

Stage 02: Workgroup Consultation

Connection and Use of System Code (CUSC)

CMP251

'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'

What stage is this document at?

01	Initial Written Assessment
02	Workgroup Consultation
03	Workgroup Report
04	Code Administrator Consultation
05	Draft CUSC Modification Report
06	Final CUSC Modification Report

CMP251 seeks to better meet 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.

This document contains the discussion of the Workgroup which formed in September 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: 29th February 2016
Length of Consultation: 20 Working days
Responses by: 29th March 2016



The Workgroup concludes:

To be completed following the Workgroup Consultation



High Impact:



Medium Impact:

Supplier, Generators



Low Impact:

Contents

1	Summary.....	3
2	Workgroup Discussions	4
3	Terms of Reference and Scope.....	6
4	Workgroup Discussion	7
5	Workgroup Alternatives.....	20
6	Impact and Assessment	21
7	Proposed Implementation and Transition.....	22
8	Responses	23
	Annex 1 – CMP251 CUSC Modification Proposal Form.....	25
	Annex 2 – CMP251 Terms of Reference.....	26
	Annex 3 – Workgroup attendance register.....	29
	Annex 4 – Background.....	30
	Annex 5 – Legal Response	33
	Annex 6 – Answers to CMP251 Workgroup Legal Questions.....	39
	Annex 6 – Exchange Rate Risk Analysis	44
	Annex 7 – The Swedish Approach to the G:D Split	45



Any Questions?

Contact:

Ryan Place

Code Administrator



ryan.place@nationalgrid.com



07976794334

Proposer: George

Moran –

George.moran@britishgas.co.uk

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 CMP251 CUSC Modification Proposal which was raised by British Gas and developed by the Workgroup. Parties are requested to respond by **5pm on Friday 29th March 2016** to CUSC.team@nationalgrid.com using the Workgroup Consultation Response Proforma which can be found on the following link: <http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/CUSC/Modifications/CMP251/>

Document Control

Version	Date	Author	Change Reference
0.9	25/02/2016	Code Administrator	Workgroup Consultation to Industry

1 Summary

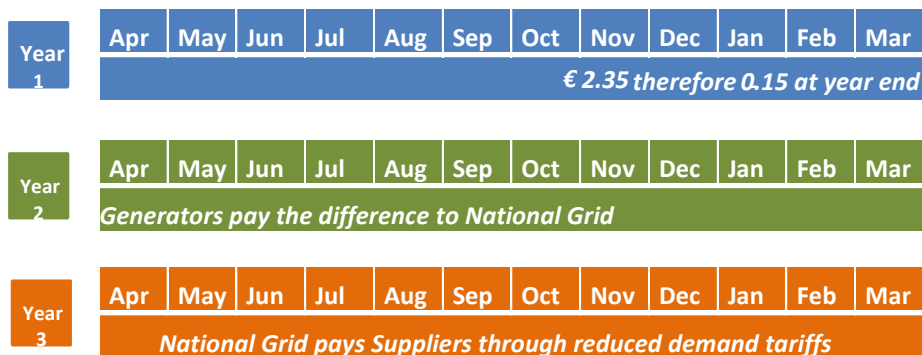
- 1.1 This document describes the Original CMP251 CUSC Modification Proposal (the Proposal), summarises the deliberations of the Workgroup and sets out the options for potential Workgroup Alternative CUSC Modifications (WACMs). Prior to confirming any alternative proposals the Workgroup are seeking views 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 CMP251 was proposed by British Gas and was submitted to the CUSC Modifications Panel for their consideration on 28th August 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 expect to report back to the Panel at the April 2016 Panel meeting.
- 1.3 CMP251 seeks to remove the error margin in the cap on total TNUoS recovered by generation and introduce a new charging element to TNUoS to ensure compliance with European Commission Regulation 838/2010 (Part B) with least impact on GB consumers.
- 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/CMP251/> along with the Modification Proposal Form

2 Workgroup Discussions

The Proposal

- 2.1 The Proposal can be found in Annex 1. In essence the modification seeks to refine the approach to compliance with the annual average €0-2.5/MWh range applicable in GB that can be recovered through transmission tariffs from chargeable generation defined in EU Regulation 838/2010 Part B , by removing the need for an error margin through the introduction of a reconciliation (if CMP251 is implemented).
- 2.2 The Proposer identified the defect as the error margin approach included within the current ex ante methodology (implemented into the CUSC via CMP224). The Proposer believes that this approach does not guarantee compliance with the Regulation and places a greater burden on Suppliers than necessary to comply with the Regulation. For example, the error margin used in the calculation to define the G:D split for Charging Year 2015/16 has been set by reference to €2.34/MWh (which includes the error margin for demand and revenue forecast error) rather than the maximum of the range, namely €2.5/MWh. The Proposer therefore suggests that the error margin should be removed.
- 2.3 The Proposer also outlined that an ex post reconciliation should be added to the existing process reconciling Generation shortly after the end of the Charging Year, and Suppliers the following Charging Year as shown in the diagram below:

Example 1–under- recovery



Example 2 – over-recovery

Year 1	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
	<i>€2.65 therefore +0.15 at year</i>											
Year 2	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
	<i>National Grid pay the difference to Generators</i>											
Year 3	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
	<i>Monies recovered from Supplier by increased demand tariffs</i>											

2.4 The Proposer presented the benefits of the proposal to the Workgroup as:

- (a) Certainty of Regulation compliance
- (b) Minimising impact on the principles underpinning TNUoS tariffs
- (c) Minimising the required transfer of costs from generators to consumers
- (d) Provide predictability by providing a fixed cap for generators
- (e) Predictability to Suppliers
- (f) Removes the risk of changes in the error margin

3 Terms of Reference and Scope

- 3.1 The Terms of Reference for the Workgroup can be found in Annex 2.
- 3.2 The Terms of Reference for the Workgroup were reviewed and the following was noted:
- Point 5.c – It was agreed that the Workgroup needed to obtain a legal opinion on the Regulation and the legal opinion should include whether reasonable endeavours by National Grid are sufficient to comply.
 - Point 5.d - One Workgroup member challenged why the cap should be set at €2.50/MWh and not another value in the middle ground. Another Workgroup member asked whether ACER's April 2014 opinion to remove power based caps on G charges was likely to be adopted by the Commission. Ofgem confirmed that in their view this was unlikely as 18 months had now passed.¹ If ACER's position at that time would be reflected in the Regulation, there would be no cap on power based G-charges across all the Member States.
- 3.3 A Workgroup member stated that the recent CMP227 decision² implied that there should be no consideration of this CMP251 modification proposal as Ofgem had stated that it was unclear how Generator charges would evolve in Europe, and therefore any changes now may be required to be undone in the future. The concern was that by implementing a change in this area a precedent would be set ahead of possible future change in Europe. Ofgem confirmed that this CMP251 modification applied to the present situation and therefore should be considered.
- 3.4 There was a brief discussion on other ways the objectives of the modification could be met but it was agreed that the scope of the modification does not permit alternatives suggesting an increase in the size of the error margin because the CMP251 defect is identified as the error margin itself.

¹ By way of background, a report was published by ACER, outlining its conclusions on European tariff structure harmonisation, which can be found at: <http://www.acer.europa.eu/Events/2nd-ACER-workshop-on-electricity-transmission-tariff-harmonisation/Documents/CEPA%20Scoping%20Draft%20Final%20Report.pdf>. A further ACER report has since been published in December 2015 re-confirming its position and requesting the Commission to reflect this in an update to the Regulation. This report can be found here: http://www.acer.europa.eu/Electricity/FG_and_network_codes/Documents/Scoping%20conclusions%20for%20harmonised%20Transmission%20Tariff%20Structures%20in%20Electricity.pdf

² https://www.ofgem.gov.uk/sites/default/files/docs/2015/09/cmp227_d_0.pdf

4 Workgroup Discussion

4.1 The Workgroup discussed the benefits of CMP251 as advocated by the Proposer:

(a) Certainty of Regulation compliance:

(i) Whilst the current ex ante methodology uses reasonable endeavours to comply with European Commission Regulation 838/2010 there remains a real risk that average annual transmission charges paid by Generators in GB may exceed €2.50/MWh in some circumstances. The legal opinion states that the proposal “...has the inherent advantage of using established figures (as opposed to forecast figures/the Error Margin) and thereby achieving a more certain and precise alignment with the G Charge Guidelines (albeit...we are not of the view that this precise ex-post alignment is essential as a pre-requisite for legal compliance with the G Charge Guidelines)”³. Therefore in the view of some Workgroup members it achieves a more certain and precise alignment with the Regulation 838/2010. as reflected in the legal text

(ii) Other Workgroup members highlighted that the legal opinion requested by the Workgroup noted that the existing ex ante methodology is compliant with Regulation 838/2010 - “.....we are of the view that there is a robust argument that the Current Approach ensures compliance with the purpose of the Guidelines Regulation and therefore is not vulnerable to legal challenge by dint of taking using ex ante calculations”⁴. In the opinion of these Workgroup members there is therefore no uncertainty of Regulation compliance.

(b) Minimising impact on the principles underpinning TNUoS tariffs:

(i) The sole purpose of CMP224 was to manage compliance with the European Commission Regulation 838/2010. The result of CMP224 was to alter the charges that would otherwise have resulted from the application of the charging methodology. The underlying principles of the charging methodology, including the default split of revenue between Generators and Suppliers, were not affected by CMP224. The Proposer believes therefore, that the application of a cap distorts the principles of the charging methodology. By removing the error margin, the proposed CMP251 solution will therefore also minimise the distortive effect on the underlying TNUoS principles.

(ii) Some Workgroup members expressed the view that an ex ante approach enables efficient trading and provides certainty to market participants. As outlined in CUSC Section 14.14.8 the charges also have the objective to “inform existing and potential new entrants with accurate and stable cost messages”, and it could be argued it is difficult to see how introducing (with CMP251) an ex post reconciliation of exchange rate risk stabilises charges. It was noted that the Workgroup for CMP224 considered including exchange rate risk into the ex ante methodology and stated that: “in relation to the €/£ exchange rate, the Workgroup viewed this as being driven by external factors and impractical for electricity industry participants to forecast with any degree of certainty”⁵.

(iii) It was expressed by the Proposer that removing the error margin itself would improve predictability for market participants since the actual level of the error margin is subject to change (in line with standard tariff notification timescales and as may be discussed in advance at the Transmission Charging Methodology Forum), which can add uncertainty to market participants. Other members of the Workgroup considered that removal of the error margin would indeed improve predictability for market participants, but it is the ex post reconciliation that creates new uncertainty and less predictability.

³ Page 37 of CMP251 Workgroup Consultation Q6, Para 3.

⁴ Page 36 of CMP251 Workgroup Consultation Q1, Para 5.

⁵ Paragraph 4.46, CMP224 Final Modification Report <http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/CUSC/Modifications/CMP224/>

(iv) CMP251 introduces an exchange rate risk into the reconciliation charges as the current ex ante approach does not take into account €/£ currency fluctuations (and does not have a reconciliation process). The consequence of introducing an exchange rate risk would be that as it is viewed to be “*impractical for electricity industry participants to forecast with any degree of certainty*”⁶, and some Workgroup members believed that market participants (both Generators and Suppliers) will begin to introduce risk margins into end customer tariffs to hedge against adverse €/£ currency movements. Using the Office of Budget Responsibility (OBR) €/£ exchange rate data, analysis was performed by the Workgroup which indicated that the highest expected variance in the €/£ exchange rates (using data from the last 5 years) would be + or -14%⁷. Assuming recently observed annual €/£ exchange rate changes, this could result in revenue movements of as much as £120m⁸ between Generators and Suppliers compared to expectations over 2 years previously. Whilst this may lead to consequential transmission tariff uncertainty, clearly uncertainty will continuously reduce both prior to the setting of TNUoS tariffs, and during the relevant Charging Year, as market participants have visibility of movements in the €/£ exchange rate. For instance, the 14% variance quoted above in respect of the 2015/16 Charging Year reduces to a 1% variance when compared to the revised OBR forecast published prior to the 2015/16 Charging Year.⁹ However, that having been said, it was noted by some Workgroup members that Generators may well have traded their output forward monthly, quarterly, seasonally, annually ahead¹⁰ such that they would have had to factor in the €/£ exchange rate at the time they priced those trades in the market. It is noted though that whilst Parties will have increasing certainty over the required revenue movement, the size of the revenue movement itself is not affected since the TNUoS methodology fixes the exchange rate using the OBR spring forecast in the previous year.

(v) It was noted by some Workgroup members that options may be available to market participants which would offer protection against the €/£ exchange rate movements. However, other Workgroup members noted that options to hedge the €/£ exchange rate risk would come at an additional cost to those parties. Large established market participants will be better able to manage the €/£ exchange rate risk as they are likely to already have exchange rate expertise. However, this is unlikely to be the case for smaller market participants. Therefore, exposing market participants to the €/£ exchange rate risk through the TNUoS charging arrangements is likely to put smaller market participants at a competitive disadvantage. To some degree, this may unduly distort competition in electricity generation and supply.

(c) Minimising the required transfer of costs from generators to consumers:

(i) By including an error margin (which is currently set at 8.2% for the 2016/17 Charging Year) Suppliers are collectively contributing ~£40m more than if no error margin was used and the G:D split was set using the top of the €0-2.5/MWh range defined in Regulation 838/2010 Part B. However, removing this cost from Suppliers may not necessarily lead to a saving to be made by consumers, as it could be argued that this is simply a movement of costs from Suppliers to Generators. The Proposer believes that just as there is a risk that not all of the reduction in generation TNUoS charges resulting from CMP224 is passed through to consumers via lower wholesale prices, similarly it is not certain that all of the c. £40m transfer back to generation will be passed through to consumers via higher wholesale prices. The Proposer stated that to the extent that generators are not able to pass through these movements in TNUoS costs, the CMP 251

⁶ Paragraph 4.46, CMP224 Final Modification Report

⁷ For Charging Year 2015/16, the OBR forecast published in March 2014 was €1.22, at one point during the year the exchange rate was up at €1.39.

