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Draft MODIFICATION REPORT

MODIFICATION PROPOSAL P109 – A Hedging Scheme For Changes To TLFs in Section T Of The Code

Prepared by ELEXON on behalf of the Balancing and Settlement Code Panel

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1 SUMMARY AND RECOMMENDATIONS

1.1 Recommendation

On the basis of the analysis, consultation and assessment undertaken in respect of this Modification Proposal during the Assessment Procedure, and the resultant findings of this report, the Balancing and Settlement Code Panel (the Panel) recommends that:

Proposed Modification P109 should not be made.

In the event that the Authority determines that the Proposed Modification P109 should be made, AGREE an Implementation Date of 1 April, 2004 if an Authority decision is received by 14 April, 2003, or AGREE an Implementation Date of 1 August, 2004 if an Authority decision is received after 14 April, 2003 but before 18 August, 2003.

1.2 Background

P109 was submitted on 1 November 2002 by British Energy plc, in accordance with Section F 2.1.1 of the Balancing and Settlement Code ('the Code'). The Modification Proposal seeks to address a perceived lack of efficient signals for long-term investment due to the risk of a change in Transmission Loss Factors (TLFs). P109 seeks to mitigate this risk through a scheme that protects investors against the windfall effects of future changes to TLFs, whilst maintaining economic incentives at the margin, so that investors react more efficiently to current and future incentives within the Code.

The suggested mechanism is that each BM Unit would be allocated two F-factors (one for Delivering and one for Offtaking) and these would be fixed volumes, either based on history (for existing CVA BM Units), published technical data (for new CVA BM units), or on a pro-rata allocation of a larger aggregated volume (SVA BM Units and Interconnector BM Units). These F-factor volumes would be exposed to an Applicable Loss Factor, which would be based on a non-zonal varying amount (for existing BM Units) or on the prevailing Transmission Loss Factor at the time of registration. Only metered amounts relative to the F-factor would be exposed to the current Transmission Loss Factor itself.

Parties would have a one-off opportunity to opt into the F-factor arrangements.

1.3 Rationale for Recommendations

Three key arguments, described in the P109 Assessment Report, were put forward against implementation of Modification Proposal P109. First, P109 would reduce the benefits introduced by P82 through a reduction in the accuracy of the allocation of transmission losses and by diminishing the locational signals of the scheme. Therefore, Applicable BSC Objectives (b) and (c) would be undermined. Second, the purported benefits resulting from the perceived reduction in risk introduced by P109 would be outweighed by increased variability in 'Transmission Loss Multipliers' (TLMs)[1]. Thereby undermining BSC Objective (c). Finally, Applicable BSC Objective (d) would be undermined owing to the reduction in efficiency of the settlement arrangements resulting from the cost and complexity of administering P109.

[1] 'Transmission Loss Multipliers' ('TLMs') are the multiplicative factor applied to metered volumes in Settlement to allocate transmission losses.

The Panel considered that, although there was a narrow majority of the P109MG who considered that P109 did better facilitate achievement of the Applicable BSC Objectives, the arguments suggesting that this was not the case were the more compelling. Furthermore, it was suggested by one Panel member that the arguments relating to the perceived reduction in the cost of capital afforded by the proposal were not robust and that no such reduction had been demonstrated and therefore, there was no better facilitation of Applicable BSC Objective (c) in that respect. Another Panel member considered that Applicable BSC Objectives would not be better achieved by BSC Parties at large providing a hedge for particular BSC Parties, in respect of zonal losses.

2 INTRODUCTION

This Report has been prepared by ELEXON Ltd., on behalf of the Panel, in accordance with the terms of the Code. The Code is the legal document containing the rules of the balancing mechanism and imbalance settlement process and related governance provisions. ELEXON is the company that performs the role and functions of the BSCCo, as defined in the Code.

This Modification Report is addressed and furnished to the Gas and Electricity Markets Authority ('the Authority') and none of the facts, opinions or statements contained herein may be relied upon by any other person.

An electronic copy of this document can be found on the BSC Website, at www.elexon.co.uk.

3 HISTORY OF PROPOSED MODIFICATION

P109 was submitted on 1 November 2002 by British Energy plc, in accordance with Section F 2.1.1 of the Code. The Initial Written Assessment (IWA) for P109 was presented to the Panel meeting of 14 November 2002. The Panel determined that P109 required further assessment and submitted P109 to a 3-month Assessment Procedure by the P109 Modification Group (P109MG) and that an Interim Report should be presented to the Panel at its meeting of the 12 December, 2002.

