

Modification proposal:	Connection and Use of System Code (CUSC) modification 227 (CMP227): Change the G:D split of Transmission Network Use of System (TNUoS) charges, for example to 15:85		
Decision:	The Authority ¹ has decided to reject this modification ²		
Target audience:	National Grid Electricity Transmission plc (NGET), all transmission system users, parties to the CUSC and all other interested parties		
Date of publication:	15 September 2015	Implementation Date:	N/A

Background to the modification

Transmission Network Use of System (TNUoS) charges recover the costs that transmission network owners (TOs) incur in providing and maintaining transmission network assets. They are based on network users' capacity and comprise a 'locational' element and a 'residual' element. The 'locational' element reflects the different costs that network users impose on the network depending on where they locate. The 'residual' element is set to recover the remaining costs that have been allocated to generation (G) and demand (D) network users by the 'G:D split'. This is currently set at '27:73', ie 27 per cent of transmission network costs are recovered from generators and 73 per cent from demand network users.

EU Regulation 838/2010 (the "Regulation") limits average transmission charges for generators in European Union member states. The average charge for each member state is equal to the total transmission charges collected from generators in that member state in a given year divided by the total output of those generators in that year. The range of allowable average transmission charges for generators in Great Britain (GB) is €0-2.5/MWh, and the range for most other EU countries is €0-0.5/MWh. GB TNUoS charges were forecast to exceed the €2.5/MWh upper limit in 2016/17. To prevent this, we approved CUSC Modification Proposal CMP224 in October 2014.³ CMP224 'caps' the average generation TNUoS charge in GB by setting the G:D split each year to ensure compliance with the Regulation. The G:D split is now forecast to shift in favour of generation over the next five years to a split of around 18:82 by 2020.⁴

In April 2014, the Agency for the Cooperation of Energy Regulators (ACER)⁵ published an opinion recommending that the ranges of allowable charges be replaced by rules restricting the type of charge that may be levied on generators (rather than restricting the level of average charge).⁶ If this opinion is implemented, CMP224 would become obsolete and the G:D split would return to its current position, 27:73. Since April 2014, ACER has appointed consultants to consider whether further tariff harmonisation would be beneficial.⁷

The modification proposals

Intergen (the "proposer") raised CMP227 in March 2014 with the aim of aligning TNUoS charges for generators in GB more closely with generator transmission charges in other EU member states. Intergen's proposal (the "Original") is to move the G:D split to 15:85 with an

¹ References to the "Authority", "Ofgem", "we" and "our" are used interchangeably in this document. The Authority refers to GEMA, the Gas and Electricity Markets Authority. The Office of Gas and Electricity Markets (Ofgem) supports GEMA in its day to day work. This decision is made by or on behalf of GEMA.

² This document is notice of the reasons for this decision as required by section 49A of the Electricity Act 1989.

³ Our decision on CMP224 is published on our website <https://www.ofgem.gov.uk/publications-and-updates/connection-and-use-system-code-cusc-cmp224-cap-total-tnuos-target-revenue-be-recovered-generation-users>

⁴ This is based on NGET's most recent five year forecast. Since then, NGET has updated its shorter term forecasts. These suggest that the split of revenue may shift further in the favour of generation by 2020. Such a change would not affect our decision.

⁵ ACER is the EU agency created under the EU Third Energy Package (in particular Regulation (EC) No. 713/2009) to further progress the completion of the internal EU energy market for both electricity and gas.

⁶ http://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Opinions/Opinions/ACER%20Opinion%202009-2014.pdf

⁷ Further information is available on ACER's website <http://www.acer.europa.eu/Events/2nd-ACER-workshop-on-electricity-transmission-tariff-harmonisation/default.aspx>

implementation lead-time of at least 12 months, ie the modification would be implemented on the first 1 April that is at least 12 months after our decision.

The CUSC workgroup which assessed CMP227 developed a number of Workgroup Alternative CUSC Modification proposals ('WACMs'). These vary based on the G:D split and the implementation lead-time, as shown in the table below:

	12 months	24 months	36 months
G:D split 15:85	Original	WACM1	WACM2
G:D split 4:96	WACM3	WACM4	WACM5

CUSC Panel recommendation

The CUSC Panel voted on CMP227 at its meeting on 31 July 2015. A majority of Panel members voted that all of the options better facilitate the relevant CUSC charging objectives (the "relevant objectives"⁸) when compared to the current arrangements. When considering which option was best, there was a split between the Panel members in favour of the Original, WACMs 2, 3, 4 and 5 and the current arrangements. The Panel members' full views are set out in the Final Modification Report (FMR).

