Draft MODIFICATION REPORT for Modification Proposal P212 'Main Imbalance Price based on Market Reference Price'

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This document has been distributed in accordance with Section F2.1.10 of the Balancing and Settlement Code.[2]

Proposed Modification P212 seeks to replace part of the current Energy Imbalance Price methodology with an alternative method for determining the 'main' Energy Imbalance Price. The main Energy Imbalance Price is that paid by Parties who are in imbalance in the same direction as the system. P212 proposes that the main Energy Imbalance Price is the market price increased by 5% when the system is short, or the market price decreased by 5% when the system is long.

No change is proposed to the reverse price which is based solely on the market price.

No Alternative Modification has been developed.

BSC PANEL'S RECOMMENDATIONS

Having considered and taken into due account the contents of the P212 draft Modification Report, the BSC Panel recommends:

- **that Proposed Modification P212 should not be made;**
- **an Implementation Date for Proposed Modification P212 of 6 November 2008 if an Authority decision is received on or before 29 February 2008, or 25 June 2009 if the Authority decision is received after 29 February 2008 but on or before 16 October 2008;**
- **the proposed text for modifying the Code, as set out in the draft Modification Report.**

[1] ELEXON Ltd fulfils the role of the Balancing and Settlement Code Company ('BSCCo').
[2] The current version of 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

As far as the Modification Group has been able to assess, the following parties/documents would be impacted by P212.

Please note that this table represents a summary of the full impact assessment results contained in Appendix 3.

Parties		Party Agents		BSC Agents		Other Agents	
Distribution System Operators	☐	Data Aggregators	☐	SAA	☒	Supplier Meter Registration Agent	☐
Generators	☒	Data Collectors	☐	FAA	☐	Unmetered Supplies Operator	☐
Interconnectors	☒	Meter Administrators	☐	BMRA	☒	Data Transfer Service Provider	☐
Licence Exemptable Generators	☒	Meter Operator Agents	☐	ECVAA	☐		
Non-Physical Traders	☒	ECVNA	☐	CDCA	☐		
Suppliers	☒	MVRNA	☐	TAA	☐		
Transmission Company	☒			CRA	☐		
				SVAA	☐		
				Teleswitch Agent	☐		
				BSC Auditor	☐		
				Profile Administrator	☐		
				Certification Agent	☐		

Sections of the BSC		
A	☐	
B	☐	
C	☐	
D	☐	
E	☐	
F	☐	
G	☐	
H	☐	
I	☐	
J	☐	
K	☐	
L	☐	
M	☐	
N	☐	
O	☐	
P	☐	
Q	☒	
R	☐	
S	☐	
T	☒	
U	☐	
V	☐	
W	☐	
X	☒	

Code Subsidiary Documents		Core Industry Documents		BSCCo		BSC Panel/Panel Committees		Other	
BSC Procedures	☒	Ancillary Services Agreement	☐	Internal Working Procedures	☒	Working Practices	☐	Market Index Data Provider	☐
Codes of Practice	☐	British Grid Systems Agreement	☐					Market Index Definition Statement	☐
BSC Service Descriptions	☒	Data Transfer Services Agreement	☐					System Operator-Transmission Owner Code	☐
Party Service Lines	☐	Distribution Code	☐					Transmission Licence	☐
Data Catalogues	☒	Distribution Connection and Use of System Agreement	☐						
Communication Requirements Documents	☐	Grid Code	☐						
Reporting Catalogue	☒	Master Registration Agreement	☐						
		Supplemental Agreements	☐						
		Use of Interconnector Agreement	☐						

1 DESCRIPTION OF MODIFICATION

This section outlines the solution for the Proposed Modification as developed by the P212 Modification Group ('the Group') during the Assessment Procedure.

For a full description of the original Modification Proposal as submitted by BizzEnergy ('the Proposer'), and the background to the proposal, please refer to the P212 Initial Written Assessment (IWA).

1.1 Current Arrangements

Under the current baseline, actions taken by the System Operator (SO) to balance Supply and Demand for a Settlement Period set the main Energy Imbalance Prices (System Buy Price (SBP) when the system is 'short' and System Sell Price (SSP) when the system is 'long').

The current methodology for determining system length (whether the system is 'long' or 'short') was introduced under Approved Modification P78 'Revised Definitions of System Buy Price and System Sell Price' and amended under Approved Modifications P194 'Revised Derivation of the Main Energy Imbalance Price' and P205 'Increase in PAR level from 100MWh to 500MWh'. Overall system imbalance (i.e. Net Imbalance Volume or 'NIV') is currently determined by summing the Pre-Gate Closure trades (reflected in Balancing Services Adjustment Data or 'BSAD') with the Bids and Offers accepted by the SO. The system is 'long' when the volume of Bids and / or Relevant Balancing Services predominates and the system is 'short' when the volume of Offers and/or Relevant Balancing Services predominates.

The following information contributes to the calculation of the main Energy Imbalance Price:

- Actions taken within the Balancing Mechanism to increase the total energy on the system (Accepted Offers), or actions within the Balancing Mechanism to decrease the total energy on the system (Accepted Bids); and
- Relevant Balancing Services provided outside the Balancing Mechanism, represented via BSAD.