⁸ See spreadsheet analysis

⁹ For Charging Year 2015/16, the OBR forecast published in March 2015 was €1.37, at one point during the year the exchange rate was up at €1.39 – a 1% variance.

¹⁰ Which, for example, facilitates Suppliers being able to offer consumers fixed price contracts.

proposal will be beneficial to consumers by reducing the windfalls being received by some generators under the current methodology.

(ii) Some Workgroup members were mindful that the Provisional Findings of the CMA and Ofgem's Wholesale Market Indicators Report (2015) confirm the absence of temporal market power in the GB generation market and conclude that the market is competitive and that there is no evidence that TNUoS cost reductions for generators are not being passed on to consumers via the wholesale power price. Therefore there is no evidence that generators in GB are making any windfall gains. Conversely, it is highly doubtful whether TNUoS cost increases for generators would not be recovered from consumers (where the generator is economic). But in any case, generators that are unable to recover their operating costs will eventually exit the market; e.g. Fiddlers Ferry and Rugeley Power Stations. An inability for economic entities to pass through the costs they incur is detrimental to competition and security of supply and ultimately consumers; it cannot be considered a benefit.

(iii) Some Workgroup members noted that the Regulation 838/2010 Part B defines a range of €0-2.5/MWh, and therefore proposed referencing another number (such as the 'mid-point') within the range i.e. €1.25/MWh, rather than the €2.5/MWh cap. As the EU Regulation defines a range rather than €2.50/MWh this means that there is no legal requirement to minimise the required transfer of costs from Generators to Suppliers although there is a legal requirement not to affect cross-border trade.

(iv) Some Workgroup members considered that the Proposal could also mean higher costs for consumers as a result of interest charges where National Grid would be financing the cost of any under-recovery that results from the proposed reconciliation of Generators in Charging Year+1, and Suppliers in Charging Year+2. Other Workgroup members noted that under recovery effectively delays charges. They therefore consider that whether or not consumers, or any other Party, incur higher overall costs will depend on the net effect of the interest applied to over and under recovery and the change in interest payments/earnings that would accrue to the Party as a result of charges being delayed. For example, if we assume National Grid under recovers from demand network users by £100million in a Charging Year 1, and recovers this in year 2 with an interest rate of 2.5% applied to the under recovery, then in Charging Year 2 National Grid will recover £102.5 million. Demand network users pay £2.5million more in charges (£102.5 million instead of £100 million) but they also earn or avoid paying interest on the £100million under recovery. If, network users earn or avoid paying 4% interest on the £100million, ie £4million, then the net impact on them is a benefit of £1.5million. If that interest rate is 2.5%, then they are cost neutral. If it is 2% then there's a net cost of £0.5m.

(d) Provide predictability by providing a fixed cap for Generators:

(i) Some Workgroup members noted that greater certainty for Generators is achieved as they will know that after reconciliation their charges will be at the cap. By monitoring the £/€ exchange rate variations both prior to and during the Charging Year Generators should be in a position to predict the likely reconciled charge and reflect this in the price of power sold.

(ii) However, other Workgroup members noted the counter arguments set out in paragraph (b) (v) above. In addition, where the cost of hedging the £/€ risk is prohibitive, Generators can be exposed to gains and losses on forward wholesale power sales depending on how the exchange rate fluctuates. This is because Generators cannot predict future exchange rate fluctuations. This would give rise to the introduction by Generators of a £/€ TNUoS risk premia.

(iii) Overall the removal of the current ex ante error margin and the application of an ex post reconciliation of Generator TNUoS charges should, in the view of some Workgroup members, also reduce year to year variability of the unreconciled generator TNUoS charges set at the start of each year. This is because the proposal will have in the previous charging years recovered average generator charges at the 'right' level (i.e. typically at the cap).

(iv) However, some Workgroup members feel that there may already be undue competitive disadvantage and setting average Generators charges at €2.50/MWh may put

GB generation at a further undue competitive disadvantage relative to their continental competitors and affect cross-border trade. This may be detrimental to the Internal Market as well as to (i) effective competition in GB, (ii) GB security of supply and (iii) achieving the UK's legally binding environmental targets.

(v) "One member of the working group did not believe that GB generation was at a competitive disadvantage relative to their continental competitors and considered it is not appropriate to compare one component of GB transmission charges without considering the wider commercial regime. For instance, generators in GB receive firm transmission rights and also benefit from ancillary service payments. When it is considered that approximately £500m is recovered through TNUoS from generation, and that approximately £1bn is made in payments to generation through BSUoS (to which demand contributes 50%), it could be argued that the net position is broadly neutral. The working group member also challenged whether TNUoS affects cross border trade since TNUoS is a fixed cost and not a short run marginal cost. However it was accepted that setting the average G charge at €2.5/MWh (relative to a lower level due to the error margin) will result in a higher proportion of transmission charges being paid by generation, and as a fixed cost this may marginally affect future investment decisions where there are alternative options on the continental mainland."

(vi) Some Workgroup members felt that introducing an ex post reconciliation and adding the €/£ exchange rate risk does not increase predictability of TNUoS costs for Generators. Conversely an ex ante methodology maximises predictability of TNUoS costs for Generators. However, the Proposer believes that the use of an ex ante based error margin increases unpredictability due to unforeseen changes in the level of the error margin. This risk is effectively 'doubled up' as it applies equally, but in opposite directions, to both Generators and Suppliers.

(e) Predictability to Suppliers:

(i) The Proposer noted that with the proposal Suppliers will have certainty that the G:D split will be set so that average TNUoS charges will be set to recover the cap set by the Regulation without the unpredictability and risk associated with unanticipated changes to any error margin. This risk, according to the Proposer, will therefore be removed and the impact on any over/under recovery position of National Grid will be known with increasing certainty through the relevant Charging Year and any reconciliation will not take effect until the second year after the relevant Charging Year providing predictability to Suppliers of the impact on future year TNUoS tariffs.

(ii) Other Workgroup members commented that introducing an ex post reconciliation and adding the €/£ exchange rate risk does not increase predictability for Suppliers. Managing the €/£ exchange rate risk comes at a cost (please see paragraph. (b) (v) above). Conversely an ex ante methodology maximises predictability for Suppliers.

(f) Removes the risk of changes in the error margin:

(i) Changes to the error margin are made at the discretion of National Grid and do not require any notice (other than as provided for in the TNUoS tariff notification). The Proposer believes that the use of an error margin increases unpredictability due to unforeseen changes in the level of the error margin. This risk is effectively 'doubled up' as it applies equally, but in opposite directions, to both Generators and Suppliers.

(ii) Other members of the Workgroup noted that changes to the error margin are evidence based on the basis of historical forecast errors. Removing the error margin with CMP251 just exchanges one form of risk for another, however, in the current ex ante methodology, this is known in advance by Generators and Suppliers, whereas in the CMP251 ex post methodology the reconciliation amount is not known in advance, meaning both types of parties have to factor in a risk premium for this uncertainty.

4.2 The Workgroup discussed other issues associated with the modification:

(a) One of the intentions of Regulation 838/2010 was to not undermine the Internal Market. For this reason average charges for access to the transmission network by Generators in Member States were to be kept within a range which helps to ensure that the benefits of harmonisation are realised and it was on this basis that the €0-2.5/MWh for GB was set. In the opinion of some Workgroup members this intention lends itself more closely to an ex ante methodology.

(b) The Proposal introduces a new reconciliation process which is more complicated than the existing ex ante process.

(c) In the view of a Workgroup member the CMP251 reconciliation process could improve cost reflectivity by reflecting actual £/€ exchange rate movements, however any gain in cost reflectivity, could be affected by market share changes that result in the intervening two separate charging years. Other Workgroup members stated that setting TNUoS tariffs to ensure that Generators pay on average €2.50/MWh exactly could not be considered more cost reflective. This is because the EC Regulation proscribes an average charge range of €0/MWh - €2.50/MWh. Any average charge within this range could be considered cost reflective. In any case, setting average Generator TNUoS charges at exactly €2.50/MWh wouldn't provide useful cost reflective signals for Generators to change their behaviour in any meaningful way.

4.3 The Workgroup discussed the actual effect the Modification would have on market participants. It was noted that for balanced vertically integrated¹¹ players, this Modification should (in theory) have little or no effect as costs are transferred from the generation to the retail business or vice versa. However, those market participants that are not vertically integrated would be exposed to gains or losses, particularly where only short notice periods are provided.

The Accrual Concept and CMP251

Some Workgroup members felt that by introducing the changes suggested in CMP251, it was important to highlight the impact resulting from the Accounting Accrual Concept and the introduction of financial uncertainty into the accounts. A Workgroup member provided further clarification below on the potential impact.

CMP251 proposes to introduce a new charging element to TNUoS which would involve reconciling charges to Generators at some point after the end of the Charging Year ('t', ending 31st March). The stated aim of the Proposal is to ensure that the average amount recovered from Generators in that Charging Year (t) is equal to €2.50/MWh in compliance with Regulation 838/2010. The reconciliation amount payable (or receivable) by Generators in the following Charging Year (t+1) would be clearly identified as an adjustment to the TNUoS charges due for the prior Charging Year (t), and would be expressed through a change in the TNUoS tariffs for that prior Charging Year (t) and applied to the Generator volumes delivered in that prior Charging Year (t). Therefore, under the accrual concept, any Generator reconciliation amounts would have to be recognised in the year to which they relate i.e. the prior Charging Year (t). To the extent that Generators are reasonably certain that such a reconciliation amount would arise (through National Grid forecasts/updates or internal calculation using publicly available data, such as the €/£ exchange rate) and even although the final reconciliation process may not yet have taken place and the appropriate payments/receipts not yet exchanged in the next Charging Year (t+1), Generators should recognise the anticipated amount in their financial statements for the prior Charging Year (t).

In the case of Suppliers, CMP251 proposes that any consequential adjustment would be carried forward as an over/under recovery of Allowed Revenues into future Charging Years' TNUoS charges.

¹¹ As in their own generation output balancing their supply needs.

It is therefore the Supplier TNUoS tariffs in those future Charging Year (t+2), which will be applied to the Supplier volumes in those future Charging Years (t+2), which will be adjusted. In this case, the accruals concept will not apply as the adjustment will not be applied to Supplier volumes delivered in the prior Charging Year (t).

The Accrual Concept

The accrual concept is the most fundamental principle of accounting which requires recording revenues when they are earned and not when they are received in cash, and recording expenses when they are incurred and not when they are paid.

The accrual concept of accounting requires that income and expense must be recognized in the accounting periods to which they relate rather than on a cash basis. Under the Accrual basis of accounting, income must be recorded in the accounting period in which it is earned. Therefore, accrued income must be recognized in the accounting period in which it arises rather than in the subsequent period in which it will be received. Expenses, on the other hand, must be recorded in the accounting period in which they are incurred. Therefore, accrued expense must be recognized in the accounting period in which it occurs rather than in the following period in which it will be paid. The accrual basis of accounting ensures that expenses are "matched" with the revenue earned in an accounting period. Accruals concept is therefore very similar to the matching principle.

Generally Accepted Accounting Practice (GAAP) allows preparation of financial statements on an accrual basis only (and not on a cash basis). Application of the accrual concept results in accurate reporting of net income, assets, liabilities and retained earnings which improves analysis of the company's financial performance and financial position over different periods. In the UK, GAAP on accruals is contained in Financial Reporting Standard 18 (FRS 18) – Accounting Policies.

