At what stage is this document **CUSC Modification Proposal Form** in the process? **Proposal Form** 01 CMP332: Workgroup 02 Consultation Transmission Demand Residual Workgroup Report 03 bandings and allocation (TCR) **Code Administrator** 04 Consultation Draft CUSC 05 Modification Report **Final CUSC** 06 Modification Report **Purpose of Modification:** The Authority has published a Direction requiring ESO to raise CUSC Modification Proposals to give effect to the TCR Decisions. This CUSC Modification Proposal will deliver their decision by creating a methodology by which the residual element of demand TNUoS 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.

The Proposer recommends that this modification should be:

- assessed by a Workgroup
- be treated as urgent and should proceed as such under a timetable agreed with the Authority

This modification was raised 12 December 2019 and will be presented by the Proposer to the Panel on 13 December 2019. The Panel will consider the Proposer's recommendation and determine the appropriate route.

High Impact: Suppliers and Demand Users connected to the Transmission Network

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| 10 Recommendations | 9 | 07787 261242 |
| Timetable The Code Administrator recommends the followi | National Grid ESO Representative: Grahame Neale | |
| updated at 1 st Workgroup) | | |
| Initial consideration by Workgroup | dd month year | grahame.neale@nati |
| Madification consultation issued to the industry | dd month year | onalgrideso.com |
| Workgroup Report presented to Repol | dd month year | 07787 261242 |
| Code Administration Consultation Report issued to the Industry | dd month year | |
| Draft Final Modification Report presented to Panel | dd month year | |
| Modification Panel decision | dd month year | |
| Final Modification Report issued the Authority | dd month year | |
| Decision implemented in CUSC | dd month year | |

Proposer Details

| Details of Proposer: (Organisation Name) | National Grid ESO | |
|---|---|--|
| Capacity in which the CUSC Modification Proposal is being proposed: (i.e. CUSC Party, BSC Party or "National Consumer Council") | CUSC Party | |
| Details of Proposer's Representative: | | |
| Name: | Grahame Neale | |
| Organisation: | National Grid ESO | |
| Telephone Number: | grahame.neal@nationalgrideso.com | |
| Email Address: | | |
| Details of Representative's Alternate: Name: Organisation: Telephone Number: Email Address: | Eleanor Horn National Grid ESO eleanor.horn@nationalgrideso.com | |
| Attachments (Yes/No): | | |
| If Yes, Title and No. of pages of each Attachment: | | |

Impact on Core Industry Documentation.

Please mark the relevant boxes with an "x" and provide any supporting information

| BSC | Х |
|-----------|---|
| Grid Code | |
| STC | |
| Other | х |

Г

For ESO to create residual demand charges under the new intended charging structures several data inputs will be required. The Proposer considers that for an efficient charging structure to be established across Distribution Network Operators (DNOs) and the ESO that a single source of information should be used. This will require changes to the Balancing and System Code (BSC)C, Master Registration Agreement (MRA) and Distribution Connection Use of System Agreement (DCUSA).

1 Summary

Defect

The Authority published, on 21 November 2019 a Direction to ESO to raise such modifications as are necessary to give effect to their Decision(s) under the Targeted Charging Review (TCR) SCR. This CUSC Modification Proposal (CMP) is concerned with the treatment of the residual element of Demand TNUoS. All references herein to 'residual' mean the residual element of Demand TNUoS unless otherwise specified. As per Paragraphs 13-16,18-23, 26-31, 33a and 34 of the Direction, and with due regard to Paragraphs 24, and 25 of the Direction, this CMP must deliver:

- A methodology to appropriately split residual recovery between HH and NHH demand, by voltage level, treating Unmetered Supply (UMS) volumes according to their Measurement Class; and
- The application of residual charges to Final Demand only (as defined in Paragraph 15 of the Direction), levied on a Site basis; and
- Charging Bands, set at the 40th, 70th and 85th percentiles of either Maximum Import Capacity or, where no Maximum Import Capacity has been agreed between DNO and consumer, consumption values in MWh, for each of the following category of consumer:
 - Low Voltage (LV) Connected Non-Domestic demand Sites with a Maximum Import Capacity, which shall be split into four bands; and
 - LV-Connected Non-Domestic demand Sites without a Maximum Import Capacity, which shall be split into four bands, treating NHH and HH as the same; and
 - Separately, High Voltage (HV) Connected and Extra High Voltage (EHV) Connected demand Sites (both with Maximum Import Capacities); and
- 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; and
- A residual charge, or a set of charges for Sites connected directly to the Transmission Network, and a single residual charge for Domestic Sites; and
- The finalisation of a residual charge Tariff structure, including a consideration of a pence per Site per day option.

