CUSC Code Administrator Consultation

CMP343 & CMP340: Transmission Demand Residual Bandings and allocation (TCR)

Overview: CMP343 creates a methodology to determine (i) the charging Bands and (ii) the tariffs for each Band, in order to charge the Transmission Demand Residual (TDR). CMP340 develops the definitions required for CMP343.

Modification process & timetable

1. **Proposal form**
   - 13 May 2020
2. **Workgroup Consultation**
   - 10 July 2020 - 31 July 2020
3. **Workgroup Report**
   - 20 August 2020
4. **Code Administrator Consultation**
   - 1 September 2020 - 22 September 2020
5. **Draft Code Modification Report**
   - 23 September 2020
6. **Final Code Modification Report**
   - 6 October 2020
7. **Implementation**
   - 1 April 2022

Have 5 minutes? Read our Executive summary

Have 25 minutes? Read the full Code Administrator Consultation and Annexes

Have 60 minutes? Read the full Code Administrator Consultation and Annexes

Status summary: The Workgroup have finalised the proposer's solution for both CMP343 and CMP340 as well as 9 alternative solutions for CMP343 and 2 alternative solutions for CMP340. We are now consulting on this proposed change.

Impact	**CMP343 is expected to have a: high impact** National Grid ESO, Distribution Network Operators, Suppliers and Demand Users connected to the Transmission Network **CMP340 is expected to have a: low impact** All CUSC Users as this will amend Sections other than Section 14 for the purposes of CMP343.
Governance route	This modification has been assessed by a Workgroup and Ofgem will make the decision on whether it should be implemented.
Who can I talk to about the change?	**Proposer:** Eleanor Horn, National Grid ESO eleanor.horn@nationalgrideso.com 07966186088

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How do I respond?	Send your response proforma to cusc.team@nationalgrideso.com **by 5pm on 22 September 2020**

Executive Summary

CMP343 will deliver part of Ofgem's TCR direction[1] concerning the Transmission Demand Residual (TDR) by creating a methodology by which the residual element of demand Transmission Network Use of System (TNUoS) tariffs can be apportioned to Half Hourly (HH) and Non Half-Hourly (NHH) demand, and a separate methodology to determine the 'Bands' against which the residual element of demand TNUoS is levied. CMP340 will provide the definitions required for CMP343.

What is the issue?

Currently, network cost recovery incentivises inefficient actions and there are differences in treatment across transmission and distribution. The full rationale for this change can be found in Ofgem's TCR direction.

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

Proposers solution (CMP343): The ESO will determine and publish the Bands that apply at each voltage level. The ESO will create these by segregating transmission connected demand by consumption in accordance with the requisite percentiles.

Key aspects of this solution are set out in the following table:

The locational charge is floored at £0, in demand zones, where the locational demand TNUoS tariff[2] is negative	**A single charging Band to charge the TDR to transmission connected sites**	**A volumetric, p/kWh Residual charge for Unmetered Supply Final Demand Sites**	**Implementation date of 1 April 2022 (as directed by the Authority)**

Alternative solutions (CMP343): 9 Workgroup Alternative CUSC Modifications (WACMs) have been put forward by the Workgroup. WACMs 1 to 8 add the following variants to the Original solution:

- creating 2 or 4 transmission bands determined by percentiles of consumption rather than a single transmission band
- alternative options to flooring the locational charge at £0 in negative locational TNUoS charging zones. Note that these options only apply from 1 April 2022 to 31 March 2023.

[1] https://www.ofgem.gov.uk/publications-and-updates/targeted-charging-review-decision-and-impact-assessment

[2] £/kW for HH metered users based on consumption over triad or p/kWh for NHH metered users based on 4-7PM chargeable volume.

WACM9 creates 2 transmission bands by segregating transmission connected demand by voltage rather than consumption; otherwise it is the same as the CMP343 Proposer's Solution Proposal.

Proposers solution (CMP340): Alter and add defined terms to Section 11 as necessary for the development of CMP343 Original Proposal and WACMs 1-5.

Alternative solutions (CMP340): Two alternative solutions have been raised for CMP340 so as not to add redundant definitions to the CUSC.

- CMP340 WACM1 relates to the Section 11 defintions needed for CMP343 WACMs 6-8.
- CMP340 WACM2 relates to the Section 11 defintions needed for CMP343 WACM 9.

The CMP340 solution to be implemented is dependent on which CMP343 solution chosen is by the Authority.

Workgroup conclusions (CMP343):

The Workgroup concluded by majority that the Original, WACM1, WACM2, WACM3, WACM4, WACM5 and WACM9 better facilitated the CUSC Objectives than the Baseline. However, there was support for WACM6, WACM7 and WACM8.

Workgroup conclusions (CMP340):

The Workgroup concluded unanimously that the Original, WACM1 and WACM2 all better facilitated the CUSC Objectives than the Baseline.

Implementation date (CMP343 & CMP340): 1 April 2022.

What is the impact if this change is made?

(CMP343) This is a large-scale change that will require amendments and consequential changes to all Supplier and DNO processes.

(CMP340) Low impact to all CUSC parties as this to add/amend definitions in the code.

Interactions

CMP343 and CMP340 are two of five CUSC modifications which will change the way the Transmission Demand Residual (TDR) is calculated and charged as per Ofgem's TCR SCR Direction[3].