Impact analysis

All of the CMP227 options would increase TNUoS charges for all demand network users and reduce TNUoS charges for all generation users. In the short run, where electricity markets do not have time to adjust, we would expect this to result in windfall profits for generators and losses for consumers and suppliers. These negative impacts could be avoided given a sufficient implementation lead-time.⁹

In the longer run, when markets have time to adjust, we would expect to see reductions in support payments through lower bids for contracts for difference (CfDs) and capacity market payments. We would also expect lower generator TNUoS charges to lead to reductions in wholesale prices. TNUoS charges are a fixed cost and, in our view, wholesale prices are largely driven by generators' marginal costs. We would, therefore, expect the effect on wholesale prices to be due, at least in part, to increased investment in generation capacity (and/or reduced closures), as opposed to a direct pass through from existing generators.

Some Workgroup members disagree with the view that reductions in wholesale prices will depend to some extent on increased investment. In their view, reductions in TNUoS charges would be passed on directly by generators through the wholesale market (so far as they are not passed on through reductions in support payments). This view is reflected in the analysis by Cornwall Energy set out in Annex 8 to the FMR. We do not agree with this view. In a competitive market, and with the exception of periods of system tightness, we would expect the marginal generator in the wholesale market to drive wholesale prices and to be operating at close to its marginal cost. If it were then to pass on reductions in a fixed cost, such as TNUoS charges, it would lose money on each unit of output. We do not consider that this is likely. Therefore, while we expect that some generators will pass on some of the reduction in their TNUoS charges through lower wholesale prices, at least part of any impact on wholesale prices will depend on increased investment in generation capacity (or reduced closures). We also note that in their previous analysis in support of the proposal (in Annex 7 of the FMR), Cornwall appear to agree with our view. They state that TNUoS charges are a fixed cost and "therefore directly attributable to the decision of a generator to remain open or not".

⁸ As defined in Standard Condition C5 of NGET's Transmission Licence.

⁹ We note that two WACMs have a 36-month lead time which may be sufficient to avoid windfall profits for generators and costs for consumers or suppliers. However, this does not change our decision. This is because we consider there is a risk of a negative impact on consumers even if the lead-time is sufficient to allow markets to adjust.

We note that the proposer put forward this modification to align charges with other EU member states. We have therefore considered how lower wholesale prices which may arise from implementing CMP227 will impact on trade with other EU countries. Lower wholesale prices could lead to greater demand for GB generation. This could lead to higher wholesale prices for GB consumers in the short term as more expensive marginal generation would be needed to meet the increased demand. However, in the long term, this could lead to further investment in generation capacity (and/or reduced closures) putting downwards pressure on wholesale prices and offsetting the short-run increases to some extent. In practice, these effects are only likely to be material if the reduction in GB wholesale prices means a significant change in the direction of flow on interconnectors connecting GB to other EU electricity markets, which is driven by the wholesale price differential between GB and other EU countries. We also consider that these changes would not happen in isolation from the effects discussed above in relation to the GB market.

Annex 10 to the FMR presents data for the half-hourly wholesale price differential between GB and France and GB and the Netherlands. We have assessed this against the estimates of the impact of implementing CMP227 on wholesale prices set out by National Grid and Cornwall Energy in annexes 6 and 8 of the FMR. This suggests that a drop in wholesale prices of between £1 and £3 may be possible.¹⁰ A change of this size would only impact the direction of flows on interconnectors in a small percentage of times during the day. Our view therefore is that this analysis shows the impact on trade is likely to be small.

Conclusions on the impact on consumers

The complexity of the electricity market makes it difficult to accurately assess to what extent reductions in TNUoS charges would be passed on through reduced support payments and to what extent they would result in reduced wholesale prices. In the absence of detailed modelling, our view is that, in the long run, the impact on consumers is likely to be neutral, with increases in demand charges being broadly offset by reductions in support payments and wholesale prices. However, we consider that there are two risks for consumers which mean implementing CMP227 could result in a negative impact for consumers.

Firstly, because TNUoS charges are a fixed cost¹¹, reductions in wholesale prices will depend, at least in part, upon reductions in TNUoS charges incentivising increased investment in generation capacity and/or reduced closures. This also applies to any investment required to offset the impact on wholesale prices of increases in exports from GB, which could bring on more expensive marginal generation. The level of investment and effect on wholesale prices is uncertain and we consider that there is a risk that it will not be sufficient to ensure that increases in demand TNUoS charges are fully offset by reductions in wholesale prices and support payments.

Secondly, measures to harmonise transmission tariff structures are currently being discussed at the European level. It is not clear what the outcome of this work will be and it is possible that it will not be consistent with CMP227. This could mean that legislation is implemented at the EU level which supersedes CMP227. In our view, this would increase regulatory risk and, ultimately costs to consumers.

