

MODIFICATION REPORT for Modification Proposal P167 Erroneous Calculation of Bid Offer Acceptance (BOA) Volume

Prepared by: ELEXON on behalf of the Balancing and Settlement Code Panel (the 'Panel')

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This document has been distributed in accordance with Section F2.1.10¹ of the Balancing and Settlement Code.

RECOMMENDATIONS

Having considered and taken into due account the contents of the draft P167 Modification Report, the Balancing and Settlement Code Panel recommends:

- that Proposed Modification P167 should not be made;
- the P167 Implementation Date of 1 March 2006 if an Authority decision is received on or before 29 April 2005, or 28 June 2006 if the Authority decision is received after 29 April 2005 but on or before 26 August 2005; and
- the proposed text for modifying the Code, as set out in the Modification Report.

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¹ The current version of the Balancing and Settlement Code (the 'Code') can be found at http://www.elexon.co.uk/bscrelateddocs/BSC/default.aspx

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SUMMARY OF IMPACTED PARTIES AND DOCUMENTS

The following parties/documents have been identified as being potentially impacted by Modification Proposal P167.

Parties		Sections of the	BSC	Code Subsidiary Documents	
Suppliers	×	А		BSC Procedures	×
Generators	\boxtimes	В		Codes of Practice	
Licence Exemptable Generators	\boxtimes	С		BSC Service Descriptions	\boxtimes
Transmission Company	\boxtimes	D		Service Lines	
Interconnector	\boxtimes	E		Data Catalogues	
Distribution System Operators		F		Communication Requirements Documents	
Non-Physical Traders	\boxtimes	G		Reporting Catalogue	\boxtimes
Party Agents		Н		MIDS	
Data Aggregators		1		Core Industry Documents	
Data Collectors		J		Grid Code	
Meter Operator Agents		K		Supplemental Agreements	
ECVNA [L		Ancillary Services Agreements	
MVRNA [M		Master Registration Agreement	
BSC Agents		N		Data Transfer Services Agreement	
SAA	X	0		British Grid Systems Agreement	
FAA		Р		Use of Interconnector Agreement	
BMRA	\boxtimes	Q	\boxtimes	Settlement Agreement for Scotland	
ECVAA		R		Distribution Codes	
CDCA		S		Distribution Use of System Agreements	
TAA		Т	\boxtimes	Distribution Connection Agreements	
CRA [U		BSCCo	
Teleswitch Agent		V		Internal Working Procedures	☒
SVAA [W		Other Documents	
BSC Auditor		X	\boxtimes	Transmission Licence	
Profile Administrator				System Operator-Transmission Owner Code	
Certification Agent					
MIDP [
Other Agents					
SMRA [
Data Transmission Provider					

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1 DESCRIPTION OF PROPOSED MODIFICATION AND ASSESSMENT AGAINST THE APPLICABLE BSC OBJECTIVES

1.1 Modification Proposal

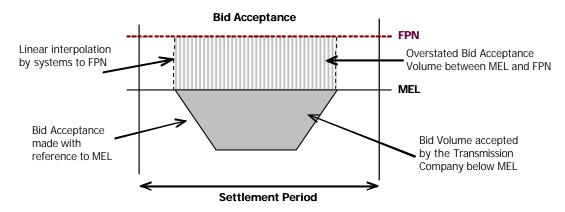
Modification Proposal P167 'Erroneous Calculation of Bid Offer Acceptance (BOA) Volume' (P167) was raised on 28 June 2004 by British Gas Trading (BGT). P167 seeks to amend the methodology for calculation of Acceptance Volumes, to account for changes in BM Unit Maximum Export Level (MEL) and Maximum Import Level (MIL). The perceived defect was initially raised to the Settlement Standing Modification Group (SSMG, hereafter referred to as 'the Group') as Issue 7, 'Potential anomaly in respect of Bid Offer Acceptance (BOA) volume' (References 1-4).

Currently the Balancing and Settlement Code (the 'Code') requires that Acceptance Volumes are calculated based on the Final Physical Notification (FPN) submitted by the Lead Party of the relevant BM Unit. The Proposer contends that this approach is not appropriate in all instances, specifically where a Party has re-declared MEL or MIL post Gate Closure (MEL below FPN, or MIL above FPN) prior to an Acceptance being issued.

The issue that P167 seeks to address is that the Transmission Company considers the physical dynamics of the BM Unit at the time the Acceptance is instructed (i.e. its notified output: FPN, or MEL (if MEL has been re-declared below FPN), or MIL (if MIL has been re-declared above FPN)), whereas the Code requires that the volume of the Acceptance is always calculated with reference to FPN. This results in the calculation and creation of Acceptance Volumes, in Settlement, that were essentially not instructed by the Transmission Company. Therefore, P167 seeks to ensure that Acceptance Volumes are calculated with reference to the output level the Transmission Company actually instructed against (i.e. FPN or MEL / MIL), and thus the 'correct' Acceptance Volumes feed into the Settlement calculations.

For clarification, P167 is not proposing to amend the actions undertaken by the Transmission Company, as the Transmission Company is acting in accordance with its obligations (as set out in the Grid Code and the BSC). Furthermore, the calculation of Acceptance Volumes for Settlement is being undertaken in accordance with the current baseline. However, the Proposer of P167 is of the view there is an anomaly in the baseline and therefore seeks to amend the Settlement calculation to ensure that the calculation of Acceptance Volumes accounts for MEL and MIL re-declarations post Gate Closure.

At a high level, the perceived defect can be illustrated via the simple example of a Party which redeclares its MEL below FPN after Gate Closure (once the FPN cannot be amended) and subsequently has a Bid accepted. The Transmission Company accepts the Bid with reference to the MEL at the time the Bid was taken. However, the Acceptance Volume is calculated by Settlement with reference to the FPN prevailing at Gate Closure for the Settlement Period, as illustrated diagrammatically below.



