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**INITIAL ASSESSMENT OF MODIFICATION
PROPOSAL P34 - Transfer of Imbalances
caused by Balancing Services to the
Transmission Company Energy Account**

Prepared by ELEXON Limited

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Each BSC Panel Member	Various
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1 SUMMARY

Modification Proposal P034 was submitted on 14th August 2001 by National Grid. The proposer requested that the Modification be treated as an Urgent Modification as defined in Section F of the Balancing and Settlement Code. The Panel Chairman contacted members of the BSC Panel and the Panel decided not to treat this as an Urgent Modification, but nevertheless to expedite its resolution.

In recognition of the Panel's aspirations, ELEXON met with the Proposer of the Modification on 20th August in order to obtain clarification on those points of the Modification Proposal which were felt not to be sufficiently clear. This Initial Written Assessment incorporates the findings of this meeting.

Energy Imbalance Prices provide an incentive for Parties to balance against their contracted position pre Gate Closure. The Modification Proposal seeks to avoid a Party being exposed to Imbalance Prices as a result of deviating from their Final Physical Notification under instruction from the Transmission Company as part of Balancing (Ancillary) Service provision. Balancing Services are instructed post Gate Closure, and therefore cannot be accurately contracted for in advance. The Modification Proposal asserts that the portion of energy attributable to the Balancing Service should not be exposed to Energy Imbalance Prices, Non –Delivery Charging or Information Imbalance Pricing.

The Modification Proposal identifies the reluctance of service providers to provide Balancing Services due to the inherent risk of exposure to Imbalance Prices and such reluctance to provide or withdrawal of such Balancing Services potentially gives rise to a reduction of System Security. It is this that the Modification Proposal is attempting to address.

The Modification Proposal suggests that where Balancing Services are provided, that the volume of energy directly relating to the provision of such a service is transferred from a Party's Energy Account to the Energy Account of the Transmission Company. The Modification Proposal draws attention to the fact that the (non IEA) Energy Accounts of the Transmission Company are not exposed to Imbalance Prices. The Modification Proposal suggests that this energy volume, known as "Deemed Balancing Services Volume", is calculated by the Transmission Company within two working days, using a published methodology to be defined by the Transmission Company. It is suggested that the governance arrangements for the proposed methodology be dealt with outside the Balancing and Settlement Code (BSC) and be subject to agreement of the Authority.

1.1 Achievement of BSC Objectives

The applicable BSC Objectives set out in paragraph 3 of Condition 7A of the Transmission Licence are as follows:

- (a) The efficient discharge by the Transmission Company of the obligations imposed under the Transmission Licence;
- (b) The efficient, economic and co-ordinated operation by the Transmission Company of the Transmission System;
- (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;
- (d) Promoting efficiency in the implementation and administration of the balancing and settlement arrangements.

This Modification Proposal seeks to address objectives (a), (b) and (d) outlined above.

1.2 Progression of Modification

It is recommended that the Modification Proposal is progressed as follows:

Modification Proposal P34 should be submitted to the Assessment Procedure in accordance with Section F 2.6 of the Balancing and Settlement Code, in order to enable a Modification Group to consider and assess the Modification Proposal, and any Alternative Modifications that might achieve the aims of the Modification more effectively and economically.

Modification Proposal P34 should be submitted to the Pricing Issues Modification Group for assessment.

The Assessment Report for Modification Proposal P34 should be submitted to the BSC Panel for the meeting of the 18th October 2001.

2 INTRODUCTION

This Report has been prepared by ELEXON Ltd. on behalf of the Balancing and Settlement Code Panel ('the Panel'), in accordance with the terms of the Balancing and Settlement Code ('BSC'). The BSC 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 BSC.

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

3 PURPOSE AND SCOPE OF THE REPORT

Section F of the BSC sets out the procedures for progressing proposals to amend the BSC (known as 'Modification Proposals'. These include procedures for proposing, consulting on, developing, evaluating and reporting to the Authority on potential modifications.

The BSC Panel is charged with supervising and implementing the modification procedures. ELEXON provides the secretariat and other advice, support and resource required by the Panel for this purpose. In addition, if a modification to the Code is approved or directed by the Authority, ELEXON is responsible for overseeing the implementation of that amendment (including any consequential changes to systems, procedures and documentation).

When a new proposal to modify the BSC is made, it is the responsibility of the Panel to determine how it should be progressed. Options include submitting the proposal to a Definition Procedure¹, submitting it to an Assessment Procedure², amalgamating the proposal with another proposal³, or proceeding directly to the Report Phase⁴. With a view to assisting the Panel in taking this decision, ELEXON prepares this initial written assessment of the implications of the Modification Proposal as soon as reasonably practicable after the proposal is made⁵. ELEXON endeavours to complete this initial assessment such that it can be reviewed by the Panel at the Panel meeting at which the relevant Modification Proposal is first to be considered.

