Modification proposal:	**Balancing and Settlement Code (BSC): Provision of Applicable Balancing Services Volumes for Interconnectors (P259)**		
Decision:	The Authority[1] rejects this proposal		
Target audience:	National Grid Electricity Transmission Plc (NGET), Parties to the BSC and other interested parties		
Date of publication:	04 November 2010	Implementation Date:	Not applicable

Background to the modification proposal

National Grid as GB System Operator has a licence obligation to maintain the frequency of electricity supply within certain limits[2], except in exceptional circumstances. Large deviations in frequency could lead to disconnections and generation disruptions. Actual system frequency is continuously changing and depends on the balance between demand and generation. If demand is greater than generation, frequency falls and, if generation is greater than demand, frequency rises.

To avoid an unacceptable fall in frequency in the event that one or more generators fail. It is necessary to have available additional generation, which can be called upon at very short notice (i.e. within minutes). This is referred to as 'Frequency Response'.

Mandatory Frequency Response is an automatic change in active power output in response to a frequency change. All generators bound by the Grid Code[3] are required to have the capability to provide Mandatory Frequency Response. The capability to provide this service is a condition of connection for generators to the GB Transmission System.

No existing interconnectors are currently obliged to provide Mandatory Frequency Response. However, on 27 May 2005 the Authority directed National Grid to implement Grid Code change H/09: 'Changes to Incorporate New Generation Technologies and DC Interconnectors (Generic Provisions)'[4]. The proposer contends that, amongst other things, the implementation of H/09 had the effect of requiring under the terms of the Grid Code that an interconnector (with a DC converter) commissioned after 2005 will be required to provide Mandatory Frequency Response. This provision may therefore capture the BritNed interconnector which is scheduled to go-live on 1 April 2011.

The modification proposal

As Mandatory Frequency Response is provided after the closure of the window for nominated trades, it would ordinarily result in the provider being placed in an imbalance position. To ensure the provider is not placed in an imbalance position, National Grid submits into settlement Applicable Balancing Services Volume Data (ABSVD) equal to the volume of the Mandatory Frequency Response from the relevant BM Unit. This energy volume is calculated in accordance with Section 4.1.3.9A of the CUSC, with an appropriate payment being made to the relevant BM Unit account.

[1] The terms 'the Authority', 'Ofgem' and 'we' are used interchangeably in this document. Ofgem is the Office of the Gas and Electricity Markets Authority.
[2] National Grid is required to maintain the frequency between 49.5-50.5 Mhz
[3] The Grid Code is designed to permit the development, maintenance and operation of an efficient, co-ordinated and economical system for the transmission of electricity, to facilitate competition in the generation and supply of electricity and to promote the security and efficiency of the power system as a whole. National Grid and users of its transmission system are required to comply with the Grid Code.
[4] http://www.ofgem.gov.uk/LICENSING/ELECCODES/GRIDCODE/MODS/Documents1/10870-Binder1.pdf

Normally, Mandatory Frequency Response is provided by electricity generators, with payments automatically being attributable to their Production BM Unit and associated energy account. However, an interconnector has both a Production and a Consumption BM Unit. An incorrectly assigned ABSVD may expose the interconnector to inappropriate imbalance charges.

P259 seeks to address the problem that National Grid may not be able to identify the appropriate interconnector BM Unit to assign the ABSVD to and thereby avoid the imbalance charge. The proposal can be summarised as follows:

- National Grid will notify the Settlement Administration Agent (SAA) of the appropriate ABSVD volume for the interconnectors' accounts. As a default National Grid will notify the ABSVD against the Production BM Unit, in line with the process for generators.

- The SAA will then determine which BM Unit should correctly be allocated the ABSVD. The SAA will then carry out Settlement calculations taking into account the ABSVD, in the same way it would at present. The SAA performs the determination of which BM Unit to assign ABSVD to as part of each Settlement Run.