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As a result of calculating the Acceptance Volume in relation to the FPN, the Accepted Bid Volume for the BM Unit is overstated. Overstating the Acceptance Volume has consequential effects on the Credited Energy for the Party, by removing some, or all, of the imbalance between FPN and MEL, i.e. the Party is essentially protected from exposure to imbalance to the extent of the overstated Bid Volume. Furthermore, overstating the Accepted Bid Volume has implications on the Net Imbalance Volume (NIV) calculation, and therefore on the resulting Energy Imbalance Price. This has implications on other Settlement calculations, such as the Residual Cashflow Reallocation Cashflow (RCRC) derivation, directly for the affected Party, and indirectly for all other Parties.

The Proposer is of the view that P167 would better facilitate Applicable BSC Objective (c) "Promoting effective competition in the generation and supply of electricity and promoting such competition in the sale and purchase of electricity" in the following ways:-

- Imbalance positions are being incorrectly calculated under the current baseline, mitigating Party exposure to imbalance prices. Correcting the perceived defect would improve the accuracy to which imbalance positions are reported and level of imbalance Parties are exposed to;
- Correcting the perceived defect will help to ensure that all Parties are receiving appropriate RCRC payments; and
- Amending the methodology for calculating Acceptance Volumes will result in a more appropriate calculation of imbalance prices.

The Initial Written Assessment (IWA) for P167 (Reference 7) was presented to the Panel at its meeting on the 8 July 2004. The Panel agreed with the recommendation that P167 be submitted to a two month Assessment Procedure conducted by the Group.

The Group met four times during the Assessment Procedure, (on the 15 July, 5 August, 27 September and 5 October 2004) and P167 was issued for industry consultation to seek the views of industry participants on the issues discussed and to support the Group's assessment against the Applicable BSC Objectives.

P167 was originally issued for industry consultation on the 10 August 2004 under the England and Wales BSC. Following BETTA Go-Active on 1 September 2004, the Panel extended the Assessment Procedure by one month and the consultation document was re-issued on a GB basis. The purpose of the latter consultation was for participants to consider P167 on a GB basis as well as for new Scottish participants to consider the consultation and related documents against the Applicable BSC Objectives (please note the Applicable BSC Objectives were amended at BETTA Go-Active).

The Assessment Report for P167 (Annex 3) was considered by the Panel at its 14 October 2004 meeting. The Panel determined that P167 should proceed to the Report Phase, in accordance with paragraph F2.7 of the Code. Accordingly the draft Modification Report and legal text were issued for industry consultation on the 22 October 2004 with responses due on 29 October 2004. Responses to industry consultation are included within this report.

The Panel considered the draft Modification Report at its meeting 11 November 2004, having noted the report phase consultation responses, the Panel unanimously confirmed its provisional recommendation that P167 should not be made.

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1.2 Proposed Modification

This section outlines the changes required to the Code and BSC systems to implement P167. It should be noted that the information included here is a high level overview of the changes required, for further detail please refer to the P167 Requirements Specification (Reference 5).

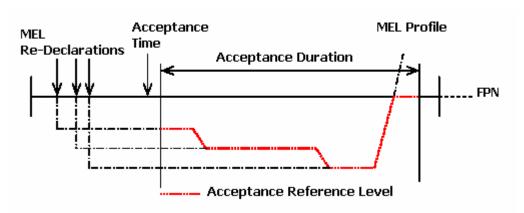
1.2.1 Acceptance Reference Level

P167 requires the volume of Acceptances to be calculated with reference to the physical dynamics of the BM Unit prevailing at the time the Acceptance is instructed (i.e. FPN or MEL/ MIL). In order to do this, a new variable would be created the 'Acceptance Reference Level' (ARL), the ARL would be calculated for each Acceptance, and would be used instead of the FPN through all Bid – Offer Acceptance and Acceptance Non – Delivery volume calculations (noting that the ARL may be equivalent to FPN).

Whether the FPN or the MEL/ MIL are used as the Acceptance Reference Level would depend on the relative timings of Bid – Offer Acceptances being made and re-declarations of MEL/ MIL. Simplistically the Acceptance Reference Level would be either:

- FPN, where, at the point the Acceptance was issued, the effective MEL is above FPN and the effective MIL is below FPN for the duration of the Acceptance; or
- For each point in time:
 - Where MEL has been declared below FPN the smallest magnitude value of the MEL effective at the Acceptance time; or
 - Where MIL has been declared above FPN the smallest magnitude value of the MIL effective at the Acceptance time.

The derivation of the ARL is illustrated in the example below where the ARL follows the level of MEL below FPN effective to the Acceptance time.



1.2.2 Calculation of Acceptance Volumes

Currently Acceptance Volumes are calculated within Settlement by reference to the BM Unit FPN. Under P167 both the Code and BSC Systems would be amended to calculate the volume of each Acceptance from the 'Acceptance Reference Level'.

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1.2.3 Calculating Acceptance Non – Delivery Volumes

Non Delivery Volumes are currently based on the difference between the Expected Metered Volume for a Settlement Period, adjusted for any Balancing Services e.g. Accepted Bids or Offers, and the Actual Metered Volume. It should be noted that the Expected Metered Volume is currently used to calculate both the Non Delivery Volume and the Information Imbalance Volume.

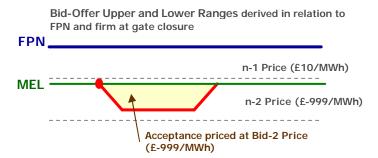
In order to calculate Non-Delivery Volumes, for each Settlement Period, the Period Expected Metered Volume would need to be derived. Under P167, two different variables would be required as a consequence of the differing intents of Information Imbalance and Non Delivery Charges:

- Information Imbalance should be the difference between what was declared prior to Gate
 Closure and what was delivered post Gate Closure. Therefore, for Information Imbalance
 Charging the Expected Metered Volume would be calculated as FPN adjusted for Bid –Offer
 Acceptances and Applicable Balancing Services Volumes. Hence, the existing definition of
 Expected Metered Volume would be utilised for this calculation; and
- The Non Delivery Volume should be the difference between what the Transmission
 Company expected to be delivered when instructing a Bid Offer Acceptance, and what
 was actually delivered by the BM Unit. Therefore the Non Delivery Volume would be
 calculated against a level defined by the Acceptances issued to that BM Unit. This has been
 defined as the Acceptance Expected Metered Volume.

