Modification proposal:	**Connection and Use of System Code (CUSC) CMP317: Identification and exclusion of Assets Required for Connection when setting Generator Transmission Network Use of System (TNUoS) charges and CMP327: Removing the Generator Residual from TNUoS Charges (TCR).**		
Decision:	The Authority[1] directs that this modification be made[2]		
Target audience:	National Grid Electricity System Owner (NGESO), Parties to the CUSC, the CUSC Panel and other interested parties		
Date of publication:	17 December 2020	Implementation date:	1 April 2021

Summary of our decision

In November 2019, we published our decision (and associated Directions) on the Targeted Charging Review ('TCR') Significant Code Review (the 'SCR Decision').[3]

Once the Directions are implemented, the costs of operating, maintaining and upgrading the electricity grid will be spread more fairly and, through reducing harmful distortions, are expected to save consumers approximately £300m per year, with anticipated £4bn-£5bn in consumer savings to 2040, as outlined in our SCR Decision and Impact Assessment[4].

The TCR included a review of how residual network charges are set and recovered, and also sought to remove some remaining distortions in network charging, known as Embedded Benefits. Embedded Benefits is the name given to the differences in charging arrangements between Small Distributed Generators and large generators (with capacity >100MW) connected to either the distribution or transmission networks.

Small Distributed Generators do not pay or receive the Transmission Generation Residual ('TGR'). Neither does on-site generation. Since the residual is currently a negative charge, this is a benefit for larger generators and a disbenefit to Small Distributed Generators and on-site generation. This is being addressed by setting the TGR to £0 under our SCR Decision.

This modification proposal seeks to implement certain aspects of the SCR Decision, namely setting the TGR to £0 and implementing the so called 'connection exclusion'. This modification concerns compliance with the range permitted for average annual transmission charges paid by producers set out in the Commission Regulation (EU) No. 838/2010, referred to in this letter as the 'Limiting Regulation'. In Great Britain ('GB'), the permitted range is €0-2.50/MWh.

[1] References to the "Authority", "Ofgem", "we" and "our" are used interchangeably in this document. The Authority refers to GEMA, the Gas and Electricity Markets Authority. The Office of Gas and Electricity Markets (Ofgem) supports GEMA in its day to day work. This decision is made by or on behalf of GEMA.
[2] This document is notice of the reasons for this decision as required by section 49A of the Electricity Act 1989.
[3] https://www.ofgem.gov.uk/system/files/docs/2019/12/full_decision_doc_updated.pdf
[4] See for example, p5 of the SCR Decision.

The Office of Gas and Electricity Markets
10 South Colonnade, Canary Wharf, London, E14 4PZ **Tel** 020 7901 7000
www.ofgem.gov.uk

We have approved the Original Proposal, which has the following characteristics:

- All Local Charges for Local Circuits and Local Substations paid by generators shall be excluded for the purposes of assessing compliance with the €0-2.50/MWh range;
- No target within that range shall be set – instead an error margin will be incorporated and where total Wider TNUoS revenues fall outside of the permitted range, an adjustment mechanism will be used solely to bring charges into that range;
- Neither BSC Charges nor any element of BSUoS Charges will be taken into account when assessing compliance with the range;
- These changes will be implemented on 1 April 2021 and will not be subject to any phasing.

In addition, we expect National Grid Electricity System Operator ('NGESO') to bring forward a further CUSC Modification Proposal (in sufficient time to enable the modifications to be effective as of 1 April 2022) to:

- Further update the CUSC charging methodology so as to include, in the assessment of compliance with the range, Local Charges in respect of Local Assets (i.e. Local Substations and Local Circuits) to the extent that such assets were pre-existing at the time the generator paying those charges wished to connect to the National Electricity System ('NETS')[5]; and
- Remove from the calculation determining compliance with the range the TNUoS Charges payable by 'Large Distributed Generators' and their associated volumes (MWh)[6].

If we consider sufficient progress is not being made with regard to the further modification proposal, we may use the measures available to us, including issuing a further Direction to NGESO, to ensure that the necessary changes are brought forward in time to ensure implementation is effective from 1 April 2022.

We also expect NGESO to examine whether there has been historic non-compliance with the Limiting Regulation and, if so, to bring forward one or more additional CUSC Modification Proposals to address this.

This letter is comprised of:

- Summary of our decision;
- Background sections;
- The amalgamated modification proposal and our assessment approach;
- Our decision and the reasons for our decision;
- Future modification(s) section detailing the future modification(s) to be made;
- Impact assessment and Ofgem consultation;
- Decision notice;
- Legal Annex One – Detailing our interpretation of the Ancillary Services Exclusion as it relates to our decision on Modules 1 and 2 below; and

[5] We anticipate that those assets which should be regarded as 'pre-existing' could be determined by reference to what assets existed as at the dates the relevant Bilateral Connection Agreements for those generators were executed.
[6] This relates solely to TNUoS-liable Distributed Generators who are party to a Bilateral Embedded Generation Agreement and are licensable.

The Office of Gas and Electricity Markets
10 South Colonnade, Canary Wharf, London, E14 4PZ **Tel** 020 7901 7000
www.ofgem.gov.uk

- Legal Annex Two – Detailing our interpretation of the Connection Exclusion as it relates to our decision on Module 7 below.

Background

Context (Modification Proposal Procedure)

NGESO is required under its licence to maintain and operate the Connection and Use of System Code (the 'CUSC')[7]. The CUSC constitutes the contractual framework for connection to, and use of, the electricity transmission network in GB, the NETS. The CUSC contains provisions as regards transmission charges.

In accordance with the transmission licence, Section 8 of the CUSC provides a mechanism for parties to propose changes to better facilitate the achievement of the 'Applicable CUSC Objectives'[8] or the 'Applicable Charging Objectives' (hereafter 'ACOs').[9] The proposals and any alternatives (known as Workgroup Alternative Code Modifications or 'WACMs') are reviewed by industry participants through a consultation process, including workgroups, and the process is overseen by the CUSC Modification Panel (the 'CUSC Panel'). All CUSC modification proposals, other than modifications following the self governance or fast track processes, can only be implemented upon approval by the Authority.

In deciding whether to approve or reject a proposal or any WACM, the Authority must consider whether the proposed modification would, as compared with the then existing provisions of the CUSC and any WACMs set out in the Final Modification Report (the 'FMR'), better facilitate the achievement of the relevant ACOs (which are set out below), as appropriate. In making its decision, the Authority must also act in accordance with its principal objective to protect the interests of existing and future consumers, and its statutory duties.[10]

The Limiting Regulation

The European Commission adopted the Limiting Regulation pursuant to Article 18 of Regulation (EC) No 714/2009 (the '2009 Regulation').

Article 2 of the Limiting Regulation stipulates: "*Charges applied by network operators for access to the transmission system shall be in accordance with guidelines set out in Part B of the Annex.*"

Part B of the Annex to the Limiting Regulation provides:

> "*1. Annual average transmission charges paid by producers in each Member State shall be within the ranges set out in point 3.*
>
> *2. Annual average transmission charges paid by producers is annual total transmission tariff charges paid by producers divided by the total measured energy injected annually by producers to the transmission system of a Member State.*

[7] SLC C10 paragraph 2
[8] Applicable CUSC Objectives are defined in paragraph 15 of SLC C10 of NGESO's Transmission Licence.
[9] The objectives vary depending upon whether the modification is to a Charging Methodology i.e. Use of System Charging Methodology or Connection Charging Methodology. Applicable Charging Objectives are defined in paragraph 5 of SLC C5 of NGESO's Transmission Licence.
[10] The Authority's statutory duties are detailed mainly in the Electricity Act 1989 (in particular, but not limited to section 3A) as amended.

The Office of Gas and Electricity Markets
10 South Colonnade, Canary Wharf, London, E14 4PZ **Tel** 020 7901 7000
www.ofgem.gov.uk

For the calculation set out at Point 3, transmission charges shall exclude:

(1) charges paid by producers for physical assets required for connection to the system or the upgrade of the connection; [the 'Connection Exclusion']

(2) charges paid by producers related to ancillary services; [the 'Ancillary Services Exclusion']

(3) specific system loss charges paid by producers.

3. […..] Annual average transmission charges paid by producers in Ireland, Great Britain and Northern Ireland shall be within a range of 0 to 2,5 EUR/MWh, and in Romania within a range of 0 to 2,0 EUR/MWh."

The effect of the Limiting Regulation is to prescribe a range of €0-2.50/MWh for annual average transmission charges paid by producers in GB (the 'Permitted Range'). It also prescribes the calculation required to determine compliance, referred to in this letter as the 'Range Calculation'. Importantly, the Limiting Regulation stipulates three categories of charges which fall to be excluded from the Range Calculation, including the Ancillary Services Exclusion and the Connection Exclusion.

Charges paid by Producers in GB

In GB, generators pay charges to connect to the NETS ('Connection Charges'), Transmission Network Use of System charges ('TNUoS Charges'), Balancing Services Use of System charges ('BSUoS Charges'), and Balancing Settlement Code charges (the 'BSC' and 'BSC Charges'). A brief description of each of these charges and the costs that they recover is set out below.

Connection Charges

Connection Charges are levied in accordance with Section 2 of the CUSC and apply to assets up to 2km in length which are used by a single generator (and which could not generally be shared with another user) to connect to the NETS.

TNUoS Charges

Ofgem sets the total allowed revenue that Transmission Owners are allowed to recover each year via TNUoS Charges through the price control process. TNUoS Charges are levied on both generation and demand users of the transmission system.

Generator TNUoS Charges comprise a 'wider zonal' charge, a 'Local' charge (together referred to as 'locational' charges), and a 'Residual' charge (the TGR). TNUoS Local Charges are levied in relation to particular assets, such that the overall Local Charge is made up of a Local Substation Charge and a Local Circuit Charge, as applicable. Together these charges seek to recover the total cost of owning and operating the transmission infrastructure assets, including a rate of return.

BSUoS Charges and BSC Charges

To maintain safe operation of the electricity transmission system, electricity supply and demand must be balanced and the system's frequency and voltage levels kept within strict limits at all times.

The Office of Gas and Electricity Markets
10 South Colonnade, Canary Wharf, London, E14 4PZ **Tel** 020 7901 7000
www.ofgem.gov.uk

NGESO provides (or procures the provision of) services for the purpose of keeping the electricity system balanced in real-time and ensuring that all equipment is being operated within safe physical limits at all times. We refer to these steps taken by NGESO as 'Balancing Services'.

BSUoS Charges are the means by which NGESO recover the costs associated with procuring and providing Balancing Services, including the administrative costs incurred in carrying out these activities. BSUoS Charges are recovered from liable generators and suppliers.

