nationalgrid

Stage 02: Workgroup Consultation

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' What stage is this document at?

01 Initial Written Assessment

Workgroup Consultation

03 Workgroup Report

04 Code Administrator Consultation

05 Draft CUSC Modification Report

06 Final CUSC Modification Report

CMP255 aims to remove the requirement for the generation allocation of costs to revert back to 27% if the limits to generation charges imposed by European Commission Regulations no longer apply.

This document contains the discussion of the Workgroup which formed in December 2015 to develop and assess the proposal. Any interested party is able to make a response in line with the guidance set out in Section 6 of this document.

Published on: 12 February 2016 Length of Consultation: 15 Working days Responses by: 4 March 2016



The Workgroup concludes:

To be completed following the Workgroup Consultation



High Impact:

All parties liable for TNUoS

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Any Questions?

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About this document

This document is a Workgroup consultation which seeks the views of CUSC and interested parties in relation to the issues raised by the Original CMP255 CUSC Modification Proposal which was raised by Bill Reed, RWE Supply and Trading GmbH and developed by the Workgroup. Parties are requested to respond by **5pm** on **4 March 2016** to CUSC.team@nationalgrid.com using the Workgroup Consultation Response Proforma which can be found on the following link: CMP255/

Document Control

Version	Date	Author	Change Reference
1.0	4 March 2016	Code Administrator	Workgroup Consultation
			to Industry

1 Summary

- 1.1 This document describes the Original CMP255 CUSC Modification Proposal (the Proposal), summarises the deliberations of the Workgroup and sets out the options for potential Workgroup Alternative CUSC Modifications (WACMs). Prior to confirming any alternative proposals the Workgroup are seeking views on the options they have identified, what is the best solution to the defect and also any other further options that respondents may propose.
- 1.2 CMP255 was proposed by RWE Supply and Trading GmbH and was submitted to the CUSC Modifications Panel for their consideration on 27 November 2015. A copy of this Proposal is provided within Annex 1. The Panel decided to send the Proposal to a Workgroup to be developed and assessed against the CUSC Applicable Objectives. The Workgroup is required to consult on the Proposal during this period to gain views from the wider industry (this Workgroup Consultation). Following this Consultation, the Workgroup will consider any responses, vote on the best solution to the defect and report back to the Panel at the April 2016 Panel meeting.
- 1.3 CMP255 aims to remove the requirement for the generation allocation of TNUoS costs in GB to revert back to 27% if the limits to the average annual generation charges imposed by Commission Regulation (EU) No 838/2010 Part B no longer apply.
- 1.4 This Workgroup Consultation has been prepared in accordance with the terms of the CUSC. An electronic copy can be found on the National Grid Website, http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/CUSC/Modifications/CMP255/ along with the Modification Proposal Form.

2 Workgroup Discussions

Background and the defect

- 2.1 Commission Regulation (EU) No 838/2010 Part B restricts annual average transmission charges paid by electricity generators in Great Britain to the range of €0/MWh to €2.50/MWh. The methodology for generation transmission charges in Great Britain is defined in Section 14 of the CUSC. Therefore, to ensure compliance of Great Britain with the above regulation, CUSC modification CMP224¹ Cap on the total TNUoS target revenue to be recovered from generation users" was raised and, subsequently, approved by Ofgem on 8th October 2014².
- 2.2 Under CMP224, and as now codified in the CUSC³ the proportion of the total annual average TNUoS revenue paid by generation is the lower of 27% or a factor to ensure that the upper €2.50/MWh limit in the Regulation is not breached. To calculate this factor the €2.50/MWh figure is converted to pound sterling using the OBR Spring Forecast €/£ Exchange Rate in Charging Year n-1. The MWh is considered by using Forecast GB Generation Output for generation liable for Transmission charges (i.e. energy injected into the transmission network in MWh) for Charging Year n. In addition an error margin is applied to the €2.50/MWh figure to account for difference in one year ahead forecast and outturn values for Forecast TO Maximum Allowed Revenue (£) and Generation Output (MWh), based on previous years error at the time of calculating the error for Charging Year n.
- 2.3 The calculation from the January 2016 final tariffs for Charging Year 2016/17 is shown in Table 1. The result of the €2.50/MWh cap is to limit the amount of the total TNUoS revenue that can be recovered from generation (the generation percentage) to 16.7% equivalent to £453M of the total TNUoS revenue of £2.7bn.

		2016/17
CAPEC	Limit on generation tariff (€/MWh)	2.50
у	Error Margin	8.20%
ER	Exchange Rate (€/£)	1.36
MAR	Total Revenue (£m)	2708.7
GO	Generation Output (TWh)	268.7
G	% of revenue from generation	16.7%
D	% of revenue from demand	83.3%
G.R	Revenue recovered from generation (£m)	453.4
D.R	Revenue recovered from demand (£m)	2255.2

Table 1: Example of the application of the €2.50/MWh cap being applied to final tariffs for 2016/17 under the current methodology.

2.4 As implemented by CMP224, to calculate the percentage of the total TNUoS to be recovered from generation, the upper limit to generation charges has been implemented through a variable described as "CAPec". This is defined as the "Upper limit of the range specified by Commission Regulation (EU) No 838/2010 Part B paragraph 3 (or any subsequent regulation specifying such a limit) on annual average transmission charge payable by generation" ⁴.

http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/CUSC/Modifications/CMP224/

Implementation took place on 22nd October 2014

The CUSC, Section 14 – Charging Methodologies, 14.14.5 (v)

The CUSC, Section 14 – Charging Methodologies, 14.14.5 (v)

- 2.5 The Proposer of CMP255 raised the defect that if the EU Regulation implementing the €2.50/MWh cap were removed, then the percentage paid by generator would 'snap-back' to 27% in the next set of TNUoS tariffs for GB. Thus, if the €2.50/MWh cap were removed in Charging Year 2016/17 then the generator percentage would snap-back from 16.7% to 27% for the next Charging Year (2017/18). The potential for snap-back is having a detrimental impact on competition in generation, and it is causing uncertainty in how to price a bid price for the Capacity Market auction and Contracts for Difference arrangements in the GB generation market. This may be leading to additional risk being added to generation prices, ultimately causing a greater cost to the end consumer than if the risk of snap-back were removed. The Capacity Market interaction is explored in more detail in paragraph 2.18 below.
- 2.6 The Proposer noted that he did not have an issue with the way the €2.50/MWh cap was being applied currently, and that the defect was related only to the potential for snap-back to 27%, and not for what should be the long term solution if the €2.50/MWh cap were removed. Moreover, the future forecasts produced by National Grid are already based on the €2.50/MWh meaning the market is aware of this figure.
- 2.7 The Workgroup noted that CMP227 had recently looked at alternatives to 27%, specifically 5% and 15% so that these figures would apply instead of 27% in the Charging Methodology. Importantly, these would (had CMP227 been approved which it was not) have replaced the 27% and so would have been applied as the lower limit now and also acted as the snap-back figure. In the Authority CMP227 decision letter⁵, in which the modification was rejected, it was noted that "... the direction of travel in respect of future tariff harmonisation at the European level is not clear at this stage". The Proposer cited this as a reason for specifying the CMP255 defect as only removing the potential snap-back, rather than addressing any issues as to the appropriate level or principals for the GB split of TNUoS tariffs in the future.

Historic and future forecast split in TNUoS recovered from generation and demand

- 2.8 To quantify the impact of a snap-back the historic and future forecast split in TNUoS recovered from generation and demand was considered by the Workgroup. This is typically called the "G/D split".
- 2.9 Prior to Charging Year 2015/16 the €2.50/MWh cap for average annual generation transmission charges in GB introduced in Commission Regulation (EU) No 838/2010 Part B 'did not bite'; that is to say, the generation percentage was fixed as 27% of TNUoS revenue and this automatically lead to tariffs which were consistent with the Regulation; i.e. the annual average GB generation tariffs were within the range €0 to €2.50/MWh.
- 2.10 In Charging Year 2015/16 the cap took effect for the first time, reducing the generation percentage to 23.2% (from 27%) of TNUoS revenue. The cap is expected to continue to bite for the foreseeable future and the trend is for a decreasing generation percentage due to the cap. The decrease in generation percentage is a function of two key factors that the allowed revenue continue to increase over time combined with the €2.50/MWh not being index linked, and that the amount of energy produced in GB by transmission connected generation is also projected to decrease due to the growth of embedded generation.
- 2.11 The historic and forecasted future G:D split is detailed in Table 2 (as well as this, average tariffs for generation, HH demand and NHH demand are shown). Figure 1 illustrates the projected generation percentages until Charging Year 2019/20 using the current €2.50/MWh cap. The data is based on historic tariffs⁶ for 2015/16, the January 2016 final tariffs⁷ for 2016/17, and the Five Year Forecast⁸ published in February 2016.

https://www.ofgem.gov.uk/sites/default/files/docs/2015/09/cmp227_d_0.pdf

http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=43163

	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
G:D split						
Energy produced by Transmission Generation (TWh)	319.63	268.70	262.67	250.54	232.62	217.20
Error Rate	6.4%	8.2%	8.2%	8.2%	8.2%	8.2%
Cap to be applied, after corrected for an error rate (€/MWh)	2.34	2.30	2.30	2.30	2.30	2.30
TNUoS Revenue (£m)	2636.69	2708.70	2735.00	2983.10	3174.70	3789.50
Exchange Rate (€/£)	1.22	1.36	1.34	1.33	1.31	1.31
G %	23.3%	16.7%	16.4%	14.5%	12.8%	10.0%
D %	76.7%	83.3%	83.6%	85.5%	87.2%	90.0%
Generator Revenue (£m)	613.06	453.43	449.90	432.30	407.50	380.60
Demand Revenue (£m)	2023.63	2255.20	2285.10	2550.80	2767.20	3408.90

Average Tariffs						
Generation Tariff (£/kW)	8.57	7.22	6.68	6.27	5.91	5.49
HH Demand Tariff (£/kW)	38.62	45.29	46.35	52.92	58.13	72.07
NHH Demand Tariff (p/kWh)	5.27	6.37	6.62	7.60	8.43	10.58

Table 2: Historic and forecast G:D Split and Average TNUoS Tariffs using current (baseline) methodology

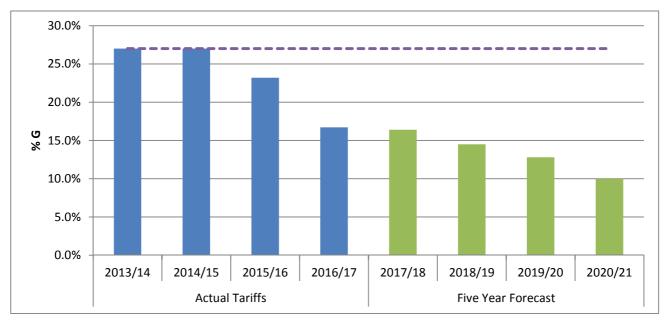


Figure 1: Historic and future forecast generation percentage of TNUoS revenue

http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=45149

⁸ http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=45336

Effect of a Snap-back on Average Tariffs

2.12 The transmission tariffs shown in Table 2 assume that the current cap caused by the €2.50/MWh limit continues to prevail. Table 3 illustrates average transmission tariffs and the change in those tariffs compared to the baseline if there were a snap-back to 27% for the generation percentage.