This initial assessment provides a preliminary view on the following:

- the potential impact of the proposed modification on BSC systems and processes;
- the potential impact of the proposed modification on other systems and processes used by Parties;
- the potential impact of the proposed modification on the BSC, Code Subsidiary Documents and Core Industry Documents;
- the potential impact of the proposed modification on ELEXON;
- the potential impact of the proposed modification on BSC financial arrangements and budget;
- the potential impact of the proposed modification on BSC Agent contractual arrangements;
- The process and timetable that should be adopted for the progression of the Modification Proposal, in light of its complexity, importance and urgency; and
- Issues that will need to be considered and addressed in progressing the Modification Proposal (including the potential need for impact assessments, consultation and analyses).

It should be noted that, as this document only represents a preliminary assessment of the Modification Proposal, the information contained herein will, in most cases, be superseded by the subsequent analysis and reports produced by the Modification Group to which the Panel assigns the proposal for consideration.

¹ see BSC F2.5

² see BSC F2.6

³ see BSC F2.3

⁴ see BSC F2.7

⁵ see BSC F2.1.8

4 DESCRIPTION OF THE MODIFICATION PROPOSAL

The Modification Proposal is seeking to modify the calculation of Credited Energy Volume (QCE_{iaj}) such that any imbalance caused by the delivery of Balancing (Ancillary) Services is transferred from the Providers Energy Account to the Transmission Company's Energy Account. The Modification Proposal also seeks to modify the calculation of Expected Metered Volume (QME_{ij}) to prevent Non Delivery and Information Imbalance Charges being levied on volumes associated with the delivery of Balancing Services.

It should be noted that there is significant detail in this section that is not present in the Modification Proposal, this detail results from discussions between ELEXON and the Proposer that were established in order to clarify the requirements of the Modification Proposal.

The Modification Proposal states that the exposure to Imbalance Prices as a result of the provision of Balancing Services is making service providers reluctant to offer such Balancing Services to the Transmission Company, potentially leading to services being withdrawn. This results in the Transmission Company having to purchase more expensive Balancing Services, where they are available, thus increasing the costs of system balancing, which in turn are passed onto Parties via Balancing Use of System Charges. Reducing availability could also lead to degradation in the security of the system.

Energy Imbalance Prices provide an incentive for Parties to balance against their contracted position, pre Gate Closure. However, the Modification Proposal asserts that the nature of actions under Balancing Services contracts mean that they are invoked post Gate Closure and therefore cannot be contracted / accounted for (accurately) in advance. Therefore the incentives for balancing should not apply to the portion of energy attributable to the provision of Balancing Services for those parties offering such services, and that portion of energy so attributable should not be exposed to imbalance prices as a result. This portion of energy is the 'Deemed Balancing Services Volume'.

The Modification proposes that volumes associated with Balancing Services where volumes cannot be predicted, and therefore the associated energy contracted for in advance of Gate Closure, should be excluded from the Energy Imbalance Price application and it follows that such volume should also be excluded from the Non Delivery and Information Imbalance Charge application for the associated Party. It is also proposes that such 'Deemed Balancing Services Volume' be transferred (adjusted) from the Energy Account of the associated Party to the Energy Account of the Transmission Company.

This has the implication that Balancing Services will therefore be less expensive for the Transmission Company to buy, as they will not have to offer compensation for the Energy Imbalance exposure for a Party, and this in turn should have the effect of reducing Balancing Services use of System Charges (BSUoS) across all Parties. Such reduction in BSUoS will mainly be a result of falling Balancing Service costs as a result of increased service competition – currently Balancing Services prices are high to reflect the risk of imbalance exposure to the provider. Where a provider is unwilling to take on such risk, the Balancing Services are being withdrawn. Therefore the removal of economic balancing Services provision is limiting competition in this area and therefore increasing prices (which are reflected in BSUoS charges). Therefore the removal of the risk to imbalance exposure should lead to increased service competition. However, it should be noted that for the specific Parties providing the Balancing Services, such reduction in BSUoS will be partially offset by a reduction in the Residual Cashflow Reallocation.

The Modification Proposal suggests that the methodology for calculating the 'Deemed Balancing Services Volume' will be developed, maintained and published outside the governance for the Balancing

and Settlement Code. Clarification has been sought from the proposer and they envisage, that such a methodology would be included under the provisions within the Transmission Licence, in a similar way to Balancing Services Adjustment Data (BSAD). It is intended that the methodology would be subject to the approval of the Authority.

As the Modification Proposal intends that the governance for the calculations associated with the Transmission Company determining the 'Deemed Balancing Services Volume' will fall outside of the Balancing and Settlement Code, the interaction between this Modification Proposal and the CUSC / Transmission Licence will need to be clarified. The methodology for calculating 'Deemed Balancing Services Volume' for the various Balancing Services is to be developed in parallel with the Modification Proposal.

