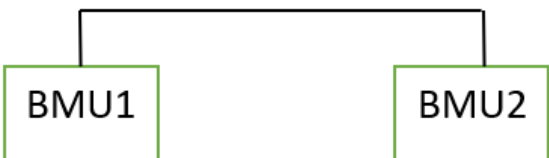
- Without any manual workaround, the current billing system would effectively split the above example into two “sites”.
 - 1 Charge per Supplier
 - Consumption at BMU1 sets TDR band for Supplier 1 and BMU2 + BMU3 sets the band for Supplier 2
 - BMU2 and BMU3 are grouped together into one charge because they have the same Supplier, meaning there are two charges at the one site. If each BMU had a different Supplier there would be three charges
- CMP425 implementation would ensure that the TDR band would be set on consumption of BMU1 + BMU2 + BMU3 and then split the charge proportionally on the consumption for each Supplier.

The following worked examples are calculated using the TDR bands charges:

Band	Threshold (kWh/MWh or kVA)		Site Count	Final TDR Charge (£/site/Day)
	Lower	Upper		
T-Demand1	-	<= 33,548	29	402.04
T-Demand2	> 33,548	<= 73,936	19	1,678.27
T-Demand3	> 73,936	<= 189,873	13	4,551.00
T-Demand4	> 189,873	∞	5	11,722.40

<p>Connection Site</p> 		<p>Worked example 1: BMU1 = 100,000MWh BMU2 = 100,000MWh</p>
<p>Current setup Billing system:</p> <ul style="list-style-type: none"> If BMU1 and BMU2 have the same Supplier: <ul style="list-style-type: none"> Band is TD4 charge = £11,722.40 If they have separate Suppliers: <ul style="list-style-type: none"> Band is TD3 charge = £4,551.00 Total = £9,102.00 	<p>Billing system post CMP425 implementation:</p> <ul style="list-style-type: none"> Connection Site Band is TD4 = £11,722.00 <ul style="list-style-type: none"> Each BMU charge = £5,861 <p>In theory could reduce charge by getting an additional Connection Agreement if configuration of site allowed them to do this to move down to TD3 charges.</p> <p>Alternatively, a separately connected BMU in the TD4 category could connect to this network to reduce their TDR charge.</p>	

<p>Connection Site</p> 		<p>Worked example 2: 3 BMUs all 100,000MWh</p>
<p>Current setup Billing system:</p> <ul style="list-style-type: none"> If all BMUs have the same Supplier: <ul style="list-style-type: none"> Band is TD4 and charge = £11,722.40 If each BMU has a different Supplier <ul style="list-style-type: none"> There are 3 different charges, each in band TD3 Total = £13,653 If BMU1 has a Supplier 1 and BMU2 and BMU3 have Supplier 2 <ul style="list-style-type: none"> Results in two charges (BMU2 and BMU3 both have the same supplier so combined in one charge) BMU1 charge (Band TD3) = £4,551 BMU2 and BMU3 charge (Band TD4) = £11,722 Total = £16,273 	<p>Billing post CMP425 implementation:</p> <ul style="list-style-type: none"> Connection Site Band is TD4 = £11,722.00 <ul style="list-style-type: none"> Each BMU charge = £3,907.33 	

<p>Connection Site</p> 		<p>Worked example 3: BMU1 = 25,000MWh BMU2 = 75,000MWh</p>
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<p>Current setup Billing system:</p> <ul style="list-style-type: none"> • BMU1 and BMU2 have the same Supplier: <ul style="list-style-type: none"> ○ Band is TD3 charge = £4,551.00 • If BMU1 and BMU2 have separate Suppliers: <ul style="list-style-type: none"> ○ BMU1 charge (Band TD1) = £402.04 ○ BMU2 charge (Band TD3) = £4,551.00 ○ Total = £4,953.04 	<p>Billing post CMP425 implementation:</p> <ul style="list-style-type: none"> • Connection site Band is TD3 = £4,551.00 <ul style="list-style-type: none"> ○ BMU1 charge = £1,137.75 (25%) ○ BMU2 charge = £3,413.25 (75%)
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ESO Billing System Impacts and Potential Workarounds

The ESO Representative confirmed that the ESO receives meter data associated with BMUs from the Balancing Settlement Code (BSC). Where BMUs at a Connection Site have different Suppliers, these could be flagged (manually or otherwise) to have the TDR shared across them.