	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	
Revenue							
G %	27.0%	27.0%	27.0%	27.0%	27.0%	27.0%	
Generator Revenue (£m)	711.91	731.35	738.45	805.44	857.17	1023.17	
Demand Revenue (£m)	1924.78	1977.35	1996.55	2177.66	2317.53	2766.34	
Swing from Demand to Generation compared to using €2.50/MWh cap (£m)	98.85	277.92	288.55	373.14	449.67	642.57	

Average Tariffs						
Generation Tariff (£/kW)	9.96	11.64	10.97	11.67	12.44	14.76
HH Demand Tariff (£/kW)	36.73	39.71	40.50	45.18	48.69	58.48
NHH Demand Tariff (p/kWh)	5.01	5.58	5.79	6.49	7.06	8.58

Change in Tariffs						
Generation Tariff (£/kW)	1.38	4.42	4.29	5.41	6.53	9.27
HH Demand Tariff (£/kW)	-1.89	-5.58	-5.85	-7.74	-9.45	-13.58
NHH Demand Tariff (p/kWh)	-0.26	-0.78	-0.84	-1.11	-1.37	-1.99

Table 3: Historic and forecast G:D Split and Average Tariffs if 27% had been used to calculate G/D split instead of €2.50/MWh

- 2.13 The change in transmission tariffs arising from the snap-back is due to a change in the residual and would be applied to all zonal generation and HH demand tariffs equally. The value of the change in the NHH tariff will be different in each zone depending on the split of HH and NHH demand. In Annex 5, the full set of transmission tariffs is detailed using the current 16.7% and snap-back 27% for Charging Year 2016/17 to illustrate the difference for each category in each zone.
- 2.14 The effect of a snap-back in Charging Year 2020/21 is that an additional £643M of revenue would be recovered from generation bringing the generation total to £1,023M, up from £380M if the snap-back did not occur (and the €2.50/MWh applied). A snap-back would cause the demand residual to fall by £13.58/kW (causing a reduction of 1.99 p/kWh for the NHH tariff), and the generator residual to rise by £9.27 leading to a near trebling of the average generation transmission tariff in GB compared to if €2.50/MWh cap applied.
- 2.15 Figure 2 illustrates how the average transmission tariffs change over time using the current €2.50/MWh cap and if the 27% snap-back for the generation percentage were used. It is worth noting that after Charging Year 2016/17 the generation charging base is forecast to increase, so all other things being equal this would cause the generation transmission tariffs to fall as the revenue to be recovered from generation is spread over a greater quantity of generation. Meanwhile, the demand charging base is decreasing (for both HH and NHH) and this causes the demand transmission tariffs, all other things being equal, to increase.

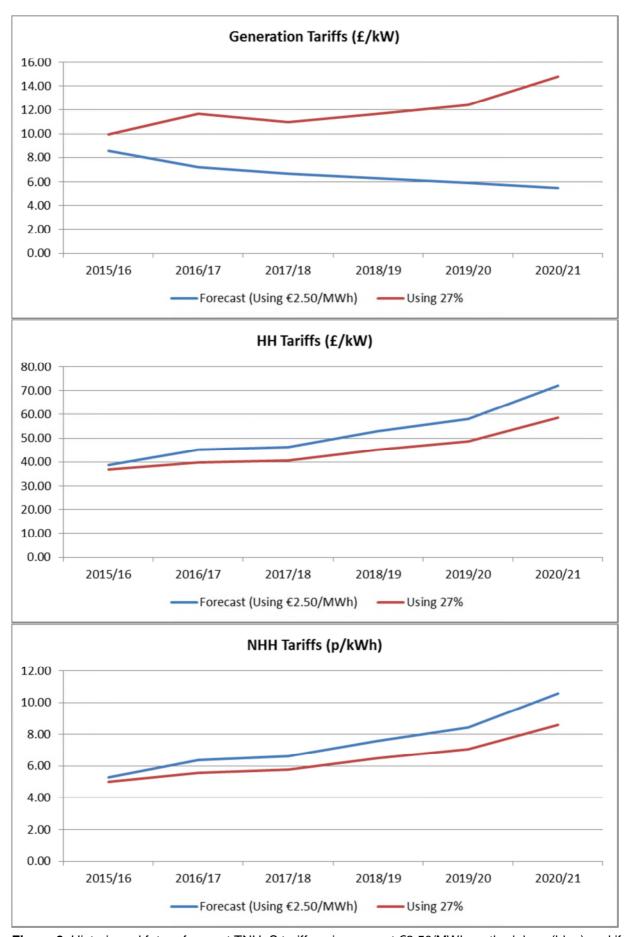


Figure 2: Historic and future forecast TNUoS tariffs using current €2.50/MWh methodology (blue) and if there were a snap-back to 27% (red)

2.16 Further, Table 4 and Figure 3 illustrate the total amount of TNUoS to be recovered from generation and each category of demand for each of the Charging Years shown.

Revenue per category (£m)	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21		
With €2.50/MWh								
Generation	613.06	453.43	449.90	432.30	407.50	380.60		
HH Demand	579.28	593.24	755.52	841.45	912.71	1124.29		
NHH Demand	1444.34	1661.96	1529.58	1709.35	1854.49	2284.61		
With 27%								
Generation	711.91	731.35	738.45	805.44	857.17	1023.17		
HH Demand	550.99	520.15	660.12	718.36	764.40	912.36		
NHH Demand	1373.79	1457.20	1336.43	1459.31	1553.14	1853.97		
Difference with 27% rather than €2.50/MWh								
Generation	98.85	277.92	288.55	373.14	449.67	642.57		
HH Demand	-28.30	-73.09	-95.40	-123.09	-148.32	-211.92		
NHH Demand	-70.55	-204.76	-193.15	-250.05	-301.35	-430.64		

Table 4: Revenue recovery per chargeable category if a snap-back to 27% had been used to calculate G:D split instead of €2.50/MWh

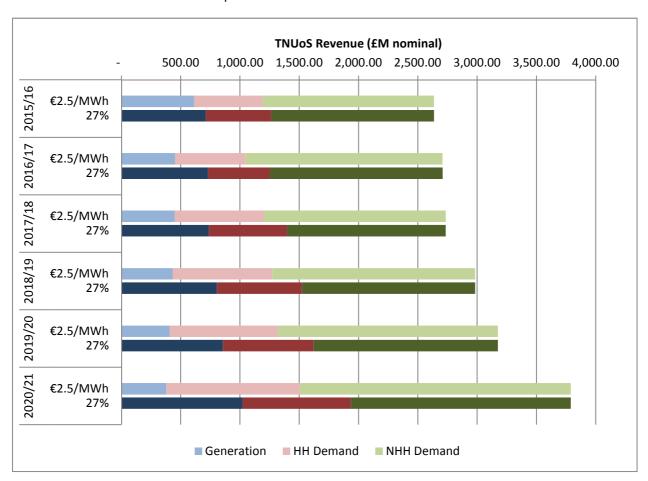


Figure 3: Historic and future forecast £M TNUoS revenue to be recovered from generation and HH and NHH demand, under €2.50/MWh and under a 27% snap-back.

2.17 National Grid confirmed that a snap-back would in general occur for the next Charging Year for which transmission tariffs have not yet been set. If that tariffs had already been set for a given Charging Year, then they would only be revised (via a mid-year tariff change) if this

were needed to ensure compliance with EU law, and legal advice would need to be sought at such a time to ensure the appropriate approach.

Note on the Capacity Market

- 2.18 To quantify the impact of a snap-back in TNUoS tariffs caused by a snap-back to a generation percentage of 27% on the Capacity Market, the T-4 Auction completed in December 2015 has been considered by the Workgroup. A snap-back in generator tariffs would increase tariffs for Charging Year 2019/20 by (on average) £5.84/kW. This should be compared to the last capacity market auction clearing price of £18/kW for that same year of 2019/20.
- 2.19 Figure 4, taken from the EMR Delivery Body report⁹, shows the analysis of the Capacity Market exit bids, which results in the 46GW of capacity clearing at a pay-as-cleared price of £18/kW/year.

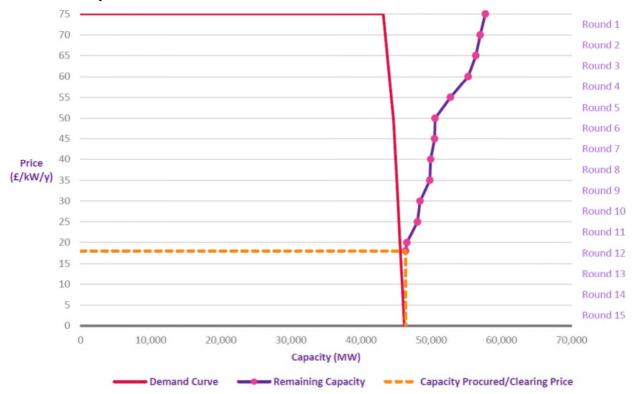


Figure 4: Taken from the T-4 Auction Report, demand curve, and clearing price of £18/kW/year.