The Modification Proposal suggests that the calculation of Credited Energy and Expected Metered Volume, under the BSC, is changed such that the Transmission Company identifies the energy volumes associated with the provision of Balancing Services by a Lead Party for a Settlement Period. The Transmission Company would then notify the Settlement Administration Agent of these volumes. Such identified volumes are then transferred from the BM Unit associated with the Energy Account of the Lead Party to the Transmission Company Energy Account. The Lead Party providing the Balancing Service (via a specific BM Unit(s)) is therefore, not exposed to Energy Imbalance, Non Delivery, or Information Imbalance charges for the volume of energy directly related to the provision of that Balancing Service. It should be noted that the Transmission Company Energy Account is exempt from Energy Imbalance charges, therefore reducing the costs of Balancing Services provision.

4.1 Effect on the Balancing and Settlement Code

It is expected that the effect of the Modification Proposal be achieved by amending Section T of the Balancing and Settlement Code as follows⁶:

New Section at 1.8 which states:

In relation to each Settlement Period and BM Unit, not later than the end of the second Business Day next following the Settlement Day, the Transmission Company shall determine (on a basis for the time being approved in writing by the Authority, for the purposes of this paragraph), and notify the Settlement Administration Agent of the net amount (in MWh) of any 'Deemed Balancing Services Volume Adjustment'.

For the purposes of this paragraph, the 'Deemed Balancing Services Volume Adjustment' is the adjustment, in relation to a BM Unit, for the deemed delivery of Applicable Balancing Services for that BM Unit, as determined by the Transmission Company.

The 'Deemed Balancing Services Volume Adjustment' is represented by:

QBS_{ij} – the 'Deemed Balancing Services Volume Adjustment' in relation to a BM Unit and Settlement Period

For the purposes of the Balancing and Settlement Code, the definition of Applicable Balancing Services is 'those Balancing Services (as defined in the Transmission Licence) other than Offers and Bids made in the Balancing Mechanism, that result in a change to production or consumption of a BM Unit, where the volume of change was not known prior to Gate Closure for the Settlement Period in which the Applicable Balancing Service was delivered'.

⁶ It is not intended that the drafting here be the definition of the exact amendments required. The drafting is attempting to clarify and reflect the amendments described in the Modification Proposal and is not the definitive legal drafting for this Modification.

The following define the amendments required to the Settlement calculations provided in Section T:

T 4.3.3 – Calculation of Expected Metered Volume:

$$QME_{ij} = FPN_{ij} + QBO_{ij} + QBS_{ij}$$

This accounts for the 'Deemed Balancing Services Volume Adjustment' in the calculation of expected metered volume. This is then reflected in the calculation of Non delivery volumes (at T 4.8.1) and in the calculation of Information Imbalance Charge (at T 4.3.4).

T 4.5.1 Calculation of Credited Energy Volumes:

(a) $QCE_{iaj} = \{QM_{ij} - QBS_{ij} - QBO_{ij}\} *etc$

Thus accounting for the adjustment in the metered volume for calculation of credited energy.

(b) $QCE_{iaj} = [(QM_{ij} - QBS_{ij}) * TLM] - \hat{a} a QCE_{iaj}$

Instead of the amendment defined below at (b) to allocate the QBS_{ij} directly into the Energy Account for the Transmission Company, the calculation for determining the Credited Energy Volume for a BM Unit could be amended to calculate the Credited Energy for the Transmission Company in a similar manner to the allocation to a Subsidiary Party. Therefore the following calculation is an alternative for the amendment to T 4.6.1 (i.e. either T 4.5.1 (c) or T 4.6.1 (b)).

(c) **For the Transmission Company** $QCE_{iaj} = QBS_{ij}$

T 4.6.1 – Calculation of the Account Credited Energy Volume (alternative approach to 4.5.1 (c))

(a) $QACE_{aj} = \hat{a} i QCE_{iaj}$

For the calculation of the Account Credited Energy Volume for the Transmission Company, consideration needs to be made for the fact that the 'Deemed Balancing Services Volume Adjustment' is not made against BM Units for which the Transmission Company is Lead Party, therefore, as the calculations defined at 4.5.1 are BM Unit specific, the calculation for the Transmission Company is missing the transfer allocation of the 'Deemed Balancing Services Volume Adjustment' from the Party to the Transmission Company. Therefore the Transmission Company requires an additional step, as follows:

(b) In respect of each Settlement Period, for each Transmission Company (non IEA) Energy Account, the Account Credited Energy Volume will be determined as follows:

$$QACE_{aj} = \hat{a} i QCE_{iaj} + \hat{a}_{inTC} QBS_{ij}$$

Where \sum_{inTC} is the sum over all BM Units for which the Transmission Company is not Lead Party, but for which the Transmission Company has notified a 'Deemed Balancing Services Volume Adjustment'.

A new calculation is required:

Calculation of the 'Total Period Deemed Balancing Services Volume Adjustment' allocated to the Transmission Company Energy Account (other than the IEA Energy Account) for each Settlement Period.

$$QBS_{TCj} = \hat{a} i QBS_{ij}$$

Where \sum_i is the sum over all BM Units for which there is a Deemed Balancing Services Volume Adjustment.