- CMP343 develops a methodology for the TDR to be applied only to 'Final Demand' consumers on a 'Site' basis, being a Final Demand Site.
- CMP340 provides the definitions required for CMP343, to areas in CUSC outside of Section 14.
- CMP334 defines "Final Demand" and "Single Site" and, as a consequence, what a "Final Demand Site" and what a "Non-Final Demand Site" is. DCUSA Change Proposal DCP359[4] looks to mirror what CMP334 is seeking to do, in the DCUSA.

[3] https://www.ofgem.gov.uk/publications-and-updates/targeted-charging-review-decision-and-impact-assessment

[4] https://www.dcusa.co.uk/wp-content/uploads/2020/01/DCP-359-Change-Proposal-Form-v1.0.pdf

The modifications have been run alongside each other to ensure consistency in the definitions.

- CMP335 and CMP336 update the post-tariff processes within CUSC.

The table below summarises which aspects of the TCR SCR Direction will be covered in each modification.

CUSC	**CMP343 & CMP340** Creates a methodology to determine (i) the charging Bands and (ii) the tariffs for each Band. Develops the definitions required for CMP343.	**CMP334** Identifies who will be liable to pay the TDR by defining 'Final Demand', Site', 'Final Demand Site' and 'Non-Final Demand Site'	**CMP335/CMP336** Updates all of the 'post tariff setting' processes (e.g. Band allocation, securitisation etc) to reflect the TDR methodology.	
DCUSA	**DCP358** Determines Banding boundaries	**DCP359** Determines which customers should pay	**DCP360** Allocates to Bands and interventions	**DCP361** Determines the calculation of charges
BSC	**P402** Establishes the processes and data flows to enable Elexon to collect aggregate data from DNOs, and subsequently provide the required data to NGESO.			

Contents

This document is the CMP343 & CMP340 **Code Administrator Consultation.** This document outlines;

We are seeking your views on the Workgroup's conclusions. The questions we are seeking your views on are embedded within the document and outlined in the **How to respond** section.

What is the issue?

What is the issue?

Currently, network cost recovery incentivises inefficient actions and there are differences in treatment across transmission and distribution. The full rationale for this change can be found in Ofgem's Targeted Charging Review Significant Code Review (TCR SCR) Decision.

What is the solution?

Differences between CMP343 and CMP332

CMP343 Original Solution is broadly the same as the CMP332 Original Solution with 2 key differences:

- Implementation Date will be 1 April 2022 rather than 1 April 2021; and
- Acting on feedback from respondents to the CMP332 Workgroup Consultation, ESO are now adopting a volumetric approach to UMS. Broadly ESO agree with the concerns from industry that including UMS sites in the LV no-MIC band could lead to gaming to avoid the Transmission Demand Residual charge.

Proposer's solution (CMP343)

In summary CMP343 will:

1. Create a new methodology for determining charging bands for TDR, based on the methodology in Ofgem's decision;
2. Create a new methodology to split TDR cost to these bands, based on Final Demand at Single Sites; and
3. Establish a process for a periodic review of the TDR methodology.

This modification has been directed by the Authority to deliver:

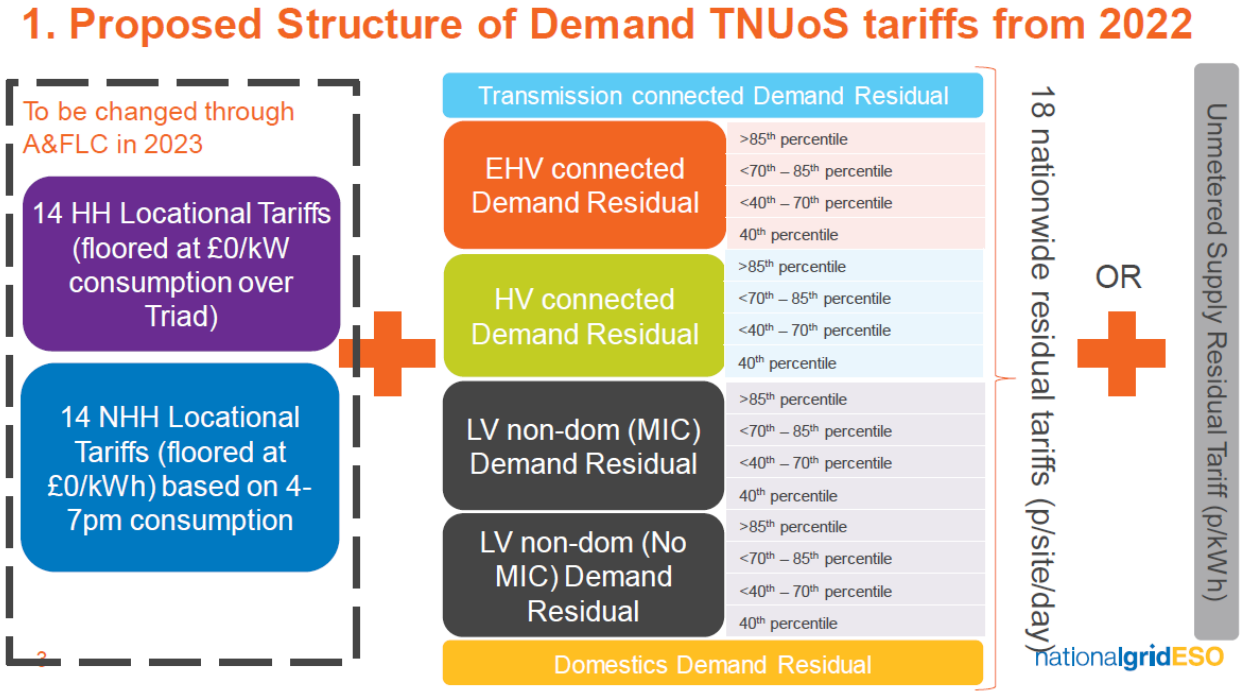
- A methodology to appropriately split residual recovery between HH and NHH demand, by voltage level, including the creation of a separate residual tariff for Unmetered Supply (UMS) volumes;
- The application of residual charges to Final Demand only, levied on a Single Site basis;
- Charging Bands, set at the 40th, 70th and 85th percentiles of either Maximum Import Capacity (MIC) or, where no MIC has been agreed between DNO and consumer, consumption values in kWh, for each of the following category of consumer:
    - LV-Connected Non-Domestic Demand Sites with a Maximum Import Capacity;
    - LV-Connected Non-Domestic Demand Sites without a Maximum Import Capacity; and
    - Separately, HV-Connected and EHV-Connected demand Sites (both with Maximum Import Capacities).

