

Modification proposal:	Connection and Use of System Code (CUSC) CMP201: Removal of Balancing Services Use of System (BSUoS) charges from generation		
Decision:	The Authority ¹ has decided to reject this proposal ²		
Target audience:	National Grid Electricity Transmission PLC (NGET), Parties to the CUSC and other interested parties		
Date of publication:	2 October 2014	Implementation Date:	n/a

Executive summary

This modification proposes to remove BSUoS charges from generators. This would align the charges for balancing activities paid by GB generators more closely with those paid by their European counterparts. In considering the impact of making this change, our assessment has focused how the flows of electricity between GB and mainland Europe would change as a result of generators being better able to compete with those in Europe, and the effect this would have on consumers.

We firmly support the move towards more closely integrated European markets for electricity. We consider that in principle, removing BSUoS from generators would have a small positive impact on competition. However, we are concerned that at this time the potential benefits this would bring would not be material enough to offset the potential costs to consumers from implementing the modification. We consider wholesale price differentials between GB and other European countries have widened since the Impact Assessment (IA) modelling, which reduces the potential impact of this modification. It makes it unclear that an increase in generator profits resulting from implementation of CMP201 will be sufficiently large to bring about the new investment that would be required to reduce any initial increase in wholesale prices in the long run. It is ongoing developments in GB and electricity markets across Europe that are likely to drive electricity flows across markets and investment decisions, and the impact of this proposed change to BSUoS charging would be very limited in this respect. We have therefore decided to reject this modification.

Background to the modification proposal

As System Operator (SO), NGET balances electricity supply and demand on the GB electricity transmission system. It conducts balancing services in real time³ to ensure the transmission system remains within safe technical and operating limits.

Under the terms of its electricity transmission licence⁴ (the licence), NGET can recover the costs of its balancing activities through BSUoS charges. How BSUoS is governed is set out in the CUSC⁵.

¹ The terms 'the Authority', 'Ofgem' and 'we' are used interchangeably in this document. Ofgem is the Office of the Gas and Electricity Markets Authority.

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

³ Real time system balancing actions involve coordinating and directing the flow of electricity onto and over the National Electricity Transmission System (NETS).

⁴ <https://epr.ofgem.gov.uk/Content/Documents/National%20Grid%20Electricity%20Transmission%20Plc%20-%20Special%20Conditions%20-%20Current%20Version.pdf>

⁵ <http://www2.nationalgrid.com/uk/industry-information/electricity-codes/cusc/the-cusc/>

BSUoS charges are calculated ex-post based on the volume of energy a user takes from, or supplies to, the transmission system on a half-hourly basis. Currently, BSUoS charges are levied 50:50 between generators and suppliers. Generators pass on their share of BSUoS charges to suppliers through the wholesale price and suppliers then pass the cost to the consumer through the retail price.

Until recently, BSUoS charges were levied on interconnector flows. However, in August 2012, the Authority approved the CUSC modification proposal CMP202⁶ to remove these charges. The proposal was raised by NGET as a result of Electricity Regulation 714/2009⁷ which defines an interconnector as a transmission line. As a consequence interconnector flows are neither classed as production (generation) nor consumption (demand), but part of the overall transmission infrastructure facilitating the wider market, and therefore not an entity that can be subject to BSUoS charges.

In our European trading partner countries the equivalent charges for balancing activities are more commonly paid entirely by suppliers, although there is no common approach to charging across all countries. As a result, the wholesale prices offered by EU generators will not always reflect these costs in the same way as those offered by a GB generator. GB generators are therefore concerned that the GB approach for recovering balancing costs is putting them at a competitive disadvantage relative to European generators.

The modification proposal

NGET raised modification CMP201 in December 2011⁸. CMP201 proposes that generators become exempt from BSUoS charges and NGET recover 100% of the costs associated with its SO balancing activities from demand, i.e. GB suppliers. All parties would still be liable for charges relating to their own imbalance⁹.

Implementation periods

The FMR presented three options for the implementation period. The periods were chosen taking into account the time it would take for generators' and suppliers' long term contracts and pricing structures to be adjusted to reflect new BSUoS arrangements. There was concern from participants in the CUSC workgroup process that if contracts were fixed, the change in the arrangements could give rise to windfall gains and losses among industry parties.

The 'Original' proposal stated that implementation should take place:

- Two full charging years after a decision is made (ie if a decision is made before 31 March 2015, implementation would take place on 1 April 2017).

