nationalgrid

Stage 06: Final CUSC Modification Report

Connection and Use of System Code (CUSC)

CMP202 Revised treatment of BSUoS charges for lead parties of Interconnector BM Units

This proposal seeks to modify the CUSC to remove BSUoS charges for Interconnector BM Units.

Date of Issue: 11 July 2012

What stage is this document at?

01 Initial Written
Assessment

02 Workgroup Consultation

03 Workgroup Report

04 Code Administrator Consultation

Final CUSC Modification Report



The Panel recommends:

that CMP202 should be implemented as it better facilitates the Applicable CUSC Objectives



High Impact:

Interconnectors



Medium Impact:

Suppliers and Generators



Low Impact:

Other CUSC Parties

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Any Questions?

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About this document

This document is the final CUSC Modification Report which contains details of the CUSC Modifications Panel vote. This document has been prepared and issued by National Grid under the rules and procedures specified in the CUSC. The purpose of this document is to assist the Authority in their decision whether to implement CMP202.

Document Control

Version	Date	Author	Change Reference
0.1	31 May 2012	Code	Version for Industry
		Administrator	Comment
0.2	18 June 2012	Code	Updated version for
		Administrator	Industry Comment
0.3	21 June 2012	Code	Version for Panel Vote
		Administrator	
0.4	3 July 2012	Code	Version for Panel
		Administrator	Comment
1.0	11 July 2012	Code	Final Version for
		Administrator	Submission to Authority



- 1.1 CMP202 seeks to remove BSUoS charges for Interconnector BM Units. This will remove potential barriers to cross border trade. It will also have the effect of further aligning GB arrangements with those prevalent in other EU member states and is consistent with EU objectives of facilitating cross-border access and developing a Europe-wide single market in electricity.
- 1.2 CMP202 was proposed by National Grid Electricity Transmission plc (NGET) and submitted to the CUSC Modifications Panel for their consideration on 8th December 2011. The Panel determined that the proposal should be considered by a Workgroup and that they should report back to the Panel within four months following a period of 15 business days for the Workgroup Consultation.
- 1.3 The Workgroup met on 10th January 2012 and the members accepted the Terms of Reference. A copy of the Terms of Reference is provided in Annex 1. The Workgroup considered the issues raised by the CUSC Modification Proposal and worked through the Terms of Reference.
- 1.4 This document outlines the discussions held by the Workgroup, the responses to the Workgroup Consultation and the Code Administrator Consultation and the nature of the CUSC changes that are proposed. Copies of all representations received in response to the Workgroup Consultation and Code Administrator Consultation are included as Annex 4 and Annex 5 respectively.
- 1.5 This CUSC Modifications Report has been prepared in accordance with the terms of the CUSC. An electronic copy can be found on the National Grid website at www.nationalgrid.com/uk/Electricity/Codes, along with the CUSC Modification Proposal form

What is BSUoS?

National Grid recovers the costs of balancing the system through BSUoS charges. BSUoS charges are paid for by all CUSC Parties, including Lead Parties for flows on Interconnector BM Units. The Statement of the Use of System Charging Methodology, now included as part of CUSC Section14. includes a detailed methodology for the calculation of daily BSUoS charges and information on the timing of the charges. The Statement of the BSUoS Charging Methodology can be found at the following link: CUSC Section 14

Workgroup Conclusion

1.6 The Workgroup voted by majority to support the implementation of CMP202. Full details of the Workgroup vote are contained within Section 7 of this document.

National Grid Opinion

1.7 As Proposer, National Grid supports the implementation of CMP202 on the basis that it better facilitates the Applicable CUSC Objectives in that it would promote more efficient trading across EU member states and that it properly reflects its duties in the development of National Grid's business by promoting a single internal market in electricity and facilitating greater cross-border trading.

CUSC Modifications Panel's Recommendation

1.8 The CUSC Modifications Panel voted unanimously that CMP202 better facilitates the Applicable CUSC Objectives. Full details of the vote can be found in Section 7 of this report.

2 Why Change?

- 2.1 Interconnectors are effectively treated within the EU Third Package as parts of a Member State's transmission system which both facilitates pan-European trade and provide national security of supply. In doing so, they support the European Union's objective of a ensuring a sustainable, secure supply of competitively priced energy for consumers and industry within the Community.
- 2.2 Within the GB regime the responsibility for the transmission system is divided between a number of licensed parties. Interconnector owners are licensed separately to both the main GB system operator functions and transmission asset owner roles. Interconnector Users have a direct commercial relationship with the Interconnector owner for access to and use of the interconnector, as well as a relationship with NGET for use of the GB transmission system. In October 2010 the Authority decided not to veto GB-ECM26, this removed Transmission Use of System Charges from Interconnector Owners.
- 2.3 The Transmission Licence allows NGET to recover revenue in respect of Balancing Services activity. National Grid does this through BSUoS charges. CUSC Parties liable for BSUoS are charged based on their energy taken from or supplied to the transmission system on a non locational MWh basis. Under the current GB arrangements, Interconnector Users are treated as if they are a Generator or Demand (depending on the contractual position in the BSC), and are charged BSUoS accordingly.
- 2.4 This has the effect of reducing the opportunity for trade across interconnectors and could therefore be considered inconsistent with the objectives of the European internal market. In particular, it creates a barrier to exports from the GB transmission system.
- 2.5 In this context, charging BSUoS to interconnectors leads to different treatment of trades that are internal to the GB market and those which are pan European. For example, a non-physical trader operating within the GB market does not pay BSUoS, however, a non physical trader operating between GB and other Member States is subject to BSUoS charges in the GB market. Efficient trading between GB and other Member States is therefore frustrated by the application of a BSUoS charge.
- 2.6 In summary, the current arrangements for BSUoS charging can therefore potentially lead to:
 - i) A restriction on interconnector flows, in particular on exports from GB and:
 - ii) A restriction to trade, in particular for non-physical parties.

3 Solution

3.1 CMP202 aims to address the issues raised in Section 2 by removing BSUoS charges for Interconnector BM Units. This will have the effect of further aligning GB arrangements with those in Europe, and so better promoting the objectives of the European Union through facilitating greater cross-border trading.

Presentation of Proposal

4.1 The National Grid Representative presented CMP202 to the Workgroup at the first meeting and gave the background to why it was raised. The Workgroup then worked though the scope of work as listed in the Terms of Reference.

The effect of BSUoS on inter-market operation.

- 4.2 BSUoS is the daily charge aimed at recovering the cost of operating the transmission system. It consists of fixed elements covering SO internal costs and Balancing Service contracts plus the variable elements of daily Ancillary Services, energy balancing and constraint management costs.
- 4.3 In other European Member States, it is commonly the case that their equivalent of BSUoS is charged almost exclusively to demand; Interconnector Users being liable solely for their energy imbalances in each market.
- 4.4 In the GB market, all CUSC parties are liable for BSUoS based on their energy taken from, or supplied to the transmission system. This has the effect of raising the GB market price of electricity by generation's share of the BSUoS charge. GB generation would therefore appear more expensive than their equivalent European counterparts. This is explained further below.
- 4.5 Currently, Interconnector Users are also charged BSUoS in the same manner as other GB Users. The price of imports to GB is therefore raised in a similar way as GB generation; the end consumer sees the same costs in GB market irrespective of its source (Figure 1).



What is an Interconnector?

An Interconnector is a link between two countries transmission systems for the transfer of electricity. In terms of GB charging arrangements, the current Interconnectors covered by CMP202 are the England-France Interconnector (IFA), the Britain-Netherlands Interconnector (BritNed) and the Ireland-Scotland Interconnector (Moyle), but will include also all future Interconnectors.

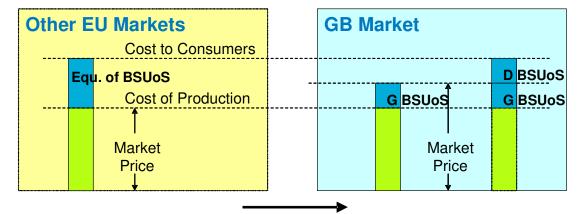


Figure 1: Current EU / GB BSUoS Arrangements – Imports

4.6 Under the current arrangements however, BSUoS charges create a potential barrier to GB exports. Generation BSUoS charges inherent in the GB market price, plus the demand BSUoS charges levied on the export, can potentially raise the GB price of exporting above that at which it would naturally flow if both markets were aligned (Figure 2).

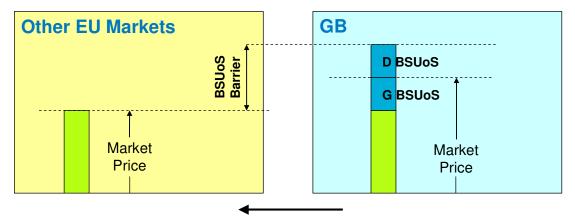


Figure 2: Impact of current BSUoS arrangements on GB exports.

4.7 Whilst removing BSUoS charges from Interconnectors Users would reduce the "BSUoS" barrier on exports, it does not totally remove it. The GB wholesale price would still retain the generation element of BSUoS and consequently may be artificially higher than that in EU Member States. As a result, there may still be occasions when exports to Europe are lost as a result of BSUoS charges on Generation (Figure 3).

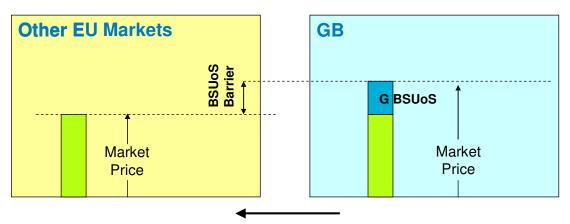


Figure 3: Impact of generator BSUoS "uplift" on GB exports

4.8 National Grid has raised a separate proposal CMP201 Removal of BSUoS Charges from Generation to address this wider competition issue.

Workgroup discussion on the issue raised

- 4.9 The Workgroup discussed potential negative consequences of the proposal. One Workgroup member expressed concern that there might be unidentified and unintended consequences of CMP202 in terms of long term contracts and trading across the Interconnector. The Workgroup considered what these consequences might be and how they may be dealt with. The Workgroup noted that there may be circumstances for possible windfall gains and/or losses but were not aware of, or able to identify any possible examples where this might occur. One of the responses to the Workgroup Consultation recognised a potential effect on the operational costs and imbalance risk for interconnector owners. Overall however, the group noted that there may be a potential increase in revenue and that the respondent supported the proposal despite this concern.
- 4.10 A consequence of the proposal identified by the Workgroup was that BSUoS charges would increase for remaining CUSC parties, all other factors remaining equal. However, it was also noted that the competitive benefits of

facilitating a wider market may reduce overall cost to end consumers, improve security of supply and facilitate wider trading opportunities for both generation and supply.

- 4.11 The Workgroup looked at historic BSUoS forecasts and outturn, Table 1 below. The forecast for prior years were based on previous BSUoS incentive scheme targets. National Grid advised that there was no explicit BSUoS forecast for 2011-12 as it is a two year scheme running to 2013 with a variable target calculated using a methodology and a number of factors based on actual data after the event, the target forecast will therefore change as the scheme progresses.
- 4.12 One Workgroup member questioned whether the SO Incentives Scheme needs to be taken into consideration in terms of the 2% increase. The 2% increase relates to recovering the same total charge from a smaller charging base i.e. generation and demand excluding Interconnector Users. It was noted that the total BSUoS charge would remain unchanged, and so it would not impact on SO Incentive payments.
- 4.13 The Workgroup agreed that the impact of the proposal on BSUoS price was stable across years and minor compared to the overall variability of BSUoS. By looking at historic interconnectors volumes and resulting BSUoS contributions National Grid presented an estimate of removing BSUoS from Interconnectors on other CUSC parties. This is shown below and suggests an impact which is consistently around 2.1%. Note this takes no account of potential benefits that may arise on wholesale prices as a result of more trading opportunities and thus the costs ultimately passed on to end consumers

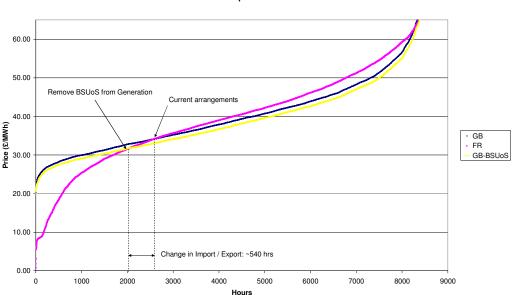
		Outtu £m		Incentive	Interconnector	Forecast	Effect on
Financial year				Element £m	Contribution ~£m	variance	BSUoS Price
2007-08	530	685		0.2	14.2	29%	2.0%
2008-09	831	1001	1005	-16.6	22.7	21%	2.1%
2009-10	1007	795	790	14.5	16.9	-22%	2.0%
2010-11	921	708	705	12.1	15.3	-23%	2.0%
2011-12	variable	689		-1.3	15.7		2.2%

Notes: Data for 2011-12 up to 7-Jan-2012 **Table 1 Historic BSUoS figures**

4.14 This table also shows the variance of forecast BSUoS against the outturn cost, and also the incentive element of BSUoS. This allows the forecast error to be compared against effect of removing the BSUoS for Interconnectors.

Trading opportunities

- 4.15 The Workgroup discussed Spot Price Duration¹ graph below. Using this as a proxy for the wholesale merit order this was presented to show the potential for increased opportunity for trading by comparing the market price with and without BSUoS. Where the market prices diverge this would result in either an import or export across the interconnector.
- 4.16 It was postulated by the Workgroup that this could provide an indication of the benefit that is derived from removing the charge on Interconnectors. One Workgroup member noted that the recent removal of TNUoS from interconnectors would have had the same effect.