- 2.20 From this £18/kW/year figure, it can be estimated what quantity of Capacity Market Units exited the auction at each round (representing a £5/kW spread). However, individual exit bids are not known as they are commercially sensitive. Also no data is published about the exit bids for capacity about the clearing price, so any analysis can only be assumed as indicative from the £18/kW/year figure.
- 2.21 Based on the figure, there is around 2GW of capacity with an exit price between the clearing price (£18/kW/year) and the £25/kW/year price. Assuming a similar gradient to the supply curve below and above the clearing price, this would suggest around 2GW of capacity would become unprofitable if TNUoS tariffs were to rise by c.£5/kW. That said all provided would be affected, as if TNUoS tariffs were expected to be say £5/kW higher, the supply curve would have shifted, ultimately causing a higher clearing price to reflect the higher TNUoS paid by generation in GB.

https://www.emrdeliverybody.com/Capacity%20Markets%20Document%20Library/T-4%20Final%20Results%202015.pdf

2.22 In broad terms it is generally true that the marginal capacity provider will be impacted more significantly than those capacity providers who are more greatly 'in merit'. However, any cost increases will still reduce the 'in merit' capacity providers' returns and potentially prevent additional investment in capacity. So ultimately, a snap-back will impact everyone - just to differing degrees of materiality. Overall the Capacity Market for 2019/20 has cleared around 46GW x £5/kW = £230M lower than if a higher generation TNUoS rate (based on a snap-back to 27%) were included which is money potentially missing from the market if there were a snap-back.

European Context

- 2.23 It is worth noting the current direction of travel in the European context of electricity transmission tariffs structures, particularly in light of the recent Authority decision on 15 September 2015 to reject CMP227 which noted that "Further, the direction of travel in respect of future changes to harmonise charges at the European level is unclear."
- 2.24 The European landscape for potential harmonisation of transmission charges is outlined in the Third Energy Package, specifically Regulation (EU) 714/2009¹¹. This outlines that a number of Network Codes shall be prepared including (Article 8(6)(k)):-
 - "....rules regarding harmonised transmission tariff structures including locational signals and inter-transmission system operator compensation rules;..."
- 2.25 Having due regard for Regulation (EC) No 714/2009, Commission Regulation (EU) No 838/2010¹² was introduced to provide a common regulatory approach to transmission charging across all the Member States. This Regulation introduced the band of €0 €2.50/MWh for average annual transmission charges for generator in GB in Part B of the Regulation, entitled "Guidelines for a Common Regulatory Approach to Transmission Charging". Importantly, in this Regulation ACER (The Agency) were tasked with monitoring the appropriateness of the range of allowed transmission charges, and to report, by 1 January 2014, on the charges for the period after 1 January 2015.
- 2.26 In ACER's opinion No 09/2014¹³, it was concluded that:

"Different levels of power-based G-charges (€/MW) or of lump-sum G-charges, as long as they reflect the costs of providing transmission infrastructure services to generators, can be used to give appropriate and harmonised locational signals for efficient investments in generation, e.g. to promote locations close to load centers or where the existing grid can accommodate the additional generation capacity with no or minimal additional investments."

"The Agency therefore considers it unnecessary to propose restrictions on cost reflective power-based G-charges and on lump-sum G-charges."

The effect of this opinion (if it had been adopted by the Commission) would have been to remove the range in Part B of Commission Regulation (EU) No 838/2010, and allow Member States to set generation transmission tariffs without being constrained to the various caps set out in Part B. If this opinion were to have been implemented and nothing else were to have change in EU or GB law, this would have caused a snap-back to 27% for generation TNUoS in GB based on the current arrangements set out in the CUSC.

https://www.ofgem.gov.uk/sites/default/files/docs/2015/09/cmp227_d_0.pdf

http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:211:0015:0035:EN:PDF

http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:250:0005:0011:EN:PDF

http://www.acer.europa.eu/official_documents/acts_of_the_agency/opinions/opinions/acer%20opinion%2009-2014.pdf

- 2.27 It is worth noting that despite the requirement for ACER to review the ranges in Commission Regulation (EU) No 838/2010 that apply "after 1 January 2015", the European Commission have not implemented any changes to the Regulation at present. As a result, until an appropriate instrument is brought forward by the Commission to replace, amend or repeal Commission Regulation (EU) No 838/2010 the current ranges (€0-€2.50/MWh for GB) will stand as European Law.
- 2.28 In December 2014, ACER started a scoping activity following Commission Decision 2014/713/EU (the Commission's priority list for 2015) to consider the harmonisation of electricity transmission tariff structures across the Union. ACER concluded¹⁴ in December 2015 that, at this time, the case for a Framework Guideline of a Network Code is not evidenced, and that implementing ACER opinion 09/2014 (effectively removing the range in Commission Regulation (EU) No 838/2010) would be "sufficient to prevent potential negative effects from any lack of harmonisation in electricity transmission tariff structures".
- 2.29 ACER also noted in their conclusion on their scoping report that ACER "will commence work on establishing a common set of transmission tariff principles in order to build a common understanding and facilitate the sharing of best practices".
- 2.30 Therefore, there is still a lack of clarity of both the short-term and longer-term direction of tariff harmonisation in Europe. In the short-term, ACER's view is that the various caps for generation transmission tariffs across the Member States should be removed, but this needs to be implemented by the Commission and they have not yet shown any intent to do so. In particular, the Commission's work programme (Commission Implementing Decision (EU) 2015/1960¹⁵) for 2016 references that rules for harmonised transmission tariff structures will be taken forward "...depending on the results of ACER's scoping activity and decisions taken as part of the energy market design initiative", but it does not explicitly reference the various Member State caps (such as the €0-€2.50/MWh for GB).
- 2.31 In the longer term there remains the potential for a more significant change to the transmission tariff arrangements as a result of any framework guidelines and subsequent Network Code (or Guideline) on harmonised electricity transmission tariff structures across the Union. These changes may require notable changes to the electricity charging methodologies currently used across the Union as many Member States charge in significantly different ways than, for example, GB. However, there is no visibility of these at the potential changes at this moment in time.
- 2.32 As and when there is any indication from the Commission and/or ACER on the future direction of electricity tariff harmonisation; and whether, for example, the various caps, such as the €2.50/MWh limit in GB, is to be removed, and what if anything comes next; in order to ensure compliance with applicable CUSC charging objective ¹⁶ (d) it may be appropriate at that time to consider the future G:D split of TNUoS tariffs in GB and associated issues.
- 2.33 The Authority representative on the CMP255 Workgroup noted that, based on their understanding of the direction of travel in Europe there may be a period between when the €2.50/MWh cap is removed (as per ACER's opinion) and before the future principles of harmonised transmission charging are established and implemented. This could leave a

http://www.acer.europa.eu/Electricity/FG_and_network_codes/Documents/Scoping%20conclusions%20for%20harmonised%20Transmission%20Tariff%20Structures%20in%20Electricity.pdf

http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32015D1960&from=EN

[&]quot;(d) compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency." Objective (d) refers specifically to European Regulation 2009/714/EC. Reference to the Agency is to the Agency for the Cooperation of Energy Regulators (ACER).

period when only the GB rules would apply and that they would have a preference for the Workgroup to explore options for this not to be a €2.50/MWh cap.

Original Proposal

- 2.34 The Original proposal advocates the removal of the reference to the G element of the G:D split being 27% and it being replaced by reference to the European Regulation in 14.14.5 of the CUSC only. The result of this is that generation transmission tariffs would continue to be set using the €2.50/MWh upper level even if Commission Regulation (EU) No 838/2010 no longer applied in GB. This change would remove the snap-back and leaves transmission charges set on the current basis until a further change were made to the Charging Methodology in due course by a separate Modification (at that future date).
- 2.35 The legal text changes included by the proposer in the proposal form are as follows:

14.14.5 ...

v.) The application of a Transmission Network Use of System Revenue split between generation and demand where the proportion of the total revenue paid by generation, for the purposes of tariff setting, is the lower of 0.27 or x times the total revenue, where x for a charging year n is calculated as:

$$x_n = \frac{(Cap_{EC} * (1-y))*GO}{MAR*ER}$$

Where;

Cap_{EC} = £2.50/MWh or such lower number as may be specified in a European Commission Regulation that sets an upper limit on the annual average transmssion charge payable by generation that is expressed in £/MWhUpper limit of the range specified by European Commission Regulation 838/2010 Part B paragraph 3 (or any subsequent regulation specifying such a limit) on annual average transmission charge payable by generation

Y = Error margin built in to adjust Cap_{EC} to account for difference in one year ahead forecast and outturn values for MAR and GO, based on previous years error at the time of calculating the error for charging year n

GO = Forecast GB Generation Output for generation liable for Transmission charges (i.e. energy injected into the transmission network in MWh) for charging year n

MAR = Forecast TO Maximum Allowed Revenue (£) for charging year n ER = OBR Spring Forecast €/£ Exchange Rate in charging year n-1

- 2.36 The Proposer noted that the Original proposal had been drafted in this manner due to his interpretation of the Authority's decision letter for CMP227. In particular that "... the direction of travel in respect of future tariff harmonisation at the European level is not clear at this stage". In the view of the Proposer, this should therefore limit the scope of the CMP255 change to just addressing the snap-back and it precludes the Workgroup from setting a longer term view of how TNUoS should be split between generation and demand.
- 2.37 One of the key benefits of the proposal is that it ensures that the market is able to use the current forecasts of TNUoS produced by National Grid at regular intervals when making future decisions, as these forecasts are already based on the €2.50/MWh cap continuing.
- 2.38 There was broad support for the Original proposal from the Workgroup members. However, the Authority representative noted, given their understanding of the direction of travel in the EU (see paragraph 2.33) that there may be an alternative to staying at €2.50/MWh cap and those other alternatives should be explored. Given a preference for stable and predictable tariffs, the Authority representative noted that a cap not specified in Euros may be preferable.

However, the Workgroup noted that they are constrained by the need to only consider Alternatives that address the defect identified in CMP255.

