

Modification Proposal – BSCP40/03	MP No: P259 <i>(mandatory by BSCCo)</i>
Title of Modification Proposal <i>(mandatory by originator)</i> : Provision of Applicable Balancing Services Volumes for Interconnectors	
Submission Date <i>(mandatory by originator)</i> : 04 May 2010	
<p>Description of Proposed Modification <i>(mandatory by originator)</i></p> <p>The Grid Code requires Interconnectors commissioned after 1 April 2005 to be capable of providing Frequency Response. This will apply to the new Interconnectors such as BritNed which is planned to start commercial operations in early 2011. Existing Interconnectors are exempt from this requirement.</p> <p>The provision of mandatory Frequency Response is governed by the Grid Code and settled largely under the Connection and Use of System Code (CUSC) governance, the BSC does cover for the allocation of frequency response energy imbalance volumes and also the provision of market data. .</p> <p>The two areas of the BSC that are impacted by the provision of frequency response by the interconnector are the allocation of frequency response imbalance volumes to the interconnector and the current definitions of FPN, MEL and SEL and their applicability to the operation of the interconnector.</p> <p>The Balancing Services Standing Group (BSSG – an industry standing group under the CUSC governance) has considered the changes required to allow Interconnectors to provide Frequency Response and came up with the following BSC recommendations:</p> <ul style="list-style-type: none"> i. frequency response imbalance volumes should be allocated to the Interconnector Error Administrator (IEA) BM Unit to which SAA allocates the metered volume corresponding to the delivered Frequency Response. ii. it is proposed to report the Interconnector equivalents of FPN, MEL and SEL to the Balancing Mechanism Reporting Agent (BMRA) <p>It is important to note than any solution must be able to work with the proposed ‘implicit auctions’ used to determine the flows on the interconnector. The European Commission has already imposed a requirement for day-ahead implicit auctions on BritNed, and the requirement is likely to extend to other Interconnectors including the existing French Interconnector (IFA) over the next few years.</p> <p>Under the current understanding with BritNed, the volumes allocated by the implicit auctions will be lumped together with any errors being allocated to the Interconnector, and allocated to the IEA BM Units. The Interconnector Administrator will not include the implicit auction flows in the Metered Volumes notified under BSCP04, and SAA will therefore automatically include these flows in the IEA Metered Volumes.</p> <p>i) Frequency response imbalance volumes</p> <p>To assign frequency response imbalance volumes data (using the Applicable Balancing Services Volume Data - ABSVD methodology) to the BM Unit responsible for the Frequency Response, the Balancing Services Settlement Group (BSSG) has identified 3 potential mechanisms:</p>	