The balance of the system can be affected by disparities between the amount of electricity that a generator has agreed to inject into the grid, and the amount that it in fact injects. Similarly, a supplier's customers may import more or less electricity than the supplier had contracted to import. To mitigate against such disparities, the GB market includes a financial settlement process, administered by Elexon in accordance with the BSC, which encourages market participants to be 'balance responsible'. The costs of administering this financial settlement process are recovered via BSC Charges payable by generators and demand.[11]

GB Charges and the Limiting Regulation

Part 2 of Section 14 of the CUSC includes a mechanism which has the aim of ensuring ongoing compliance with Limiting Regulation, in particular the Permitted Range. This calculation is referred to in this letter as the 'CUSC Calculation'. To date, the CUSC Calculation has only taken account of TNUoS Charges, with all BSC Charges and BSUoS Charges being excluded.

Where projected TNUoS revenues from locational charges are expected to result in average annual charges to producers above the upper limit of the Permitted Range, a negative TGR is applied (in effect as a credit) with the aim of ensuring compliance on an *ex ante* basis. The CUSC Calculation may not, however, be effective in achieving that aim if it is formulated on the basis of an incorrect interpretation of the Limiting Regulation.

For the avoidance of doubt, if revenues from locational charges were below €2.50/MWh the TGR would be positive in value, under the CUSC Calculation as it stands. In such circumstances, the effect of the TGR to £0 modification would be to reduce the charges that would otherwise have been payable by generators. As we outlined in our SCR Decision, we do not believe that generators should face residual charges and therefore CMP 317/327 would remove either a negative or positive TGR.

As more fully described below, CMP317/327 sets the TGR to £0 (in effect removing the credit) and seeks to implement the correct interpretation of the Connection Exclusion. Some of the alternative proposals also seek to include certain BSUoS Charges and BSC Charges in the CUSC Calculation.

CMP261

The scope of the Connection Exclusion was the subject of an appeal to the Competition and Markets Authority (the 'CMA') in 2017 following the Authority's determination on CMP261 ("*Ensuring the TNUoS paid by Generators in GB in Charging Year 2015/16 is in compliance with the €2.5/MWh annual average limit set in EU Regulation 838/2010 Part B (3)*").[12]

[11] The proportion of BSC Charges that is not referable to the administration of the settlement process is negligible.
[12] https://www.ofgem.gov.uk/system/files/docs/2017/11/cmp261_decision.pdf

The Office of Gas and Electricity Markets
10 South Colonnade, Canary Wharf, London, E14 4PZ **Tel** 020 7901 7000
www.ofgem.gov.uk

CMP261 was raised on the basis of a claim that annual average transmission charges in the charging year 2015/16 had exceeded the upper limit of the Permitted Range. CMP261 sought to operate as an *ex post* reconciliation.

In the context of CMP261, the scope of the charges falling within the Connection Exclusion was critical as its interpretation determined whether annual average transmission charges fell within or outwith the Permitted Range. The CMP261 Workgroup considered there were two possible interpretations of the Connection Exclusion: the narrow interpretation and broad interpretation; the narrow interpretation including fewer charges within the Connection Exclusion. If the narrow interpretation was correct, there would have been a breach of the upper limit of the Permitted Range. If the broad interpretation was correct, there had been no breach.

The Authority concluded that the broad interpretation was correct, meaning more charges fell to be included in the Connection Exclusion than the CUSC Calculation assumed. On that basis, there had been no breach of the Limiting Regulation. The Authority therefore rejected the modification proposal, the premise of which was that there had been a breach.

The decision was appealed to the CMA. The CMA rejected the appeal (the 'CMA Decision').[13] The CMA found that certain charges which the CUSC Calculation assumed to fall outside the Connection Exclusion (and which were therefore being included in the CUSC Calculation) in fact fell within the Connection Exclusion.[14] The key findings of the CMA are set out in Legal Annex Two. In May 2019, NGESO raised CMP317 ("*Identification and exclusion of Assets Required for Connection when setting Generator Transmission Network Use of System (TNUoS) charges*") as a means of updating the CUSC Calculation to reflect the correct legal interpretation of the Connection Exclusion.

Targeted Charging Review

The TCR included a review of how residual network charges are set and recovered, and also sought to remove some remaining distortions in network charging, known as 'Embedded Benefits'. Embedded Benefits is the name given to the differences in charging arrangements between Small Distributed Generators and larger generators (with capacity >100MW) connected to either the distribution or transmission networks.

As part of the Embedded Benefits review within the TCR, we identified the negative TGR as a benefit to those who receive it (i.e. transmission-connected generators and Large Distributed Generators) and a disbenefit to those who do not (i.e. Small Distributed Generators, including those located on demand sites, known as, "behind the meter" generators).

Alongside our SCR Decision, we issued a Direction to NGESO[15] (the 'Direction') to bring forward proposals to modify the CUSC to give effect to the TCR. Paragraph 45 of the Direction provided:

> "*The Proposal(s) must set out proposals to modify the Use of System Charging Methodology, Section 14 of CUSC to set the TGR to £0, subject to ensuring ongoing compliance with EU Regulation No 838/2010 (in particular, the*

[13] https://assets.publishing.service.gov.uk/media/5a95295de5274a5b849d3ad0/EDF-SEE-decision-and-order.pdf
[14] Specifically, the CMA found that TNUoS Charges in relation to 'Offshore Generator Only Spurs' were to be included in the Connection Exclusion. To date, such charges have formed part of the CUSC Calculation.
[15] https://www.ofgem.gov.uk/system/files/docs/2019/11/cusc_direction_1.pdf

The Office of Gas and Electricity Markets
10 South Colonnade, Canary Wharf, London, E14 4PZ **Tel** 020 7901 7000
www.ofgem.gov.uk

requirement that average transmission charges paid by producers in each Member State must be within prescribed ranges – which for Ireland, Great Britain and Northern Ireland is 0 to 2.50 EUR/MWh). This should be achieved by charging generators all applicable charges (having factored in the correct interpretation of the connection exclusion as set out in EU Regulation 838/2010), and adjusted if needed to ensure compliance with the 0 to 2.50 EUR/MWh range."

There are effectively two discrete elements to this aspect of the Direction: i) set the TGR to £0, subject to ensuring ongoing compliance with the €0-2.50/MWh range; and ii) factor into the CUSC Calculation the correct interpretation of the Connection Exclusion.

As explained above, the second element of the Direction was already under consideration by industry under CMP317.

In November 2019, NGESO raised CMP327 ("*Removing the Generator Residual from TNUoS Charges (TCR)*") in respect of the TGR to £0 element of the Direction. In January 2020, the Authority granted consent to the amalgamation of CMPs 317 and 327, since they were "*sufficiently proximate to justify amalgamation on the grounds of efficiency and logically dependent on each other*."[16]

The modification proposal

The CMP317/327 amalgamated modification proposal seeks to:

- Identify the charges paid by generators which fall within the Connection Exclusion, with due regard to the findings of the CMA Decision, and to ensure that such charges are excluded from the CUSC Calculation;
- Set the TGR to £0 as directed by the Authority, subject to compliance with the Limiting Regulation; and
- Raise new proposals as regards the treatment of BSC Charges and certain BSUoS Charges (related to congestion management) and whether those charges should be included within the CUSC Calculation.

CMP317/327 resulted in a total of 84 options for change, i.e. NGESO's Original Proposal and 83 WACMs. CMP339 is the related modification proposal which sets out consequential definitional changes needed to support changes to the CUSC Calculation.[17]

Each of the proposals includes a solution to set the TGR to £0. The large number of WACMs was created because the Workgroup wanted to ensure that the Authority was '*presented with a full suite of options it could choose from to ensure compliance with the Limiting Regulation*'[18]. In our view the inclusion of additional options (and associated modification proposals) was unnecessary in a number of respects, e.g. targeting and phasing. The effect of this was to add unnecessary complexity to both the modification process and in turn, our decision making.

The 84 proposals comprise various permutations of options within seven discrete modules, each of which covers different aspects of the modification (as explained more fully below)[19]. In practical terms, this meant that once we reached a conclusion as to

[16] https://www.nationalgrideso.com/document/162076/download
[17] Our determination on CMP339 has been published alongside this decision letter: https://www.ofgem.gov.uk/publications-and-updates/cmp339-consequential-changes-cmp317327-tcr
[18] Para 9.3.13, CMP317/27 Final Modification Report available at https://www.nationalgrideso.com/industry-information/codes/connection-and-use-system-code-cusc-old/modifications/cmp317-cmp327
[19] Annex 11 of the FMR has details of all of the combinations of the modules which were proposed.

which option within each module we wished to approve, the others (in that particular module) effectively fell to be rejected.

A brief description of each of the modules is provided below, with a summary of the options within each module in Table 1.

- Treatment of BSC Charges: proposes alternatives in relation to whether some elements of BSC Charges will be included or excluded from the CUSC Calculation.
- Treatment of BSUoS Charges (congestion management): proposes alternatives which would include or exclude certain BSUoS Charges (related to congestion management) within or from the CUSC Calculation. The Workgroup did not define "congestion management costs" but indicated that they expect this would include some elements of BSUoS Charges.
- Two-step *ex ante* adjustment: one of the options in this module would incorporate a two-step process to set and, in certain circumstances, adjust charges to be paid in an upcoming charging year. The other option does not include such a process. The options under this module are only applicable if any element of BSC Charges and/or BSUoS Charges is included in the CUSC Calculation.
- Phasing of implementation: proposes options to phase implementation, where changes may be introduced gradually over a period of up to three years.
- Target: proposes options that provide for the inclusion of a target for annual average transmission charges within the Permitted Range.
- Error margin: proposes options for the inclusion (or otherwise) of an error margin in the CUSC Calculation to reduce the risk of a breach of the Limiting Regulation.
- Definition of charges for assets required for connection: proposes alternative definitions of the charges that fall within the Connection Exclusion and excludes such charges from the CUSC Calculation.

Table 1 Potential options within each module which make up the Original Proposal and subsequent WACMs

No	Module Name	Options
1	**BSC Charges (*included in the Calculation*)**	• Include BSC Charges in the CUSC Calculation; or • Exclude BSC Charges from the CUSC Calculation
2	**BSUoS Charges (*included in the Calculation*)**	• Include some BSUoS Charges in the CUSC Calculation; or • Exclude BSUoS Charges from the CUSC Calculation
3	**Two-step ex ante adjustment**	• Where BSC and/or some BSUoS Charges are included in the CUSC Calculation, use a two-step ex ante adjustment process (linked to Modules 1 and 2); or • No such two-step adjustment process
4	**Phasing of the implementation**	• No phasing; or • Phasing over two charging Years; or • Phasing over three charging Years

The Office of Gas and Electricity Markets
10 South Colonnade, Canary Wharf, London, E14 4PZ **Tel** 020 7901 7000
www.ofgem.gov.uk

No	Module Name	Options
5	**Amount targeted (€/MWh)**	• No target; or • A target of €0/MWh; or • A target of €0.25/MWh; or • A target of €0.50/MWh; or • A target of €1.25/MWh
6	**Error Margin**	• Include an error margin; or • Do not include an error margin (linked to Module 5)
7	**Definition of charges for assets required for connection (*for the Connection Exclusion*)**	• Charges for all Local Circuits and Substations; or • Charges for Generator Only Spurs ("GOS"); or • Charges for all Local Circuits and Substations except those which are pre-existing, shared or shareable

CUSC Panel recommendation

At the CUSC Panel meeting on 31 July 2020, a majority of the CUSC Panel considered the modifications in the table below to be better than the Baseline (i.e. the existing provisions in the CUSC) in facilitating the ACOs. The Panel did not reach an overall majority consensus as to the 'best' overall option.

