

Modification proposal:	<b>Connection and Use of System Code (CUSC) CMP255: 'Revised definition of the upper limit of Generation Charges in the charging methodology with removal of the reference to the 27% charging cap'</b>		
Decision:	The Authority <sup>1</sup> consents that the WACM1 modification <sup>2</sup> be made <sup>3</sup>		
Target audience:	National Grid Electricity Transmission plc (NGET), Parties to the CUSC and other interested parties		
Date of publication:	4 August 2016	Implementation date:	18 August 2016

## Background

Transmission Network Use of System (TNUoS) charges seek to recover the costs incurred by transmission network owners (TOs) to provide and maintain transmission network assets. TNUoS charges are based on network users' capacity and comprise a 'locational' element and a 'residual' element. The 'locational' element reflects the different costs network users impose on the network depending on where they locate. The 'residual' element is set to recover the remaining costs allocated to generation (G) and demand (D) network users by the 'G:D split'. Historically, the G:D split was set at '27:73', ie 27% of transmission network costs are recovered from generators and 73% from demand network users.

EU Regulation EC 838/2010 ('the Regulation') restricts average transmission charges paid by GB generation to within the range €0-2.5/MWh. In October 2014, we approved CMP224<sup>4</sup> with the aim of ensuring compliance with the Regulation, by setting the G proportion of revenue to the lower of 27% or the maximum amount that results in the average transmission charge for GB not exceeding the upper limit of the range, based on a prudent<sup>5</sup> interpretation of the Regulation. Currently, this results in a G proportion of 17% and this is forecast to fall to 10% by 2020. These low G proportions are forecast to result in negative generation residual charges, and for the majority of onshore generators to have negative TNUoS charges by 2020.

In May 2014, the Agency for the Co-operation of Energy Regulators (ACER) published its opinion<sup>6</sup> that the restrictions on average charges should be removed. ACER reiterated this view in follow-on scoping work on potential future tariff harmonisation measures.<sup>7</sup> Under the current methodology, this would result in a 'snap back' to a 27% G revenue proportion for the first year for which the charge ranges cease to have effect and for

<sup>1</sup> 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.

<sup>2</sup> 'Change' and 'modification' are used interchangeably in this document.

<sup>3</sup> This document is notice of the reasons for this decision as required by section 49A of the Electricity Act 1989.

<sup>4</sup> Our CMP224 decision is here: <https://www.ofgem.gov.uk/publications-and-updates/connection-and-use-system-code-cusc-cmp224-cap-total-tnuos-target-revenue-be-recovered-generation-users>

<sup>5</sup> The decision on CMP224 was taken on prudent grounds so as to avoid any question as to compliance with the Regulation. It was not a decision on the correct interpretation of the Regulation.

<sup>6</sup> ACER's opinion appears on its website here:

[http://www.acer.europa.eu/Official\\_documents/Acts\\_of\\_the\\_Agency/Opinions/Opinions/ACER%20Opinion%2009-2014.pdf](http://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Opinions/Opinions/ACER%20Opinion%2009-2014.pdf)

<sup>7</sup> "Scoping towards potential harmonisation of electricity transmission tariff structures" is on ACER's website: [http://www.acer.europa.eu/en/Electricity/FG\\_and\\_network\\_codes/Documents/Scoping%20conclusions%20for%20harmonised%20Transmission%20Tariff%20Structures%20in%20Electricity.pdf](http://www.acer.europa.eu/en/Electricity/FG_and_network_codes/Documents/Scoping%20conclusions%20for%20harmonised%20Transmission%20Tariff%20Structures%20in%20Electricity.pdf)

which charges had not already been set. A 'snap back' would result in increased TNUoS charges for generation. The size of the increase will vary depending on the level of the TNUoS charges before 'snap back', the total TNUoS revenue at the time of 'snap back', and the total capacity of generation subject to TNUoS charges.

Whether ACER's opinion is progressed is a matter for the European Commission (EC). It is not clear if, or when, the charge ranges will cease to apply. However, we understand it is not likely that the EC will take any decision on the charge ranges during 2016. It is therefore unlikely that the charge ranges will cease to apply any earlier than the 2018/19 charging year, ie if the EC took a decision to remove the charge ranges in 2017, the earliest 'snap back' could occur is the 2017/18 charging year.

