| BSC Modification Proposal Form | At what stage is this document in the process? |
|---|---|

# P402

## Mod Title: Enabling reform of residual network charging as directed by the Targeted Charging Review

01 Modification

02 Workgroup Report

03 Draft Modification Report

04 Final Modification Report

**Purpose of Modification:**

On 21st November 2019, the Authority published a Direction requiring NETSO to raise code modifications giving effect to their Decision under the Targeted Charging Review (TCR) Significant Code Review (SCR). In order to facilitate related CUSC modifications, NETSO requires additional data to enable it to;

- Set tariffs for the TNUoS demand residual in line with a methodology that delivers the Authority's Direction (methodology to be developed by CUSC Modification Proposal 332).
- Charge the TNUoS demand residual to applicable users (processes to be developed by CUSC Modification Proposal 335/6).

This modification aims to establish the processes and data flows to enable BSCCo to collect and subsequently provide the required data to NETSO.

The Proposer recommends that this Modification should:

- Not be a Self-Governance Modification Proposal
- Be assessed by a Workgroup and submitted into the Assessment Procedure

This Modification will be presented by the Proposer to the BSC Panel on 12 March 2020. The Panel will consider the Proposer's recommendation and determine how best to progress the Modification.

Medium Impact:

BSCCo/BSC Agents, LDSOs (including IDNOs) and NETSO

## Contents



## Timetable

**The Proposer recommends the following timetable:**

| | |
|---|---|
| Initial consideration by Workgroup | 31/03/2020 |
| Assessment Procedure Consultation | 04/05/2020 - 15/05/2020 |
| Workgroup Report presented to Panel | 11/06/2020 |
| Report Phase Consultation | 15/06/2020 – 26/06/2020 |
| Draft Modification Report presented to Panel | 09/07/2020 |
| Final Modification Report submitted to Authority | 13/07/2020 |

**Any questions?**


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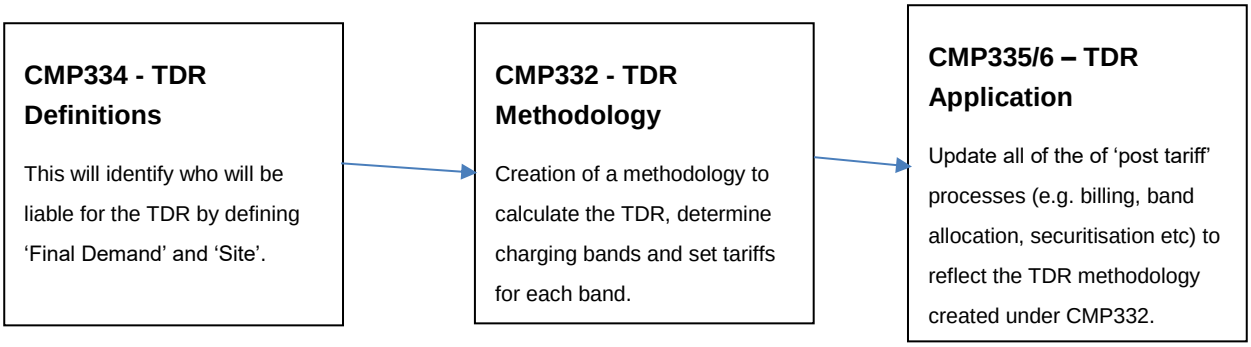
# 1 Why Change?

## What is the issue?

On 21st November 2019, the Authority published a direction[1] henceforward referred to as "the Direction" requiring NETSO to raise code modifications giving effect to its decision[2] under the Targeted Charging Review (TCR) Significant Code Review (SCR). NETSO raised CUSC Modification Proposals (CMP) CMP332[3], CMP334[4] and CMP335/6[5] to implement the Direction as per the Energy Network Association (ENA) Project Initiation Document (PID)[6]. The below diagram shows how these CMPs interact and provides a brief summary of each.




Collectively CMP332, 334 and 335/336 cover three broad sets of requirements:

i) Setting Charging Bands (and allocating Sites to these bands);
ii) Tariff Setting per band; and
iii) Billing.