1.2.4 Bid-Offer Upper and Lower Range Derivation

Bid and Offer Upper and Lower Ranges define the price the Transmission Company pays (or is paid) for an Acceptance. The Group considered that Bid-Offer Upper and Lower Ranges should be fixed at FPN.

Bid-Offer Upper and Lower Ranges would always be derived from FPN (as is the case under the current baseline). This approach would ensure that Bid-Offer Upper and Lower Ranges are firm at Gate Closure. However, both Parties and the Transmission Company would need to consider whether an Acceptance was from FPN or MEL/ MIL in order to determine the price of the Acceptance (since the relevant price band will be dependent on the point from which the Acceptance is issued).



In the example, a Party has submitted a Bid price which indicates they do not wish to reduce output to the level of the n-2 band (i.e. a high negative Bid price in the second band). With the Bid Upper and Lower Ranges derived from FPN, the price for an Acceptance taken from MEL would be calculated from the n-2 band and the Party would receive the associated payment for reducing output to an undesirable level if the Bid is accepted.

1.2.5 Reporting

Under P167 new reporting requirements would be specified to indicate (to Parties and the Transmission Company in the Settlement Report) the level from which Acceptance Volumes have been calculated (as considered in Reference 5).

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1.2.6 MEL and MIL Submissions

Under P167 submission of MEL/MIL data to the Transmission Company and provision of this data to BSC Agents for use in Settlement would be formalised within the Code.

1.3 Issues raised by the Proposed Modification

The following issues were considered during the Assessment of Proposed Modification P167:

- Changes required to the Code and BSC Systems to account for MEL and MIL re-submissions in the calculation of Acceptance and Non-Delivery Volumes, and the associated costs;
- The impact of the perceived defect on Party imbalance positions, imbalance prices, and the RCRC:
- The potential for exploitation of the issue (deliberate avoidance of imbalance via re-declaration of MEL or MIL post Gate Closure);
- Exception rules for specific circumstances where it would be inappropriate for the Acceptance Volume to be calculated from MEL/MIL (including potential impact on 'multi shafted BM Units');
- Historic rationale for the current approach to the calculation of Acceptance Volumes; and
- Interaction with the Grid Code, in particular the potential impact on the submission of FPN, MIL and MEL data (including the implications of Parties benefitting from re-declaration acting as a disincentive to submit accurate FPNs).

These issues are discussed in depth in the Assessment Report (Annex 3) and are not covered further here.

1.4 Assessment of whether P167 will better facilitate the Applicable BSC Objectives

The Applicable BSC Objectives are listed in Annex 6 of this document.

The majority of the Group agreed that there is a discrepancy in the way in which Acceptance Volumes are calculated where there has been a MIL / MEL re-declaration away from FPN before an Acceptance is instructed by the Transmission Company, although some Group members did not believe that this should be considered a defect with the existing baseline. It was noted by the Group that correcting this discrepancy would:

- improve the accuracy to which imbalance positions are reported and the level of imbalance to which Parties are exposed;
- help to ensure that all Parties are receiving appropriate RCRC payments;
- result in a more appropriate calculation of imbalance prices; and
- remove any possibility of exploitation of the perceived defect (although it should be noted that the Group concluded there is no evidence of exploitation at present).

It was the view of the Group that the above benefits would better facilitate achievement of Applicable BSC Objective (c). However, the Group also noted that there would be an impact on and associated cost for Parties and the Transmission Company under P167. The Group agreed that this impact and associated costs would be detrimental to the achievement of Applicable BSC Objective (c).

The Group noted that there would be implementation costs associated with P167 in terms of central systems. It was also recognised that P167 would introduce a further level of complexity into the

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Settlement arrangements. The Group agreed that the costs and increased complexity associated with P167 would be detrimental to the achievement of Applicable BSC Objective (d).

The Group also noted that placing a commercial driver on MEL and MIL submissions could potentially have a detrimental impact on the submission of these values. It was considered by the Group that this could have a potentially detrimental impact on the achievement of Applicable BSC Objective (b).

The majority of the Group were of the view that, on balance, P167 would not better facilitate achievement of the Applicable BSC Objectives.

Those members not in support of P167 were of the opinion that placing a commercial driver on MEL and MIL submissions would have a potentially detrimental impact on the achievement of Applicable BSC Objective (b). In addition, it was the view of these members that the materiality of the perceived defect is not sufficient to justify the cost of implementation and therefore does not overall better facilitate Applicable BSC Objective (c). Also any beneficial effect on achievement of Applicable BSC Objective (c) would be further outweighed by the detrimental effect on achievement of Applicable BSC Objectives (d) associated with Central System costs.

Those members in support of P167 (including the Proposer) were of the opinion that the materiality of the perceived defect is such that the cost of implementation could be justified and hence the beneficial effect to the achievement of Applicable BSC Objective (c) would outweigh any detrimental effect to the achievement of Applicable BSC Objectives (d). Additionally, Grid Code obligations to provide timely MEL/MIL submissions would prevent a detrimental effect on (b).

1.5 Modification Group's cost benefit analysis of Proposed Modification

The Group's cost/benefit analysis is detailed in considerable depth in sections 1.5 and 1.6 of the Assessment Report (Annex 3). Headline figures are summarised below.