The P109MG met twice, prior to the December Panel meeting, to consider the particular issues that the Panel had agreed should form the basis of the Interim Report, namely; some definitional elements of the proposal, the vires of the Assessment Procedure, governance, given the anticipatory nature of the proposal, the quantification of the purported better achievement of Applicable BSC Objectives, given the anticipatory nature of the proposal, the limitation of the proposed hedging to TLFs and the interaction with other Modification Proposals.

At its meeting of the 12 December, 2002, the Panel noted the content of the Interim Report, agreed that no guidance needed to be given to the P109MG and that no provisional thinking was required from the Authority in respect of any matter raised in the Interim Report. The Panel also agreed that the Assessment procedure should continue, in accordance with agreed Terms of Reference.

The P109MG subsequently met twice to consider the proposal and issued a consultation on the 13 January, 2003. Fifteen responses (53 Parties) responded and the P109MG considered these responses and completed its Assessment, meeting on two further occasions following the consultation.

The Assessment Report was considered by the Panel at its meeting of the 14 February, 2003.

4 DESCRIPTION OF PROPOSED MODIFICATION

P109 seeks to address a perceived lack of efficient signals for long-term investment due to the risk of approval of a Modification Proposal seeking to change the allocation of transmission losses. When P109 was submitted on 1 November 2002, the Code set the value of TLFs to zero for all market participants, but it was recognised that the Code could be modified at any time in the future to make TLFs vary by location. Such a Code Modification would change the value of long-term investments in the production or consumption of electricity. According to the Proposer, the resulting risk would either be too costly to hedge or unhedgeable, and so would reduce the efficiency of investment decisions. P109 seeks to mitigate this risk through a scheme that protects investors against the windfall effects of future changes to TLFs, whilst maintaining economic incentives at the margin, so that investors react more efficiently to current and future incentives within the Code.

The P109MG refined P109 such that the 'trigger' for the proposed risk mitigation scheme would be an Authority determination that the Code be modified such that TLFs changed. On 17 January 2003, the Authority determined that Modification Proposal P82 'Introduction of Zonal Transmission Losses on an Average basis' ('P82') should be made. Approved Modification P82 will introduce zonal differentiation of transmission losses on 1 April 2004. Acknowledging that the Code baseline had changed, the P109MG defined the 17 January decision as the 'trigger' for the hedging scheme proposed by P109.

The Code currently allocates 45% of total transmission losses to BM units located within 'Delivering' Trading Units and 55% to BM Units located within 'Offtaking' BM Units, in both cases on a uniform basis determined for each half-hour.

P109 would maintain this rule for each existing CVA-registered BM Units, but only for a fixed volume known as the 'F-Factor'. There would be two F-Factors per BM Unit – one for 'Delivering' and one for 'Offtaking'. For each existing CVA-registered BM unit, the associated F-Factor volumes would be defined by formulae relating to the past level of its output and consumption respectively, and would remain constant for the lifetime of the hedging scheme (i.e. 15 years from the trigger). Differences between actual output and these F-Factor volumes (whether positive or negative) would incur a TLF based on the new rules for allocating transmission losses (i.e. those contained in Approved Modification Proposal P82). Applying the new TLFs to marginal changes in output and consumption would preserve any desirable incentives provided by the new rules. However, applying the TLFs in existence prior to the trigger to fixed (i.e. F-Factor) volumes would provide a means of hedging against the windfall effects of such a change. CVA-registered BM units would have a one-off option to invoke this F-Factor or not (i.e., to set their F-Factor to zero), depending upon whether they wished to take advantage of the scheme or not.

'New' CVA-registered BM Units, those registered on or after 1 December 2001[2], would be able to opt for F-factors based on average plant characteristics (also on a one-off basis). For these F-Factors, they would tie in the zonal TLF prevailing at the time of their registration. This aspect would offer some protection against instability in incentives – e.g. the prospect of TLFs worsening if a second generator connected at the same place.

For SVA-registered BM Units, the scheme would offer similar hedging, subject to the following conditions:

(1) Suppliers within a GSP Group would share a single F-Factor volume defined for the GSP Group as a whole,

[2] Any BM Unit registered on or after this period would not have been present for the duration of the baseline period agreed by the P109MG. And therefore would lack the required data set from which to calculate F-Factors on a historical basis..