The data believed to be required for the CMP425 solution such as which BMUs are assigned to which site (data held originating from Connection Agreements), and consumption data; is available from Elexon which provides it to the ESO. Due to this availability the builds to the ESO's billing system will be around functionality (inclusive of the ability to add/remove BMUs from a site if required) and therefore a lower impact than having to source the data from scratch.

The cost of any change to the ESO billing system and the time required to implement the required changes for CMP425 is estimated to be in the region of £125,000 and would be in place for 01 April 2025.

Registering New BMUs

The Workgroup considered how the process would work where a customer that is on a site where there is either currently one Supplier or it is "behind the meter" on a generation site and they decided to use this rule change to choose a different Supplier. The Workgroup noted that, having accepted an offer from a Supplier, the incoming Supplier would need to establish the customer's demand as a new BMU under the BSC processes.

As part of this process, the ESO would be informed of the new BMU and would therefore identify that the site now needed to have its residual charge split between one or more User. As the BSC processes are well established, the Workgroup agreed no further changes were required to the registration process (under either the CUSC or the BSC) to make this modification work.

Complex Sites

The letter granting CMP425 Urgency commented that the extent of the impact of this modification at the proposal stage was uncertain, particularly for complex sites³

Within the Workgroup it was confirmed that complex sites should be considered as sites that do not sit within one category, for example, a factory with a battery would be considered a complex site as battery demand would not contribute towards their TDR band.

³ Complex sites were examined in detail as part of the implementation of the Target Charging Review – see Reference material.

The Proposer stated that by this definition the majority of TO connected sites could be classed as complex as there will be variations of categories on sites, therefore the modification offers the ability to have more options when tendering for Suppliers.

Workgroup Consultation Summary

The Workgroup held their Workgroup Consultation between 10 November 2023 – 15 November 2023 and received 7 non confidential responses. The full responses and a summary of the responses can be found in Annex 5.

- All respondents supported the implementation approach.
- All respondents felt that the solution better facilitated at least one of the Applicable CUSC Objectives (ACO).
 - All 7 felt that the modification provided for better compliance with the use of system charging methodology resulting in charges (ACO b).
 - 6 felt that the modification provided for better compliance with the use of system charging methodology facilitates effective competition in the generation and supply of electricity (ACO a).
 - 6 felt that the modification provided for better efficiency in the implementation and administration of the system charging methodology (ACO e).
 - 3 felt that the modification provided for better use of system charging methodology properly taking account of the developments in transmission businesses (ACO c).
- The respondent who did not feel that ACO a was better facilitated by the modification raised concerns around Supplier's ability to provide quotes for Connection Sites and suggested amends to the 14.17.13 legal text.
- 3 respondents had no preference in implementation date; 2 respondents preferred an implementation date ASAP, and 2 respondents preferred an implementation date of 01 April 2025.
- 6 respondents considered themselves impacted by the modification, and the other respondent felt that some of their members would be.
- 1 respondent suggested additional legal text within the Residual Charging Bands section.
- No alternatives were raised.

The Workgroup discussed the Workgroup Consultation responses and updated the 14.17.13 legal text to reflect that a Connection Site does not itself have any Suppliers and to provide clarity on the fact that it would be the ESO who would be dividing the Residual charges, between the Suppliers, at a relevant site.

One respondent raised concerns around Suppliers' ability to provide quotes for Connection Sites when they would not know the residual split. This was discussed by the Workgroup, the majority of whom considered that these types of customers have network charges as a pass through by Suppliers, so this was unlikely to require the legal text amendments suggested by the respondent, so no amendments were made to the legal text.

The Workgroup discussed the additional proposed text to 14.15.158(c) which would have cross-referenced, in the section dedicated to the Residual charging arrangements, the proposed arrangements as set out at 14.17.13. However, this suggestion was not included as the majority agreed that the cross referencing, whilst well intended and having precedent within the CUSC, was not in line with The Authority direction for code rationalisation and simplification.

Implementation Date

The Proposer requires a decision on CMP425 in the coming weeks to support strategic commercial decisions⁴, but the practical implementation of the solution into the CUSC is not required until April 2025. Workgroup members suggested that an earlier implementation could be considered by the Authority in case there are other customers who are already in this situation and would therefore benefit from choosing a Supplier before the Proposer, a similar sentiment was echoed by the Workgroup Consultation responses.