Costs:

Participant	Costs
BSC Agent	Total Cost £600k Change Specific £350k
BSCCo	Total £135k
	Change Specific £75k
Transmission Company	£470k
Party Costs	£75-100k per Party

Benefits:

The Group produced a number of materiality estimates recognising the potential for Parties to be long or short as a result of the perceived defect, and thus potentially receiving an imbalance benefit at either System Buy Price or System Sell Price. These estimates ranged between £100,000 and £400,000, with a mid price estimate of £180,000 for the annual materiality of leaving the perceived defect unresolved (NB this figure represents an impact on cashflows within the market rather than an annual saving to the industry as a whole, as such the figure can not be directly compared to the costs of implementation). It should be noted that a number of assumptions (for details see Reference 8) were made to reach these figures, and they should therefore be regarded as indicative rather than definitive.

The Group believed that Suppliers are currently receiving a net dis-benefit from the perceived defect, and would therefore financially benefit from the implementation of P167, and that conversely

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generators participating in the Balancing Mechanism are currently at a net benefit from the perceived defect, and would therefore be at a financial dis-benefit from the implementation of P167. Vertically integrated participants with an equal balance of generation and supply assets are considered to be neutral to the perceived benefit.

The Group estimated that the perceived defect has the potential to impact imbalance prices in up to 35% of Settlement Periods. The estimated annual materiality of the impact on imbalance prices, in terms of absolute imbalance payments from/to Parties is £327k pa (NB: absolute annual imbalance payments are of the order of £200m). In the majority (at least 97%) of potentially affected Settlement Periods the impact is estimated at less than £0.25 on both imbalance prices.

As detailed in section 1.4, the Majority of the group were of the opinion that the cost of implementing P167 would outweigh any benefit in terms of increased Settlement accuracy.

1.6 Alternative Modification

The Group did not identify or develop any Alternative Modifications that might better facilitate the Applicable BSC Objectives.

1.7 Governance and regulatory framework assessment

The Group did not identify any impact upon the governance or regulatory framework as arising from P167.

2 COSTS²

PROGRESSING MODIFICATION PROPOSAL			
Meeting Cost	£ 1,500		
Legal/expert Cost	£ 3,000 ³		
Impact Assessment Cost	£ 10,000		
ELEXON Resource	50 Man days		
	£ 10,500		

IMPLEMENTATION COSTS					
		Stand Alone Cost	P167 Incremental Cost	Tolerance	
Service Provider ⁴ Cost					
	Change Specific Cost	£ 320,000	£ 320,000	+/- 0%	
	Release Cost	£ 250,000		+/- 0%	

² Clarification of the meanings of the cost terms in this section can be found in annex 7 of this report

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³ This cost is new to the draft Modification Report and was not contained within the Assessment Report. In view of the technical complexity of the changes required for P167, external advice was sought as the legal drafting was compiled. This estimate reflects an upper range estimation of the costs of external legal advice.

⁴ BSC Agent and non-BSC Agent Service Provider and software Costs

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	Incremental Release Cost	£ 28,000	£ 28,000	+/- 0%
	Total Service Provider Cost	£ 598,000	£ 348,000	+/- 0%
Implementation Cost				
	External Audit	£ 60,000	£ 35,000	+/- 20%
	Design Clarifications	£ 30,000	£ 17,000	+/- 100%
	Additional Resource Costs	£ 0	£ O	+/- 0%
	Additional Testing and Audit Support Costs	£ 40,000		+/- 25%
Total Demand Led Implementation Cost		£ 728,000	£ 400,000	+/- 1%

ELEXON Implementation Resource Cost	450 Man days £ 135,000	250 Man days £ 75,000	+/- 10%
Total Implementation Cost	£ 863,000	£ 475,000	+/- 10%

ONGOING SUPPORT AND MAINTENANCE COSTS			
<u> </u>	Stand Alone Cost	P167 Incremental Cost	Tolerance
Service Provider Operation Cost	£ 0	£ 0	+/- 0%
Service Provider Maintenance Cost	£ 0	£ O	+/- 0%
ELEXON Operational Cost	£ 0	£ 0	+/- 0%

3 RATIONALE FOR PANEL'S RECOMMENDATIONS

The Panel noted that the Group had reached a majority opinion that Proposed Modification P167 would not better facilitate the Applicable BSC Objectives and therefore should not be made.

The Panel re-iterated concerns expressed within the Assessment Report that P167 could create commercial incentives for Parties to delay the submission of MEL/MIL data which could have a detrimental effect on the Transmission Company's ability to conduct system balancing. It was noted that the Transmission Company conducts a regular operational forum at which it has been reporting back concerted efforts to ensure Parties provide accurate MEL/MIL data, and concern was expressed by several Panel members that P167 might undermine the accuracy of post Gate Closure data submissions.

The Panel queried whether implementation cost estimates put forward by the Group could be reduced, and noted ELEXON advice that no cost savings on the figures put forward had been identified as P167

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seeks to change the Settlement calculations. The Panel expressed concerns that the cost of implementing P167 would considerably exceed the benefits of doing so. The Panel noted that the perceived defect had been known about at the time the Code was originally drafted and that the materiality of it had not been considered sufficient to justify its removal. A view was expressed that it was a tolerable defect and that trying to achieve excessive accuracy in Code provisions may not be merited on cost grounds.

The Panel expressed general concerns with regard to the credibility of any estimation of the materiality of the perceived defect, noting that limitations in data availability meant that such estimations were indicative rather than definitive. The Panel was not therefore minded that a compelling case had been demonstrated for the benefits of P167, whilst noting that implementation costs would be substantial.

For the above reasons, the Panel unanimously affirmed the recommendation of the Group that P167 should be rejected.

In the event that the Authority determines that the Proposed Modification should be made, the Panel agreed with the Implementation Dates suggested by the Group. In order to allow the Transmission Company the required ten calendar months following the latter of either Authority Approval or the BETTA Effective Date and in order to minimise the cost by aligning implementation with the release strategy the following Implementation Dates are recommended:

- 1 March 2006 if an Authority decision is received on or before 29 April 2005; or
- 28 June 2006 if the Authority decision is received after 29 April 2005 but on or before 26 August 2005.