Modification Number	Which are better than Baseline?	Which are not better than Baseline?	Best Option
CMP317/327 – Original and WACMs 1-83	Majority of Panel voted that the following were better than Baseline: WACM 7, 8, 14, 15, 49, 50, 52, 53, 56, 57, 59, 60, 70, 71, 73, 74, 77, 78, 80 and 81	Majority of Panel voted that the Original Proposal and the remaining WACMs were not better than the Baseline	2 votes each for WACM7 and WACM79 1 vote for each of WACM1, WACM29, WACM72, WACM76 and WACM83

Our assessment approach

Our assessment of the modules (and in turn, the associated modification proposals) has been as follows:

1. Compliance: we first assessed whether the options (if implemented) would achieve compliance with i) the Limiting Regulation and ii) the Direction;

The Office of Gas and Electricity Markets
10 South Colonnade, Canary Wharf, London, E14 4PZ **Tel** 020 7901 7000
www.ofgem.gov.uk

2. Applicable Charging Objectives: we then assessed the options against the ACOs; and
3. Principal objective and statutory duties: finally, we considered the application of our principal objective and statutory duties, including in particular section 3A of the Electricity Act 1989 (which provides that the Authority's principal objective is "to protect the interests of existing and future consumers in relation to electricity conveyed by distribution systems or transmission systems").

The ACOs

The ACOs against which the Original Proposal and the WACMs are to be assessed are set out in paragraph 5 of Standard Licence Condition ('SLC') C5 of NGESO's licence:

(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 subparagraphs (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[20]; and

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

Our decision

We have considered the issues raised by the modification proposals and the FMR dated 13 August 2020, including taking into account the responses to the Workgroup Consultation and Code Administrator Consultation. We have also considered and taken into account the votes of the Workgroup and the CUSC Panel on CMP317/327.

We do not consider that any of the proposals incorporate the correct interpretation of the Connection Exclusion. Notwithstanding this, we have concluded that the Original Proposal would be likely to avoid the imminent risk of a breach of the Limiting Regulation that is posed by the status quo, and better facilitate achievement of the ACOs than either the status quo or any of the WACMs. We also consider that approval of the Original Proposal would be consistent with our principal objective and statutory duties.

Accordingly, our decision is to approve the Original Proposal and direct that it be implemented.

Our approval of the Original Proposal is on the express basis that it is a 'stop-gap' measure which should avert an imminent risk of breach of the Limiting Regulation, and

[20] Objective (d) refers specifically to European Regulation 2009/714/EC. The Agency referred to is the Agency for the Cooperation of Energy Regulators (ACER).

allow time for the formulation of a longer-term solution that properly reflects the correct interpretation of the Connection Exclusion. We expect NGESO to bring forward a further CUSC Modification Proposal that will fully give effect to the correct interpretation of the Connection Exclusion.

We also expect NGESO to bring forward a CUSC Modification Proposal to remove from the CUSC Calculation the TNUoS Charges payable by Large Distributed Generators and their associated volumes (MWh). The need for this further modification is explained in more detail in the '*Future Modifications'* section below.

Reasons for our Decision

Introduction

In considering the large number of WACMs and combinations of modules presented by the Workgroup, in the first instance we decided which option within each module performs best having conducted the assessment outlined above. We then selected the specific modification proposal to approve based on the combination of these individual modular assessments. We set out below our assessment of each of the modules and our assessment against the ACOs. We indicate which modification proposals were rejected at each stage. Finally, we consider our principal objective and statutory duties.

Module 1 - BSC Charges

During the Workgroup Consultation, one response brought to the Workgroup's attention a decision letter the Authority had published for a BSC modification, P396 ('*Revised treatment of BSC Charges for Lead Parties of Interconnector BM Units')*[21]. In that decision letter, we stated that we believed that some elements of BSC Charges (the Main Funding Share and SVA (Production) Funding Share) were '*network access charges*'.

The Workgroup considered whether those charges (and also certain BSUoS Charges[22]) should be included within the CUSC Calculation.

The Workgroup raised a query with the Authority in relation to the impact of the decision on P396 on the treatment of BSC Charges and BSUoS Charges under the Limiting Regulation. We responded stating that we did not consider that P396 affected the interpretation of the Limiting Regulation.

We note that the FMR states:

> "*A number of Workgroup members were not satisfied with this statement from The Authority and expressed their concern that a material impact on the calculation of annual average transmission charges paid by generators in GB could see a breach of the Limiting Regulation if generators paid BSC funding shares but, for the purposes of the calculations to ensure compliance with the Limiting Regulation, they were not incorporated into the total amount of annual average transmission charges paid by generators in GB*."

The Proposals

The Workgroup brought forward a module with an option that would include the sum of generators' contributions to the Main Funding Share and SVA (Production) Funding Share

[21] https://www.ofgem.gov.uk/system/files/docs/2020/03/p396_d_0.pdf
[22] The inclusion (or otherwise) of BSUoS Charges within the CUSC Calculation is considered under our assessment of Module 2 below.

elements of BSC Charges within the CUSC Calculation. References to BSC Charges in the remainder of this letter are to these specific elements of BSC Charges. We discuss BSUoS Charges below.

The Workgroup estimated that the inclusion of BSC Charges in the CUSC Calculation would result in an additional £25m of charges being included in the CUSC Calculation [9.3.21 of the FMR.]

Our decision

For the reasons set out in Legal Annex One, we consider that BSC Charges should not be taken into account when assessing compliance with the Permitted Range. Rather they fall within the scope of the Ancillary Services Exclusion, being charges paid by producers related to ancillary services. This is consistent with the approach that has been taken to date in the CUSC Calculation.

We consider that the option (and associated modification proposals) that includes BSC Charges within the CUSC Calculation is negative against ACOs a), b), c), d) and e) (by comparison with the Baseline and options that would not include BSC Charges within the CUSC Calculation).

The inclusion of BSC Charges in the CUSC Calculation would have the effect of unnecessarily increasing the financial adjustment made by the CUSC Calculation (by including charges within the calculation which should be excluded). This would undermine the effect of setting the TGR to £0, the purpose of which was to remove a distortionary benefit that only certain generators receive. In this way, the inclusion of BSC Charges in the CUSC Calculation would be detrimental to competition and, as such, be negative against ACO a).

We believe that generators should face the full extent of their cost-reflective locational charges, subject to compliance with the Limiting Regulation. The cost-reflective signals sent to generators via TNUoS Charges could be diluted if BSC Charges were included in the CUSC Calculation, in circumstances where this is not necessary to achieve compliance with the Permitted Range. As such, we consider that the options that include BSC Charges in the CUSC Calculation are negative against ACO b).

The inclusion of BSC Charges in the CUSC Calculation would not be a response to any development in transmission licensees' transmission businesses. Rather, a direction to the ESO to include BSC Charges in the CUSC Calculation would require a change to the ESO's transmission business, insofar as it would place new obligations on the ESO. We therefore consider that inclusion of BSC Charges in the CUSC Calculation would be negative against ACO c).

The inclusion of charges in the CUSC Calculation that, as a matter of EU law, fall within the Ancillary Services Exclusion would increase the risk of non-compliance with the Limiting Regulation. In particular, if charges that fall within the Ancillary Services Exclusion are taken into account in the CUSC Calculation, this would increase the risk of a breach of the lower limit of the Permitted Range (assuming that the charges in question are greater than zero). We therefore consider that options that include BSC Charges in the CUSC Calculation are negative against ACO d) (the Limiting Regulation being a relevant legally binding decision of the Commission).

To require NGESO to deliver processes to facilitate the inclusion of BSC Charges in the CUSC Calculation (in circumstances where this is not necessary to achieve compliance with the Permitted Range) would be negative in terms of promoting efficiency in the

The Office of Gas and Electricity Markets
10 South Colonnade, Canary Wharf, London, E14 4PZ **Tel** 020 7901 7000
www.ofgem.gov.uk

administration and operation of the Charging Methodology and, as such, negative against ACO e).

We therefore reject proposals which would include BSC Charges in the CUSC Calculation.

Module 2 – BSUoS Charges / Congestion Management

In relation to BSUoS Charges, the Workgroup discussions focussed on the definition of "*ancillary service*" in Regulation (EU) 2019/943 (the '2019 Regulation')[23], which is different from that found in earlier legislation. The Workgroup considered whether the exclusion of "*congestion management*" from the definition in the 2019 Regulation affects the interpretation of the Limiting Regulation and, in particular, the Ancillary Services Exclusion.[24] The FMR states "*congestion management costs incurred by the ESO are currently recovered under the BSUoS charge paid by generators and suppliers (50:50) in GB."* [9.3.8 of the FMR]

One Workgroup member presented a paper to the Workgroup for consideration. This can be found in Annex 14 of the FMR. The paper highlights that "*there is no explicit recognition of congestion charges as network charges in the GB arrangements. However, Balancing Services Use of System (BSUoS) charges include an element of costs associated with "constraints" as well as costs related to ancillary services*". [9.3.10 of FMR]

There were different views within the Workgroup as to whether the interpretation of "*ancillary services*" for the purposes of the Limiting Regulation had been amended as a result of the 2019 Regulation and also, if it had been, what was meant by "*congestion management*" and how it might relate to the different elements of BSUoS Charges. The Workgroup felt that the charges covered would be those related to NGESO's activity to manage physical constraints and any market balancing actions taken by NGESO.

The Proposal

The Workgroup brought forward a module with an option that would include some elements of BSUoS Charges within the CUSC Calculation.

We note that the legal text[25] associated with the option that would include elements of BSUoS Charges within the CUSC Calculation was incomplete. It contained a new term "Congestion Management" within the new defined term "Ancillary Services Exclusion" but left "Congestion Management" undefined, leaving it open to the Authority to insert a definition if it considered it appropriate.

The Workgroup, for the purposes of its analysis, considered that some elements of the constraint costs within BSUoS could be 'congestion management' charges. They estimated that the inclusion of BSUoS Charges in respect of such constraint costs would result in an additional £279m of charges being included in the CUSC Calculation [9.3.21 of the FMR]. References to BSUoS Charges in the remainder of this letter are to the elements of the charges which relate to congestion management.