European Regulation

4.4 The Workgroup agreed to acquire legal opinion on the interpretation of EU Regulation 838/2010 Part B. The EU Regulation can be found in Annex 3. The Workgroup identified the key questions as follows:

(a) *Do the 'Guidelines for A Common Regulatory Approach to Transmission Charging' set out in Part B of 838/2010 apply to:*

(i) *Calendar years only*

(ii) *Charging years as applicable in the regulatory arrangements for each member state only i.e. regulatory years (Apr-Mar) for GB*

(iii) *Both a. and b. (if a. and b. are different)*

(iv) *Either a. or b. (if a. and b. are different)*

(v) *It is inconclusive. In which case, would it equally be defensible or consistent with the legal and regulatory scheme for a member state to put in place arrangements to comply with the one (a. or b.) it deemed most appropriate.*

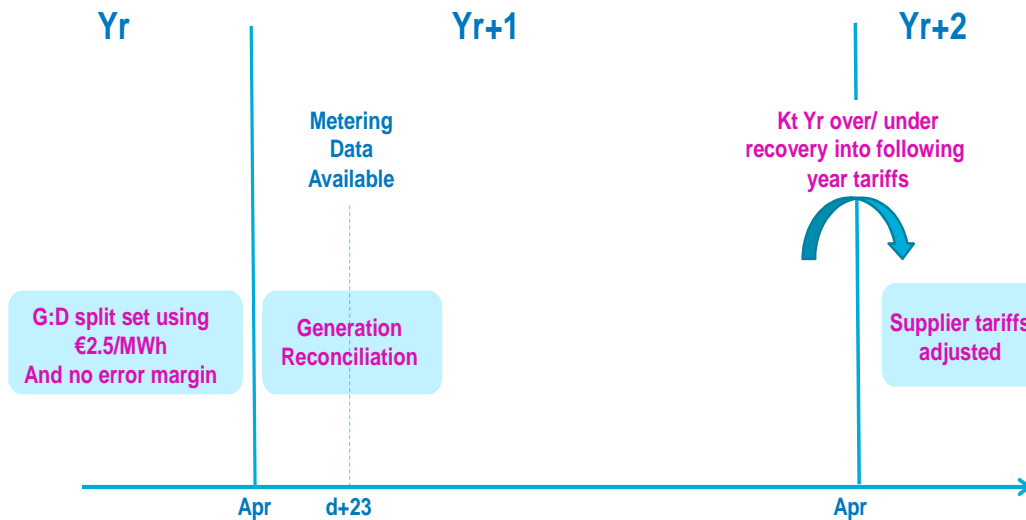
- (b) *Legal advice on the above would facilitate working group discussions on the timing of any adjustment.*
- (c) *Does the regulation specify payment terms between produced/generators and National Grid?*
- (d) *Would removing the error margin and introducing reconciliation after the year be better, worse or neutral in terms of compliance with the regulation as compared to the baseline?*
- (e) *Would removing the error margin and introducing an adjustment within year be better, worse or neutral in terms of compliance with the regulation as compared to the baseline?*
- (f) *Is there any time limitation for any correction in respect of either a within year adjustment or after the year reconciliation taking place? If so which time limitation is preferable e.g. 30 days; 3 months; 6 months; 12 months?*
- (g) *The current arrangement sets charges based on forecast. They include an error margin to mitigate the risk of exceeding an average charge of €2.50 per MWh due to forecast error. However, this risk is not mitigated entirely and charges could still exceed €2.50 per MWh.*
- (i) *If this happens are charges in breach of the regulation?*
- (ii) *If so, does action need to be taken to comply with the regulation, e.g. by refunding part of generation charges?*
- (iii) *If action has to be taken, should it be within year adjustment or after the year reconciliation or either?*

- 4.5 The legal firm Addleshaw Goddard were commissioned by National Grid to provide an opinion for the Workgroup on the above and this can be found in Annex 4. In summary, the legal opinion suggests either an ex ante or an ex post approach is justifiable under the terms of the Regulation and that Member States have a high degree of latitude to implement the most appropriate methodology that matches the relevant commercial regime. The legal opinion discusses the pros and cons of both methods, and concludes that both the Proposer's approach and the current approach are viable. It is essentially up to the Workgroup to outline which approach offers the best solution.
- 4.6 The legal opinion also confirmed that in an ex ante approach there is no breach of the Regulation if appropriate measures have been taken to conform with the Regulation, and in the view of Addleshaw Goddard, the current ex ante method is robust. However, the legal opinion also stated that the modification has the inherent advantage of using established figures (as opposed to forecast figures/the Error Margin) to calculate average Generation Charges, thereby achieving a more certain and precise alignment with the Generation Charge Guidelines. The legal opinion states "*the ex-post mechanism through which the BG Proposal [CMP251] calculates average G Charges has the inherent advantage of using established figures (as opposed to forecast figures/the Error Margin) and thereby achieving a more certain and precise alignment with the G Charge Guidelines (albeit...we are not of the view that this precise ex-post alignment is essential as a pre-requisite for legal compliance with the G Charge Guidelines).*"¹²
- 4.7 Although the Workgroup questions had been broadly answered by the legal opinion response, one group member requested the legal opinion be restructured to respond directly to the questions the Workgroup had proposed to ensure that nothing had been missed and it was agreed this would be helpful. The restructured response can also be found in Annex 4.

Under or Over Recovery Mechanism

¹² Page 37 of CMP251 Workgroup Consultation Q6, Para 3.

4.8 The Modification Proposal advocates the following reconciliation mechanism where Generators would be reconciled in Charging Year t+1 and Suppliers in Charging Year t+2 for any under or over recovery in the initial Charging Year t:



4.9 The above can be achieved through adjustment of the generation and demand residual TNUoS tariffs. It was noted that the Original Proposal leads to a reconciliation timing delay between Generators and Suppliers.

Network users pay interest on under-recoveries.

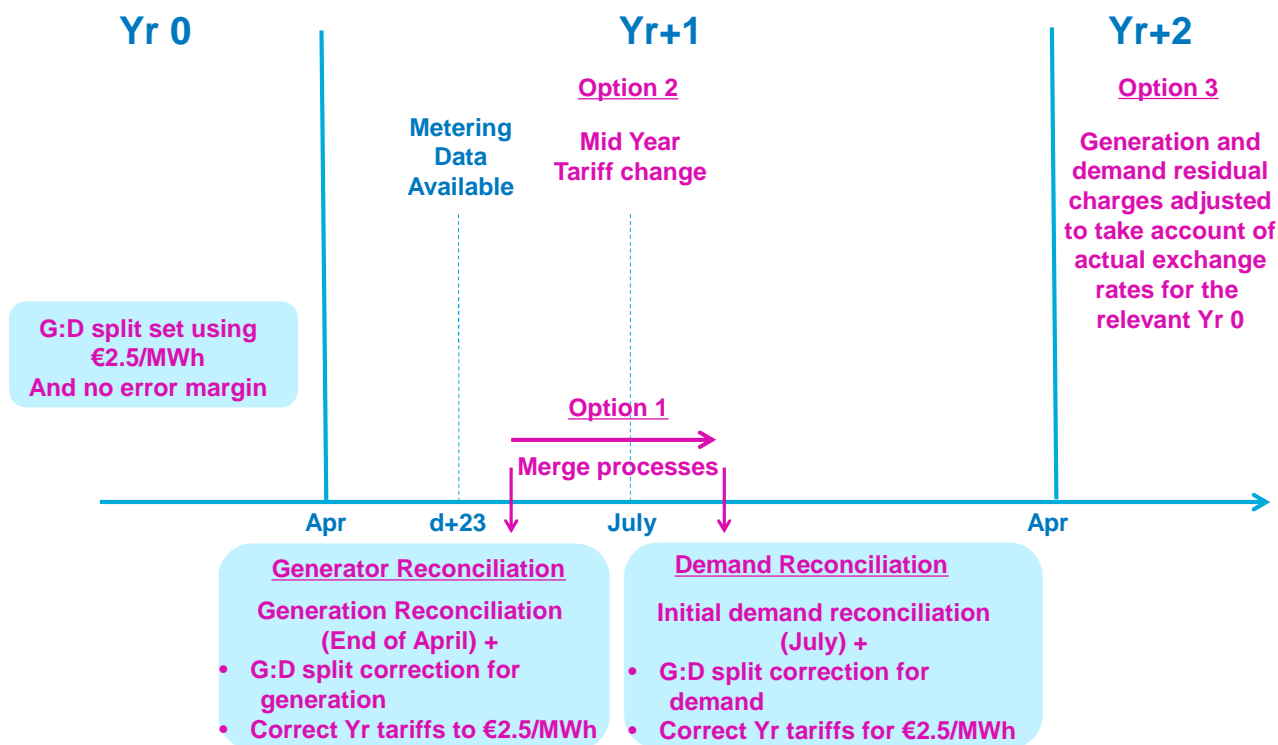
Example: Generators pay more than the 2.5 euro cap, National Grid pay £80m back to generators in year t+1. This becomes an under recovery on k, leading to increase in year t+2 tariffs and interest paid to National Grid on this money they have funded. £80m becomes £84.2m increase in Allowed Revenue as % 2% + Bank of England base rate interest is charged by National Grid for each of the relevant 2-years (Yr and Yr+1).

National Grid pays interest on over-recoveries.

Example: Generators pay under the 2.5 euro cap, National Grid receives £80m from generators in year t+1. This becomes an over recovery on k, leading to decrease in year t+2 tariffs with interest paid by National Grid on this money they held. £80m becomes £84.2m decrease in Allowed Revenue as % 2% + Bank of England base rate interest is charged to National Grid on a 2-year recovery.

Note that as set out in 4.1 c (iv), some Workgroup members consider that whether or not any Generator or Supplier incurs higher overall costs is dependent on the net effect of the change in TNUoS charges and the change in interest payments that would accrue to the Generator or Supplier as a result of charges being delayed or brought forward.

4.10 Three other possible *simultaneous* reconciliation options (avoiding the potential additional cost of financing any under recovery) in the event an ex post approach was adopted could also be implemented using existing processes and they are shown below:



4.11 It should be noted that with a mid-year¹³ (in t+1) tariff change (Option 2 shown above), all new information available to National Grid at that time (such as changes to demand, generation TEC levels, OFTO income etc.) would be included, and not just an updated €/£ exchange rate position.

4.12 In the event an ex post process was adopted, National Grid confirmed that a good enough set of data for Generator reconciliation is available at D+23 as per the existing standard metering settlement timescales. Presently a generation reconciliation process is carried out at the end of April (in t+1) to take account of power station demand and generation in negative TNUoS charging zones in the preceding Charging Year t. Initial demand reconciliation is also carried out in July (t+1) to take account of the latest metering data for the preceding Charging Year t.

4.13 Discussion centred on the impacts of the options with the following points noted:

- The Original creates a cost of financing for National Grid between the payment made to Generator in spring t+1 and the recovery of the amount paid to Generators from Suppliers via the Kt into the following Charging Year t+2. The Proposer noted that the Regulation only refers to Generation charges that must be in the range €0-2.5/MWh for the Charging Year t in question and therefore there was no need to include Suppliers in the reconciliation in spring t+1. However, it was noted that further consideration is required as to how the payments to or from Generators in Charging Year t+1 for the initial Charging Year t are to be accounted for in terms of then calculating the average annual TNUoS charges paid by Generators in Charging Year t+1.
- The issue with Option 1 is that Generation reconciliation is merged with the Supplier reconciliation and so resourcing this process concurrently could become an issue both for National Grid and industry.
- Option 2 would use the existing mid-year tariff change mechanism, which was last utilised in 2010/11. There was little appetite within the Workgroup for pursuing this option as it would

¹³ Note 'mid-year' does not mean the mid-point in the Charging Year – a change could occur on, for example, the 2nd April or 30th March or anytime in between.

introduce uncertainty of Generators' and Suppliers' TNUoS costs. This could be detrimental to competition in the wholesale and retail market.

- Option 3 allows for reconciliation of both generation and supplier positions through simultaneous generation and demand residual tariff adjustment, avoiding financing costs, and without the possible resourcing issues associated with Option 1 as it would just be an additional component of the annual tariff setting process. The downside is that it is a full 2 years after the relevant year in question, and therefore physical market participant positions may have changed in the intervening time leading to reconciliation amounts being transferred to incorrect parties. Any theoretical gains in ex post cost reflectivity could be lost with this delay due to participant changes in market shares.

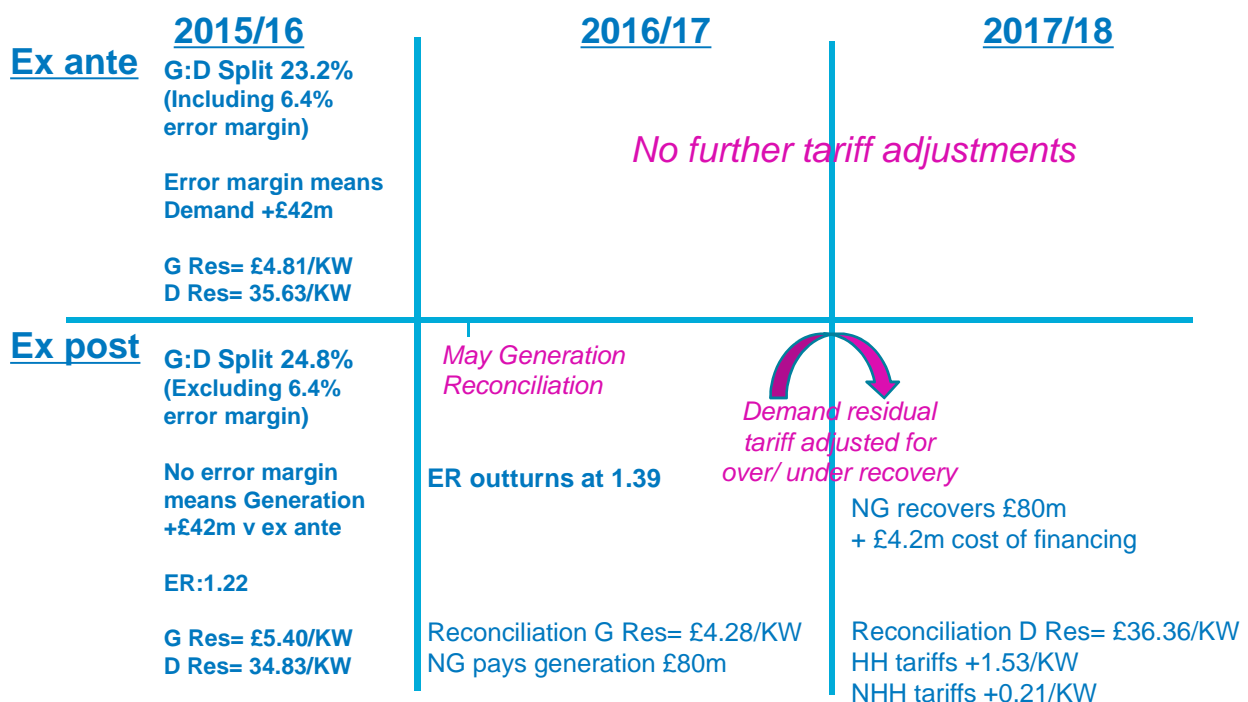
Analysis of materiality and potential cost of financing

4.14 Parameters for Charging Year 2015/16 and 2016/17 were used (for illustrative purposes only) to perform an analysis of the materiality of the proposed CMP251 ex post methodology in comparison to the existing ex ante methodology. The analysis is shown in Annex 5.