- A methodology to apportion the residual to each Band within each of these voltage-based categories, where the total value paid by demand in each Band is directly proportional to that Band's consumption as a percentage of total national (gross) consumption, such values to be recovered through specific residual Tariffs which must be the same for each demand Site within a Band;
- A residual charge, or a set of charges for Sites connected directly to the Transmission Network;
- A single residual charge for Domestic Sites;
- A single p/kWh residual tariff for Final Demand Unmetered Supplies; and
- A process to review the Bands and, separately, the finalisation of a residual charge Tariff structure, including a consideration of a pence per Site per day option.

National Grid ESO (NGESO), on receipt of total annual national gross consumption, split by Measurement Class, and the site aggregate MVA value of MICs agreed between consumers and DNOs, will determine and publish the Bands that apply at each voltage level, having calculated the Bands in accordance with the requisite percentiles.

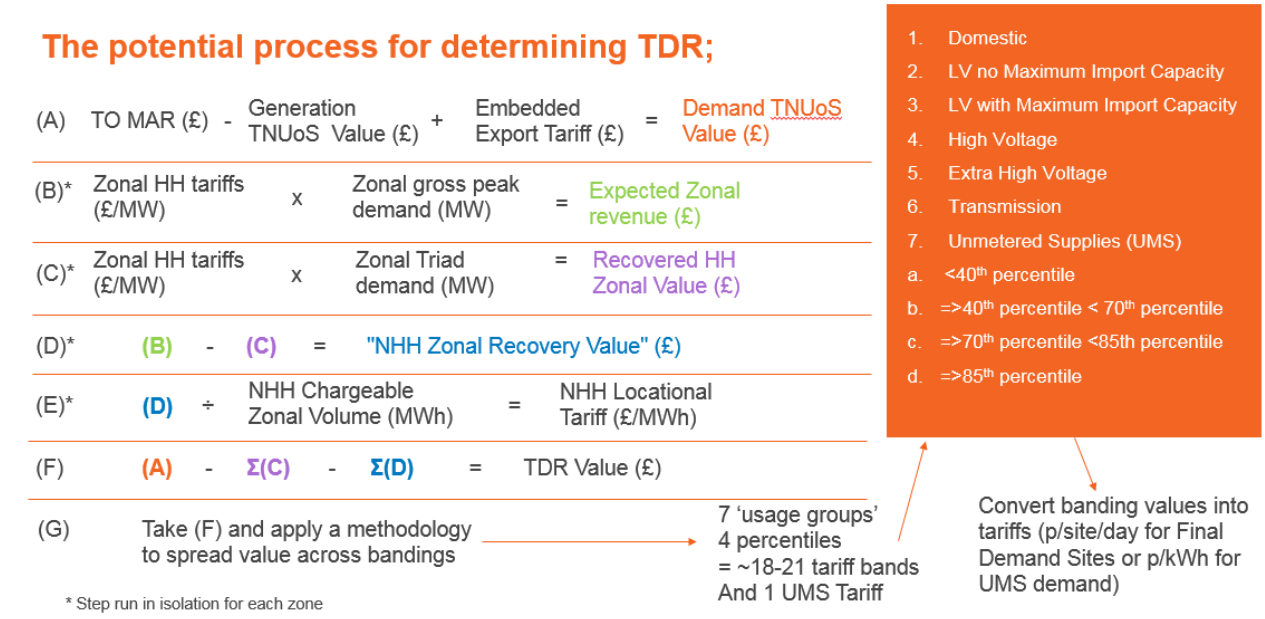
NGESO will have an obligation, following approval of DCP358 by the Authority, for it or its nominated Agent to determine and publish the Bands by 31 October 2020 in advance of the commencement of the Onshore Transmission Owner price control in April 2021. For subsequent Onshore Transmission Owner price controls this Band setting exercise will be repeated.

