

Modification proposal:	Connection and Use of System Code (CUSC) CMP336: Transmission Demand Residual – Billing and consequential changes to CUSC Section 14 (TCR)		
Decision:	The Authority ¹ directs that this modification be made ²		
Target audience:	National Grid Electricity System Owner (NGESO), Parties to the CUSC, the CUSC Panel and other interested parties		
Date of publication:	10 March 2022	Implementation date:	1 April 2023

Background

In November 2019, we published our Decision (and associated Direction) on the Targeted Charging Review (TCR) Significant Code Review.³ Once the TCR Decision is implemented, the costs of operating, maintaining and upgrading the electricity grid will be spread more fairly and, through reducing harmful distortions, will save consumers approximately £300m per year, with anticipated £4bn-£5bn consumer savings in total over the period to 2040.

For the transmission network, the Transmission Owners (TO) recover their allowed revenue from their customers through transmission network use of system (TNUoS) tariffs. Under current arrangements, the forward-looking component of TNUoS charges is calculated first. The residual component is then calculated, so that the total charges recovered are equal to the allowed revenue for network companies set under the price controls.

¹ References to the "Authority", "Ofgem", "we" and "our" are used interchangeably in this document. The Authority refers to GEMA, the Gas and Electricity Markets Authority. The Office of Gas and Electricity Markets (Ofgem) supports GEMA in its day to day work. This decision is made by or on behalf of GEMA.

² This document is notice of the reasons for this decision as required by section 49A of the Electricity Act 1989.

³ <https://www.ofgem.gov.uk/publications/targeted-charging-review-decision-and-impact-assessment>

The transmission residual charges have historically been levied on both demand and generation, through the Transmission Demand Residual (TDR) and the Transmission Generation Residual (TGR) charges.⁴

The TCR included a review of how residual network charges are set and recovered. The aim of the TCR is to ensure that these charges are recovered from network users in a way that meets the TCR Principles:

- reducing harmful distortions;
- fairness; and
- proportionality and practical considerations.

We decided that residual charges should apply to final demand consumers and that residual charges will be fixed charges. For domestic consumers, we decided that there will be a single transmission residual charge, and a single distribution residual charge within each of the 14 distribution licensed areas. For distribution-connected non-domestic consumers, we decided that there will be a charging structure that combines a fixed transmission residual charge and a banded fixed distribution residual charge. For transmission-connected non-domestic consumers we directed that consideration should be given to whether a single transmission charging band or alternative banding options would be more appropriate.

Alongside our Decision, we issued a Direction to National Grid Electricity System Operator (NGESO) (the 'TCR Direction')⁵, to bring forward proposals to modify the Connection and Use of System Code (CUSC) in relation to residual charges, to give effect to the terms of the TCR Decision.

The TCR Direction included a number of components relevant to this proposal. This included [emphasis added]:

- directing NGESO to "*work and cooperate with the DNOs ... to give effect to the TCR Decision [...] to ensure that a consistent approach is taken to issues or matters common to both directions* [i.e. the CUSC Directions issued to NGESO and the DCUSA Direction issued to the DNOs] [...] *Issues or matters common to both*

⁴ Our TCR Decision directed that the TGR be removed from 2021/22. This was implemented by the approval of CMP317/327. [CMP317 & CMP327: Excluding assets required for connection and removing Transmission Generator Residual | Ofgem](#)

⁵ [CUSC Direction \(ofgem.gov.uk\)](#)

directions include, but are not limited to i) final demand; ii) single site; and iii) the review of charging bands.” (para 38)

- *“a process must be established to allocate ‘new’ consumers and consumers for whom the appropriate data is not available to the relevant charging band, based on an assessment of their agreed capacity or consumption, as applicable. The process shall make use of such information as is available to best estimate the expected usage of the consumer, for example, by taking an average of all of the data that is available, or based on an understanding from such sources as are considered appropriate of the typical profile of a similar consumer.” (para 25)*

In September 2020, we approved Distribution Connection and Use of System Agreement (DCUSA) Change Proposals (DCPs) 358 and 360. DCPs 358 and 360 were implemented to determine band boundaries and allocate users to bands for the purposes of distribution residual charges.⁶