⁶<http://www.ofgem.gov.uk/Licensing/ElecCodes/CUSC/Amend/Documents1/CMP202%20Decision%20Letter.pdf>

⁷ Electricity Regulation (EC) No 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No 1228/2003 are available at:

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

⁸ We published an updated version of this decision letter on 4 November 2014 to amend this date. The original letter referred to the modification having been raised by NGET in October 2012. We've corrected this to December 2011, as the original date quoted was when the Final Modification Report was first submitted to the Authority, rather than when the modification was initially raised to the CUSC panel.

⁹ Imbalance is the difference between contracted generation or consumption and the amount that was actually generated or consumed in each half hour trading period. Imbalances impose system operation costs.

Two alternatives to the Original (Workgroup Alternative CUSC Modifications, or WACMs) were also proposed:

- WACM1 (3 year implementation period): The change would be implemented three full charging years after a decision is made.
- WACM2 (5 year implementation period): The change would be implemented five full charging years after a decision is made.

CUSC Panel¹⁰ recommendation

At the CUSC Panel meeting on 26 April 2013 a vote was taken on the CMP201 proposal and its alternatives. A majority of the Panel expressed a preference for the Original proposal (a 2 year implementation period). The Panel vote is summarised in Table 1.

We note that the majority of Panel members (seven of nine) considered the Original proposal (the proposal) best met the relevant objectives. Two panel members voted against the proposal, and in favour of the status quo.

Table 1: Summary of CUSC Panel vote on CMP201

	Does the proposal better meet the Relevant Objective?				Which option best meets these objectives?
	Competition	Cost reflectivity	Business development	Overall	
Status quo	Baseline (ie no change)				2
Original	Yes = 7 No = 2	Neutral = 9	Yes = 5 Neutral = 4	Yes = 7 No = 2	7
WACM1	Yes = 7 No = 2	Neutral = 9	Yes = 5 Neutral = 4	Yes = 7 No = 2	0
WACM2	Yes = 5 No = 3 Neutral = 1	Neutral = 9	Yes = 3 Neutral = 6	Yes = 5 No = 3 Neutral = 1	0

Our Impact Assessment

In November 2013, we published our IA on CMP201¹¹. In this we said that we were minded to reject the proposal, but asked stakeholders for views on specific questions to help inform our thinking and final decision.

We received nine responses from generators and suppliers. Three stakeholders supported our minded-to position and six asked us to reconsider. The responses are published on our website.

¹⁰ The CUSC Panel is established and constituted from time to time pursuant to and in accordance with the section 8 of the CUSC.

¹¹ <https://www.ofgem.gov.uk/publications-and-updates/impact-assessment-cmp201-proposal-remove-balancing-charges-generators>

Initial assessment

In our IA we assessed what the impact would be on GB consumers of implementing CMP201. This was based on a qualitative assessment of the proposal supported by indicative modelling from NGET.

Assuming a two year implementation period or longer, we said that in the near term implementing CMP201 was likely to have a positive impact on GB generators but a negative impact on GB consumers. This was because:

- GB generators will be able to offer a lower wholesale price in the market¹². The lower wholesale price will boost demand from Europe (via interconnectors).
- This increases the overall demand for energy so more expensive plant is required to come online to meet demand in GB. This increases the wholesale price, and increases generators' profits.
- GB suppliers pass on the increased BSUoS to consumers; there is no effect on them unless they are locked into existing contracts which leave them unable to pass the additional costs on.
- GB consumers therefore should see no effect from the changed generator/supplier split in the long run, as long as the full BSUoS decrease is passed on through wholesale prices. But, they are impacted by the adjustment to the GB wholesale price required to accommodate higher levels of exports to Europe.

We also noted that there may be longer term impacts which could reverse these effects:

- Higher profits for generators should encourage greater investment in GB generation – either in the form of new plant build or delayed closure/refurbishment of existing infrastructure;
- The increased investment would exert competitive pressure on the GB wholesale electricity price which would reduce or potentially eliminate the short term increase noted above.

The quantitative modelling aimed to estimate the scale of the short term impact on generators and consumers. It looked at three markets, GB, France, and Netherlands and was based on 2010/11 and 2011/12 data.

The modelling suggested that the costs to GB consumers could be between £200m - £250m per year (equating to £2.00-£2.50 increase in bills for the average domestic consumer) with an annual increase in generator profits of between £181m and £281m¹³.