The following table summarises how the Charging Bands will be determined:



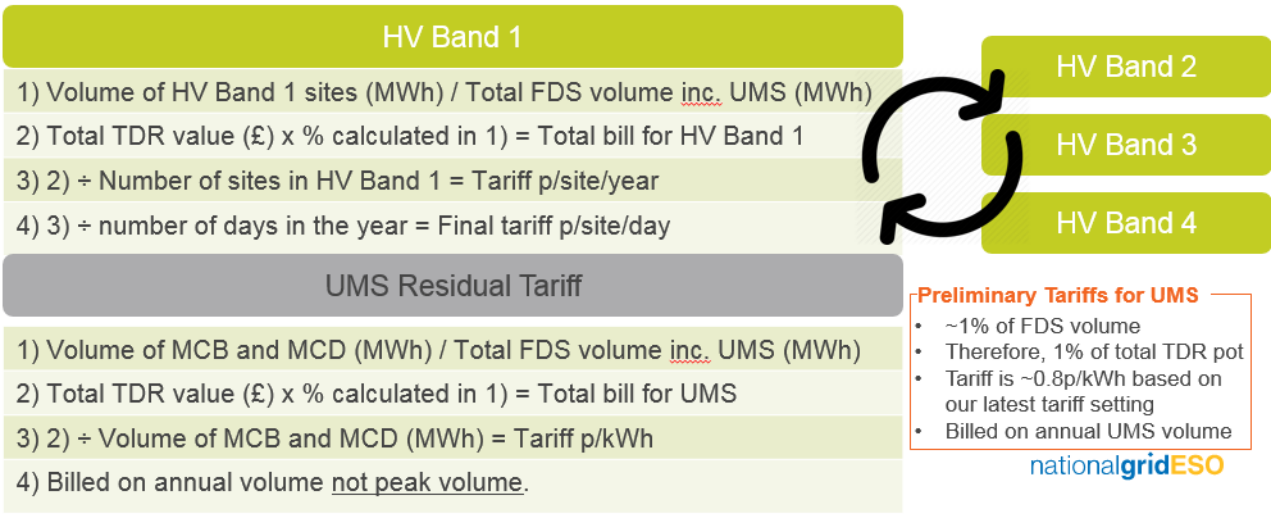
The following slide explains how the demand residual tariffs would be calculated once the charging Bands had been determined. This includes a new UMS Residual tariff:

How the total TNUoS Demand Residual (TDR) could be calculated



2. How will costs be split between the residual bands?

- Levy the locational components from Tariff & Transport model to NHH and HH volumes
- Identify the Total Amount remaining (including the Embedded Export Tariff)
- Determine the residual p/site/day for each of the 18 bands & UMS p/kWh tariff.



There will be a periodic review of the TDR methodology at the start of each new price control.

Proposer's solution (CMP340):

Amend the CUSC where necessary to support the Original Proposal and any Workgroup Alternative CUSC Modification Proposals as raised by the CMP343 Workgroup.

Workgroup Considerations

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

The CMP343 Workgroup took into account the previous work done for CMP332 and noted the changes between CMP332 and CMP343. A Workgroup Consultation was run for CMP332 between 6 and 27 February 2020. See Annex 5-7 for the CMP332 Workgroup Consultation, Summary and responses.

The CMP343/340 Workgroup held their Workgroup Consultation between 10 – 30 July 2020 and received 13 responses which included 1 confidential response. The full non-confidential responses and a summary of the responses can be found Annexes 13 and 14.

The main themes that came out of the consultation were:

- Support across a range of options; however, there is need to ensure consistency as much as possible across Transmission and Distribution;
- Respondents were broadly happy with the delayed implementation date; however, there were still some who felt 2022 was too early;
- The Workgroup were asked to consider whether Transmission connected sites can be charged/allocated based on allowed/agreed capacity or voltage rather than consumption.
- On the number of transmission bands:
    - The majority were supportive of having just 1 transmission band given the low numbers of transmission sites, as this avoids creating ‘cliff edges’ at the band boundaries and there is no risk of gaming;
    - There was some support for having 4 transmission bands, as this avoids distortive charges between small and large sites and delivers more cost reflective prices to sites connected at Transmission;
    - No respondent opted for 2 transmission bands; however, there was general agreement that 85% would be the most appropriate percentile split.
- On the treatment of zones that have a negative locational tariff:
    - There was majority support for flooring the locational tariff to £0/kW as this minimises the risk of incentive for demand sites to consumer more power at peak times;
    - There was some support for no flooring as this appears to be consistent with Ofgem’s Direction;
    - There was also some support for the £/site/day locational adjustment to negative locational charges, although others believed this was too complex to introduce for 1 Charging Year.
- There was support for charging UMS on a volumetric basis.

The below summarises the main aspects of the Proposer's solution that have been discussed in the CMP332, and CMP343/340 workgroups. This section details each aspect in term.

The locational charge is floored at £0, in demand zones, where the locational demand TNUoS tariff[5] is negative	**A single charging Band to charge the TDR to transmission connected sites**	**A volumetric, p/kWh Residual charge for Unmetered Supply Final Demand Sites**	**Implementation date of 1 April 2022 (as directed by the Authority)**

Treatment of zones that have a negative locational tariff

Option A) Floor the locational tariff to £0/kW[6] (Proposer's solution)

The Proposer continues to believe following discussions within the CMP332 workgroup that, pending the outcome of the Access and Forward-Looking Charges SCR, the existing floor of £0 on demand tariffs should be retained, such that in zones where the locational element of the tariff (or the new, solely locational demand tariff) is negative as an outcome of either the DC Load Flow Investment Cost Related Pricing DCLF ICRP model ("Transport model") or the above NHH allocative methodology, it is floored at £0 and demand users are not paid to import over peak periods, as is the case today.