Price Duration
GB & Fr Spot Market Prices

- 4.17 The Workgroup acknowledged that removing BSUoS would change when flows on the interconnector would occur, however they were concerned that this only highlighted the change in one direction. National Grid agreed to review this and produce further analysis seeking to combine both import and export effects.
- 4.18 That analysis, based on historic price information, indicated that implementing this proposal should result in better utilisation of the interconnectors. Given that other factors, such as market liquidity, can affect trade across the interconnectors, the analysis concluded that BSUoS was a factor affecting approximately 20% of potentially beneficial trades in either direction. A fuller description of the analysis in provided in Annex 8.

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¹ The wholesale prices from both the GB and France markets converted to a cost of production slope across a year

4.19 National Grid highlighted information presented by APX/ENDEX that suggested the potential restriction to flows. This is shown below in figure 4²:

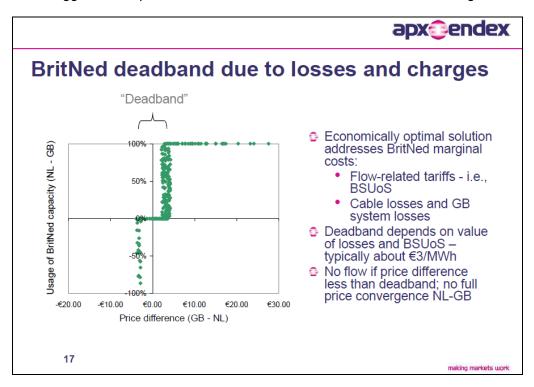


Figure 4 Impact of BSUoS and losses on interconnector trade

4.20 Export and import figures were discussed in terms of their potential impact on the GB market. Table 2 below shows Exports and Imports as a proportion of GB demand and estimates the impact on BSUoS on remaining participants arising from the removal of interconnectors from the charging base from which BSUoS is recovered.

FinYear	Total Demand TWh	Total Exports TWh	Total Imports TWh
FY2007-2008	348.5	4.3	9.6
FY2008-2009	340.5	2.6	11.6
FY2009-2010	333.3	7.0	6.4
FY2010-2011	331.2	5.1	8.3
FY2011-2012*	243.6	2.7	7.8
FinYear	Total Exports % Demand	Total Imports % Demand	Effect on BSUoS
	70 Boilidia	70 Demand	D3003
FY2007-2008	1.2%	2.8%	2.0%
FY2007-2008 FY2008-2009			
	1.2%	2.8%	2.0%
FY2008-2009	1.2% 0.8%	2.8% 3.4%	2.0% 2.1%

Table 2: Interconnector Flows (loss adjusted). Data as of 16-Jan-12.

² From All Island Project website: Slides from Workshop on Emerging Electricity Target Models Presentation: Andrew Claxton -Business Services Director APX-ENDEX http://www.allislandproject.org/GetAttachment.aspx?id=5d08e1ca-45a6-4e1a-b0ff-bbaafcdcb807

- 4.21 The impact on BSUoS was calculated by looking at the change in the charging base i.e. those liable for BSUoS charges. Under existing arrangements, the charging base consists of:
 - 1) GB Generation (GB Demand *less* demand met by net interconnector imports, net imports being Total imports *less* Total exports);
 - 2) GB Demand (less net export);
 - 3) Interconnector Imports;
 - 4) Interconnector Exports.
- 4.22 Under this proposal, Interconnector Import and Export volumes would be excluded; the new charging base being GB Generation and GB Demand only. The effect on BSUoS charges is then derived from the ratio of the original and new charging base

Consider the Impact on End Consumers

- 4.23 It was not immediately clear that there would be an impact on end Consumers. Some workgroup members thought that the reallocation of BSUoS charges to generation and suppliers would filter through into their prices and ultimately to end consumers. One Workgroup member thought the increase in price is significant; the rest of the Workgroup noted this point, but agreed that a potential increase is outweighed by the likely benefits. Members noted that other factors such as greater competition and access to other EU markets may also lead to lower prices. The proposer noted the issue had been raised as one of restricted competition.
- 4.24 For example, assume two markets, A and B. Both are open competitive markets (as opposed to closed systems) i.e. export and import between both markets is possible as long as trades are economic. If a reduction in supply or an increase in demand occurs in Market B, all else remaining equal, the price of the commodity in Market B should rise. Assuming that the supply and demand fundamentals remain constant in Market A we would expect to see the commodity from Market A to be exported to Market B. The price in Market B would be expected to fall while the price in Market A would be expected to rise as a result of facilitating trade.
- 4.25 Assuming there are no barriers to trade (tax, logistical etc.) the prices between both market should reach equilibrium i.e. the price will be equal in both markets. The ability of the markets to fully converge (reach a common equilibrium) would be dependant on the availability of interconnector capacity.
- 4.26 The same effect would occur if the initial supply and demand fluctuation occurred in Market A whereby supply increases or demand falls. Prices will react in the opposite direction if the initial supply and demand fluctuation conditions are reversed in Markets A and B i.e. supply falls or demand rises in Market A and supply increases or demand decreases in Market B.
- 4.27 The proposer suggested that restricting competition to reduce prices in an exporting zone would be inefficient in the long term and also inconsistent with the GB and EU objectives of facilitating effective competition and removing barriers to cross border trade.

Consider the Impact on Competition

- 4.28 The Workgroup generally agreed that there would be an impact and discussed the affected parties individually. Some members of the Workgroup felt that there would be a bigger impact on suppliers. However other members understood that it would be a symmetric impact as the increase in BSUoS on remaining CUSC parties would be equal for both generation and suppliers. It was suggested that the generation increase would be passed through to suppliers, doubling the impact on suppliers who may not be able to pass these costs on to end consumers.
- 4.29 The ability of generation to pass through these costs would be subject to contractual arrangements between generation and suppliers and where these had been hedged generation might not be able to pass through the costs. In the longer term, outside the hedged period, it could be expected that generation will pass these cost on to suppliers, who will in turn seek to pass them on to end consumers. Therefore suppliers were potentially more at risk assuming differing (shorter) contractual durations between generation & supplier compared with supplier & end consumer.
- 4.30 It was agreed that there may be more of an impact for smaller parties, particularly smaller suppliers, as they may be least able to manage the increase compared to larger parties. It was also suggested that there could be a beneficial impact for new entrance suppliers wishing to enter the market as they would not have to deal with the transition / implementation effect. It was suggested that a new entrant's commercial arrangements would include any impact from this proposal, thus avoiding any issues relating to absorbing or passing potential increase through in their prices. Not all Workgroup members agreed with this interpretation or that if it did exist that it was an appropriate benefit.
- 4.31 One Workgroup member noted that generators compete with interconnector imports to the GB market. The Workgroup noted that given GB generation is subject to BSUoS charges, they were potentially competing with continental generation that may not be subject to an equivalent charge. This raises the prospect of inefficient competitive outcomes. It was noted however, that by removing BSUoS from interconnector trades, this should also provide GB generation with greater opportunities for exports, although some market distortion would remain.
- 4.32 In relation to interconnectors, the Workgroup agreed that CMP202 should encourage more investment. Removing BSUoS should increase the opportunities for potentially beneficial trading and thus improve the business case form new investments.
- 4.33 With regard to non-physical traders, it was felt that the impact on competition would be beneficial as simpler market arrangements would encourage more businesses to consider trading between GB / European markets. It was also suggested that the actual volume of trades would increase as BSUoS effectively placed a 'wedge' where no trades would take place under implicit trading arrangements.

Examine the Impact of implementation on all relevant parties

4.34 The Workgroup first considered the impact of implementation on suppliers. One Workgroup member felt that it would be practical for CMP202 to be implemented around one of the main contract rounds which occur on 1st April and 1st October each year. However it was noted that prior notice to these dates would be beneficial allowing the costs to be more efficiently

- contractually managed. One Workgroup member advised that they considered the 1st April 2013 was the earliest that CMP202 could be implemented.
- 4.35 However, after further discussion, the majority of the Workgroup agreed that given the relatively low materiality of the proposal when compared to the overall BSUoS variability, then CMP202 could be implemented in line with the standard timescales i.e. 10 days after approval.
- 4.36 The Workgroup noted that generators would face similar issues with regard to implementation as those recognised for suppliers.
- 4.37 With regard to interconnectors, it was highlighted that there may be an impact on their scheduling algorithms where these take a forecast of BSUoS costs into account.
- 4.38 The Workgroup considered if any changes would be required to computer systems which may impact timescales for implementation. The Workgroup noted that changes to forecasting may result in User system changes but that this is unlikely to be a major change. Changes required to the National Grid IS systems are currently being progressed and no issues are envisaged with regard to timescales or technical problems, however, these changes have not yet been completed.
- 4.39 One member of the Workgroup suggested that it would be useful for Ofgem to perhaps carry out a post-implementation review in order to demonstrate any effects or if there have been any changes in the flows and in the volumes. At the meeting on 15th March 2012, the group recommended that a post-implementation review should take place 18 months after implementation.

Consider Interaction with Trading Unit Operation

- 4.40 A Trading Unit can be one or more Balancing Mechanism (BM) Units. By default a Trading Unit is a single BM Unit, called a Sole Trading Unit. Being a Trading Unit allows all the BM Units to be treated the same for BSUoS charges.
- 4.41 It was noted in the Workgroup that BSUoS is charged for importing and exporting interconnector BM units and that under the current arrangements, they could form a Trading Unit and thus reduce their BSUoS exposure. Under CMP202 proposal, there would no longer be an incentive for Interconnector traders to form Trading Units. It was noted that there are no interconnector Trading Unit at present.

4.42 The Workgroup compiled a list of pros and cons against each party to show how each issue might be quantified:

Party	Pro	How to Quantify	Con / Issue	How to Quantify
Interconnector Owner / Trader	Greater opportunities for beneficial trade. Better case for more	Review of historic prices & dead-band		
	interconnector investment due to increased trade			
	May encourage more interconnector trading parities			
	Reduced incentive to form Trading Units, however no I/C users currently in Trading Unit.			
Supplier	Potential for greater import of 'lower cost' power i.e. potential to lower supplier cost base		Small Increase in BSUoS. Minor impact on contracts Potential for greater export of GB power – GB suppliers have to compete increasingly with EU demand (increased competition could be considered a pro)	Interconnector contribution to BSUoS Retail Market Review data
Generator	Greater access to EU market/better able to compete with continental generators but potential for increased distortion in the GB market if CMP201 is not		Small Increase in BSUoS Minor impact on contracts: Need for 3 months notice prior to Oct 2012? Potentially subject to 'below cost' imports —	AS per supplier
	implemented alongside CMP202		'inefficient' competition undercuts GB generation as a result of GB generation still being exposed to BSUoS	

Party	Pro	How to Quantify	Con / Issue	How to Quantify
End Consumers	Potential reduction in BSUoS due to reduction in cost of providing SO service (eg Reserve) over interconnector. More trade / greater competition across interconnector potentially leading to lower prices (although cross border trade is not optimised)	Consider if market interaction can be modelled.	Small increase in BSUoS Exports from GB may increase leading to high wholesale prices. Generators share of BSUoS reflected within GB market price may encourage imports	Examination of % time current day-ahead and spot market prices are within BSUoS deadband.

Workgroup Alternative CUSC Modifications

4.43 No Workgroup Alternatives were raised for CMP202.

5 Impacts and Costs

Impact on the CUSC

- 5.1 CMP202 requires amendments to the following parts of the CUSC:
 - Section 14 Charging Methodologies, Part 2 The Statement of the Use of System Charging Methodology, Section 2 The Statement of the Balancing Services Use of System Charging Methodology.
- 5.2 The text required to give effect to the Proposal is contained in Annex 7 of this document.

Impact on Greenhouse Gas Emissions

5.3 Neither the proposer nor the Workgroup identified any material impact on Greenhouse Gas emissions.

Impact on Core Industry Documents

- 5.4 The Workgroup considered that parties generally considered that there was a linkage between BSUoS and the cashout arrangements in the BSC. This manifests itself when NGET takes an energy balancing action and recovers the net cost through BSUoS. The energy imbalance that led to the NGET action would result in a revenue in the Residual Cashflow Reallocation Cashflow (RCRC). RCRC is 'cashed out' to the lead parties of BMUs based on their metered volumes. This redistribution was understood to have the effect of reinforcing the incentive for an individual to balance. It was also noted that BSUoS covered many more costs beyond energy balancing and that currently it is generally a payment (i.e. RCRC is negative).
- 5.5 The Workgroup also noted that whilst BSUoS would be removed from Interconnectors under CMP202 they would still be exposed to RCRC. A number of members were concerned that this interaction was significant and therefore the RCRC exposure issue need to be addressed in parallel with CMP202. Other members of the Workgroup expressed the view that RCRC was a relatively small effect and a GB balancing signal issue and so therefore could be addressed separately.
- 5.6 The Workgroup also noted that Ofgem recently consulted on the BSC cashout arrangements. The majority of the Workgroup believed that any consequential changes as a result of CMP202 could be addressed through the Ofgem review.
- 5.7 At the post-consultation meeting on 15th March 2012, there was a strong feeling that RCRC and BSUoS are inter-linked and that there is an impact, but that it is not within the scope of CMP202 to address. The majority of the group agreed that CMP202 should continue and for the issue with RCRC to be considered separately.