Should P167 be implemented on the 1 March 2006, the required software changes would be delivered in the February 2006 Release but would not be utilised until the P167 Implementation Date.

If approved, P167 would be implemented on a Settlement Day basis. As such, the P167 arrangements would only apply to Settlement Days post the Implementation Date.

4 IMPACT ON BSC SYSTEMS AND PARTIES

An assessment has been undertaken in respect of BSC Systems and Parties and the following have been identified as potentially being impacted by the Proposed Modification.

4.1 BSCCo

An initial assessment has been undertaken in respect of BSCCo and the following areas have been identified as potentially impacted by the Modification Proposal.

Area of Business	Potential Impact of Proposed Modification					
BSCCo Systems	There would be a significant impact on the BSCCo Market Monitoring system (TOMAS) potentially requiring changes to: • TOMAS Requirement Catalogue • TOMAS Data Catalogue • TOMAS System Design • TOMAS User Guide					

ELEXON impact assessment identified the following costs:

 Requirement to support implementation (150 ELEXON Man Days incremental cost (£45,000) and 350 ELEXON Man Days (£105,000) as a stand alone change); and P167 Modification Report Page 14 of 24

Requirement to upgrade TOMAS (approximately 100 ELEXON Man Days (£30,000));

Therefore, it is estimated that the ELEXON implementation resource cost would lie somewhere between the stand alone cost of 450 ELEXON man days (£135,000) and the incremental cost of 250 ELEXON man days (£75,000).

4.2 BSC Systems

BSC Systems and processes have been identified as being impacted by the Modification Proposal.

BSC System / Process	Potential Impact of Proposed Modification
Balancing Mechanism Activities	Formalisation of MEL and MIL data submission.
Settlement	Settlement calculations would be amended such that the derivation of Acceptance and Non-Delivery Volumes accounts for MEL and MIL submissions.
Reporting	New reporting requirements will be introduced to indicate the level from which Acceptance Volumes have been calculated.

Response to BSC Agent impact assessment is included in Annex 3.

4.3 Parties and Party Agents

The systems and processes used by Parties and Party Agents would be impacted as follows:

System / Process	Potential Impact of Proposed Modification
Settlement Calculations	Parties would be required to amend their systems to account for the timings of MEL and MIL submissions and the resulting approach to Acceptance and Imbalance Volume calculation.
Reporting	Party systems and processes would require amendment in line with the new reporting requirements.

Participant impact assessment responses are included in Annex 3.

5 IMPACT ON CODE AND DOCUMENTATION

5.1 Balancing and Settlement Code

The draft legal text for P167 is appended to this document. At a high level, the changes contained within it can be summarised as follows:

5.1.1 Section Q: Balancing Mechanism Activities

- Formalisation of MEL and MIL data submission; and
- Formalised requirements for Transmission Company provision and interim processing of MEL and MIL data to the SAA.

5.1.2 Section T: Settlement and Trading Charges

- Introduction of rules for conversion of MEL and MIL data for use in Settlement calculation;
- Rules for calculation of the Acceptance Reference Level;
- Rules for calculation of Acceptance Volumes from Acceptance Reference Level; and
- Amendment of Non-Delivery Rules.

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5.1.3 Changes identified during consultation period

During the consultation period respondents were invited to comment on the draft legal text for P167. In addition over the same time period ELEXON conducted a further technical review. As a consequence of this review procedure a number of changes have been made to the version of legal text issued for industry consultation as detailed in this section.

1. Process followed by the Transmission Company

Legal drafting for P167 formalises the existing process for submission of MEL and MIL data by the Transmission Company. Currently the Transmission Company submits MEL and MIL data both at Gate Closure for a Settlement Period and on each post Gate Closure re-declaration by a Party. For data submitted at Gate Closure, the Transmission Company creates an effective MEL/MIL profile defined for each spot time in the Settlement Period. For data submitted post Gate Closure the Transmission Company does not define effective profiles and submits data as received.

Transmission Company comments received on the draft Modification Report highlighted that the legal drafting issued for consultation did not distinguish between the pre and post Gate Closure processes. These comments have been addressed within the legal drafting by specifying that Clause Q 2.2 (c) (which sets out the determination of effective MEL/ MIL profiles) only applies in the case of data submitted at or before Gate Closure.

2. Acceptance Volume default rules

For each Acceptance k the function Acceptance Volume ($qA^k_{ij}(t)$) is defined for each spot time in a Settlement Period. Sections T3.4.3 and T3.4.4 set out the rules for determining $qA^k_{ij}(t)$ where no Acceptance has been issued for a spot time. Under the current baseline $qA^k_{ij}(t)$ defaults to FPN_{ij}(t) in the absence of any Acceptance for that spot time.

The draft legal text for P167 issued for consultation included changes to T3.4.3 and T3.4.4 such that $qA^k_{ij}(t)$ would default to the Acceptance Reference Level (ARL $^k_{ij}(t)$). However, ELEXON internal review flagged up that it would be more appropriate to retain the current default to FPN $_{ij}(t)$. This approach is more accurate since the $qA^k_{ij}(t)$ values for an Acceptance k are based (in part) on $qA^k_{ij}(t)$ values for previous acceptances and it would be inappropriate for the $qA^k_{ij}(t)$ values for Acceptance k to be affected by ARL data for a previous Acceptance (i.e. MIL/MEL data that may have been superseded by the time Acceptance k was issued).

Therefore, the changes to the definition of $qA^k_{ij}(t)$ have been removed from the P167 legal drafting. As such sections T3.4.3 and T3.4.4 are no longer impacted by P167. In addition, as a result of the changes to the formulation of $qA^k_{ij}(t)$, consequential changes were required to the drafting of Section T4.8.1.