Given the above, our view is that the impact of CMP227 on consumers is likely to be broadly neutral, but there is risk of a negative impact on consumers.

¹⁰ We consider that Cornwall's analysis which suggests a reduction of around £3/MWh for move to a G:D split of 4:96 is likely to significantly overstate the impact on wholesale prices. This is because it relies on the assumptions that there will be no impact on support payments and that the marginal generator will always directly pass on reductions in TNUoS through the wholesale price. We do not agree with these assumptions. In our view, the impact of a reduction in TNUoS for generators will be spread across wholesale prices and support payments. We also consider that reductions in wholesale prices will rely to some extent on increased investment in generation capacity (as opposed to being passed through directly). This is because TNUoS is a fixed cost and, with the exception of periods of system tightness, we would expect wholesale prices to be driven by marginal costs.

¹¹ We note that, from 1 April 2016, TNUoS charges will vary based on average historical annual load factor as well generator capacity. This means that future charges will vary with output to some extent. However, this will apply to only a small proportion of a generator's charges, so TNUoS charges will remain largely fixed in relation to output. For further details please see the Project TransMIT page on our website -

<https://www.ofgem.gov.uk/electricity/transmission-networks/charging/project-transmit>

Other factors considered

We have also considered whether moving to a fixed G:D split would improve the predictability and volatility of charges, as compared to the current flexible G:D split. This could have a positive impact on consumers because it could reduce the risk premium included in wholesale and retail prices. Based on NGET's analysis of historical charge predictability in annex 9 of the FMR, we do not consider that the options under CMP227 would improve charge predictability as compared to the current arrangements.

Other Workgroup members considered that shifting costs from generation to demand, would reduce charging volatility for generators and therefore increase predictability of charges. While this is true, it would also have the opposite effect for suppliers and demand customers. We have no evidence that the net effect would improve overall charge predictability.

Our decision

We have considered the information provided in the FMR¹² by the CMP227 Workgroup. We have also taken into account the responses to the Code Administrator consultation on the modification proposal, which are attached to the FMR. We have concluded that none of the proposals better facilitate the applicable CUSC objectives¹³ as compared to the current arrangements. Moreover, approving this modification would not be consistent with the Authority's principal objective and statutory duties.¹⁴

We have therefore decided to reject this modification.

Reasons for our decision

The reasons for our decision on the CMP227 options, assessed against the applicable CUSC objectives and our principal objective, are set out below.

CUSC charging objective (a) 'that compliance with the Use of System charging methodology facilitates effective competition in the generation and supply of electricity and (so far as is consistent therewith) facilitates competition in the sale, distribution and purchase of electricity;'

We have assessed a number of factors when considering whether CMP227 better facilitates effective competition, including the impact on competition between generators and suppliers in GB as well as competition with European generators.

Competition within GB

There would be no change in the treatment of GB generators and suppliers under the proposal. Consequently, our assessment is that implementing the proposal would not cause discrimination in either the supplier or generation market.

There would be a redistribution of costs from generators to suppliers under CMP227. If implemented with insufficient lead time we would expect this to result in windfall profits for generators and increased costs for suppliers, some of which they may not be able to pass on to consumers. If implemented with a longer lead time, we would expect increased costs for suppliers and consumers to be largely offset by reduced support payments to generators and wholesale electricity prices.

Increasing the predictability of charges could improve competition. However, we do not consider that moving to a fixed G:D split under CMP227 would improve charge predictability as compared to the current arrangements (a flexible G:D split). This is in line with NGET's analysis in annex 10 of the FMR, as discussed in the impact analysis section of this decision.

¹² The FMR is available on NGET's website - <http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/CUSC/Modifications/CMP227/>

¹³ The term "applicable CUSC objectives" is defined in Standard Condition C10 of NGET's Transmission licence, which sets out that in relation to a proposed modification of the charging methodologies only, this means the objectives (as applicable) set out at paragraph 5 of standard condition C5 in relation to the use of system charging methodology (the "relevant objectives"). NGET's Transmission Licence is available at: <http://epr.ofgem.gov.uk>

¹⁴ The Authority's statutory duties are wider than matters which the Panel must take into consideration and are detailed mainly in the Electricity Act 1989 as amended.

As noted above, the direction of travel on tariff harmonisation currently being considered at an EU level is not clear. We consider that making a change to align tariffs with those in other EU member states while the outcome of this work is uncertain could lead to the changes being reversed in the short to medium term. In our view, this would increase regulatory risk and would be detrimental to competition.