When the system is estimated by the method above to be short of energy, the main price (i.e. SBP as the price applied to imbalances in the same direction as the system) is based on the volume weighted average of the most expensive 500MWh[3] of priced balancing actions (accepted Offers and BSAD) remaining, following the application of the following rules:

- **De Minimis:** Individual accepted Bid and Offer Volumes below a defined threshold (1 MWh) are excluded from the price calculation completely. This approach is intended to remove 'false' actions created due to the finite accuracy of the systems used to calculate Bid and Offer Volumes;
- **Arbitrage:** Accepted Bids and Offers where no net energy has been delivered to the system but which have provided an overall financial benefit to the system are excluded from the price calculation completely (i.e. where the price of an accepted Offer Volume is less than the price of an accepted Bid Volume);
- **CADL:** Acceptance Volumes associated with Acceptances of short duration (below the Continuous Acceptance Duration Limit (CADL) currently 15 minutes) are treated as un-priced[4] in the price calculation;

[3] This is known as the Price Average Reference (PAR) volume. PAR is currently 500MWh. When the system has excess energy (said to be 'long') then the main price (SSP) will be based on the volume weighted average of the most expensive 500MWh of priced balancing actions (accepted Bids and Energy BSAD) remaining following the application of the tagging mechanism rules. If the NIV is less than 500 MWh then no volumes will be PAR tagged.

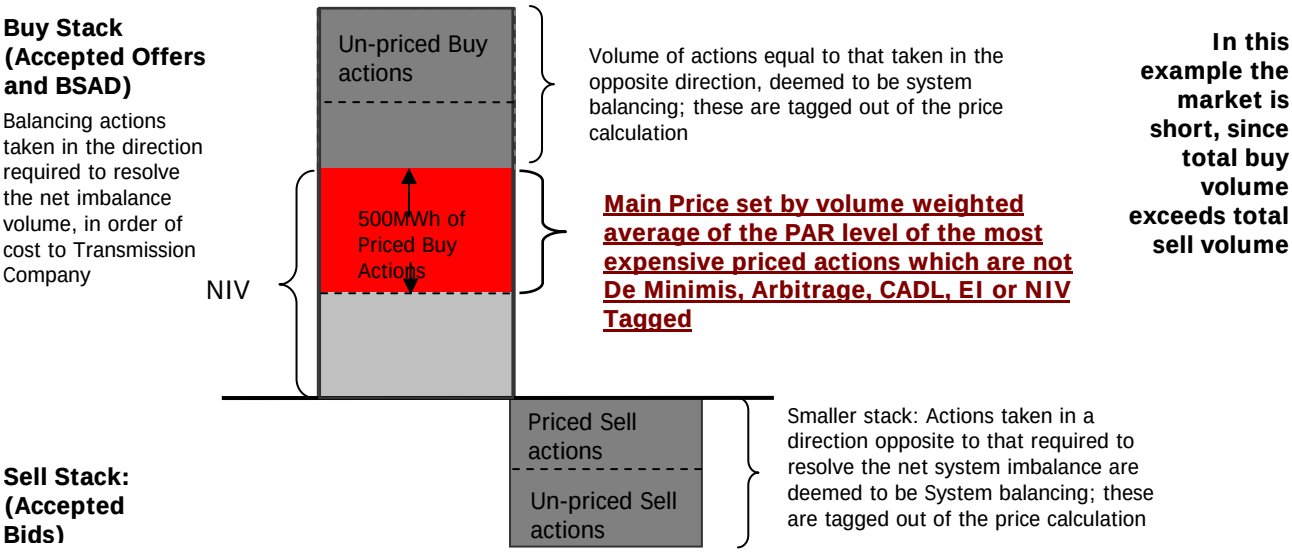
[4] Un-priced volumes contribute to the determination of which actions set the main Energy Imbalance Price, however the costs of these actions are not included in the main Energy Imbalance Price.

- **BSAD:** The SO determines whether Relevant Balancing Services will be treated as priced or un-priced. BSAD is calculated net[5] and represents both priced and un-priced Relevant Balancing Services in aggregate form;
- **Emergency Instructions:** On the determination of the SO, Accepted Bids and Offers associated with Emergency Instructions may be tagged as Excluded Emergency Acceptances and therefore treated as un-priced for the purpose of Energy Imbalance Price Calculation; and
- **NIV Tagging:** Following application of the rules outlined previously, the Net Imbalance Volume (NIV) tagging process is applied to determine which of the priced actions will be subject to PAR tagging.

These processes are collectively known as the 'tagging mechanism'. The de-minimis, CADL, emergency instructions and NIV Tagging functions are the processes to remove what are deemed to be system balancing actions from the main price.

In addition, trades undertaken on power exchanges feed into market prices provided by Market Index Data Providers (or a single provider, as it currently stands). The reverse Energy Imbalance Price (i.e. the price applied to imbalances in the opposite direction to the system) is based on the market price derived from data submitted by Market Index Data Providers.