### **The modification proposal**

CMP255 seeks to remove the potential for a material increase in generator charges without a suitable notice period. Four options were proposed to address this defect, the original proposal raised by RWE Supply and Trading GmbH and three Workgroup Alternative CUSC modifications (WACMs). The options vary based on how the G proportion of revenue is set if and when the charge ranges no longer have effect:

- Original proposal (the Original) proposes that the €2.5/MWh 'cap' remains in place;
- WACM1 proposes that the G proportion of revenue remains where it was set prior to the charge range ceasing to have effect, eg if the G proportion was 15% in the last year for which the charge ranges had effect, it would remain at that level;
- WACM2 proposes that the €2.5/MWh 'cap' remains in place for four years, and the G proportion of revenue then returns to 27% over a three-year period; and
- WACM3 proposes that the G:D split follows NGET's latest five-year forecast at the time the charge ranges cease to apply, and then remains at the level it is set in the last year of that forecast, eg if the G proportion was 10% in the last year of NGET's five-year forecast, it would remain at that level in the following years.

The forecast G revenue proportions for each option are shown in Annex 1 of this letter.

### **CUSC Panel<sup>8</sup> recommendation**

The CUSC Panel considered the draft Final Modification Report (FMR) for CMP255 at its meeting on 24 June 2016. A majority of Panel members considered that all the options better facilitate the relevant charging objectives compared to the existing CUSC baseline. These views were based on the options better facilitating relevant objective (a). Six Panel members also considered that WACM1 best achieves the relevant charging objectives, and three considered that the Original best achieves those objectives compared to all options. The three Panel members that consider the Original is best also consider that the WACMs are out of scope of the modification, and should not have come to the Panel for decision. The views of Panel members are set out in full in the FMR.

### **Our decision**

We have considered the issues raised by the modification proposal and the FMR dated 6 July 2016. We have considered and taken into account the responses to the Code

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<sup>8</sup> The CUSC Panel is established and constituted from time to time pursuant to and in accordance with the section 8 of the CUSC.

Administrator consultation on the modification proposal which are attached to the FMR.<sup>9</sup> We have concluded that:

1. implementation of WACM1 will better facilitate the achievement of the relevant charging objectives of the CUSC<sup>10</sup> compared with the CUSC baseline and the other options (the Original, WACM2 and WACM3); and
2. directing that WACM1 be made is consistent with our principal objective and statutory duties.<sup>11</sup>

### **Reasons for our decision**

We have considered the views of the CUSC Panel and of respondents to the industry consultation. We consider that all options presented to us under CMP255 better facilitate relevant CUSC charging objective (a) compared to the current baseline. Of these, we consider that WACM1 best facilitates objective (a) relative to the other options. We also consider the current baseline better facilitates objective (b) compared to the options presented to us. However, we consider that improved cost reflectivity under the current baseline is likely to be temporary and is, in our view, outweighed by the negative effects of the potential for an immediate 'snap back' to a G proportion of 27%, discussed under objective (a). Therefore, we agree with the Panel that, overall, WACM1 best facilitates the relevant CUSC objectives compared to the current baseline and the other options.

### ***Objective (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'***

We consider that the €2.5/MWh cap imposed by the current baseline has a negative impact on competition in two ways. Firstly, it is forecast to result in negative generation residual charges in future years. Secondly, it introduces exchange rate risk to TNUoS forecasting, increasing overall uncertainty.<sup>12</sup> A negative residual charge prevents generators facing the full costs they impose on the transmission system, effectively subsidising all generators that pay TNUoS charges. We do not consider that this is consistent with the development of an efficient transmission network and a well-functioning wholesale market. However, we also agree with the Panel that the potential for a sudden and significant change in charges under the current baseline creates unnecessary risk which may increase costs to consumers, eg if generators price this risk into their Capacity Market (CM) bids. We therefore consider that, if the charge ranges cease to apply, it would be best to remove exchange rate risk from the charging methodology (as exists under the current baseline) and to move towards non-negative residual charges, but that the move towards non-negative residual charges should happen over a reasonable time period.

Of the options submitted to us, only WACM2 reduces negative generation residual charges over a longer time period. However, negative residual charges would only begin

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<sup>9</sup> CUSC modification proposals, modification reports and representations can be viewed on NGET's website at <http://www.nationalgrid.com/uk/Electricity/Codes/systemcode/amendments/>

<sup>10</sup> As set out in Standard Condition C5(5) of NGET's Transmission Licence, see: <https://epr.ofgem.gov.uk/Content/Documents/Electricity%20transmission%20full%20set%20of%20consolidated%20standard%20licence%20conditions%20-%20Current%20Version.pdf>

<sup>11</sup> The Authority's statutory duties are wider than matters which the Panel must take into consideration and are detailed mainly in the Electricity Act 1989 as amended.

reducing four years after the charge ranges cease to apply. In the four years preceding this, the €2.5/MWh cap would continue to apply. This would maintain exchange rate risk unnecessarily and negative generation residual charges would continue to increase over this period, before a sharp swing back towards 27% over a three-year period. WACM1 immediately removes exchange rate risk for TNUoS forecasts and prevents generator residual charges falling further. Since it does not increase the G revenue proportion and reduces the level of negative residual charges, industry should consider further how best to return to non-negative residual charges should the charge ranges cease to apply. As discussed below, we encourage them to do so.