4.15 When the error margin included in the ex ante calculation is removed, it has the effect of changing the G:D split and transfers approximately £40m from demand to generation. The ex post approach also introduces a €/ exchange rate risk to the reconciliation. The following diagrams illustrate how these movements would play out under the CMP251 original proposal versus the existing ex ante approach.

Impact Analysis had CMP251 been implemented for 2015/16

- Analysis of exchange rate risk only



*For simplicity, the cost of financing has not been included in the reconciliation demand residual tariffs

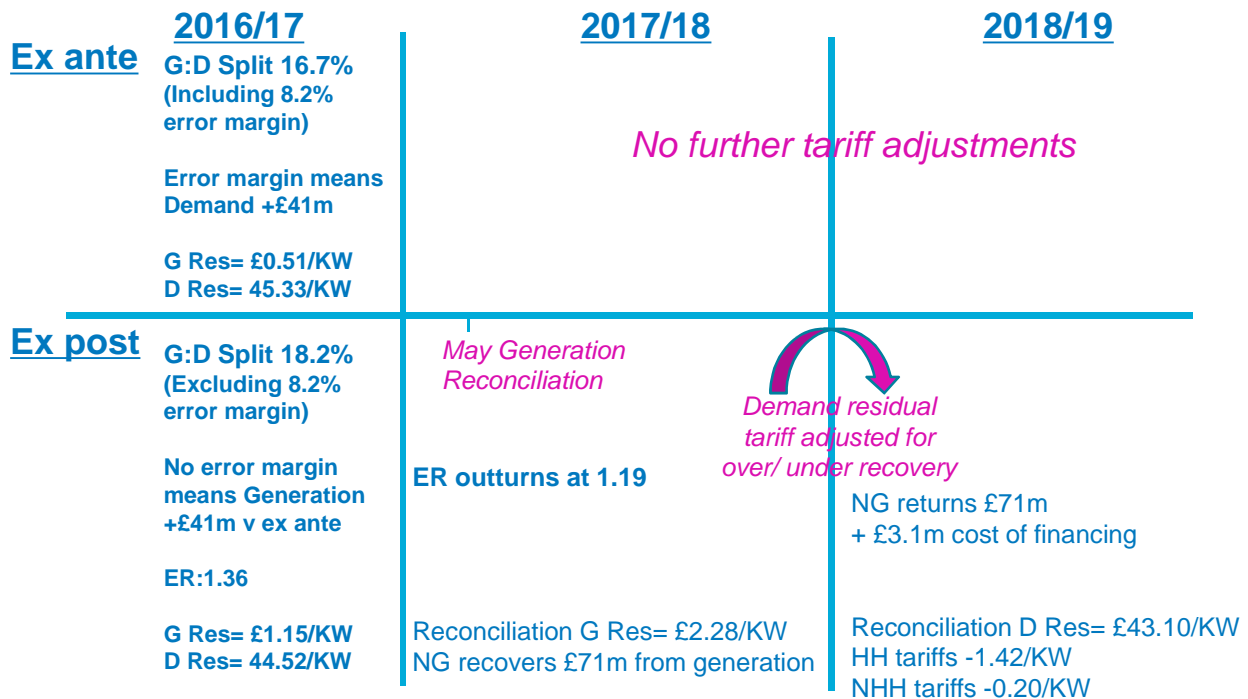
4.16 In the above diagram, using actual data, had hypothetically CMP251 been implemented for Charging Year 2015/16, the G:D split would have been 24.8:75.2 with a ex post approach (rather than 23.2:76.8 in the ex ante approach). This would mean that the starting TNUoS tariffs from 1st April 2015 would have been higher for generation and generation would have paid about £40m more during the Charging Year 2015/16. If CMP251 had been in place in 2015/16 then there would have been no

error margin. During the course of that year, the exchange rate moved from €1.22 to €1.39 and this would lead, under the CMP251 proposal, to a reconciliation of generator charges in the May of the following Charging Year t+1 (2016/17). Thus, for Charging Year 2015/16 this would (hypothetically) have led to National Grid paying generators £80m around May 2016. According to the Transmission Licence, National Grid would be entitled to levy an under-recovery rate of interest associated with the £80M payment made by them to Generators in t+1 (2016/17). This would amount to £4.2m¹⁴ and would be recovered from Suppliers in Charging Year t+2 (2017/18) along with the £80M under recovery from t (2015/16). Demand TNUoS tariffs for Charging Year t+2 (2017/18) would (based on the £84.2M figure) subsequently be increased by £1.53/KW for HH and an average of £0.21/KW for NHH demand as a result.

- 4.17 For Charging Year 2016/17 ('x'), two scenarios have been generated to illustrate the impact of the €/£ exchange rate risk on transmission tariffs. Scenario A shows the effect of a similar movement in exchange rates to that experienced in 2015/16, but in the opposite direction. Scenario B illustrates a continuing increase in the strength of the pound against the Euro.

Impact Analysis had CMP251 been implemented for 2016/17

- Scenario A: ER moves down by as much as 2015/16



*For simplicity, the cost of financing has not been included in the reconciliation demand residual tariffs

14

Part E: Calculation of the correction term (K_t)

3A.14 For the purposes of the Principal Formula, subject to paragraph 3A.15 and 3A.16, K_t is derived in accordance with the following formula:

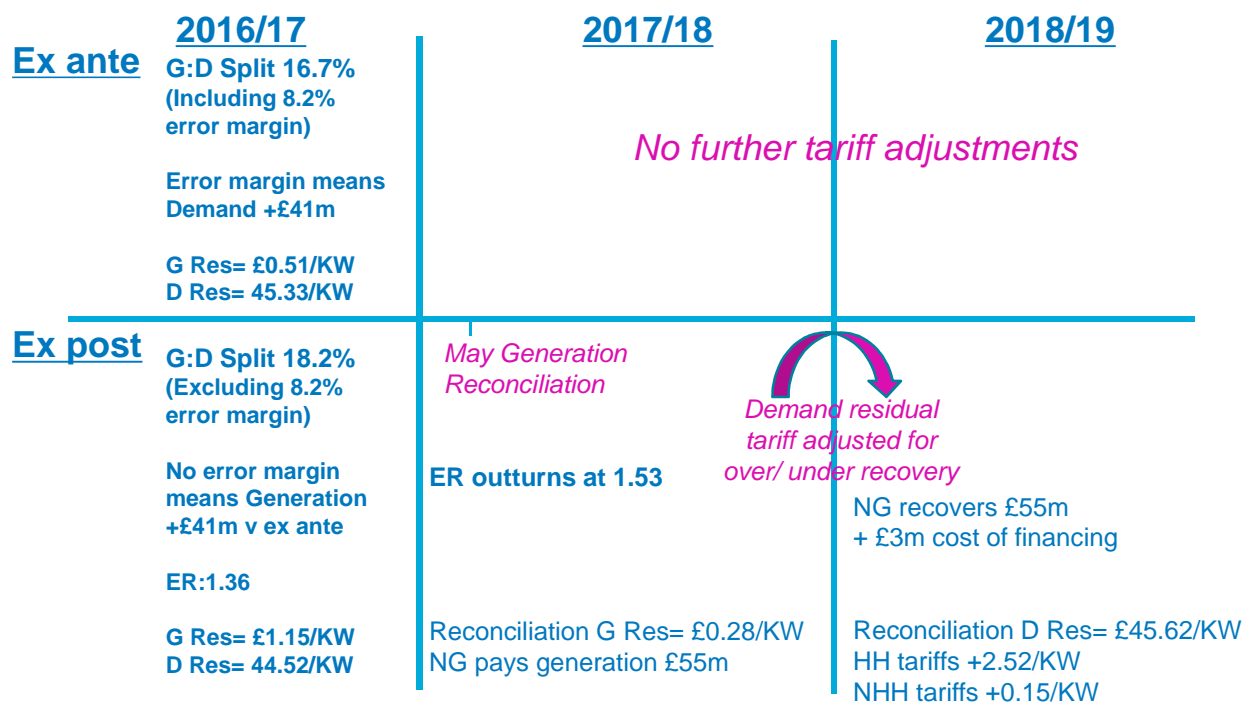
$$K_t = (TNR_{t-2} - TO_{t-2}) \times \left(1 + \frac{I_{t-2} + PR_t}{100}\right) \times \left(1 + \frac{I_{t-1} + 2}{100}\right)$$

Interest rate for 2015/16 was 0.5%, 2016/17 0.65% and for 2017/18 0.95% as per the November 2015 OBR forecast <http://budgetresponsibility.org.uk/efo/economic-and-fiscal-outlook-november-2015/> chart 3.8 on page 45

- 4.18 Scenario A again shows that the CMP251 ex post G:D split methodology without the error margin would be higher than the current ex ante approach. During the Charging Year x (2016/17), the exchange rate could move from €1.36 to €1.19. This would require (hypothetically) National Grid to recover (£71m+£3.1m)£74.1m from Generators which would then be passed on to Suppliers in Charging Year x+2 (2018/19).
- 4.19 Some Workgroup members expressed the views that it is unclear whether the over recovery paid to Suppliers would be subsequently passed on to consumers considering the competition concerns set out in the initial CMA Energy Market Investigation. In this Scenario there would be no cost of financing (of the £71M) to National Grid, but a lost opportunity cost to Generators paying £71M which will be detrimental to future generation investments. It was noted that this cost is likely to be higher for Generators than National Grid's cost of financing as Generators have an appreciably higher cost of capital than National Grid. Some Workgroup members did not consider that the proposal would be detrimental to future generation investment since such investments should be made on the basis of a long term view of costs and revenues. Since CMP 251 reconciliations can be assumed to be symmetrical, over the long term they would not expect the OBR forecast to be biased in any particular direction.

Impact Analysis had CMP251 been implemented for 2016/17

- Scenario B: ER moves up by as much as 2015/16



*For simplicity, the cost of financing has not been included in the reconciliation demand residual tariffs

- 4.20 In Scenario B, the same situation as Charging Year 2015/16 plays out for Charging Year x (2016/17) with the pound strengthening relative to the Euro. National Grid would (hypothetically) pay generation £55m in the May 2017 reconciliation and recover £58m, including the National Grid cost of finance, from Suppliers in Charging Year x+2 (2018/19).
- 4.21 National Grid's cost of financing would be avoided for alternative reconciliation Options 1, 2 and 3 described above.
- 4.22 From National Grid's perspective, a significant feature is the effect that the additional CMP251 €/£ exchange rate uncertainty would have on the bandwidths determining the interest rate to be applied for over or under recoveries. The Transmission Licence implements penal interest rate charges¹⁵ for National Grid where under or over recovery exceeds 5.5% of the Allowed Revenue. In Charging Year 2016/17 the 5.5% of the Allowed Revenue is £149m and therefore an ex post reconciliation process would introduce a significant new risk for National Grid, and one which the existing bandwidths set out in their Transmission Licence were not designed to accommodate.

Comparison to other Member State Approaches to EU Regulation 838/2010

- 4.23 The Workgroup considered it may be helpful to consider how other Member States in Europe go about implementing Regulation 838/2010 Part B.
- 4.24 It was noted that eight Member States apply transmission charges to Generation, and most of those use energy-based (MWh) charges rather than power-based (MW) charges. Only Sweden, the UK and Ireland use power-based charges. Sweden also uses an ex ante methodology, but without an error margin, and a detailed description of the Swedish methodology is provided in Annex 6 including theoretical analysis of how this methodology would transpose to GB charges. In summary, the Swedish method uses an assumed utilisation rate of 5000 hours for each contracted MW of generator without the use of an error margin. It was noted that this equated to an annual load factor for Swedish generation of 57% whereas GB generation had widely differing annual load factors.
- 4.25 The Workgroup did not consider that the Swedish approach merited further consideration with the existing ex ante GB approach being preferable to the Swedish ex ante approach as the assumed 5000 hour utilisation rate may be incorrect for the mix of generation plant in GB.
- 4.26 The Workgroup considered it would be interesting to understand how many EU countries are adjusting their Generation transmission charges with reference to EU Regulation 838/2010 Part B.

¹⁵ In the case of under-recoveries, only Bank of England interest rate would apply, and in the case of over-recoveries, 4% + Bank of England base rate would be returned

5 Workgroup Alternatives

- 5.1 [Before the Workgroup consultation is sent out, there will not be much to write in this section as the official WACMs (Workgroup Alternate CUSC Modifications) are agreed following the Workgroup consultation. However the Workgroup would have probably discussed potential alternatives to the modification before the Workgroup consultation, it can be made clear within this section how these differ to the Original proposal.]

6 Impact and Assessment

Impact on the CUSC

6.1 Changes to Section 14

Impact on Greenhouse Gas Emissions

6.2 None identified.

Impact on Core Industry Documents

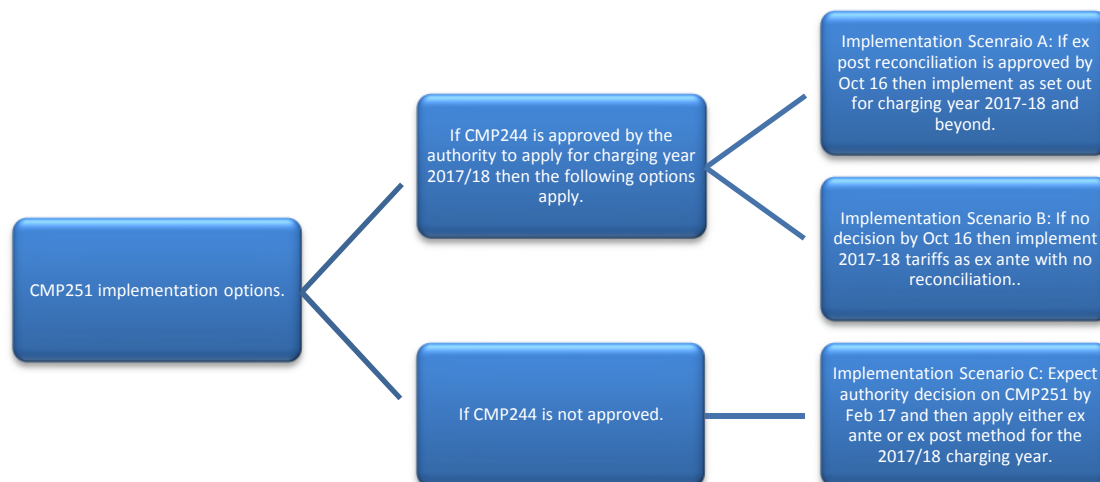
6.3 None identified.