3. Further minor changes

ELEXON internal review also identified an number of minor typographical errors which have been addressed.

5.2 Code Subsidiary Documents

The following Code Subsidiary Documents have been identified as impacted by the Modification Proposal.

Item	Potential Impact of Proposed Modification
NDFC	Changes to reporting requirements would impact the NETA Data File Catalogue
Reporting	Changes to reporting requirements would impact the Reporting Catalogue.

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Catalogue	
SAA SD	The Settlement Administration Agent Service Description would need to be amended in line with changes to the calculation of Acceptance and Non-Delivery Volumes.
BMRA SD	The Balancing Mechanism Reporting Agent Service Description would need to be amended in line with changes to the calculation of Acceptance Volumes.

5.3 BSCCo Memorandum and Articles of Association

No changes to the BSCCo Memorandum and Articles of Association have been identified.

5.4 Impact on Core Industry Documents and supporting arrangements

No changes to Core Industry Document and supporting arrangements have been identified.

6 SUMMARY OF CONSULTATIONS

Six responses (representing 34 Parties) were received in respect of the consultation on the draft Modification Report. These responses are summarised in the table below and in the remainder of this section.

Consultation question	Respondent agrees	Respondent disagrees	Opinion unexpressed
Do you agree with the Panel's views on P167 and the provisional recommendation to the Authority contained in the draft Modification Report that P167 should not be made?	4 (32 Parties)	1 (1 Party)	1 (1 Party)
Do you agree with the Panel's view that the legal text provided in the draft Modification Report correctly addresses the defect or issue identified in the Modification Proposal?	2 (21 Parties)	2 (11 Parties)	2 (2 Parties)
Do you agree with the Panel's provisional recommendation concerning the Implementation Date for P167?	5 (33 Parties)	-	1 (1 Party)

6.1 Panel's Provisional Recommendation

The majority of respondents expressing an opinion on Proposed Modification P167 supported the Panel's provisional recommendation that the Proposed Modification should **not** be made. The arguments expressed were consistent with those considered during the Assessment Procedure and outlined in section 1.4 of this document.

Views expressed by the majority of consultation respondents **not in support** of the Proposed Modification can be summarised as follows:

- The cost of implementation would outweigh any potential benefits in terms of Settlement accuracy;
- P167 would introduce additional complexity into the Settlement arrangements and that there could be risk and potential unintended side affects associated with this increased complexity;
- There may be a detrimental impact on the submission of MEL/MIL information to the Transmission Company should P167 be implemented; and

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• One respondent expressed the view that P167 may have a detrimental impact on the willingness for 'Multi Shafted' BM Units to participate in the Balancing Mechanism⁵.

Views expressed by the minority of consultation respondents **in support** of the Proposed Modification can be summarised as follows:

- Although the defect was acknowledged at Go-Live, the materiality of the defect is more significant than was originally envisaged. Furthermore, the respondent did not believe that this is a tolerable defect within the Code as it is resulting in certain Parties imbalance exposures being incorrectly calculated whilst also impacting on the calculation of imbalance prices.
- In relation to the view opposed to P167 on the grounds that there may be an adverse impact
 on the submission of MEL/MIL data, a counter view was expressed. This view was based on the
 fact that it is a Grid Code obligation to submit timely MIL/MEL data and that the assessment of
 any Modification Proposal should been conducted on the assumption that market participants
 comply with such obligations.
- The costs of implementation would be justified in terms of the historic materiality of the error and the continuing impact the defect will have on imbalance liabilities and imbalance prices.

No new arguments were expressed that had not been considered by the SSMG during the P167 Assessment Procedure (see Annex 3).

6.2 Draft Legal Text

Two consultation respondents supported the legal text as included in the draft Modification Report consultation. Two consultation respondents did not comment on the legal drafting.

Two respondents did not support the legal text as included in the draft Modification Report consultation. One respondent did not support the legal text as they were not in support of the Proposed Modification, although no particular comments on the text itself were raised. In addition one respondent (the Transmission Company) noted that the legal drafting did not distinguish the separate process currently conducted by the Transmission Company in terms of MEL/MIL data submission pre and post Gate Closure. This comment has been considered and addressed as outlined in section 5.1.

6.3 Recommended Implementation Date

Respondents expressing an opinion on the P167 Implementation Date unanimously supported the Panel's recommendation.

6.4 Further Comments

No further comments were received.

6.5 Comments and views of the Panel

The Panel considered the report phase consultation responses and noted that the views expressed by respondents were aligned with those received during the assessment procedure. The Panel noted that comments on the draft legal text raised by the Transmission Company had been addressed.

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⁵ The potential impact of P167 on 'multi shafted' BM Units was considered by the SSMG during the Assessment Procedure as detailed in Annex 3.

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7 SUMMARY OF TRANSMISSION COMPANY ANALYSIS

7.1 Analysis

The Transmission Company analysis is included in Annex 3 and is summarised here.

The Transmission Company expressed the view that P167 would only have a marginal impact on its ability to discharge its obligations efficiently under the Transmission Licence and on its ability to operate an efficient, economical and co-ordinated Transmission System. Concerns were raised over the possible reluctance of Balancing Mechanism participants to re-declare MIL/MEL under P167, given that such re-declaration would hold a financial implication. As such the Transmission Company indicated that there would be a potential impact on the security of supply if there is any distortion to the true generation ability declared, however it was noted that this would be dependent on the behaviour of participants.

On consideration of P167 against the Applicable BSC Objectives, the Transmission Company expressed the view that achievement of Applicable BSC Objective c) would be better facilitated due to more accurate apportioning of cashflows to Parties. However, the view was also expressed that P167 would be detrimental to Objective b), due to the possible adverse impact on provision of MEL and MIL data leading to a less efficient operation of the Transmission System. However, it was noted this was dependent on the behaviour of the participants.