Our decision

For the reasons set out in Legal Annex One, we consider that BSUoS Charges should not be included in the CUSC Calculation. Rather they fall within the scope of the Ancillary

[23] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32019R0943
[24] Legal Annex One provides a summary of the relevant legislation.
[25] The supporting legal text is set out in WACMS 12 – 23 of CMP339.

The Office of Gas and Electricity Markets
10 South Colonnade, Canary Wharf, London, E14 4PZ **Tel** 020 7901 7000
www.ofgem.gov.uk

Services Exclusion, being charges paid by producers related to ancillary services. This is consistent with the approach that has been taken to date in the CUSC Calculation.

We consider that the option (and associated modification proposals) that includes BSUoS Charges within the CUSC Calculation is negative against ACOs a), b), c), d) and e) (by comparison with the Baseline and options that would not include BSUoS Charges within the CUSC Calculation), for the same reasons as set out above in relation to the proposal to include BSC Charges in the CUSC Calculation.

We therefore reject proposals which would include BSUoS Charges in the CUSC Calculation.

We would also highlight that it is incumbent upon the CUSC Panel, Workgroup members and Code Administrators to ensure that the required legal text is included as part of each modification proposal so that (if approved) it can be incorporated into the CUSC and can take effect without further action. Where this is not the case, we will ordinarily exercise our send back powers[26]. In this case, send back was not required as we have approved the option that does not include any part of BSUoS Charges in the CUSC Calculation.

The rejection of WACMs that include BSC Charges and / or BSUoS Charges results in the rejection of WACMs 21 - 83 inclusive.

Module 3 – Two step adjustment process

The incorporation of a two-step *ex ante* adjustment process would only be relevant if the CUSC Calculation was to include BSC Charges and/or BSUoS Charges. Given our decision to reject proposals which would include such charges in the CUSC Calculation, the question of whether there should be a two-step adjustment process does not arise. All proposals that included a two-step adjustment process have already been rejected by virtue of our conclusions on Module 1 and 2, as set out above.

Module 4 - Phasing of implementation

The majority of the Workgroup believed that a phased approach to implementation would be preferable, on the basis that it would better allow generators to adapt their business models to the changes in cost base that would occur as a result of this modification. Other Workgroup members considered that the intended changes had been well signalled by Ofgem since the start of the TCR deliberations and therefore that phasing was not necessary or appropriate.

Three alternative options were proposed under this module: (i) no phasing; (ii) phased introduction of the changes over 2 years; and (iii) phrased introduction of the changes over 3 years.

The SCR Decision followed extensive consultation with industry, as part of which multiple implementation date options were assessed. In relation to Embedded Benefits, our conclusions in this respect were summarised as follows in the SCR Decision:

> *"6.20 We think there has been sufficient time for both investors and market participants to anticipate these potential changes. We consider that the potential benefit to consumers from these changes being made earlier outweighs the reasons for delaying the implementation of these reforms. Having considered all*

[26] Section 8.23.12 of the CUSC

responses and evidence submitted, we remain of the view that the preferred implementation option is April 2021".

Table 14 in the SCR Decision also made it clear that implementation in 2021 was considered to bring the benefit of reducing harmful distortions more quickly.

For those reasons, our Direction required that "*NGESO raise the necessary code modification proposal(s) in sufficient time to enable the modifications to be effective as of 1 April 2021.*" We also indicated that NGESO was to work in conjunction with the relevant industry Workgroup already in place for CMP317 to ensure that any impact on that modification proposal by the SCR Decision was addressed in a manner that would not undermine NGESO's ability to comply with its obligations under the Direction.

Our decision

The Authority considered the possibility of phased implementation as part of its SCR Decision and concluded that the relevant aspects of its decision were to be implemented to take effect from April 2021. The Direction was clear in this respect. We consider (i) that phased implementation would not satisfy the Direction; and (ii) that the representations put forward in favour of phased implementation were not persuasive, in light of the extensive consultation previously undertaken and advanced notice of the intended changes.

We consider that the option which does not involve phased implementation would better facilitate ACOs a), b), c), d) and e), compared to options which involve phasing.

Phased implementation would prolong the period over which larger generators benefit from (all or part of) the negative TGR whilst smaller generators do not. As set out in our SCR Decision, we consider that this differential is detrimental to competition. The option which does not involve phasing would expedite the removal of this differential, and thus better facilitate ACO a).

We believe that generators should face the full extent of their cost-reflective locational charges, subject to compliance with the Limiting Regulation. Phasing would prolong the period in which the price signals sent to larger generators are dampened by the negative TGR, and thereby undermine cost-reflectivity. As such, we consider that the option which does not involve phasing would better facilitate ACO b).

All options which involve phased implementation would be detrimental to NGESO's ability to comply with the Direction, which required implementation in April 2021. The existence of the Direction is a development in NGESO's transmission business, and we therefore consider that the option which does not involve phasing would better facilitate ACO c).

Options which entail phasing would postpone, at least in part, the taking of steps to bring the CUSC Calculation more closely into line with the calculation prescribed by the Limiting Regulation. The option which does not involve phasing would therefore be likely to reduce the risk of non-compliance with the Limiting Regulation. We therefore consider that the option which does not involve phasing would better facilitate ACO d).

Phased implementation would involve greater administrative complexity than the option which does not involve phasing. We therefore consider that the option which does not involve phasing would better facilitate ACO e).

The Office of Gas and Electricity Markets
10 South Colonnade, Canary Wharf, London, E14 4PZ **Tel** 020 7901 7000
www.ofgem.gov.uk

We therefore conclude that implementation should not be phased. The effect of this conclusion is rejection of a further six WACMs (1, 6, 8, 13, 15 and 20).

Module 5 - Amount Targeted and Module 6 - Error Margin

Of the remaining options, there is a distinction between:

(i) those which include a target within the €0-2.50/MWh range (to be used when setting TNUoS Charges);
(ii) those without a target; and
(iii) those which, depending on (i) and (ii) include an error margin in the CUSC Calculation with the aim of ensuring compliance with the Permitted Range on an *ex ante* basis, noting the variable nature of the CUSC Calculation inputs.

We understand that the Workgroup have included these proposals with the aim of ensuring ongoing compliance with the Permitted Range.

The Direction stated that compliance with the Limiting Regulation:

> "…*should be achieved by charging generators all applicable charges (having factored in the correct interpretation of the connection exclusion as set out in EU Regulation 838/2010), and adjusted if needed to ensure compliance with the 0 to 2.50 EUR/MWh range*"

The Direction did not set any requirement as regards the introduction of a target within the CUSC Calculation. The Original Proposal does not specify a target as the Proposer did not feel this was necessary for compliance with the Limiting Regulation.

Other Workgroup members felt that there should be a target. The reason for this was to more closely align GB with other Member States, many of which have a narrower range for average annual transmission charges of €0-0.5/MWh prescribed in the Limiting Regulation. The Workgroup put forward several suggested target values (€0-1.25), as outlined in Table 1 above.

Our decision

We consider that the correct process to assess compliance with the Permitted Range in the Limiting Regulation is:

1. Calculate the annual average transmission charge as stipulated in the Limiting Regulation (applying the correct interpretation, in particular, of the Connection Exclusion and the Ancillary Services Exclusion);
2. Assess whether that resultant average is compliant with the Permitted Range and:
    - Where it is within the Permitted Range, no further action is needed; or
    - Where it is outside of the Permitted Range, an adjustment is needed solely to bring the figure into the Permitted Range.

As such, we consider that the introduction of a target is not necessary for the purpose of complying with the Direction. Rather, the introduction of a target would effectively amount to a (self-imposed) lowering of the upper end of the Permitted Range. Based on the predicted level of charges over the coming years, it would result in a significant

The Office of Gas and Electricity Markets
10 South Colonnade, Canary Wharf, London, E14 4PZ **Tel** 020 7901 7000
www.ofgem.gov.uk

reduction of transmission charges payable by generators. Such charges would require to be 'picked up' by consumers.

We note that the Panel Members' views on whether the introduction of a target would better facilitate competition (ACO a)) was mixed. We consider that the introduction of a target below €2.50 would be negative against ACO a) (facilitating competition). As set out in the SCR Decision, we consider the negative TGR to be a benefit for those that receive it (currently transmission connected generators and Large Distributed Generators). Small Distributed Generators do not receive the negative TGR. Our review of Embedded Benefits sought to address such differences. The introduction of a target below €2.50 would effectively undermine and potentially even negate the impact of setting the TGR to £0, since it would result in some generators benefitting from a negative adjustment to their charges, beyond what is necessary to achieve compliance with the Limiting Regulation. We therefore consider that the option without a target would better facilitate ACO a) than the options involving targets.

We consider that generators should face the full extent of their cost-reflective locational charges, subject to compliance with the Limiting Regulation. If a target was set within the Permitted Range, the scope to send price signals to generators would be unnecessarily constrained, undermining the principle of cost-reflectivity. As such, we consider that the option without a target would better facilitate ACO b) than the options involving targets.

We consider that the inclusion of an error margin within the CUSC Calculation provides sufficient protection against the risk of a breach of the Limiting Regulation, and that the options are therefore neutral in relation to ACO d). We also consider each of the options to be neutral in relation to ACOs c) and e).

We have approved the option within these modules which i) does not include a target value; and ii) does include an error margin. We consider this to be consistent with the terms of our Direction. This approval results in the rejection of a further 12 modification proposals (WACMs 2, 3, 4, 5, 9, 10, 11, 12, 16, 17, 18 and 19).

Module 7 - Assets required for connection

81 of the 84 proposals put to us have been rejected on the basis of our conclusions in respect of the previous six modules. The remaining three options (the Original Proposal, WACM7 and WACM14) differ solely by their definition of "*Charges for Physical Assets Required for Connection*", contained within the CMP339 legal text. To recap, this issue relates to the question of what is required in order to reflect in the CUSC Calculation the correct interpretation of the Connection Exclusion (following the findings of the CMA in relation to CMP261).