Potential issues with a cap specified in €/MWh

- 2.39 The proposer reiterated that, in his view, the defect was to deal with the potential of snap-back to 27% if the Commission Regulation (EU) No 838/2010 Part B were repealed and <u>not</u> what should apply after any such a repeal. The proposer noted that under this approach that €2.50/MWh would continue to apply until such time as the Charging Methodology were updated using the appropriate governance process through a future CUSC modification (rather than this CMP255 proposal).
- 2.40 Workgroup members, in general, agreed with the proposer's statement of the defect. The National Grid representative noted that he had received advice against trying to specify now, what might be the right way to split the generation and demand elements of TNUoS, and that such a decision would need to be taken by the industry, if and when the European Regulation were removed, repealed or replaced. This view is consistent with removing the potential for snap-back, but noting that a likely next-step following any change to the Regulation (such as the removal of the need for GB to set generation TNUoS based on a €2.50/MWh upper limit) would be a further CUSC modification to decide on the longer term approach to the G:D split at that time.
- 2.41 Notwithstanding the views among Workgroup members that the defect was to address the potential for snap-back, a number of potential problems of a long-term cap specified as a €/MWh figure were also discussed:
 - (a) The €2.50/MWh figure is implemented through European Law, and in the absence of EU law a cap expressed in this manner may not be the choice of GB;
 - (b) A level of uncertainty remains, as the calculation is dependent on the £ to € exchange rate, which is variable;
 - (c) A forecast is still required to convert the energy based charge (expressed in MWh) to a capacity based charge for TEC (expressed in MW) which is used when applying TNUoS to generation in GB;
 - (d) When setting the various levels in Regulation 238/2010 Part B for Member States in 2010 it was decided not to index link those figures (such as the €2.50/MWh for GB), so all other things being equal, this will lead to a decrease in the transmission charges paid by generators across the Union over time.

Potential other methods for specifying a G:D split

- 2.42 The Workgroup held a discussion about whether other options for addressing the defect should be considered, in particular those that (i) remove the reference to 27% and then went further to (ii) specify a different (to €2.50/MWh) way of splitting G and D in GB.
- 2.43 The proposer was clear that further options should not be explored, as part (ii) was explicitly beyond the scope of the CMP255 defect which deals only with the potential for a snap-back, and the removal of the return to a G:D split of 27% for generation (which is what is currently set out in the CUSC). The majority of Workgroup members agreed with this view. However, it was noted by the Authority representative that, in their view, there are other ways of specifying the G:D split that are within the scope of the CMP255 defect and could therefore be raised by the Workgroup as alternative solutions to the defect. The Authority representative also noted that regardless of the scope of the modification, it was up to Workgroup members to raise and vote on alternative modification proposals.

- 2.44 In this vein, the Workgroup identified the following examples of possible criteria (no preference is implied by the ordering shown below) for how the G:D split could be based, in the event of the €2.50/MWh cap no longer applying to generation transmission charges in GB, and not being replaced by anything equivalent by the European Commission:
 - (a) Fix at the generation percentage last used to set transmission tariffs;
 - (b) Fix at the generation percentages as forecast (such as in the latest five-year forecast), and fix at the last one;
 - (c) A phased return to 27% for the generation percentage;
 - (d) A snap-back to a different generation percentage value (less than 27%);
 - (e) A phased return to a different generation percentage value (less than 27%);
 - (f) Convert the last €/MWh cap to a £ per energy (£/MWh) cap to apply for generation TNUoS going forward;
 - (g) Set a new £/MWh cap for generation TNUoS;
 - (h) Convert the last €/MWh cap to a £ per capacity (£/MW) cap to apply for generation TNUoS going forward;
 - (i) Set a new £/MW cap for generation TNUoS.
- 2.45 Although in theory, the generation percentage value could exceed 27%, the Workgroup agreed that for the consideration of these examples it would be limited to not exceeding the present upper limit 27%.
- 2.46 The Workgroup noted that the list is *not* exhaustive of all the possible ways to split G:D charges. Annex 6 summarises illustrative example of the average transmission tariffs for generation and demand in the event of a split determined otherwise than via €2.50 / MWh using the criteria (a) to (i) above. In addition Table 15 in Annex 6 summarises the pros and cons for these examples.
- 2.47 The view of the proposer and the majority of the Workgroup at this stage is to not consider these criteria any further as they believe they are beyond the scope the of the CMP255 defect. However, they have been included in this report, being cognisant of the view of the Authority representative's and at least one workgroup member, for completeness, as a record of the discussion and to seek industry views.

2.48 The Workgroup is seeking industry views, through the Workgroup Consultation, on two questions relating to the scope of the CMP255 defect and the example criteria.

Consultation Question 5

Do you think that the defect set out in the modification proposal form for CMP255 (Annex 1) limits potential solutions to those that simply remove the 'snap-back' to a 27% generation proportion of revenue i.e. those options that maintain the €2.50/MWh cap? Or do you think that the scope of the CMP255 defect is wider and may include some or all examples described in (a)-(i) of paragraph 2.43?

Consultation Question 6

Regardless of your views in respect of question 5, if the scope of the CMP255 defect were considered wider which of the options described in (a)-(i) of paragraph 2.43 should the Workgroup consider? Are there any additional options that you believe the Workgroup should consider?

2.49 At present (and this view might change based on evidence received during the Workgroup consultation) the majority of the Workgroup members believe that the CMP255 defect does not involve developing / determining the future criteria for the G:D split, and therefore are not minded to have any alternative(s) (along the lines of the examples noted in (a) to (i) in paragraph 2.43) to the Original Proposal.

Other ongoing pertinent modifications

- 2.50 The ongoing modification, CMP251 aims to consider "Removing the error margin in the cap on total TNUoS recovered by generation and introducing a new charging element to TNUoS to ensure compliance with European Commission Regulation 838/2010" to ensure that there is no risk of non-compliance with European Regulation 838/2010 by removing the error margin introduced by CMP224 and by introducing a new charging element to the calculation of TNUoS.
- 2.51 Although this modification, CMP255, and CMP251 are in the same section of the CUSC the defects are sufficiently different in particular, this CMP255 modification deals with the situation if the €2.50/MWh cap were removed rather than how we ensure compliance now.

3 Workgroup Alternatives

3.1 At present the majority of the Workgroup members have not identified any alternative(s) to the Original Proposal, however, they welcome the views of stakeholders through this consultation to inform their deliberation on this matter post-consultation.

4 Impact and Assessment

Impact on the CUSC

4.1 Changes to Section 14 – Charging Methodologies – specifically 14.14.5 - Part 2 The Statement of the Use of System Charging Methodology

Impact on Greenhouse Gas Emissions

4.2 None identified.

Impact on Core Industry Documents

4.3 None identified.

Impact on other Industry Documents

4.4 None identified.

5 Proposed Implementation and Transition

- 5.1 The Workgroup discussed implementation, and agreed that the changes should be made so that they apply to Charging Year 2017/18 onwards. This can be achieved through an implemented in April 2017.
- 5.2 The Workgroup indicated they would not anticipate a mid-year tariff change as a result of the implementation of the Original Proposal or any Alternatives.

6.1 This Workgroup is seeking the views of CUSC Parties and other interested parties in relation to the issues noted in this document and specifically in response to the questions highlighted in the report and summarised below:

Standard Workgroup Consultation questions:

- Q1: Do you believe that the CMP255 Original Proposal better facilitates the Applicable CUSC Objectives?
- Q2: Do you support the proposed implementation approach?
- Q3: Do you have any other comments?
- Q4: Do you wish to raise a Workgroup Consultation Alternative request for the Workgroup to consider? Please see 6.3.

CMP255 Workgroup Specific Consultation questions:

- Q5: Do you think that the defect set out in the modification proposal form for CMP255 (Annex 1) limits potential solutions to those that simply remove the 'snap-back' to a 27% generation proportion of revenue i.e. those options that maintain the €2.50/MWh cap? Or do you think that the scope of the CMP255 defect is wider and may include some or all examples described in (a)-(i) of paragraph 2.43?
- Q6: Regardless of your views in respect of question 5, if the scope of the CMP255 defect were considered wider which of the options described in (a)-(i) of paragraph 2.43 should the Workgroup consider? Are there any additional options that you believe the Workgroup should consider?
- 6.2 Please send your response using the response proforma which can be found on the National Grid website via the following link: http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/CUSC/Modifications/CMP255/
- 6.3 In accordance with Section 8 of the CUSC, CUSC Parties, BSC Parties, the Citizens Advice and the Citizens Advice Scotland may also raise a Workgroup Consultation Alternative Request. If you wish to raise such a request, please use the relevant form available at the weblink below:
 - http://www.nationalgrid.com/uk/Electricity/Codes/systemcode/amendments/forms_guidance
- 6.4 Views are invited upon the proposals outlined in this report, which should be received by **5pm** on **4 March 2016.** Your formal responses may be emailed to: cusc.team@nationalgrid.com
- 6.5 If you wish to submit a confidential response, please note that information provided in response to this consultation will be published on National Grid's website unless the response is clearly marked "Private & Confidential", we will contact you to establish the extent of the confidentiality. A response market "Private & Confidential" will be disclosed to the Authority in full but, unless agreed otherwise, will not be shared with the CUSC Modifications Panel or the industry and may therefore not influence the debate to the same extent as a non-confidential response.
- 6.6 Please note an automatic confidentiality disclaimer generated by your IT System will not in itself, mean that your response is treated as if it had been marked "Private and Confidential".

Annex 1 – CMP255 CUSC Modification Proposal Form

CUSC Modification Proposal Form (for national **grid** Charging Methodology Proposals) CMP255

Connection and Use of System Code (CUSC)

Title of the CUSC Modification Proposal

Revised definition of the upper limit of Generation Charges in the charging methodology with removal of the reference to the 27% charging cap

Submission Date

16th November 2015

Description of the Issue or Defect that the CUSC Modification Proposal seeks to address

On 8th October 2014 Ofgem approved CUSC Modification Proposal CMP224. This adjusts the G:D Split each year to mitigate the potential risk of exceeding the upper limit on average generation charges established under European Commission Regulation (EU) No. 838/2010 (the Regulation). The Regulation restricts average transmission charges paid by electricity generators in the EU to 0-2.5 Euros/MWh.