Each of these broad sets of requirements require input data.

NETSO currently relies on data provided to it by BSCCo for existing TNUOS and BSUOS charge setting and billing requirements. However, these existing reporting provisions would not provide NETSO with the data it requires to fulfil the requirements to support Band Setting, Tariff Setting and Billing.

LDSOs and NETSO plan to share directly with each other the data necessary to set Charging Bands. This is because band setting happens infrequently (i.e. the start of each Transmission Owner price control approximately every five years) and because it is a large data set.

NETSO believes that the BSC should be modified to ensure it continues to facilitate the provision of data necessary for TNUOS charging; the BSC should define how data is provided to NETSO to enable TCR Tariff Setting and Billing.

[1] https://www.ofgem.gov.uk/system/files/docs/2019/11/cusc_direction_1.pdf
[2] https://www.ofgem.gov.uk/system/files/docs/2019/12/full_decision_doc_formatted_updated9.pdf
[3] https://www.nationalgrideso.com/codes/connection-and-use-system-code-cusc/modifications/cmp332-transmission-demand-residual
[4] https://www.nationalgrideso.com/codes/connection-and-use-system-code-cusc/modifications/cmp334-transmission-demand-residual
[5] https://www.nationalgrideso.com/codes/connection-and-use-system-code-cusc/modifications/cmp335-transmission-demand-residual-billing
[6] http://www.chargingfutures.com/media/1390/tcr-joint-eso-dno-pid-v10.pdf

## Desired outcomes

In order to facilitate implementation of the Direction, new data needs to be reported by BSCCo to NETSO to enable NETSO to;

- Set annual tariffs for the TDR charge in line with the methodology developed by CMP332 and produce future forecasts of the TDR charge.
- Bill the TDR charge to applicable users using the processes to be developed by CMP335/6.

This modification aims to establish the processes and data flows required to enable BSCCo to collect the required data and provide to NETSO. The source data will be provided to BSCCo by LDSOs in the short term; longer term this may be through revised industry data flows, however this will be progressed via future separate BSC proposals.

# 2 Solution

## Proposed Solution

The proposed solution must satisfy two sets of high-level requirements;

1. Tariff setting and future forecasting of TDR tariffs.
2. Billing requirements.

***Tariff setting and forecasting requirements***

In order to set residual charge tariffs, NETSO must:

- Allocate its TDR annual allowed revenue between charging bands based on each bands proportional contribution to actual annual total 'final demand'[7] gross Imports[8];
- For each band, divide the apportioned allowed revenue by the actual number of sites in that band to derive a pence per site (p/site) rate; and
- Divide each bands' p/site rate by the number of days in the Settlement year (365 normally, 366 on leap years) to derive a pence per site per day (p/site/day) residual charging tariff.

The methodology for the above points is to be implemented through CMP332. NETSO also has a CUSC obligation (14.29) to provide a five-year forecast of TNUoS tariffs, including the TDR charge.

[7] 'Final demand' will be defined in the CUSC and DCUSA via CMP334 and DCP359 respectively.
[8] Gross Imports mean the actual metered Imports measured by a single or group of Import Metering Systems. It does not combine metered volumes from Import and Export Metering Systems, except where explicitly required as part of a set of aggregation rules necessary for Settlement. Nb using Gross Imports does not preclude a site's demand being satisfied by a mixture of Imports from the Total System and supply from on-site generation. In this situation gross Imports are the Settlement metered electricity imported from the Total System after any on-site generation has been supplied 'behind the meter' – the metered position at the Import Metering System is sometimes referred to as 'net consumption at the boundary'.

In order to support the annual setting of tariffs (for a forthcoming charging year and forecasts for the forthcoming five years), NETSO requires two annual reports, no later than 10 October each year to set draft charges and no later than 10 December each year to set final charges each year. Each annual report must contain the latest 12 months' sum of Final Demand Gross Imports (MWh) (and associated losses) per Residual Charging Band and per GSP Group.