Impact on other Industry Documents

5.8 Neither the proposer nor the Workgroup identified any impacts on other Industry Documents.

Costs

Code administration costs			
Resource costs	£8,168 - 3 Workgroup meetings £203 - Catering		
Total Code Administrator costs	£8,370		

Industry costs (Standa	Industry costs (Standard CMP)				
Resource costs	 £27, 225 - 3 Workgroup meetings £18, 150 - 2 Consultations 3 Workgroup meetings 10 Workgroup members 1.5 man days effort per meeting 1.5 man days effort per consultation response 10 consultation respondents 				
Total Industry Costs	£45,375				

6 Proposed Implementation

- 6.1 The Workgroup concluded by majority that that CMP202 should be implemented 10 Working Days after an Authority Decision.
- 6.2 9 of the respondents to the Workgroup Consultation agreed with this approach.
- 6.3 National Grid has undertaken an impact assessment on changes required to its BSUoS charging systems as a consequence of this proposal. That assessment indicates the cost will be under £20k (ex vat) with the required changes being ready for implementation mid September 2012.

Workgroup Conclusion

- 7.1 On 15th March 2012 the Workgroup voted by a majority of 7 to 1 that CMP202 better facilitates the Applicable CUSC Objectives than the baseline and so should be implemented.
- 7.2 For reference the CUSC Objectives for the Use of System Charging Methodology 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.

National Grid View

7.3 National Grid considers that CMP202 would better facilitate Applicable CUSC Objectives (a) in that it would promote more efficient trading across EU member states and remove any perverse incentive for limited or inefficient trades that arise from attempts to manage BSUoS exposure and (c) in that it properly reflects its duties in the development of National Grid's business by promoting a single internal market in electricity and facilitating greater cross-border trading.

Does CMP202 better facilitate the Applicable CUSC Objectives than the CUSC baseline?

Member	(a)	(b)	(c)
Garth Graham	Marginally yes as it	Neutral	Yes
	promotes more		
	efficient trading		
Michael Dodd	Yes it is better than	Neutral	Yes
	the baseline		
Iain Pielage	Yes as it removes a	Neutral	Yes as it encourages
	perverse incentive to		cross-border trading
	trade in the wrong		
	direction		
Helen Inwood	Yes it will improve	Neutral	Neutral
	competition with		

	generators		
Paul Mott	Yes as it will remove the barrier to flow	Neutral	Yes as it facilitates cross-border trading
Sarah Owen	Neutral	Neutral	Neutral
Cem Suleyman	Neutral	Neutral	Yes
Rob Hill	Neutral	Neutral	Yes

Which option BEST facilitates achievement of the ACOs?

CUSC Baseline CMP202

Member	BEST Option
Garth Graham	CMP202
Michael Dodd	CMP202
lain Pielage	CMP202
Helen Inwood	CMP202
Paul Mott	CMP202
Sarah Owen	Baseline
Cem Suleyman	CMP202
Rob Hill	CMP202

- 7.4 The Workgroup also noted the new Relevant Objective that had come into force in November 2011 as part of the Statutory Instrument on The Electricity and Gas (Internal Markets) Regulations 2011. The Workgroup acknowledged that this Objective had been omitted from the Charging Objectives and therefore it was agreed that the Workgroup should consider this Objective as part of their vote. The new Applicable CUSC Objective is as follows:
 - "(c) compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency".
- 7.5 The Workgroup voted unanimously that CMP202 would meet a like-for-like Applicable CUSC Objective (c).

CUSC Modifications Panel Recommendation

- 7.6 At the meeting of the CUSC Modifications Panel on 29 June 2012, the Panel voted unanimously that CMP202 better facilitates Applicable Objective (c) and were neutral on (b). On Applicable Objective (a), four Panel members voted that they were neutral, and four voted that CMP202 better facilitates Objective (a). Overall, the panel unanimously agreed that CMP202 better facilitates the Applicable CUSC Objectives.
- 7.7 The table below shows a breakdown of Panel members voting on whether each proposal better facilitates the Applicable CUSC Objectives and the rationale for such votes.

Panel Member	Better facilitates ACO (a)	Better facilitates ACO (b)?	Better facilitates ACO (c)?	Overall (Y/N)
Paul Jones	As a standalone proposal, it is broadly neutral.	Neutral.	Marginal yes, it takes into account the wider European context.	Yes.
Garth Graham	Yes, marginal benefit related to cross border trading.	Neutral.	Yes, strongest argument.	Yes.
Patrick Hynes	Yes, it ensures resolution of trading on Interconnectors is more likely to be in the correct direction.	Neutral.	Yes, it encourages cross border trading. Noted CUSC specific objectives include new European Objective which should have been applied to the charging proposals.	Yes.
Barbara Vest	Yes, as above.	Neutral.	Yes, as above.	Yes.
Duncan Carter	Neutral, moving away from the status quo involves a number of risks in terms of winners and losers and parties may not be able to mitigate risks. Unclear if it is positive or negative in terms of competition.	Neutral.	Yes, there is a move towards EU context.	Yes.
Simon Lord	Neutral.	Neutral.	Yes, it meets the European Objectives.	Yes.
Bob Brown	Neutral.	Neutral.	Yes, it meets the European Objectives, although these are not mandatory.	Yes.
Paul Mott	Yes, it slightly better facilitates Objective (a) as there is no deadband so small price differentials can facilitate flows on interconnectors.	Neutral.	Yes, it promotes a single internal market.	Yes.

8 Workgroup Consultation Responses

8.1 10 responses were received to the Workgroup Consultation. These responses are contained with Annex 4 of this report. The following table provides an overview of the representations received:

Company	Initial Views	Views against ACOs	Implementation	Other Comments
BritNed	Supportive. Removal of BSUoS would reduce 'deadband' leading to increased imbalance liability.	Agree with Proposer's view.	Supportive of approach.	Supportive of Ofgem post-implementation review.
Drax	Agree with defect. Removing BSUoS would mean generators remain at competitive disadvantage compared to Europe due to 'G' element of charges. Solution in CMP201 will remedy the distortion.	Neutral on (a), yes on (c).	Supportive of approach. Would be beneficial to implement CMP202 and 201 simultaneously.	
EDF Trading	Agree with deliberations captured in report.	Yes on (a).	Support 10 day approach.	
EDF Energy	Supportive.	Marginal on (a), yes on (c).	Support 10 day approach. No need for special arrangements ie. phasing.	No alternative needed.
EON	Supportive.	Agree with Proposer's view.	Support 10 day approach.	
Scottish Power	Supportive as long as implemented in conjunction with CMP201.	Yes on (a) and neutral and (b) and (c).	Support 10 day approach.	Any windfall gains or losses will be short-lived and difficult to determine.
Centrica	Not supportive. Will lead to higher prices for end consumers and suppliers may be unable to pass on their increases. Also introduces a disconnect between industry players who are subject to RCRC and BSUoS charges.	Neutral on (a).	Concern that with 10 day implementation, suppliers cannot pass their increased costs onto consumers.	Increase in power costs for end users and increase in power exports to GB resulting in increase in GB power prices. Also Generators may not be

				able to pass on costs.
APX- ENDEX	Strongly support removal of BSUoS for Interconnectors – will result in increase in usage of day-ahead cross border capacity.	Agree with Proposer's wording in report.	Fully support approach.	
SSE	Support, as long as implemented in conjunction with CMP201. Without CMP201, GB trading parties will be at a disadvantage.	Neutral on (a) in line with 7.2 of the report (addressed by implementing CMP201). Neutral on (b). Marginal yes on (c) but would be addressed by CMP201.	Agree with 10 day approach.	
NPower	Supportive but concern that raising price for non-interconnector BM units.	Yes on (a).	Support 10 day approach.	

9 Code Administrator Consultation Responses

9.1 10 responses were received to the Code Administrator Consultation including 1 late response. The majority were supportive of CMP202 and the table below provides an overview of the representations received. Copies of the responses are contained within Annex 5 of this report.

Company	Views against ACOs	Implementation	Other Comments
BritNed	Better facilitate all the ACOs.	Support approach.	A post-implementation review by Ofgem should be carried out as soon as possible.
Centrica	Neutral.	Do not support.	
Drax	Better facilitates (c), neutral against (a). Would better facilitate (a) If implemented in conjunction with CMP201.	Yes, but would be better if CMP201 implemented as well.	
E.ON	Yes, but should be implemented alongside CMP201.	Appropriate, but until CMP201 is implemented, it could see GB generation still subject to BSUoS at an unfair disadvantage,	
EDF Energy	Marginally better facilitate ACO (a) and substantially better facilitate ACO (c)	A rapid implementation is desirable.	
Endesa Ireland	Support.	Support 10 day approach.	
ESBI	Support.	Support 10 day approach.	CMP202 should be introduced alongside CMP201.
Mutual Energy	Better facilitates the ACOs.	Seems appropriate.	Welcome efforts to align GB trading arrangements.
Scottish Power	Yes, but should be implemented alongside CMP201. Neutral against (b).	Support 10 day approach.	
SSE	Better facilitates (a) and (c), neutral against (b).	Support 10 day approach.	

TERMS OF REFERENCE FOR CMP 202 WORKGROUP

Responsibilities

The Workgroup is responsible for assisting the CUSC Modifications Panel in the evaluation of CUSC Modification Proposal CMP202 'Revised treatment of BSUoS charges for lead parties of Interconnector BM Units' tabled by National Grid at the CUSC Modifications Panel meeting on 16 December 2011.

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

- 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.

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

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.

In addition to the overriding requirement of paragraph 4, the Workgroup shall consider and report on the following specific issues:

- a) Review the illustrative legal text
- b) Consider the impact on end consumers
- c) Consider the impact on competition
- d) Examine the impact of implementation on all relevant parties
- e) Consider interaction with Trading Unit operation
- f) The Workgroup is also requested by the Panel to consider if the mechanism for charging BSUoS to remaining parties continues to be beneficial and whether the CUSC Modifications Panel may wish to initiate further work outside the Workgroup on this subject.

The Workgroup is responsible for the formulation and evaluation of any Workgroup Alternative CUSC Modifications (WACMs) arising from Workgroup 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.

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 Workgroup 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.

Workgroup members should be mindful of efficiency and propose the fewest number of WACMs possible.

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.

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 three weeks as determined by the Modifications Panel.

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.

The Workgroup is to submit its final report to the Modifications Panel Secretary on 19 April 2012 for circulation to Panel Members. The final report conclusions will be presented to the CUSC Modifications Panel meeting on 27 April 2012.

Membership

It is recommended that the Workgroup has the following members:

Role	Name	Representing
Chairman	Patrick Hynes	Code Administrator
National Grid	lain Pielage	National Grid
Representative*		
Industry	Paul Mott	EDF Energy
Representatives*		
	Garth Graham	SSE
	James Anderson	Scottish Power
	Esther Sutton	EON
	Cem Suleyman	Drax
	Simon Lord	International Power
	Michael Dodd	ESBI
	Helen Inwood	NPower
	Rob Hill	Conoco Philips
	Sarah Owen	Centrica
Observer	David Kemp	ELEXON
Authority Representative	Matthew Grant	
Technical secretary	Emma Clark	Code Administrator

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

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 CMP202 is that at least 5 Workgroup members must participate in a meeting for quorum to be met.

A vote is to take place by all eligible Workgroup members on the Modification Proposal and each WACM. The vote shall be decided by simple majority of those present at the meeting at which the vote takes place (whether in person or by teleconference). The Workgroup chairman shall not have a vote, casting or otherwise]. There may be up to three rounds of voting, as follows:

- Vote 1: whether each proposal better facilitates the Applicable CUSC Objectives;
- Vote 2: where one or more WACMs exist, whether each WACM better facilitates the Applicable CUSC Objectives than the original Modification Proposal;

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

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

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.

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.

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.

The Workgroup membership can be amended from time to time by the CUSC Modifications Panel.

CUSC Modification Proposal Form (for Charging Methodology proposals)

CMP202

Title of the CUSC Modification Proposal: (mandatory by proposer)

Revised treatment of BSUoS charges for lead parties of Interconnector BM Units

Submission Date (mandatory by Proposer)

8th December 2011

Description of the CUSC Modification Proposal: (mandatory by proposer)

This proposal aims to further the European Commission's objectives of facilitating cross-border access and developing a Europe-wide single internal market in electricity.

Interconnectors are, in effect, treated within the EU Third Package as extensions to a Member State's transmission system which facilitate pan-European trade essential to supporting a single Europe-wide market in electricity. In the current GB arrangements, Interconnector flows are treated as if they were a Generator or Demand, which is inconsistent with arrangements across Europe.

The Transmission Licence allows NGET to recover revenue in respect of the Balancing Services Activity, including the operation of the transmission system, through Balancing Services Use of System (BSUoS) charges. Liable CUSC parties pay BSUoS charges, based on their energy taken from, or supplied to the transmission system on a non locational MWh basis. BSUoS charges are paid for by all CUSC parties, including Lead Parties for flows on Interconnectors BM Units. This has the effect of reducing the number of occasions where potentially beneficial trades could have taken place and therefore potentially conflicts with the EU objectives. In particular, it creates a barrier to exports from the GB transmission system across Interconnectors.

In addition, the application of BSUoS to cross-border flows creates a differential between those trades that facilitate competition within a national market and pan European trades that facilitate competition across a single European electricity market. A non physical trader operating within the GB market does not pay BSUoS. However, trades between GB and other Member States, which in the context of a single European market can also be considered as non-physical, are subject to BSUoS charges when they result in flows to / from GB. Efficient trading between GB and other Member States is therefore frustrated by the application of a BSUoS charge.

This proposal aims to address these issues by removing BSUoS charges for Interconnector BM Units, and, in doing so, further align GB arrangements with EU objectives and facilitates greater use of Interconnectors, and encourages further cross-border trading.