We note that, under WACM1, charges will vary from forecast from the first year for which the charge ranges no longer apply. However, this impact is likely to be small. Current forecasts are that this would be less than £1/kW in the first year rising to around £3.50/kW in the third year. This is within the normal margin for error for TNUoS forecasts over these time periods and we do not consider that it presents a significant risk to generators. We have also considered whether approving the Original or WACM3 would better facilitate competition because it would avoid significant short-term changes to the G:D split. In our view, the negative effects of negative generation residuals and/or maintaining exchange rate risk outweighs any benefits of longer term certainty, as we would expect the market to adjust to changes in TNUoS charges. We also consider that, given these negative effects, it would not be consistent with our duty to protect consumer interests for us to commit to maintaining a cap denominated in €/MWh or negative generation residual charges in the longer run if this is not required to maintain a system of locational charges that fully reflects the marginal costs that generators impose on the transmission system while complying with the law.

Given the above, our view is that WACM1 best facilitates this objective compared to the other options and the current baseline. We also consider that the other options better achieve this objective compared to the current baseline. This is because the risk of 'snap back' is a more immediate concern than the method of setting the G:D split if the charge ranges cease to apply, which can be addressed by future modifications.

***Objective (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 in accordance with the STC) incurred by transmission licensees in their transmission businesses and which are compatible with standard condition C26 (Requirements of a connect and manage connection)'***

All options affect the residual charge only, with locational charges unaffected. Negative generator residual charges prevent generators facing the marginal costs that they impose on the system. The current baseline will reduce negative residual charges more quickly than all the options presented to us. Therefore, none of the options presented to us better facilitate this objective compared to the current baseline.

In comparing the options with each other, we have considered charges in the four years following an EC decision to remove the charge ranges, and charges in the longer term. In the four years following an EC decision, WACM1 has the lower negative residuals. In the longer term, WACM2 has lower negative residual charges. As indicated in our open letter of 29 July 2016 on charging arrangements for embedded generation<sup>13</sup>, we will be setting

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<sup>13</sup> <https://www.ofgem.gov.uk/publications-and-updates/open-letter-charging-arrangements-embedded-generation>

out how we propose to address the allocation of sunk/fixed costs associated with transmission networks in Autumn 2016. We encourage industry to consider further the long-term approach to recovering residual costs. Given this future work, we give more weight in making this decision to charges in the four years following a decision to remove the charge ranges. We consider that the current baseline best facilitates this objective, and that WACM1 better facilitates this objective compared to the other options.

### **The scope of the modification**

The proposer, a number of Workgroup members, and three Panel members argue that the WACMs are out of scope of the modification because they go beyond addressing the defect identified by the proposer. In their view, the defect is limited to addressing the risk related to a 'snap back' to a G proportion of 27% and that the WACMs go beyond this by also removing exchange rate risk.

We consider that all options presented to us are within scope for two reasons. Firstly, the proposal clearly describes the defect with the current baseline as risking a significant increase in costs for generators without appropriate notice. All the WACMs address this issue, either by preventing or reducing the change in charges or by increasing the notice of the charge change. Secondly, CUSC modifications are made relative to the current baseline. The current baseline is for a return to a fixed percentage, ie for exchange rate risk to be removed. The Original proposes a method which addresses the defect. It also incidentally introduces exchange rate risk, but the proposal in no way suggests that introducing this risk itself addresses an identified defect or is a necessary feature of eliminating pricing volatility. In fact introducing exchange rate risk operates against the benefits of reducing price volatility sought by other features of the proposal. Options which deal with the identified defect, but which maintain the status quo position of removing exchange rate risk should the charge ranges cease to apply, are therefore clearly within scope. We also note that only a minority of Panel members consider the WACMs to be out of scope.

The CUSC allows CUSC parties, BSC Parties, Citizens Advice or Citizens Advice Scotland to raise WACMs to address the defect identified in the modification proposal. For the reasons set out above, we see no reason to consider the WACMs presented as out of scope.