Figure 1. Example of the Existing Arrangements Main Imbalance Price Calculation (Short System)



1.2 Proposed Modification

The mechanism for calculating Energy Imbalance Prices for the P212 solution compares to the current baseline as follows:

- Rather than using actions taken within the Balancing Mechanism to increase the total energy on the system (Accepted Offers), or actions within the Balancing Mechanism to decrease the total energy on the system (Accepted Bids), the information that contributes to the calculation of the main Energy Imbalance Price will be a premium or discount of 5% applied to the Market Index Price[6] in

[5] This means that in any Settlement Period there can only be one non-zero volume of Energy BSAD (EBVA or ESVA), and one non-zero volume of System BSAD (either SBVA or SSVA).
[6] Whilst the title of P212 refers to 'Market Reference Price', this refers to the 'Market Index Price' which is the term used in the BSC and Market Index Definition Statement.

each Settlement Period. Note that this approach excludes the actions taken by the SO outside of the Balancing Mechanism such as BSAD, which are currently reflected in Energy Imbalance Prices;

The information that contributes to the calculation of the main Energy Imbalance Price will therefore be:

- A fixed percentage premium (5%) of the Market Index Price added to the Market Index Price in each Settlement Period when the system is short (and therefore SBP is the main price); and
- A fixed percentage discount (5%) of the Market Index Price removed from the Market Index Price when the system is long (and therefore SSP is the main price);

For example, if the Market Index Price is £100/MWh, the fixed percentage is set at 5%, and the system is:

- Short, then SBP will be £105/MWh and SSP (as the reverse price) will be £100/MWh;
- Long, then SSP will be £95/MWh and SBP (as the reverse price) will be £100/MWh; or
- In balance (NIV = 0), then both SBP and SSP will be £100/MWh.

- The 5% value is set in the BSC as a parameter (ϕ). This is written into the BSC and can only be changed by a modification to the BSC;
- The calculation of the Market Index Price as defined in the MIDS will not change (although the Group agreed that this would benefit from review outside this Modification were P212 to be approved);
- The existing NIV methodology (using Accepted Bids, Offers and BSAD) will be retained to determine the direction of the system. However, as the prices of actual acceptances making up NIV would not be used for the Main Imbalance Price calculation it should be noted that the existing process can be simplified as described in the P212 Requirement Specification[7] and section 3.1 of the Assessment Report in Appendix 3;
- The Reverse Price will remain the Market Index Price as defined in the existing BSC pricing arrangements;
- The Default rules will be amended such that, when the volumes supplied by the Market Index Data Provider's are below the required threshold for liquidity in any Settlement Period, then the Market Index Price in the Settlement Period immediately prior will be used to determine both the Reverse Price and the main Energy Imbalance Price. The Reverse Price will default to the Market Index Price from the previous Settlement Period. The main Energy Imbalance Price will default to the Market Index Price from the previous Settlement Period plus or minus the percentage premium or discount as determined by the length of the system in the current Settlement Period. Where the previous Settlement Period has also not met the required threshold for liquidity then the most recent Market Index Price which did meet the threshold will be used[8]; and
- When NIV is equal to zero the main Energy Imbalance Price will revert to the Reverse Price.

2 AREAS RAISED BY THE TERMS OF REFERENCE

The following areas were considered by the Modification Group during the Assessment Procedure for P212:

- Determination of System Length;

[7] This can be found at:
http://www.elexon.co.uk/ChangeImplementation/modificationprocess/modificationdocumentation/modProposalView.aspx?propID=232
[8] The reason that the previous Market Index Price is used here, and not the previous Main Imbalance Price, is because the direction of the system may change from one Settlement Period to the next.

- Determination of Default Rules;
- The value of the Percentage Premium/Discount;
- Impact on Energy Imbalance Prices;
- Cashflow Analysis;
- Market Participant behaviour, including incentives to balance and trade;
- Impact on the System Operator including impact on NIV and SO costs; and
- Implementation Approach and Costs.

These issues are discussed in the Assessment Report contained in Appendix 3, and are not covered further here.

3 IMPLEMENTATION APPROACH AND COSTS

Due to the size of the changes required for P212 Proposed Modification, it is recommended that P212 should form a complete Release on its own. No P212 cost benefits would be derived from the inclusion of other Change Proposals or Modifications in the same release as P212 (although there may be cost benefits for the other items included).

P212 PROPOSED MODIFICATION IMPLEMENTATION COSTS[9]

		Stand Alone Cost	Tolerance
Service Provider[10] Cost			
	Change Specific Cost	£ 68,350	+/- 0%
	Release Cost	£ 49,650	+/- 0%
	Total Service Provider Cost	£ 118,000	+/- 0%
Implementation Cost			
	External Audit	£ 0	+/- 0%
	Design Clarifications	£ 5,900	+/- 0%
	Additional Resource Costs	£ 0	+/- 0%
	Additional Testing and Audit Support Costs	£ 5,000	+/- 20%
	TOMAS changes	£ 51,257	+/- 10%
Total Demand Led		£ 180,157	+/- 10%

[9] An explanation of the cost terms used in this section can be found on the BSC Website at the following link: http://www.elexon.co.uk/documents/Change_and_Implementation/Modifications_Process_-_Related_Documents/Clarification_of_Costs_in_Modification_Procedure_Reports.pdf

[10] BSC Agent and non-BSC Agent Service Provider and software costs.