Description of Issue or Defect that the CUSC Modification Proposal seeks to Address: *(mandatory by proposer)*

The current arrangements for BSUoS charging can potentially lead to:

- o A restriction on Interconnector flows, in particular on exports from GB
- o A restriction to trade, in particular, for non physical parties

This is potentially inconsistent with the objectives of the EU Third package.			
Impact on the CUSC: (this should be given where possible)			
Revision to Section 14 – Charging Methodologies, Part 2 – The Statement of the Use of System			
Charging Methodology, Section 2 – The Statement of the Balancing Services Use of System			
Charging Methodology			
Main Sections affected are 14.29 and 14.30			
Do you believe the CUSC Modification Proposal will have a material impact on Greenhouse			
Gas Emissions? Yes/No (assessed in accordance with Authority Guidance – see guidance notes			
for website link)			
Impact on Core Industry Documentation. Please tick the relevant boxes and provide any supporting information: (this should be given where possible)			
BSC 🖂			
Grid Code			
STC			
Other			
(please specify)			
Wider implications on BSC cash-flows may need to be explored. Urgency Recommended: Yes / No (optional by Proposer)			
Justification for Urgency Recommendation (mandatory by Proposer if recommending progression as an Urgent Modification Proposal)			

Self-Governance Recommended: Yes / No (mandatory by Proposer)					
Jus	tifica	ation for Self-Governance Recommendation (mandatory by Proposer if			
reco	mm	ending progression as Self-governance Modification Proposal)			
<u> </u>					
		this CUSC Modification Proposal be considered exempt from any ongoing ant Code Reviews? (mandatory by Proposer in order to assist the Panel in			
_		whether a Modification Proposal should undergo a SCR Suitability Assessment)			
		this proposal seeks to make revisions to the BSUoS Methodology only, it has no			
		on with the ongoing TNUoS SCR.			
		on Computer Systems and Processes used by CUSC Parties: (this should be			
give	n wl	here possible)			
Mino	r Im	pact on National Grid Electricity Transmission's BSUoS charging system.			
Main	ıly de	epending on the consideration of BSC cash flow implications, on BSC and User systems.			
Poss	sibly	also on how Interconnector volumes are notified and treated			
Deta	ails	of any Related Modifications to Other Industry Codes (including related CUSC			
Mod	lifica	ation Proposals): (where known)			
Justi	ficati	ion for CUSC Modification Proposal with reference to Applicable CUSC Objectives:			
		ory by proposer)			
DI		ale the male count have a send a social a local Counting for each of the Observing Mathedalastics			
affec		ck the relevant boxes and provide justification for each of the Charging Methodologies			
anec	ieu.				
Use	of Sy	ystem Charging Methodology			
\boxtimes	(a)	that compliance with the use of system charging methodology facilitates effective			
	(α)	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;			
		tacinates of the control of the cont			
	4				
	(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);			
_					
\boxtimes	(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			

Full justification:

National Grid believes that this proposal better facilitates effective competition through promoting more efficient trading across EU Member States. It will also remove any perverse incentive for limited trade or inefficient trades that arise from attempts to manage BSUoS exposure.

In that an objective of EU legislation is to promote a single internal market in electricity and facilitate greater cross-border trading, National Grid believes that this proposal properly reflects its duties in the development of its transmission business.

Details of Proposer:	National Grid Electricity Transmission Ltd.
(Organisation's Name)	Transmission Eta.
Capacity in which the CUSC	
Modification Proposal is being proposed:	CUSC Party
(i.e. CUSC Party, BSC Party,	COSC Faity
"National Consumer Council" or	
Materially Affected Party)	
Details of Proposer's	Iain Pielage
Representative:	National Crid Floatricity Transmission Ltd
Name:	National Grid Electricity Transmission Ltd
Organisation:	01926 656360
Telephone Number:	lain.Pielage@uk.ngrid.com
Email Address:	lam.r lelage@uk.ngnd.com
Details of Representative's	
Alternate:	Andy Wainwright
Name:	National Grid Electricity Transmission Ltd
Organisation:	01926 655944
Telephone Number:	Andy.Wainwright@uk.ngrid.com
Email Address:	
Attachments (Yes /No):	

If Yes, Title and No. of pages of each Attachment:

Annex 3 - Workgroup Attendance Register

Name	Organisation	Role	Meeting 1	Meeting 2	Meeting 3
Patrick Hynes	National Grid	Chairman	Yes	Yes	Yes
Emma Clark	National Grid	Technical Secretary	Yes	Yes	Yes
Iain Pielage	National Grid	Workgroup Member	Yes	Yes	Yes
Heather Carter	National Grid	Observer	Yes	Yes	Yes
David Kemp	ELEXON	Observer	Yes	Yes	No
Matthew Grant	Ofgem	Authority Representative	Yes	Yes	Yes
Evridiki Kaliakatsou	Ofgem	Observer	No	Yes	Yes
James Anderson	Scottish Power	Workgroup Member	Yes	Yes	No
Sarah Owen	Centrica	Workgroup Member	Yes	Yes	Yes
Esther Sutton	E.ON UK	Workgroup Member	Yes	Yes	No
Cem Suleyman	Drax	Workgroup Member	Yes	Yes	Yes
Rob Hill	Conoco Philips	Workgroup Member	Yes	Yes	Yes
Paul Mott	EDF	Workgroup Member	Yes	Yes	Yes
Helen Inwood	NPower	Workgroup Member	Yes	Yes	Yes
Garth Graham	SSE	Workgroup Member	No	Yes	Yes
Michael Dodd	ESBI	Workgroup Member	No	Yes	Yes

Annex 4 – Workgroup Consultation Responses

CMP202 – Revised treatment of BSUoS charges for lead parties of Interconnector BM Units

Industry parties are invited to respond to this consultation expressing their views and supplying the rationale for those views, particularly in respect of any specific questions detailed below.

Please send your responses by **8 March 2012** to cusc.team@uk.ngrid.com. Please note that any responses received after the deadline or sent to a different email address may not receive due consideration by the Workgroup

These responses will be considered by the Workgroup at their next meeting at which members will also consider any Workgroup Consultation Alternative Requests. Where appropriate, the Workgroup will record your response and its consideration of it within the final Workgroup report which is submitted to the CUSC Modifications Panel.

Respondent:	Jethro van Hardeveld
	j.vanhardeveld@apxendex.com
	+31(0)20 305 5139
Company Name:	APX-ENDEX
Please express your views regarding the Workgroup Consultation, including rationale.	Thank you for providing us with the opportunity to respond to the CUSC Workgroup Consultation on CMP 202.
(Please include any issues, suggestions or queries)	As you are aware, one of the priorities of the European Union is to create a genuine single market for electricity in Europe. It is an ambition which the Anglo-Dutch energy exchange APX-ENDEX very much supports. Market integration enhances diversity of supply, competitive dynamics, price resilience, social welfare and security of supply.
	The integration of day-ahead markets across Europe using the proven approach of market coupling is critical to delivering robust markets. Efficient intraday cross border trading is also essential for the transition to a low carbon energy sector by accommodating the increased intermittency created by the growing amount of wind energy produced in Great Britain.
	The current transmission charges for electricity applied in Great Britain threaten to hinder the

efficient integration of the GB market with Continental Europe and Ireland. We believe that further alignment of Great Britain with progressing EU law and the goal of the creation of a single market for electricity in Europe is needed.

The charge levied by the national Transmission System Operator (TSO) National Grid for the balancing of the British transmission system (the "BSUoS" charge) is also levied upon interconnector flows and therefore effectively acts as a cross border transmission charge (akin to a flow based tariff). The BSUoS charge effectively represents a barrier to efficient market integration, and the benefits that this will deliver. We therefore strongly support the removal of the BSUoS charge for interconnector owners.

A historical simulation (re-run) of the APX UK Auction from data gathered between the 1st of April 2011 until the 8th of March 2012 supports this view. The analysis showed that the removal of the BSUoS charge from interconnectors resulted in an increase in the usage of day-ahead cross border capacity. Instances where there is zero flow on the interconnector reduced from 22,1 percent historically to 13,4 percent. Hours where there was congestion on the interconnector increased from 29,1 percent historically to 34,3 percent.

The analysis furthermore showed that the removal of the BSUoS charge on interconnectors would lead to an increase of approximately 10 percent in traded volume on the UK day-ahead Auction market. APX-ENDEX is very much willing to further explain the outcome of the analysis with the working group members if desired.

Do you believe that the proposed original or any of the alternatives better facilitate the Applicable CUSC Objectives? Please include your reasoning.

We support the analysis and reasoning as worded in CMP202.

Do you support the proposed

APX-ENDEX fully supports the proposed

implementation approach? If not, please state why and provide an alternative suggestion where possible.	implementation approach of implementing CMP202 10 working days after an Authority Decision.
Do you have any other comments?	-
Do you wish to raise a Workgroup Consultation Alternative Request for the Workgroup to consider?	APX-ENDEX does not want to raise a Workgroup Consultation Alternative Request.

CMP202 – Revised treatment of BSUoS charges for lead parties of Interconnector BM Units

Industry parties are invited to respond to this consultation expressing their views and supplying the rationale for those views, particularly in respect of any specific questions detailed below.

Please send your responses by **8 March 2012** to cusc.team@uk.ngrid.com. Please note that any responses received after the deadline or sent to a different email address may not receive due consideration by the Workgroup

These responses will be considered by the Workgroup at their next meeting at which members will also consider any Workgroup Consultation Alternative Requests. Where appropriate, the Workgroup will record your response and its consideration of it within the final Workgroup report which is submitted to the CUSC Modifications Panel.

Respondent:	Richard Sidley
	T: +44 (0) 7748 180429
	E: richard.sidley@britned.com
Company Name:	BritNed Development Limited
Please express your views regarding the Workgroup Consultation, including rationale.	We are in support of CMP202, though we note that the Workgroup has not yet provided its recommendation. We do have the following comments however:
(Please include any issues,	a) Regarding paragraph 4.36, in BritNed's case, BSUoS

suggestions or queries)	does not affect any scheduling algorithm as such, though BSUoS forecasts are used in the calculation of the flow tariffs for implicit auctions. The removal of BSUoS for interconnector users would therefore reduce the "deadband" shown in the diagram at paragraph 4.18. b) The reduced deadband should result in increased implicit nominations on the interconnector during periods where there would currently be no congestion. As implicit nominations are guaranteed by BritNed the reduced deadband will result in an increased imbalance liability in the event of an incident. Due to the expected larger nominations and at times where there is a change in the market direction, larger flow changes will be required. The result will be larger imbalances due to ramping limitations. It is also possible that the flow across interconnectors will change direction more often, as the market spread may switch back and forth between the import and export directions at low levels which are within the current deadband, but fall outside of the reduced deadband. This will increase the ramping costs, imbalance risk and firmness risk for interconnector owners due to larger implicit nominations and larger	
Do you believe that the proposed original or any of the alternatives better facilitate the Applicable CUSC Objectives? Please include your reasoning. Do you support the proposed implementation approach? If not, please state why and provide an alternative suggestion where possible.	owners due to larger implicit nominations and larger power swings. Analysis on the increased risk to BritNed of a reduced deadband is on-going c) We would be in favour of Ofgem carrying out a full post-implementation review, as suggested in paragraph 4.38 of the consultation document. In our view, such a review could start once CMP202 is implemented, and it should also consider the issue that we have identified in b) above through analysis of post trading data. We agree with the proposer that Applicable CUSC Objectives (a) and (c) would be better facilitated by CMP202, for the reasons stated at paragraph 7.1 of the consultation document.	

Do you have any other comments?	No.
Do you wish to raise a Workgroup Consultation Alternative Request for the Workgroup to consider?	No.

Q	Question	Response
1	What, if any, do you believe may be the unintended consequences of CMP202 in terms of trading?	None. However, as mentioned in our comment b) above, there is a potential effect on the operational costs and imbalance risk
		for interconnector owners.
2	Are there any further pros and cons that should be highlighted in the assessment?	None.

CMP202 – Revised treatment of BSUoS charges for lead parties of Interconnector BM Units

Industry parties are invited to respond to this consultation expressing their views and supplying the rationale for those views, particularly in respect of any specific questions detailed below.

Please send your responses by **8 March 2012** to cusc.team@uk.ngrid.com. Please note that any responses received after the deadline or sent to a different email address may not receive due consideration by the Workgroup

Respondent:	Sarah Owen 01753 431052 sarah.owen@centrica.co.uk	
Company Name:	Centrica group	
Please express your views	We do not support the implementation of this proposal. We suggest that it will eventually lead to higher prices for end	

regarding the Workgroup Consultation, including rationale. (Please include any issues, suggestions or queries)	consumers on two counts, the first is that any increases for both generators and suppliers in their BSUoS costs will eventually be passed through to end consumers, additionally, if this proposal is implemented there is likely to be an increase in exports of power from GB through the interconnector, this will result in an increase to power prices for GB end consumers (as detailed within section 4.23 of the report). If this proposal is adopted (with the minimum delay between decision and implementation), suppliers may be unable to pass on the increases they incur in their BSUoS charges due to contractual arrangements they have in place with their customers, this is especially the case for fixed power prices, where margins may be small. The same could be true for generators depending on the detail of their contracts, and could adversely impact very marginal generation plant. Furthermore, this proposal introduces a disconnect between the industry players that are subject to RCRC and BSUoS charges, we suggest the proposal is flawed and should not be adopted in its current form. We do not agree that a future change to the charging or cash out arrangements should be left to be considered as part of Ofgem's cash out review. Any potential disconnect should be resolved as part of this modification proposal. We suggest that this proposal is neutral to the Applicable CUSC Objective (a), as there is no evidence to suggest that export trades would increase more than import trades under this modification.	
Do you believe that the proposed original or any of the alternatives better facilitate the Applicable CUSC Objectives? Please include your reasoning.		
Do you support the proposed implementation approach? If not, please state why and provide an alternative suggestion where possible.	desision we are concerned that Cumpliars may not be in a	
Do you have any other comments?		
Do you wish to raise a Workgroup Consultation Alternative Request for the Workgroup to consider?	If yes, please complete a Workgroup Consultation Alternative Request form, available on National Grid's website, and return to the above email address with your completed Workgroup Consultation response proforma.	