Impact on other Industry Documents

6.4 None identified.

7 Proposed Implementation and Transition

- 7.1 The following decision tree outlines possible implementation approaches that the Workgroup have considered in the event an ex post reconciliation process is adopted. There is a potential¹⁶ interaction with an existing modification proposal CMP244, which seeks to provide a longer notice period (6-8 months) for the setting of transmission tariffs.



- 7.2 For Implementation Scenario A transmission charges for Charging Year 2017/18 and beyond would be set without the use of an error margin, and be subject to an ex post reconciliation meaning that the generation bill for 2017/18 would be recalculated in May 2018 and the demand residual for Charging Year 2019/20 would reflect the under or over recovery of exchange rate risk for Charging Year 2017/18.
- 7.3 For Implementation Scenario B transmission charges for Charging Year 2017/18 would continue to use the existing ex ante approach. If CMP251 was subsequently approved, transmission charges for Charging Year 2018/19 would be set without the use of an error margin, and be subject to an ex post reconciliation meaning that the generation residual would be recalculated in May 2019 and the demand residual for Charging Year 2020/2021 would reflect the under or over recovery of exchange rate risk in Charging Year 2018/19.
- 7.4 For Implementation Scenario C, if CMP251 is approved, transmission charges for Charging Year 2017/18 would be set without the use of an error margin, and be subject to an ex post reconciliation meaning that the generation residual would be recalculated in May 2018 and the demand residual for Charging Year 2019/20 would reflect the under or over recovery of exchange rate risk in Charging Year 2017/18. If CMP251 is not approved, the existing ex ante approach would continue to be used.
- 7.5 For the avoidance of doubt, there will be no reconciliation of Charging Year 2016/17 transmission tariffs even if CMP251 was to be approved.
- 7.6 The Workgroup noted that in the event an ex post reconciliation is adopted; any reconciliation should include an entirely separate invoicing line/item so that any future adjustments due to the CMP251 reconciliation process are clearly identified.
- 7.7 It was agreed that the daily spot € exchange rate against sterling values published on the Bank of England website¹⁷ would be used when calculating the actual €/£ outturn in the Charging Year in question.

¹⁶ It depends if that proposal is approved and when it (and CMP251, if approved) is implemented.

¹⁷ <http://www.bankofengland.co.uk/boeapps/iadb/rates.asp>

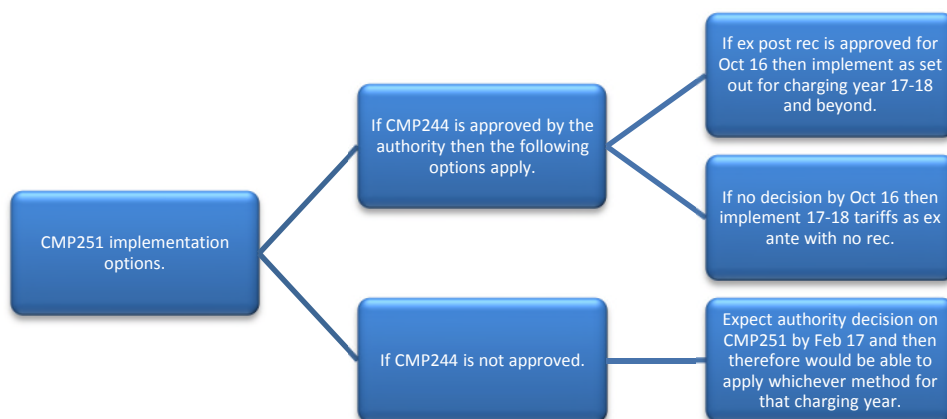
8 Responses

- 8.1 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:

Workgroup Consultation questions;

Q1: Do you believe that CMP251 Original proposal or either of the potential options for change better facilitates the Applicable CUSC Objectives?

Q2: Do you support the proposed below implementation approaches?



Or are there any further implementation implications that need to be considered?

Q3: Do you have any other comments?

Q4: Do you wish to raise a Workgroup Consultation Alternative Request for the Workgroup to consider? (Please refer to 8.3 below).

Q5: Do you have any comments on the legal opinion?

Q6: Is ex ante certainty preferred over ex post accuracy?

Q7: If an ex post reconciliation was to be adopted how quickly should the reconciliation proceed?

Q8: Are there trade-offs between speed of reconciliation and the most appropriate process?

8.2 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/CMP251/>

8.3 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/

8.4 Views are invited upon the proposals outlined in this report, which should be received by **5pm** on **29th March 2015**. Your formal responses may be emailed to: cusc.team@nationalgrid.com

8.5 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 marked “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.

- 8.6 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”.

Connection and Use of System Code (CUSC)

Title of the CUSC Modification Proposal

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.

Submission Date

19th August 2015

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

European Commission Regulation 838/2010 states a range of 0 - 2.5 €/MWh that average annual transmission charges payable by generators in GB must remain within. If in any given year the average annual generation transmission charges do not fall within this range, National Grid risks being non-compliant with the regulation.

In order to combat this risk, National Grid raised a modification (CMP 224) in September 2013. CMP 224 was approved by Ofgem and implemented in October 2014.

Under the current charging methodology, as amended by CMP 224, TNUoS tariffs are set to result in the overall revenue received from GB generation being the lesser of:

- 27% of the total revenue to be recovered from GB Users via TNUoS tariffs; or
- such a value that results in generation tariffs not exceeding the upper limit specified under the EC Regulation (currently €2.5 /MWh), **after an adjustment for an 'error margin' to deal with forecast error.**

Whilst CMP 224 reduces the risk of non-compliance with the EC regulation, it does not remove it entirely since TNUoS charges are set ahead of the charging year based on forecast variables which can be difficult to accurately predict.

There remains a risk that annual charges may exceed the 2.5 €/MWh cap currently specified by the regulation. For instance, if the Euro/pound exchange rate remains at the level observed since April 2015 (an average of 1.38 for the period 1 April to 30 June) then the cap would be exceeded in 2015/16 (holding all other assumptions constant), as demonstrated below:

National Grid 2015/16 Tariff Setting Assumptions:

Total TNUoS Revenue for 2015/16: £2,637m

Generation Revenue Recovery for 2015/16: £612m

Forecast generation: 319.6 GWh

Assumed Euro/pound exchange rate: 1.22

Assumed Generator €/MWh: $(612 * 1.22) / 319.6 = \underline{2.34}$ €/MWh

TNUoS charge level adjusted for current exchange rate:

Current (April 15 - June 15) Euro/pound exchange rate: 1.38

Latest forecast Generator €/MWh: $(612 * 1.38) / 319.6 = \underline{2.65}$ €/MWh

It can be seen that whilst the methodology implemented by CMP 224 uses reasonable endeavours to comply with European Commission Regulation 838/2010, there remains a risk that average annual transmission charges may exceed 2.50 €/MWh in some circumstances. There is a need for a further methodology change to ensure that compliance with the regulation in future is not dependent on the accuracy of forecasts.

The only purpose of CMP224 was to manage compliance with European Commission Regulation. The result of CMP224 was to alter the charges that would otherwise have resulted from the application of charging methodology. The underpinning principles of the charging methodology, including the default split of revenue between generators and demand users, were not affected by CMP224. Therefore, the application of a cap distorts the principles of the charging methodology. By removing the error margin, our proposed solution will therefore also reduce the distortive effect on charges of the 2.50 €/MWh cap.

In practice the distortive impact on the G:D split is to transfer costs from generation to demand. In the CMP224 decision, Ofgem was clear that there was a risk that the transfer of costs from generation to demand has a negative impact on consumers. By removing the error margin our proposed solution will reduce this risk.

Description of the CUSC Modification Proposal

As specified in the EC regulation, the value for average annual transmission charges payable by generators is calculated by dividing the total revenue collected from generation users through Transmission Network Use of System (TNUoS) charges by the total measured energy injected into the Transmission Network or simply the total demand for that year.

CUSC Section 14 Part – 2 specifies that the total Transmission Network Use of System (TNUoS) revenue recovered from generators will be the lower of:

- 27%, or
- A percentage (x) calculated as

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

Where:

CapEC = 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

y = Error margin built in to adjust CapEC 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

The proposal aims to ensure that the risk of non-compliance is removed with least impact on GB consumers.

The proposal is to remove any error margin from the above equation (i.e. set the y term to zero) when setting initial TNUoS charges and also introduce a new element to the TNUoS charging methodology. The new element would be a single adjustment which guaranteed compliance with the regulation. The adjustment would be calculated shortly after the end of the charging year and would be set at an amount which would ensure that the average amount charged to GB generators would be equal to the lesser of the percentage of revenue to be recovered from generators (currently 27%) or the absolute cap allowed by the regulation (currently 2.50 €/MWh).

For the avoidance of doubt, the adjustment could be either a charge or a credit to generators depending on the out turn values for the relevant variables (i.e. revenue recovered, generation volumes, average exchange rate) compared to the assumptions used to set initial charges.

The adjustment to generators (whether a charge or a credit) would be treated as either additional or reduced (as appropriate) recovered TNUoS revenue for the charging year to which the adjustment relates and would affect the over/under recovery position, with demand customers effectively picking up the reverse of the adjustment in future years TNUoS tariffs.

We consider that this proposal:

- Provides certainty that the regulation will be complied with
- Minimises the impact on the principles underpinning the TNUoS tariffs
- Minimises the required transfer of costs from generators to consumers
- Provides predictability for generators that the average TNUoS charges will be set to recover the cap set by the regulation (currently 2.50 €/MWh), unless this would recover greater than the percentage of revenue (currently 27%) of overall TNUoS revenue
- Provides predictability to suppliers of the impact on future year tariffs (by capturing the generator adjustment within the over/under recovery position)

Impact on the CUSC

CUSC Section 14 – Part 2 – The Statement of the Use of System Charging Methodology, Section 1 – The Statement of the Transmission Use of System Charging Methodology

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

Yes

Justification for Urgency Recommendation

As demonstrated above, whilst the current methodology uses reasonable endeavours to comply with European Commission Regulation 838/2010 there remains a real risk that average annual transmission charges may exceed 2.50 €/MWh in some circumstances. There is an urgent need for a further methodology change to ensure that compliance with the regulation in future is not dependent on the accuracy of forecasts. Therefore we consider it is necessary to expedite this change to allow for implementation for the TNUoS charges applicable from 2016/17.

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?

We believe that this proposal does not have any interaction with an ongoing SCR

Impact on Computer Systems and Processes used by CUSC Parties:

Unknown.

Details of any Related Modification to Other Industry Codes

Justification for CUSC Modification Proposal with Reference to Applicable CUSC Objectives for Charging:

Please tick the relevant boxes and provide justification for each of the Charging Methodologies affected.

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 (c) refers specifically to European Regulation 2009/714/EC. Reference to the Agency is to the Agency for the Cooperation of Energy Regulators (ACER).

Full justification:

The European Commission Regulation 838/2010 is legally binding for all Transmission licensees across Europe. We believe that this proposal ensures that National Grid remains compliant with the European legislation and properly reflects National Grid's duties in the development of its transmission business.

The principles underpinning the charging methodology, including the default proportion of revenue to be recovered from generators, are approved as meeting objective (b) above. Therefore, any unnecessary restrictions on how these principles are translated into charges are detrimental to meeting objective (b). The error margin included in the current methodology

represents an unnecessary restriction on the underlying principles of the methodology since it applies a cap which goes above and beyond the cap stated in the regulation. By minimising the impact of compliance with 838/2010 objective (b) is better met.

CMP224 also sought to 'properly take account of developments in the transmission licensees' transmission business', however it has proven to be sub-optimal in two respects:

- (1) CMP 224 goes above and beyond the cap stated in the regulation to the detriment of consumers
- (2) CMP 224 does not provide sufficient assurance that the regulation will not be breached

The modification we propose here will rectify these short-comings.

Additional details

Details of Proposer: (Organisation Name)	British Gas
Capacity in which the CUSC Modification Proposal is being proposed: (i.e. CUSC Party, BSC Party or "National Consumer Council")	CUSC Party
Details of Proposer's Representative: Name: Organisation: Telephone Number: Email Address:	George Moran British Gas 07557 611983 George.moran@britishgas.co.uk
Details of Representative's Alternate: Name: Organisation: Telephone Number: Email Address:	Andy Manning British Gas 07789 575 553 Andy.manning@britishgas.co.uk
Attachments (Yes/No): If Yes, Title and No. of pages of each Attachment:	

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 cusc.team@nationalgrid.com

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-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.

Annex 2 – CMP251 Terms of Reference

1. The Workgroup is responsible for assisting the CUSC Modifications Panel in the evaluation of CUSC Modification Proposal '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' tabled by British Gas at the CUSC Modifications Panel meeting on 28th August 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.
3. 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
 - c) Consider the legality of breaching the regulation then reconciling the difference the following year.
 - d) Consider whether you should fix the charge at €2.5 as proposed rather than remaining within the €0-€2.5 range as per the EC Regulation.
 - e) Assess impact on competition
 - f) Consider any interaction with CMP244.
 - g) Consider when €2.50 is to be calculated.
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 15 days 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 18th February 2016 for circulation to Panel Members. The final report conclusions will be presented to the CUSC Modifications Panel meeting on 26th February 2016.
13. 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 CMP251 is that at least 5 Workgroup members must participate in a meeting for quorum to be met.
14. 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.
15. 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.