The 'Total System Deemed Balancing Services Volume Adjustment' is

$$\sum_j QBS_{TCj}$$

Where \sum_j is the sum over all Settlement Periods.

The new variables and definitions are required to be reflected in the Technical Glossary – Section X-2.

The Settlement Reports (SAA-I014) require amendment to reflect inclusion of the new variables, at BM Unit, Energy Account and System level.

4.2 Balancing Services

The Balancing Services that this Modification may apply to are recorded in the 'Procurements Guideline' document, published by the Transmission Company. They are defined therein as follows.

The actual Balancing Services to be covered under this Modification Proposal will be determined by the Transmission Company and reflected in the methodology for calculating the 'Deemed Balancing Services Volume' associated with the provision of each of the relevant Balancing Services. Therefore the attached should not be considered to be a list of the Balancing Services covered by the Modification Proposal, only an indication of the existing Balancing Services provided.

Part 1 Services

- Reactive Power
- Frequency Response

Part 2 Services

- Black Start
- Fast Start

Commercial Ancillary Services

- Enhanced Reactive
- Frequency Response
- Reserve
 - Fast Reserve
 - Standing Reserve
 - Warming
- Commercial Intertrip
- Emergency Assistance

Other Services

- Reactive Power
- Frequency Response
- Standing Reserve

- Demand Intertrip
- Energy Related products

A copy of the Modification Proposal, as submitted by its proposer, can be found at Annex 1 to this report.

5 IMPACT ON BSC SYSTEMS AND PROCESSES

BSC System / Process	Potential Impact of Proposed Modification
Registration	No Impact Identified at this time
Contract Notification	No Impact Identified at this time
Credit Checking	No Impact Identified at this time
Balancing Mechanism Activities	No Impact Identified at this time
Collection and Aggregation of Metered Data	No Impact Identified at this time
Supplier Volume Allocation	No Impact Identified at this time
Settlement	The Modification Proposal impacts the way in which the Credited Energy Volume and Expected Metered Volumes for Parties are calculated by the Settlement Administration Agent, utilising 'Deemed Balancing Services Volumes' provided by the Transmission Company.
Clearing, Invoicing and Payment	No Impact Identified at this time
Reporting	<p>The Settlement Report (SAA-I014 – all sub flows) may be impacted if it is determined that the 'Deemed Balancing Services Volume' is required to be reported to BSC Parties, ELEXON and the Transmission Company.</p> <p>A new interface is required from the Transmission Company to SAA (and potentially BSC Parties) to notify them of the 'Deemed Balancing Services Volume' for a Party and, where appropriate, BM Unit and Settlement Period.</p>
Contingencies	No Impact Identified at this time
Dispute Resolution	The Disputes Process <u>may</u> have to be extended to include Trading Queries and Trading Disputes on the application of (not calculation of, as the Modification Proposal intends that the governance for such calculation sits elsewhere) 'Deemed Balancing Services Volume' notified by the Transmission Company. However, this should not materially affect the Trading Query / Disputes process, only the grounds for raising a Trading Query / Dispute.

6 IMPACT ON OTHER SYSTEMS AND PROCESSES USED BY PARTIES

System / Process	Potential Impact of Proposed Modification
BSC Parties Transmission Company	If the Settlement Report (SAA-I014, all sub flows) is amended to include reporting of the 'Deemed Balancing Services Volume', then BSC Parties, ELEXON and Transmission Company processes and systems for receipt of this interface may be impacted.
BSC Parties	A new interface may be required from the Transmission Company to BSC Parties to notify them of the 'Deemed Balancing Services Volume' for their BM Units / Energy Accounts. Therefore BSC Parties may need to amend processes and systems to account for this interface.
Transmission Company	<p>The Transmission Company already has processes in place for calculating the volumes associated with the provision of Balancing Services, however, these volumes will have to be notified via an agreed format to the Settlement Administration Agent (SAA) before the Initial Interim Information Run (at SD + 2 WD). This will require a new interface from the Transmission Company to the SAA.</p> <p>The methodology for the calculation of the 'Deemed Balancing Services Volume' is not currently available to the industry, as a result of these volumes being calculated under a bilateral contract with the individual providing the Balancing Service. Therefore the Transmission Company will be required to provide and have agreed (by the Authority) the generic methodology statements, and will be required to maintain them.</p>