The modification proposal

NGESO (‘the Proposer’) raised five CUSC modification proposals to implement TDR reforms in line with the TCR Direction.⁷ CMP343 proposes the methodology for TDR charges to be applied to ‘Final Demand’ on a ‘Site’ basis. We have published our final decision on CMP343 alongside this decision; CMP343 introduces four bands for TDR charges for transmission-connected consumers.⁸

CMP336 was raised by NGESO on 16 January 2020 and proposes to revise existing processes to account for the CMP343 methodology and create new processes to ensure ‘Sites’ are allocated to the correct charging band. The Proposer expects this modification to have a positive impact on Applicable CUSC Charging Objectives (ACOs) (a), (b), (c) and (e) as this proposal would ensure that the CUSC remains fit for purpose with the implementation of the Authority’s TCR decision.

CMP336 proposes to amend Section 14 for compatibility with the solution developed under CMP343. The Original Proposal proposes to:

⁶ <https://www.ofgem.gov.uk/publications/dcp358-determination-banding-boundaries-and-dcp360-allocation-bands-and-interventions>

⁷ CMPs 334, 335, 336, 340 and 343. See <https://www.nationalgrideso.com/industry-information/codes/connection-and-use-system-code-cusc/modifications>

⁸ For CMP343 decision letter, please see the Main document section on the Decision on CMP343 webpage.

- Allocate Final Demand Sites to bands based on the best available data from the following hierarchy:
 1. 24 months average consumption data, or
 2. if (1) is not available, an average of less than 24 months, or
 3. if (1) and (2) are not available, the most recent 12 months average consumption of all transmission connected Final Demand Sites. The Proposer’s view is that this step would only ever apply to newly connected transmission sites.
- Update CUSC Section 14.17.18 through to 14.17.37 covering Reconciliation of Demand Charges – new terms and explanations added.

Following review of the Workgroup Consultation responses, the Workgroup proposed two alternative proposals for CMP336, which were both related to the process for new transmission connection sites where no metered consumption data is available at the time of banding. The first Workgroup Alternative CUSC Modification (‘WACM1’) is the same as the Original proposal but would introduce an annual September review of consumption to confirm whether new transmission connected sites have been allocated to the correct band, and reallocate if required. The second (‘WACM2’) would introduce a “User self-reported expected annual consumption figure” for the purposes of allocating new sites to a band.

CUSC Panel⁹ recommendation

At the CUSC Panel meeting on 1 October 2020, the CUSC Panel (the Panel) unanimously considered that both the CMP336 Original Proposal and WACM1 would better facilitate the ACOs than the baseline. One Panel member considered that WACM2 would better facilitate the ACOs than the baseline. Of the eight votes, four considered the Original Proposal would be the best option and four considered WACM1 would be the best option.

Our decision

We have considered the issues raised by the modification proposal, both WACMs and the Final Modification Report (FMR) dated 6 October 2020. We have considered and taken into account the responses to the industry consultations on the modification proposal which are attached to the FMR.¹⁰ We have concluded that:

⁹ The CUSC Panel is established and constituted from time to time pursuant to and in accordance with section 8 of the CUSC.

¹⁰ CUSC modification proposals, modification reports and representations can be viewed on NGENSO’s website at: <https://www.nationalgrideso.com/industry-information/codes/connection-and-use-system-code-cusc/modifications>

- implementation of WACM1 will better facilitate the achievement of the applicable objectives of the CUSC;¹¹ and
- directing that WACM1 be made is consistent with our principal objective and statutory duties.¹²
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We have concluded that the implementation will be on 1 April 2023, in line with the reasoning included in our CMP343 decision.

Reasons for our decision

We consider that WACM1 will better facilitate ACOs (a) and (e) and has a neutral impact on the other ACOs.

(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

The majority of Panel members considered that the Original and WACM1 would better facilitate achievement of ACO (a). Only one Panel member believed that WACM2 would better facilitate this objective though did not explain why. The Panel generally highlighted that the Original and WACM1 proposals would better facilitate ACO (a) as they would implement the banding approach to applying the residual as directed by the Authority under the TCR. The majority of the Panel believed that WACM2 would be detrimental against ACO (a) as it relies on data provided by the consumer, which could result in consumers being incentivised to understate their consumption to benefit from lower TNUoS charges, therefore creating a distortion between users.