Annex 3 – Workgroup attendance register

A – Attended

X – Absent

O – Alternate

D – Dial-in

Name	Organisation	Role	28 th September 2015	26th November 2015	11th January 2016	3 rd February 2016	9th February 2016	24th February 2016
John Martin	Code Administrator	Chair	A	A	A	D	D	D
Heena Chauhan	Code Administrator	Technical Secretary	A	X	X	X	X	X
Ryan Place	Code Administrator	Technical Secretary	A	A	A	D	D	D
George Moran	British Gas	Proposer	A	A	A	D	D	D
Nick Pittarello	National Grid	Workgroup member	A	A	A	D	D	D
Garth Graham	SSE	Workgroup member	A	A	A	D	D	D
Jon Wisdom	Npower	Workgroup member	X	X	X	X	X	X
Lisa Waters	Waters Wye	Workgroup member	X	X	X	X	X	X
Cem Suleyman	Drax	Workgroup member	A	D	A	D	D	D
Binoy Dharsi	EDF	Workgroup member	A	A	A	D	D	D
James Anderson	Scottish Power	Workgroup member	A	A	A	D	D	D
Guy Phillips	Eon	Workgroup member	X	X	X	D	X	D
George Douthwaite	Npower	Alternate	O	O	O	O	O	O
Peter Bolitho	Waters Wye	Alternate	O	O	O	O	O	O
Donald Smith	Ofgem	Authority Representative	A	A	A	D	D	D

Background

The Network Access Regulation notes in its preamble that "at present, there are obstacles to the sale of electricity on equal terms, without discrimination or disadvantage in the Community. In particular, non-discriminatory network access and an equally effective level of regulatory supervision do not yet exist in each Member State, and isolated markets persist". While much of the Network Access Regulation specifically concerns itself with appropriately compensating national transmission system operators for hosting cross-border flows of electricity, the Network Access Regulation also empowers the European Commission (**Commission**) to adopt Guidelines which "determine appropriate rules leading to progressive harmonisation of the underlying principles for the setting of charges applied to producers and consumers (load) under national tariff systems [...]".

Pursuant to this, the Guidelines Regulation was enacted by the European Commission on 23 September 2010. This states in its preamble that "Variations in charges faced by producers of electricity for access to the transmission system should not undermine the internal market. For this reason average charges for access to the network in Member States should be kept within a range which helps to ensure that the benefits of harmonisation are realised." Under Article 2, and Part B of the Annex, the Guidelines Regulation sets out guidelines on the level of transmission charges which each Member State may permit to be levied on electricity generators.

In the case of Great Britain, these guidelines state that annual total transmission charges paid by generators divided by the total measured energy injected annually by generators onto Great Britain's transmission system ("annual average transmission charges") shall be within a range of 0 to 2.5 Euros/MWh (**G Charge Guidelines**). (The Guidelines Regulation provides for the Agency for the Cooperation of Energy Regulators (**ACER**) to, by 1 January 2014, provide an opinion to the Commission on the appropriate range/ranges of these charges for the period after 1 January 2015. This opinion was provided by ACER on 15 April 2014 – the Commission has not yet responded.)

While the range of transmission charges are referred to as "guidelines", the Network Access Regulation requires that Member States lay down rules on effective, proportionate and dissuasive penalties for infringements of the provisions of the Network Access Regulation (Article 22).

Under Article 19 of the Network Access Regulation, Ofgem (in the context of Great Britain) is required to ensure compliance with the G Charge Guidelines. As a result, the Electricity and Gas (Internal Markets) Regulation 2011 amended the Electricity Act 1989 (**EA89**) such that Ofgem is empowered to enforce compliance (including by way of penalties) by National Grid Electricity Transmission PLC (**NGET**) with the G Charge Guidelines (Sections 25 – 27F of the EA89).

As a result of the need to implement the G Charge Guidelines, NGET raised CUSC Modification Proposal 224 in September 2013. Following a consultation, this proposal was accepted in its original form by Ofgem on 8 October 2014 and implemented as a modification to the CUSC on 22 October 2014.

Prior to the consultation the relevant provisions of the CUSC operated on the following basis (much of this remains unchanged by the modification):

- Part 2 Section 14 of the CUSC sets out the basis upon which Transmission Network Use of System charges (**TNUoS**) are calculated for any financial year (1 April to 31 March). This takes as its starting point TO Allowed Revenue (as determined under Ofgem's price control processes in conjunction with NGET's Transmission Licence) for the relevant financial year. (By way of example, for the financial year 1 April 2014 to 31 March 2015 this Maximum Allowed Revenue was set at £2,477 million.) This Maximum Allowed Revenue takes into account under or over recovery in a previous year.

- This Maximum Allowed Revenue was then split between generators and demand in a fixed proportion of generation at 27% and demand at 73%. (Applied to the example, this gives an aggregate total of £669m to be recovered from generation (**G Charge**) and £1808m to be recovered from demand.)
- The TNUoS charges paid by each generator are then calculated on a £/kW basis. This is achieved through firstly calculating location specific TNUoS charges, based upon marginal costs of investment in the transmission system as the result of increased generation in a relevant area. This, for example, might produce a charge of £25/kW for a generator located in North Scotland, with additional locational charges also applying for specific local circuits, specific types of local substation, and specific areas of offshore generation. Under the CUSC, the forecast aggregate level of these locational charges is then subtracted from the total G Charge to leave a "residual" component of the G Charge. For example, from the £669m G Charge referred to above, £326m might be taken by the aggregate locational G Charges.
- This scenario would leave a total of £343m residual G Charges to be levied on generators in the worked example. This residual amount is simply spread across the total generation capacity (based upon generating stations' Transmission Entry Capacity) to give a consistent £/kW payment for all generation capacity. So, to complete the example, the £343m residual amount would be divided by aggregate total capacity (for example, 71.5GWs) which would produce a payment of £4.81/kW for each generator in relation to the residual charge element of the G Charge.
- In this way, the aggregate annual TNUoS Charges were split between generation and demand on a 27%/73% basis.

Following the CUSC modification, the above approach has remained the same except that the 27%/73% split between generation and demand has been amended (see paragraph 14.14.5(v) of the CUSC) (**Current Approach**) such that the G Charge is set at the *lower of*:

- 27%; or
- the percentage achieved from:
 - taking the Guidelines Regulation €2.5/MWh maximum, amending this based on a risk margin for forecasting error (**Error Margin**), and multiplying this by forecast GB generation output for the relevant year (calculated two months ahead of the time) to give a total €x figure;
 - and taking this €x figure as a proportion of forecast transmission operator maximum allowed revenues (converted from pound Sterling into Euros based on forecast exchange rates, in order to ensure consistency of units),

(Forecasting Equation)

By way of example, for financial year 15/16 this has led to the generator/demand split being set at 23.2%/76.8% rather than at the 27%/73% level.

The Error Margin is set each year by NGET based upon the level of historical error in forecast generation output and forecast transmission operator maximum allowed revenues. In its original consultation and decision on the CUSC modification, Ofgem confirm that this Error Margin is included to mitigate the risk of forecast errors causing the actual outturn average G Charges level to exceed the Guidelines Regulation €2.5/MWh maximum.

Fundamentally, this calculation is needed in the context of GB G Charges because GB G Charges are charged on a £/kW basis (power based charges) rather than on a £/kWh basis (energy based charges). Given the Guidelines Regulation sets the permitted range of G Charges on an energy basis (€/MWhs), the CUSC will always need (whether the check against the Guidelines Regulation permitted range of G Charges is conducted on an ex-ante or ex-post basis) to conduct this conversion from power to energy.

British Gas Trading Limited (**British Gas**), in its capacity as a CUSC party, made a CUSC modification proposal on 19 August 2015 (**BG Proposal**). This modification proposal suggests that the Forecasting Equation is carried out without the use of the Error Margin and (instead of relying on the Error Margin to allow for forecasting error on an ex-ante basis) an ex-post reconciliation is conducted to establish whether the Guidelines Regulation cap on G Charges has been exceeded or alternatively whether the G Charges proportion can be increased (up to a maximum of 27%) without exceeding the Guidelines Regulation cap. British Gas suggests any reconciliation would be paid by way of an adjustment to the subsequent year's G Charge/demand side charge levels.

Legal Analysis of CUSC Modification Proposal 251 in the context of Regulation (EU)



838/2010 Compliance

In this note:

- the term "**Current Approach**" refers to the way in which Transmission Network Use of System (**TNUoS**) charges are currently calculated for any financial year (1 April to 31 March) pursuant to Part 2 of Section 14 of the CUSC;
- the term "**BG Proposal**" refers to British Gas Trading Limited's (**British Gas's**) proposal to amend the Current Approach (as set out in CMP251); and
- the term "**G Charges**" refers to TNUoS Charges recovered from generation (as opposed to demand).

The Current Approach, the BG Proposal and the calculation of G Charges pursuant to the CUSC are outlined in more detail in the [Appendix](#) to this note.

Other defined terms used in this note are defined (**in bold in brackets**) on the first occasion on which they are used.

Introduction

This note has been prepared in order to set out our preliminary legal analysis in respect of British Gas Trading Limited's Connection and Use of System Code (**CUSC**) modification 251 (**CMP251**). The questions which this addresses are as follows:

1. Which of the Current Approach and the BG Proposal is likely to result in G Charges that are compliant with the Guidelines Regulation?
2. Where the effect of the Current Approach and/or the BG Proposal means that there is the potential for technical non-compliance with the Guidelines Regulation, what are the pros and cons of each approach, taking into account our understanding of the policy context?

The [Appendix](#) to this note sets out the background to CMP251, including a detailed summary of the *Regulation (EU) 714/2009 (Network Access Regulation)* and *Regulation (EU) 838/2010 (Guidelines Regulation)* requirements in relation to G Charges and the way in which the CUSC was previously modified (pursuant to CMP224) to comply with these requirements. However, to briefly summarise the position:

- The Network Access Regulation empowered the European Commission to adopt Guidelines for the progressive harmonisation of the underlying principles for the setting of charges applied to producers (generators) and consumers (load) under national tariff systems.

- Pursuant to this, the Guidelines Regulation was enacted by the European Commission on 23 September 2010. Under Article 2, and Part B of the Annex, the Guidelines Regulation sets out guidelines on the level of transmission charges which Member States may permit to be levied on electricity generators. In the case of Great Britain, these guidelines state that annual total transmission charges paid by generators divided by the total measured energy injected annually by generators onto Great Britain's transmission system ("annual average transmission charges") must be within a range of 0 to 2.5 Euros/MWh (**G Charge Guidelines**).
- As a result of the need to implement the G Charge Guidelines, NGET raised Connection and Use of System Code (**CUSC**) Modification Proposal 224 in September 2013. This modification (which was accepted by Ofgem) looked to ensure compliance with G Charge Guidelines *on an ex-ante basis*. This was achieved through amending paragraph 14.14.5 of the CUSC such that the proportion of TNUoS paid by generators is automatically reduced from the default level of 27% in circumstances where forecasts of aggregate generation, transmission operation maximum allowed revenues, and £/Euros for the relevant year suggest the G Charge Guideline Euro/MWh threshold will be exceeded.

In recognition that the forecasts used for this calculation are likely to be inaccurate as against outturn values, an error margin is included in this calculation (based upon the level of historic error in forecast generation output and forecast transmission operator maximum allowed revenues).

- CMP251 (dated 19 August 2015) proposes that the Current Approach is amended through this error margin being removed and instead through an *ex-post* reconciliation payment being passed through from generators to demand (or vice versa) to account for differences between forecast generation/aggregate operator revenues/exchange rates and actual outturn values. The CMP251 Workgroup is currently considering this proposal.

As further set out below, our view is that both the Current Approach and the BG Approach can facilitate G Charges that are compliant with the Guidelines Regulation. Working within these two options, there are adaptations of either approach which might mean a more close alignment with the €2.5/MWh average in terms of time and/or accuracy but, as both options consistently comply, the benefits of each such adaptation would need to be weighed against the value/effort to make it.

Question 1: Which of the Current Approach and the BG Proposal is likely to result in G Charges that are compliant with the Guidelines Regulation

1. Both the Current Approach and the BG Proposal appear to facilitate G Charges that are compliant with the Guidelines Regulation.
2. This conclusion is partly driven by the fact that the European Court of Justice takes a *purposive* approach to the interpretation of EU law (an approach which has in turn been adopted by the Courts of England and Wales when they consider compliance with EU law). The result of this is that the courts will look to the broader purpose and objectives of EU legislation in interpreting the meaning of the specific provisions. In particular, the recitals setting out the objectives of the Guidelines Regulation have weight and are relevant to interpreting the requirements of the G Charge Guidelines as a whole.
3. The Guidelines Regulation is silent on whether an *ex-post* or *ex-ante* approach should be adopted in respect of G Charges, and therefore we are not of the view that the G Charge Guidelines as drafted in the Guidelines Regulation are narrowly or specifically enough drafted to preclude either an *ex-ante* or *ex-post* approach being compliant with the G Charge Guidelines. As set out in paragraphs 5 and 6 below, robust legal arguments can be made that both the Current Approach and the BG Proposal comply with the purpose and objectives of the Guidelines Regulation (and the Network Access Regulation from which the Guidelines Regulation stems) and therefore that neither approach should be discounted on the basis of compliance/non-compliance with the G Charge Guidelines.