- The Balancing Mechanism Reporting Agent (BMRA) will report the ABSVD data as provided by National Grid. The ABSVD would therefore be reported against the Production BM Unit, regardless of whether the SAA ultimately assigns it to the Consumption BM Unit in subsequent Settlement Runs. This is consistent with the concept that the data reported on the Balancing Mechanism Reporting System (BMRS) is indicative.

Attachment A to the P259 Assessment Report (the 'Detailed Assessment') notes that the proposed solution was chosen as it treats interconnectors the same as generators that provide Mandatory Frequency Response, it provides sufficient transparency around the provision of Mandatory Frequency Response by Interconnectors and it was seen as less complex and costly than other options under discussion.

BSC Panel[5] recommendation

The BSC Panel considered the draft Final Modification Report (FMR) at its meeting on 12 August 2010. The Panel unanimously agreed that P259 would better facilitate Applicable Objectives (a) to (d). Further details of the Panel's views appear in the FMR.

The Authority's decision

The Authority has considered the issues raised by the modification proposal and the FMR dated 10 September 2010. The Authority has considered and taken into account the responses to ELEXON's[6] consultation which are attached to the FMR[7]. The Authority has concluded that, having regard to its principal objective and statutory duties it is unable to direct the implementation of modification proposal P259 and that it would not better facilitate the achievement of any of the Applicable Objectives of the BSC[8]. This decision is also consistent with EU law.

[5] The BSC Panel is established and constituted pursuant to and in accordance with Section B of the BSC.
[6] The role and powers, functions and responsibilities of ELEXON are set out in Section C of the BSC.
[7] BSC modification proposals and modification reports can be viewed on the ELEXON website: www.elexon.co.uk
[8] The Authority's statutory duties are wider than matters which the Panel must take into consideration and are detailed mainly in the Electricity Act 1989.

Reasons for the Authority's decision

We note that the BSC Panel recommended that the Authority not take this decision until the impact of the implementation of the European Union (EU) Third Internal Market Energy Package (the 'Third Package') is known. The FMR states that P259 was the best solution given uncertainty about Third Package implementation. The uncertainty referred to is whether or not interconnectors are Transmission System Operators (TSOs). The Detailed Assessment notes that 'interconnectors being designated as Transmission System Operators, […] would remove the [Grid Code] obligation to be capable of provision of Mandatory Frequency Response'. The FMR also notes that if interconnectors are TSOs they will not be obligated to be capable of providing Mandatory Frequency Response.

We consider that there is sufficient clarity from legislation that an interconnector is a TSO. Under both the Second and Third Package an interconnector is defined as a transmission line[9] and the definition of TSO includes interconnections[10]. As a consequence, interconnector flows are neither classed as production (generation) nor consumption (demand), but part of the overall transmission infrastructure facilitating the wider market.

We agree that the provision of Frequency Response over interconnectors may have important benefits for GB consumers. Here, we interpret the expression "provision" of Frequency Response by interconnectors to mean the provision from neighbouring markets. GB consumers should benefit if National Grid is able to access a bigger pool of generation from which to procure Frequency Response as this should reduce the overall cost. The greater the pool of available generation the greater the potential benefits. However, national regulators and TSOs responsible for the interconnected systems may need to ensure that the provision of frequency response to GB does not undermine operational security and that the arrangements fit with the their national balancing mechanism. The commercial arrangements envisaged by National Grid under P259 are unilateral and do not represent a coordinated approach to cross-border balancing.

The Third Package (which must be implemented in Member States by 3 March 2011) will require TSOs to cooperate regionally to, amongst other things, integrate regional balancing and reserve power mechanisms[11]. The Third Package also requires regulators to ensure that cross-border arrangements not entered into unilaterally[12]. We are concerned that the proposed approach to the procurement of Frequency Response which is supported by P259 will not promote the integration of cross-border balancing mechanisms; any proposal in this respect would need to be co-ordinated between TSOs and NRAs and in the absence of a clear set of commercial arrangements from National Grid it is not clear that this is the case here.