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<ul style="list-style-type: none"> • Option 1– The Transmission Company assigns the calculated frequency imbalance volumes (ABSVD) to the Interconnector Error Administrator (IEA) BM Unit ‘believed’ to have been in imbalance (i.e. either the production or consumption account). If the IEA incurs Imbalance Charges as a result of the Transmission Company picking the ‘wrong’ BM Unit (e.g. allocating the frequency response imbalance volumes to the production account when they should have been allocated to the consumption account), then the IEA can ask the Transmission Company to resubmit corrected ABSVD. This is a ‘Do Nothing Option’ as there will be no changes to the BSC system. • Option 2– The Transmission Company provides ABSVD to the Settlement Administration Agent (SAA) for the Interconnector, and SAA assigns it to the IEA BM Unit that received the IEA Metered Volume (QMij) in accordance with T4.1. • Option 3– Allocate a single BM Unit to the IEA for Frequency Response (i.e. no production and consumption accounts) and error volumes. Amend SAA to allocate error volumes to this BM Unit. There are two variants to this Option. <ul style="list-style-type: none"> a) The IEA could have the single BM Unit for Frequency Response in addition to the existing pair of BM Units. The existing pair will continue to be associated with the volumes resulting from Interconnector capacity auctions. b) The existing pair of BM Units will be decommissioned and all IEA volumes will be assigned to this single BM Unit. <p>Option 1 appears to have a number of significant disadvantages:</p> <ul style="list-style-type: none"> • It imposes additional processes on the Transmission Company and IEA; and • It makes the IEA responsible for checking their settlement data and identifying instances where their ABSVD has gone into the ‘wrong’ BM Unit, exposing them to spurious Imbalance Charges. This would place them on an unequal footing with other providers of Frequency Response, who have their expected energy volumes resulting from the delivery of frequency response removed from their overall imbalance volumes. <p>For these reasons, we propose (subject to confirmation that the system costs are reasonable) that either of the options 2 or 3 be progressed.</p> <p>ii) Reporting Interconnector equivalents of FPN, MEL and SEL to the Balancing Mechanism Reporting Agent (BMRA)</p> <p>It is proposed to report the Interconnector equivalents of FPN, MEL and SEL to the Balancing Mechanism Reporting Agent (BMRA). This data is used to calculate payments for Frequency Response and hence will be useful for Interconnectors to understand their position.</p> <p>This could be achieved by either of the following solutions:</p> <ul style="list-style-type: none"> • Associate the data for each Interconnector with an appropriate BM Unit such as IEA BM Unit (which could be searched for using the existing BM Unit search functionality). This would minimise system changes, in that data for Interconnectors could appear on the existing BM Unit screens; or • Introduce new data flows and screens specifically for reporting data related to 	

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Interconnectors. This would be likely to have a larger system impact, but might offer more scope for tailoring the reporting to the specific requirements of Interconnectors.	
<p>Description of Issue or Defect that Modification Proposal Seeks to Address <i>(mandatory by originator)</i></p> <p>The Grid Code requires Interconnectors completed after 1 April 2005 to be capable of providing Frequency Response.</p> <p>The expected change in energy delivery from a provider due to the provision of frequency response is calculated by the Transmission Company and submitted to settlement as Applicable Balancing Services Volume Data (ABSVD). The effect of this ABSVD submission is to avoid any Imbalance Charge exposure for the Party providing Frequency Response (provided that they deliver the calculated volume). Any over- or under-delivery will still be subject to Imbalance Charges.</p> <p>The current rules for the submission of ABSVD require the Transmission Company to assign all volumes to BM Units. However, for an Interconnector providing Frequency Response, the Transmission Company will not necessarily be in a position to determine which BM Unit the ABSVD should be assigned to. This is due to the fact that SAA determines the BM Unit depending on the overall direction of the IEA volume.</p> <p>Currently, the BSC does not prohibit the provision of ABSVD for IEA BM Units and could therefore support Option 1 described above. However, there is scope for error and incorrect charges to Interconnectors leading to inefficient arrangement for the provision of Frequency Response by Interconnectors.</p> <p>The BSC should be amended to provide Interconnectors providing Frequency Response with the same certainty that they won't incur Imbalance Charges (provided they deliver the correct volume) that is already enjoyed by other Frequency Response providers.</p> <p>The issue that then arises is how to ensure that the ABSVD is assigned to the correct BM Unit. The Settlement Administration Agent (SAA) calculates a Metered Volume for the IEA and allocates it to either the Production BM Unit or the Consumption BM Unit depending on its sign. In order to avoid levying Imbalance Charges on successfully-delivered Frequency Response, the IEA's ABSVD must be allocated to the same BM Unit as the Metered Volume.</p> <p>In addition to these changes, BSSG would like the BMRA to report the equivalents of the following for the Interconnector as a whole:</p> <ul style="list-style-type: none"> • Aggregate Final Physical Notification (FPN), • Maximum Export Limit (MEL), and • Stable Export Limit (SEL) 	