Additional Stakeholder Engagement

To raise CMP425, the Authority agreed that Nissan Motor Manufacturing (UK) Limited (NMUK) and AESC (UK) were materially affected parties⁵. As it is likely that most parties impacted by this modification are similarly not Schedule 1 CUSC Users, additional efforts have been made by the Proposer and the Code Administrator to proactively engage with Suppliers, large user representatives, trade bodies, customer representatives, other parties identified by the group and were grateful to the Authority for highlighting to their Large User Group to ensure that the consultation stages are as effective as possible.

Legal text

The full draft legal text for this change can be found in Annex 4, below is the main change to Section 14.

Supplier BM Unit

14.17.13 A Supplier BM Unit charges will be the sum of its energy, demand locational, Transmission Demand Residual and embedded export liabilities where:

- The Chargeable Demand Locational Capacity will be the average of the Supplier BM Unit's half-hourly metered gross demand during the Triad (and the £/kW tariff), *and*
- The Chargeable Embedded Export Capacity will be the average of the Supplier BM Unit's half-hourly metered embedded export during the Triad (and the £/kW tariff), *and*
- The Chargeable Energy Capacity will be the Supplier BM Unit's non half-hourly metered energy consumption over the period 16:00 hrs to 19:00 hrs inclusive every day over the **Financial Year** (and the p/kWh tariff).

⁴ Hence the need for urgency as is this is an imminent issue.

⁵ Defined in the CUSC as "any person or class of persons designated by the Authority as such, in relation to the Charging Methodologies".

- The **Transmission Demand Residual** charge for **Final Demand Sites** will be the sum of the number of sites per **Charging Band** as served by that **Supplier BM Unit** multiplied by the number of days the sites were served by that **Supplier BM Unit** and multiplied by the applicable **Transmission Demand Residual Tariff** £/site/day as determined in 14.15.141. **Where a Connection Site is served by more than one Supplier BM Unit, the charges will be divided by The Company, annually, between the relevant Supplier BM Units in proportion to their annual Consumption from the previous year, and**
- The **Transmission Demand Residual** charge for **Unmetered Supplies** will be the sum of the forecast monthly volume of **Unmetered Supplies** per **Charging Band** as served by that **Supplier BM Unit** multiplied by the applicable **UMS Tariff** (p/kWh) as determined in 14.15.141.

What is the impact of this change?

Proposer's assessment against Code Objectives

Proposer's assessment against CUSC Charging Objectives	
Relevant Objective	Identified impact
(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;	Positive By changing the way demand charges are levied customers will be no worse off by choosing their own Suppliers. This will therefore add to supply competition for customers that are TO connected. It may also make it easier for them to get a good supply deal as they can then be specific to the customer type and also smaller, as getting quotes for very large demand sites is, in our experience, quite difficult.
(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);	Positive The initial intent of the residual charging arrangement was that each site paid for its capacity. This will ensure the site still pays, but that charge can be divided by multiple Suppliers.
(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;	Positive Given the changing nature of the transmission system users, it would appear to be of benefit to the TOs if more demand were to locate on the transmission system. Addressing this defect may help with that development in the longer term.
(d) Compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency *; and	Neutral
(e) Promoting efficiency in the implementation and administration of the system charging methodology.	Positive The charging methodology will be improved by not distorting competition,

	though we appreciate that there may be systems changes required by ESO.
**The Electricity Regulation referred to in objective (d) 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.	

Workgroup vote

The Workgroup met on 21 November 2023 to carry out their Workgroup vote. The full Workgroup vote can be found in Annex 6. The table below provides a summary of the Workgroup members view on the best option to implement this change.

The Applicable CUSC (charging) Objectives are:

CUSC charging objectives

- 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;
- 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 *; and
- e) To promote efficiency in the implementation and administration of the system charging methodology

*The Electricity Regulation referred to in objective (d) 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.

The Workgroup concluded unanimously that the Original better facilitated the Applicable Objectives than the Baseline.

Option	Number of voters that voted this option as better than the Baseline
Original	6

Workgroup Member	Company	Industry Sector	Best Option?	Which objective(s) does the change better facilitate?
Lisa Waters	Waters Wye Associates acting for Nissan Motor Manufacturing UK	Demand	Original	A, B, C and E
Martin Cahill	ESO	System Operator	Original	E
Grace March	Sembcorp Energy	Supplier	Original	A and B
Edda Dirks	SSE Generation	Generator	Original	B, C and E
Nick Booth	Nick Booth Ltd acting for Envision AESC	Demand	Original	A, B, C and E
Paul Jones	Uniper	Generator	Original	A and E

Code Administrator Consultation Summary

The Code Administrator Consultation was issued on the 24 November 2023 closed on 29 November 2023 and received five non confidential responses and one confidential response. A summary of the responses can be found in Annex 8 and the full responses can be found in Annex 9.