Q	Question	Response
1	What, if any, do you believe may be the unintended consequences of CMP202 in terms of trading?	
2	Are there any further pros and cons that should be highlighted in the assessment?	Any Supplier who has offered a fixed priced power price to a customer will be unable to pass this cost increase on until the end of this contract. This could include a period of up to two years ahead. Additionally, we suggest that there is highly likely to be an increase in power costs for end users, this will be as a direct result of the increase to BSUoS costs for generators and suppliers as ultimately, any increase for generators and suppliers will flow down to end consumers. We challenge the Pro in the working group report (table 4.41) that suggests that BSUoS costs are likely to decrease for end consumers; it would have been beneficial for the reasoning behind this point to have been included in the report to aid comprehension. If this proposal is accepted, there is likely to be an increase in power exports for GB. This will result (according to the logic in the report (4.23)) in an increase in GB power prices. This is an opposing view to that detailed in the assessment. Additionally, generators may not be able to pass on increases to BSUoS costs under the terms of their contracts. This will squeeze margins and may adversely impact marginal plant. Notwithstanding the above comments and concerns, we do not support the implementation of this proposal, without seeking to address the resulting disconnect between parties subject to RCRC and BSUoS that would be created. The same group of users should be liable for both charges/payments. We suggest this disconnect should be fully considered and resolved as part of this proposal.

Industry parties are invited to respond to this consultation expressing their views and supplying the rationale for those views, particularly in respect of any specific questions detailed below.

Please send your responses by **8 March 2012** to cusc.team@uk.ngrid.com. Please note that any responses received after the deadline or sent to a different email address may not receive due consideration by the Workgroup

Respondent:	Cem Suleyman - cem.suleyman@draxpower.com	
Company Name:	Drax Power Limited	
Please express your views regarding the Workgroup Consultation, including rationale. (Please include any issues, suggestions or queries)	We agree that efficient trading between GB and other EU Member States is frustrated by the current application of BSUoS charges. Under the current arrangements the application of BSUoS charges creates a barrier to the efficient export of GB power. This is primarily because BSUoS is charged in part to generators (and reflected in the wholesale power price) whereas this is not commonly the case in continental Europe (where BSUoS is charged almost exclusively to demand and thus BSUoS type costs are not included within the wholesale power price of these markets). In light of the evidence presented to date, we agree that it is commonly the case that equivalent BSUoS type costs in other EU Member States are almost exclusively charged to demand.	
	However, whilst removing BSUoS charges from Interconnector Users would reduce BSUoS distortion for the efficient export of power, GB generators would still remain at competitive disadvantage when compared to their European counterparts. This is due to the 'G' element of BSUoS charges in the GB charging arrangements, which would still be recovered from GB generators' output prices.	
	The equivalent of 'G BSUoS' is not included in the wholesale power price of continental European markets and thus some distortion will remain. Moreover, the potential exists following the implementation of CMP202 for 'higher cost' power to be imported into GB. This is because the price of imported power will no longer reflect the cost of BSUoS, whereas GB generators will still be required to recover BSUoS costs from the market. The	

imports in this case only appear to be 'cheaper' relative to GB power due to the differential application of BSUoS charges. We do not consider this facilitates efficient cross border trade. In fact such trades are inefficient and fail to maximise economic welfare (the fundamental rationale for the completion of the Single Market).

For the reasons given above we agree strongly with the statement made in the consultation document that "given GB generation is subject to BSUoS charges, they will potentially compete with continental generation that may not be subject to an equivalent charge. This raises the prospect of inefficient outcomes". Moreover "that by removing BSUoS from interconnector trades, this should also provide GB generation with greater opportunities for exports, *although some market distortion would remain*" (emphasis added).

To the credit of the proposer, the limitations of implementing the CMP202 solution in isolation have been recognised and the solution contained in CMP201 will remedy the distortion created by this proposal, thus maximising economic welfare. Implementing both CMP201 and CMP202 as a single package will completely eliminate BSUoS related import and export price distortion between competing generators.

We note that some workgroup members stated that the modification would result in greater competition and access to other EU markets which could result in lower prices. We believe this benefit will only be fully realised (if at all) if CMP202 is implemented alongside CMP201 as a single package. We are of the view that CMP202 only provides, at best, a partial solution to the trade distortions noted above.

Do you believe that the proposed original or any of the alternatives better facilitate the Applicable CUSC Objectives? Please include your reasoning.

We agree that CMP202 probably better facilitates Applicable Objective (c). However, we believe that CMP202 should be considered as neither facilitating nor hindering Applicable Objective (a), i.e. the effect should be considered neutral. Whilst there would be scope for a potential increase in the quantity of economic exports to continental European markets, there is also scope to facilitate uneconomic imports to GB. As there is no evidence at present to suggest that the export effect of CMP202 would outweigh the import effect (or vice versa) CMP202 should be considered neutral against Objective (a). CMP202 will only better facilitate Objective (a) if it is implemented in conjunction with CMP201 as a single package, as this would completely remove both the import and export price distortion.

	W.
Do you support the proposed implementation approach? If not, please state why and provide an alternative	We agree with the majority of the Workgroup that CMP202 should be implemented in line with standard timescales, i.e. ten days after approval, and that implementation should take place as soon as possible.
suggestion where possible.	We consider there will also be administrative benefits (in terms of cost minimisation) associated with implementing both CMP201 and CMP202 simultaneously as a package. These benefits would accrue through a reduction in the National Grid man days required to implement both Modifications simultaneously compared to the man days required to implement both Modifications separately. There might also be some benefit in terms of minimising the complexity associated with implementing two separate changes at two different times in a relatively short period relative to making both changes at the same time.
Do you have any other comments?	No.
Do you wish to raise a Workgroup Consultation Alternative Request for the Workgroup to consider?	No.

Q	Question	Response
1	What, if any, do you believe may be	We are not aware of any potential
	the unintended consequences of	unintended consequences that might result
	CMP202 in terms of trading?	from the implementation of CMP202.
	_	·

Q	Question	Response
2	Are there any further pros and cons that should be highlighted in the assessment?	We believe that the main pros and cons have been identified. We particularly agree with the following pro and con:
		 There is "potential for increased distortion in the GB market if CMP201 is not implemented alongside CMP202". The GB market could "potentially [be] subject to 'below cost' imports – 'inefficient' competition undercuts GB generation as a result of GB generation still being exposed to BSUoS.

Industry parties are invited to respond to this consultation expressing their views and supplying the rationale for those views, particularly in respect of any specific questions detailed below.

Please send your responses by **8 March 2012** to cusc.team@uk.ngrid.com. Please note that any responses received after the deadline or sent to a different email address may not receive due consideration by the Workgroup

Respondent:	Paul Mott	
Company Name:	EDF Energy	
Please express your views regarding the Workgroup Consultation, including rationale.	The workgroup consultation is well-written and effectively summaris issues, pros and cons. EDF Energy agrees with the workgroup that well-defined and that no alternative is needed, nor any special arraneeded for the introduction of this change (e.g. phasing, is not needed.)	th€ nge
(Please include any issues, suggestions or queries)		

Do you believe that the EDF Energy does not consider that a consultation Alternative CU\$C proposed original or any of Modification is needed and are not putting one forward. the alternatives better facilitate the Applicable EDF Energy considers that CMP202 would marginally better facilitate Applicable CUSC Objective (a) by promoting more efficient trading be **CUSC Objectives? Please** EU member states, allowing interconnectors to be efficiently utilised a include your reasoning. a narrower range of price spreads without the burden of BSUoS charge EDF Energy considers that CMP202 would substantially better facilita Applicable CUSC Objective (c) by promoting a single internal market i electricity and facilitating greater cross-border trading, whilst reflecting British interpretation of the EU's "Third Package" by treating interconn as transmission (not, generation or demand as appropriate to direction flow). Treating interconnectors as transmission means they must be e from BSUOS charges, just like the B6 boundary transmission circuits between Scotland and England, or any other transmission for that ma CMP202 gives effect to this exemption from BSUOS. An equivalent ch to BSUOS is generally not charged to generators on the continent. By charging it to interconnector flows, there should be a beneficial effect competition across the EU, with reduced barriers to trade. The consultation proposes that CMP202 should be implemented Do you support the 10 Working Days after an Authority Decision. EDF Energy agrees proposed implementation in this instance that a rapid implementation is desirable as there approach? If not, please are no special transitional issues in relation to this mod, which will state why and provide an have a marginal impact on BSUoS resulting in an increase of alternative suggestion BSUoS for generation and demand by +2% (about 2 pence a MWh). where possible. No. Do you have any other comments? Do you wish to raise a No. Workgroup Consultation Alternative Request for the Workgroup to consider?

Specific questions for CMP202

Q	Question	Response
1	What, if any, do you believe may be the unintended consequences of CMP202 in terms of trading?	We do not anticipate such unintended consequences. We believe CMP202 to be beneficial for competition across the EU and may also support CMP201, a separate modification proposal which exempts generation from BSUoS, further aligning Britain with the general treatment of equivalent charges across the rest of the EU.

Q	Question	Response
2	Are there any further pros and cons	No, the considerations in the consultation
	that should be highlighted in the	document appear complete and thorough.
	assessment?	

Industry parties are invited to respond to this consultation expressing their views and supplying the rationale for those views, particularly in respect of any specific questions detailed below.

Please send your responses by **8 March 2012** to cusc.team@uk.ngrid.com. Please note that any responses received after the deadline or sent to a different email address may not receive due consideration by the Workgroup

Respondent:	Sofia Eng, sofia.eng@edftrading.com, 020 7061 4363
Company Name:	EDF Trading
Please express your views regarding the Workgroup Consultation, including rationale. (Please include any issues,	The deliberations of the Workgroup are appropriate and capture the impacts of the issue at hand. In particular, the analysis of the effect CMP 202 would have on interconnector flows is worthwhile, as it illustrates the rationale for change.
suggestions or queries)	
Do you believe that the proposed original or any of the alternatives better facilitate the Applicable CUSC Objectives? Please include your reasoning.	Our view is that the proposal better facilitates competition in the wholesale market and therefore facilitates Objective A. Applying BSUoS charges to Interconnector BM Units hinders cross border trade and the creation of a single internal EU market. Current arrangements treat trades across the interconnectors differently from trades that are internal to the GB market. (As the consultation points out, a non physical trader who trades across the interconnector would be subject to BSUoS charges, whereas a non physical trader active only in GB would not.) Applying BSUoS charges to Interconnector BM Units further affects flows between GB and other Member States, given that

	the price of exports and imports will be affected by BSUoS charges. As a result there may be instances when flows to other Member States are not optimal.
	The consultation does not propose any alternative solutions and in line with this we also do not envisage any alternative solution.
Do you support the proposed implementation approach? If not, please state why and provide an alternative suggestion where possible.	We support the proposed implementation approach.
Do you have any other comments?	No.
Do you wish to raise a Workgroup Consultation Alternative Request for the Workgroup to consider?	No.

Q	Question	Response
1	What, if any, do you believe may be	We do not foresee any unintended
	the unintended consequences of	consequences of removing BSUoS charges
	CMP202 in terms of trading?	from Interconnector BM Units.
2	Are there any further pros and cons	We believe that the assessment captures
	that should be highlighted in the	the pros and cons for affected parties.
	assessment?	

CMP202 – Revised treatment of BSUoS charges for lead parties of Interconnector BM Units

Industry parties are invited to respond to this consultation expressing their views and supplying the rationale for those views, particularly in respect of any specific questions detailed below.

Please send your responses by **8 March 2012** to cusc.team@uk.ngrid.com. Please note that any responses received after the deadline or sent to a different email address may not receive due consideration by the Workgroup

Respondent:	Esther Sutton
	esther.sutton@eon-uk.com
Company Name:	E.ON
Please express your views regarding the Workgroup Consultation, including rationale.	We support CMP202.
(Please include any issues, suggestions or queries)	
Do you believe that the proposed original or any of	For reference, the Applicable CUSC Objectives for the Use of System Charging Methodology are:
the alternatives better facilitate the Applicable CUSC Objectives? Please include your reasoning.	(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.
	Yes, we agree that it supports Applicable Objectives a) and c) as identified by the Proposer and Workgroup.
Do you support the proposed implementation approach? If	Yes.

not, please state why and provide an alternative suggestion where possible.	
Do you have any other comments?	No.
Do you wish to raise a Workgroup Consultation Alternative Request for the Workgroup to consider?	No.

Q	Question	Response
1	What, if any, do you believe may be	At this time we do not foresee any particular
	the unintended consequences of	consequences.
	CMP202 in terms of trading?	
2	Are there any further pros and cons	No.
	that should be highlighted in the	
	assessment?	

CMP202 – Revised treatment of BSUoS charges for lead parties of Interconnector BM Units

Industry parties are invited to respond to this consultation expressing their views and supplying the rationale for those views, particularly in respect of any specific questions detailed below.