Our position

All of the proposals help facilitate our TCR reforms, by giving effect to elements of our TCR Direction, which is expected to have a positive impact on competition generally. Notwithstanding this, there are elements of each of the proposals which lead us to conclude that, on balance, WACM1 would better facilitate ACO (a), the Original Proposal and WACM2 would be neutral against this objective.

¹¹ As set out in Standard Condition C10(1) of the Electricity Transmission Licence, see: <https://epr.ofgem.gov.uk/Content/Documents/Electricity%20transmission%20full%20set%20of%20consolidated%20standard%20licence%20conditions%20-%20Current%20Version.pdf>

¹² The Authority's statutory duties are wider than matters which the Panel must take into consideration and are detailed mainly in the Electricity Act 1989 as amended.

For the Original Proposal and WACM1, we consider that the approach of allocating new consumers based on the average of all transmission-connected consumers has the potential to negatively impact competition by introducing a new distortion. Owing to the consumption patterns of transmission-connected consumers, a mean average of consumption would likely result in new consumers being allocated to transmission Band 3, which will not be representative of the consumption of all new connectees. Based on our CMP343 Decision IA, this would result in annual TDR charges of c.£878k, compared with c.£108k for the smallest 40% of consumers (Band 1) and c.£416k for the next smallest consumers (40-70th percentile by consumption).

We consider that this averaging approach could deter efficient use of the transmission network, particularly from small connectees who may be deterred from connecting by being allocated relatively high (Band 3) TDR charges. This potentially undermines one of the principal benefits of the CMP343 four-band approach, that of fairness. We consider that WACM1 would mitigate the potential effects of this approach by introducing an annual review, so that the higher charges would be temporary rather than enduring until the next price control.

WACM2 would adopt a different approach to new connectees by allowing consumers to self-report expected consumption. We agree with the Panel that WACM2 has the potential to introduce gaming from consumers' self-reported figures who may be incentivised to underreport likely consumption to benefit from a lower TDR charge. We consider this would introduce a potential harmful distortion and could undermine effective competition.

All of the options are different to that proposed for distribution banding. For sites with less than 24 months of consumption data, DCP360 introduced a minimum of 12 months of site consumption data or (for newer sites) banding based on a typical profile of a similar site. We consider such inconsistencies introduce a distortion between distribution and transmission.

Given the wide range in consumption patterns of transmission-connected consumers, we do not consider averaging across all transmission-connected consumers would "*make use of such information as is available to best estimate the expected usage of the consumer*" as required under the TCR Direction. As explained further below, in order to fully discharge the terms of the TCR Direction, we expect NGESO to raise a new modification proposal to improve this process and make the CUSC more consistent with the equivalent DCUSA approach.

The annual review approach, proposed under WACM1, is different to the approach at DCUSA, where no such annual review exists. However, we feel such a review is appropriate, not least because the averaging approach means that sites are likely to be allocated to the incorrect band in the first place (with only 15% of transmission-connected users in Band 3). We also note that there is a current DCUSA change proposal proposing an equivalent review process for distribution residual banding.¹³ For the avoidance of doubt, we would expect the annual review process to remain, regardless of the process used to determine the initial banding that is proposed in any follow-up modification proposal. Nothing in this letter in any way fetters our discretion with respect to our upcoming decision on DCP389 or any future modification proposal.

In summary, we note that all proposals give effect to elements of our TCR Decision, which, as a whole, will better facilitate effective competition. We consider that the averaging approach for new sites under the Original Proposal and WACM1 has the potential to deter efficient use of the network, while the WACM2 approach would introduce a gaming risk. WACM1 would introduce an annual review to help mitigate the impact of sites potentially being incorrectly allocated, and we consider is overall positive against ACO (a), notwithstanding that it may introduce a temporary distortion if users are initially allocated to the incorrect band. We consider this process could be improved by making a best estimate of likely consumption, as per the terms of the TCR Direction, rather than relying on the average consumption of a disparate group of consumers.

