



July 2001

MODIFICATION REPORT

Modification P008 - Introduction of a Price Adjuster to Reflect Option Fees for Balancing Services Contracts in Setting SBP and SSP

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

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b Distribution

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CONTENTS TABLE

I	Document Control.....	2
a	Authorities.....	2
b	Distribution.....	2
c	Intellectual Property Rights and Copyright.....	2
II	Contents Table	3
1	Summary and Recommendations	4
2	Introduction.....	5
3	Purpose and Scope of the Report	6
4	History of Proposed Modification.....	7
5	Description of Proposed Modification.....	8
6	Rationale for Panel Recommendations	9
7	Legal Text to Give Effect to the Proposed Modification.....	10
8	Assessment	11
9	Summary of Representations.....	12
	Annex 1 – Copies of Representations	13
	Annex 2 – Legal Text to Give Effect to the Proposed Modification.....	14

1 SUMMARY AND RECOMMENDATIONS

Recommendation

Modification Proposal P008 ('the Modification') seeks to replace Workaround 024 by incorporating Price Adjuster functionality within the BSC Systems. On the basis of the analysis, consultation and assessment undertaken in respect of this Modification during the Assessment Procedure, and the resultant findings of this Modification Report, the Panel recommends to the Authority that:

The Proposed Modification as set out in Section 7 of this Modification Report be approved and implemented in [August 2002] ¹.

Background

The Transmission Company raised the Proposed Modification on 20th April 2001. It is intended to replace Workaround 024, which was implemented as a temporary solution to the Price Adjuster functionality proposed by Modification Proposal P003. The Authority decision was not to apply the Balancing and Settlement Code ('the Code') changes proposed in Modification Proposal P003. Instead, the Authority agreed to Workaround 024 which involved alterations to the Balancing Services Adjustment Data (BSAD) Methodology, the NETA Central Service Agent's processes and ELEXON procedures.

At its meeting on 3 May 2001, the Panel agreed (Panel paper 017/002) that Proposed Modification P8 should be submitted to the Assessment Procedure. The Panel agreed that the Assessment Report should be submitted to the Panel meeting on 26 July 2001..

The BSC Panel considered the P008 Modification Group Assessment Report at its meeting on 26 July 2001 and agreed that the Proposed Modification should proceed to the Report Phase, and that the draft Modification Report should be approved and implemented with effect from the implementation date described in Section 1.1.

Rationale for Recommendations

The Panel endorses the Modification Group's conclusions that the Proposed Modification would better facilitate the Applicable BSC Objectives as set out in the Transmission Licence. In particular, it would meet objective 7A(3)(d) – 'promoting efficiency in the implementation and administration of the balancing and settlement arrangements'. The Proposed Modification has no impact on the remaining Applicable BSC Objectives set out in Condition 7A(3)(a - c). In reaching this conclusion, the Panel took due account of the views of the proposer, all representations received from interested parties and the views of the Modification Group, which are detailed in Section 5 below. This Modification Report should be read in conjunction with the Modification Group's Assessment Report.

¹ ELEXON is currently undertaking an exercise to confirm the Implementation Dates of Modification Proposal P2 and of other Proposed Modifications (taking into account their interaction with the BSC Systems Release 2 project and with each other). A firm date will be included in the Final Modification Report.

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 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 PURPOSE AND SCOPE OF THE REPORT

BSC Section F sets out the procedures for progressing proposals to amend the Code (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).

A Modification Report must be prepared and submitted to the Authority in respect of each proposed modification and must contain:

- (a) The recommendation of the Panel as to whether or not the Proposed Modification or any Alternative Modification should be made;
- (b) The proposed Implementation Date for implementation of the Proposed Modification or any Alternative Modification;
- (c) The matters set out in Annex F-1 of the Code. This will usually be in the form of the relevant Assessment Report where the Proposal has been submitted to a Modification Group prior to the Report Phase;
- (d) An explanation of the Panel's rationale should the Panel form a different view of any matters contained in the Modification Group Report; and
- (e) A summary of the representations made by Parties and interested third parties during the consultation undertaken in respect of the Proposed Modification and any Alternative Modification.