BSC objective a) 'efficient discharge of the obligations of the Transmission Licence'

[9] Article 2 of Regulation (EC) 1228/2003 defines an interconnector as "*a transmission line which crosses or spans a border between Member States and which connects the national transmission systems of the Member States*". Regulation (EC) 714/2009 adopts an almost identical definition.
[10] Article 2 of Directives 2003/54/EC and 2009/72/EC define Transmission system operator as *"a natural or legal person responsible for operating, ensuring the maintenance of and, if necessary, developing the transmission system in a given area and, where applicable, its interconnections with other systems, and for ensuring the long-term ability of the system to meet reasonable demands for the transmission of electricity."*
[11] Article 12 of Regulation 714/2009 on "Regional cooperation of transmission system operators".
[12] See Article 6, Article 37 and Article 38 of Directive 2009/72/EC

The FMR suggests that implementation of P259 furthers this objective, as it would remove a disadvantage to interconnectors that provide Mandatory Frequency Response compared to other generators. This disadvantage would be the extent to which interconnectors, unlike generators, may be exposed to imbalance volumes and associated charges through the inappropriate allocated of ABSVD.

However, the commercial arrangements envisaged by National Grid under P259 are unilateral in nature and may not be appropriate. To determine whether P259 furthers this objective the commercial arrangements for National Grid to procure Mandatory Frequency Response need to have been agreed. Without agreement of cross-border arrangements with the neighbouring TSO and regulator, this mod will be unable to further this objective.

BSC objective b) 'efficient economic and co-ordinated operation of the national electricity system'

We agree that National Grid should be able to procure sufficient Frequency Response to maintain electricity supply security and quality, ensuring it remains within statutory tolerances. We also agree that Frequency Response should be procured at the most efficient price and interconnectors may have a role to play in that.

The FMR also notes that the implementation of P259 would impact central BSC Systems, with an associated cost of £73,700 and a further estimated cost to ELEXON of around £9,600. It also states that P259 would avoid the need for National Grid to operate a workaround to correctly allocate ABSVD, giving an estimated cost saving to it of between £14,000 and £50,000 per annum. The actual costs to National Grid would depend on how often Mandatory Frequency Response is instructed. No information has been provided on the likelihood or anticipated frequency of such instructions.

For the provision of Frequency Response to GB, National Grid need to agree on the appropriate commercial arrangements with the relevant interconnector, interconnected TSOs and with approval of the relevant regulator authorities. Until these arrangements have been established and approved it is not possible to determine whether P259 better facilitates this objective.

BSC objective c) 'promoting effective competition in the generation and supply of electricity and in the sale and purchase of electricity'

The ability of National Grid to procure Frequency Response from neighbouring markets should increase the degree of competition in the provision of such services and enable National Grid to procure them at a more efficient price. We also agree that interconnectors should not be exposed to greater risk of spurious imbalance charges and should face the same transparency requirements as other parties.

However, in the absence of coordinated cross-border balancing arranagements it is not clear that mod P259 better facilitates the achievement of this objective. In addition, as interconnectors do not currently provide Mandatory Frequency Response and it is not clear that National Grid is able to require them to do so, mod P259 does not better facilitate this objective.

BSC objective d) 'promoting efficiency in the implementation and administration of the balancing and settlements arrangements'

We agree that to the extent there is an inconsistency between the BSC and other relevant documents, that inconsistency should be clarified and wherever appropriate removed. However, we note that concerns have been raised that it is not appropriate for the Grid Code to require another TSO to offer Mandatory Frequency Response.

We accept the arguments made by the panel and other respondents that mod P259 should be assessed against the current baseline rather than pre-empting the outcome of the implementation of the Third Package. However, in order to determine whether P259 better facilitates the Applicable Objectives of the BSC it needs to be clear how National Grid will procure Mandatory Frequency Response from neighbouring markets. These arrangements need to be developed in cooperation with the relevant interconnector, interconnected TSO and with the approval of national regulators.

For the reasons set out above, we have decided not to direct the implementation of P259: 'Provision of Applicable Balancing Services Volumes for interconnectors'.

Martin Crouch
Partner – European Strategy
Signed on behalf of the Authority and authorised for that purpose.