(2) consequently, there would be no provision for such Suppliers to opt in or out of the scheme and

(3) the F-Factor volume would decline gradually to zero over 15 years, to prevent any sudden change in costs to customers.

Interconnector BM Units would be offered hedging similar to that provided for SVA-registered BM Units, subject to the following conditions:

(1) Interconnector BM Units would share a single F-Factor volume defined for the Interconnector as a whole,

(2) the Interconnector Administrator (IA) would make a one-off decision, on behalf of all Interconnector Users, to hedge or not; and

(3) the F-factor volume would constant for the lifetime of the hedging scheme (i.e. 15 years from the trigger).

The table below summarises the different treatment by BM Unit type:

	CVA 'Existing'	CVA 'New'	SVA	Interconnector
Basis for F-Factor Values (F-Factors are the volume to be hedged against varying TLFs)	Sample period from 1/12/01 to 31/11/02[3]	Published statistics for new technology and migrating BM Units, as per CALF Methodology Statement	Pro-rata amount of GSP Group load, based on sample period from 1/12/01 to 31/11/02	Pro-rata amount of I/C load, based on sample period from 1/12/01 to 31/11/02
Applicable Loss Factors (ALFs are the Loss Factors to be applied to the F-Factor Volumes)	Dynamically calculated to remove zonal variation.	Prevailing TLF at the time of registration.	Dynamically calculated to remove zonal variation.	Dynamically calculated to remove zonal variation.
Option to Hedge (Allows hedging to be switched on, or off)	Yes (Lead Party)	Yes (Lead Party)	No	Yes (IA)
Duration of Hedge (Time over which the hedge applies)	15 years from month of trigger date	Remainder of 15 years from month of trigger date	15 years from month of trigger date, with a linear rundown	15 years from month of trigger date

5 RATIONALE FOR PANEL RECOMMENDATIONS

In the first instance, the Panel considered further the vires issues associated with the proposal and acknowledged legal advice provided by ELEXON as to the interpretation of relevant sections of the

[3] Existing in this case means registered prior to the 1/12/01.

Code in judging whether a submitted proposal should be taken forward. Two distinct criteria were described:

- A proposal must imply a change to the prevailing Code (F2.1.2 (f) refers), in order to be a Modification Proposal, as defined. If the proposal implies a change to some future version of the Code (i.e. the prevailing Code, plus one or more Approved Modifications) then it is a contingent proposal and is not a Modification Proposal, according to the Code definition. In this latter case, such a proposal can not be considered under section F of the Code.
- If a proposal is considered to be a Modification Proposal then, under F2.1.2, it must address an issue or defect with the prevailing Code (F2.1.2(c) refers). If, however, the Modification Proposal describes an issue or defect that may manifest itself at some future point, as a result of one or more subsequent Code Modifications, but is not an issue or defect with the prevailing Code then the Modification Proposal is anticipatory and the Modifications Secretary (or the Panel) may refuse the Modification Proposal, since no issue or defect currently exists.

It was also stated that, if a proposal is a Modification Proposal and has not been refused, even if it is subsequently determined that it could have been (for example, if it were recognised that no current issue or defect existed), then the Modification Proposal must be processed to its completion, as required by F2.1.7.

The Panel noted that P109 would have an impact on the achievement of the following Applicable BSC Objectives:

- Applicable BSC Objective (b): 'The efficient, economic and co-ordinated operation by the Transmission Company of the Transmission System.'
- Applicable BSC Objective (c): 'Promoting effective competition in the generation and supply of electricity and (so far as is consistent therewith) promoting such competition in the sale and purchase of electricity.'
- Applicable BSC Objective (d): 'Promoting efficiency in the implementation and administration of the balancing and settlement arrangements.'

The principal argument presented by the P109MG Assessment Report, in favour of implementation of P109, was as follows. Achievement of Applicable Objectives (b) and (c) would be better facilitated through the provision of a more stable investment environment, coupled with the retention of the benefits provided by the locational signals resulting from P82. Limiting exposure of existing investment to variable transmission losses and providing protection against potential future changes in the allocation of transmission losses would increase the efficiency of long-term investment in generation and supply. As a consequence, investment in the Transmission System would be more efficient. In addition, the reduced risk faced by industry as a result of this more stable environment would decrease the cost of capital, reducing barriers to entry. Moreover, the benefits of this reduction in risk would outweigh the implementation costs of P109 – therefore, achievement of Applicable BSC Objective (d) would not be compromised.