The Transmission Company did not envisage any required changes to Core Industry documents, but did state that changes to their computer systems and processes would be needed. Three issues were raised:

- Processes surrounding the submission MEL/MIL would require amending in order to provide suitable assurance were the data to be used in Settlement calculations;
- Changes would be required to despatch systems; and
- A requirement to support a new variation of the SAA-I014 flow (Settlement Report).

The estimated time-scale for implementation of P167 was ten calendar months following the latter of either Authority Approval or the BETTA Effective Date. The estimated costs for implementing P167 were £470,000.

7.2 Comments and views of the Panel

The Panel noted the Transmission Company analysis, without expressing any specific comments on its content.

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8 DOCUMENT CONTROL

8.1 Authorities

Version	Date	Author	Reviewer	Change Reference
0.1	19/10/04	Change Delivery	Sarah Parsons	P167 MG Chair review
0.2	22/10/04	Change Delivery	Industry	Consultation
0.3	03/11/04	Change Delivery	Change Delivery	Technical review
0.4	04/11/04	Change Delivery	Change Delivery	Final review
0.5	05/11/04	Change Delivery	Panel	Decision
1.0	16/11/04	Change Delivery	Authority	Decision

8.2 References

Ref No.	Document Title	Owner	Issue Date	Version
1	Paper: Potential Anomaly in respect of Bid Offer Acceptance (BOA) Volume	BGT		1.0
2	SSMG Issue 7 -Meeting notes 23/04/04	ELEXON	23/04/04	1.0
3	SSMG Issue 7- Analysis of impact on Energy Imbalance Prices	ELEXON	26/04/04	1.0
4	Panel Paper 78/001 (e) SSMG Issue 7: Potential anomaly in respect of Bid Offer Acceptance (BOA) volume	ELEXON	10/06/04	1.0
5	Requirements Specification for P167 Erroneous Calculation of Bid Offer Acceptance (BOA) Volume	ELEXON	09/08/04	2.0
6	Modification Proposal P167 Erroneous Calculation of Bid Offer Acceptance (BOA) Volume	ELEXON	28/06/04	1.0
7	Initial Written Assessment: P167 Erroneous Calculation of Bid Offer Acceptance (BOA) Volume	ELEXON	08/07/04	1.0

Issue 7 documentation is available for published on the BSC Website at:

www.elexon.co.uk/changeimplementation/ModificationProcess/groups/issues/issues.aspx?issueID=7

P167 documentation is available on the BSC Website at:

 $\underline{www.elexon.co.uk/change implementation/ModificationProcess/ModificationDocumentation/modProposal}\\ \underline{View.aspx?propID=176}$

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ANNEX 1 LEGAL TEXT

Legal text is appended to this document as a separate attachment.

ANNEX 2 MODIFICATION GROUP DETAILS

NAME	POSITION	MEMBER		MEETING A	ATTENDANC	E
			15/07/04	05/08/04	27/09/04	05/10/04
Sarah Parsons	ELEXON	Υ	Υ	Υ	Υ	N
	(Chairman)					
Tom Bowcutt	ELEXON (Lead	Υ	Υ	Υ	Υ	Υ
	Analyst)					
Mark Manley	British Gas Trading	Υ	Υ	Υ	Υ	Υ
	(Proposer)					
Man Kwong Liu	SAIC Limited	Υ	Υ	Υ	N	Υ
Andrew Colley	Scottish and Southern	Υ	Υ	Υ	N	N
Helen Bray	EDF Energy	Υ	Υ	Υ	Υ	Υ
Steve Drummond	EDF Trading	Υ	Υ	Υ	N	N
Tim Johnson	E.ON UK	Υ	Υ	Υ	Υ	Υ
						(Tele-
						conference)
Lisa Waters	Waters Wye	Υ	Υ	N	N	N
	Associates					
Martin Mate	British Energy	Υ	Υ	Υ	N	N
Sanjukta Round	Cornwall Consulting	Υ	Υ	N	N	N
Ben Willis	Npower	Υ	Υ	Υ	Υ	N
Ndidi Njuko	Ofgem	N	Υ	Υ	Υ	Υ
Rob Smith	National Grid	N	Υ	Υ	Υ	Υ
Sam Wither	National Grid	N	Υ	Υ	Υ	N
Louisa Gilchrist	Npower	N	Υ	N	N	N
Fred Barasi	ELEXON (Operations)	N	Υ	Υ	Υ	N
Roger Salomone	ELEXON	N	N	N	N	Υ
	(Chairman)					
Melanie Henry	ELEXON (Legal)	N	Υ	Υ	Υ	Υ

ANNEX 3 ASSESSMENT REPORT

The Assessment Report for P167, which includes annexes detailing Party, BSC Agent and Transmission Company impact assessments is attached as a separate document.

ANNEX 4 DRAFT MODIFICATION CONSULTATION RESPONSES

Consultation responses on the draft Modification Report is appended to this document as a separate attachment.

ANNEX 5 CLARIFICATION OF COSTS

There are several different types of costs relating to the implementation of Modification Proposals. ELEXON implements the majority of Approved Modifications under its CVA or SVA Release Programmes.

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These Programmes incur a base overhead which is broadly stable whatever the content of the Release. On top of this each Approved Modification incurs an incremental implementation cost. The table of estimated costs of implementing the Proposed/Alternative Modification given in section 2 of this report has three columns:

- Stand Alone Cost the cost of delivering the Modification as a stand alone project outside of a CVA or SVA Release, or the cost of a CVA or SVA Release with no other changes included in the Release scope. This is the estimated maximum cost that could be attributed to any one Modification implementation.
- Incremental Cost the cost of adding that Modification Proposal to the scope of an existing release. This cost would also represent the potential saving if the Modification Proposal was to be removed from the scope of a release before development had started.
- **Tolerance** the predicted limits of how certain the cost estimates included in the template are. The tolerance will be dependent on the complexity and certainty of the solution and the time allowed for the provision of an impact assessment by the Service Provider(s).