Implementation Cost			

Port and Migrate Costs

Service Provider Cost	Port and Migrate[11]	£ 38,000	+/- 0%

ELEXON Implementation Resource Cost		184 man days £ 40,480	+/- 10%
Total Implementation Cost		£ 258,637	+/- 20%

a) BSC Agent Impact

Work required includes:

- Creating two new dated system parameters: The P212 Premium and Discount Values;
- Modifying the F009 functionality to include P212 functionality for P212 effective Settlement Dates; and
- Modifying the SAA-I014 report module.

For SAA reporting, a new DTC version of the SAA-I014 flow will be defined. The SAA-I014 module will be modified to remove those data items currently reported that are not relevant for P212 effective dates. Note that P212 will not require any new reported data.

The lead time is 18 weeks and all prices assume a November 2008 target release.

A copy of the full BSC Agent impact assessment for P211 can be found in the Assessment Report (see Appendix 3).

b) BSC Party and Party Agent Impact

As this modification is a change to the Energy Imbalance Calculation, this is a significant change to one of the main tenets of the BSC Arrangements that will impact Settlement for all BSC Parties. Parties will be impacted by the change to sub-flow 1 of the Settlement Report (SAA-I014).

There were four responses to the Party Impact Assessment undertaken as part of the Assessment Procedure. Full copies of the BSC Party and Party Agent impact assessment responses can be found in Appendix 3. One Party indicated that due to the changes to the SAA-I014 they would require a lead time of 6 months to implement P212. The Party asked the Group to confirm the impact to SAA-I014.

The Group have clarified the changes and examples of the impact on the SAA-I014 are listed below:

- Removal of CADL item from Settlement Period Information (SPI) Group;
- Removal of DMAT item from SPI Group ; and
- Removal of various P78 (NIV tagging) reporting fields in SSD (System Period Data) Group - e.g. 'NIV Tagged SBVA'.

[11] The Port and Migrate costs are an indicative cost related to Project Isis interaction. This cost covers the porting and migrating of the P211 changes from Tru-64 and Oracle 9i to HP-UX and Oracle 10g. This cost assumes that LogicaCMG is doing all calculations and also it is assumed that this work follows the main CVA Port and Migrate project. Note that the optional BMRA reporting was ignored for this indicative cost.

When referring to the 'removal' of items, it is that these items would become optional in the new Data Transfer Catalogue (DTC) version of the report, such that they will be included for reporting of pre-P212 Settlement Days but not for post-P212 Settlement Days reporting.

Note that this is not a full list of changes. The example fields can be seen in the IDD 'part 2 spreadsheet under the SO tab' and in the SPI and SSD groups. There are three SAA-I014 sub-flows in total, all of which would be changed. This can be found here:
http://www.elexon.co.uk/bscrelateddocs/URSIDD/default.aspx

Parties are given the opportunity, as part of the Report Phase consultation, to provide any further information on the impact of P212 on their systems and processes based on this clarification to the changes to SAA-IO14 flow. This further information will be presented to the Panel in their consideration of the responses from the Report Phase consultation.

c) Transmission Company Impact

The Transmission Company will be required to modify systems receiving SAA data and business processes to cope with the new SAA-I014 variables. The initial cost estimate for implementing P212 Proposed Modification is approximately £80K with a lead time of approximately 7 months.

The Transmission Company impact assessment for P211 can be found in Appendix 3.

d) BSCCo Impact

ELEXON acceptance testing (4 weeks), new service provider acceptance testing (4 weeks) and go-live decision and deployment (2 weeks) will take a total of 10 weeks from the conclusion of the changes to the BSC Central Systems identified above (18 weeks). It is therefore proposed that the Implementation Date for Proposed Modification P211 should be 6 November 2008 if an Authority decision is received on or before 29 February 2008, or 25 June 2009 if the Authority decision is received after 29 February 2008, but on or before 16 October 2008.

Detailed impacts on BSCCo can be found in Appendix 3.

4 RATIONALE FOR MODIFICATION GROUP'S RECOMMENDATIONS TO THE PANEL

This section summarises the recommendations of the Modification Group, as detailed in the Assessment Report in Appendix 3.

4.1 Assessment of Proposed Modification Against Applicable BSC Objectives

The **UNAMIMOUS** view of the Modification Group was that the Proposed Modification **WOULD NOT** better facilitate the achievement of Applicable BSC Objectives (b), (c) or (d) when compared to the current Code baseline, for the following reasons:

Applicable BSC Objective (b)

- Energy Imbalance Prices would not be cost reflective, as P212 does not attempt to reflect what the SO actually did to resolve the imbalance on the system. Cost reflective Energy Imbalance Prices are essential to provide the correct incentives for Parties to balance. One member noted that 5% premium/discount was too low to create the correct incentives;