No other Paragraph of the Direction will be addressed within this CMP. A separate modification proposal will be raised to address the definitions of Site, Final Demand, references to voltage as well as Domestic and Non-Domestic, and additional CMP(s) will be raised to deal with the Paragraphs of the Direction not covered by this CMP (for instance where commonality in process is required across Transmission and Distribution charging methodology application).

What

Part of the proposed solution is:

ESO, on receipt of total annual national gross consumption, split by Measurement Class, and the aggregate MVA value of Maximum Import Capacities 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.

The demand charging methodology as is:

- Takes the zonal HH locational tariff output of the DCLF ICRP model, and multiplies it by the zonal forecast gross volume (MW) at system peak, to derive a 'target' value of revenue to be recovered from the demand locational in each zone (for example, using the forecast 20/21 tariff information, zone 14 tariff of £3.97/kW multiplied by 2550MW would give a total expected locational recovery of £10.12m);
- 2. The total (national) value to be recovered from demand is the sum of the TOs' allowed revenues, minus the value determined in Paragraph 14.14.5(v), which is payable by generators, plus the cost of the Embedded Export Tariff;
- 3. The total value to be recovered as determined in step 2, minus the expected revenue recovered through the HH demand locational (the £10.12m in step 1, plus the other 13 locational expected recoveries calculated in the same way) is the residual, which is then divided by the national forecast gross volume (MW) at system peak to create the HH residual £/kW which is added to the DCLF ICRP output to create the HH Final Tariff. NHH tariffs are the total 'target' revenue (i.e. the £10.12m), minus the expected recovery over triad (i.e. the HH final tariff charged over triad demand), divided by the NHH MWh. No NHH residual is currently calculated. All demand tariffs are floored at £0

This methodology needs to change, such that steps 1 and 2 above remain unchanged, but step 3 becomes:

3a. The non-residual revenue recovered from HH demand is the zonal triad demand multiplied by the zonal locational tariff (taking zone 14 again, $\pounds 3.97$ /kW multiplied by 738.38MW = $\pounds 2.93$ m). The remaining locational zonal amount to collect, per step 1 (in this case $\pounds 10.12$ m minus $\pounds 2.93$ m, so $\pounds 7.19$ m) must then be applied to NHH. The locational value attributed to NHH through this process should then be divided by the 4-7pm chargeable NHH volume to derive a p/kWh NHH locational tariff.

As a result of this initial change, there will be specific NHH and HH locational tariffs for each zone.

The sum of revenues recovered through locational tariffs, subtracted from the value determined in step 2 above (the demand residual) needs to be allocated between each voltage or category, and within voltage between each Band. It is proposed that the process for this should be, initially to create Charging Groups, which shall be Domestic, and, for Non-Domestic: LV-Connected, no Maximum Import Capacity (MIC), LV-Connected with MIC, HV-Connected, EHV-Connected and Transmission-Connected. Within each Charging Group will be one or more Bands set in accordance with the percentiles specified in the Direction. Following determination of the Charging Groups and Bands:

- 4. The amount of residual payable by demand in each Charging Group should be calculated by taking the total of the HH and NHH annual volume consumed by that Group (MWh) and dividing it by the national HH and NHH annual volume (MWh), converted into a percentage then applied to the total residual £m figure;
- 5. To split between Bands within a Charging Group, using LV-Connected, no Maximum Import Capacity as an example, the LV-Connected, no MIC annual volumes, need to be expressed as a percentage of all LV annual volumes (as the overall Charging Group), with that percentage then being applied to the value derived in step 4 above (the total residual allocated to LV). This process is repeated for all Bands within a Charging Group.