The Workgroup considered the combined effect of the proposed demand residual changes and the existing negative locational charges and raised the following concerns:

- Maintaining negative demand locational changes, with the TCR SCR directed changes, will mean some users will be paid TNUoS for their use of the transmission system over TRIAD. This could create a perverse incentive for Demand Users to consume over these periods;
- This incentive could cause congestion at Distribution Network level in negatively charged zones, due to an increase in peak demand at lower voltages, as there is now an incentive to increase demand, rather than a signal to reduce demand at peak times.
- Increasing demand at times of peak system demand in zones with negative locational tariff could push up wholesale prices across Great Britain.
- Flooring the locational demand tariff at £0/kW would, based on the 2019/20 Charging Year, cause distributional effects of ~ £200m on the Residual value as 8 of the 14 demand zones (based on Charging Year 2020-21) have negative locational demand tariffs.
- Flooring the locational tariff at £0/kW would weaken the locational price signal by setting 8 zones to be the same and reducing cost-reflectivity.

[5] £/kW for HH metered users based on consumption over triad or p/kWh for NHH metered users based on 4-7PM chargeable volume.

[6] Intention is to floor the locational tariff at £0/kW only and not to floor (at £0/kW) the gross tariffs (locational + residual)

Noting that the ESO Original Proposal is to floor the locational demand tariff at £0/kW where the locational TNUoS demand tariff is negative, the CMP332 Workgroup had considered potential alternatives for other treatment of the negative demand locational charge. CMP343/340 Workgroup agreed that these options remain valid alternative solutions to consider. **However, these would be temporary solutions, which would be in place until the changes from the Access and Forward-Looking Charges SCR are implemented (2023).**

The 2 options are:

Option B) Not to floor the tariffs – EDF

Ofgem confirmed that they have not assumed flooring of the locational demand TNUoS tariffs at £0 in the modelling used to inform the TCR SCR Decision. Whilst there was no overwhelming support for this, some members of the Workgroup are concerned that the ESO's Original solution is not in line with the TCR SCR Decision and questioned whether Ofgem would approve this or alternatives to an Original solution that would interact with the ongoing AFLC SCR by removing the locational signal from 8 of the 14 demand tariff zones. Some Workgroup members suggested that a no flooring option would appear to comply with what was directed. Therefore, the Workgroup agreed that options should be put forward for this approach. See potential solutions 3-5 for more detail.

Option C) Introduce a £/site/day locational adjustment to negative locational charges, to mitigate the distributional impact of flooring the locational tariff to zero - Npower

In the treatment of negative locational charges, this seeks to introduce a £/site/day locational adjustment that aims to mitigate the distributional impact of flooring the locational tariff to zero so that there is no perverse incentive to consume more energy over peak periods.

To calculate the £ per zone adjustment, ESO would need to run the Tariff model twice, once with a floor of zero applied to the locational tariffs and then again without applying a floor to the locational tariffs, recording the revenue expected to be collected from each zone under both scenarios. See potential solutions 6-8 for more detail.

Transmission banding

Ofgem has given the Workgroup discretion to determine how to Band sites connected directly to the transmission network. Solutions that determine bands using consumption and voltage have been raised as alternative proposals. Solutions using capacity to determine bands were considered but not taken forwards – these are summarised in the table below.

One transmission Band (Proposer's solution)

The Original proposal is to charge the Transmission Demand Residual to Directly Connected Final Demand Sites through a single Charging Band. The Proposer shared some analysis which supported the proposal to have one charging Band for Transmission connected customers (as per paragraph 18 of the Direction - this is set out in Annex 8).

The Workgroup also considered Transmission banding, in respect of paragraph 35 of the Direction, which contains specific reference to Transmission banding options or exceptions

for very small Transmission connected final demand sites. The analysis produced by the ESO shows that the distribution of Transmission connected final demand sites by consumption has a long tail containing a small number of sites with very high annual consumption. This analysis encouraged the proposal of workgroup alternatives with either two Transmission bands (with the band boundary at the 85th percentile), or four Transmission Bands (with the band boundaries at the 40th, 70th and 85th percentiles, as used for the Distribution level).

Transmission Bands determined by consumption - Analysis

As part of the CMP332 Workgroup, the ESO identified what they believed to be Final Demand Sites and produced some analysis to show the comparison between having one, two or four transmission bands determined by consumption. The CMP343 Workgroup has updated this analysis following clarity on the definition for Final Demand Site as part of the CMP334 / DCP359 Workgroup discussions and has identified 4 additional sites that would be classed as Final Demand Sites. The analysis, which is set out in Annex 8, concludes that there is significant difference between Transmission Demand Residual Charges for each Transmission Band – given the materiality, this will encourage parties to dispute which band they sit within. This analysis is based on a number of assumptions (as set out in Annex 9).