The cost breakdowns are shown below:

	PROGRESSING MODIFICATION PROPOSAL
Meeting Cost	This is the cost associated with holding Modification Group meetings and is based on an estimate of the travel expenses claimed by Modification Group members.
Legal/expert Cost	This is the cost associated with obtaining external expert advice, usually legal advice.
Impact Assessment Cost	Service Provider Impact Assessments are covered by a pre-determined monthly contractual charge. Therefore the cost included in this report is an estimate based on the level of impact assessment that the modification is expected to require and may not reflect the actual cost attributed to the modification, which will be based on a percentage of the contractual impact assessment costs for each month that it is assessed.
ELEXON Resource	This is the ELEXON Resource requirement to progress the Modification Proposal through the Modification Procedures. This is estimated using a standard formula based on the length of the Modification Procedure.

SERVICE PROVIDER ⁶ COSTS		
Change Specific Cost	Cost of the Service Provider(s) Systems development and other activities relating specifically to the Modification Proposal.	
Release Cost	Fixed cost associated with the development of the Service Provider(s) Systems as part of a release. This cost encompasses all the activities that would be undertaken regardless of the number or complexity of changes in the scope of a release. These activities include Project Management, the	

⁶ A Service Provider can be a BSC Agent or a non-BSC Agent, which provides a service or software as part of the BSC and BSC Agent Systems. The Service Provider cost will be the sum of the costs for all Service Providers who are impacted by the release.

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	production of testing and deployment specifications and reports and various other standard release activities.
Incremental Release Cost	Additional costs on top of base Release Costs for delivering the specific Modification Proposal. For instance, the production of a Test Strategy and Test Report requires a certain amount of effort regardless of the number of changes to be tested, but the addition of a specific Modification Proposal may increase the scope of the Test Strategy and Test Report and hence incur additional costs.

	IMPLEMENTATION COSTS
External Audit	Allowance for the cost of external audit of the delivery of the release. For CVA BSC Systems Releases this is typically estimated as 10% of the total Service Provider Costs, with a tolerance of +/- 20%. At present the SVA Programme does not use an external auditor, so there is no External Audit cost associated with an SVA BSC Systems Release.
Design Clarifications	Allowance to cover the potential cost of making any amendments to the proposed solution to clarify any ambiguities identified during implementation. This is typically estimated as 5% of the total Service Provider Costs, with a tolerance of +/- 100%.
Additional Resource Costs	Any short-term resource requirements in addition to the ELEXON resource available. For CVA BSC Systems Releases, this is typically only necessary if the proposed solution for a Modification Proposal would require more extensive testing than normal, procurements or 'in-house' development. For SVA BSC Systems Releases, this will include the management and operation of the Acceptance Testing and the associated testing environment.
	This cost relates solely to the short-term employment of contract staff to assist in the implementation of the release.
Additional Testing and Audit Support Costs	Allowance for external assistance from the Service Provider(s) with testing, test environment and audit activities. Includes such activities as the creation of test environments and the operation of the Participant Test Service (PTS). For CVA BSC Systems Releases, this is typically estimated as £40k per release with at tolerance of +/-25%. For SVA BSC Systems Releases this is estimated on a Modification Proposal basis.

TOTAL DEMAND LED IMPLEMENTATION COSTS

This is calculated as the sum of the total Service Provider(s) Cost and the total Implementation Cost. The tolerance associated with the Total Demand Led Implementation Cost is calculated as the weighted average of the individual Service Provider(s) Costs and Implementation Costs tolerances. This tolerance will be rounded to the nearest 5%.

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ELEXON IMPLEMENTATION RESOURCE COSTS

Cost quoted in man days multiplied by project average daily rate, which represents the resources utilised by ELEXON in supporting the implementation of the release. This cost is typically funded from the "ELEXON Operational" budget using existing staff, but there may be instances where the total resources required to deliver a release exceeds the level of available ELEXON resources, in which case additional Demand Led Resources will be required.

The ELEXON Implementation Resource Cost will typically have a tolerance of +/- 5% associated with it.

ONGOING SUPPORT AND MAINTENANCE COSTS		
ELEXON Operational Cost	Cost, in man days per annum multiplied by project average daily rate, of operating the revised systems and processes post implementation.	
Service Provider Operation Cost	Cost in £ per annum payable to the Service Provider(s) to cover staffing requirements, software or hardware licensing fees, communications charges or any hardware storage fees associated with the ongoing operation of the revised systems and processes.	
Service Provider Maintenance Cost	Cost quoted in £ per annum payable to the Service Provider(s) to cover the maintenance of the amended BSC Systems.	

ANNEX 6 APPLICABLE BSC OBJECTIVES

For reference the GB Applicable BSC Objectives, as contained in the Transmission Licence, are;

- (a) The efficient discharge by the licensee of the obligations imposed upon it by this licence and, during the transition period, shall include the efficient discharge by the licensee of those obligations which it is known (or reasonably anticipated) during the transition period are to be imposed on the licensee by this licence after the expiry of the transition period;
- (b) The efficient, economic and co-ordinated operation of the licensee's transmission system and the efficient, economic and co-ordinated operation of the GB 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;
- (e) Without prejudice to the foregoing objectives and subject to paragraph 3A, the undertaking of work by BSCCo (as defined in the BSC) which is:
 - (i) necessary for the timely and effective implementation of BETTA; and
 - (ii) relevant to the proposed GB wide balancing and settlement code;

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and does not prevent BSCCo performing its other functions under the BSC in accordance with its objectives;

- 3A For the purpose of, and without prejudice to, paragraph 5(a), in order to better achieve the objective referred to in 3(e), any modification to the BSC providing for the undertaking of work by the BSCCo pursuant to paragraph 3(e) must include express provision that:
 - (i) such work is proposed by BSCCo and approved by the Authority prior to its commencement; and
 - (ii) the costs of such work as may be carried out by BSCCo shall be identified and recorded separately by BSCCo.