The three options put forward in respect of the Connection Exclusion would define "*Charges for Physical Assets Required for Connection*" as follows:

Option	**Definition of "*Charges for Physical Assets Required for Connection*"**
The Original Proposal (All Local Charges)	"*Connection Charges*[27] *and charges in respect of an Onshore local circuit, Onshore local substation, Offshore local circuit and Offshore local substation*"

[27] "Connection Charges" as referenced here and hereafter is as defined in section 11 of the CUSC

The Office of Gas and Electricity Markets
10 South Colonnade, Canary Wharf, London, E14 4PZ **Tel** 020 7901 7000
www.ofgem.gov.uk

Option	Definition of "*Charges for Physical Assets Required for Connection*"
WACM7 (Generator Only Spurs)	"*Connection Charges and charges in respect of an Onshore local circuit and Onshore local substation, where they form part of an Onshore Generator Only Spur and charges in respect of an Offshore local circuit and Offshore local substation where they form part of an Offshore Generator Only Spur*." This definition also relies on the following additional definitions: "*Offshore Generator Only Spurs": "These consist of (a) an Offshore substation (the Offshore local substation) where that sub-station is not shared with demand or another Generator; and (b) cable(s), (where those cable(s) are not shared with demand or another Generator) which run from the Offshore local substation to an Onshore substation*"; and "*Onshore Generator Only Spurs": "These consist of (a) an Onshore substation (the Onshore local substation) where that sub-station is not shared with demand or another Generator; and (b) underground cable(s), or overhead line(s) (that are not shared with demand or another Generator), which run from the Onshore local substation to an Onshore substation*"
WACM14 (Pre-existing / shared)	"*Connection Charges and charges in respect of an Onshore local circuit, Onshore local Substation, Offshore local circuit and Offshore local substation except for those charges that are for Shared Assets or Pre-Existing Assets*" This definition also relies on the following additional definitions: "*Pre-Existing Assets": "in respect of a Generator Onshore local circuit and/or Onshore local substation and/or Offshore local circuit and/or Offshore local substations that existed prior to the connection of that Generator to the NETS";* and "*Shared Assets": An Onshore local circuit and/or Onshore local substation and/or Offshore local circuit and/or Offshore local substation that are or could be used without the need for new assets or could be used just by switching, by either (i) more than one Generator or (ii) a single Generator and demand that is not Station Demand for that Generator*"

Correct interpretation of the Connection Exclusion

We set out our analysis of the correct interpretation of the Connection Exclusion in Legal Annex Two. In summary, we consider that the Connection Exclusion includes all charges paid by generators in respect of Local Assets (whether shared / shareable or otherwise) that were required to connect the generator(s) in question to the NETS as the NETS existed at the time the generator(s) wished to connect. We consider that charges paid by generators in relation to Local Assets which existed at the point at which such generator(s) wished to connect to the NETS do not fall within the Connection Exclusion.

By way of an illustrative example, suppose that two generators connect to the transmission system in a similar area at different times. For the first generator ('Generator One') to connect, a Local Circuit and Local Substation are installed. Generator One pays Local Circuit and Local Substation TNUoS Charges in respect of these 'Local Assets' based on its Transmission Entry Capacity. As the Local Assets were required to connect Generator One to the NETS as the NETS existed at the time Generator One wished to connect, those charges fall within the Connection Exclusion.

A second generator ('Generator Two') subsequently wishes to connect at a location close to Generator One. It may utilise the Local Assets used by Generator One which now form part of the NETS, instead of requiring a new Local Substation and/or Local Circuit.[28] As such, the Local Assets in this example were required for Generator One to connect to the NETS, but not for Generator Two to connect to the NETS (since the Local Assets already existed at the time Generator Two wished to connect). Local Charges will be payable by both generators based on their respective Transmission Entry Capacities. Local Charges paid by Generator One will fall within the Connection Exclusion (both before and after the connection of Generator Two), but the Local Charges paid by Generator Two will not (since the Local Charges paid by Generator Two do not relate to assets required to connect Generator Two to the NETS as it existed at the time Generator Two wished to connect).

For the avoidance of doubt, if Generator One and Generator Two had both wanted to connect to the NETS at the same time and Local Assets were installed for them to share a connection from the outset, the Local Charges paid by *both* Generator One and Generator Two in respect of those Local Assets would fall within the Connection Exclusion. This is consistent with §5.98(b) of the CMA Decision.

Neither the existing provisions of the CUSC Calculation nor any of the proposals in the FMR reflect this interpretation. The Authority therefore needs to choose between the imperfect status quo and a series of imperfect alternatives. It is open to the Authority to approve a modification proposal which is based on an incorrect interpretation of the Connection Exclusion, if that proposal is better than the (imperfect) Baseline and the other (imperfect) proposals at facilitating the achievement of the ACOs.

Baseline

As NGESO highlighted in the FMR (at 9.3.17), there is a real and imminent risk that annual average transmission charges paid by producers (as calculated in accordance with the Limiting Regulation) will fall below €0/MWh unless changes are made to the current charging methodology. This would result in a breach of the Limiting Regulation.

Under the Baseline, all Local Charges paid by generators are included in the CUSC Calculation – i.e. the CUSC Calculation assumes that no Local Charges fall within the Connection Exclusion. We consider, however, that Local Charges fall within the Connection Exclusion, unless they relate to Local Assets which existed at the point at which the generator paying the charge wished to connect to the NETS.

The inclusion within the CUSC Calculation of charges which fall within the Connection Exclusion results in the calculated value for annual average transmission charges being inflated (i.e. the calculated value is higher than it would be, had the CUSC Calculation not been based on an erroneous interpretation of the Connection Exclusion). This in turn causes the TGR (i.e. the negative charge applied with the aim of ensuring compliance with the Permitted Range) to be higher (i.e. more negative) than would otherwise be the

[28] This assumes that the Local Assets did not require to be upgraded to facilitate Generator Two's connection.

case. In circumstances where the extent of such erroneous inflation of the TGR is greater than €2.50/MWh, this would result in the lower limit of the Permitted Range being breached.

Under the status quo, there is a serious and imminent risk of a breach of the lower limit of the Permitted Range. We understand from the ESO that the estimated value of offshore Local Charges in Charging Year 2021-2022 is c. £423m and estimated generator output is 223 TWh (or 223 million MWh). We expect that the vast majority, if not all, of these charges would fall within the Connection Exclusion, but the current CUSC Calculation assumes that they do not, and therefore takes them into account. The effect of including these charges in the CUSC Calculation is to increase calculated average charges by £1.90/MWh above what would otherwise be the case (and thus to produce a matching increase in the negative adjustment made by the TGR). On the basis of currently-forecast GBP/EUR exchange rates of around 1.1, this is equivalent to €2.09/MWh. Taking into account a c.20% *ex ante* error margin, there is therefore a serious risk under the status quo that annual average transmission charges (calculated in accordance with the Limiting Regulation) will fall below the lower limit of the Permitted Range. This would constitute non-compliance with the Limiting Regulation.

Since the Baseline presents an immediate risk of non-compliance with the Limiting Regulation, we consider that a proposal which would secure compliance (or reduce the risk of such non-compliance) would represent an improvement on the status quo. Approval of such an option would be preferable to allowing the status quo to remain (whether by rejecting all proposals or exercising our send back powers).

We have therefore assessed whether the Original Proposal, WACM7 and/or WACM14 would present a lower risk than the Baseline of annual average transmission charges falling outside the Permitted Range. In carrying out this assessment, we have compared the available options against what we consider to be the correct interpretation of the Connection Exclusion to evaluate the extent of the divergences in each case.

Assessment of the options vs the correct legal interpretation

The divergences between each of the proposals and what we consider to be the correct interpretation of the Connection Exclusion relate to a considerable extent to the treatment of shared assets. For illustration purposes, we have continued to use the hypothetical example (set out in the *Correct interpretation of the Connection Exclusion* section of this letter) where two generators connected in a similar area at different times.

The option which treats all Local Charges as falling within the Connection Exclusion (the Original Proposal): this option involves an over-inclusive approach to which charges should fall within the Connection Exclusion, since it includes charges related to Local Assets (onshore and offshore Local Circuits and Local Substations) which were not required for a particular generator to connect to the NETS as it existed at the time the generator wished to connect.[29] Thus, for example, this option would erroneously treat Local Charges paid by Generator Two (in the example we set out above) as falling within the Connection Exclusion. This option would also incorrectly treat charges in respect of assets which had become redundant and were subsequently re-used by another generator (such assets being pre-existing at the time that generator wished to connect to the NETS) as falling within the Connection Exclusion.

[29] This conclusion is consistent with the views of some Workgroup members who stated that this definition was too broad as, in their opinion, it meant that more assets would be considered as physical assets required for connection to the system than was actually the case under the Limiting Regulation.

The Office of Gas and Electricity Markets
10 South Colonnade, Canary Wharf, London, E14 4PZ **Tel** 020 7901 7000
www.ofgem.gov.uk

The option which treats charges in respect of Generator Only Spurs (but not other Local Charges) as falling within the Connection Exclusion (WACM7): this option involves an under-inclusive approach to which charges should fall within the Connection Exclusion, to the extent that it assumes that charges in respect of Local Assets that are shared cannot fall within the Connection Exclusion. Thus, for example, this option would erroneously treat Local Charges paid by Generator One after the Connection of Generator Two (in the example set out above) as falling outside the Connection Exclusion. This option would also incorrectly treat as falling outside the Connection Exclusion Local Charges paid in respect of assets which were constructed to connect two or more generators to the NETS at or around the same time.[30] Like the Original Proposal, this option would incorrectly treat charges in respect of assets which had become redundant and were subsequently re-used by another generator as falling within the Connection Exclusion, providing the asset is unshared – in this respect, this option errs on the side of over-inclusivity.

The option which treats all Local Charges as falling within the Connection Exclusion, except for charges in respect of assets that are pre-existing and/or shared/shareable (WACM14): this option involves an under-inclusive approach to which charges should fall within the Connection Exclusion, to the extent that it assumes that charges in respect of Local Assets that are shared or shareable cannot fall within the Connection Exclusion.

We consider that WACM14 is inferior to WACM7, for the following reasons:

- WACM14 is more under-inclusive than WACM7, since WACM14 assumes that all charges in respect of shareable (as well as shared) Local Assets must fall outside the Connection Exclusion. This would result in a situation where Local Charges for any Local Asset with spare capacity (for instance where a generator's Local Circuit cable has a 100MW capacity rating but the generator has a Transmission Entry Capacity of 90MW) would be treated as falling outside of the Connection Exclusion, irrespective of the fact that the asset was required for that generator's connection. This would result in a significant amount of charges being incorrectly factored into the CUSC Calculation, since many assets come in specific, pre-defined sizes and are not tailored to fit the Transmission Entry Capacity of the connecting party – many assets therefore have spare capacity which could in principle be shared.

- We recognise that WACM14, unlike WACM7, would correctly treat a charge in respect of a redundant asset that was later re-used as falling outside the Connection Exclusion. We understand, however, that such situations are expected to be uncommon in practice.

- There are problems in relation to WACM14's definition of "Pre-Existing Assets". As noted above, the proposed definition is, "*in respect of a Generator Onshore local circuit and/or Onshore local substation and/or Offshore local circuit and/or Offshore local substations that existed* ***prior to the connection of that Generator to the NETS****.*"[emphasis added]. Read literally, the definition of "Pre-Existing Assets" provided by the Workgroup would treat very little (if anything) as falling within the Connection Exclusion since at the moment of connection, the assets (or virtually all of the assets) required for connection will have been installed. We do not consider that this would be consistent with the CMA Decision, or the correct interpretation of the Connection Exclusion more generally[31].