7 IMPACT ON DOCUMENTATION

7.1 Impact on Balancing and Settlement Code

BSC Section	Potential Impact of Proposed Modification
A: Parties and Participation	No Impact Identified at this time
B: The Panel	No Impact Identified at this time
C: BSCCo and its Subsidiaries	No Impact Identified at this time
D: BSC Cost Recovery and Participation Charges	No Impact Identified at this time
E: BSC Agents	No Impact Identified at this time
F: Modification Procedures	No Impact Identified at this time
G: Contingencies	Paragraph 3 of this Section of the BSC refers to the provision of 'Black Start' services. An initial high level review indicates that this will not require amendment as a result of the implementation of this Modification, however, this section should be reviewed from a legal perspective to ensure that this is the case.
H: General	No Impact Identified at this time
I: Not Used	No Impact Identified at this time
J: Party Agents	No Impact Identified at this time
K: Classification and Registration of Metering Systems and BM Units	No Impact Identified at this time
L: Metering	No Impact Identified at this time
M: Credit Cover and Credit Default	No impact identified at this time
N: Clearing, Invoicing and Payment	No Impact Identified at this time

BSC Section	Potential Impact of Proposed Modification
O: Communications	No Impact Identified at this time
P: Energy Contract Volumes and Metered Volume Reallocations	No Impact Identified at this time
Q: Balancing Mechanism Activities	No Impact Identified at this time
R: Collection and Aggregation of Metered Data from CVA Metering Systems	No Impact Identified at this time
S: Supplier Volume Allocation	No Impact Identified at this time
S: ANNEX S-1 Performance Levels and Supplier Charges	No Impact Identified at this time
S: ANNEX S-2 Supplier Volume Allocation Rules	No Impact Identified at this time
T: Settlement and Trading Charges	The Modification Proposal impacts the way in which the Credited Energy and Expected Metered Volumes are calculated for Parties, including the Transmission Company, by the Settlement Administration Agent (SAA). The amendment to the calculation requires the introduction of a new variable 'Deemed Balancing Services Volume' which is provided by the Transmission Company to the SAA for Party (and BM Unit, where appropriate) and Settlement Period.
U: Provisions Relating to Settlement	The Balancing and Settlement Code may have to be updated to include reference to the provisions for notifying the 'Deemed Balancing Services Volume Adjustment' to (BSC Parties and) SAA.
V: Reporting	<p>The Settlement Report (SAA-I014 – all sub flows) may be impacted if it is determined that the detail of the 'Deemed Balancing Services Volume Adjustment' is required to be reported to BSC Parties, ELEXON and the Transmission Company. This may need to be reflected in this Section of the BSC.</p> <p>A new interface is required from the Transmission Company to SAA (and BSC Parties) to notify them of the 'Deemed Balancing Services Volume Adjustment', and this may need to be represented in this Section of the BSC.</p>
W: Trading Queries and Trading Disputes	No Impact Identified at this time

BSC Section	Potential Impact of Proposed Modification
X: Definitions and Interpretation	No Impact Identified at this time
X: ANNEX X-1 General Glossary	No Impact Identified at this time
X: ANNEX X-2 Technical Glossary	New definitions are required to support the functionality defined in Section 4 of this IWA.

7.2 Impact on Code Subsidiary Documents

Code Subsidiary Document	Potential Impact of Proposed Modification
BSC Procedures	No Impact Identified at this time
Codes of Practice	No Impact Identified at this time
BSC Service Descriptions	The Service Description for the Settlement Administration Agent (SAA) requires amendment to include reference to the 'Deemed Balancing Services Volume Adjustment' and the associated calculations.
Party Service Lines	No Impact Identified at this time
Data Catalogues NETA Data File Catalogue (NDFC)	<p>The Modification Proposal may have an impact on the NETA Data File Catalogue where there is a requirement to amend the Settlement Report to reflect the inclusion of 'Deemed Balancing Services Volume Adjustment' variables.</p> <p>A new interface is required from the Transmission Company to SAA (and BSC Parties) to notify them of the 'Deemed Balancing Services Volume Adjustment', and this may need to be represented in the NETA Data File Catalogue.</p>
Communication Requirements Documents	No Impact Identified at this time
Reporting Catalogue	<p>The Settlement Report (SAA-I014 – all sub flows) may be impacted if it is determined that the detail of the 'Deemed Balancing Services Volume Adjustment' is required to be reported to BSC Parties, ELEXON and the Transmission Company. This may need to be reflected in the Reporting Catalogue.</p> <p>A new interface is required from the Transmission Company to SAA (and BSC Parties) to notify them of the 'Deemed Balancing Services Volume Adjustment', and this may need to be represented in the Reporting Catalogue.</p>

7.3 Impact on Core Industry Documents

Core Industry Document	Potential Impact of Proposed Modification
Grid Code	There may be an impact on the Grid Code depending upon the mechanism for determining the 'Deemed Balancing Services Volume Adjustment', and depending upon the exact nature of the governance for the calculations.
MCUSA	There may be an impact on the MCUSA (CUSC) depending upon the mechanism for determining the 'Deemed Balancing Services Volume Adjustment', and depending upon the exact nature of the governance for the calculations.
Supplemental Agreements	No Impact Identified at this time
Ancillary Services Agreements	There may be an impact on the Ancillary Services Agreements depending upon the mechanism for determining the 'Deemed Balancing Services Volume Adjustment', and depending upon the exact nature of the governance for the calculations.
Master Registration Agreement	No Impact Identified at this time
Data Transfer Services Agreement	No Impact Identified at this time
British Grid Systems Agreement	No Impact Identified at this time
Use of Interconnector Agreement	No Impact Identified at this time
Pooling and Settlement Agreement	No Impact Identified at this time
Settlement Agreement for Scotland	No Impact Identified at this time
Distribution Codes	No Impact Identified at this time
Distribution Use of System Agreements	No Impact Identified at this time
Distribution Connection Agreements	No Impact Identified at this time