Panel considerations on Implementation Date

Ahead of the Panel conducting their recommendation vote on CMP425, the Panel sought further clarity on the proposed implementation date for CMP425, taking into consideration the responses received to the Code Administrator Consultation.

During panel, there was a discussion regarding materially affected parties and a potential provider that believes this is a current issue. The ESO have confirmed that they have checked the billing information and associated data and believe that the site has been billed in line with the CUSC i.e. on a single site basis. Evidence for this has been passed to Ofgem, it cannot be shared within the Final Modification Report as it contains commercially sensitive data. It is believed that this is an issue between the provider and supplier that is being explored further.

There was further discussion at Panel about if there are materially affected parties, if CMP425 was implemented ASAP how it would affect charges. The ESO confirmed that charges would only impact affected sites. At this point in time, this would mean if a site decided to have multiple suppliers.

The ESO confirmed that there are no sites currently with multiple BMUs and multiple Suppliers. The ESO also confirmed that if the modification were approved for implementation for April 2024, then it could be implemented via a manual workaround to the system. If the implementation is approved for April 2025, it can be implemented via a wider system update.

ESO

The ESO stated that there are some concerns about potential unintended consequences for Private Networks reducing their TDR costs. Given the urgent timescales there has not been the time or resource to investigate fully. Therefore, the ESO would suggest an implementation of April 2025 to allow for a system update (compared to a manual work around), to allow for further time to investigate the consequences, and that this would be appropriate given that there has been no evidence of materially impacted sites provided.

Panel Recommendation vote

The Panel met on the 06 December 2023 to carry out their recommendation vote.

They assessed whether a change should be made to the CUSC by assessing the proposed change and any alternatives against the Applicable Objectives.

Vote 1: Does the Original facilitate the objectives better than the Baseline?

Panel Member: **Andrew Enzor**

	Better facilitates AO (a)?	Better facilitates AO (b)?	Better facilitates AO (c)?	Better facilitates AO (d)?	Better facilitates AO (e)?	Overall (Y/N)
Original	Yes	Yes	Yes	Neutral	Yes	Yes
Voting Statement						
<p>This modification will ensure that sites with multiple suppliers face the same charge as they would face with a single supplier. This removes a barrier to competition in supply for such sites so better facilitates ACO(a). It will also ensure similar sites are charged in the same way, better facilitating ACO(b). Such sites are likely to become more common as we see multiple demand users co-locating to maximise use of grid connections, hence the modification better facilitates ACO(c). The additional clarity introduced better facilitates ACO(e).</p> <p>I note that NGESO considers there are currently no sites impacted by the defect identified in the modification, with the Nissan/AESC site yet to connect. One code administrator consultation response contradicts this, highlighting that there is at least one site currently being charged multiple TDRs. This is a material consideration for implementation of the modification. If there were no sites impacted, I would support implementation on 1 April 2024, to ensure that any future sites are not impacted. April 2025 is an appropriate date for the Nissan/AESC site, but may not be for others which connect and/or change their supply arrangements in the meantime. If sites are impacted now, implementation from 1 April 2023 may be appropriate. While this appears to be retrospective implementation, the core of the modification is clarification of the arrangements which should have applied from 1 April 2023 so may be justified.</p>						

Panel Member: **Andy Pace**

	Better facilitates AO (a)?	Better facilitates AO (b)?	Better facilitates AO (c)?	Better facilitates AO (d)?	Better facilitates AO (e)?	Overall (Y/N)
Original	Yes	Neutral	Yes	Neutral	Neutral	Yes

Voting Statement

CMP425 clarifies how the application of the fixed charge for transmission connected sites should be applied. Where the connection is a private network and there are multiple sites embedded within the private network the current rules are not clear whether the TNUoS residual fixed charge should be applied by connection site or by BMU. CMP425 proposes that the application of the fixed charge should be by connection site and then split between BMUs based on the relative consumption of each BMU. This removes a barrier for sites embedded in a private network from procuring a third party supplier which would necessitate their volume being allocated to a different BMU. We therefore assess this modification as better meeting relevant objective (a) by facilitating effective competition in the generation and supply of electricity and relevant objective (c) by properly taking account of the developments in transmission licensees’ transmission businesses as this mod results in one fixed charge per connection site which aligns with the principles of the TCR.