4. We would also note that the use of the term "annual" in the G Charge Guidelines should be read in the light of a purposive approach to interpretation of EU law and in the context of the discretion given to the Member States in deciding on more detailed provisions for the setting of G Charges. Therefore, in our view, whether a Member State calculates G Charge averages over e.g. 1 April to 31 March or 1 January to 31 December (or any other period which could reasonably be said to be "annual" and which does not interfere with purpose of the G Charge Guidelines) will not impact upon legal compliance/non-compliance with the G Charge Guidelines.
5. **Current Approach:** As you are aware, the Current Approach takes an ex-ante approach to G Charges, meaning that it could in theory lead to average G Charges exceeding the €/MWh limit set under the Guidelines Regulation. However, we are of the view that there is a robust argument that the Current Approach ensures compliance with the purpose of the Guidelines Regulation and therefore is not vulnerable to legal challenge by dint of taking using ex-ante calculations. We have reached this conclusion for the following primary reasons:
- a. The upfront certainty on G Charges and demand side TNUoS charges afforded by an ex-ante approach arguably better encourages cross-border electricity trading than an ex-post approach. While an ex-post approach guarantees the reconciliation of annual average G Charges where they exceed the G Charge Guidelines, given the overall aim of the Network Access Regulation is explicitly stated to be to encourage the cross border trading of electricity this provides argument for the Current Approach.
 - b. The fact that the Network Access Regulation specifically refers¹⁸ to the right of Member States to adopt more detailed provisions than the guidelines set out in the Guidelines Regulation, and that the Network Access Regulation is silent on the use of ex-ante/ex-post (while specifically disallowing an ex-ante approach in the context of a different payment mechanism¹⁹), provides a solid rebuttal to any suggestion that an ex-ante approach does not comply with the relevant legislation. Similarly, ACER's opinion on the appropriate range of transmission charges paid by electricity producers is neutral as to the choice of approach.²⁰ ACER has clearly studied the approach taken by Member States in relation to G Charges and at no point highlights any concern with (or indeed interest in) the question of ex-ante approach versus ex-post approach.
 - c. The use of the risk margin for forecasting error (at paragraph 14.14.5(v) of the CUSC) (**Error Margin**), and the careful weighing up of the implementation options at the time the original CUSC modification was made, demonstrate a clear desire on the part of Ofgem and NGET to implement the intent of the G Charge Guidelines and provides sound reason for avoiding an ex-post approach on grounds of the uncertainty it would create. Again, this gives robust legal argument for defending the Current Approach.
6. **BG Proposal:** We are also of the view that the BG Proposal falls within the requirements of the Guidelines Regulation. We have reached this conclusion for the following primary reasons:

¹⁸ See Article 21 of the Network Access Regulation, which states: "This Regulation shall be without prejudice to the rights of Member States to introduce measures that contain more detailed provisions than those set out herein or in the Guidelines referred to in Article 18 [eg the G Charge Guidelines]."

¹⁹ The Network Access Regulation specifically states (at Article 13(3)) that, *in the context of the inter-transmission system operator compensation mechanism* "Compensation payments shall be made on a regular basis with regard to a given period of time in the past. Ex-post adjustments of compensation paid shall be made where necessary, to reflect costs actually incurred."

²⁰ This report was produced by ACER pursuant to point 5 of Part B to the Annex of the Guidelines Regulation, and we should emphasise was neither designed to judge the validity of Member State's implementation of the Guidelines Regulation nor is it binding on the Commission in this regard.

- a. As discussed in paragraph 3 above, the Guidelines Regulation does not specifically refer to a requirement to use either an ex-ante or an ex-post approach and in our view is not narrowly enough drafted to preclude either approach. Therefore, there is no explicit drafting within the Guidelines Regulation (or, for the avoidance of doubt, the Network Access Regulation) that prevents a move to an ex-post approach or necessitates the use of the ex-ante Current Approach.
- b. Similarly, we are of the view that there is a robust argument that an ex-ante approach complies with the *purpose* of the Guidelines Regulation as it clearly put in place a transparent mechanism for ensuring average G Charge levels do not exceed the levels in the G Charge Guidelines and thereby helps to ensure EU harmonisation of G Charge levels as is the stated aim of the G Charge Guidelines²¹. While the BG Proposal reduces upfront certainty for generators, we do not believe that this loss of certainty means that (from a legal perspective) the BG Proposal would fail to comply with the relevant EU legislative requirements.
- c. The ex-post mechanism through which the BG Proposal calculates average G Charges has the inherent advantage of using established figures (as opposed to forecast figures/the Error Margin) and thereby achieving a more certain and precise alignment with the G Charge Guidelines (albeit, for the reasons set out in paragraph 5 above, we are not of the view that this precise ex-post alignment is essential as a pre-requisite for legal compliance with the G Charge Guidelines).

Question 2: Where both the Current Approach and the BG Proposal has the potential to result in technical breaches, what are the pros and cons of each approach, taking into account our understanding of the policy context?

A. Pros and Cons of the Current Approach

	Pros	Cons
1.	<p>The stated aim of the Network Access Regulation is to promote cross border exchanges of electricity. Arguably, while an ex-post approach to G Charges may guarantee more precise technical compliance with the G Charge Guidelines, the increased uncertainty on G Charge levels that an ex-post approach would introduce would (in the round) be detrimental to cross border electricity trading.</p> <p>When the CUSC Modification Panel originally considered how to implement the Guidelines Regulation this very uncertainty appears to have been what dissuaded them from taking forward an ex-post approach to the consultation stage.</p>	<p>As implicitly recognised by the use of the Error Margin, the ex-ante nature of the Current Approach means that it could lead to Generator's average G Charges exceeding the €/MWh limit set under the Guidelines Regulation. However, the approach of including the Error Margin does aim to mitigate this risk through the Error Margin being based on the level of historic error in forecast generation output and forecast transmission operator maximum allowed revenues. The error margin therefore does, in itself, represent a crude form of reconciliation.</p> <p>As pointed out by British Gas in its modification proposal, the use of the Error Margin does carry with it the inherent risk that the level of G Charges is set at a lower level than strictly required by the G Charge Guidelines. However, given the Error Margin is based upon historical inaccuracy of forecasting, this should inherently prevent the Error</p>

²¹ See the Guidelines Regulation at recital 10 and the Network Access Regulation at Article 18(2).

Pros	Cons
<p>Paragraph 4.41 of the Stage 3 Final Workgroup Report²² (CUSC Report) in respect of the relevant modification states, "[an ex-post reconciliation] would inject a level of uncertainty into commercial arrangements. [...] This uncertainty would cause suppliers to introduce a risk premium based on the accuracy of National Grid forecasting [...] it was recognised uncertainty on charges paid by GB generation in the short term had a negative impact on trading. Therefore the introduction of reconciliation could, overall, be considered counterproductive."</p>	<p>Margin from being unreasonably large.</p>
<p>2. The way in which the Error Margin is calculated is also helpful in supporting the Current Approach. The use of the Error Margin both demonstrates a good faith attempt to mitigate the risks created by the ex-ante approach, and also (given it is based on the inaccuracies of historical forecasts) in itself represents a crude form of reconciliation.</p>	
<p>3. Ofgem's consultation and final decision in respect of the Current Approach carefully weighed the advantages and disadvantages of using forecasts with a long lead time to calculate the split between G Charges and demand side TNUoS charges, as against using forecasts with a short lead time. While the short lead time forecast was acknowledged as having the disadvantage of giving industry less foresight on TNUoS charges, it was ultimately selected as it reduced the potential for forecasting error which in turn meant a smaller Error Margin percentage would need to be employed .</p>	

B. Pros and Cons of the BG Proposal

²² Final Workgroup Report, 3 May 2014: [Link](#)

	Pros	Cons
1.	<p>As discussed above, the Guidelines Regulation and the Network Access Regulation do not specify whether an ex-post or ex-ante approach is preferred. Therefore, there is nothing to suggest that an ex-post approach is inappropriate.</p>	<p>As set out in the section above on the Current Approach, good arguments have previously been made for the certainty provided by an ex-ante approach.</p>
2.	<p>In terms of compliance with the letter of the Guidelines Regulation, the ex-post approach guarantees that any breach of the Guidelines Regulation's ceiling on G Charges is automatically remedied, by contrast with the current approach.</p> <p>This represents a very transparent and easy to follow mechanism for ensuring that the level of average G Charges are precisely and robustly aligned with the requirements of the Guidelines Regulation.</p> <p>The fact this mechanism uses ex-post figures and thereby is a more precise and robust approach to alignment has the benefit that the approach can be more easily justified as following the technical requirements of the Guidelines Regulation.</p>	

C. Broad Conclusions

1. As set out above, we are not of the view that compliance with the Guidelines Regulation or the Network Access Regulation strictly prohibits either the use of the Current Approach or moving to the BG Proposal.
2. No doubt the Workgroup will discuss the wider advantages and disadvantages of each approach, and indeed other refinements that could be made to develop the Current Approach or the BG Proposal.

Legal Advice restructured to refer specifically to the questions posed by the Working Group

Restructured Legal Opinion

- 1 Following the discussions on the legal advice this document transposes that advice, so far as practicable, directly to the specific questions posed by the Working Group. This should be read in context of that advice note and the general position that, given the purposive interpretation, an approach that seeks to meet the principle of the guideline (which either of the proposed approaches do), rather than the specific detail as to exactly how it does it, is considered compliant and on this basis there isn't as such a "scale" of compliance at a European level which the questions are trying to establish.
- 2 Comments shaded in yellow are cut and paste from the legal advice directly. Comments shaded in purple are National Grid's view.

8.7 Legal Questions

- 3 Do the Guidelines for A Common Regulatory Approach to Transmission Charging set out in Part B of 838/2010 apply to:
 - (a) Calendar years only
 - (b) Charging years as applicable in the regulatory arrangements for each members state only i.e. regulatory years (Apr-Mar) for GB
 - (c) Both a. and b. (if a. and b. are different)
 - (d) Either a. or b. (if a. and b. are different)
 - (e) It is inconclusive. In which case would it equally be defensible or consistent with the legal regulatory scheme for a member state to put in place arrangements to comply with the one (a. or b.) it deemed most appropriate.

Advice Page 3, paragraph 3

We would also note that the use of the term "annual" in the G Charge Guidelines should be read in the light of a purposive approach to interpretation of EU law and in the context of the discretion given to the Member States in deciding on more detailed provisions for the setting of G Charges. Therefore, in our view, whether a Member State calculates G Charge averages over e.g. 1 April to 31 March or 1 January to 31 December (or any other period which could reasonably be said to be "annual" and which does not interfere with purpose of the G Charge Guidelines) will not impact upon legal compliance/non-compliance with the G Charge Guidelines

So in summary, looking at the questions, it is (e) on the basis that there is flexibility available at national level.

- 4 Does the regulation specify payment terms between producers/ generators and National Grid?

Other than the need for average charges to be within a range the regulation does not address payment terms

- 5 Would removing the error margin and introducing reconciliation after the year be better. Worse or neutral in terms of compliance with the regulation as compared to the baseline?

Advice Page 2 paragraph 7

- (a) Both the Current Approach and the BG Proposal appear to facilitate G Charges that are compliant with the Guidelines Regulation

Advice Page 3 paragraphs 1 and 2

- (b) This conclusion is partly driven by the fact that the European Court of Justice takes a *purposive* approach to the interpretation of EU law (an approach which has in turn been adopted by the Courts of England and Wales when they consider compliance with EU law). The result of this is that the courts will look to the broader purpose and objectives of EU legislation in interpreting the meaning of the specific provisions. In particular, the recitals setting out the objectives of the Guidelines Regulation have weight and are relevant to interpreting the requirements of the G Charge Guidelines as a whole.

- (c) The Guidelines Regulation is silent on whether an ex-post or ex-ante approach should be adopted in respect of G Charges, and therefore we are not of the view that the G Charge Guidelines as drafted in the Guidelines Regulation are narrowly or specifically enough drafted to preclude either an ex-ante or ex-post approach being compliant with the G Charge Guidelines. As set out in paragraphs 5 and 6 below [see original], robust legal arguments can be made that both the Current Approach and the BG Proposal comply with the purpose and objectives of the Guidelines Regulation (and the Network Access Regulation from which the Guidelines Regulation stems) and therefore that neither approach should be discounted on the basis of compliance/non-compliance with the G Charge Guidelines

Advice Page 4 paragraphs 3-6

- (d) We are also of the view that the BG Proposal falls within the requirements of the Guidelines Regulation. We have reached this conclusion for the following primary reasons

- (e) As discussed in paragraph 3 above [see original], the Guidelines Regulation does not specifically refer to a requirement to use either an ex-ante or an ex-post approach and in our view is not narrowly enough drafted to preclude either approach. Therefore, there is no explicit drafting within the Guidelines Regulation (or, for the avoidance of doubt, the Network Access Regulation) that prevents a move to an ex-post approach or necessitates the use of the ex-ante Current Approach

- (f) Similarly, we are of the view that there is a robust argument that an ex-ante approach complies with the *purpose* of the Guidelines Regulation as it clearly put in place a transparent mechanism for ensuring average G Charge levels do not exceed the levels in the G Charge Guidelines and thereby helps to ensure EU harmonisation of G Charge levels as is the stated aim of the G Charge Guidelines²³. While the BG Proposal reduces upfront certainty for generators, we do not believe that this loss of certainty means that (from a legal perspective) the BG Proposal would fail to comply with the relevant EU legislative requirements

²³ See the Guidelines Regulation at recital 10 and the Network Access Regulation at Article 18(2).