- SO costs[12] should be appropriately targeted on those who are out of balance. As P212 would reduce the degree to which the SO's costs are reflected in Energy Imbalance Prices, it follows that these costs would not be appropriately targeted and the incentives for Parties to balance would decrease. This in turn would increase the actions required to be taken by the SO and increase the costs faced by the SO. This would be detrimental to the efficient operation of the GB transmission system;
- Better balancing comes at a cost to Parties through such things as investment in reliable technologies and the quality of staff employed. However, innovation and investment in technology would be stifled if the SO costs are not being appropriately targeted, as there is less reward for making these investments. In the longer term this could lead to less reliable plant as well as greater imbalance positions, as Parties have less incentive to forecast their positions accurately. Any plant loss post Gate Closure would be likely to require expensive actions to be taken by the SO and these are not accounted for by the Proposed Modification. This would result in the potential for increased future plant loss which would increase costs to the SO, as they would have to procure more reserve to cover for this possibility; and
- The potential for Parties to rationally change their physical positions once the exchange market closes (as described in Section 3.6.3.2 of the Assessment Report[13]), would mean there would be less predictability of NIV and the potential to take greater positions into imbalance. This would increase the SO costs of balancing the system, as they have to take more actions to resolve the imbalance and would need to hold higher levels of reserve to cover the increase in unpredictability of NIV in certain Settlement Periods.

One member of the Group had initially stated that they could not evaluate P212 against Applicable BSC Objective (b) without observing the estimated cost change to the SO. Once they had reviewed the paper by the SO, on likely change in SO costs (based on arbitrary change in volatility in NIV), the member believed that P212 would not better facilitate objective (b).

Applicable BSC Objective (c)

- All Parties contribute proportionately to the costs of balancing via the Balancing Services Use of System (BSUoS) charge and those that are out of balance via SBP and SSP. P212 would not reflect the costs incurred by the SO to resolve the net imbalance on the system. This would result in a greater cost of balancing being socialised across all Parties (though BSUoS), rather than providing an incentive on Parties to minimise imbalance, by reflecting actual energy imbalance costs on those out of balance. This cross subsidy would be detrimental to competition;
- There is the potential for perverse outcomes as illustrated in the scenario analysis (Section 3.6.3.2 of the Assessment Report). This is because under P212 there is the potential for trading to not relate to economic fundamentals, as the P212 solution creates an incentive (whether acted upon or not) to trade to influence the Market Index Price and therefore the resulting Energy Imbalance Prices. Incentives to trade to influence price, rather than to achieve efficient balancing (as the current arrangements arguably do), would be detrimental to competition. Whilst this behaviour might be simple to identify where trades occur at extreme prices, it would be harder to identify at the margins;
- In a scenario where Parties change their physical position after the exchange market closes, this would favour Generators over Suppliers, as Generators have more ability to participate in the Balancing Mechanism to take advantage of this. Additionally, Generators have more control over their physical positions than Suppliers. This would distort competition by giving a distinct advantage to Generators and even more so to larger Generators; and

[12] This refers to the SO costs to balance the system.
[13] This is contained in Appendix 3.

- The prices may be benign most of the time with a decreased level of volatility. Thus there would be less incentive to balance or trade.

One member noted that, whilst they did not believe the current baseline produced Energy imbalance Prices that were reflective of market conditions, the detrimental effects of P212 to competition noted above, would mean that P212 would not better facilitate Applicable BSC Objective (c), when compared to the current baseline.

Applicable BSC Objective (d)

A majority of the Group believed that the Proposed Modification would have a neutral impact on Applicable BSC Objective (d).

A minority of the Group believed that the Proposed Modification would have a detrimental impact on Applicable BSC Objective (d).

- The current arrangements are based on a simple concept; to reflect the costs of the SO when balancing the system. P212 would move away from this simple concept;
- The introduction of P212 would be likely to trigger further Modifications to refine or redesign the solution; and
- The regulatory oversight required due to P212 creating incentives to trade to influence price (which currently do not exist) would be significant and result in increased ongoing costs to the industry.

A minority of the Group stated that the Modification did better facilitate the objective for the following reason:

- The Proposed solution is simpler for Parties to understand and for the industry to implement and operate.

The Group agreed that the Proposed Modification would have a neutral impact on Applicable BSC Objective (a).

Note that these Group views represent both their initial and final views as these did not change as a result of considering the second Assessment Procedure consultation responses.

4.2 Implementation Date

The Modification Group agreed the following recommended implementation approach for P212:

- An Implementation Date for the Proposed Modification of 6 November 2008 if an Authority decision is received on or before 29 February 2008, or 25 June 2009 if the Authority decision is received after 29 February 2008 but on or before 16 October 2008.

If approved, P212 would apply to Settlement Runs and Volume Allocation Runs carried out in relation to Settlement Days on or after the Implementation Date. Settlement Runs and Volume Allocation Runs carried out in relation to Settlement Days before the Implementation Date would not be affected by P212.

4.3 Legal Text

The Modification Group have reviewed the legal text and agreed that it delivers the solution developed by the Group for P212 Proposed Modification.

The legal drafting can be summarised as the changes to:

- Section Q:
  - Removing provisions for Unpriced Emergency Acceptances;

- Section T:
  - Removing CADL tagging and De Minimis tagging, Arbitrage tagging, NIV tagging and PAR tagging;
  - Simplifying the NIV calculation;
  - Amends the main Energy Imbalance Price calculation and default rules; and
- Section X:
  - Required changes to Glossary, Table X-2, Table X-3.