Please send your responses by **8 March 2012** to cusc.team@uk.ngrid.com. Please note that any responses received after the deadline or sent to a different email address may not receive due consideration by the Workgroup

Respondent:	Helen Inwood
Company Name: RWE npower	
Please express your views regarding the Workgroup Consultation, including	We do have concerns that this is raising BSUoS prices for non- inter-connector BM Units. This does have a small impact on BSUoS prices for both suppliers and generators (2%) that will
	not have been taken into account if contracts have been entered

rationale. (Please include any issues, suggestions or queries)	into for delivery of power in the period after the change is implemented. These generators and suppliers may then suffer some financial impact in the short term since the costs may be larger than they had forecasted. However, we recognise that this is a relatively straightforward change request which meets the objective of aligning the GB charging arrangements with those prevalent in other UK member states and is consistent with EU objectives. We support the change.
Do you believe that the proposed original or any of the alternatives better facilitate the Applicable CUSC Objectives? Please include your reasoning.	We believe this better facilitates CUSC Objective (a) (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;
Do you support the proposed implementation approach? If not, please state why and provide an alternative suggestion where possible.	Yes, we do support the implementation approach of 10 working days after the Authority decision.
Do you have any other comments?	No
Do you wish to raise a Workgroup Consultation Alternative Request for the Workgroup to consider?	No

Q	Question	Response
1	What, if any, do you believe may be	None at this time
	the unintended consequences of	
	CMP202 in terms of trading?	
2	Are there any further pros and cons	No
	that should be highlighted in the	
	assessment?	

Industry parties are invited to respond to this consultation expressing their views and supplying the rationale for those views, particularly in respect of any specific questions detailed below.

Please send your responses by **8 March 2012** to cusc.team@uk.ngrid.com. Please note that any responses received after the deadline or sent to a different email address may not receive due consideration by the Workgroup

Respondent:	James Anderson, james.anderson@scottishpower.com; 0141 614 3006
Company Name:	ScottishPower Energy Management
Please express your views regarding the Workgroup Consultation, including rationale. (Please include any issues, suggestions or queries)	ScottishPower supports the removal of BSUoS from Interconnector BM Units as this will remove barriers to trade between the GB and European electricity markets and is consistent with the EU objectives of facilitating cross-border access and developing a single EU-wide market in electricity. However, it is important that CMP202 is implemented in conjunction with CMP201 (removal of BSUoS from Generator parties) otherwise electricity imports to GB (not subject to BSUoS) will have an unfair advantage over generation within GB (subject to BSUoS).
Do you believe that the proposed original or any of the alternatives better facilitate the Applicable CUSC Objectives? Please include your reasoning.	For reference, the Applicable CUSC Objectives for the Use of System Charging Methodology 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);
	transmission licensees which are made und with the STC) incurred by transmission licer transmission businesses and which are concondition C26 (Requirements of a connect a connection);

	We believe that overall CMP202 better facilitates Objective (a) as it removes a current barrier to cross-border access and competition. However, it is important that CMP202 is implemented in conjunction with CMP201 (removal of BSUoS from Generator parties) otherwise electricity imports to GB (not subject to BSUoS) will have an unfair advantage over generation within GB which would not facilitate effective competition We are neutral as to whether CMP202 better achieves Objectives (b) and (c).
Do you support the proposed implementation approach? If not, please state why and provide an alternative suggestion where possible.	ScottishPower agrees that due to the low materiality of the impact of this proposal, implementation should be subject to the standard timescales i.e. 10 working days after approval by the Authority. There should not be any undue delay between the implementation of CMP202 and CMP201 to minimise any unfair competition from electricity imports as outlined above.
Do you have any other comments?	No.
Do you wish to raise a Workgroup Consultation Alternative Request for the Workgroup to consider?	No.

Q	Question	Response
1	What, if any, do you believe may be the unintended consequences of CMP202 in terms of trading?	We have not identified any adverse unintended consequences from the introduction of CMP202. Any windfall gains or losses from the introduction of CMP202 are likely to be short-lived and are difficult to determine as the exact volume of interconnector flows cannot be determined until the wholesale prices in both interconnected markets become apparent.
2	Are there any further pros and cons that should be highlighted in the assessment?	No.

Industry parties are invited to respond to this consultation expressing their views and supplying the rationale for those views, particularly in respect of any specific questions detailed below.

Please send your responses by **8 March 2012** to cusc.team@uk.ngrid.com. Please note that any responses received after the deadline or sent to a different email address may not receive due consideration by the Workgroup

Respondent:	Garth Graham (garth.graham@sse.com 01738 456000)
Company Name:	SSE
Please express your views regarding the Workgroup Consultation, including rationale.	We have considered the deliberations of the Workgroup (as set out in the consultation document) and the Ofgem decision letter on "Use of System Charging Methodology Modification Proposal GB ECM-26: Review of interconnector charging arrangements".
(Please include any issues, suggestions or queries)	Whilst at the time that GB ECM-26 was being considered (in 2010) we had serious reservation about that change (primarily, but not exclusively, due to the flaws with the TNUoS regime) we can see that given developments since then and the work of the CMP202 Workgroup that there would be merit in this change going forward in order to align the GB arrangements with those in Europe. However, this support comes with a caveat, namely that it would be wrong to implement CMP202 without also implementing a solution to ensure a level playing field for GE trading parties; i.e. CMP201; otherwise those GB parties will be placed at a competitive disadvantage if CMP202 is implemented.
Do you believe that the proposed original or any of the alternatives better facilitate the Applicable CUSC Objectives? Please include your reasoning.	For reference, the Applicable CUSC Objectives for the Use of System Charging Methodology 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;
	We agree with the Workgroup member that CMP202 is neutral with respect to Objective (a) for the reasons set out in paragraph

	7.2 (which would, in our view, be addressed by implementing CMP201).
	(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);
	We consider CMP202 to be neutral under Objective (b).
	(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.
	We believe CMP202 does better facilitate Objective (c). However, the benefit is marginal pending the resolution of the equality of treatment for GB generators (which would, in our view, be addressed by implementing CMP201).
Do you support the proposed implementation approach? If not, please state why and provide an alternative suggestion where possible.	We concur with the implementation approach set out in Section 6 of the consultation document.
Do you have any other comments?	Nothing further at this time.
Do you wish to raise a Workgroup Consultation Alternative Request for the Workgroup to consider?	No.

Q	Question	Response
1	What, if any, do you believe may be	We have not as yet identified any additional
	the unintended consequences of	unintended consequences over and above
	CMP202 in terms of trading?	those shown in the consultation document.
2	Are there any further pros and cons	We have not as yet identified any additional
	that should be highlighted in the	pros or cons over and above those shown in
	assessment?	the consultation document.

Annex 5 – Code Administration Consultation Responses

CMP202 – Revised treatment of BSUoS charges for lead parties of Interconnector BM Units

Respondent:	David Friend
	T: +44 (0)7789 942 665
	E: david.friend@britned.com
Company Name:	BritNed Development Limited
Do you believe that CMP202 better facilitates the Applicable CUSC Objectives? Please include your reasoning.	In our view all three Applicable CUSC Objectives are better facilitated by CMP202. As has been noted by the proposer, other respondents and the analysis set out at Annex 7 of the consultation document, the current arrangements create a barrier to cross border trade across interconnectors.
	For reference, the Applicable CUSC Objectives are:
	(a) the efficient discharge by the licensee of the obligations imposed upon it under the Act and by this licence; and
	NGET is allowed to recover BSUoS charges under its transmission licence and, by removing the barriers to cross border trade across interconnectors caused by the current arrangements, CMP202 would improve the efficiency of the BSUoS charge recovery mechanism.
	(b) facilitating effective competition in the generation and supply of electricity, and (so far as consistent therewith) facilitating such competition in the sale, distribution and purchase of electricity.
	The removal of BSUoS for interconnectors will facilitate better competition by removing a barrier to trades across interconnectors and therefore CMP202 better facilitates this Applicable CUSC objective.
	(c) compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency.
	By aligning the GB arrangements with those in Europe and removing a barrier to cross-border trade, CMP202 is within the spirit of the legal developments occurring at EU level and therefore furthers this Applicable CUSC Objective.

Do you support the proposed	
implementation approach?	lf
not, please state why and	

We support the proposed implementation timeframe of late summer 2012.

provide an alternative suggestion where possible.	
Do you have any other comments?	We note that the Workgroup have recommended that Ofgem carry out a post-implementation review 18 months after implementation. We support this review, though in our opinion it should be carried out as soon as possible after implementation and once sufficient information becomes available.
	We also understand that a BSC modification to remove RCRC from interconnectors has been raised in order to address the issue of interconnectors being exposed to RCRC and not BSUoS if CMP202 is implemented.

Respondent:	Sarah Owen 01753 431052 sarah.owen@centrica.co.uk
Company Name:	Centrica group of companies excluding Centrica Storage Ltd
Do you believe that CMP202 better facilitates the Applicable CUSC Objectives? Please include your reasoning.	We believe that CMP202 is neutral to the applicable CUSC objectives. We suggest that this proposal, if adopted, will directly lead to higher costs to end consumers. Additionally, as stated in the proposal, it will result in greater export flows through the interconnector, it will also result in an increase in the wholesale power price in the UK, this will cause a detrimental impact on end consumers.
	Furthermore, we believe that due to the short implementation timescales, Suppliers may be unable to pass the direct increases in costs onto their customers, squeezing tight margins in a competitive market.
	Although we are aware that National Grid has recently raised BSC modifications to address the resulting disconnect between liable parties for BSUoS and RCRC, we do not support the implementation of this proposal before this issue has been fully resolved.
Do you support the proposed implementation approach? If not, please state why and provide an alternative suggestion where possible.	As stated above, we do not support the implementation of this modification. Notwithstanding, we suggest that the resulting disconnect between parties liable for BSUoS and those liable for RCRC should be resolved prior to this proposal being considered for implementation.
Do you have any other comments?	

Respondent:	Cem Suleyman (<u>cem.suleyman@draxpower.com</u>)
Company Name:	Drax Power Limited
Do you believe that CMP202 better facilitates the Applicable CUSC Objectives? Please include your reasoning.	We agree that CMP202 better facilitates Applicable Objective (c). However, we believe that CMP202 should be considered as neither facilitating nor hindering Applicable Objective (a), i.e. the effect should be considered neutral. Whilst there would be scope for a potential increase in the quantity of economic exports to continental European markets, there is also scope to facilitate uneconomic imports to GB. As there is no firm evidence at present to suggest that the export effect of CMP202 would outweigh the import effect (or vice versa) CMP202 should be considered neutral against Objective (a). CMP202 will only better facilitate Objective (a) if it is implemented in conjunction with CMP201 as a single package, as this would completely remove both the import and export price distortion.

Do you support the proposed implementation approach? If not, please state why and provide an alternative suggestion where possible.

Yes. However, as alluded to above, implementing CMP202 on its own without CMP201 will only reduce rather than eliminate the BSUoS distortion affecting the efficient export of power. GB generators would continue to remain at a competitive disadvantage when compared to their European counterparts. Moreover, the potential exists following the implementation of CMP202 for 'higher cost' power to be imported into GB; an inefficient market outcome. We are therefore of the view that CMP202 only provides, at best, a partial solution to the trade distortions noted above.

Implementing both CMP201 and CMP202 as a single package will completely eliminate BSUoS related import and export price distortions between competing generators. Only if the two modifications are implemented as a package will the benefits of efficient cross border trade be fully realised.

For the avoidance of doubt, whilst we believe that both CMP202 and CMP201 should be implemented we do not believe they should necessarily come into effect at the same time. Whilst CMP202 could come in to effect almost immediately, CMP201 will need to be implemented in such a way as to provide market participants with sufficient notice to react appropriately to the change i.e. sufficient lead time needs to be provided between an Ofgem decision and when the Modification will come into effect. Therefore, we envisage that CMP201 will come into effect a certain number of charging years after CMP202, assuming Ofgem approves both Modifications.

Do you have any other comments?

No.

Respondent:	Esther Sutton
	Esther.sutton@eon-uk.com
Company Name:	E.ON
Do you believe that CMP202 better facilitates the Applicable CUSC Objectives?	For reference, the Applicable CUSC Objectives are: (a) the efficient discharge by the licensee of the obligations imposed upon it under the Act and by this licence;
Please include your reasoning.	(b) facilitating effective competition in the generation and supply of electricity, and (so far as consistent therewith) facilitating such competition in the sale, distribution and purchase of electricity;
	(c) compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency.
	We note that this question lists the 'main' CUSC Objectives while the Code Administrator consultation setting the question in para 9.2 refers to the CUSC Objectives for the Use of System Charging Methodology as detailed in para 7.2.
	Overall we continue to believe that indeed CMP202 should support Use of System Charging Methodology Applicable CUSC Objective a) to facilitate effective competition, and c) to take account of developments in transmission business, as identified by the Proposer and majority of the Workgroup. However, this is only the case if implemented alongside CMP201. There could be a negative impact on competition if not implemented alongside CMP201, this as has been identified this modification could be regarded as neutral or even negative under a) until/unless CMP201 is also implemented.
	We concur that CMP202 would further Applicable CUSC Objectives a) for the efficient discharge of licensee obligations, and c) for EC compliance, by treating interconnectors as transmission and removing a barrier to cross-border trade.
	However, as above we note that whilst BSUoS costs to non-interconnector BMUs, both supplier and generator, will increase, and some parties may face difficulties in passing these through. CMP220 will only bring limited benefit, and some disadvantage to GB generation if not implemented alongside CMP201; thus in itself it is not clear that CMP202 would facilitate effective competition.