- (g) The ex-post mechanism through which the BG Proposal calculates average G Charges has the inherent advantage of using established figures (as opposed to forecast figures/the Error Margin) and thereby achieving a more certain and precise alignment with the G Charge Guidelines (albeit, for the reasons set out in paragraph 5 above [see original], we are not of the view that this precise ex-post alignment is essential as a pre-requisite for legal compliance with the G Charge Guidelines)

So in terms of generally being compliant, removing the error margin and introducing reconciliation after the year would be neutral with the baseline. Meeting the specific range more exactly and precisely through reconciliation rather than derived from assumptions would mean a greater degree of compliance with the specific range, but within the general principles that either approach would already comply.

- 6 Would removing the error margin and introducing an adjustment within year be better, worse or neutral in terms of compliance with the regulation as compared to the baseline?

Advice Page 2 paragraph 7

- (a) Both the Current Approach and the BG Proposal appear to facilitate G Charges that are compliant with the Guidelines Regulation

Advice Page 3 paragraphs 1 and 2

- (b) This conclusion is partly driven by the fact that the European Court of Justice takes a *purposive* approach to the interpretation of EU law (an approach which has in turn been adopted by the Courts of England and Wales when they consider compliance with EU law). The result of this is that the courts will look to the broader purpose and objectives of EU legislation in interpreting the meaning of the specific provisions. In particular, the recitals setting out the objectives of the Guidelines Regulation have weight and are relevant to interpreting the requirements of the G Charge Guidelines as a whole

- (c) The Guidelines Regulation is silent on whether an ex-post or ex-ante approach should be adopted in respect of G Charges, and therefore we are not of the view that the G Charge Guidelines as drafted in the Guidelines Regulation are narrowly or specifically enough drafted to preclude either an ex-ante or ex-post approach being compliant with the G Charge Guidelines. As set out in paragraphs 5 and 6 below [see original], robust legal arguments can be made that both the Current Approach and the BG Proposal comply with the purpose and objectives of the Guidelines Regulation (and the Network Access Regulation from which the Guidelines Regulation stems) and therefore that neither approach should be discounted on the basis of compliance/non-compliance with the G Charge Guidelines

Advice Page 4 paragraphs 3-6

- (d) We are also of the view that the BG Proposal falls within the requirements of the Guidelines Regulation. We have reached this conclusion for the following primary reasons

- (e) As discussed in paragraph 3, the Guidelines Regulation does not specifically refer to a requirement to use either an ex-ante or an ex-post approach and in our view is not narrowly enough drafted to preclude either approach. Therefore, there is no explicit drafting within the Guidelines Regulation (or, for the avoidance of doubt, the Network Access Regulation) that prevents a move to an ex-post approach or necessitates the use of the ex-ante Current Approach

- (f) Similarly, we are of the view that there is a robust argument that an ex-ante approach complies with the *purpose* of the Guidelines Regulation as it clearly put in place a

transparent mechanism for ensuring average G Charge levels do not exceed the levels in the G Charge Guidelines and thereby helps to ensure EU harmonisation of G Charge levels as is the stated aim of the G Charge Guidelines²⁴. While the BG Proposal reduces upfront certainty for generators, we do not believe that this loss of certainty means that (from a legal perspective) the BG Proposal would fail to comply with the relevant EU legislative requirements

- (g) The ex-post mechanism through which the BG Proposal calculates average G Charges has the inherent advantage of using established figures (as opposed to forecast figures/the Error Margin) and thereby achieving a more certain and precise alignment with the G Charge Guidelines (albeit, for the reasons set out in paragraph 5 above [see original], we are not of the view that this precise ex-post alignment is essential as a pre-requisite for legal compliance with the G Charge Guidelines)

So in terms of generally being compliant, removing the error margin and introducing an adjustment within year would be neutral with the baseline.. Meeting the specific range more exactly and precisely rather than derived from assumptions and achieving this closer to real time would mean a greater degree of compliance with the specific range, but within the general principles that either approach would already comply.

- 7 Is there any time limitation for any correction in respect of either a within year adjustment or after the year reconciliation taking place? If so which time limitation is preferable e.g. 30 days; 3 months; 6 months; 12 months?

Advice page 7, Broad Conclusion point 2

- (a) No doubt the Workgroup will discuss the wider advantages and disadvantages of each approach, and indeed other refinements that could be made to develop the Current Approach or the BG Proposal

As either approach achieves the purpose of the regulation there is no need to correct but if seeking a more specific alignment (and shortest time of potential misalignment) in terms of actual range, in principle, the sooner, the better.

- 8 The current arrangement sets charges based on forecast. They include an error margin to mitigate the risk of exceeding an average charge of €2.50/MWh due to forecast error. However this risk is not mitigated entirely and charges could still exceed €2.50/MWh.

- (a) If this happens are charges in breach of the Regulation?

Advice Page 3, paragraphs 4-6

- (i) the Current Approach takes an ex-ante approach to G Charges, meaning that it could in theory lead to average G Charges exceeding the €/MWh limit set under the Guidelines Regulation. However, we are of the view that there is a robust argument that the Current Approach ensures compliance with the purpose of the Guidelines Regulation and therefore is not vulnerable to legal challenge by dint of taking using ex-ante calculations. We have reached this conclusion for the following primary reasons

- The upfront certainty on G Charges and demand side TNUoS charges afforded by an ex-ante approach arguably better encourages cross-border electricity trading than an ex-post approach. While an ex-post approach guarantees the

²⁴ See the Guidelines Regulation at recital 10 and the Network Access Regulation at Article 18(2).

reconciliation of annual average G Charges where they exceed the G Charge Guidelines, given the overall aim of the Network Access Regulation is explicitly stated to be to encourage the cross border trading of electricity this provides argument for the Current Approach

- The fact that the Network Access Regulation specifically refers²⁵ to the right of Member States to adopt more detailed provisions than the guidelines set out in the Guidelines Regulation, and that the Network Access Regulation is silent on the use of ex-ante/ex-post (while specifically disallowing an ex-ante approach in the context of a different payment mechanism²⁶), provides a solid rebuttal to any suggestion that an ex-ante approach does not comply with the relevant legislation. Similarly, ACER's opinion on the appropriate range of transmission charges paid by electricity producers is neutral as to the choice of approach.²⁷ ACER has clearly studied the approach taken by Member States in relation to G Charges and at no point highlights any concern with (or indeed interest in) the question of ex-ante approach versus ex-post approach

Advice Page 4 Paragraph 2

- The use of the risk margin for forecasting error (at paragraph 14.14.5(v) of the CUSC) (**Error Margin**), and the careful weighing up of the implementation options at the time the original CUSC modification was made, demonstrate a clear desire on the part of Ofgem and NGET to implement the intent of the G Charge Guidelines and provides sound reason for avoiding an ex-post approach on grounds of the uncertainty it would create. Again, this gives robust legal argument for defending the Current Approach

- (b) If so, does action need to be taken to comply with the Regulation e.g. by refunding part of generation charges

(i) Action doesn't have to be taken

- (c) If action has to be taken, should it be within year adjustment or after the year reconciliation or either?

(i) Action doesn't have to be taken

²⁵ See Article 21 of the Network Access Regulation, which states: "This Regulation shall be without prejudice to the rights of Member States to introduce measures that contain more detailed provisions than those set out herein or in the Guidelines referred to in Article 18 [eg the G Charge Guidelines]."

²⁶ The Network Access Regulation specifically states (at Article 13(3)) that, *in the context of the inter-transmission system operator compensation mechanism* "Compensation payments shall be made on a regular basis with regard to a given period of time in the past. Ex-post adjustments of compensation paid shall be made where necessary, to reflect costs actually incurred."

²⁷ This report was produced by ACER pursuant to point 5 of Part B to the Annex of the Guidelines Regulation, and we should emphasise was neither designed to judge the validity of Member State's implementation of the Guidelines Regulation nor is it binding on the Commission in this regard.

Annex 6 – Exchange Rate Risk Analysis

Year	Limit €/MWh	Error Margin	Adjusted Limit €/MWh	Energy Forecast TWh	AR £m	ER €/£	G	D	G Rev	D Rev	G Res £/KW	D Res £/KW	G Charging base £/KW	Demand Peak GW	HH Charge Base GW	NHH Demand TWh
2015/16	2.5	6.4%	2.34	319.6	2637	1.22	23.2%	76.8%	613.0	2024	4.81	35.63	71.5	52.4	15	27.4
2016/17	2.5	8.2%	2.30	268.7	2709	1.36	16.7%	83.3%	453.4	2255	0.51	45.33	62.9	49.8	13.1	26.1

Ex Ante 2015/16

2015/16	2.5	6.4%	2.34	319.6	2638	1.22	23.2%	76.8%	613.0	2025	4.81	35.63				
---------	-----	------	------	-------	------	------	-------	-------	-------	------	------	-------	--	--	--	--

Ex Post Tariff at t-2m Impact of removal of risk margin

													HH £/KW	NHH p/KWh		
2015/16	2.5	0.0%	2.5	319.6	2638	1.22	24.8%	75.2%	654.9	1983	5.40	34.83				
											42	-42	0.59	-0.80	-0.11	

Reconciliation Impact of exchange rate risk only

													HH £/KW	NHH p/KWh		
2015/16	2.5	0.0%	2.5	319.6	2638	1.39	21.8%	78.2%	574.8	2063	4.28	36.36				
											-80.1	80.4	-1.12	1.53	0.21	£6.36m cost of carry of £81m

Ex Ante 2016/17

2016/17	2.5	8.2%	2.30	268.7	2709	1.36	16.7%	83.3%	453.4	2256	0.51	45.33				
---------	-----	------	------	-------	------	------	-------	-------	-------	------	------	-------	--	--	--	--

Ex Post Tariff at t-2m Impact of removal of risk margin

													HH £/KW	NHH p/KWh		
2016/17	2.5	0.0%	2.5	268.7	2709	1.36	18.2%	81.8%	493.9	2215	1.15	44.52				
											41	-41	0.64	-0.81	-0.11	

Reconciliation Impact of exchange rate risk only Scenario (a)

													HH £/KW	NHH p/KWh		
2016/17	2.5	0.0%	2.5	268.7	2709	1.19	20.8%	79.2%	564.5	2145	2.28	43.10				
											70.6	-70.6	1.12	-1.42	-0.20	No cost of carry as NG in surplus

Reconciliation Impact of exchange rate risk only Scenario (b)

													HH £/KW	NHH p/KWh		
2016/17	2.5	0.0%	2.5	268.7	2709	1.53	16.2%	83.8%	439.1	2270	0.28	45.62				
											-54.9	54.9	-0.84	2.52	0.15	£4.37m cost of carry of -54.9

Annex 7 – The Swedish Approach to the G:D Split

An alternative method to apply to EU Regulation 838/2010

Background

- 9 Like GB, Sweden applies power-based capacity charges to generation and is also required to comply with EU Regulation 838/2010²⁸. Svenska Kraftnat recovers 39% of its allowed revenue from generation and is required to ensure that the value of the annual average transmission charges paid by producers is within a range of €0-1.2/MWh. Regulation 838/2010 provides latitude to Member States in the detailed approach taken, and in the context of CMP251 it makes sense to consider how countries with similar generation charging regimes compare.
- 10 Sweden also uses an ex ante approach to determine its G:D split, but it does not use an error margin in its calculation. This approach should therefore be of particular interest given the identification of the “error margin” as the defect in CMP251.

Calculations compared

- 11 Sweden takes a different approach to the power to energy calculation (converting charges based on MW to MWh, the unit on which the Euro cap is defined). In GB, the power to energy calculation is made by applying a demand forecast to the TO Revenue to arrive at the £/MWh value. The variations around the demand and generation revenue forecasts are the reasons for including an error margin.
- 12 Sweden takes its contracted generation and multiplies this capacity by a standardised utilisation as a proxy for demand. It applies a standardised “base case” for how many hours each MW of energy is used, and that standard is taken from the ENTSO-E’s annual Tariff Overview Report²⁹. The report identifies 5000 hours as the central base case. In other words, the Swedes make the assumption that each MW of capacity on the transmission network is used for 5000 hours. By using its contracted generation position, it also removes the generation revenue uncertainty.
- 13 A calculation is performed below applying the Swedish methodology to GB for the year 2015/16.

2015/16	Sweden/ SEK	GB/ £
AR		£ 2,644,700,000
		27%
G Rev	816,000,000	714,069,000
Capacity (MW)	20,800	69,646
Usage (h)	5,000	5,000
Energy (MWh)	104,000,000	348,230,000
G Charge	7.85	2.05
ER	0.11	1.4
€/MWh	0.86	2.87
Cap (€/MWh)	1.2	2.5
Split		2.50
		23.5%

²⁸ Ireland is the only other European country with capacity-based G charges

²⁹ <https://www.entsoe.eu/publications/market-reports/transmission-tariffs/Pages/default.aspx>

- 14 Clearly, using 5000 hours as a proxy for average utilisation in GB may not be appropriate as this is significantly higher than the average in this country, though appropriate for Sweden. However, it might be possible to build on this methodology to derive an appropriate average utilisation for GB which could be applied in the calculation, and negate the need for an error margin.
- 15 For example, using a Load Factor proxy for utilisation more akin to what might be expected in GB³⁰, the following calculation could be made:

2015/16	GB	
AR	£	2,644,700,001
		27%
G Rev		714,069,000
Capacity (MW)		69,646
Usage (h)		3,989
Energy (MWh)		277,817,894
G Charge		2.57
ER		1.4
€/MWh		3.60
Cap (€/MWh)		2.5
		2.49
Split		18.7%

2014/15

- 16 It can be seen therefore that ex ante approaches without using error margins are possible, if a methodology to identify average usage can be agreed.

³⁰ The last complete year of data that we have (2014/15) using the sum of max(metered output, FPN, or 0) for each settlement period for each station for every day of the year divided by 2 and multiplied by TEC gives a utilisation of 3989 hours.