5 RATIONALE FOR PANEL'S RECOMMENDATIONS TO THE AUTHORITY

5.1 Panel's Consideration of Assessment Report

The Panel considered the P212 Assessment Report at its meeting on 9 November 2007. This section summarises the Panel's discussions in formulating its provisional recommendation for inclusion in the draft Modification Report. Details of the Report Phase consultation responses, the Panel's discussion of the responses and its final recommendation to the Authority can be found in Sections 5.2, 5.3 and 5.4 respectively.

5.1.1 Panel Consideration of Process

The Panel considered whether the Group had followed correct process and fulfilled its terms of reference, particularly with regard to the behavioural model that was developed. It was the Panel's view that, whilst the behavioural model developed by the Group had many simplifications, it did provide useful insights into Party behaviour and the Group had completed what the Panel had asked of it. The Panel noted that a full economic model using game theory, which would be run through various simulations, would have been preferential if this could have been completed in the required timescales. However, they noted that this was not achievable in the timescales and costs for P212. One member noted their view that, often the main conclusions that are drawn, and which predominate in a simplified model, do not change when the modelling becomes more sophisticated. Therefore, the modelling that was undertaken under P212 did have merit.

Another member noted that whilst they believed the Group had followed due process, that they were concerned with the balance of the Assessment Report. It was the member's view that the report often focused on the negative aspects of P212 and, on occasion, did not record a counter view. As an example, the member highlighted Section 3.6.4 of the Assessment Report where comments were made on disorderly trading in which only a negative aspect was recorded. The member also noted that the report contained incomplete cashflow analysis in which impacts on particular participant type, or potential competition distortions, had not been analysed. Additionally, the member was concerned that one part of the analysis only looked at 9 Settlement Periods, which was a very small sample size, and that the Group could only provide an arbitrary impact on SO costs.

In support of the assertion that counter views were not always expressed, another member highlighted that there were no counter views recorded in Section 3.6.4 on liquidity. One member indicated that they did not believe the Assessment Report under-reported in any area.

ELEXON welcomed the feedback and highlighted that they were a neutral Party who attempt to record the views of the Modification Group as accurately as possible. Where no counter views have been expressed, ELEXON cannot record potential counter views. The Assessment Report had been reviewed by the Modification Group and it was believed that a balanced report had been produced which reflected all the points that had been made for and against P212. ELEXON also noted that Section 3.6.4 summarised the views of respondents and the nature of a summary is to record a balanced view of the respondents as

succinctly as possible. The full consultation responses were attached to the Assessment Report for full transparency.

The Ofgem representative stated that in taking their decision on P212, they will consider all responses to the consultations undertaken during the Assessment Procedure and Report Phase regardless of how they are summarised within the Assessment Report. They agreed that it was not for ELEXON to provide counter views where these had not been provided, however, they did indicate that ELEXON should attempt to 'stress test' Group views.

The Panel considered the decision to direct the Group to only analyse the Option 1 (ex-ante fixed percentage) solution which formed the solution for P212 Proposed Modification during the assessment. The Panel agreed that a correct process had been followed. One member noted that, whilst they did not think there was a breakdown in the process followed, it was unsatisfying that Option 3 (ex-post dynamic percentage) had not been considered and perhaps this had merit in the future. Furthermore, the Group had spent a lot of time debating the issues within assessment and there might be a lesson learnt in terms of when a Modification should be submitted to the Definition Procedure. Another member noted that in their view, Option 2 (ex-ante variable percentage) and Option 3 were more complicated solutions that represented the same essential market structure as Option 1. This would therefore mean that the model conclusions drawn from Option 1 would also apply to Option 2 and Option 3. It was therefore correct to direct the Group to concentrate on the simpler Option 1, so as to enable the analysis to be completed during the Assessment Procedure (that had been already extended by 2 months).

5.1.2 The Behavioural Model

The Panel believed that the modelling undertaken by the Group was sufficient to draw the main conclusions provided in the Assessment Report. These would seem to be a reasonable set of outcomes that could occur with a P212 solution. One member noted that the analysis covered the main scenarios and that the only other way to have analysed behaviour, was by developing a full and more comprehensive economic model, which would require simulations where Party's actual behaviour is analysed. One member noted that the model illustrates clearly what could happen under P212, and there was no value in developing a further more complex model.

One member speculated as to whether the opportunities for gaming (highlighted by the incentives to trade to influence price in the analysis) might be lost in a larger market. However, the member also identified that having more players might mean that gaming behaviour might be more difficult to detect. Another member supported the view that more Parties in a market would make gaming behaviour more difficult to detect. The member's view was that all markets contain an element of marginal abuse. However, P212 would provide incentives for two Parties to continue to buy and sell from each other so as to influence price without the risk of increasing their level of imbalance. Such behaviour may be detectable in a small market, but if it occurs in a larger market, and amongst more than just two Parties, this could be become difficult to trace.

Another member expressed the view that any market in which there are two prices in which to trade off against each other (the price of a trade on the forward market versus the Energy Imbalance Price that can be accurately predicted ex-ante), that Parties will always take the option of the most beneficial price. This moves away from trading primarily to reduce imbalance volumes (to an efficient level), to a market in which Parties primarily trade to maximise their profits. The model showed that under P212 the latter scenario might occur.