Further details on NGET's model and the modelling results can be found in chapter three of our IA, and annex 13 of the FMR¹⁴.

Dynamic and longer term impacts were not modelled. However, we asked the workgroup to try and quantify the longer term impact of the proposal. To do this, they looked at the volume of new investment required to offset the short term costs to customers. The working group found that between 500MW and 1GW of additional mid-ranking capacity

¹² The long run effect is uncertain but we would expect the drop in wholesale prices to be equivalent to the drop in BSUoS for generators.

¹³ The level of impact varied depending on the assumed level of BSUoS charge.

¹⁴ The FMR is available on NGET's website here: <http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/CUSC/Modifications/CMP201/>

would need to become available, following the implementation of CMP201, in order for the short term impact of CMP201 to be offset. We noted in the IA that the scale and timing of any new investment was uncertain.

In reaching our decision, we have reviewed the modelling assumptions, in particular those about the wholesale prices in the three different markets. We have also considered responses to our consultation, although we received no additional quantitative evidence from respondents.

Review of wholesale prices used in IA modelling

The modelling results are driven largely by the level of differentials in wholesale prices between the three markets modelled. Increased exports arose because the reduction in the wholesale price when BSUoS was removed from generators resulted in GB prices falling below French or Dutch prices more of the time, and therefore moving interconnector flows from imports to exports. The prices used in the modelling presented in the IA were derived from 2010/11 spot prices. Due to changes in the GB and European market since that date (for example, the introduction of the Carbon Price Floor in GB) we assessed what the likely impact of implementing CMP201 would be in the current market in reaching our decision.

We examined updated wholesale price data and the changes in the actual levels of interconnector flows since 2010/11. We compared hourly day ahead wholesale prices in GB and France between 1 April 2013 (when the Carbon Price Floor was introduced) and 31 March 2014¹⁵. This allowed us to compare the level of the price differentials between GB and France with the current level of BSUoS. This suggested that GB prices were higher than those in France by more than the level of BSUoS more often than suggested by the earlier NGET modelling.

This view is also borne out by analysis of flows across the interconnector with France¹⁶ using data available from NGET. In 2010/11 the data shows that GB exported to France 30% of the time. This had fallen to 4% by 2013/14. It is also consistent with the Electricity Capacity Assessment Report 2014 that notes in the past two years GB prices have generally been higher than prices in our interconnected markets, resulting in GB importing power from mainland Europe¹⁷. This suggests that removing BSUoS from GB generators will not increase exports to the extent inferred by the results of the NGET modelling, but we would still expect this effect to be present to a smaller degree.

We cannot be certain whether the current price differentials between GB and markets in mainland Europe will persist. Developments both at a European level as well as in individual markets make it difficult to predict future wholesale prices. For example, many markets have implemented or are planning to implement capacity markets, and many expect capacity margins to tighten in coming years. This could affect price differentials and interconnector flows, which may influence the assessment of the impact of implementing CMP201. Without a clear view of future we have therefore based our decision on the current market position.

There have been other changes in markets since our IA was published. The GB Capacity Market has been introduced, with the first auctions expected by the end of 2014. It is

¹⁵ Using data provided by the N2e exchange and epex spot.

¹⁶ <http://www2.nationalgrid.com/UK/Industry-information/Electricity-transmission-operational-data/Data-Explorer/> - see DemandData_historic file published on 18 July 2014 and the column indicating French import

¹⁷ <https://www.ofgem.gov.uk/publications-and-updates/electricity-capacity-assessment-2014>

unclear what the effect of this would have been if it had been included in the quantitative modelling. If profits for generators increase as a result of this modification, then they may require lower payments in the capacity mechanism. However, any benefit from this could be offset by increased exports, which would increase the amount of capacity required to be procured under the mechanism. As we have no quantitative evidence as to how these effects would interact, we have assumed that they would be neutral when assessing the impact of the proposed change.

The Authority's decision

We have considered the information provided in the FMR by the industry workgroup, and the responses to our consultation. We have also taken into account the responses to the Code Administrator consultation¹⁸ on the modification proposal, which are attached to the FMR. We have concluded that while the Original proposal meets the relevant CUSC objectives, the benefits likely to accrue are marginal. Moreover, approving this modification would not be consistent with the Authority's principal objective.

We have therefore decided to reject this modification.

The reasons for our decision, assessed against the relevant CUSC objectives and our principal objective are set out below.