[30] See §5.98(b) of the CMA Decision which considers this scenario.
[31] A summary of the CMA Decision is included in Legal Annex Two.

For these reasons, we consider that WACM14 is further from the correct interpretation of the Connection Exclusion than WACM7. We therefore reject WACM14, and the remainder of our assessment is focused on the Original Proposal and WACM7.

Assessment of the options

Original Proposal vs Generator Only Spur

In assessing the Original Proposal and WACM7, we have considered the extent to which each would address the imminent risk of a breach of the Limiting Regulation which arises under the status quo. Since we are directing that a further modification proposal be brought forward, we have focused on the risk of a breach in the short term – i.e. in the period between now and 1 April 2022, after which we anticipate that a further modification will be implemented. We have also considered the administrative complexity or otherwise of implementing each option; we are particularly keen to avoid unnecessary administrative complexity, since whichever proposal we approve will only be a 'stop-gap' measure to be in place until 1 April 2022.

We asked NGESO to provide us with indicative figures as to the respective value of the charges that would be treated as falling within the Connection Exclusion under each of the following: i) the correct interpretation; ii) the Original Proposal; and iii) WACM7. We considered these figures alongside the charges provided in the FMR.

Based on the figures made available to us, we understand:

i) The difference between total charges treated as falling within the Connection Exclusion under the Original Proposal and under WACM7 would be less than £3 million for each of 2021/22, 2022/23 and 2023/24. This difference would represent less than 1% of all charges that will be treated as falling within the Connection Exclusion;
ii) the value of the correct interpretation of the Connection Exclusion would sit somewhere between both of these options;
iii) the modest difference in value between the options (c£3m) reflects that there are and will be very few shared Local Assets in that period (the difference in treatment of shared assets being the driver of the differential between the two options);
iv) the difference in value would become more significant in the following years (2024/2025 and 2025/26),[32] by which time it is expected that a greater proportion of Local Assets will be shared, with the estimated charges associated with these shared assets being in the region of £80m;
v) of those shared assets, NGESO estimates the charges that would relate to pre-existing assets (using the definition we believe to be correct, as described in this letter) to be around £55m; and
vi) NGESO sets TNUoS charges using an Error Margin, to reduce the risk of charges falling outside of the Permitted Range.

We therefore consider that both the Original Proposal and WACM7 would be likely to result in compliance with the Permitted Range for each of the next 3 years (although we would not envisage either being in force beyond 1 April 2022). During that period, both options would involve only a small divergence from the correct interpretation of the Connection Exclusion, and such divergences would be accounted or compensated for on application of the error margin. However, from years 2024/2025 onwards, the options

[32] We believe that this relates to the proliferation of shared onshore cabling for the island links.

The Office of Gas and Electricity Markets
10 South Colonnade, Canary Wharf, London, E14 4PZ **Tel** 020 7901 7000
www.ofgem.gov.uk

would result in a significant over or under-inclusion of charges in the Connection Exclusion. Neither of these long-term outcomes is acceptable as:

- Treating too many charges as falling within the Connection Exclusion (under the Original Proposal) could lead to a breach of the upper threshold of the Permitted Range.
- While treating too few charges as falling with the Connection Exclusion (under WACM7) would not be expected to result in a breach of the lower threshold of the Permitted Range, it would result in demand consumers facing higher charges than would otherwise be the case. Generators would be receiving an additional benefit from the adjustment mechanism versus what is required for compliance with the Limiting Regulation.[33]

In terms of acting as a stop-gap until the future modification is made, we consider that the Original Proposal is preferable to WACM7. We expect that the proposal we approve will only be in place for one year. We want to keep the administrative costs associated with it as low as possible. We believe that the Original Proposal is simpler to implement than WACM7 as it is will be administratively simpler to identify all charges in respect of Local Assets than charges for Generator Only Spurs (since the latter would require an assessment of which assets are shared).

We further consider that as a new Baseline against which a future modification is to be made, the Original Proposal is preferable to WACM7. In practice, we anticipate that the future modification will treat the Connection Exclusion as comprising all Local Charges, except those which relate to assets which existed at the point when the generator paying the charge wished to connect to the NETS. This interpretation does not involve the concept of 'shared', which would be introduced by WACM7. Therefore, not only is the Original Proposal administratively preferable for April 2021 implementation, it is administratively preferable for the implementation of a future modification because it does not introduce a concept which later has to be removed from the CUSC.

In terms of our assessment against the ACOs, we consider that each of the proposals is better than the Baseline against ACOs a) facilitating competition and b) cost reflectivity. The effect of each would be to remove the negative TGR. To the extent that an adjustment would be required to bring the average charges within the Permitted Range, such adjustment would be significantly smaller in value than the TGR required under the Baseline. For the reasons set out in relation to the other modules, we consider the removal of the TGR to be positive in terms of facilitating competition and improving cost reflectivity.

We consider each of the options to be better than the Baseline against ACOs c) and d) as they would represent (i) a more accurate implementation of the Connection Exclusion, as required by the Direction and (ii) be more likely to result in compliance with the Limiting Regulation.

Finally, we consider the Original Proposal to be better than the Baseline and the other options against ACO e) *Promoting efficiency in the implementation and administration of the use of system charging methodology*. As explained above, the Original Proposal is

[33] We recognise that the exclusion of too many charges from the Connection Exclusion could result in annual average transmission charges falling below the lower limit of the Permitted Range, although we do not consider this to be an immediate risk under the Generator Only Spur proposal owing to the relatively low levels of under-inclusion.

administratively the most simple proposal to implement and avoids making changes that will require to be changed again in a year's time.

Further, we consider that the adoption of the Original Proposal would better protect the interests of consumers than WACM7, albeit only to a modest extent. This is because WACM7 would treat c£1.2m less than should be the case as falling within the Connection Exclusion, with the ultimate consequence that those charges would be borne by consumers rather than generators. We therefore consider that adoption of the Original Proposal would be consistent with our principal objective.

Our decision

In summary:

1. Under the Baseline, there is a significant and immediate risk of a breach of the lower threshold of the Permitted Range. A proposal which does not carry a significant risk of breach of the Permitted Range would therefore represent an improvement on the Baseline.
2. All of the proposals are based on incorrect interpretations of the Limiting Regulation, and we therefore do not regard any of them as a long-term solution. We are therefore directing that a further modification proposal be brought forward. The purpose of approving a modification now is to avoid the imminent risk of breach, and allow time to develop a long-term solution.
3. WACM14 is more erroneous in its interpretation of the Limiting Regulation than WACM7, and we therefore reject WACM14.
4. Under the Original Proposal and WACM7, the risk of a breach of the Limiting Regulation in the next 3 years is low. Therefore each of these proposals would represent an improvement on the Baseline.
5. In circumstances where a proposal is only being adopted as a stop-gap, we want it to be as administratively simple to implement as possible (to avoid the costs of making complex changes that are then going to be changed again in a year's time).
6. The most administratively simple proposal is the Original Proposal, and it is also the best for consumers (albeit only by a small margin).
7. We therefore approve the Original Proposal (on the express basis that it is only a stop-gap until a further modification proposal is brought forward) and reject the other two options (WACMs 7 and 14).

Principal objective and statutory duties

We consider that the approval of the Original Proposal is consistent with our statutory duties, including our principal objective to protect the interests of existing and future consumers and our other statutory duties. In rejecting proposals which would unnecessarily increase the level of adjustment required to bring average annual transmission charges within the Permitted Range, we are protecting the interests of consumers who would otherwise require to meet the resultant costs of the increase in residual charges payable by demand.

Our decision

Based on our assessment of each of the above modules, we have decided to approve the Original Proposal.

We also expect NGESO to bring forward a further modification proposal to fully implement the correct interpretation of the Connection Exclusion and to amend the treatment of Large Distributed Generation (as set out below).

Future Modification(s)

Treatment of Large Distributed Generation

The Limiting Regulation provides that "*annual average transmission charges paid by producers is annual total transmission tariff charges paid by producers divided by the total measured energy injected annually by producers to the transmission system of a Member State".*

The CUSC Calculation divides the total TNUoS Charges paid by the total chargeable MWh volume. TNUoS Charges are payable by transmission connected generators and Large Distributed Generators. The CUSC Calculation includes TNUoS Charges and volumes attributable to both types of generators. We consider this current approach to be incorrect. In our view, the Limiting Regulation (and the limitations on transmission charges) only applies in relation to transmission connected generators.

We reach this view based on the wording of the Limiting Regulation which refers to "*energy injected… to the transmission system*". We do not consider that Distributed Generation inject energy to the transmission system. Rather they inject energy to the distribution system. In our view, the Limiting Regulation does not apply to transmission charges payable by Large Distributed Generators.

It is necessary, therefore, to revise the CUSC Calculation so that when assessing compliance with the Limiting Regulation, the sums payable by Large Distributed Generators and their associated volumes of MWh exports are not taken into consideration.

We asked NGESO to provide us with initial estimates as to the impact of removing Large Distributed Generators from the CUSC Calculation. The estimates provided were based on the Connection Exclusion included in the Original Proposal, and indicate that the removal of Large Distributed Generator contributions and volumes from the CUSC Calculation would result in an increase in the average €/MWh transmission charges meaning that the adjustment used to bring charges back into the Permitted Range would therefore also need to be higher.

For 2021/22, we understand that the adjustment is estimated to be £0.04/MWh lower than would be the case if only the revenues and volumes associated with generators connected directly to the transmission system were included in the CUSC Calculation. We note, however, that the error margin (which is currently projected to be c20%) should mean that the annual average transmission charges (calculated in accordance with the Limiting Regulation) still fall within the Permitted Range.

As such, we consider that the inclusion of Large Distributed Generators' charges and volumes in the CUSC Calculation in charging year 2021/2022 will not create significant risks of non-compliance with the Permitted Range for that year. If any such compliance risks do arise, we will work with NGESO to determine the appropriate course of action. NGESO will be required to bring forward a CUSC Modification Proposal to remove these Large Distributed Generators from the CUSC Calculation to take effect by 1 April 2022.

The Office of Gas and Electricity Markets
10 South Colonnade, Canary Wharf, London, E14 4PZ **Tel** 020 7901 7000
www.ofgem.gov.uk

We will provide additional guidance in due course as to further changes that may be required to the charging methodology to ensure that Large Distributed Generators are treated fairly as compared to transmission connected generators.

Connection Exclusion

Either at the same time as bringing forward a modification proposal in respect of the treatment of Large Distributed Generators, or separately, we expect NGESO to bring forward proposals to fully implement the correct interpretation of the Connection Exclusion. This should be raised in sufficient time to enable the modifications to be effective as of 1 April 2022.