Under CMP224, the upper limit to Generation charges has been implemented as a variable described as "CAPec". This is defined as the "Upper limit of the range specified by European Commission Regulation 838/2010 Part B paragraph 3 (or any subsequent regulation specifying such a limit) on annual average transmission charge payable by generation".

There is guidance published by ACER in April 2014 (Opinion no. 09/2014) which, if adopted, could mean that the limit specified in European Commission Regulation 838/2010 would no longer apply. If this were to happen CMP224 is designed so that the proportion of charges paid by generators would revert back to 27%.

This situation has created uncertainty about the level of charges that will apply under the CUSC. Since the outcome depends on external influences, namely decisions and actions of the European Commission, it is difficult to anticipate what changes may be implemented or when it will happen.

A reversion to the 27% allocation of transmission costs to generation in TNUoS charges would result in a material increase in costs attributed to generation without any appropriate lead time.

This poses a particular problem to generators who are making assumptions about the cost of TNUoS charges in future years in order to determine a bid price for the capacity market auction and contracts for difference.

Description of the CUSC Modification Proposal

It is proposed that, if limits to generation charges imposed by European Commission Regulations no longer apply, the requirement for generation allocation of costs to revert to 27% should be removed. Instead the current limit of 2.5 Euros/MWh should remain until a new limit can be agreed and implemented by means of a CUSC modification. This will ensure that whatever limit succeeds the current CAPec value is appropriate at the time, is agreed by all affected parties and has a suitable implementation period. It will reduce the risk to generators of a large increase in costs, caused by external influences at short notice.

The revised wording to implement this change could be as follows:

"CAPec means 2.5 Euros/MWh or such lower number as may be specified in a European Commission Regulation that sets an upper limit on the annual average transmission charge payable by generation that is expressed in euros/MWhUpper limit of the range specified by European Commission Regulation 838/2010 Part B paragraph 3 (or any subsequent regulation specifying such a limit) on annual average transmission charge payable by generation".

In addition, it is proposed that the reference to 27% allocation of costs to generation is removed from the text.

"v). The application of a Transmission Network Use of System Revenue split between generation and demand where the proportion of the total revenue paid by generation, for the purposes of tariff setting, is the lower of 0.27 or x times the total revenue, where x for a charging year n is calculated as"

The consequence of this change is that volatility in Generation charges would be better managed, particularly in the circumstances where the European Commission Regulation was to be revoked or significantly modified.

Impact on the CUSC

This modification aims to change Section 14 – Charging Methodologies as described above.

Do you believe the CUSC Modification Proposal will have a material impact on Greenhouse Gas Emissions? Yes / No

No

Impact on Core Industry Documentation. Please tick the relevant boxes and provide any supporting information
BSC
Grid Code
STC
Other (please specify)
This is an optional section. You should select any Codes or state Industry Documents which may be affected by this Proposal and, where possible, how they will be affected.
Urgency Recommended: Yes / No
No
Justification for Urgency Recommendation
N/A
Self-Governance Recommended: Yes / No
No
Justification for Self-Governance Recommendation
N/A
Should this CUSC Modification Proposal be considered exempt from any ongoing Significant Code Reviews?
N/A
Impact on Computer Systems and Processes used by CUSC Parties:
N/A

Details of any Related Modification to Other Industry Codes								
N/A	N/A							
Justification for CUSC Modification Proposal with Reference to Applicable CU Objectives for Charging:	JSC							
Please tick the relevant boxes and provide justification for each of the Chargi Methodologies affected.	ng							
Use of System Charging Methodology								
(a) that compliance with the use of system charging methodology facilitates eff competition in the generation and supply of electricity and (so far as is constherewith) facilitates competition in the sale, distribution and purchase of electricity	sistent							
(b) that compliance with the use of system charging methodology results in charging reflect, as far as is reasonably practicable, the costs (excluding any payment transmission licensees which are made under and in accordance with the Sincurred by transmission licensees in their transmission businesses and who compatible with standard condition C26 (Requirements of a connect and monaction);	nts between STC) nich are							
(c) that, so far as is consistent with sub-paragraphs (a) and (b), the use of syst charging methodology, as far as is reasonably practicable, properly takes a the developments in transmission licensees' transmission businesses.								
(d) compliance with the Electricity Regulation and any relevant legally binding the European Commission and/or the Agency. These are defined within the National Grid Electricity Transmission plc Li Standard Condition C10, paragraph 1.								
Objective (c) refers specifically to European Regulation 2009/714/EC. If the Agency is to the Agency for the Cooperation of Energy Regulators (AC								
Full justification:								
Objective (a): The current legal drafting of CMP224 creates uncertainty associated level of cost recovery associated with Generation charges. In particular the linkage Commission Regulation (EU) No. 838/2010 (the Regulation) or "any subsequent recoverates uncertainty and risk in the CUSC about the level of generation charges. The modification will improve stability of generation charges, ensure that any future chargeneration charges cap will be subject to a further modification and will result in generators that are not conditional on external circumstances. Overall the proposed mulli reduce risk for generators and costs for customers. Consequently the modification better meet Objective (a).	to European gulation" e proposed nge to the neration							

Additional details

Details of Proposer:	Bill Reed
(Organisation Name)	RWE Supply and Trading GmbH
	017893893835
	Bill.Reed@rwe.com
Capacity in which the CUSC	
Modification Proposal is being	
proposed:	CUSC Party
(i.e. CUSC Party, BSC Party or "National	
Consumer Council")	
Details of Proposer's Representative:	
Name:	Bill Reed
Organisation:	RWE Supply and Trading GmbH
Telephone Number:	017893893835
Email Address:	Bill.Reed@rwe.com
Details of Representative's Alternate:	
Name:	Raoul Thulin
Organisation:	RWE Supply and Trading GmbH
Telephone Number:	01793892167
Email Address:	Raoul.Thulin@rwe.com
Attachments (Yes/No):	
If Yes, Title and No. of pages of each At	tachment:

Contact Us

If you have any questions or need any advice on how to fill in this form please contact the Panel Secretary:

E-mail <u>cusc.team@nationalgrid.com</u>

Phone: 01926 653606

For examples of recent CUSC Modifications Proposals that have been raised please visit the National Grid Website at http://www2.nationalgrid.com/UK/Industry-information/Electricity-

nttp://www2.nationalgrid.com/UK/Industry-Information/Electricity-codes/CUSC/Modifications/Current/

Submitting the Proposal

Once you have completed this form, please return to the Panel Secretary, either by email to jade.clarke@nationalgrid.com copied to cusc.team@nationalgrid.com, or by post to:

Jade Clarke
CUSC Modifications Panel Secretary, TNS
National Grid Electricity Transmission plc
National Grid House
Warwick Technology Park
Gallows Hill
Warwick
CV34 6DA

If no more information is required, we will contact you with a Modification Proposal number and the date the Proposal will be considered by the Panel. If, in the opinion of the Panel Secretary, the form fails to provide the information required in the CUSC, the Proposal can be rejected. You will be informed of the rejection and the Panel will discuss the issue at the next meeting. The Panel can reverse the Panel Secretary's decision and if this happens the Panel Secretary will inform you.



Workgroup Terms of Reference and Membership TERMS OF REFERENCE FOR CMP255 WORKGROUP

CMP255 aims to remove the requirement for the generation allocation of costs to revert to 27% if the limits to generation charges imposed by European Commission Regulations no longer apply.

Responsibilities

- 1. The Workgroup is responsible for assisting the CUSC Modifications Panel in the evaluation of CUSC Modification Proposal **255** 'Revised definition of the upper limit of Generation Charges in the charging methodology with removal of the reference to the **27%** charging cap' tabled by RWE at the CUSC Modifications Panel meeting on 27th November 2015.
- 2. The proposal must be evaluated to consider whether it better facilitates achievement of the Applicable CUSC Objectives. These can be summarised as follows:

Use of System Charging Methodology

- (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 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);
- (c) that, so far as is consistent with sub-paragraphs (a) and (b), the use of system charging methodology, as far as is reasonably practicable, properly takes account of the developments in transmission licensees' transmission businesses.
- (d) compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency.

 These are defined within the National Grid Electricity Transmission plc Licence under Standard Condition C10, paragraph 1.
- Objective (d) refers specifically to European Regulation 2009/714/EC. Reference to the Agency is to the Agency for the Cooperation of Energy Regulators (ACER).
- It should be noted that additional provisions apply where it is proposed to modify the CUSC Modification provisions, and generally reference should be made to the Transmission Licence for the full definition of the term.

Scope of work

- 4. The Workgroup must consider the issues raised by the Modification Proposal and consider if the proposal identified better facilitates achievement of the Applicable CUSC Objectives.
- 5. In addition to the overriding requirement of paragraph 4, the Workgroup shall consider and report on the following specific issues:
 - a) Implementation
 - b) Review draft legal text
- 6. The Workgroup is responsible for the formulation and evaluation of any Workgroup Alternative CUSC Modifications (WACMs) arising from Group discussions which would, as compared with the Modification Proposal or the current version of the CUSC, better facilitate achieving the Applicable CUSC Objectives in relation to the issue or defect identified.
- 7. The Workgroup should become conversant with the definition of Workgroup Alternative CUSC Modification which appears in Section 11 (Interpretation and Definitions) of the CUSC. The definition entitles the Group and/or an individual member of the Workgroup to put forward a WACM if the member(s) genuinely believes the WACM would better facilitate the achievement of the Applicable CUSC Objectives, as compared with the Modification Proposal or the current version of the CUSC. The extent of the support for the Modification Proposal or any WACM arising from the Workgroup's discussions should be clearly described in the final Workgroup Report to the CUSC Modifications Panel.
- 8. Workgroup members should be mindful of efficiency and propose the fewest number of WACMs possible.
- 9. All proposed WACMs should include the Proposer(s)'s details within the final Workgroup report, for the avoidance of doubt this includes WACMs which are proposed by the entire Workgroup or subset of members.
- 10. There is an obligation on the Workgroup to undertake a period of Consultation in accordance with CUSC 8.20. The Workgroup Consultation period shall be for a period of 3 weeks as determined by the Modifications Panel.
- 11. Following the Consultation period the Workgroup is required to consider all responses including any WG Consultation Alternative Requests. In undertaking an assessment of any WG Consultation Alternative Request, the Workgroup should consider whether it better facilitates the Applicable CUSC Objectives than the current version of the CUSC.