Reasons for our decision

Relevant objectives

The Relevant Objectives for changes to the Use of System charging methodology are set out in standard condition C5 of the Licence. These are:

- 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 decisions of the European Commission and/or the Agency.

Relevant Object (a): Facilitates effective Competition

We have assessed a number of factors when considering whether CMP201 better facilitates effective competition including the impact on the competition between generators and suppliers in GB as well as competition with European generators.

¹⁸ During the WG assessment a Workgroup consultation and Code Administrator consultation are carried out.

Factors affecting competition in GB

All GB generators and suppliers will continue to be treated the same under the proposal. Consequently, our assessment is that implementing the proposal will not have an impact on discrimination in either the supplier or generation market.

There will be a redistribution of costs from generators to suppliers under CMP201. However, as BSUoS is a pass through charge, the BSUoS cost will ultimately be paid for by consumers. The Original proposal is likely in our view to allow sufficient time for suppliers and generators to re-adjust their pricing structures to accommodate this change. We therefore consider that the distributional effects are unlikely to impact on competition. We do not have any evidence that an implementation period of longer than two years would change this assessment.

We noted in the IA that suppliers may face a higher risk from BSUoS volatility than generators. This is because generators may offset BSUoS charges against the constraint payments they receive from the SO. This may mean that generators mark up the BSUoS charge by a lower risk premium when passing this through to suppliers than suppliers would place on BSUoS when passing it through to customers. Increasing the level of BSUoS to suppliers would therefore have a net increase on costs to consumers. We asked respondents for more evidence on this. Suppliers who responded agreed that this effect would occur but generators who responded to the IA said that it may be more efficient for one party to manage the BSUoS risk as opposed to two parties. This would therefore reduce costs to consumers and lower the wholesale price. The respondents did not provide any evidence to support their views so we had no way to assess if any adjustment to risk premiums as a result of implementing CMP201 would increase or decrease costs to consumers.

The proposal could increase barriers to entry for suppliers if, as a result of increased BSUoS charges, they need to post increased credit¹⁹ with NGET. This would increase costs for suppliers, which would be passed on to consumers. It could also particularly affect smaller suppliers. But evidence presented in the FMR showed that this effect was not likely to be material, as NGET had identified only one company that may be required to increase its credit cover if CMP201 was implemented. This was not a small supplier. In addition, it was noted that if CMP201 were implemented within the proposed implementation period, any affected party would have sufficient time to arrange adequate credit cover. We did not receive any further evidence on this point in the consultation responses. We therefore do not consider that this is likely to impact on competition in the energy supply market or result in increased costs to consumers.

Overall, our view is that there would be no quantifiable impact on competition in GB either in the generation or supply market resulting from implementing CMP201.

Factors affecting EU competition

In principle, we agree that there could be a wholesale price distortion created by BSUoS which might impact on cross-border trade. Removing BSUoS from generators could therefore allow GB generators to compete on a more equal footing with European generators. However, we are still concerned that the benefits of this will not be realised in the long term and this has been strengthened with our revised view of the IA modelling. This suggests that the potential impact of implementing CMP201 is likely to

¹⁹ Generators and suppliers have to provide credit cover for one month of BSUoS charges.

be smaller than set out in the IA. While this means that increased exports are likely to give rise to much smaller increases in wholesale prices to consumers than forecast in the analysis presented in the IA, the likelihood of the benefits of more competition to reverse this effect in the long run is also smaller.

We are therefore of the view that while CMP201 would in principle better facilitate relevant objective (a) because it would be consistent with the position of EU generators, we do not consider that this positive effect is material.

Relevant Objective (b): Cost reflectivity

Our minded-to position in our IA was that we considered that the proposal is neutral against this objective. The proposed modification will have no impact on the cost reflectivity of the charging methodology. We note that all members of the workgroup developing the proposal also stated that it was neutral against this objective, and we remain of this view in our final decision.

Relevant Objective (c): Taking account of developments

We recognise that some CUSC panel members considered that the modification proposal better facilitated this objective while others considered it neutral. All of those who considered it better facilitated relevant objective (c) did so because it recognised the impact of the Third Energy Package on the GB market. They highlighted the proposal promoted the move to an internal European energy market through making GB BSUoS charging consistent with the approaches taken in other EU member states. We have considered this further below.

We remain of the view that this modification may, at best, only marginally better facilitate the development of the transmission businesses across Europe based on our assessment under objective (a) above.