4 HISTORY OF PROPOSED MODIFICATION

The Transmission Company raised the Proposed Modification on 20th April 2001. It is intended to replace Workaround 024, which was implemented as a temporary solution to the Price Adjuster functionality proposed by Modification Proposal P003. At its meeting on 3 May 2001, the Panel agreed (Panel paper 017/002) that Proposed Modification P8 should be submitted to the Assessment Procedure. Following completion of the Assessment Procedure an Assessment Report was presented to the Panel on 26 July 2001.

The BSC Panel considered the P008 Modification Group Assessment Report and agreed that the Proposed Modification should proceed to the Report Phase

5 DESCRIPTION OF PROPOSED MODIFICATION

The Proposed Modification will incorporate the Price Adjuster functionality within the BSC Systems. Changes will therefore be required to the following:

Balancing Mechanism Activities

The current SAA and BMRA Systems receive BSAD data from the Transmission Company in the form of an email containing a spreadsheet compatible CSV file. This interface will be automated to ensure that human errors are reduced.

There are no Code changes required to support this change.

Settlement

The Proposed Modification will require changes to the SAA and BMRA software to utilise the new data items ie. Sell Price Price Adjustment (SPA) and Buy Price Price Adjustment (BPA), received from the Transmission Company, in the imbalance price calculations.

The Code changes are included in Section 7 of this Modification Report.

With an effective Settlement Day of the 5th April 2001, there will be a one-off requirement to re-set the BSAD for days between Settlement Day 5th April 2001 and the actual implementation date. This is required to ensure that BSC Systems perform their next settlement calculation in line with the rules of both P3 and P8, but using the more accurate software solution introduced with P8.

Reporting

SAA Reporting

Changes are required to the SAA Settlement Report flow (SAA-I014) to report the two new data items ie. SPA and BPA which were used in the Settlement calculations. This will be achieved by creating a new version of the Settlement Report flow, which would exist in parallel with the current version of the SAA Settlement Report flow for a period of three months after the implementation date. Thereafter only the new version of the SAA Settlement Report flow will exist.

There are no Code changes required to support this change.

BMRA Reporting

Changes are required to the BMRA reporting to provide the BSAD which was used in the calculation of the indicative imbalance prices. This will be achieved by publishing the BSAD on the BMRA website.

The Code changes are included in Section 7 of this Modification Report.

6 RATIONALE FOR PANEL RECOMMENDATIONS

On the basis of the analysis, consultation and assessment undertaken in respect of the Proposed Modification, the Panel recommends to the Authority that the Proposed Modification be approved, with the implementation date specified in Section 1.1.

The Panel at their meeting on 26th July 2001 endorses the views set out in the Assessment Report:

1. that the Proposed Modification should progress to the Report Phase;
2. to Recommend to the Authority that the Proposed Modification be approved;
3. that the Proposed Modification includes automating the interface into the BSC Systems and modifying the BSC Systems, including changing the SAA and BMRA reporting;
4. to Recommend to the Authority that the Proposed Modification is implemented on the implementation date specified in Section 1.1;
5. to recommend to the Authority that the Proposed Modification becomes effective from Settlement Day 5th April 2001, on the basis that correct BSAD data should be reflected in the BSC System in line with the Ofgem determination on Proposed Modification P003 - Correction of Price Spikes Generated By De-Minimis NGC Purchases.

In light of the above considerations, the Panel has concluded that the Proposed Modification would better facilitate the Applicable BSC Objective 7A(3)(d) - promoting efficiency in the implementation and administration of balancing and settlement arrangements. The Proposed Modification has no impact on the Applicable BSC Objectives set out in Condition 7A(3) (a - c). This Modification Report should be read in conjunction with the Modification Group's Assessment Report.

7 LEGAL TEXT TO GIVE EFFECT TO THE PROPOSED MODIFICATION

The conformed and clean versions of the changes to Sections Q, T, V and X of the Code are shown in Annex 2 of this Modification Report.

8 ASSESSMENT

The following is a summary of the impacts identified in the Assessment Report produced by the Group, which forms Attachment 1 to this report.