The Proposer believes, pending the outcome of the Access and Forward-Looking Charges SCR, that 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 DCLF ICRP or the above NHH allocative methodology, it is floored at £0 and demand is not paid to consume over peak periods, as is the case today.

Why

The rationale for the Decision(s) made by the Authority in respect of the Targeted Charging Review SCR can be found in the Ofgem/GEMA publications relating to that SCR. The Company, as per Condition C10 (para 6C(a)) of its Licence, and Section 8.17.6(a) of CUSC, is required to raise CMPs when Directed to do so by the Authority

How

A broad rewrite of Section 14 (insofar as it relates to demand TNUoS charges) is required to give effect to the above partial solution, and to deliver the process elements of the Defect not covered in the What section of this CMP

2 Governance

Justification for Normal, Urgent Procedures

The Proposal should proceed under Normal Governance and be subject to an Authority Decision but should be treated as Urgent. The Company has been directed to raise this modification proposal and implement The Authority's decision by April 2021. To allow the necessary system and process changes to take place, in order to prevent ESO from breaching the terms of the Direction and therefore the provisions of its Licence and the CUSC, this modification will need to follow an Urgent timetable with submission of the Final Modification Report to the Authority in February 2020.

Requested Next Steps

This modification should be treated as urgent and should proceed as such under a timetable agreed with the Authority, and be sent to a Workgroup for assessment.

3 Why Change?

The rationale for the Decision(s) made by the Authority in respect of the Targeted Charging Review SCR can be found in the Ofgem/GEMA publications relating to that SCR. The Company, as per Condition C10 (para 6C(a)) of its Licence, and Section 8.17.6(a) of CUSC, is required to raise CMPs when Directed to do so by the Authority.

4 Code Specific Matters

Technical Skillsets

Expertise in demand TNUoS charging, understanding of Ofgem's Targeted Charging Review and resultant decisions.

Reference Documents

Authority Decision:https://www.ofgem.gov.uk/system/files/docs/2019/11/tcr_final_decision.pdf Direction letter:-

https://www.ofgem.gov.uk/system/files/docs/2019/11/cusc_direction_1.pdf

5 Solution

Demand residual charges should be calculated and applied in the manner specified above and in Ofgem's Decision and Direction letters of the 21st November 2019.

6 Impacts & Other Considerations

This is a large scale change that will require amendments and consequential changes to all Supplier and DNO processes. In particular the ESO 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/MRA 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.

Does this modification impact a Significant Code Review (SCR) or other significant industry change projects, if so, how?

This CMP is resultant of the Targeted Charging Review SCR.

Consumer Impacts

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

CUSC Modification Proposal Form - Version 1.0 (31 August 2016)

7 Relevant Objectives

| Impact of the modification on the Applicable CUSC Objectives (Charging): | | |
|---|--|--|
| 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; | None | |
| (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); | None | |
| (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 as NGESO has been directed to raise this modification and implement its effects by the Authority. | |
| (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 | None | |
| (e) Promoting efficiency in the implementation and administration of the CUSC arrangements. | None | |
| *Objective (d) refers specifically to European Regulation 2009/714/EC. Reference to the Agency is to the Agency for the Cooperation of Energy Regulators (ACER). | | |

ESO has been directed to raise and implement this modification by the Authority to enact their SCR Decision.

8 Implementation

These modifications need to be implemented by April 2021 to allow ESO to comply with the Direction letter published by The Authority on the 21st November 2019. This means

that to allow enough time for ESO to implement an agreed solution by April 2021, a decision by the Authority is required before 16th March 2020.

9 Legal Text

Text Commentary

Due to the scale of the changes required to the legal text the Proposer has not provided legal text at this time. Legal text will be agreed with the Workgroup.

10 Recommendations

Proposer's Recommendation to Panel

Panel is asked to:

- Agree that this Urgent;
- Agree that Normal governance procedures should apply; and

Refer this proposal to a Workgroup for assessment.