Relevant Objective (d): Compliance with the Electricity Regulation

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. In our IA we consulted on the view that approving the proposal would not be consistent with the Authority's principal objective due to the impact it would have on consumer bills as compared to the status quo.

As explained above, we now consider that the potential increase in exports as a result of removing BSUoS from generators is likely to be less than previously thought. This means it is also likely to have less of an impact on consumers. But, as our revised assessment of the impact does suggest a small increase in exports, there is still a risk to consumers of an increase in costs, albeit small, at least in the near term.

Some of those who responded to the IA were of the view that because the modelling showed additional profits for generators from implementing this modification this would create greater competitive pressures, attract additional investment and lower wholesale prices, benefiting consumers in the long run.

We support the fundamental economic principle that increasing competition should lead to lower wholesale prices in the long run. However, in the IA we said that there were uncertainties in the European market that meant it was unclear whether approving this modification would in fact result in increased competition and bring about these benefits. Our revised assessment of the impact modelling confirms this view.

The potential increase in generators profits will now be smaller than shown in the IA. As new investment has a high fixed cost and cannot be added incrementally, there is no evidence that the potential for additional profits arising from the proposed change to BSUoS charges will be high enough to bring forward new investment to offset the additional costs to consumers arising from increased exports. In addition, changes in the current market such as the Contracts for Difference (CfD) regime and the Capacity Market are likely to dominate generators investment decisions. Any increase in generator profits arising from implementing this modification is unlikely to outweigh these factors.

We are therefore of the view that, under current market conditions, the potential for increased competition is not sufficiently great to deliver the long term benefits for consumers that would outweigh short run costs. There is a real risk that any potential costs to consumers will not be fully reversed in the long run. If price differentials result in greater exports in future, these effects might be greater than currently assessed. But, the impact of drivers of price differentials (such as tightening security of supply margins) are likely to be more fundamental in determining the flows of electricity between GB and other European markets than removing BSUoS from generators.

We have also considered whether there are any wider strategic and sustainability benefits that would result from the proposed change. We do not consider that this modification is likely to have an impact on security of supply. Similarly it is unlikely that this modification will impact on the reduction of greenhouse gas emissions.

We have therefore decided that 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 the requirements of applicable European law that the Authority must have regard to. We also note that the licence was updated in December 2013²⁰ to include a fourth relevant charging objective when considering changes to the CUSC (Objective (d)). This means we must comply with the Electricity Regulation and any relevant legally binding decisions of the European Commission and/or the Agency.

Some workgroup members and some respondents to our IA commented that as the proposal would level the playing field between GB generators and those in other EU member states it would enhance harmonisation towards the single European market. Respondents to our IA also said that our minded-to position failed to recognise our wider duties under the European Third Package and the benefit of the proposal to European consumers.

²⁰ <https://www.ofgem.gov.uk/publications-and-updates/decision-modify-gas-and-electricity-licence-conditions-following-implementation-third-package-and-other-house-keeping-changes>

We firmly support the move towards a single European market. However, the Electricity Regulation, part of the package of legislation that makes up the Third Package, does not require a harmonised approach to tariffs across member states. The current approach is also consistent with existing EU Directives on transmission charges and the recent Agency for the Cooperation of Energy Regulators (ACER) opinion on the level of charges to be borne by generators.²¹

We therefore consider that the modification is neutral in relation to relevant objective (d) and rejecting CMP201 would not be inconsistent with our duties under the Third Package.

Interaction with Balancing and Settlement Code Modification (P286)

Our IA discussed the interaction between this modification and the Residual Cashflow Reallocation Cashflow (RCRC) arrangements. These are the arrangements by which payments to and from parties in respect of their system imbalance payments are settled to a net zero position for the system as a whole²². Parties who pay BSUoS also are subject to the RCRC provisions. There was concern that if CMP201 was approved that there would be inconsistencies with RCRC as generators would no longer pay BSUoS. A modification to the Balancing and Settlement Code (BSC), P286, was raised by NGET to address these issues.

Our decision on the P286 modification has also been published today on our website²³.

Kersti Berge
Partner, Transmission

Signed on behalf of the Authority and authorised for that purpose

²¹http://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Opinions/Opinions/ACER%20Opinion%2009-2014.pdf

²² http://www.elexon.co.uk/wp-content/uploads/2013/11/rcrc_guidance_v3.0_cgi.pdf

²³ <https://www.ofgem.gov.uk/licences-codes-and-standards/codes/electricity-codes/balancing-and-settlement-code-bsc>