The Proposed Modification will have the following impacts:

- Amendments to Sections Q, T, V and X of the Code. The relevant legal drafting can be found at Section 6 of this Modification Report;
- Impact on BSC Systems;
- Impact on the Code Subsidiary Documents;
- Impact on Parties but no impact on Party Agents;
- An increase in the payments due under BSC Agent Contracts;
- There will be savings in BSC Costs as a result of Workaround 024 being withdrawn. Savings would also potentially arise because there would be a reduction in the number of disputes being raised as a result of automating the Transmission Company to BSC System interface;
- No impact on the Core Industry Documents;
- Impact on the systems and processes of BSCCo;
- Costs will be attributable to the implementation of the Proposed Modification;
- and
- No impact on the statutory, regulatory and contractual framework within which the Code sits.

9 SUMMARY OF REPRESENTATIONS

Initial Consultation

Copies of the original representations received and considered by the Group under the initial consultation on the Proposed Modification can be found in the Assessment Report, included as Attachment 1 to this Modification Report.

Second Consultation and Detailed Level Impact Assessment

Copies of the representations received to the second consultation and Detailed Level Impact Assessment (DLIA) and considered by the Group can be found in the Assessment Report, included as Attachment 1 to this Modification Report.

Consultation on Draft Modification Report

[] representations were received in response to the consultation on the Draft Modification Report, representing the views of [] Parties. Copies of these responses are attached at Annex 1 to this report.

ANNEX 1 – COPIES OF REPRESENTATIONS

The following submissions were received in response to the Modification Report.

ANNEX 2 – LEGAL TEXT TO GIVE EFFECT TO THE PROPOSED MODIFICATION

Conformed Version

Section Q 'Balancing Mechanism Activities'

Add the two new data items, BPA and SPA to clause 6.3.2 as follows:

'6.3.2 The Balancing Services Adjustment Data shall comprise the following data in respect of each Settlement Period:

- (a) Sell Price Cost Adjustment SCA
- (b) Sell Price Volume Adjustment SVA
- (c) Buy Price Cost Adjustment BCA
- (d) Buy Price Volume Adjustment BVA
- (e) *Buy Price Price Adjustment BPA*
- (f) *Sell Price Price Adjustment SPA.*

Section T 'Settlement and Trading Charges'

Add the new formula to clauses 4.4.5 and 4.4.6 as follows;

'4.4.5 In respect of each Settlement Period, if $\{\sum_i \sum^n \{QAO_{ij}^n * TLM_{ij}\} + BVA_j\}$ is not equal to zero then the System Buy Price will be determined as follows:

$$SBP_j = \{\sum_i \sum^n \{QAO_{ij}^n * PO_{ij}^n * TLM_{ij}\} + BCA_j\} / \{\sum_i \sum^n \{QAO_{ij}^n * TLM_{ij}\} + BVA_j\} + \{BPA_j\}$$

where \sum_i represents the sum over all BM Units and \sum^n represents the sum over those accepted Offers that are not De Minimis Accepted Offers and not Arbitrage Accepted Offers and not Trade Tagged Offers.

If for any Settlement Period $\{\sum_i \sum^n \{QAO_{ij}^n * TLM_{ij}\} + BVA_j\}$ is equal to zero, then:

- (a) if for that Settlement Period $\{\sum_i \sum^n \{QAB_{ij}^n * TLM_{ij}\} + SVA_j\}$ is equal to zero, the System Buy Price for that Settlement Period will be equal to zero;
- (b) otherwise, the System Buy Price will be determined as the maximum of System Sell Price and:
 - (i) the Offer Price of the cheapest Offer available in that Settlement Period:
 - (1) which has a positive Bid-Offer Pair Number; and
 - (2) which has an Offer Price greater than the Offer Price of any Offer which is an Arbitrage Accepted Offer in respect of that Settlement Period; and
 - (3) for which the value of Bid-Offer Volume ($qBO_{ij}^n(t)$) is greater than zero for all spot times t in that Settlement Period;
 - (ii) or, if no such Offer exists, zero.

4.4.6 In respect of each Settlement Period, if $\{\sum_i \sum^n \{QAB_{ij}^n * TLM_{ij}\} + SVA_j\}$ is not equal to zero then the System Sell Price will be determined as follows:

$$SSP_j = \{\sum_i \sum^n \{QAB_{ij}^n * PB_{ij}^n * TLM_{ij}\} + SCA_j\} / \{\sum_i \sum^n \{QAB_{ij}^n * TLM_{ij}\} + SVA_j\} + \{SPA_j\}$$

where \sum_i represents the sum over all BM Units and \sum^n represents the sum over those accepted Bids that are not De Minimis Accepted Bids and not Arbitrage Accepted Bids and not Trade Tagged Bids.