8 IMPACT ON OTHER CONFIGURABLE ITEMS

Item	Potential Impact of Proposed Modification
Settlement Administration Agent (SAA) User Requirements Specification (URS) Other SAA Specifications	The Modification Proposal has a significant impact on the SAA URS and associated SAA documentation in order to reflect the introduction of the 'Deemed Balancing Services Volume Adjustment'.

9 IMPACT ON ELEXON

Area of Business	Potential Impact of Proposed Modification
ELEXON Systems	If the Settlement Report (SAA-I014, all sub flows) is amended to include reporting of Deemed Balancing Services Volume Adjustment', then ELEXON processes and systems for receipt of this interface may be impacted.
ELEXON Procedures	If the Settlement Report (SAA-I014, all sub flows) is amended to include reporting of Deemed Balancing Services Volume Adjustment', then ELEXON processes and systems for receipt of this interface may be impacted.
ELEXON Contracts (Excluding BSC Agent Contracts)	No Impact Identified at this time
Other (e.g. costs, staffing, etc.)	The ELEXON resource required to support a Modification Proposal through the Assessment Phase is estimated at between thirty and forty man days.

10 IMPACT ON FINANCIAL ARRANGEMENTS AND BUDGET

No Impact Identified at this time

11 IMPACT ON BSC AGENT CONTRACTUAL ARRANGEMENTS

BSC Agent Contract	Potential Impact of Proposed Modification
Logica (BMRA, CRA, CDCA, SAA, ECVAA, TAA(CVA))	The Modification Proposal has a contractual impact on the SAA, as a result of the impact on the SAA System functionality and associated documentation.
EPFAL (FAA)	No Impact Identified at this time
ESIS (TAA(SVA))	No Impact Identified at this time
Cap Gemini (SVAA)	No Impact Identified at this time
PwC (BSC Auditor, Certification Agent)	No Impact Identified at this time
EASL (Teleswitch Agent, Profile Administrator)	No Impact Identified at this time

12 PROCESS AND TIMETABLE FOR PROGRESSING THE PROPOSAL

The Initial Assessment of this Modification Proposal indicates that although further work is required to define the amendments required under the provisions of the Modification Proposal, the Modification itself is sufficiently well defined to enable submission to the Assessment Procedure. ELEXON therefore recommends that this Modification Proposal P034: Transfer of Imbalances caused by Balancing Services to the Transmission Company Energy Account be submitted to the Pricing Issues Modification Group (PIMG) for Assessment. The Pricing Issues Modification Group should be actioned to provide its Assessment Report to the Panel by the Panel Meeting of the 18th October 2001.

12.1 Impact Assessment Costs

Processing this Modification Proposal will require at least two meetings of the Modification Group and the commissioning of Impact Assessments from the Transmission Company and the NETA Central Service Agent. This Modification Proposal is believed to be of medium complexity and a budget of £30K should be established to enable progression of the Modification Proposal through the Assessment Procedure.

13 ISSUES

The following issues will need to be considered and addressed by the Modification Group in progressing the Modification Proposal P34.

1. Governance outside of the Balancing and Settlement Code introduces the following issues:
 - The calculations associated with the determination of the 'Deemed Balancing Services Volume Adjustment' are not intended to fall under the BSC. This therefore introduces issues around the governance for Trading Queries and Disputes relating to the calculation and notification of the 'Deemed Balancing Services Volume Adjustments';
 - If the Balancing Services to be included under the calculation of 'Deemed Balancing Services Volume Adjustments' are extended / reduced, then there may be a requirement to amend the Transmission Company documentation, and even the Transmission Licence. Therefore there is an issue over how this is achieved and the potential impacts on and interaction with the Balancing and Settlement Code; and
 - As previously noted, the calculations associated with the determination of the 'Deemed Balancing Services Volume Adjustment' are not intended to fall under the BSC. This therefore introduces issues around the visibility of such calculations and subsequent notification of the 'Deemed Balancing Services Volume Adjustments. Since BSC Parties Settlement liability is directly affected by provisions falling outside of the Balancing and Settlement Code, there may be an argument for including at least some of the calculations in the provisions of the Balancing and Settlement Code.
2. Optionality for BSC Parties under Balancing Services Contracts to determine whether they wish to 'opt out' of this Modification and be exposed to Energy Imbalance charges. However, it is unclear what the driver, in terms of applicable BSC Objectives, for such optionality could be, if the justification for the Modification Proposal is that such balancing Services volumes should not be exposed to Energy Imbalance prices. However, the proposer suggested that such optionality may be appropriate, particularly if the Lead Party of the BM Unit is not the provider of the Balancing Services.
3. The scope of the BM Auditor with respect to Deemed Balancing Services Volume Adjustment;
4. It should be noted that there are other ways of achieving the same result outside of the Balancing and Settlement Code – via the Transmission Company contracts; and
5. It should also be noted that there are other ways of achieving the same result with regards to the result of the amendments to the settlement calculations, and these could be considered as they may reduce implementation costs and timescales.