Gross Imports measured by Primary and Secondary Metering Systems at Final Demand Sites must be aggregated and attributed to the same charging band.

An example is shown below – each column represents a charging band; for the avoidance of doubt, this example does not show all the expected charging bands:

| | |
|---|---|
| **Date From** | 01/10/2020 |
| **Date To** | 30/09/2021 |

| | LVNC_1 | LVNC_2 | LVNC_3 | LVNC_4 | LV_1 | LV_2 | LV_3 | LV_4 |
|---|---|---|---|---|---|---|---|---|
| **Aggregate MWh Final Demand Gross Import** | 411,984 | 654,646 | 2,465,562 | 6,546,541 | 41,654,651 | 1,654,544 | 464,654 | 65,496 |
| **Count of Final Demand Sites** | 25,046 | 24,161 | 10,183 | 5,741 | 36,974 | 32,450 | 1,583 | 185 |

For the avoidance of doubt, the above example does not contain all the bands that will be established under CMP332. Transmission connected (i.e. non-Supplier BMU metered volumes) data does not need to be included in this report as existing data flows provide this information. As of writing, it is to be confirmed if/how Unmetered Supplies are to be included in this this will be confirmed by CMP332. Also, the report, must include details of all distribution connected sites, which includes both SVA and CVA registered sites.

***Billing requirements***

NETSO must calculate a daily bill for each chargeable party. In the context of this modification chargeable parties are registrants of Supplier BMUs and non-Supplier BMUs related to facilities/sites connected to Distribution Systems – this is because NETSO already receives all necessary data for Transmission connected sites.

NETSO calculates a chargeable parties' daily bill by multiplying the daily number of 'Final Demand' sites registered by the party in each band by the corresponding tariff rate (p/site/day) for the band. NETSO then sums the charges calculated for each day of the relevant month.

In order to calculate each daily charge, NETSO requires a report containing the number of Final Demand Sites per Settlement Day, per Residual Charging Band, per Registrant and per BMU ID. This report must be no less frequent than monthly. These Billing requirements will have interactions with existing code changes:

- Residual Charging Band – in general these are as determined by Ofgem in its TCR SCR decision. CMP332 will define in detail the parameters of these Charging Bands, including how they are defined, set and periodically reviewed.
- Final Demand Sites – DCP359 proposes (at the time of writing) that by default a Site will be defined as a single Import Metering System; however where a Site comprises more than one Import Metering System, DCP359 proposes that the Site is as defined in the Connection Agreement and that LDSOs will be responsible identifying a Site's Primary Metering System and

Secondary Metering System(s); therefore LDSOs will be responsible for only reporting the numbers of Primary Metering Systems in order not to over-count the numbers of Sites.

An example is shown below:

| Date | Party Name | Party ID | BMU ID | LVNC_1 | LVNC_2 | LVNC_3 | LVNC_4 | LV_1 | LV_2 | LV_3 | LV_4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 01/04/2021 | Example Supplier | Exam | EX_1 | 9,298 | 9,518 | 6,179 | 2,424 | 5,156 | 6,724 | 10 | 7,391 |
| 01/04/2021 | Example Supplier | Exam | EX_2 | 9,676 | 557 | 7,072 | 3,174 | 2,055 | 661 | 8,090 | 6,506 |
| 01/04/2021 | Test Supplier | Test | TE_1 | 4,268 | 8,232 | 4,642 | 545 | 7,351 | 3,670 | 538 | 2,310 |
| 01/04/2021 | Test Supplier | Test | TE_2 | 5,693 | 7,551 | 5,587 | 1,194 | 6,063 | 4,096 | 1,776 | 2,283 |

For the avoidance of doubt, the above example does not contain all the bands that will be established under CMP332.Transmission connected data does not need to be included in this report as existing data flows provide this information. As of writing, it is to be confirmed if/how Unmetered Supplies are to be included in this report, this will be confirmed by CMP332.