If for any Settlement Period $\{\sum_i \sum^n \{QAB_{ij}^n * TLM_{ij}\} + SVA_j\}$ is equal to zero, then:

- (a) if for that Settlement Period $\{\sum_i \sum^n \{QAO_{ij}^n * TLM_{ij}\} + BVA_j\}$ is equal to zero, the System Sell Price for that Settlement Period will be equal to zero;
- (b) otherwise, the System Sell Price will be determined as the minimum of System Buy Price and:
 - (i) the Bid Price of the most expensive Bid available in that Settlement Period:
 - (1) which has a negative Bid-Offer Pair Number; and
 - (2) which has a Bid Price less than the Bid Price of any Bid which is an Arbitrage Accepted Bid in respect of that Settlement Period; and
 - (3) for which the value of Bid-Offer Volume ($qBO_{ij}^n(t)$) is less than zero for all spot times t in that Settlement Period;
 - (ii) or, if no such Bid exists, zero.'

The new BPA_j/SPA_j terms will only be used within these two formulae, therefore all other aspects of imbalance price calculations are not impacted by this change (this includes defaulting requirements for SSP/SBP).

Section V 'Reporting'

Modify 2.6.5 as follows:

'2.6.5 The BMRA shall calculate:

- (a) the Indicative System Buy Price (ISBP_j), and
- (b) the Indicative System Sell Price (ISSP_j)

in accordance with the rules in Section T4.4 save that in each case the terms ETLMO⁺, ETLMO⁻, IQABⁿ_{ij}, IQAOⁿ_{ij}, IBCA_j, IBVA_j, *IBPA_j*, ISCA_j, ISVA_j, *ISPA_j*, ISBP_j and ISSP_j, shall (for the purposes of this paragraph 2.6 only) be substituted for the terms TLMO⁺, TLMO⁻, QABⁿ_{ij}, QAOⁿ_{ij}, BCA_j, BVA_j, *BPA_j*, SCA_j, SVA_j, *SPA_j*, SBP_j and SSP_j in Section T.'

Modify Annex V-1: Table 1 to add the following entry after the entry for "System warnings (SYS_WARN)":

<i>Balancing Services Adjustment Data (BSAD)</i>	<i>Daily</i>	<i>Tabular</i>	<i>None</i>
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Section X, Annex X-2 'Technical Glossary'

Add the following two new terms:

Defined Term	Acronym	Units	Definition/Explanatory Text
<i>Buy Price Price Adjustment</i>	<i>BPA_j</i>	<i>£/MWh</i>	<i>The amount sent by the Transmission Company as the 'Buy Price Price Adjustment' in accordance with Section Q6.3.</i>
<i>Sell Price Price Adjustment</i>	<i>SPA_j</i>	<i>£/MWh</i>	<i>The amount sent by the Transmission Company as the 'Sell Price Price Adjustment' in accordance with Section Q6.3.</i>

Clean Version

Section Q 'Balancing Mechanism Activities'

'6.3.2 The Balancing Services Adjustment Data shall comprise the following data in respect of each Settlement Period:

- (a) Sell Price Cost Adjustment SCA
- (b) Sell Price Volume Adjustment SVA
- (c) Buy Price Cost Adjustment BCA
- (f) Buy Price Volume Adjustment BVA
- (g) Buy Price Price Adjustment BPA
- (f) Sell Price Price Adjustment SPA.'

Section T 'Settlement and Trading Charges'

4.4.5 In respect of each Settlement Period, if $\{\sum_i \sum^n \{QAO_{ij}^n * TLM_{ij}\} + BVA_j\}$ is not equal to zero then the System Buy Price will be determined as follows:

$$SBP_j = \{\sum_i \sum^n \{QAO_{ij}^n * PO_{ij}^n * TLM_{ij}\} + BCA_j\} / \{\sum_i \sum^n \{QAO_{ij}^n * TLM_{ij}\} + BVA_j\} + \{BPA_j\}$$

where \sum_i represents the sum over all BM Units and \sum^n represents the sum over those accepted Offers that are not De Minimis Accepted Offers and not Arbitrage Accepted Offers and not Trade Tagged Offers.

