Connection and Use of System Code (CUSC) CMP430: Adjustments to TNUoS Charging from 2025 to support the Market Wide Half Hourly Settlement (MHHS) Programme (CMP430)

Decision	The Authority[1] determines that this modification should be made[2]
Target audience	National Grid Electricity System Operator (NGESO), Parties to the CUSC, the CUSC Panel and other interested parties
Date of publication:	26/09/2024
Implementation date:	01/04/2025

Background

Transmission Network Use of System (TNUoS) charges are charges paid by some Users of the electricity transmission system. They are calculated annually (in January) and levied by National Grid Electricity System Operator (NGESO) (from 1 April) according to the Charging Methodologies contained in section 14 of the Connection and Use of System Code (CUSC)[3].

Demand locational charges are issued via three overall methodologies:

- Supplier charges relating to larger half-hourly ("HH") sites (those with demand >100kW, or with Current Transformers), are based on Chargeable Demand Locational Capacity, derived from the average of the Supplier Balancing Mechanism (BM) Unit's half hourly metered gross demand during the three half hours of national peak demand, November – February, separated by 10 clear days (in this letter, we refer to charges associated to this charging methodology as 'Triad charges'). These charges are levied as £/kW.

[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] The CUSC is the contractual framework for connecting to and using the National Electricity Transmission System (NETS) . See https://www.nationalgrideso.com/industry-information/codes/connection-and-use-system-code-cusc

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- Supplier charges relating to smaller HH sites (those with Whole Current metering or demand <100kW), and non-half-hourly ("NHH") sites, are based on Chargeable Energy Capacity, which is the Supplier BM Unit's relevant metered energy consumption over the period 16:00 hrs to 19:00 hrs inclusive every day over the Financial Year (in this letter, we refer to charges associated to this charging methodology as '4-7pm charges') These Charges are levied as p/kWh.
- Some embedded generators receive the Embedded Export Tariff, which is the inverse of the demand locational tariff plus a credit for the anticipated avoided costs of transmission investment created by that embedded generator. This tariff is charged against Chargeable Embedded Export Capacity, which is the average of the BMU's exports during the triad window. The demand locational component of TNUoS is anticipated to be £112m for the 2024/25 charging year[4] and £134m for the 2025/26 charging year[5].

On 21 April 2021, we set out our decision on Market Wide Half-Hourly Settlement (MHHS)[6]. MHHS will utilise the ability of smart meters to record a customer's usage during half hour periods. Starting in 2025, all NHH sites will become HH settled even though many will continue to face 4-7pm charges.

The modification proposal

NGESO (the 'Proposer') raised modification CMP430 (the 'Proposal') on 16 February 2024. CMP430 intends to resolve defects that will occur within the demand locational element of TNUoS charging during the migration phase of the MHHS Programme.

Currently, TNUoS arrangements rely on a report produced by Elexon, which in turn relies on a datum called Measurement Class ("MC") to distinguish between different categories of sites, in particular of HH sites. In TNUoS terms, this gives practical effect to our approval of CMP266[7]

[4] https://www.nationalgrideso.com/document/301731/download (Table 22, Row 25)
[5] https://www.nationalgrideso.com/document/317556/download (Table 29, Row 25)
[6] MHHS Draft Impact Assessment consultation decision letter (ofgem.gov.uk)
[7] https://www.nationalgrideso.com/document/9521/download

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where HH sites attract different charges based on their metering setups and maximum demand requirements.

MC contains three data items that distinguish each level: whether a site is domestic or non-domestic, the type of meter installed, and maximum demand. However, MC as a data item will not be retained in the new MHHS Target Operating Model (TOM), replaced instead by the Consumption Component Class (CCC). MC cannot be mapped straight across to CCC, as CCC does not have a datum for maximum demand; in practice, this means that some sites will change from facing Triad charges to facing the 4-7pm charges, or vice versa on migration to HH settlement. As we set out in our decision to grant CMP430 Urgent status[8], we consider that this specific implementation issue could have been avoided. The Proposer outlines the three components of the defect as the following:

a) Demand data cannot be segmented in a way that maintains the same application of TNUoS charging for sites once they have been migrated to the new MHHS arrangements.
b) The risk of double charging MPANs increases during MHHS migration (April-25 to October-26) as sites move from legacy arrangements to the new MHHS arrangements.
c) Some definitions or terminology within the CUSC may be inconsistent with any solution introduced under this modification and MHHS baselined design.

The Proposal intends to assign sites between the two charging methodologies using the new MHHS design data items introduced by the underlying CCC – Domestic and Connection Type Indicators – once that site has migrated to half-hourly settlement. Sites will be assigned to the two charging methodologies in such a way as to remain as close as possible to existing charging arrangements. However, some MPANs will face a change in charging methodology due to the imperfect matching of MC to CCC. Additionally, Suppliers may be exposed to double charging in respect of some sites once they migrate (i.e., the Supplier will receive 4-7pm charges for part of the year, and then face Triad charges over the winter for the same site).