In theory the relatively minor impact of CMP202 compared to Do you support the proposed CMP201 means that implementation to the standard timescale of implementation approach? If 10 working days after an Authority decision could be appropriate. not, please state why and However we are cautious that the subsequent period until provide an alternative CMP201 is implemented, if approved, could see GB generation, suggestion where possible. still subject to BSUoS, at an unfair disadvantage to European imports. While this modification has been brought forward to further progress competition and a single EU energy market, we also note that GB Electricity Market Reform will mean that from 2013 GB generation will be subject to a carbon price floor. With European power not subject to such a measure, this could put GB generation at a further disadvantage in comparison with European imports. As the carbon price floor is due to be introduced in 2013 and CMP201 not until 2015 at the earliest if approved, delaying implementation of CMP202 until a carbon price floor is put in place might help to reduce the disadvantage to GB generation in the interim. We also note that BSC modification P285 has been raised to exclude Interconnector BMUs from the rcrc calculation should CMP202 be approved; ideally this would be implemented alongside CMP202.

Respondent:	PAUL MOTT
Company Name:	EDF Energy
Do you believe that CMP202 better facilitates the Applicable CUSC Objectives? Please include your reasoning.	Yes - EDF Energy considers that CMP202 would marginally better facilitate Applicable CUSC Objective (a) by promoting more efficient trading between EU member states, allowing interconnectors to be efficiently utilised across a narrower range of price spreads without the burden of BSUoS charges.
	EDF Energy considers that CMP202 would more substantially better facilitate Applicable CUSC Objective (c) by promoting a single internal market in electricity and facilitating greater cross-border trading, whilst reflecting the British interpretation of the EU's "Third Package" by treating interconnectors as transmission (not, generation or demand as appropriate to direction of flow). Treating interconnectors as transmission means they should be exempt from BSUOS charges, just like the B6 boundary transmission circuits between Scotland and England, or any other transmission. CMP202 gives effect to this exemption from BSUOS. An equivalent charge to BSUOS is generally not charged to generators on the continent. By not charging it to interconnector flows, there should be a beneficial effect on competition across the EU, with reduced barriers to trade.
	For reference, the Applicable CUSC Objectives are: (a) the efficient discharge by the licensee of the obligations
	imposed upon it under the Act and by this licence; and
	(b) facilitating effective competition in the generation and supply of electricity, and (so far as consistent therewith) facilitating such competition in the sale, distribution and purchase of electricity.
	(c) compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency.

Do you support the proposed implementation approach? If not, please state why and provide an alternative suggestion where possible.

The consultation proposes that CMP202 should be implemented 10 Working Days after an Authority Decision. EDF Energy agrees in this instance that a rapid implementation is desirable as there are no special transitional issues in relation to this mod, which will have a marginal impact on BSUoS resulting in an increase of BSUoS for generation and demand by +2% (about 2

	pence a MWh).
Do you have any other comments?	No

Respondent:	Marian Troy; marian.troy@endesaireland.ie +353 1 522 8343
Company Name:	
Do you believe that CMP202 better facilitates the Applicable CUSC Objectives? Please include your reasoning.	Endesa Ireland considers that CMP202 better facilitates the CUSC objectives (a) and (c), as set out in the Modification proposal, on the basis that it removes barriers to cross border trade over the interconnectors and facilitates the development of a Europe-wide single market in electricity. This is on the basis that the BSUoS charge to interconnector users can create an incentive to limit trades or result in inefficient trades. For reference, the Applicable CUSC Objectives are: (a) the efficient discharge by the licensee of the obligations imposed upon it under the Act and by this licence; and (b) facilitating effective competition in the generation and supply of electricity, and (so far as consistent therewith) facilitating such competition in the sale, distribution and purchase of electricity. (c) compliance with the Electricity Regulation and any relevant

	legally binding decision of the European Commission and/or the Agency.
Do you support the proposed implementation approach? If not, please state why and provide an alternative suggestion where possible.	Endesa Ireland agrees that CMP202 should be implemented as proposed, that is within 10 Working Days after an Authority Decision.
Do you have any other comments?	N/A

Respondent:	Michael Dodd
	GB Regulation Manager
	Michael.dodd@esbi.ie
Company Name:	ESBI
Do you believe that CMP202 better facilitates the Applicable CUSC Objectives? Please include your reasoning.	ESBI welcomes the opportunity to comment and is of the view that the CMP202 proposal does better facilitate the Applicable CUSC Objectives, in particular Objectives (a) and (c).
reasoning.	CMP 202 will remove the barriers to efficient cross-border trade that BSUoS charges on interconnectors create. Those barriers can be seen to be having detrimental effects on GB generation and supply companies by creating an uneven cross-border

playing field and narrowing trading options. CMP202, if implemented, will go some way to improving this situation and therefore better facilitates Applicable Objective (a).
We are of the view that CMP202 is neutral to Applicable Objective (b).
In removing the barriers discussed above, CMP202 will also better facilitate the move towards a single European market and therefore better achieves Applicable Objective (c).

Do you support the proposed implementation approach? If not, please state why and provide an alternative suggestion where possible.	Yes, ESBI fully supports the proposed implementation approach.
Do you have any other comments?	In order to fully recognise the benefits that efficient cross-border trade can have for market participants and consumers, we believe that CMP202 should be introduced alongside CMP201, which proposes to remove BSUoS from GB generators.

Respondent:	Paul McGuckin
	Email: <u>Paul.mcguckin@mutual-energy.com</u>
	Tel: 028 90 437 589
Company Name:	Mutual Energy
Do you believe that CMP202 better facilitates the Applicable CUSC Objectives? Please include your reasoning.	For reference, the Applicable CUSC Objectives are: (a) the efficient discharge by the licensee of the obligations imposed upon it under the Act and by this licence; and (b) facilitating effective competition in the generation and supply of electricity, and (so far as consistent therewith) facilitating such competition in the sale, distribution and purchase of electricity. (c) compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the

Agency.
Yes, we consider that CMP202 would better facilitate Applicable CUSC Objectives.
Under the current arrangements BSUOS charges create a potential barrier to GB exports, raising the price that would naturally occur if markets were aligned. The effect of this is that a BSUOS "dead band" exists whereby otherwise economic flows are not scheduled as the available infra-marginal rent is insufficient to pay the BSUOS charge.
CMP202 would remove this "BSUOS dead band" thereby promoting more efficient trading across EU member states, facilitating effective competition and thus the single internal market in electricity.

Do you support the proposed implementation approach? If not, please state why and provide an alternative suggestion where possible.	The proposed implementation approach seems appropriate.
Do you have any other comments?	We welcome this modification and the efforts being made to align the GB trading arrangements with those prevalent in other EU member states.

Respondent:	James Anderson; <u>james.anderson@scottishpower.com</u> ; 0141 614 3006
Company Name:	ScottishPower Energy Management
Do you believe that CMP202 better facilitates the Applicable CUSC Objectives? Please include your reasoning.	For reference, the Applicable CUSC Objectives are: (a) the efficient discharge by the licensee of the obligations imposed upon it under the Act and by this licence; and (b) facilitating effective competition in the generation and supply of electricity, and (so far as consistent therewith) facilitating such competition in the sale, distribution and purchase of electricity. (c) compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency.
	We believe that overall CMP202 better facilitates Objective (a)

as it removes a current barrier to cross-border access and competition. However, it is important that CMP202 is implemented in conjunction with CMP201 (removal of BSUoS from Generator parties) otherwise electricity imports to GB (not subject to BSUoS) will have an unfair advantage over generation within GB which would not facilitate effective competition
We are neutral as to whether CMP202 better achieves Objectives (b).
On balance, CMP202 better facilitates Objective (c) as it takes account of the development of a single internal market in electricity.

Do you support the proposed implementation approach? If not, please state why and provide an alternative suggestion where possible.	ScottishPower agrees that due to the low materiality of the impact of this proposal, implementation should be subject to the standard timescales i.e. 10 working days after approval by the Authority. There should not be any undue delay between the implementation of CMP202 and CMP201 to minimise any unfair competition from electricity imports as outlined above.
Do you have any other comments?	No.

Respondent:	Garth Graham (garth.graham@sse.com 01738 456000)
Company Name:	SSE
Do you believe that CMP202 better facilitates the Applicable CUSC Objectives? Please include your reasoning.	For reference, the Applicable CUSC Objectives are: (a) the efficient discharge by the licensee of the obligations imposed upon it under the Act and by this licence; We believe that there is a marginal benefit in terms of promoting more efficient trading within the EU given the potential downside if the defect identified in CMP201 is not addressed.
	 (b) facilitating effective competition in the generation and supply of electricity, and (so far as consistent therewith) facilitating such competition in the sale, distribution and purchase of electricity; We consider CMP202 to be neutral under Objective (b). (c) compliance with the Electricity Regulation and any relevant

legally binding decision of the European Commission and/or the Agency.
As we noted at the Workgroup consultation stage, we believe CMP202 does better facilitate Objective (c). However, the benefit is marginal pending the resolution of the equality of treatment for GB generators (which would, in our view, be addressed by implementing CMP201).

Do you support the proposed implementation approach? If not, please state why and provide an alternative suggestion where possible.	We note the proposed implementation approach set out in section 6.1 of the Code Administrator consultation document. We support the proposed implementation approach (namely ten working days after an Authority Decision).
Do you have any other comments?	We have no additional comments at this time.

Annex 6 – CMP202 Timeline

16 December 2011	Panel to agree progression
10 January 2012	Workgroup meeting
2 February 2012	Second Workgroup meeting (if required)
6 February 2012	Issue draft Workgroup Consultation for Workgroup comment
13 February 2012	Deadline for comments on draft Workgroup Consultation
16 February 2012	Publish Workgroup consultation (for 3 weeks)
8 March 2012	Deadline for responses to Workgroup consultation
W/C 12 March 2012	Post-consultation Workgroup meeting
27 March 2012	Circulate draft Workgroup Report
5 April 2012	Deadline for comment on Workgroup report
19 April 2012	Submit final Workgroup report to Panel Secretary
27 April 2012	Present Workgroup report to CUSC Modifications Panel
8 May 2012	Issue Code Administrator Consultation
29 May 2012	Deadline for responses
21 June 2012	Publish draft final modification report with Panel Papers

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29 June 2012	Panel Vote
11 July 2012	Send final report to Ofgem
15 August 2011	Indicative Authority decision date (based on 25 day KPI)

Annex 7 – Draft Legal Text

The following extracts of the text in blue is the proposed additional text for CMP202 and the text to be deleted as part of CMP202 is in red.

- 14.29.4 All CUSC Parties acting as Generators and Suppliers (for the avoidance of doubt excluding all BMUs and Trading Units associated with Interconnectors) are liable for Balancing Services Use of System charges based on their energy taken from or supplied to the National Grid system in each half-hour Settlement Period.
- 14.30.2 A customer's charge is based on their proportion of BM Unit Metered Volume for each Settlement Period relative to the total BM Unit Metered Volume for each Settlement Period, adjusted for transmission losses by the application of the relevant Transmission Losses Multiplier.

For all liable importing and exporting BM Units in delivering Trading Units in a Settlement Period:

$$BSUoSTOT_{ij} = \frac{BSUoSTOT_{j} * QM_{ij} * TLM_{ij}}{\left[\sum^{+} (QM_{ij} * TLM_{ij})\right] + \left[\sum^{-} (QM_{ij} * TLM_{ij})\right]}$$

$$BSUoSTOT_{ij} = \frac{BSUoSTOT_{j} * QM_{ij} * TLM_{ij}}{\left[\sum^{+}(QMBSUoS_{ij} * TLM_{ij}) \middle| + \middle|\sum^{-}(QMBSUoS_{ij} * TLM_{ij}) \middle|\right]}$$

Comment [P1]: Denominator changed to liable BM Units

For all liable importing and exporting BM Units in offtaking Trading Units in a Settlement Period:

$$BSUoSTOT_{ij} = \frac{-1*BSUoSTOT_{j}*QM_{ij}*TLM_{ij}}{\left\{\sum_{i}^{+}(QM_{ij}*TLM_{ij})\Big| + \left|\sum_{i}^{-}(QM_{ij}*TLM_{ij})\right|\right\}}$$

$$BSUoSTOT_{ij} = \frac{-1*BSUoSTOT_{j}*QM_{ij}*TLM_{ij}}{\left[\sum^{+}(QMBSUoS_{ij}*TLM_{ij})\right] + \left[\sum^{-}(QMBSUoS_{ij}*TLM_{ij})\right]}$$

Comment [P2]: Denominator changed to liable BM Units

Where:

BSUoSTOT_i Total BSUoS Charge applicable for Settlement Period j

QM_{ii} BM Unit Metered Volume **

QMBSUoS_{ii} BSUoS Liable BM Unit Metered Volume

TLM_{ii} Transmission Loss Multiplier **

 $\sum_{i=1}^{+}$ - refers to the sum over all BM Units that are in delivering

Trading Units in Settlement Period 'j'

refers to the sum over all BM Units that are in offtaking

Trading Units in Settlement Period 'j'

'delivering' and 'offtaking' in relation to Trading Units have the meaning set out in the Balancing and Settlement Code (excluding all Interconnector BMUs and Trading Units)

14.30.3 For the avoidance of doubt, BM Units that are registered in Trading Units will be charged on a net Trading Unit basis i.e. if a BM Unit is exporting to the system and is within a Trading Unit that is offtaking from the system then the BM Unit in essence would be paid the BSUoS charge. Conversely, if a BM Unit is importing from the system in a delivering Trading Unit then the BM Unit in essence would pay the BSUoS charge. Note this includes the Interconnector BM Units that belong to the Interconnector Error Administrator

Interconnector BM Units

14.30.4 The Lead Party of an Interconnector BM Unit and Trading Units associated with Interconnectors, including those associated with the Interconnector Error Administrator, are not will be liable for BSUoS charges. based on their proportion of the total BM Unit Metered Volume of each Settlement Period adjusted for Transmission Losses by the application of the relevant Transmission Losses Multiplier. Note this includes the Interconnector BM Units that belong to the Interconnector Error Administrator.