Panel Member: **Claire Huxley**

	Better facilitates AO (a)?	Better facilitates AO (b)?	Better facilitates AO (c)?	Better facilitates AO (d)?	Better facilitates AO (e)?	Overall (Y/N)
Original	Neutral	Neutral	Neutral	Neutral	Yes	Yes

Voting Statement

ESO have some concerns about the precedent of CMP425 encouraging the formation of other larger private networks that could allow connected demand sites to avoid site-by-site TDR charges. Hence we would prefer an implementation date of 2025 to allow us to work through these concerns, raise any follow-on modifications if necessary and provide enough time for a system update compared to manual workaround that would be required if implemented in 2024. However, we support the Original on the basis of the proposer’s specific site and situation, also recognising the urgent status of this modification. We have voted positive against Objective E as this modification will provide clarity in how to charge for the scenario raised, while the concerns raised about wider future impact are why we have taken a neutral position against other applicable objectives.

Panel Member: **Mark Duffield**

	Better facilitates AO (a)?	Better facilitates AO (b)?	Better facilitates AO (c)?	Better facilitates AO (d)?	Better facilitates AO (e)?	Overall (Y/N)
Original	Yes	Neutral	Neutral	Neutral	Yes	Yes

Voting Statement

By clarifying the transmission demand residual charging arrangements to remove the potential anomaly of double charging where multiple suppliers are connected at a single site this amendment proposal, if implemented, would facilitate effective competition in supply. Similarly, by removing the potential anomaly, efficiency in the implementation and efficiency in the administration of the charging methodology is also positively supported.

Panel Member: **Joe Colebrook**

	Better facilitates AO (a)?	Better facilitates AO (b)?	Better facilitates AO (c)?	Better facilitates AO (d)?	Better facilitates AO (e)?	Overall (Y/N)
Original	Yes	Yes	Yes	Neutral	Yes	Yes
Voting Statement						
I believe this modification is clarifying existing understanding of the CUSC and therefore should be approved. The implementation date should be as soon as reasonably practical, noting the concerns of the Electricity System Operator (ESO) and the impact on a small number of customers.						

Panel Member: Joe Dunn

	Better facilitates AO (a)?	Better facilitates AO (b)?	Better facilitates AO (c)?	Better facilitates AO (d)?	Better facilitates AO (e)?	Overall (Y/N)
Original	Yes	Yes	Yes	Neutral	Yes	Yes
Voting Statement						
I agree with the proposer's assessment of the proposal against each of the ACOs: re ACO (a) - Yes. The ability to choose one's own suppliers will improve competition re ACO (b) - Yes. Charges across multiple suppliers will be more cost reflective re ACO (c) - Yes. Incentive towards more demand locating on the T network will help future planning re ACO (d) - Neutral. No change re ACO (e) - Yes. improvement removes potential distortion.						

Panel Member: Kyran Hanks

	Better facilitates AO (a)?	Better facilitates AO (b)?	Better facilitates AO (c)?	Better facilitates AO (d)?	Better facilitates AO (e)?	Overall (Y/N)
Original	Yes	Yes	Yes	Neutral	Yes	Yes
Voting Statement						
It is evident from the TCR that charges are meant to be per site. This proposal achieves that and hence it implements the intent of the TCR. By making it easier to have multiple suppliers, it facilitates competition. By avoiding double charging, it better reflects the costs of the transmission system. The point about different charges for use of the same capacity is well made.						

Panel Member: Paul Jones

	Better facilitates AO (a)?	Better facilitates AO (b)?	Better facilitates AO (c)?	Better facilitates AO (d)?	Better facilitates AO (e)?	Overall (Y/N)
Original	Yes	Neutral	Neutral	Neutral	Yes	Yes
Voting Statement						
This clarifies what I believe the CUSC says already, in line with the Targeted Charging Review decision from Ofgem, which is that residual charges should be levied on each Final Demand Site. For transmission connected sites this is the Connection Site in the Bilateral Connection Agreement. CMP425 improves the efficient implementation of the arrangements by removing scope for misinterpreting the CUSC. In doing so, it helps						

promote competition in supply as the proposer was under the impression that competitive supply would result in double charging of the residual and it would be reasonable to assume that other customers might do so too.