[8] https://www.nationalgrideso.com/document/303496/download

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NGESO have stated that they do not have the data required to assess the number of sites potentially subject to double charging. However, they have produced guidance for Suppliers on how this risk relates to migration date, which we discuss later in this letter.

Sites that will be subject to a change of methodology as identified by the Proposer are as follows:

1. High demand or large domestic sites that are Measurement Class C currently attract Triad charges, and can access embedded export benefits, should they export over winter peaks. The Proposal sets out that all domestic sites would attract 4-7pm charges based on their net consumption (thereby still affording an embedded benefit to these sites).
2. Microbusiness Current Transformer (CT) metered sites that have opted out of the provision of half-hourly data under Supply Licence SLC47 currently have a NHH Measurement Class (A) and would be charged under the 4-7pm Consumption methodology. Under the Proposal, these would attract Triad charges, alongside all other non-domestic CT metered sites.
   CT metered embedded generators which are Measurement Class A would, where relevant, attract the Embedded Export tariff.
3. Other non-domestic CT metered sites may be registered as Measurement Class A.
4. Reverse migration is possible where a migrated site switches from a MHHS Supplier to a non-Qualified MHHS Supplier. In this scenario, a site may be registered with the previous Measurement Class held.

The Proposer considers the Proposal to be positive for Applicable CUSC Objectives (ACOs) (a)[9], (b)[10] and (e)[11], and neutral against Objectives (c)[12] and (d)[13]. In their view, the Proposal will facilitate and align with the MHHS Programme migrations of MPANs, supporting Suppliers'

[9] ACO (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.
[10] ACO (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).
[11] ACO (e) Promoting efficiency in the implementation and administration of the system charging methodology.
[12] ACO (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.
[13] ACO (d) Compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency.

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migration early in the window, thus being positive for the competition Objective ACO (a). They also believe that the Proposal will maintain as much as possible the existing locational demand charging methodologies faced by sites, and that the solution reduces the risk of double charging, so is positive for the cost reflectivity Objective ACO (b). The Proposer also considers the Proposal to provide transparency on how sites can be segmented using the new MHHS data items, thus positive for efficiency Objective ACO (e). The Proposer also considers that this solution is preferable to others in relation to the costs of implementation and in posing the least risk of impacting the MHHS delivery timescales, as per discussions held between NGESO, Elexon, Helix and the MHHS Programme.

An Alternative Request was raised in the Workgroup stage, aiming to remove the demand locational methodology entirely. This request was voted against by the majority of the Workgroup, so the alternative was not formalised into a WACM.

The Workgroup Consultation was issued on 17 April 2024 and closed on 24 April 2024. In total 5 non-confidential responses were received. No alternatives were raised. Several respondents agreed that the solution should be enduring until a more complete solution is developed by the TNUoS Task Force Signals Workstream, with all respondents supportive of both the Proposal and the implementation approach.

The Workgroup voted on 12 July 2024 on the Original Proposal. They voted unanimously that the Proposal better facilitated the ACOs than the baseline. Voting was also unanimous that the Proposal better facilitates ACO (a) than the baseline, and that it is neutral on ACOs (c) and (d). The voting was split on ACOs (b) and (e), with a majority voting that the Proposal was positive against (b) and (e).

The Code Administrator Consultation was issued on 31 July 2024 and closed on 12 August 2024. In total 4 non-confidential responses were received. Three respondents preferred the Original Solution over the baseline, while one stated that they had no preference. All respondents supported the implementation approach and that the modification be implemented on an enduring basis.

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CUSC Panel[14] recommendation

At the CUSC Panel meeting on 23 August 2024, the CUSC Panel (the Panel) voted unanimously that the Proposal would better facilitate the Applicable CUSC Objectives than the baseline and therefore recommended its approval. All the Panel members considered the Proposal to better meet ACO (a), while of the eight voting members, five voted the Proposal as positive for ACO (b), two voted it as positive for ACO (c), and five voted it as positive and two negative for ACO (e).

Our decision

We have considered the issues raised by the Proposal and the Final Modification Report (FMR) dated 23 August 2024. We have considered and taken into account the responses to the industry consultation on the modification proposal which are attached to the FMR[15]. We have concluded that:

- implementation of the modification proposal will better facilitate the achievement of the applicable charging objectives of the CUSC;[16] and
- directing that the modification be made is consistent with our principal objective and statutory duties.[17]

Reasons for our decision

We consider this Proposal would better facilitate ACOs (a), (b) and (e) while having a neutral impact on the other applicable objectives. In addition, we believe that the Proposal positively impacts our principal objective. Under the baseline, the consequences of the deletion of the MC datum could have been that the demand charging methodologies ceased to be operational,

[14] The CUSC Panel is established and constituted from time to time pursuant to and in accordance with section 8 of the CUSC.
[15] CUSC modification proposals, modification reports and representations can be viewed on NGESO's website at: https://www.nationalgrideso.com/industry-information/codes/connection-and-use-system-code-cusc/modifications

[16] As set out in Standard Condition C5(5) of NGESO's Transmission Licence, see: Licences and licence conditions | Ofgem
[17] 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.