ANNEX 1 – MODIFICATION PROPOSAL

Modification Proposal	MP No: 34 <i>(mandatory by BSCCo)</i>
Title of Modification Proposal <i>(mandatory by proposer):</i> Transfer of imbalances caused by Balancing Services to the Transmission Company Energy Account	
Submission Date <i>(mandatory by proposer):</i> 14 August 2001	
Description of Proposed Modification <i>(mandatory by proposer):</i> To modify the calculation of Credited Energy Volume (QCE_{iaj}) such that the imbalance caused by the delivery of Balancing (Ancillary) Services is transferred from the provider's energy account to the Transmission Company's energy account. To make this Proposed Modification effective from the date of the first panel meeting following the Submission Date.	
Description of Issue or Defect that Modification Proposal Seeks to Address <i>(mandatory by proposer):</i> Certain Balancing Services, required by the System Operator for economic operation of the Transmission System (notably Response and Standing Reserve) and the testing of other Balancing Service (such as Black Start), result in the provider's energy account (or their supplier's) being exposed to imbalance charges. Imbalance charges are designed to reflect the cost of being out of balance. To the extent that the imbalance is as a result of delivering balancing services, it is inappropriate to charge imbalance prices to parties that have assisted in system balancing. Risk of exposure to high imbalance charges is making service providers (in particular, smaller demand side providers) reluctant to provide services, and some services are being withdrawn. The loss of these services will result in the Transmission Company having to use more expensive service providers; this will increase the overall cost of system balancing, and potentially reduce system security. The Transmission Company's energy account is not exposed to imbalance charges, and this is appropriate for services that assist in the balancing of the system.	
Impact on Code <i>(optional by proposer):</i> Change to the definition of QCE_{iaj} in section T4.5.1 to allow for the transfer of deemed service volumes. Change to the definition of QME_{ij} in section T4.3.3 to allow the correct calculation of non-delivery volumes and information imbalance. Corresponding changes to the glossary.	
Impact on Core Industry Documents <i>(optional by proposer):</i> To achieve the benefits associated with the delivery of Mandatory Response, a modification to CUSC will be required.	
Impact on BSC Systems and Other Relevant Systems and Processes Used by Parties <i>(optional by proposer):</i> The software calculating QCE_{aj} and QME_{ij} will require modification.	

Modification Proposal	MP No: 34 <i>(mandatory by BSCCo)</i>
<p>Impact on other Configurable Items <i>(optional by proposer):</i></p> <p>National Grid will need to calculate and inform the SAA the volume (if any) of energy allocated to each BMU for Balancing Services.</p> <p>National Grid will need to publish a methodology by which the volume of energy allocated to a BMU for balancing services is allocated.</p>	
<p>Justification for Proposed Modification with Reference to Applicable BSC Objectives <i>(mandatory by proposer):</i></p> <p>This proposal will reduce the prices and increase the availability of Balancing Services (required to operate the system). This will assist the Transmission Company in meeting its objective of “the efficient, economic and co-ordinated operation by the Transmission Company of the Transmission System”.</p> <p>To ensure the maintenance of existing service providers and to encourage the further development of the provision of economic services, we propose that this Proposed Modification is treated as Urgent.</p>	
<p>Details of Proposer:</p> <p style="padding-left: 40px;">Name: Nicholas Sillito</p> <p style="padding-left: 40px;">Organisation: National Grid</p> <p>Telephone Number: 024 7642 3082</p> <p style="padding-left: 40px;">Email Address: nick.sillito@uk.ngrid.com</p>	
<p>Details of Proposer’s Representative:</p> <p style="padding-left: 40px;">Name: Nicholas Sillito</p> <p style="padding-left: 40px;">Organisation: National Grid</p> <p>Telephone Number: 024 7642 3082</p> <p style="padding-left: 40px;">Email Address: nick.sillito@uk.ngrid.com</p>	
<p>Details of Representative’s Alternate:</p> <p style="padding-left: 40px;">Name: John Greasley</p> <p style="padding-left: 40px;">Organisation: National Grid</p> <p>Telephone Number: 024 7642 3190</p> <p style="padding-left: 40px;">Email Address: john.greasley@uk.ngrid.com</p>	
<p>Attachments: YES</p> <p>If Yes, Title and No. of Pages of Each Attachment:</p> <p>Proposal to transfer energy imbalances resulting from the delivery of Balancing Services to the Transmission Company. Paper by National Grid (3 pages).</p>	