Competition between generators in GB and other EU member states

In principle, more closely aligning generator TNUoS charges with those in other EU countries could result in more efficient investment decisions in GB and other EU member states. However, other factors, such as taxes and subsidies and different charging structures, may also distort trade and investment decisions between EU member states. Further, the direction of travel in respect of future changes to harmonise charges at the European level is unclear. We also note that the likely impact in terms of trade is small. For these reasons, we do not believe that CMP227 is likely to have a significant impact in improving competition between generators in GB and other EU member states.

Overall

Given the factors discussed above, our view is that, if implemented with a sufficient lead-time, the CMP227 options are broadly neutral against objective (a). They may marginally improve competition between generators in GB and the rest of the EU but may also increase regulatory risk if not consistent with on-going work on tariff harmonisation at the EU level. Options that do not have a sufficient lead-time would result in windfall profits for generators and would have a negative impact against this objective.

CUSC charging objective (b) 'that compliance with the Use of System charging methodology results in charges which reflect, as far as is reasonably practicable, the costs (excluding any payments between transmission licensees which are made under and in accordance with the STC) incurred by transmission licensees in their transmission businesses and which are compatible with standard condition C26 (Requirements of a connect and manage connection);'

All options under CMP227 are neutral against this objective. The proposed modification would have no impact on the cost reflectivity of the charging methodology. We note that no Panel members consider that CMP227 better facilitates this objective.

CUSC charging objective (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'

All options under CMP227 are neutral against this objective. The proposed modification is not designed to take developments in the transmission licensees' businesses into account. We note that no Panel members consider that CMP227 better facilitates this objective.

CUSC charging objective (d) 'compliance with the Electricity Regulation and any relevant legally binding decisions of the European Commission and/or the Agency'

Please see the section on 'European law' below.

The Authority's principal objective

In making a decision on this proposal we have to do so in accordance with our principal objective and statutory duties.

As explained above, we consider that, with a longer implementation lead-time, the impact of CMP227 on consumers, generators and suppliers is likely to be broadly neutral. However, there is a risk that investment required to reduce wholesale prices will not materialise. This would leave consumers facing higher costs because suppliers had passed on the higher TNUoS charges directly through retail bills. We also note that future tariff harmonisation measures at the European level could move in a different direction. If this were to happen, changes to reverse

CMP227 would need to be made, potentially shortly after implementation, increasing regulatory risk and, ultimately, costs for consumers.

We note Cornwall Energy's analysis suggests consumers will benefit from CMP227 through lower bills. This relies on the view that generators will directly pass through reductions in generator TNUoS charges to wholesale prices. We do not agree with this view for the reasons set out under the Impact Analysis section above.

We have also considered whether there are any wider strategic and sustainability benefits that would result from the proposed change. Cornwall Energy argues that by increasing demand for GB electricity there will be greater investment in GB generation and that this will improve security of supply. This argument could equally apply to increased investment as a result of reduced TNUoS charges for generators, as discussed in the Impact Analysis section above. In our view, any impact on investment is likely to be small. We also note that there are other measures in place to ensure security of supply, eg the capacity market. We therefore do not consider that this modification is likely to have a significant impact on security of supply. Similarly, it is unlikely that this modification would impact on greenhouse gas emissions.

We have therefore decided that, due to the risk of the potential for higher costs to consumers, approving this modification would not be consistent with the Authority's principal objective to protect the interests of current and future consumers.

European law

We have considered the European aspects of the modification more widely, in line with our principal objective and, in particular, with the requirements of applicable European law that the Authority must have regard to. We also have regard to relevant charging objective (d) when considering changes to the CUSC.

Some Workgroup members and some respondents to the Code Administrator consultation considered that the proposal would level the playing field between GB generators and those in other EU member states and that it would enhance harmonisation towards the single European market.

We firmly support the move towards a single European market. However, the Electricity Regulation, part of the EU Third Energy Package, does not require a harmonised approach to tariffs across member states, beyond the requirement for average transmission charges for generators to be within ranges of allowable charges set out in the EU Regulation 838/2010. The current approach is also consistent with existing EU Directives on transmission charges and the recent ACER opinion on the level of charges to be borne by generators. Further, and as discussed above, the direction of travel in respect of future tariff harmonisation at the European level is not clear at this stage. We do not consider that it is certain that tariff harmonisation would require all EU member states to minimise transmission costs charged to generators.

We therefore consider that the modification is neutral in relation to relevant objective (d) and rejecting CMP227 would not be inconsistent with our duties under the EU Third Energy Package.

Decision notice

In accordance with Standard Condition C10 of NGET's Transmission Licence, the Authority has decided that CMP227 '*Change the G:D split of Transmission Network Use of System (TNUoS) charges, for example to 15:85*' should not be made.

Yours sincerely,

Kersti Berge

Partner, Transmission

Signed on behalf of the Authority and authorised for that purpose