5.1.3 Applicable BSC Objectives

The unanimous provisional view of the Panel was that the Proposed Modification would not better facilitate the achievement of Applicable BSC Objectives (b), (c), and (d) when compared to the current Code baseline, for the following reasons:

Applicable BSC Objective (b)

- P212 would not be cost reflective prices as it removes the link to the costs the SO faces when balancing the system, and then targeting these costs onto those Parties who are out of balance. This would reduce the incentives on Parties to balance and require the SO to take more balancing actions. This would be detrimental to the industry as a whole;
- An efficient transmission system relies on having an efficient market. However, the P212 market structure creates incentive for Parties to concentrate on the price level, and how to influence it to make profit, rather that reducing their level of imbalance. As a result, there would be a reduction in the incentive for Parties to balance; and
- The potential for Parties to rationally change their physical positions, (based on the ex-ante nature of the imbalance price), once the exchange market closes, would mean there would be less predictability of NIV. This would increase the SO costs of balancing the system, as they have to take more actions to resolve the imbalance and would need to hold higher levels of reserve to cover the increase in unpredictability of NIV in certain Settlement Periods.

One member noted that the analysis on SO costs and the impact on NIV meant that it was difficult to assess P212 against Applicable BSC Objective (b).

Applicable BSC Objective (c)

- P212 would present Parties with perverse incentives, particularly around the opportunity to game and trade to influence price. Any such activity would be detrimental to competition as such price creation would mean that Parties would not be facing the costs that they cause to the system. Such perverse behaviours are likely to be difficult to detect in a large market. The natural incentive should first be on Parties to balance and not to trade to impact market price (and therefore Energy Imbalance Price); and
- There would be a distinct market advantage for larger Parties. This is because it would be easier for a large Party to be able to adopt strategies to influence price due their larger portfolios (and hence larger volumes available for trade). This could potentially drive smaller Parties out of the market.

One member noted that it was their view that the current arrangements have a real and significant defect that is distorting competition. However, the modelling identifies certain areas with P212 that would need to be addressed for the case to be made for it to better facilitate Applicable BSC Objective (c).

Two members believed that as P212 was such a fundamental shift in the Energy Imbalance Price calculation that they could not come to a conclusion as to the impact on Applicable BSC Objective (c).

Applicable BSC Objective (d)

- Simpler arrangements should not necessarily be considered more efficient. Having Energy Imbalance Prices permanently set at a very unfavourable level would be simple, and provide incentives to balance, but would be an irrational solution and not efficient to implement; and
- Due to the gaming potential, the solution creates a market that is more complex to understand and operate in.

One member noted that the P212 arrangements were straightforward and would therefore be simpler to understand, implement, and operate and would therefore better facilitate Applicable BSC Objective (d).

The Panel agreed that the Proposed Modification would have a neutral impact on Applicable BSC Objective (a).

Provisional recommendation to the Authority

With one member abstaining from voting, the Panel therefore agreed a unanimous provisional recommendation to the Authority that the Proposed Modification should not be made.

5.1.4 Implementation Date

The Panel agreed with the Modification Group's recommendation regarding the Implementation Date.

5.1.5 Legal Text

The Panel reviewed the draft text and agreed that it addresses the defect identified by the Modification Proposal.

5.2 Results of Report Phase Consultation

This section to be completed following the Report Phase consultation.

5.3 Panel's Consideration of Draft Modification Report

This section to be completed following the Panel meeting at which the draft Modification Report and Report Phase consultation responses are considered.

5.4 Panel's Final Recommendation to the Authority

This section to be completed following the Panel meeting at which the draft Modification Report and Report Phase consultation responses are considered.

6 TERMS USED IN THIS DOCUMENT

Other acronyms and defined terms take the meanings defined in Section X of the Code.

Acronym / Term	Definition
BMRA	Balancing Mechanism Reporting Agent
BSAD	Balancing Services Adjustment Data
BSUoS	Balancing Services Use of System
Energy balancing actions	Balancing actions taken purely to increase or decrease the level of generation or demand on the Transmission System.
FPN	The Final Physical Notification is the level of generation or demand that the BMU expects to generate or consume. Submitted as a ramped profile to National Grid prior to Gate Closure.
Main Energy Imbalance Price	The Energy Imbalance Price applied to imbalances in the same direction as the system length.
MEL	Maximum Export Limit
NIV	Net Imbalance Volume
PAR Tagging	The process of removing Acceptance Volumes from the calculation of Energy Imbalance Prices
PAR Volume	Price Average Reference Volume, the volume of actions that are used to set the Main Energy Imbalance Price

RCRC	Residual Cashflow Reallocation Cashflow
Reverse Price	The price applied to imbalances in the opposite direction to the system. This is based on the market reference price derived from data submitted by Market Index Data Providers.
SAA	Settlement Administration Agent
SBP	System Buy Price
SO	System Operator
SSP	System Sell Price
System balancing actions	Balancing actions which are not taken purely to increase or decrease the level of generation or demand on the Transmission System. For example to resolve a constraint on the physical flow of electricity caused by the finite capacity of the Transmission System.
TQEI	The Total System Energy Imbalance Volume is the sum over all Energy Accounts of the Account Energy Imbalance Volume.
TRC	Total System Residual Cashflow. For all Settlement Periods, the Total Residual Cashflow (TRC) is calculated as being the sum of all energy imbalance charges across all parties and accounts. This value represents the total amount of money to be redistributed (or collected) via the Residual Cashflow Reallocation Cashflow (RCRC).