Proposal to Transfer Energy Imbalances Resulting from the Delivery of Balancing Services to the Transmission Company

Paper by National Grid

Introduction

National Grid contracts with various parties for the provision of Balancing Services such as response, reserve and black start. These services are essential to allow National Grid to balance the system. The delivery of these services (or tests required to show service capability) can result in the provider generating or consuming different volumes of energy than they had planned or contracted for. These imbalances result in providers (or their suppliers) incurring an imbalance charge. The imbalance charge was designed to reflect the cost imposed on the system by a user not meeting their contracted position. It seems inappropriate to apply the charge to “imbalances” that assist the balancing of the system. Currently imbalance charges present an economic deterrent to provide Balancing Services, and hence reduce the efficiency by which the Transmission Company can balance the system.

This paper considers the Balancing Services that cause imbalance, and looks at the impact of imbalance charges on service providers and the economic provision of Balancing Services. It concludes that transferring the energy associated with Balancing Services to the Transmission Company is the most effective solution, as this energy is not subject to imbalance charges.

Delivery of Balancing Services

The delivery of the following Balancing Services result in the provider being potentially out of balance:

- i. Frequency Response (both mandatory and commercial);
- ii. Standing Reserve from providers not participating in the BM; and
- iii. Tests witnessed by National Grid of service capability (notably Black Start and governor tests for response capability).

There are two reasons why it may not be possible to give Bid Offer Acceptances:

- i. Smaller providers, especially demand side providers, do not wish to take on the overhead of becoming a BSC signatory or operating and maintaining a BMU; and
- ii. The volume of energy associated with a Balancing Service (notably response) is not known in advance, and the price of the energy agreed for the Balancing Service may not be equal to the Bid Offer price.

Consequences of Charging Imbalance for the Delivery of Balancing Services

Where Balancing Services result in the provider moving away from their contracted energy position without, for the reasons discussed previously, receiving a bid offer acceptance, they (or their supplier) are exposed to imbalance prices, which historically have been extremely volatile. This has had the following consequences:

- i. Due to the uncertainty of imbalance prices, the provider increases the service price to mitigate the risk; or

- ii. Where the provider finds the risk unacceptable, the service is withdrawn. This results in the Transmission Company having to use more expensive services and increases the cost of balancing the system. In addition, extensive withdrawal of services would reduce the level of system security.

Currently, Grid Code mandatory response providers receive a refund of the imbalance payments they are expected to incur as a result of deviation from their expected output (FPN plus bid offer acceptances). This is undesirable for the following reasons:

- i. Where a generator's FPN position does not equal their contracted energy position, refunding their imbalance exposure calculated against FPN position (rather than the contract position) can lead to perverse incentives.
- ii. The incentive on the provider to deliver the service is reduced. There is no imbalance exposure as a result of failing to deliver the service, although compensation is still received; and
- iii. Providers have expressed serious concerns with the compensation method as their exposure to SSP and SBP cannot be totally removed.

In summary, the current position is increasing the cost of balancing the system, resulting in the loss of services essential to balance the system and can reduce the incentive on providers to deliver the service.

Proposal

One of the design principles under NETA was that users paid the cost they imposed on the system resulting from their imbalance. This led to the development of dual imbalance prices to reflect both the residual benefit of a party taking less energy than their contracted position (System Sell Price, SSP), and the cost of taking additional energy beyond their contracted position (System Buy Price, SBP).

The delivery of Balancing Services assists the Transmission Company to balance the system and does not impose costs on the system. Therefore, we propose that the energy associated with the delivery of Balancing Services is transferred from the providers' (or their suppliers') account into the Transmission Company's energy account which is not exposed to imbalance charges. The Transmission Company would pay for this energy in accordance with the Balancing Services contract. The adjustment volume would be calculated post event by the Transmission Company, using an agreed methodology. This is analogous to the mechanism currently used for interconnectors, where if the transfer on an interconnector is varied for the purposes of balancing the system, Interconnector Users' energy accounts are unaffected.

We expect this proposal to have the following impacts:

- i. A greater availability of Balancing Services, particularly from the demand side, as providers would no longer be exposed to imbalance price risk;
- ii. Failure to deliver firm Balancing Services (notably response and reserve) will expose providers (or their suppliers) to imbalance charges. This will correctly reflect onto the provider the cost of the failure to deliver the energy element of the service; and
- iii. The removal of imbalance charges and imbalance refunds will reduce the cost of providing Balancing Services. This will reduce the overall cost of system balancing, leading to greater market efficiency.

Recommendation

The transfer of Balancing Services' energy to the Transmission Company will remove imbalance exposure from the provision of Balancing Services and should lead to an overall cost reduction. We therefore propose that the BSC is modified to allow energy associated

with Balancing Services to be transferred to the Transmission Company. This should result in lower prices and greater service availability (due to reduced risk) for Balancing Services, leading to an overall reduction in the cost of balancing the system.