If for any Settlement Period $\{\sum_i \sum^n \{QAO_{ij}^n * TLM_{ij}\} + BVA_j\}$ is equal to zero, then:

- (a) if for that Settlement Period $\{\sum_i \sum^n \{QAB_{ij}^n * TLM_{ij}\} + SVA_j\}$ is equal to zero, the System Buy Price for that Settlement Period will be equal to zero;
- (b) otherwise, the System Buy Price will be determined as the maximum of System Sell Price and:
 - (i) the Offer Price of the cheapest Offer available in that Settlement Period:
 - (1) which has a positive Bid-Offer Pair Number; and
 - (2) which has an Offer Price greater than the Offer Price of any Offer which is an Arbitrage Accepted Offer in respect of that Settlement Period; and
 - (3) for which the value of Bid-Offer Volume ($qBO_{ij}^n(t)$) is greater than zero for all spot times t in that Settlement Period;
 - (ii) or, if no such Offer exists, zero.

4.4.6 In respect of each Settlement Period, if $\{\sum_i \sum^n \{QAB_{ij}^n * TLM_{ij}\} + SVA_j\}$ is not equal to zero then the System Sell Price will be determined as follows:

$$SSP_j = \{\sum_i \sum^n \{QAB_{ij}^n * PB_{ij}^n * TLM_{ij}\} + SCA_j\} / \{\sum_i \sum^n \{QAB_{ij}^n * TLM_{ij}\} + SVA_j\} + \{SPA_j\}$$

where \sum_i represents the sum over all BM Units and \sum^n represents the sum over those accepted Bids that are not De Minimis Accepted Bids and not Arbitrage Accepted Bids and not Trade Tagged Bids.

If for any Settlement Period $\{\sum_i \sum^n \{QAB_{ij}^n * TLM_{ij}\} + SVA_j\}$ is equal to zero, then:

- (a) if for that Settlement Period $\{\sum_i \sum^n \{QAO_{ij}^n * TLM_{ij}\} + BVA_j\}$ is equal to zero, the System Sell Price for that Settlement Period will be equal to zero;
- (b) otherwise, the System Sell Price will be determined as the minimum of System Buy Price and:
 - (i) the Bid Price of the most expensive Bid available in that Settlement Period:
 - (1) which has a negative Bid-Offer Pair Number; and
 - (2) which has a Bid Price less than the Bid Price of any Bid which is an Arbitrage Accepted Bid in respect of that Settlement Period; and
 - (3) for which the value of Bid-Offer Volume ($qBO_{ij}^n(t)$) is less than zero for all spot times t in that Settlement Period;
 - (ii) or, if no such Bid exists, zero.'

Section V 'Reporting'

2.6.5 The BMRA shall calculate:

- (c) the Indicative System Buy Price (ISBP_j), and
- (d) the Indicative System Sell Price (ISSP_j)

in accordance with the rules in Section T4.4 save that in each case the terms ETLMO⁺, ETLMO⁻, IQAB_{ij}ⁿ, IQAO_{ij}ⁿ, IBCA_j, IBVA_j, IBPA_j, ISCA_j, ISVA_j, ISPA_j, ISBP_j and ISSP_j, shall (for the purposes of this paragraph 2.6 only) be substituted for the terms TLMO⁺, TLMO⁻, QAB_{ij}ⁿ, QAO_{ij}ⁿ, BCA_j, BVA_j, BPA_j, SCA_j, SVA_j, SPA_j, SBP_j and SSP_j in Section T.'

Annex V-1: Table 1

Balancing Services Adjustment Data (BSAD)	Daily	Tabular	None'
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Section X, Annex X-2 'Technical Glossary'

Defined Term	Acronym	Units	Definition/Explanatory Text
Buy Price Price Adjustment	BPA _j	£/MWh	The amount sent by the Transmission Company as the 'Buy Price Price Adjustment' in accordance with Section Q6.3.
Sell Price Price Adjustment	SPA _j	£/MWh	The amount sent by the Transmission Company as the 'Sell Price Price Adjustment' in accordance with Section Q6.3.