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<p>The reporting of Aggregate FPN will benefit the participants in the Frequency Response market, because the aggregate is the baseline against which Frequency Response is delivered, and hence controls the volume of Frequency Response that the Interconnector can deliver. This FPN, MEL and SEL data is used to calculate payments for Frequency Response and will therefore help Interconnectors to understand their position.</p>	
<p>Impact on Code <i>(optional by originator)</i></p> <p>Option 1 would not necessarily require any BSC changes, in that:</p> <ul style="list-style-type: none"> • Section Q6.4 does not prohibit providing ABSVD for IEA BM Units; and • Section Q6.4.3 allows the Transmission Company to resubmit ABSVD up until Final Reconciliation. <p>Options 2 and 3 would require the following changes to the BSC:</p> <ul style="list-style-type: none"> • Amend Section Q6.4 to specify that Applicable Balancing Services Volume Data may be provided for BM Units and/or Interconnectors. • For option 2, add a new paragraph to T4.1 requiring the SAA to allocate the ABSVD for an Interconnector to the IEA BM Unit that received the Metered Volume (i.e. the Production BM Unit where QMij is positive and the Consumption BM Unit where QMij is negative). • For option 3, add a new paragraph to T4.1 requiring SAA to allocate the ABSVD for an Interconnector to the single IEA BM Unit. <p>There will be changes to BMRA to display equivalents of Aggregate FPN, MEL and SEL for the Interconnector.</p>	
<p>Impact on Core Industry Documents or System Operator-Transmission Owner Code <i>(optional by originator)</i></p> <p>In addition to the proposed BSC changes, the BSSG is considering CUSC changes associated with interconnectors providing frequency response although there is no interaction with these changes.</p>	

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<p>Impact on BSC Systems and Other Relevant Systems and Processes Used by Parties <i>(optional by originator)</i></p> <p>For the implementation to address the allocation of frequency response volumes, the following potential system changes may be required:</p> <p>For Option 1: No changes anticipated.</p> <p>For Option 2: The Transmission Company would submit ABSVD against the IEA’s Production BM Unit with an understanding that SAA may re-allocate the volume to either IEA BM Unit. The SAA software would be amended to allocate the Interconnector ABSVD to the IEA BM Unit that received the Metered Volume.</p> <p>For Option 3: Depending on the variant chosen, the CRA database package will require change to commission a new Frequency Response BM Unit and decommission the existing pair for the Interconnector Error Administrator. There will be minor amendments to SAA to assign error volume to the single IEA BM Unit. To display the equivalent interconnector data, changes to the BMRA will be required.</p>	
<p>Impact on other Configurable Items <i>(optional by originator)</i></p>	

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<p>Justification for Proposed Modification with Reference to Applicable BSC Objectives <i>(mandatory by originator)</i></p> <p>By removing the barrier to efficient Interconnector participation in the market for Frequency Response, this Modification Proposal will:</p> <ul style="list-style-type: none"> • Better facilitate Applicable BSC Objective (b) (“the efficient, economic and co-ordinated operation of the national electricity transmission system”), by allowing access to Frequency Response from Interconnectors where they are the most economic provider; and • Better facilitate Applicable BSC Objective (c) (“promoting effective competition in the generation and supply of electricity, and (so far as consistent therewith) promoting such competition in the sale and purchase of electricity”), specifically by promoting competition in the market for Frequency Response <p>The Modification Proposal will also facilitate Applicable BSC Objective (d) (“promoting efficiency in the implementation and administration of the balancing and settlement arrangements described in paragraph 2”) by removing a potential inconsistency between the Grid Code and the BSC. The Grid Code requires Interconnectors completed after 1 April 2005 to provide Frequency Response, while the BSC is (at best) silent about how this is supported. Introducing clarity on the BSC arrangements will avoid the risk of confusion or error in the administration of the ABSVD arrangements.</p>	
<p>Urgency Recommended: No <i>(delete as appropriate) (optional by originator)</i></p>	
<p>Justification for Urgency Recommendation <i>(mandatory by originator if recommending progression as an Urgent Modification Proposal)</i></p>	
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Attachments: No <i>(delete as appropriate) (mandatory by originator)</i>	
If Yes, Title and No. of Pages of Each Attachment:	