Two transmission Bands determined by consumption - EDF

ESO developed a model to look at the effect on charges of having more than one transmission Band. There was a clear boundary line for creation of two Bands, which would mean there were no parties close to being in the lower Band. This was the 85th percentile of the Band, which fits in with the percentiles used in the TCR direction in the distribution Bandings. However, there was concern that those in the lower Band were still large consumers and would benefit from having the lower charge. Concerns were also raised in the Workgroup Consultation that two or four transmission bands create ‘cliff edges’ at the band boundaries and encourage customers to reconfigure their sites in order to benefit from cheaper Annual Tariffs.

Four transmission Bands determined by consumption - EDF

Four Bands were considered to avoid distortive charges between small and large sites and deliver more cost reflective prices to sites connected at Transmission. This is also consistent with the Banding approach for distribution connected sites.

EDF raised proposed solutions with variants of 2 and 4 transmission Bands. See table 1 for the proposed solutions raised by the Workgroup.

Two Transmission Bands determined by voltage – NGESO

All of the options presented in the CMP343 Workgroup Consultation had the number of Transmission bands determined in respect to percentiles of consumption. This is because a suitable proxy for capacity (MIC is used at Distribution) is not available for Transmission connected demand. One potential way of segregating transmission connected demand is by voltage rather than capacity or consumption. This alternative was therefore raised following the Workgroup Consultation.

In this alternative, Transmission connected Final Demand Sites are allocated into the below bands:

1. >132kV

2. <=132kV

There would be no further segregation (e.g. by percentiles) within a voltage level due the low numbers of sites that would occur in each band if this was to be applied. There would also be no additional voltage levels below 132kV (at this point) due to only 1 site having a connection (subject to the following point) at <132kV. This would require defining a new point from which this voltage is derived (i.e. the boundary between shared and sole use/User assets). Using the point of connection voltage is not suitable due to the effect of Transmission Connection Assets as illustrated in the Alternative Proposal form in Annex 11. Draft tariffs for this alternative can also be found in the Alternative Proposal (WACM9) in Annex 11.

This alternative also goes some way to protecting very small Transmission connected sites from high charges created by being banded with very large energy consumers. This proposal segments off sites connected at <=132kV from all other transmission connected sites. These sites on average consume a smaller annual volume of energy than the Transmission connected sites at higher voltages and separating them off into a different band could be seen to better align treatment between sites connected at 132kV across the whole of GB. However, the Workgroup also had concerns that there were relatively small energy consuming sites connected at >132kV which would not be adequately protected from unreasonably high charges under this solution.

The benefits and pitfalls of this solution are summarised below.

Benefits	Pitfalls
More equivalent treatment between 132kV transmission and 132kV distribution connected sites	May influence what voltage potential connectees wish to use.
Difficult to game without significant engineering works	Can be gamed with significant engineering works to change the connection design.
The TDR charge the band faces is directly proportional to the band's usage	The TDR charge a site pays doesn't directly reflect the site's usage of the network (and therefore less cost-reflective).
Simpler and more transparent charging methodology	Potential mismatch between where the 'Site' boundary is and where the voltage is taken
Difficult to dispute	Assumes sites within a voltage band are similar
More stable charges as not subject to re-banding	Impacts legacy sites whose connection voltage is a product of history

Transmission banding options determined by capacity (not taken forwards)

Option	NGESO (Proposer's) view	Workgroup view
Highest Half Hourly offtake	This has broadly the same strengths and problems as the annual consumption data item. It would however create an additional distortion between 'baseload' consumers and 'peaky' consumers	No further comment
Instantaneous MW offtake	This is not a commercial product like TEC/MIC and NGESO does not have confidence in the data given it has not gone through robust data validation processes like settlement data. This would also be more difficult for the customer to understand as they will not typically be familiar with the second by second meter reads rather working in Half Hourly intervals.	No further comment
Physical connection capacity	Using the physical connection capacity (CEC) for a site would severely disadvantage legacy sites who had a connection set up many years ago when the requirements of the site were different. This is not a commercial product like TEC/MIC and customers would not be able to easily change their CEC to suit their business needs. Additionally, the CEC values are stepped as they correlate to standard sizing of transformer equipment.	No further comment
Prospective capacity	When applying for a connection the customer requests an import capacity through their application. This can change as customer needs evolve but the ESO does not keep a record of these requests once the site is connected so this would not be a feasible data item to use for banding or existing sites.	No further comment
ELEXON's "demand capacity" value	This is a seasonal product that can vary with customer needs and there are easily accessible historical records. However, the capacity is self-reported (and therefore subject to commercial gaming' risk) and there are no penalties for exceeding your self-reported value.	No further comment

A volumetric, p/kWh Residual charge for Unmetered Supply Demand

Since the CMP332 Workgroup Consultation, the Proposer has updated the CMP343 Original proposal in terms of how UMS Final Demand Sites are charged. Previously the Original proposal was to charge UMS final demand sites using a £/site/day tariff – this was because Ofgem's direction was to make the residual charges unavoidable. However, it became apparent in the CMP332 Workgroup and consultation responses that because there is no specific meter to allocate for UMS, that this could enable owners to lump all of their volumes from different inventories into one inventory (e.g. A Council who had volumes for street lamps, CCTV etc) to avoid the residual charge. The CMP343 solution is a volumetric, p/kWh residual charge for UMS Final Demand Sites.