Due to the ability for Final Demand Sites to move between bands and/or suppliers retroactively (e.g. erroneous Supplier transfers or disputes), an exceptions report may also be needed to inform NGESO of any such retroactive changes so adjustments to Billing can be completed; this report is to be defined.

***Identification of Sites***

The effect of the Direction is for the residual to be apportioned on a daily basis to “Sites” with “Final Demand” based on voltage tier, percentile capacity/usage and user classification. The Direction defines “Final Demand” as “electricity which is consumed other than for the purposes of generation or export onto the electricity network”. The Decision proposes a definition of “Site” as “One or a collection of buildings, structures or pieces of land in close geographical proximity, owned or occupied by one customer within a defined curtilage on one site, where each building, structure or piece of land serves the other in some necessary or reasonably useful way”. CMP334 and DCUSA Change Proposal 359[9] are jointly working to review these definitions and ensure consistent implementation across the relevant industry codes.

LDSOs will be responsible for determining what a ‘Site’ is in accordance with the rules in the CUSC and DCUSA. Consequently the LDSOs will be responsible for determining the correct Final Demand Gross Imports per Charging Band in accordance with the Tariff Setting requirements and the correct numbers of Final Demand Sites per Charging Band in accordance with the Billing requirements.

Further to the Tariff Setting Requirements, LDSOs must send two annual reports to BSCCo containing Gross Import data per Charging Band and a snapshot count of Sites per Charging Band.

Further to the Billing requirements, LDSOs must send reports (at least monthly) to BSCCo containing a Site Count per Charging Band.

[9] https://www.dcusa.co.uk/change/ofgem-targeted-charging-review-implementation-customers-who-should-pay/

***New SVAA report***

Using new reports, BSCCo must send two annual Tariff Setting Reports and monthly Billing Reports to NETSO at least monthly.

It is proposed this is done via new reports (as opposed to modifying existing files) for the following reasons;

- Effects on Third Parties minimised as existing file transfers unaffected
- The requirements of this new file are not captured in any existing reports

This will require changes to BSC Section S, BSC Section V, to BSCP508, BSCP515, the SVA Data Catalogue to create the new file, and to BSC Agent Service Descriptions and User Requirement Specifications.

The implementation date of the Direction which is April 2021, to meet this date, the above reports need to be produced by;

- Tariff and Forecasting – Oct/Dec 2020
- Billing – 31st March 2021

The proposal is that LDSOs provide a one-off set of Tariff Setting Reports that are sent directly to NETSO to facilitate the setting of charges that take effect on 1 April 2021.

Then, from 1 April 2021 BSCCo will be responsible for aggregating LDSO reports and sending consolidated Tariff Setting and Billing Reports to NETSO.

# 3 Relevant Objectives

| Impact of the Modification on the Relevant Objectives: | |
|---|---|
| Relevant Objective | Identified impact |
| a) The efficient discharge by the Transmission Company of the obligations imposed upon it by the Transmission Licence | Positive |
| (b) The efficient, economic and co-ordinated operation of the National Electricity Transmission System | Neutral |
| (c) Promoting effective competition in the generation and supply of electricity and (so far as consistent therewith) promoting such competition in the sale and purchase of electricity | Positive |
| (d) Promoting efficiency in the implementation of the balancing and settlement arrangements | Positive |
| (e) Compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency [for the Co-operation of Energy Regulators] | Neutral |
| (f) Implementing and administrating the arrangements for the operation of contracts for difference and arrangements that facilitate the operation of a capacity market pursuant to EMR legislation | Neutral |
| (g) Compliance with the Transmission Losses Principle | Neutral |

This modification has the following impact against the BSC Relevant Objectives

a) Delivering the Decision is a license condition on NETSO and so this modification will support NETSO in meeting its license conditions.

b) No expected impact

c) As part of Ofgem's decision, Ofgem have provided evidence and rationale for the impact on competition.

d) As there are no existing files available for this information, a co-ordinated pan-industry file seems most prudent.