As appropriate, the Workgroup will be required to undertake any further analysis and update the original Modification Proposal and/or WACMs. All responses including any WG Consultation Alternative Requests shall be included within the final report including a summary of the Workgroup's deliberations and conclusions. The report should make it clear where and why the Workgroup chairman has exercised his right under the CUSC to progress a WG Consultation Alternative Request or a WACM against the majority views of Workgroup members. It should also be explicitly stated where, under these circumstances, the Workgroup chairman is employed by

- the same organisation who submitted the WG Consultation Alternative Request.
- 12. The Workgroup is to submit its final report to the Modifications Panel Secretary on 10th March 2016 for circulation to Panel Members. The final report conclusions will be presented to the CUSC Modifications Panel meeting on 18th March 2016.

Membership

13. It is recommended that the Workgroup has the following members:

Role	Name	Representing
Chairman	John Martin	Code Administrator
National Grid	Paul Wakeley	National Grid
Representative*	_	
Industry	Bill Reed (Proposer)	RWE
Representatives*		
	Christopher Granby	Infinis
	Garth Graham	SSE
	Binoy Dharsi	EDF Energy
	Karl Mayron	Haven Power
	Cem Suleyman	Drax Power
	James Anderson	Scottish Power
	Guy Phillips	Eon
	Jeremy Guard	First Utility
Authority	Donald Smith	Ofgem
Representatives		
Technical secretary	Ryan Place	Code Administrator
Observers		

NB: A Workgroup must comprise at least 5 members (who may be Panel Members). The roles identified with an asterisk in the table above contribute toward the required quorum, determined in accordance with paragraph 14 below.

- 14. The Chairman of the Workgroup and the Modifications Panel Chairman must agree a number that will be quorum for each Workgroup meeting. The agreed figure for CMP255 is that at least 5 Workgroup members must participate in a meeting for quorum to be met.
- 15. A vote is to take place by all eligible Workgroup members on the Modification Proposal and each WACM. The vote shall be decided by simple majority of those present at the meeting at which the vote takes place (whether in person or by teleconference). The Workgroup chairman shall not have a vote, casting or otherwise. There may be up to three rounds of voting, as follows:
 - Vote 1: whether each proposal better facilitates the Applicable CUSC Objectives;
 - Vote 2: where one or more WACMs exist, whether each WACM better facilitates the Applicable CUSC Objectives than the original Modification Proposal;

 Vote 3: which option is considered to BEST facilitate achievement of the Applicable CUSC Objectives. For the avoidance of doubt, this vote should include the existing CUSC baseline as an option.

The results from the vote and the reasons for such voting shall be recorded in the Workgroup report in as much detail as practicable.

- 16. It is expected that Workgroup members would only abstain from voting under limited circumstances, for example where a member feels that a proposal has been insufficiently developed. Where a member has such concerns, they should raise these with the Workgroup chairman at the earliest possible opportunity and certainly before the Workgroup vote takes place. Where abstention occurs, the reason should be recorded in the Workgroup report.
- 17. Workgroup members or their appointed alternate are required to attend a minimum of 50% of the Workgroup meetings to be eligible to participate in the Workgroup vote.
- 18. The Technical Secretary shall keep an Attendance Record for the Workgroup meetings and circulate the Attendance Record with the Action Notes after each meeting. This will be attached to the final Workgroup report.
- 19. The Workgroup membership can be amended from time to time by the CUSC Modifications Panel.

Appendix 1 – Indicative Workgroup Timetable

The following timetable is indicative for CMP255

4 th December 2015	Deadline for comments on Terms of Reference / nominations for Workgroup membership
14 th December 2015	Workgroup meeting 1
11 th January 2016	Workgroup meeting 2
22 nd January 2016	Workgroup Consultation issued for 1 week Workgroup
	comment
5 th February 2016	Deadline for comment
12 th February 2016	Workgroup Consultation published
4 th March 2016	Deadline for responses
14 th March 2016	Workgroup meeting 3
17 th March 2016	Workgroup meeting 4
25 th March 2016	Circulate draft Workgroup Report
1 st April 2016	Deadline for comment
21 st April 2016	Submit final Workgroup Report to Panel
29 th April 2016	Present Workgroup Report at CUSC Modifications Panel

Post Workgroup modification process

2 nd May 2016	Code-Administrator Consultation published
23 rd May 2016	Deadline for responses
25 th May 2016	Draft FMR published
31 st May 2016	Deadline for comments
16 th June 2016	Draft FMR issued to CUSC Panel
24 th June 2016	CUSC Panel Recommendation vote
29 th June 2016	Final CUSC Modification Report submitted to Authority

Annex 3 – Workgroup attendance register

- A Attended
- X Absent
- O Alternate
- D Dial-in

Name	Organisation	Role	14/12/15	11/01/16	09/02/16 [2]
John Martin	National Grid	Chair	Α	Α	D
Ryan Place	National Grid	Technical Secretary	Α	Α	D
Bill Reed	RWE	Proposer	Α	Α	D
Donald Smith	Ofgem	Authority Representative	D	Α	D
Paul Wakeley	National Grid	Workgroup member	Α	Α	D
Garth Graham	SSE	Workgroup member	D	Α	D
Christopher Granby	Infinis	Workgroup member	Χ	Х	D
Cem Suleyman	D D	Workgroup member	Χ	Α	Χ
Joe Underwood	Drax Power	Workgroup alternate	0	-	O, D
Binoy Dharsi	EDF	Workgroup member	Α	Α	Α
Karl Mayron	Haven Power	Workgroup member	Α	Α	Х
James Anderson	Scottish Power	Workgroup member	Α	Α	D
Jeremy Guard	First Utility	Workgroup member	[1]	Α	D
Guy Phillips	E.On	Workgroup member	[1]	Α	D
Joshua Bates	National Grid	Observer	Α	Α	D

^[1] Workgroup members joined the Workgroup after the first meeting.

^[2] The Workgroup on 09/02/16 was held by teleconference.

Annex 4 – Chargeable Volumes

Chargeable Volumes for Calculating Average Tariffs	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Chargeable Generation (GW)	71.50	62.83	67.31	69.00	68.90	69.30
Chargeable Demand (GW)	52.40	49.80	49.30	48.20	47.60	47.30
HH Chargeable(GW)	15.00	13.10	16.30	15.90	15.70	15.60
NHH Chargeable (TWh)	27.40	26.10	23.10	22.50	22.00	21.60

Generation Tariffs		2.5€/MW	/h Cap	If G=27% applied	%	Difference		
Zone No.	Zone Name	Conventional 70%	Intermittent 30%	Conventional 70%	Intermittent 30%	Conventional 70%	Intermittent 30%	
1	North Scotland	13.64	11.43	18.07	15.85	4.42	4.42	
2	East Aberdeenshire	10.24	9.52	14.66	13.94	4.42	4.42	
3	Western Highlands	11.74	10.49	16.16	14.91	4.42	4.42	
4	Skye and Lochalsh	9.20	11.96	13.63	16.38	4.42	4.42	
5	Eastern Grampian and Tayside	10.83	9.95	15.25	14.37	4.42	4.42	
6	Central Grampian	13.90	10.18	18.32	14.60	4.42	4.42	
7	Argyll	19.66	18.00	24.09	22.42	4.42	4.42	
8	The Trossachs	10.20	7.96	14.62	12.38	4.42	4.42	
9	Stirlingshire and Fife	5.40	6.42	9.83	10.84	4.42	4.42	
10	South West Scotlands	8.57	7.18	12.99	11.60	4.42	4.42	
11	Lothian and Borders	7.38	5.01	11.80	9.43	4.42	4.42	
12	Solway and Cheviot	4.66	4.30	9.08	8.72	4.42	4.42	
13	North East England	2.77	1.02	7.19	5.45	4.42	4.42	
14	North Lancashire and The Lakes	4.93	2.98	9.35	7.41	4.42	4.42	
15	South Lancashire, Yorkshire and Humber	5.62	1.03	10.04	5.46	4.42	4.42	
16	North Midlands and North Wales	4.71	0.65	9.13	5.07	4.42	4.42	
17	South Lincolnshire and North Norfolk	3.17	0.69	7.59	5.11	4.42	4.42	
18	Mid Wales and The Midlands	2.35	0.60	6.77	5.03	4.42	4.42	
19	Anglesey and Snowdon	6.19	0.81	10.61	5.23	4.42	4.42	
20	Pembrokeshire	7.75	-0.30	12.17	4.12	4.42	4.42	
21	South Wales & Gloucester	4.90	-0.29	9.32	4.13	4.42	4.42	
22	Cotswold	0.13	-4.31	4.55	0.12	4.42	4.42	
23	Central London	-6.40	-4.88	-1.98	-0.46	4.42	4.42	
24	Essex and Kent	-0.81	1.44	3.61	5.86	4.42	4.42	
25	Oxfordshire, Surrey and Sussex	-1.55	0.05	2.88	4.47	4.42	4.42	
26	Somerset and Wessex	-2.36	-0.29	2.06	4.13	4.42	4.42	
27	West Devon and Cornwall	-2.00	-0.68	2.42	3.74	4.42	4.42	

Table 5: 2016/17 Zonal Generation Tariffs with effect of Snap-Back

Deman	Demand Tariffs		2.5€/MWh Cap		pplied	Difference		
Zone No.	Zone Name	HH Zonal Tariff (£/kW)	NHH Zonal Tariff (p/kWh)	HH Zonal Tariff (£/kW)	NHH Zonal Tariff (p/kWh)	HH Zonal Tariff (£/kW)	NHH Zonal Tariff (p/kWh)	
1	Northern Scotland	40.97	5.77	35.37	4.98	-5.59	-0.79	
2	Southern Scotland	40.24	6.21	34.65	5.34	-5.59	-0.86	
3	Northern	42.93	6.77	37.33	5.88	-5.59	-0.88	
4	North West	42.83	5.69	37.23	4.95	-5.59	-0.74	
5	Yorkshire	42.49	6.54	36.90	5.68	-5.59	-0.86	
6	N Wales & Mersey	42.68	6.48	37.08	5.63	-5.59	-0.85	
7	East Midlands	44.72	6.38	39.13	5.58	-5.59	-0.80	
8	Midlands	45.74	6.35	40.15	5.58	-5.59	-0.78	
9	Eastern	46.54	6.35	40.95	5.59	-5.59	-0.76	
10	South Wales	42.31	6.40	36.71	5.56	-5.59	-0.85	
11	South East	49.20	6.65	43.61	5.90	-5.59	-0.76	
12	London	51.87	6.51	46.28	5.81	-5.59	-0.70	
13	Southern	50.08	6.49	44.48	5.76	-5.59	-0.72	
14	South Western	48.58	6.88	42.99	6.09	-5.59	-0.79	

Table 6: 2016/17 Zonal Demand Tariffs with effect of Snap-Back

Some minor discrepancies may exist due to rounding between the averages in Section 2 and the full tariff model used to the produce this data.