Alternative solutions

The below table shows the Workgroup Alternative CUSC Modifications that have been formally raised by the workgroup.

CMP343 Proposed Alternatives	Treatment of negative locational	Number of Transmission Bands - determined by	Proposer
Original	Floor at zero	1 - consumption	ESO
Alternative 1	Floor at zero	2 - consumption	EDF
Alternative 2	Floor at zero	4 - consumption	EDF
Alternative 3	No Flooring	1 - consumption	EDF
Alternative 4	No Flooring	2 - consumption	EDF
Alternative 5	No Flooring	4 - consumption	EDF
Alternative 6	Introduce a £/site/day locational adjustment to negative locational charges	1 - consumption	Npower
Alternative 7	Introduce a £/site/day locational adjustment to negative locational charges	2 - consumption	EDF
Alternative 8	Introduce a £/site/day locational adjustment to negative locational charges	4 - consumption	EDF
Alternative 9	Floor at zero	1 - voltage	ESO

For further details on the above solutions see the Workgroup Alternative Code Modification forms in Annex 11.

Legal text

CMP343:
The legal text for the original and all of the alternatives can be found in Annex 15.

CMP340:
The legal text for the original and all of the alternatives can be found in Annex 16.

What is the impact of this change?

Who will it impact?

This is a large-scale change that will require amendments and consequential changes to all Supplier and DNO processes. In particular, NGESO will require data input (likely via Elexon) for site level information of capacity and annual consumption and site counts per relevant Band or category. This will further need to be broken down by Grid Supply Point Group and Supplier to allow relevant billing processes to take place. There is a contingency between this CMP and the DCUSA/BSC changes – this CMP will create the charging methodology, but it cannot be practically implemented until the relevant non-CUSC changes are approved and the requisite data-gathering processes are completed.

What are the positive impacts?

Ofgem has established that there are consumer benefits to this change due to certain types of customers no longer being able to avoid the costs of residual transmission charges.

Workgroup vote

The Workgroup met on 12 August 2020 to carry out their Workgroup vote. 8 Workgroup Members voted, and the full Workgroup vote can be found in Annexes 17 (CMP343) and 18 (CMP340). The tables below provide:

- a summary of how many Workgroup members believed the Original and each of the nine WACMs were better than the Baseline; and
- a summary of the Workgroup members views on the best option to implement this change.

The applicable CUSC objectives are:

CUSC charging objectives (CMP343)

(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. These are defined within the National Grid Electricity Transmission plc Licence under Standard Condition C10, paragraph 1 *; and

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

CUSC non-charging objectives (CMP340)

(a) The efficient discharge by the Licensee of the obligations imposed on it by the Act and the Transmission Licence;

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

(c) Compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency *; and

(d) Promoting efficiency in the implementation and administration of the CUSC arrangements.

*Objective (c) refers specifically to European Regulation 2009/714/EC. Reference to the Agency is to the Agency for the Cooperation of Energy Regulators (ACER).

CMP343 - Assessment of the Original and WACM1 to WACM9 vs the Baseline (the current CUSC arrangements)

The Workgroup concluded by majority that the Original, WACM1, WACM2, WACM3, WACM4, WACM5 and WACM9 better facilitated the CUSC Objectives than the Baseline. However, there was support for WACM6, WACM7 and WACM8.

Proposed Solution	Of the 8 votes, how many said that this option was better than the Baseline
Original	**7**
WACM1	**7**
WACM2	**8**
WACM3	**5**
WACM4	**5**
WACM5	**5**
WACM6	**4**
WACM7	**3**
WACM8	**3**
WACM9	**7**

CMP343 Best Option

Workgroup Member	Company	BEST Option?	Which objective(s) does the change better facilitate? (if baseline not applicable)
Eleanor Horn	NGESO	**Original**	**a, b, c**
Karl Maryon	Haven Power Limited	**Original**	**a, b, c**
Garth Graham	SSE	**Original**	**a, b, c**
Simon Lord	Engie	**WACM2**	**a, b**
Simon Vicary	EDF Energy	**WACM5**	**a, b**
Robert Longden	Cornwall Insight	**Original**	**a, b**
Grace March	Sembcorp	**Original**	**a, b, c**
Lee Stone	E.ON	**WACM3**	**a, b, c**

Code Administrator Consultation question: Do you believe that the CMP343 Original solution, WACM1, WACM2, WACM3, WACM4, WACM5, WACM6, WACM7, WACM8 or WACM9 better facilitates the Applicable CUSC Charging Objectives?

CMP340 - Assessment of the Original, WACM1 and WACM2 vs the Baseline (the current CUSC arrangements)

The Workgroup concluded unanimously that the Original, WACM1 and WACM2 all better facilitated the CUSC Objectives than the Baseline.

Proposed Solution	Of the 8 votes, how many said that this option was better than the Baseline
Original	8
WACM1	8
WACM2	8

CMP340 Best Option

Workgroup Member	Company	BEST Option?	Which objective(s) does the change better facilitate? (if baseline not applicable)
Eleanor Horn	NGESO	**Original**	**a, b, d**
Karl Maryon	Haven Power Limited	**Original**	**a, d**
Garth Graham	SSE	**Original**	**a, b**
Simon Lord	Engie	**Original**	**a, b**
Simon Vicary	EDF Energy	**Original**	**a, b**
Robert Longden	Cornwall Insight	**Original**	**a, b**
Grace March	Sembcorp	**Original**	**a, d**
Lee Stone	E.ON	**Original**	**a, b, d**

Code Administrator Consultation question: Do you believe that the CMP340 Original solution, WACM1 or WACM2 better facilitates the Applicable CUSC Objectives?