The principal arguments described in the P109 Assessment Report, against implementation of P109, were threefold. First, P109 would reduce the benefits introduced by P82 through a reduction in the accuracy of the allocation of transmission losses and by diminishing the locational signals of the scheme. Therefore, Applicable BSC Objectives (b) and (c) would be undermined. Second, the purported benefits resulting from the perceived reduction in risk introduced by P109 would be outweighed by increased variability in 'Transmission Loss Multipliers' (TLMs)[4]. Thereby undermining BSC Objective C.

[4] 'Transmission Loss Multipliers' ('TLMs') are the multiplicative factor applied to metered volumes in Settlement to allocate transmission losses.

Finally, BSC Objective D would be undermined owing to the reduction in efficiency of the settlement arrangements resulting from the cost and complexity of administering P109.

The Panel considered that, although there was a narrow majority of the P109MG who considered that P109 did better facilitate achievement of the Applicable BSC Objectives, the arguments suggesting that this was not the case were the more compelling. Furthermore, it was suggested by one Panel member that the arguments relating to the perceived reduction in the cost of capital afforded by the proposal were not robust and that no such reduction had been demonstrated. Therefore, there was no better facilitation of Applicable BSC Objective C, in that respect. Another Panel member considered that Applicable BSC Objectives would not be better achieved by BSC Parties at large providing a hedge for particular BSC Parties, in respect of zonal losses.

6 LEGAL TEXT TO GIVE EFFECT TO THE PROPOSED MODIFICATION

6.1 Conformed Version

Redlined versions of the legal text are contained in Annex 2.

7 ASSESSMENT

In addition to the issues considered initially, as described in the Interim Report, the Assessment Report considered the following issues;

- Impact of the Authority determination in respect of Modification Proposal P82 (Introduction of Zonal Transmission Losses On An Average Basis),
- Different treatment of BM Unit types,
- Different treatment of 'new' and 'existing' CVA BM Units,
- Use of a CALF-type methodology in calculating the volume to be hedged for new CVA BM Units,
- The sample period for the calculation of the volumes to be hedged,
- Mechanistic rather than discretionary setting of the volumes to be hedged,
- Impact on the cost of capital,
- Credited energy calculations,
- Tradability of the volumes to be hedged and
- Overall impact (against Applicable BSC Objectives), in the light of the above.

The detailed arguments associated with these issues are contained in the Assessment Report.

The Panel, in its consideration of the Assessment noted the above issues and noted the outcome of an impact assessment, also detailed in the P109 Assessment Report. Furthermore, the Panel noted that the BSC Agent impacts were the result of a High Level Impact Assessment and that, as a consequence, there were limitations on the confidence in the results. However, the HLIA did provide sufficient information on which to base a decision. The Panel also acknowledged that there had been no impact assessment in respect of the data provision requirement on Interconnector Administrators[5], since these requirements had been a late refinement suggested by the P109MG. Finally, the Panel noted that the P109MG had suggested two potential implementation dates (1/4/04 and 1/8/04), depending on the timing of any Authority determination. The Panel noted the implication that, if implementation were to occur on the later date, there would be an interim period during which all BM Unit volumes would be exposed to live zonal losses. The Panel were also given an assurance that the choice of implementation date could be accommodated by the algebraic expressions set down in the requirements.

The P109 Assessment Report did not contain legal text. The Panel consulted with the Authority in order to determine whether the Modification Report should contain such text. The Authority confirmed that legal text was required.

[5] In parallel with the draft Modification Report consultation, the Interconnector Administrators were asked to provide a High Level Impact Assessment, BSC Agents were asked to update their High Level Impact Assessment in order that any issues can be fully considered by the Panel at their meeting on 13 March 2003.

8 SUMMARY OF REPRESENTATIONS

A summary of representations will be inserted here

ANNEX 1 – REPRESENTATIONS

[See separate document following the consultation]

ANNEX 2 – LEGAL TEXT

See attached separate documents.

Annex 2a – Changes to Section K

Annex 2b – Changes to Section R

Annex 2c – Changes to Section T

Annex 2d – Changes to Annex X2