Vote 2 – Which option is the best?

Panel Member	BEST Option?	Which objectives does this option better facilitate? (If baseline not applicable).
Andrew Enzor	Original	(a), (b), (c) & (e)
Andy Pace	Original	(a), (c)
Claire Huxley	Original	(e)
Mark Duffield	Original	(a), (e)
Joe Colebrook	Original	(a), (b), (c) & (e)
Joe Dunn	Original	(a), (b), (c) & (e)
Kyran Hanks	Original	(a), (b), (c) & (e)
Paul Jones	Original	(a), (e)

Panel conclusion

The Panel recommended unanimously that the Proposer's Original solution should be implemented.

When will this change take place?

Implementation date

01 April 2025, or as soon as practical.

Date decision required by

The potentially significant commercial impact on the Proposers means that a decision is needed in the coming weeks.

Implementation approach

The ESO have indicated that an automated billing system process could be implemented for April 2025 and that an implementation date before then would require a manual billing process to be put in place.

Interactions

- | | | | |
|---|---|--|--------------------------------|
| <input type="checkbox"/> Grid Code | <input type="checkbox"/> BSC | <input type="checkbox"/> STC | <input type="checkbox"/> SQSS |
| <input type="checkbox"/> European Network Codes | <input type="checkbox"/> EBR Article 18 T&Cs ⁶ | <input type="checkbox"/> Other modifications | <input type="checkbox"/> Other |

Note that the Proposer has confirmed with Elexon that this modification does not impact the BSC. Further, it is not expected that this modification affects any other codes.

⁶ If the modification has an impact on Article 18 T&Cs, it will need to follow the process set out in Article 18 of the Electricity Balancing Regulation (EBR – EU Regulation 2017/2195) – the main aspect of this is that the modification will need to be consulted on for 1 month in the Code Administrator Consultation phase. N.B. This will also satisfy the requirements of the NCER process.

The Workgroup discussed if CMP425 has any impacts on the Electricity Balancing Regulation (EBR) and agreed unanimously that this modification has no impacts.

Acronyms, key terms, and reference material

Acronym / key term	Meaning
BMU	Balancing Mechanism Unit
BSC	Balancing and Settlement Code
CMP	CUSC Modification Proposal
CUSC	Connection and Use of System Code
DNO	Distribution Network Operator
DSR	Demand Side Response
EBR	Electricity Balancing Regulation
EII	Energy Intensive Industries
ESO	Electricity System Operator
EV	Electric Vehicle
FCL	Final Consumption Levies
IDNO	Independent Distribution Network Operator
SQSS	Security and Quality of Supply Standards
STC	System Operator Transmission Owner Code
T&Cs	Terms and Conditions
TCR	Targeted Charging Review
TDR	Transmission Demand Residual
TO	Transmission Owner

Reference material

- [The Authority Decision on DCP328 – Use of system charges for private networks with competition in supply](#)
- [Transmission connected sites residual charging bands](#)
- [The Authority direction to ESO in relation to the Significant Code Review under the Targeted Charging Review](#)
- [Targeted Charging Review: Decision and Impact Assessment](#)
- [CMP335&CMP336: Transmission Demand Residual - Billing and consequential changes to CUSC Section 3 and 11 \(TCR\)' & CMP336 'Transmission Demand Residual - Billing and consequential changes to CUSC Section 14 \(TCR\)](#)
- [CMP343 and CMP340: 'Transmission Demand Residual bandings and allocation for 1 April 2022 implementation \(CMP343\)' and 'Consequential changes for CMP343 \(CMP340\)'](#)
- [CMP363 & CMP364: TNUoS Demand Residual charges for transmission connected sites with a mix of Final and non-Final Demand & Definition changes for CMP363](#)
- [CMP388: Transmission Demand Residual \(TDR\) Minor Clarifications](#)
- [CMP389: Transmission Demand Residual \(TDR\) band boundaries updates](#)

Annexes

Annex	Information
Annex 1	Proposal forms

Annex 2	Urgency letters
Annex 3	Terms of reference
Annex 4	Legal Text
Annex 5	Workgroup Consultation Responses and Summary
Annex 6	Workgroup Vote
Annex 7	Attendance and Action Log
Annex 8	Code Administrator consultation responses Summary
Annex 9	Code Administrator consultation responses