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as they rely extensively on MC (per 14.17.40.1 onwards). Approval of CMP430 avoids these negative consumer and market outcomes (and potential Supplier windfall gains/losses).

(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 Panel and Workgroup voted unanimously in favour of ACO (a) being better facilitated by the Proposal. Supporting statements on ACO (a) by the Workgroup and Panel refer to the increased certainty to Suppliers of the charges they will face during and after migration as well as the inappropriate charging impacts of the baseline compared to the Proposal. There was also a sentiment that the Proposal, by supporting the MHHS migration plan, will allow Suppliers to offer customers more dynamic tariffs which, due to the differing migration dates of Suppliers, will facilitate competition.

Our position

We agree with the view of both the CMP430 Workgroup and the Panel that the Proposal will positively impact ACO (a). Given the disruptive impacts of the baseline upon MHHS migration – where the current methodologies would cease to operate with no clear alternative approach to demand charging available – the Proposal retains much of the current structure of demand charging and thus creates more stability for Suppliers and is in that way better for ACO a) than the baseline.

Had this issue been identified sooner, it is possible that a different solution which carried no double-charging risk could have been created, as it has been for distribution, and we recognise that a double-charging issue could itself present competition issues between smaller and larger Suppliers if MHHS migration is not handled appropriately by Suppliers. It will be for Suppliers to create their own migration plans taking into consideration the potential risk of double-charging, and we expect them to mitigate to the fullest extent possible that risk.

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(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 majority of the CUSC Panel and all of the Workgroup members voted in favour of ACO (b) being better facilitated by the Proposal. It was stated that the Proposal would retain much more of the current assignment of charging methodology than the baseline, and thus be more cost reflective of impacts on the system. In addition, voting statements within Panel and workgroup voting set out that the Proposal will reduce the risk of double charging when compared to the baseline to positively impact CUSC ACO (b).

Our position

We agree with the Panel and Workgroup that the Proposal will be positive for cost reflectivity as compared the baseline. The current assignment of demand locational methodology for each site is based on what is appropriate for reflecting a site's impact on the transmission network. The baseline presents a situation where the demand charging methodology could have become inoperable, as it relies on Measurement Class to differentiate between different categories of site. The Proposal mitigates this, and critically, does so in a way that matches as close as is possible current arrangements, and is therefore better at facilitating ACO b).

(e) promoting efficiency in the implementation and administration of the system charging methodology.

The majority of the CUSC Panel and all Workgroup members voted in favour of ACO (e) being better facilitated by the Proposal. Statements raised by the Panel and Workgroup that the Proposal would make it clearer how charging methodologies will be assigned under the MHHS data items and that the charging regime will remain largely unchanged for the 2025-26 charging year when compared to the baseline. Additionally, statements set out that the Proposal would be more efficient than the baseline as it would ensure that the charging methodology is compatible with the new data items introduced under MHHS migration.

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Our position

We agree with the majority view of the Panel and Workgroup that the Proposal will constitute a positive impact on ACO (e). By making it clear within the CUSC how data items introduced by the MHHS Programme will be used to determine the charging methodology applied to sites, it will be easier for NGESO to administer the charging methodology and implement changes arising from half hourly migration. Additionally, as the Proposal will largely retain the current charging arrangements for the 2025-26 charging year, this will constitute a benefit for efficiency compared to the baseline. As such, we consider CMP430 to constitute a positive impact on ACO (e).

Guidance on double charging

As CMP430 only mitigates the risk of double charging rather than outright negating it, it is important that Suppliers are aware of the risk and act accordingly. Under MHHS, Suppliers are expected to provide migration plans that indicate when they will transfer MPANs from legacy arrangements to half-hourly settlement. NGESO has produced guidance on when the issue of double charging may occur for Suppliers[18], and we would ask NGESO to ensure this is published on their website. We encourage Suppliers to take account of the potential for double charging when producing these migration plans, as the date of migration and the type of customer contract will largely determine the risk of whether a site is double charged or not.

[18] See Annex 4, Annex 5 and Annex 12 of the FMR Annexes: CMP430: Adjustments to TNUoS Charging from 2025 to support the Market Wide Half Hourly Settlement (MHHS) Programme | ESO (nationalgrideso.com)

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Decision notice

In accordance with Standard Condition C10 of the Transmission Licence, the Authority, hereby directs that modification proposal *CMP 430: Adjustments to TNUoS Charging from 2025 to support the Market Wide Half Hourly Settlement (MHHS) Programme* be made.

Harriet Harmon
Head of Electricity Transmission Charging
Signed on behalf of the Authority and authorised for that purpose

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