The scope of this proposal should be to provide for the appropriate treatment of charges for Local Assets that were "pre-existing" at the time a particular generator wished to connect to the NETS (i.e. to ensure that these charges are included in the CUSC Calculation, and not treated as if they fell within the Connection Exclusion).

In terms of the relevant point in time at which determination is made as to which Local Assets are considered "pre-existing" (i.e. part of the NETS), our initial view is that the date of execution of the contracts between NGESO and the relevant generator would be a reasonable proxy as to when a generator wished to connect. This is the point at which the generator and NGESO enter into a binding commitment under which NGESO agrees to provide the generator with a connection. The connection offer (in particular, the Bilateral Connection Agreement) will also set out the Local Assets that will require to be built or upgraded to facilitate the connection.

For the avoidance of doubt, the future modification proposal should ensure that charges in respect of upgrades of a connection are treated as falling within the Connection Exclusion.

Historical compliance with the Limiting Regulation

In addition to bringing forward future modification(s) as set out above, NGESO should evaluate whether there has been non-compliance with the Limiting Regulation in 2020-21 and/or previous charging years as a result of the i) the inclusion in the CUSC Calculation of Distributed Generator volumes and charges; and/or ii) the fact that the CUSC Calculation is based on an erroneous interpretation of the Connection Exclusion. We understand that NGESO's initial assessments indicate that it is unlikely that there has been any non-compliance in respect of previous charging years. The position in respect of this current charging year is less clear and requires further investigation. If and insofar as any non-compliance is identified, we expect NGESO to bring forward additional modifications to address such issues. We will work together with NGESO to understand the compliance position in respect of previous years.

Impact assessment and Ofgem consultation

Section 5A of the Utilities Act 2000 imposes a duty on the Authority (its 'Section 5A duty') to undertake an impact assessment in certain circumstances. In particular, that applies where it appears to the Authority that a proposal is important. A proposal is important for these purposes if its implementation would be likely to, among other things, "*have a significant impact on persons engaged in commercial activities connected with the…generation, transmission, distribution or supply of electricity*." Where this applies, the Authority is obliged to carry out an impact assessment.

The Office of Gas and Electricity Markets
10 South Colonnade, Canary Wharf, London, E14 4PZ **Tel** 020 7901 7000
www.ofgem.gov.uk

We conducted an impact assessment as part of our TCR Significant Code Review which was taken into consideration in our SCR Decision. This assessment factored in setting the TGR to £0 and showed significant consumer benefits associated with the changes that will be implemented through CMP317/327. It also found the distributional impacts on affected generators, who will pay higher charges as a result of this decision, to be acceptable when considered alongside the benefits.

Further information on future generator charges (based on the different interpretations of the Connection Exclusion) was presented in the FMR. These were broadly consistent with the impact assessment. More recently, estimates of generator charges for future charging years is set out in the ESO's 'Draft TNUoS Tariffs for 2021/2022' report (November 2020)[34]. This reflects the fact that the most recent figures are based on updated estimates.

For completeness, we note that the value of Offshore Local Charges set out in the above report is greater than the estimated value of such charges as at the date of our impact assessment. The structure of the impact assessment was such that an increase in the value of Offshore Local Charges would not affect the modelled outcomes in respect of the impact on generators.

Expansion Constant

For completeness we note that on 2 December 2020 we published our decision to approve CMP353 '*Stabilising the Expansion Constant and non-specific Onshore Expansion Factors from 1st April 2021*'[35]. This CUSC modification has been made to prevent the implementation of a large increase to the expansion constant in April 2021. No such increase had been modelled in the impact assessment for the TCR .

We note that there may be changes to the expansion constant in the future but also that any such future changes would not affect the decisions taken in the TCR. Rather the distributional impacts of any proposed change require to be considered as part of any future decision to amend the expansion constant.

Decision notice

In accordance with Standard Condition C10 of the Transmission Licence, the Authority, hereby directs that the Original Proposal of modification proposal *CMP317: Identification and exclusion of Assets Required for Connection when setting Generator Transmission Network Use of System (TNUoS) charges and CMP327: Removing the Generator Residual from TNUoS Charges (TCR*) be made.

Andrew Self
Deputy Director, Electricity Network Charging & Access
Signed on behalf of the Authority and authorised for that purpose

[34] https://www.nationalgrideso.com/document/181866/download
[35] https://www.ofgem.gov.uk/system/files/docs/2020/12/cmp353_d_1.pdf

Legal Annex One
Module 1 - BSC Charges / Module 2 - BSUoS Charges
Ancillary Services Exclusion

1. For the reasons set out below, we consider that BSC Charges and BSUoS Charges fall within the scope of the Ancillary Services Exclusion, such that they are excluded from the Range Calculation, and in turn should be excluded from the CUSC Calculation.

Ancillary Services Exclusion

2. The Ancillary Services Exclusion provides that "*[c]harges paid by producers related to ancillary services"* shall be excluded from the Range Calculation.[36]

3. The Limiting Regulation does not define '*ancillary services*', or provide any guidance as to what is expected to be captured by this exclusion. The supporting legislative framework, forming the legal basis of the Limiting Regulation, is the 2009 Regulation and Directive 2009/72/EC[37] (the '2009 Directive'; together the '2009 Legislation'). The 2009 Legislation defines 'ancillary service' as:

"a *service necessary for the operation of a transmission or distribution system*".[38]

4. With effect from 1 January 2020, the 2009 Legislation has been recast in the 2019 Regulation and Directive (EU) 2019/944[39] (the '2019 Directive'; together, the '2019 Legislation'). The 2019 Legislation defines *'ancillary service'* as:

"a service necessary for the operation of a transmission or distribution system, including ***balancing*** *and* ***non-frequency ancillary services****, but not including* ***congestion management****"* [emphasis added][40]

5. The 2019 Legislation provides the following definitions for the 'new' elements of the definition of '*ancillary service'*:

"*Balancing*" means "*all actions and processes, in all timelines, through which transmission system operators ensure, in an ongoing manner, maintenance of the system frequency within a predefined stability range and compliance with the amount of reserves needed with respect to the required quality*"[41]

"*Non-frequency ancillary service" means "a service used by a transmission system operator or distribution system operator for steady state voltage control, fast reactive current injections, inertia for local grid stability, short-circuit current, black start capability and island operation capability*"[42]

6. "*Congestion management*" is not defined in the 2019 Legislation.

7. We have considered the legislative framework in interpreting the scope of the Ancillary Services Exclusion and, for the following reasons, our view is that little or no weight

[36] Paragraph 2 of Annex B of the Limiting Regulation.
[37] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L:2009:211:TOC
[38] Article 2(1) of the 2009 Regulation and Article 2(17) of the 2009 Directive.
[39] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32019L0944
[40] Article 2(60) of the 2019 Regulation and Article 2(48) of the 2019 Directive.
[41] Article 2(10) of the 2019 Regulation and Article 2(45) of the 2019 Directive
[42] (Article 2(61) of the 2019 Regulation and Article 2(49) of the 2019 Directive).

should be attached to the 2019 Legislation as an aid to interpreting the Limiting Regulation:

a. It is difficult to contemplate that the drafter of the Limiting Regulation, when using the expression '*ancillary services*', would have had in mind a definition that would be introduced years later. In our view, the intention of the drafter of the Limiting Regulation was that charges paid by producers related to "*a service necessary for the operation of a transmission or distribution system*" (i.e. the definition in the 2009 Legislation) be excluded from the Range Calculation.

b. The 2019 Legislation does not refer to the Limiting Regulation, and we are not aware of any indication that it was intended to alter its effect. Indeed the Impact Assessment that the Commission published with its proposals for the 2019 Legislation refers to the Limiting Regulation, and appears to conclude that it should remain unchanged, albeit with the Agency for the Cooperation of Energy Regulators ('ACER') being required to develop non-binding principles on best practices in relation to the setting of transmission tariffs.[43]

8. In considering whether BSC Charges and / or BSUoS Charges fall within the scope of the Ancillary Services Exclusion, we therefore focus on the definition of '*ancillary service*' in the 2009 Legislation. If such charges fall within the Ancillary Services Exclusion, they are excluded from the Range Calculation (and should accordingly be excluded from the CUSC Calculation), and if they do not, they will fall to be included. We consider each of BSC Charges and BSUoS Charges in turn.

Do BSC Charges fall within the scope of the Ancillary Services Exclusion?

9. Focusing on the definition of '*ancillary service*' in the 2009 Legislation, the question is whether BSC Charges relate to "*a service necessary for the operation of a transmission…system*".

10. In order to maintain the safe operation of the electricity grid, the amount of electricity being injected into and withdrawn from the system must be balanced. Our view therefore is that services carried out to ensure the system is balanced must be considered a "*service necessary for the operation of a transmission* […] *system*".

11. There can be disparities between the amount of electricity that a generator has agreed to inject into the grid, and the amount that it in fact injects. Similarly, a supplier may export more or less electricity than it had contracted to export. The GB market includes a financial settlement process, administered by Elexon in accordance with the BSC; the costs of which are recovered via BSC Charges payable by generators and demand.[44]

12. The settlement process, the costs of which are recovered via BSC Charges as explained above, seeks to ensure that generators and suppliers are compensated/charged for the actual volumes of electricity that they inject/withdraw from the transmission system. Importantly, the settlement process is designed to create a financial incentive for generators and suppliers to be '*balance responsible'*, i.e. to match their actual volumes

[43] See pages 234-46 of Part 4 of the Impact Assessment, available at https://eur-lex.europa.eu/resource.html?uri=cellar:e4c834ae-b7b8-11e6-9e3c-01aa75ed71a1.0001.02/DOC_1&format=PDF. The requirement for ACER to provide a best practice report appears at Article 18(9) of the 2019 Regulation.

[44]

with their expected volumes. If this settlement process did not exist, generators and suppliers would have no obvious incentive to be '*balance responsible*'.

13. Our view is that the transmission system could not reliably be kept in balance without a process to check how much electricity generators and suppliers have injected onto or withdrawn from the system, and to financially incentivise them to minimise variation from the volumes that they had forecast. We therefore consider that the provision of a settlement process of the sort administered by Elexon, the costs of which are recovered via BSC Charges, to be related to "*a service necessary for the operation of a transmission…system*". Consequently, we consider (i) that BSC Charges fall within the Ancillary Services Exclusion; and (ii) that BSC Charges should be excluded from the CUSC Calculation.

Do BSUoS Charges fall within the scope of the Ancillary Services Exclusion?

14. As noted above, we do not consider that any or any significant weight should be attached to the 2019 Legislation as an aid to the interpretation of the Limiting Regulation.

15. Focusing on the definition afforded to '*ancillary service*' in the 2009 Legislation, the question is whether BSUoS Charges (in particular those elements related to addressing physical constraints on the network) relate to "*a service necessary for the operation of a transmission…system*". We consider that they do for the following reasons.