e) No expected impact

f) No expected impact

g) No expected impact

# 4 Potential Impacts

## Impacts on Core Industry Documents

| Impacted Core Industry Documents | | | |
|---|---|---|---|
| ☐Ancillary Services Document | ☒Connection and Use of System Code | ☐Data Transfer Services Agreement | ☐Use of Interconnector Agreement |
| ☐Master Registration Agreement | ☐Distribution Connection and Use of System Agreement | ☐System Operator Transmission Owner Code | ☐Supplemental Agreements |
| ☐Distribution Code | ☐Grid Code | ☐Transmission License | ☐Other (please specify) |

## Impacts on BSC Systems

| Impacted Systems | | | | |
|---|---|---|---|---|
| ☐CRA | ☐CDCA | ☐PARMS | ☐SAA | ☐BMRS |
| ☐EAC/AA | ☐FAA | ☐TAAMT | ☐NHHDA | ☒SVAA |
| ☐ECVAA | ☐ECVAA Web Service | ☐ELEXON Portal | ☐Other (Please specify) | |

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## Impacts on BSC Parties

| Impacted Parties | | | |
|---|---|---|---|
| ☐Supplier | ☐Interconnector User | ☐Non Physical Trader | ☐Generator |
| ☒Licensed Distribution System Operator | ☒National Electricity Transmission System Operator | ☐Virtual Lead Party | ☐Other (Please specify) |

## Legal Text Changes

To be developed and confirmed during Assessment Phase.

# 5 Governance

## Self-Governance

| ☒ **Not Self-Governance –** A Modification that, if implemented materially impacts: | |
|---|---|
| ☐ the Code's governance or modification procedures | ☐ sustainable development, safety or security of supply, or management of market or network emergencies |
| ☐ competition | ☐ existing or future electricity consumers |
| ☒ the operation of national electricity Transmission System | ☐ likely to discriminate between different classes of Parties |
| ☐ **Self-Governance –** A Modification that, if implemented: | |
| Does not materially impact on any of the Self-Governance criteria provided above | |

This modification proposal is necessary to enable the NETSO to calculate TNUOS charges, which is an integral part of its function operating the NETS. Therefore, this proposal is likely to have a material impact on the operation of the NETS.

## Progression route

| ☒ **Submit to assessment by a Workgroup** –:A Modification Proposal which: | |
|---|---|
| does not meet any criteria to progress via any other route. | |
| ☐ **Direct to Report Phase** – A Modification Proposal whose solution is typically: | |
| ☐ of a minor or inconsequential nature | ☐ deemed self-evident |
| ☐ **Fast Track Self-Governance** – A Modification Proposal which meets the Self-Governance Criteria and: | |
| is required to correct an error in the Code as a result of a factual change including but not limited to: | |
| ☐ updating names or addresses listed in the Code | ☐ correcting minor typographical errors |
| ☐ correcting formatting and consistency errors, such as paragraph numbering | ☐ updating out of date references to other documents or paragraphs |
| ☐ **Urgent –** A Modification Proposal which is linked to an imminent issue or current issue that if not urgently addressed may cause: | |
| ☐ a significant commercial impact on Parties, Consumers or stakeholder(s) | ☐ a Party to be in breach of any relevant legal requirements. |
| ☐ a significant impact on the safety and security of the electricity and/or gas systems | |

Whilst we believe this modification should proceed to the Assessment Phase, it must proceed in a quick and efficient manner, as all TCR code modifications must be finalised early/mid Summer 2020 to allow Ofgem to make decisions, and to give industry a chance to implement these with effect from 1 April 2021.

The Initial Written Assessment contains a detailed breakdown of the steps and proposed dates for achieving this.

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

This modification is supporting the implementation of Ofgem's Targeted Charging Review SCR.

## Does this modification impact on end consumers or the environment?

Whilst this modification by itself does not provide any consumer impacts, it is supporting the implementation of Ofgem's Targeted Charging Review SCR, the consumer impacts of which are documented in Ofgem's decision.

There is no expected environmental impact.

## Implementation approach

All files, system changes and supporting process need to be completed with sufficient time to meet the implementation date of the Direction which is April 2021.