Annex 6: Illustrative examples for setting the G:D split if not using €2.50/MWh

- 6.7 In all of the following examples it is assumed that the EU Regulation has stopped applying prior to the transmission tariffs for <u>Charging Year 2017/18</u> being set, and therefore they are being set on a new methodology and in a number of cases based on the values applied in Charging Year 2016/17.
- 6.8 There examples provide an illustrative view of the future average transmission tariffs for generation, HH demand and NHH demand if a number of different approach were taken to specifying the G:D split if €2.50/MWh (or some other value) did not apply.

A. Fix at the generation percentage last used to set transmission tariffs;

6.9 In this example, for Charging Year 2017/18 onwards the Generation percentage stays the same as the Charging Year 2016/17 value of 16.7%.

	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	
Revenue							
G %	23.3%	16.7%	16.7%	16.7%	16.7%	16.7%	
Generator Revenue (£m)	613.06	452.35	456.75	498.18	530.17	632.85	
Demand Revenue (£m)	2023.63	2256.35	2278.26	2484.92	2644.53	3156.65	
Swing from Demand to Generation compared to using €2.50/MWh cap (£m)			6.85	65.88	122.67	252.25	

Average Tariffs						
Generation Tariff (£/kW)	8.57	7.20	6.79	7.22	7.69	9.13
HH Demand Tariff (£/kW)	38.62	45.31	46.21	51.55	55.56	66.74
NHH Demand Tariff (p/kWh)	5.27	6.37	6.60	7.40	8.06	9.79

Change in Tariffs						
Generation Tariff (£/kW)	0.10	0.95	1.78	3.64		
HH Demand Tariff (£/kW)	-0.14	-1.37	-2.58	-5.33		
NHH Demand Tariff (p/kWh)	-0.02	-0.20	-0.37	-0.78		

Table 7: Indicative values for Average Tariffs under Example A: Fix at the generation percentage last used to set transmission tariffs;

- B. Fix at the generation percentages as forecast (such as in the latest five-year forecast), and fix at the last one;
- 6.10 In this example, the percentages would stay the same as those which have most recently been published in the National Grid TNUoS forecast. That is either in the most recent quarterly forecast or the draft tariffs for the next Charging Year (t+1) and as in the most recently published five year forecast for the following Charging Years (t+2 to t+5).
- 6.11 For the purposes of this illustration those figures would be the same as those shown in Table 2, except the percentage figures would be fixed, rather than variable according to changes in either the £/€ exchange rate or generation volumes.

C. A phased return to 27% for the generation percentage;

- 6.12 In this example, it is assumed that there is a phased return to 27% over a number of Charging Years therefore delaying the full effect of the snap-back. There would need to be a decision about the manner of the snap-back (does it go in variable steps or fixed steps, over how many Charging Years, or does it mirror the decrease) and whether there were any delay in starting the return.
- 6.13 Illustrated in the example is the case of a mirror return, whereby Charging Year 2017/18 repeats the G% from 2016/17, and then 2018/19 is the same as 2015/14, before returning to 27% in 2019/20 the same as 2014/15.

	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21		
Revenue								
G %	23.3%	16.7%	16.7%	23.3%	27.0%	27.0%		
Generator Revenue (£m)	613.06	453.43	456.75	693.61	857.17	1023.17		
Demand Revenue (£m)	2023.63	2255.20	2278.26	2289.49	2317.53	2766.34		
Swing from Demand to Generation compared to using €2.50/MWh cap (£m)			6.85	261.31	449.67	642.57		

Average Tariffs						
Generation Tariff (£/kW)	8.57	7.20	6.79	10.05	12.44	14.76
HH Demand Tariff (£/kW)	38.62	45.31	46.21	47.50	48.69	58.48
NHH Demand Tariff (p/kWh)	5.27	6.37	6.60	6.82	7.06	8.58

Change in Tariffs						
Generation Tariff (£/kW)		0.10	3.79	6.53	9.27	
HH Demand Tariff (£/kW)		-0.14	-5.42	-9.45	-13.58	
NHH Demand Tariff (p/kWh)		-0.02	-0.78	-1.37	-1.99	

Table 8: Indicative values for Average Tariffs under Example C: A phased return to 27% for the generation percentage;

D. A snap-back to a different generation percentage value (less than 27%);

- 6.14 In this example, it is assumed there is a snap-back to a value other than 27%. There would need to be a justification of the choice of any number. For the avoidance of doubt, the generation level would always be less than not greater than 27%
- 6.15 For this illustration, the value of 20% is used, so that the snap-back occurs immediately to 20% in Charging Year 2017/18.

	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Revenue						
G %	23.3%	16.7%	20.0%	20.0%	20.0%	20.0%
Generator Revenue (£m)	613.06	452.35	547.00	596.62	634.94	757.90
Demand Revenue (£m)	2023.63	2256.35	2188.00	2386.48	2539.76	3031.60
Swing from Demand to Generation compared to using €2.50/MWh cap (£m)			97.10	164.32	227.44	377.30

Average Tariffs						
Generation Tariff (£/kW)	8.57	7.20	8.13	8.65	9.22	10.94
HH Demand Tariff (£/kW)	38.62	45.31	44.38	49.51	53.36	64.09
NHH Demand Tariff (p/kWh)	5.27	6.37	6.34	7.11	7.74	9.41

Change in Tariffs						
Generation Tariff (£/kW)		1.44	2.38	3.30	5.44	
HH Demand Tariff (£/kW)		-1.97	-3.41	-4.78	-7.98	
NHH Demand Tariff (p/kWh)		-0.28	-0.49	-0.69	-1.17	

Table 9: Indicative values for Average Tariffs under Example D: A snap-back to a different generation percentage value (less than 27%);

E. A phased return to a different generation percentage value (less than 27%);

- 6.16 In this example, it is assumed there is a phased return to a value other than 27%. There would need to be a justification of the choice of any number and the method of snap-back (see C above). The phased return could be a mirror of the decrease, or over a fixed numbr of years. For the avoidance of doubt, the generation level would always be less than not greater than 27%
- 6.17 For this illustration, the value of 20% is used as the snap-back over three Charging Years, and the generation percentage increases by an equal amount each year to achieve this by 2019/20.

	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Revenue						
G %	23.3%	16.7%	17.8%	18.9%	20.0%	20.0%
Generator Revenue (£m)	613.06	453.43	486.83	563.81	634.94	757.90
Demand Revenue (£m)	2023.63	2255.27	2248.17	2419.29	2539.76	3031.60
Swing from Demand to						
Generation compared to using €2.50/MWh cap (£m)			36.93	131.51	227.44	377.30

Average Tariffs						
Generation Tariff (£/kW)	8.57	7.20	7.23	8.17	9.22	10.94
HH Demand Tariff (£/kW)	38.62	45.31	45.60	50.19	53.36	64.09
NHH Demand Tariff (p/kWh)	5.27	6.37	6.51	7.21	7.74	9.41

Change in Tariffs					
Generation Tariff (£/kW)	0.55	1.91	3.30	5.44	
HH Demand Tariff (£/kW)	-0.75	-2.73	-4.78	-7.98	
NHH Demand Tariff (p/kWh)	-0.11	-0.39	-0.69	-1.17	

Table 10: Indicative values for Average Tariffs under Example E: A phased return to a different generation percentage value (less than 27%);

- F. Convert the last €/MWh cap to a £ per energy (£/MWh) cap to apply for generation TNUoS going forward;
- 6.18 Under this approach, the €2.50/MWh is given an equivalent £/MWh value by converting € to £ using the exchange rate used in the G:D split calculation. It is then assumed that this value of £/MWh would be used to fix the Generation % for each of the following Charging Years. This has the effect of removing the exchange rate volatility from the future calculation of transmission tariffs. There would also need to be a decision about whether to index link the value in future to avoid it reducing in real-terms.
- 6.19 In this illustration, the £/MWh equivalent for Charging Year 2016/17 of the €2.50/MWh cap is £1.6875 /MWh (based on an exchange rate of 1.36 €/£). This is the value that is then used for subsequent Charging Years i.e. no indexing is applied together with the forecast volume of energy produced by Transmission Generation to set the generation percentage.