(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

The Panel unanimously agreed that both the Original and WACM1 proposals would better facilitate the achievements of ACO (b). The Panel emphasised that the Original and WACM1 options are consistent with the TCR Direction and therefore account for transmission licensee business developments. Only two Panel members believed that WACM2 would better facilitate ACO (b) with one believing that WACM2 would facilitate the implementation of the TCR Direction. In contrast, most Panel members believed that WACM2 would impact negatively against objective (b) as it would present a risk of error or gaming by introducing

¹³ DCP389: TCR – Clarification on Exceptional Circumstances and Allocation Review for ‘New’ Sites
<https://www.dcusa.co.uk/change/tcr-clarification-on-exceptional-circumstances-and-allocation-review-for-new-sites/>

a self-assessment of expected annual consumption figures, which could be understated in order to achieve reduced TNUoS charges.

Our position

Our view is that all the options are neutral against ACO (b). As stated in the TCR Decision, we believe that residual charges are cost recovery charges, and should not send cost-reflective signals to users. Consumers should not change their behaviour to avoid residual charges; any such signals should instead be sent by forward-looking charges.

(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

The majority of the Panel considered that the Original and WACM1 would have a positive impact on ACO (c) and that WACM2 would have a neutral impact on this objective. One Panel member felt that all of the options presented would be neutral against this objective and another believed WACM2 would be positive against this objective. Those Panel members that believed the Original and WACM1 to better facilitate this objective also cited these as compatible with the requirements of the TCR Direction.

Our position

We consider all of the options are neutral against ACO (c). All of the options give effect to elements of our TCR Decision, though (as discussed above) do not fully meet the requirements of our TCR Direction. There is also inconsistency with DCUSA in failing to make use of the best available data to allocate consumers with limited consumption data to charging bands. We note that all of the options are consistent with DCUSA with respect to the changes required for the reallocation of consumers to different charging bands.

(d) compliance with the Electricity Regulation and any relevant legally binding decisions of the European Commission and/or the Agency for the Cooperation of Energy Regulators

All Panel members considered CMP336 to be neutral against this objective.

Our position

We agree with the Panel that this proposal is neutral against this objective.

(e) to promote efficiency in the implementation and administration of the use of system charging methodology

The majority of Panel members agreed that the Original Proposal would better facilitate the achievement of ACO (e). The Panel members of this view highlighted that it would be the simplest and most efficient process. One Panel member also noted that the Original would not require a post-connection review for new sites, unlike WACM1 and WACM2 which would present additional complexity. Some Panel members considered WACM2 would be negative against this objective as it would introduce a risk of gaming.

Our position

We agree with the majority of Panel members that the Original Proposal would better facilitate ACO (e) by being simple to implement, without a review process. We consider the review step that would be introduced by WACM1 and WACM2 to be proportionate. Given the relatively low number of new transmission-connected consumers likely to connect in any given year, we consider WACM1 and WACM2 to also be positive against ACO (e).

New modification proposals

In order to fully discharge the terms of the TCR Direction, we expect NGESO to raise a new modification proposal to address our concerns regarding the data used to allocate sites with less than 12 months of consumption data to a charging band, and think such a proposal should be raised in a timely fashion to allow for implementation from April 2023.¹⁴ The proposal should “*make use of such information as is available to best estimate the expected usage of the consumer*” as specified in the TCR Direction, to help ensure the consistent treatment of new transmission-connected sites with those connected at distribution voltages.

We note that all of the CMP336 options contain a reference to paragraph 14.15.153 of the CUSC, which does not exist. Any new modifications should ensure that the legal text introduced under CMP336 WACM1 is amended to include references to correct sections of the CUSC. We also note that there may be benefits to improvements to the clarity of what is meant by latest data in the legal text.

In our CMP343 decision, we explain that we think it may be beneficial for NGESO to raise new modification proposal(s) to clarify the data to be used in setting band boundaries and allocating users to bands, as well as to examine the location of the band boundaries.

¹⁴ If we consider sufficient progress is not being made with regard to the further modification proposal, we will consider the measures available to us to ensure that the necessary changes are brought forward in time to ensure implementation is effective from 1 April 2023.

We expect NGESO to use its judgement as to whether any of these issues can be combined into fewer proposals while achieving the same outcome.

Decision notice

In accordance with Standard Condition C10 of the Transmission Licence, the Authority, hereby directs that WACM1 of modification proposal CMP336: *Transmission Demand Residual – Billing and consequential changes to CUSC Section 14 (TCR)* be made with an implementation date of 1 April 2023.

Andrew Malley

Head of Electricity Network Charging

Signed on behalf of the Authority and authorised for that purpose