### **Future work**

As discussed above, we consider that if the charge ranges no longer apply, there should be a move towards non-negative generation residual charges as soon as practicable. We encourage industry to consider how best to do so.

We also note that we are considering, within the context of CUSC modification CMP261, the interpretation of the Regulation and whether charges set for 2015/16 are compliant with its terms. We may encourage industry action as a result of this consideration.

The generation residual is a mechanism for cost recovery and hence linked to other network charging work we intend to take forward. As mentioned in our open letter on embedded benefits<sup>14</sup>, there are some elements of embedded benefits and related topics (such as the allocation of sunk/fixed costs, including for storage, 'behind the meter'

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<sup>14</sup> See footnote 13.

installations and private wires) that we think may be suitable for a targeted review. We intend to consult on this related work further in Autumn 2016.

### **Decision notice**

In accordance with Standard Condition C10 of NGET's Transmission Licence, the Authority, hereby consents that the WACM1 option for modification CMP255 '*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)*' be made.

**Frances Warburton**  
**Partner, Energy Systems**

Signed on behalf of the Authority and authorised for that purpose



## Annex 1 – Forecast charges

The table below shows forecast G revenue proportions, generators revenue and average charges under the different options based on NGET's latest five year forecast of TNUoS charges to 2020/21.<sup>15</sup> For 2021/22 onwards we assume no change to the 2020/21 forecast. This is to illustrate the different options only, it is not intended as a forecast of future charges.

Current baseline	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2022/24	2022/24
G proportion	17%	16%	27%	27%	27%	27%	27%	27%	27%
Generator Revenue (£m)	453	450	805	857	1023	1023	1023	1023	1023
Generator TNUoS Residual (£/kW)	0.51	-0.92	2.03	1.15	-0.42	-0.42	-0.42	-0.42	-0.42
Average generator TNUoS charge (£/kW)	7.21	6.69	11.67	12.43	14.77	14.77	14.77	14.77	14.77
Average onshore generator TNUoS charge (£/kW)	4.06	3.56	7.26	6.67	5.15	5.15	5.15	5.15	5.16
Average wider (£/MWh)	0.83	0.78	1.78	1.74	1.38	1.38	1.38	1.38	1.38
<b>The original/WACM3</b>									
G proportion	17%	16%	14%	13%	10%	10%	10%	10%	10%
Generator Revenue (£m)	453	450	432	408	381	381	381	381	381
Generator TNUoS Residual (£/kW)	0.51	-0.92	-3.38	-5.37	-9.69	-9.69	-9.69	-9.69	-9.69
Average generator TNUoS charge (£/kW)	7.21	6.69	6.26	5.91	5.49	5.49	5.49	5.49	5.49
Average onshore generator TNUoS charge (£/kW)	0.00	3.56	1.85	0.15	-4.13	-4.13	-4.13	-4.13	-4.12
Average wider £/MWh	0.83	0.78	0.29	-0.19	-1.58	-1.58	-1.58	-1.58	-1.58
<b>WACM1</b>									
G proportion	17%	16%	16%	16%	16%	16%	16%	16%	16%
Generator Revenue (£m)	453	450	491	522	623	623	623	623	623
Generator TNUoS Residual (£/kW)	0.51	-0.92	-2.54	-3.71	-6.19	-6.19	-6.19	-6.19	-6.19
Average generator TNUoS charge (£/kW)	7.21	6.69	7.11	7.57	9.00	9.00	9.00	9.00	9.00
Average onshore generator TNUoS charge (£/kW)	4.06	3.56	2.70	1.81	-0.63	-0.63	-0.63	-0.63	-0.61
<b>WACM2</b>									
G proportion	17%	16%	14%	13%	10%	10%	16%	21%	27%
Generator Revenue (£m)	453	450	432	408	381	381	593	805	1023
Generator TNUoS Residual (£/kW)	0.51	-0.92	-3.38	-5.37	-9.69	-9.69	-6.63	-3.57	-0.42
Average generator TNUoS charge (£/kW)	7.21	6.69	6.26	5.91	5.49	5.49	8.56	11.62	14.77
Average onshore generator TNUoS charge (£/kW)	4.06	3.56	1.85	0.15	-4.13	-4.13	-1.07	1.99	5.16

<sup>15</sup> <http://www2.nationalgrid.com/UK/Industry-information/System-charges/Electricity-transmission/Approval-conditions/Condition-5/>