16. There are necessarily limits to the amount of electricity that can safely be transmitted across the electricity network. Such limits (at least in the context of GB) are referred to as "constraints". As well as ensuring that the system as a whole is kept in balance, NGESO provides (or procures the provision of) "constraint management services", i.e. NGESO monitors how much electricity is being transmitted (or is proposed to be transmitted) on different parts of the GB transmission network, and where necessary takes steps to ensure that the relevant constraints are not exceeded. Such steps may include, for example, paying particular generators to reduce their output.

17. As with the costs of keeping the system in balance, the costs of constraint management services are recovered from both generators and consumers. NGESO recovers such costs via BSUoS Charges. We refer to the elements of BSUoS Charges which are referable to constraint management services as "Constraint Management Charges". We believe that these are the costs which the Workgroup refers to as "congestion management costs".

18. We consider Constraint Management Charges to be charges recovering the costs associated with essential actions taken by NGESO to keep the transmission system operating safely (i.e. "*a service necessary for the operation of a transmission…system*"), such that they fall within the Ancillary Services Exclusion.

19. We believe that this conclusion is supported by reference to the *travaux preparatoires* of the Limiting Regulation.

    a. The Impact Assessment published by the Commission in relation to the Limiting Regulation indicates that, in introducing Annex B to the Limiting Regulation, the Commission intended to adopt, without any substantive modification, a set of non-binding guidelines which had been published by the European Regulators' Group for Electricity and Gas ('ERGEG') in 2005 (the 'ERGEG Guidelines').[45] The ERGEG Guidelines were published contemporaneously with an Explanatory Note, which said:

[45] See pages 36-37 of the Impact Assessment.

"As well as the fixed costs of the transmission network in the short run, ie capital and operation costs, transmission tariffs often include specific charges for losses, congestion and other ancillary services.

[…] ***Charges related to*** *losses,* ***congestion and other ancillary services are also an important feature. These charges are not, however, considered to be part of the G charge for the purpose of these Guidelines."*** (emphasis added)

b. The Impact Assessment accompanying the Limiting Regulation identifies the effects of cross-border flows of electricity to include:

"…causing ***internal congestion*** *which the TSO* [i.e. the Transmission System Operator] *must manage. Transmission lines have a maximum capacity of energy which they can transport.* ***When planned generation and consumption patterns mean that the expected flows on a line would be greater than it is physically capable of transporting, congestion is said to exist. It is usually the responsibility of TSOs to manage this within the system for which they are responsible****, for example by instructing some generators to reduce production and increasing other generators' production so that lines are not overloaded. Generators who are instructed to reduce output must be compensated for lost profits while the additional generation must also be paid for. The costs of managing additional congestion as a result of transit flows should, in principle, be compensated…"* (p8).[46]

c. The Impact Assessment refers to the desirability of national regulatory authorities being able to use locational pricing "*in order to send signals on the most appropriate and inappropriate zones to locate new generation in view of local circumstances with regard to network losses and network congestion*" (p12).

20. We draw the following points from the *travaux preparatoires*:

a. In the Impact Assessment the Commission's reference to '*congestion*' seems consistent with what we refer to as '*constraint*' in a GB context and makes it clear that '*congestion*' is something that could occur within a Member State, not just on an interconnection between Member States.

b. It would seem likely that ERGEG was using the word 'congestion' in the same way in the Explanatory Note, given that the ERGEG Guidelines are concerned with charging arrangements within Member States.

c. ERGEG treated *'congestion'* as a form of *'ancillary service'*, and intended that charges in respect of *'congestion'* should be excluded from the calculation stipulated in the ERGEG Guidelines.

d. There is nothing to indicate that the Commission had any contrary intention; indeed, as noted above, the Commission presented Annex B to the Limiting Regulation as the straightforward adoption of the ERGEG Guidelines.

e. The Commission wanted to facilitate pricing models in which generators would have to pay more if they chose to locate new generating facilities in places that were likely to give rise to congestion or network losses. There would therefore be a clear logic to

[46] This passage appears in a section of the Impact Assessment that is concerned with an inter-TSO compensation mechanism (not limits on transmission charges), but is relevant to understanding how the Commission was using the word *"congestion"*.

The Office of Gas and Electricity Markets
10 South Colonnade, Canary Wharf, London, E14 4PZ **Tel** 020 7901 7000
www.ofgem.gov.uk

excluding charges in respect of congestion management (and network losses) from the calculation prescribed by the Limiting Regulation, so that national authorities would have wide scope to set such charges in ways that would encourage economically efficient choices in the location of new generating facilities.

21. Reading the Limiting Regulation in the light of the *travaux preparatoires* and the 2009 Legislation, being the legislation in force at the time of its enactment, we consider that Constraint Management Charges fall within the Ancillary Services Exclusion, and that they should therefore not be included in the CUSC Calculation.

The Office of Gas and Electricity Markets
10 South Colonnade, Canary Wharf, London, E14 4PZ **Tel** 020 7901 7000
www.ofgem.gov.uk

Legal Annex Two
Module 7 – Assets required for connection (the Connection Exclusion)

1. For the reasons set out below, our interpretation of the Connection Exclusion is that charges paid by a generator fall within the Connection Exclusion if they are for assets that were required to connect that generator to the system, as the system existed at the time when the generator wished to connect, or for the upgrade of that connection. In this context we consider the system to be the 'NETS'.

The CMA Decision

2. In reaching our view as to the correct interpretation of the Connection Exclusion, we considered the CMA Decision closely. We agree with the conclusions that the CMA reached. The following findings from the CMA Decision are particularly useful in determining the correct interpretation of the Connection Exclusion:

   a. Noting that the Connection Exclusion uses words which are not defined, the CMA found *"[w]here EU legislation uses an expression which is not defined, the expression's meaning "must be determined by considering its usual meaning in everyday language, while also taking into account the context in which it occurs and the purposes of the rules of which it is a part".*[47]

   b. *"[i]t would be wrong in principle to seek to define the Connection Exclusion…by reference to the extant GB domestic charging structure".*[48]

   c. In the context of the Connection Exclusion, "*the system*" must mean "*the system as it exists at the point that a new Generator wishes to be connected to it*"[49]. When deciding whether or not a charge falls within the Connection Exclusion, it is necessary to ask whether the physical asset to which it relates was "*required for*" the generator to connect to "*the system*" as it existed at that point – this is the same as asking whether, "*but for*" the asset, the generator would be connected to "*the system*".[50]

   d. Equipment by which a connection to "*the system*" is effected continues to be "*required for*" connection to "*the system*" after the initial act of connecting, and charges in respect of such equipment continue to fall within the Connection Exclusion. [51]

3. The CMA did not, however, need to (and did not) provide a comprehensive ruling as to the precise ambit of the Connection Exclusion.

[47] CMA Decision, §5.76(a)). As authority, the CMA cited C-568/15 *Zentrale zur Bekämpfung unlauteren Wettbewerbs Frankfurt am Main eV v comtech GmbH*, ECLI:EU:C:2017:154, §19
[48] CMA Decision, §5.88
[49] CMA Decision, §5.94
[50] CMA Decision, §§5.94, 5.97-5.98.
[51] CMA Decision, §§5.94-5.96, 6.23.

The Office of Gas and Electricity Markets
10 South Colonnade, Canary Wharf, London, E14 4PZ **Tel** 020 7901 7000
www.ofgem.gov.uk

Our Interpretation of the Connection Exclusion

4. The proposals regarding the Connection Exclusion in the FMR raise two principal issues which are not expressly addressed by the CMA Decision, namely:

   (i) whether, in the context of the Connection Exclusion, "*the system*" should be understood to be the Main Integrated Transmission System (the 'MITS') (as it existed at the relevant time) or the NETS (again, as it existed at the relevant time); and

   (ii) whether the fact that an asset is shared or shareable is determinative of whether charges in respect of the asset fall within the Connection Exclusion.

5. We consider these points in turn below.

'*The System'*

6. The electricity transmission network in GB is known as the NETS. The MITS is the core part of the NETS, and the rest of the NETS is referred to in this letter as the Local Network (comprising 'Local Assets', namely Local Circuits and Local Substations). We have considered whether, in the context of the Connection Exclusion, '*the system*" should be understood as the NETS or the MITS.

7. In our view, "*the system*" should be interpreted as the NETS. Our reasons for this are as follows:

   a. The most natural everyday meaning of *"the system"* is the entire transmission system (as it exists at the relevant time) of a member state. In the context of GB, this is the NETS. There is nothing in the wording of the Limiting Regulation to suggest that *"the system"* is intended to refer only to some subset of the transmission system.

   b. The Connection Exclusion should be given a uniform interpretation across the EU. The MITS is a concept specific to GB – even if other member states have some concept of a core part of their transmission systems, we are not aware that they define that core in the same way as the MITS is defined. By contrast, while other member states may well not use the term "*NETS*", they all have national transmission systems, such that the concept described by the expression *"NETS"* is not GB-specific.

   c. We also consider that defining *"the* system" as the NETS is consistent with our view that the Limiting Regulation is intended to facilitate cost reflective signals[52]. Consider, for example, a situation where a generator connects to the Local Network utilising spare capacity on existing infrastructure, i.e. it was not necessary for infrastructure to be installed to facilitate the connection. If *"the system"* were considered to be the MITS, the Connection Exclusion would include charges in respect of infrastructure (i.e. the Local Assets) which existed at the time the generator wanted to connect, the need for which was <u>not</u> occasioned by a generator's choice to locate in a particular place. The principle of cost-reflectivity does not require such charges to be outside the Range Calculation and as such there is no clear rationale for including them in the Connection Exclusion.

[52] See, for example, the table at 5.52 of the CMA Decision.

The Office of Gas and Electricity Markets
10 South Colonnade, Canary Wharf, London, E14 4PZ **Tel** 020 7901 7000
www.ofgem.gov.uk

'*Sharing/Shareability'*

8. We have considered whether "sharing" and/or "shareability" of assets is informative as to their treatment with regards the Connection Exclusion. We do not consider that the fact that an asset is shared and/or shareable precludes it from falling within the Connection Exclusion. There is nothing in the wording of the Limiting Regulation to indicate that the fact that an asset is shared or shareable is determinative of whether charges in respect of the asset fall within the Connection Exclusion. In addition, we note that the CMA Decision appears to endorse the view that charges in respect of a Local Asset that serves the connection of two generators to the system from the outset should fall within the Connection Exclusion.[53]

Conclusion as to the correct interpretation

9. Based on the above, we consider that charges paid by a generator fall within the Connection Exclusion if they are in respect of assets (whether shared/shareable or otherwise) that were required to connect the generator to the NETS, as the NETS existed at the time when the generator wished to connect (and in that respect, were not pre-existing), or for the upgrade of such assets.

[53] CMA Decision, §5.98b