7 DOCUMENT CONTROL

7.1 Authorities

Version	Date	Author	Reviewer	Reason for Review
0.1	14/11/07	Chris Stewart	Justin Andrews/ David Jones	For technical review
0.2	19/11/07	Change Delivery	BSC Parties and other interested parties	For consultation
0.3	dd/mm/yy			For technical review
0.4	dd/mm/yy			For quality review
0.5	dd/mm/yy	Change Delivery	BSC Panel	For Panel decision
1.0	dd/mm/yy	BSC Panel		For Authority decision

7.2 References

Ref.	Document Title	Owner	Issue Date
1	Ofgem's Cash Out Review – Independent Consultants' Reports http://www.ofgem.gov.uk/MARKETS/WHLMKTS/COMPANDEFF/CASHOUTREV/Pages/CashoutRev.aspx	Ofgem	22/03/2007
2	P205 'Increase in PAR volume from 100MWh to 500MWh' - Decision Letter http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=86&refer=Markets/WhlMkts/CompandEff/CashoutRev	Ofgem	22/03/2007

3	P211 'Main Energy Imbalance Price Based on Ex-post Unconstrained Schedule' – Final Modification Report http://www.elexon.co.uk/ChangeImplementation/modificationprocess/modificationdocumentation/modProposalView.aspx?propID=231	BSC Panel	22/10/2007
4	P194 'Revised Derivation of the Energy Imbalance Price' – Decision Letter http://www.ofgem.gov.uk/Markets/WhlMkts/CompandEff/CashoutRev/Pages/CashoutRev.aspx	Ofgem	23/03/2006

APPENDIX 1: LEGAL TEXT

Legal text for the Proposed Modification is attached as a separate document, Attachment [1].

APPENDIX 2: PROCESS FOLLOWED

Copies of all documents referred to in the table below can be found on the BSC Website at: http://www.elexon.co.uk/ChangeImplementation/modificationprocess/modificationdocumentation/modProposalView.aspx?propID=232

Date	Event
29/04/07	Modification Proposal raised by BizzEnergy
10/05/07	IWA presented to the Panel
15/05/07	First Assessment Procedure Modification Group meeting held
22/05/07	Second Assessment Procedure Modification Group meeting held
6/06/07	Third Assessment Procedure Modification Group meeting held
13/06/07	Fourth Assessment Procedure Modification Group meeting held
4/07/07	Fifth Assessment Procedure Modification Group meeting held
5/07/07	Requirements Specification issued for BSC Agent impact assessment based on Option 1
5/07/07	Request for Transmission Company analysis issued based on Option 1
17/07/07	BSC Agent impact assessment response based on Option 1 returned
17/07/07	Transmission Company analysis based on Option 1 returned
18/07/07	Sixth Assessment Procedure Modification Group meeting held
24/07/07	Seventh Assessment Procedure Modification Group meeting held
8/08/07	Eighth Assessment Procedure Modification Group meeting held
15/08/07	First industry consultation issued
29/08/07	First industry consultation received
30/08/07	Ninth Assessment Procedure Modification Group meeting held
12/09/07	First modelling behaviour Modification Subgroup held
19/09/07	Tenth Assessment Procedure Modification Group meeting held
26/09/07	Second modelling behaviour Modification Subgroup held
02/10/07	Eleventh Assessment Procedure Modification Group meeting held
04/10/07	Second industry consultation issued
18/10/07	Second industry consultation received
19/10/07	Twelfth Assessment Procedure Modification Group meeting held
8/11/07	Assessment Report presented to the Panel

Date	Event
19/11/07	Draft Modification Report issued for consultation
3/12/07	Draft Modification Report consultation responses due

ESTIMATED COSTS OF PROGRESSING MODIFICATION PROPOSAL[14]

Meeting Cost	£ 5,750
Legal/Expert Cost	£ 5,000
Impact Assessment Cost	£ 10,000
ELEXON Resource	135 man days £ 44,260

Note that the meeting cost and number of ELEXON man days (and ELEXON cost) has been updated. The updated values represent the extended timetable, additional meetings (Modification Group and Modification Sub-group) and the additional analysis undertaken by the Group.

APPENDIX 3: ASSESSMENT REPORT

The P212 Assessment Report can be found on the BSC website at:

http://www.elexon.co.uk/ChangeImplementation/modificationprocess/modificationdocumentation/modProposalView.aspx?propID=232

The Assessment Report includes:

- The conclusions of the Modification Group regarding the areas set out in the P212 Terms of Reference;
- Details of the Group's membership;
- The full results of the Assessment Procedure impact assessment; and
- Full copies of all responses to the Assessment Procedure consultation.

APPENDIX 4: REPORT PHASE CONSULTATION RESPONSES

To be attached following Report Phase consultation.

[14] Clarification of the meanings of the cost terms in this appendix can be found on the BSC Website at the following link: http://www.elexon.co.uk/documents/Change_and_Implementation/Modifications_Process_-_Related_Documents/Clarification_of_Costs_in_Modification_Procedure_Reports.pdf