External BSUoS Charge for each Settlement Period (BSUoSEXT_{id})

14.30.6 The External BSUoS Charges for each Settlement Period (BSUoSEXT_{jd}) are calculated by taking each Settlement Period System Operator BM Cash Flow (CSOBM_j) and Balancing Service Variable Contract Cost (BSCCV_j) and allocating the daily elements on a MWh basis across each Settlement Period in a day.

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BSUoSEXT_{jd} = CSOBM_{jd} + BSCCV_{jd} + \left[ \left( IncpayEXT_d + BSCCA_d + ET_d - OM_d \right) \right] 
* \left\{ \left| \sum_{j=d}^{+} \left( QMBSUoS_{ijd} * TLM_{ijd} \right) \right| + \left| \sum_{j=d}^{-} \left( QMBSUoS_{ijd} * TLM_{ijd} \right) \right| \right\} \right\} 
\sum_{j=d}^{+} \left\{ \left| \sum_{j=d}^{+} \left( QMBSUoS_{ijd} * TLM_{ijd} \right) \right| + \left| \sum_{j=d}^{-} \left( QMBSUoS_{ijd} * TLM_{ijd} \right) \right| \right\} \right]
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$$BSUoSEXT_{jd} = CSOBM_{jd} + BSCCV_{jd} + \left[\left(IncpayEXT_d + BSCCA_d + ET_d - OM_d \right) \right]$$

$$* \left\{ \left| \sum_{j \in d}^+ \left(QMBSUoS_{ijd} * TLM_{ijd} \right) \right| + \left| \sum_{j \in d}^- \left(QMBSUoS_{ijd} * TLM_{ijd} \right) \right| \right\}$$

$$\sum_{j \in d}^+ \left\{ \left| \sum_{j \in d}^+ \left(QMBSUoS_{ijd} * TLM_{ijd} \right) \right| + \left| \sum_{j \in d}^- \left(QMBSUoS_{ijd} * TLM_{ijd} \right) \right| \right\} \right]$$

Comment [P3]: The second element [...] profiles the daily cost across half hours on a volume weighted basis. Interconnector volumes removed from the calculation: QM replaced with QMBSUoS

Internal BSUoS Charge for each Settlement Period (BSUoSINTid)

14.30.14 The Internal BSUoS Charges (BSUoSINT_{jd}) for each Settlement Period for a particular day are calculated by taking the incentivised and non-incentivised SO Internal Costs for each Settlement Day allocated on a MWh basis across each Settlement Period in a day.

$$BSUoSINT_{jd} = (CSOC_d + IncpayINT_d + NC_d + IAT_d + IONT_d)$$

$$* \{ \left| \sum_{j \in d}^+ (QMBSUoS_{ijd} * TLM_{ijd}) \right| + \left| \sum_{j \in d}^- (QMBSUoS_{ijd} * TLM_{ijd}) \right| \}$$

$$/ \sum_{j \in d}^+ \{ \left| \sum_{j \in d}^+ (QMBSUoS_{ijd} * TLM_{ijd}) \right| + \left| \sum_{j \in d}^- (QMBSUoS_{ijd} * TLM_{ijd}) \right| \}$$

Comment [P4]: This profiles the daily cost across half hours on a volume weighted basis. Interconnector volumes removed from the calculation: QM replaced with QMBSUoS

$$BSUoSINT_{jd} = (CSOC_d + IncpayINT_d + NC_d + IAT_d + IONT_d) \\ * \{ \left| \sum_{j \in d} \{ \left| \sum_{j \in d} \{ \left| \sum_{ijd} *TLM_{ijd} \right| \right| + \left| \sum_{j} (QM_{ijd} *TLM_{ijd}) \right| \} / \sum_{j \in d} \{ \left| \sum_{j} (QM_{ijd} *TLM_{ijd}) \right| + \left| \sum_{j} (QM_{ijd} *TLM_{ijd}) \right| \}$$

14.31.8 Balancing Services Use of System Acronym Definitions

BSUoS Liable BM Unit Metered Volume	QMBSUoS _{ij}	MWh	QM _{ij} for all BM Units liable for BSUoS	
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Annex 8 – BSUoS Impact Analysis on Interconnector Flows

The analysis aims to quantify the impacts of interconnector BSUoS on trade with Europe. As BSUoS is a charge imposed on interconnector users, the premise is that it acts as a barrier to trade which has the potential to affect trade decisions. This analysis looks to calculate the percentage of time that the generators would export or sell their energy domestically based on spot prices and day-ahead prices under the current and proposed arrangements, taking into account the BSUoS charge and also the price of capacity.

Spot Market Price Analysis

Under the current arrangements

The assumption is that the price a generator can receive in the opposing country is reduced by the BSUoS charge and the price of capacity (C).

For example:

- A GB generator will export their power to France when the price in France is greater than GB (GB>Fr)
- However, as the GB generator has to pay the BSUoS charge for using the interconnector and a price for capacity (C), it will reduce the return that they can achieve in France (Fr-BSUoS-C)
- Therefore, a GB generator will only export to France when GB < (Fr-BSUoS-C), otherwise their decision would be to sell their energy domestically.

This principle works the same for a French generator.

A GB generator's decision

- If GB > (Fr-BSUoS-C), the GB generator will sell their power domestically
- If GB < (Fr-BSUoS-C), the GB generator will export their power to France

A French generator's decision

- If Fr > (GB-BSUoS-C), the Fr generator will sell their power domestically
- If Fr < (GB-BSUoS-C), the Fr generator will export their power to France

The results of the analysis are included in the table below:

	Export	Sell Domestically
GB Generator	35%	65%
Fr Generator	54%	46%

The total amount of hours in the year that the interconnector is in use is (total export)

• 35% + 54% = 89%

Under CMP 202

The price that the generator sees in the other country is no longer reduced by the BSUoS charge; however the generator still has to pay for the interconnector capacity.

A GB generator's decision

- If GB > (Fr-C), the GB generator will sell their power domestically
- If GB < (Fr-C), the GB generator will export their power to France

A French generator's decision

- If Fr > (GB-C), the FR generator will sell their power domestically
- If Fr < (GB-C), the FR generator will export their power to GB

The results of the analysis are included in the table below:

	Export	Sell Domestically
GB Generator	39%	61%
Fr Generator	59%	41%

The total amount of hours in the year that the interconnector is in use is:

• 39% + 59% = 98%

Based on spot prices, the interconnector would only be utilised 89% of the time under the current arrangements. However, when BSUoS is removed, the interconnector is in use 98% of the time, therefore BSUoS is a barrier to trade for 9% of the year. A full explanation is included in the summary of results.

Day-ahead Market Price Analysis

Under the current arrangements

The day-ahead prices are split into one baseload price and one peak price for the whole day. The analysis takes into consideration an average baseload spot price and capacity price and an average peak spot price and capacity price for each day. Note, there is only 250 days worth of data for 2010/11 as trading does not appear to occur over weekends.

A GB generator's decision

The price that the GB generator will see in the French market is:

- Fr Baseload Price Average Baseload BSUoS Average Baseload Capacity
- $(Fr_{BL} BSUoS_{BL} C_{BL})$
- Fr Peak Price Average Peak BSUoS Average Peak Capacity
- (Fr_{PK} BSUoS_{PK} C_{PK})

The GB generator will export to FR when:

- $GB_{BL} < Fr_{BL} BSUoS_{BL} C_{BL}$
- GB_{PK} < Fr_{PK} BSUoS_{PK} C_{PK}

A French generator's decision

The price that the Fr generator will see in the GB market is:

- GB Baseload Price Average Baseload BSUoS Average Baseload Capacity (GB_{BL} - BSUoS_{BL} - C_{BL})
- GB Peak Price Average Peak BSUoS Average Peak Capacity
- (GB_{PK} BSUoS_{PK} C_{PK})

The French generator will export to GB when:

- $FR_{BL} < (GB_{BL} BSUoS_{BL} C_{BL})$
- $FR_{PK} < (GB_{PK} BSUoS_{PK} C_{PK})$

The results of the analysis are included in the table below:

	Baseload Prices		Peak Prices	
	Days	Days Selling	Days	Days Selling
	Exporting	Domestically	Exporting	Domestically
GB Generator	31%	69%	32%	68%
Fr Generator	36%	64%	37%	63%

The total amount of days in the year that the interconnector is in use:

Based on baseload prices:

• 31% + 36% = 67%

Based on peak prices:

• 32% + 37% = 69%

Under CMP 202

The price that the generator sees in the other country is no longer reduced by the BSUoS charge; however the generator still has to pay for the interconnector capacity.

A GB generator's decision

- $GB_{BL} > (Fr_{BL} C_{BL})$
- $GB_{PK} > (Fr_{PK} C_{PK})$

GB generator will sell energy domestically

- $GB_{BL} < (Fr_{BL} C_{BL})$
- $GB_{PK} < (Fr_{PK} C_{PK})$

GB generator will export their power to Fr

A French generator's decision

- FrBL > (GBBL- CBL)
- FrPK > (GBPK- CPK)

Fr generator will sell energy domestically

- FrBL < (GBBL- CBL)
- FrPK < (GBPK CPK)

Fr generator will export their power to FR

The total amount of days in the year that the interconnector is in use:

	Baseload Prices		Peak Prices	
	Days	Days Selling	Days	Days Selling
	Exporting	Domestically	Exporting	Domestically
GB Generator	42%	58%	44%	56%
Fr Generator	45%	55%	45%	55%

Based on baseload prices:

42% + 45% = 87%

Based on peak prices:

• 44% + 45% = 89%

Based on Day-ahead prices, under the current arrangements, the interconnector is in use c.a. 67% of the time. However, once BSUoS is removed from the interconnector, it is utilised c.a. 87%. Therefore, BSUoS, other factors aside, acts to discourage potentially beneficial trades c.a. 20% of the time.

Summary of Results

As the markets do not fully converge, there is always a price differential. Consequently, the interconnector should be in use 100% of the time. However, the price of capacity may restrict trade for a small percent of the time, which is why even under CMP 202, the analysis does not show the interconnector being utilised 100% of the time.

From this analysis, the percentage of time that BSUoS appears to act as a barrier to trade; 9% and 20%, represent times when both generators make the same decision, which is to sell their power domestically. This occurs when the BSUoS is greater than the price differential and therefore reverses the differential for one of the trading parties.

A simple numerical example can demonstrate this:

- GB Spot price £11.00/MWh,
- Fr Spot price £10.00/MWh,
- BSUoS £1.50/MWh
- Capacity £0.50/MWh

In this situation:

- GB generator would choose to sell domestically (GB>Fr-BSUoS-C)
- FR generator would also choose to sell domestically (Fr>GB-BSUoS-C)

Without BSUoS:

- GB generator would make the same decision and sell domestically (GB>Fr-C)
- FR generator would export to GB (GB>Fr-C)

The BSUoS charge has affected the trading decision and prevented the trade between the two markets. Therefore, the removal of BSUoS under the implementation of CMP 202 should mean that the interconnector is used for a greater percentage of the time and potentially more beneficial trades will take place between the markets.

Other supporting analysis

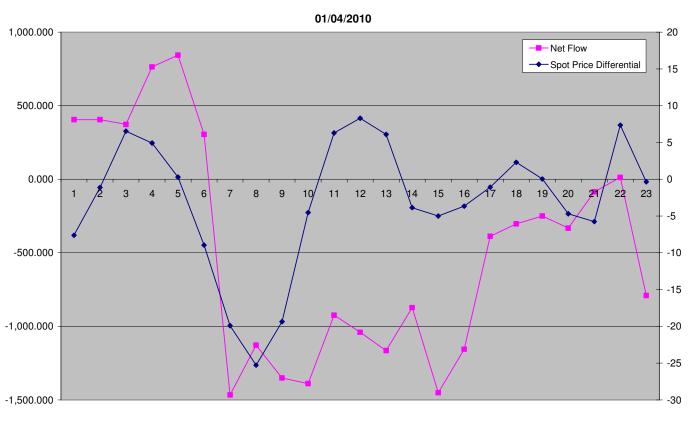
Other analysis was conducted that compared the actual flows on the GB-France (IFA) interconnector with the price differential for the year 2010-11. Based on this historical data, there were trades on the interconnector 99.87% of the time.

The analysis looked at the price differential and the net flow on the interconnector for each half hourly period to calculate the percentage of time that the flow on the interconnector was against the spot price differential.

For example:

- A positive spot price differential implies that GB > Fr
- A positive net flow implies that the flow is into GB (GB Import)
- Therefore a positive spot price differential should be matched with a positive net flow

The graph below shows the net flow and spot price differential for 1st April 2010. The net flow and the price differential should follow the same trend (i.e. both positive or both negative) to allow the trader to maximise the arbitrage opportunity. As demonstrated, there are times when the net flow is counter to the price differential, particularly periods 11-13 and 18.



The analysis concluded that for 32% of the time, the flow on the interconnector was in the direction against the spot price differential.

We understand however, that much of the current trading on the IFA link is performed day-ahead or earlier and thus other factors, such as liquidity in the markets, may have an effect on the potential benefits outlined in this analysis.