	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Revenue						
Energy produced by Transmission Generation (TWh)	319.63	268.70	262.67	250.54	232.62	217.20
Error Rate	6.4%	8.2%				
Cap to be applied, after corrected for an error rate (€/MWh)	2.34	2.30				
TNUoS Revenue (£m)	2636.69	2708.70				
Exchange Rate (€/£)	1.22	1.36				
Equivalent £/MWh Cap	1.92	1.69	1.69	1.69	1.69	1.69
G %	23.3%	16.7%	16.2%	14.2%	12.4%	9.7%
Generator Revenue (£m)	613.06	453.43	443.25	422.78	392.54	366.53
Demand Revenue (£m)	2023.63	2255.27	2291.75	2560.32	2782.16	3422.98
Swing from Demand to Generation compared to using €2.50/MWh cap (£m)			-6.65	-9.52	-14.96	-14.08

Average Tariffs						
Generation Tariff (£/kW)	8.57	7.20	6.58	6.13	5.70	5.29
HH Demand Tariff (£/kW)	38.62	45.31	46.49	53.12	58.45	72.37
NHH Demand Tariff (p/kWh)	5.27	6.37	6.64	7.63	8.48	10.62

Change in Tariffs						
Generation Tariff (£/kW)	-0.10	-0.14	-0.22	-0.20		
HH Demand Tariff (£/kW)	0.13	0.20	0.31	0.30		
NHH Demand Tariff (p/kWh)	0.02	0.03	0.05	0.04		

Table 11: Indicative values for Average Tariffs under Example F: Convert the last €/MWh cap to a £ per energy (£/MWh) cap to apply for **generation TNUoS going forward**;

G. Set a new £/MWh cap for generation TNUoS;

- 6.20 Under this approach, a new £/MWh cap would be chosen to apply. The £ figure chosen would need to be justified, as would whether it were index-linked or not. Depending on how far away the cap is from the actual value there may still be a snap-up or snap-back. There would also need to be a decision about whether to index link the value in future to avoid it reducing in real-terms.
- 6.21 In this illustration if a value of £2/MWh is chosen for Charging Year 2017/18 (entirely arbitrary and indicative), and it assumed to be indexed in future years by 3%.

	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21		
Revenue								
Energy produced by Transmission Generation (TWh)	319.63	268.70	262.67	250.54	232.62	217.20		
Error Rate	6.4%	8.2%						
Cap to be applied, after corrected for an error rate (€/MWh)	2.34	2.30						
TNUoS Revenue (£m)	2636.69	2708.70						
Exchange Rate (€/£)	1.22	1.36						
Equivalent £/MWh Cap	1.92	1.69	2.00	2.06	2.12	2.19		
G %	23.3%	16.7%	19.2%	17.3%	15.5%	12.5%		
Generator Revenue (£m)	613.06	453.43	525.33	516.11	493.57	474.68		
Demand Revenue (£m)	2023.63	2255.27	2209.67	2466.99	2681.13	3314.82		
Swing from Demand to Generation compared to using €2.50/MWh cap (£m)			75.43	83.81	86.07	94.08		

Average Tariffs						
Generation Tariff (£/kW)	8.57	7.22	7.80	7.48	7.16	6.85
HH Demand Tariff (£/kW)	38.62	45.29	44.82	51.18	56.33	70.08
NHH Demand Tariff (p/kWh)	5.27	6.37	6.40	7.35	8.17	10.28

Change in Tariffs				
Generation Tariff (£/kW)	1.12	1.21	1.25	1.36
HH Demand Tariff (£/kW)	-1.53	-1.74	-1.81	-1.99
NHH Demand Tariff (p/kWh)	-0.22	-0.25	-0.26	-0.29

Table 12: Indicative values for Average Tariffs under Example G: Set a new £/MWh cap for generation TNUoS;

- H. Convert the last €/MWh cap to a £ per capacity (£/MW) cap to apply for generation TNUoS going forward;
- 6.22 Under this approach, a £/MW cap would be established based on the prevailing value from the current methodology. This removes the need for a € to £ exchange rate, and a forecast volume of generation in future Charging Years. There would also need to be a decision about whether to index link the value in future to avoid it reducing in real-terms.
- 6.23 In this illustration, the £/MW equivalent for Charging Year 2016/17 of the €2.50/MWh cap is £7.11 /kW (the same as the average tariff), and this value is not index linked. This is the value that would then be used to set the maximum recoverable from generator and thus the generation percentage.

	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Revenue						
Energy produced by Transmission Generation (TWh)	319.63	268.70				
Error Rate	6.4%	8.2%				
Cap to be applied, after corrected for an error rate (€/MWh)	2.34	2.30				
TNUoS Revenue (£m)	2636.69	2708.70				
Exchange Rate (€/£)	1.22	1.36				
Chargeable Generation (GW)	71.50	62.83	67.31	69.00	68.90	69.30
Equivalent £/kW Cap	8.57	7.22	7.22	7.22	7.22	7.22
G %	23.3%	16.7%	17.8%	16.7%	15.7%	13.2%
Generator Revenue (£m)	613.06	453.43	485.80	497.98	497.26	500.14
Demand Revenue (£m)	2023.63	2255.27	2249.20	2485.12	2677.44	3289.36
Swing from Demand to Generation compared to using €2.50/MWh cap (£m)			35.90	65.68	89.76	119.54

Average Tariffs						
Generation Tariff (£/kW)	8.57	7.22	7.22	7.22	7.22	7.22
HH Demand Tariff (£/kW)	38.62	45.29	45.62	51.56	56.25	69.54
NHH Demand Tariff (p/kWh)	5.27	6.37	6.52	7.40	8.16	10.21

Change in Tariffs				
Generation Tariff (£/kW)	0.53	0.95	1.30	1.73
HH Demand Tariff (£/kW)	-0.73	-1.36	-1.89	-2.53
NHH Demand Tariff (p/kWh)	-0.10	-0.20	-0.27	-0.37

Table 13: Indicative values for Average Tariffs under Example H: Convert the last €/MWh cap to a £ per capacity (£/MW) cap to apply for **generation TNUoS going forward**;

I. Set a new £/MW cap for generation TNUoS.

- 6.24 Under this approach, a £/MW cap would need to be chosen to apply instead of the €2.50/MWh cap. The £ figure chosen would need to be justified, and there would also need to be a decision about whether to index link the value in future to avoid it reducing in real-terms.
- 6.25 In this illustration, the £/MW cap of £5/MW is chosen for Charging Year 2017/18 (entirely arbitrary and indicative), and it is indexed in future years by 3%.

	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Revenue						
Energy produced by Transmission Generation (TWh)	319.63	268.70	262.67	250.54	232.62	217.20
Error Rate	6.4%	8.2%				
Cap to be applied, after corrected for an error rate (€/MWh)	2.34	2.30				
TNUoS Revenue (£m)	2636.69	2708.70				
Exchange Rate (€/£)	1.22	1.36				
Chargeable Generation (GW)	71.50	62.83	67.31	69.00	68.90	69.30
Equivalent £/kW Cap	8.57	7.22	5.00	5.15	5.30	5.46
G %	23.3%	16.7%	12.3%	11.9%	11.5%	10.0%
Generator Revenue (£m)	613.06	453.43	336.57	355.35	365.48	378.63
Demand Revenue (£m)	2023.63	2255.27	2398.44	2627.75	2809.22	3410.87
Swing from Demand to Generation compared to using €2.50/MWh cap (£m)			-113.34	-76.95	-42.02	-1.97

Average Tariffs						
Generation Tariff (£/kW)	8.57	7.22	5.00	5.15	5.30	5.46
HH Demand Tariff (£/kW)	38.62	45.29	48.65	54.52	59.02	72.11
NHH Demand Tariff (p/kWh)	5.27	6.37	6.95	7.83	8.56	10.58

Change in Tariffs				
Generation Tariff (£/kW)	-1.68	-1.12	-0.61	-0.03
HH Demand Tariff (£/kW)	2.30	1.60	0.88	0.04
NHH Demand Tariff (p/kWh)	0.33	0.23	0.13	0.01

Table 14: Indicative values for Average Tariffs under Example I: Set a new £/MW cap for generation TNUoS.

6.26 Table 15 illustrates some identified pros and cons of the various examples.

Op	otion	Pros	Cons
Α	Fix at the generation percentage last used to set transmission tariffs;	Removes potential for snap-back	Does not match the forecasts made by NGET and known to the market.
В	Fix at the generation percentages as forecast (such as in the latest five-year forecast), and fix at the last one;	 Removes potential for snap-back Matches most closely the data published to the market 	Potential issues over when forecasts are produced and the Regulation removed that would need to be considered.
С	A phased return to 27% for the generation percentage;	Removes potential for immediate snap-back	 Does not match the forecasts made by NGET and known to the market. Need to justify how the phasing works (mirror, number of fixes or variable steps, delayed started etc.)

Ор	tion	Pros	Cons
D	A snap-back to a different generation percentage value (less than 27%);	Reverts to the GB value that was established prior to European Regulation in 2010	 Does not match the forecasts made by NGET and known to the market. Need to objectively justify the new value Does not address defect as still leaves snap-back
Е	A phased return to a different generation percentage value (less than 27%);	Removes potential for immediate snap-back	 Does not match the forecasts made by NGET and known to the market. Need to justify how the phasing works (mirror, number of fixes or variable steps, delayed started etc.) Need to objectively justify the new value
F	Convert the last €/MWh cap to a £ per energy (£/MWh) cap to apply for generation TNUoS going forward;	Removes exchange rate volatility Removes potential for snap-back	 Does not match the forecasts made by NGET and known to the market. MWh to MW conversation still required Is a £/MWh cap justified or appropriate. May need to consider if an index link is needed to avoid reduction in real-terms over time.
G	Set a new £/MWh cap for generation TNUoS;	Removes exchange rate volatility	 Need to objectively justify the new value May need to consider if an index link is needed to avoid reduction in real-terms over time. Does not match the forecasts made by NGET and known to the market. MWh to MW conversation still required Is a £/MWh cap justified or appropriate. Potentially a snap back to the new figure, which will be unpredicted.
Н	Convert the last €/MWh cap to a £ per capacity (£/MW) cap to apply for generation TNUoS going forward;	Remove exchange rate volatility Removes need to forecast MWh to MW conversation Removes potential for snap-back (addresses defect)	 May need to consider if an index link is needed to avoid reduction in real-terms over time Does not match the forecasts made by NGET and known to the market. Is a £/MW cap justified or appropriate.
ı	Set a new £/MW cap for generation TNUoS.	Remove exchange rate volatility Removes need to forecast MWh to MW conversation	 Need to objectively justify the new value May need to consider if an index link is needed to avoid reduction in real-terms over time Does not match the forecasts made by NGET and known to the market. Is a £/MW cap justified or appropriate. Potentially a snap to the new figure, which will be unpredicted.

Table 15: Analysis of the different illustrative examples.