When will this change take place?

The Authority has issued a modified Direction[7] to ESO to withdraw CMP332 and raise a new Proposal to give effect to the TCR Decision with an implementation date of 1 April 2022.

An Authority decision is needed as soon as is practicable to support the development of the substantial system and process changes at ESO and within Industry needed to implement the solution. The current timescales for the modification are to deliver the Final Modification Report to Ofgem on 6 October 2020. Until a decision is received from the Authority on the preferred solution there is still uncertainty about some of the finer points of the solution where alternatives may be raised. This uncertainty impacts on implementation planning capability. To minimise inefficient system and process change planning the ESO needs to receive a decision from the Authority on CMP343 by 30 November 2020.

Code Administrator Consultation question: Do you support the implementation approach for CMP343?

Code Administrator Consultation question: Do you support the implementation approach for CMP340?

[7] https://www.ofgem.gov.uk/publications-and-updates/consent-withdraw-cmp332-and-direction-raise-new-cusc-modification-proposal-new-transmission-demand-residual-charges-targeted-charging-review-tcr-1

How to respond

Code Administrator Consultation questions:

- Do you believe that the CMP340 Original solution, WACM1 or WACM2 better facilitates the Applicable CUSC Objectives?
- Do you support the implementation approach for CMP340?
- Do you have any further comments for CMP340?
- Do you believe that the CMP343 Original solution, WACM1, WACM2, WACM3, WACM4, WACM5, WACM6, WACM7, WACM8 or WACM9 better facilitates the Applicable CUSC Charging Objectives?
- Do you support the implementation approach for CMP343?
- Do you have any further comments for CMP343?

Views are invited on the proposals outlined in this consultation, which should be received by 5pm on 22 September 2020. Please email your formal response using the response pro-forma to cusc.team@nationalgrideso.com

If you wish to submit a confidential response, please note that information provided in response to this consultation will be published on National Grid ESO's website unless the response is clearly marked "Private & Confidential", we will contact you to establish the extent of the confidentiality. A response marked "Private & Confidential" will be disclosed to the Authority in full but, unless agreed otherwise, will not be shared with the CUSC Modifications Panel or the industry and may therefore not influence the debate to the same extent as a non-confidential response. Please note an automatic confidentiality disclaimer generated by your IT System will not in itself, mean that your response is treated as if it had been marked "Private and Confidential".

Acronyms, key terms and reference material

Acronym	Meaning
BSC	Balancing and Settlement Code
Baseline	The current methodology in code
CMP	CUSC Modification Proposal
CUSC	Connection and Use of System Code
DCLF ICRP model	Direct Current Load Flow Investment Cost Related Pricing Model – otherwise known as the Transport and Tariff model for calculating TNUoS tariffs.
DCP	Distribution Code Proposal
DCUSA	Distribution Connection and Use of System Agreement
DNO	Distribution Network Operator
EAC	Estimated Annual Consumption
EHV	Extra High Voltage
ESO	National Grid Electricity System Operator
EV	Electric Vehicle
FDS	Final Demand Site
HH	Half Hourly
HV	High Voltage
IDNO	Independent Distribution Network Operator

LLFC	Line Loss Factor Class
LV	Low Voltage
MCB	Measurement Class B
MCD	Measurement Class D
MIC	Maximum Import Capacity
MPAN	Meter Point Administration Number
MRA	Master Registration Agreement
NETSO	National Electricity Transmission System Operator
NHH	Non-Half Hourly
PID	ENA Targeted Charging Review Project Initiation document
SCR	Significant Code Review
TNUoS	Transmission Network Use of System
TCR	Targeted Charging Review
TDR	Transmission Demand Residual
UMS	Unmetered Supplies

Reference material:

1. Ofgem direction letter
2. Ofgem Targeted Charging Review decision
3. ENA Targeted Charging Review Project Initiation document
4. ENA Targeted Charging Review Updated Project Initiation document
5. Ofgem updated direction letter with implementation date April 2022

Annexes

Annex	Information
Annex 1	CMP343 Proposal Form
Annex 2	CMP340 Proposal Form
Annex 3	CMP343 Terms of Reference
Annex 4	CMP340 Terms of Reference
Annex 5	CMP332 Workgroup Consultation
Annex 6	CMP332 Workgroup Consultation Responses Summary
Annex 7	CMP332 Workgroup Consultation Responses
Annex 8	Updated Transmission Banding Analysis
Annex 9	Updated Transmission Banding Analysis - Assumptions
Annex 10	£ Per Site Locational Adjustment Analysis
Annex 11	CMP343 Workgroup Alternative Proposal Forms

Annex 12	CMP340 Workgroup Alternative Proposal Forms
Annex 13	CMP343 & CMP340 Workgroup Consultation Responses Summary
Annex 14	CMP343 & CMP340 Workgroup Consultation Responses
Annex 15	CMP340 Legal text
Annex 16	CMP343 Legal text
Annex 17	CMP343 Workgroup Vote
Annex 18	CMP340 Workgroup Vote