

ASSESSMENT REPORT for Modification Proposal P215 Revised Credit Cover Methodology for Generating BM Units

Prepared by P215 Modification Group

For Review	Date of Issue	8 February 2008	Version Number	1.0
For Attention Of	BSC Panel			
Overview or Purpose of Document:				
<p>Proposed Modification P215 seeks to amend the Balancing and Settlement Code ('the Code') so that certain types of BM Units (defined as 'Credit Qualifying BM Units') have their Credit Cover calculated using Final Physical Notifications (FPN), instead of Credit Assessment Load Factor (CALF) values.</p> <p>Alternative Modification P215 seeks to amend the Code so Credit Cover for 'Credit Qualifying BM Units' uses FPNs, and Metered Volumes from a Central Data Collection Agent run two Working Days after Gate Closure is used for CVA registered Credit Qualifying BM Units' Credit Cover (SVA registered Credit Qualifying BM Units would use FPNs in calculating Credit Cover over a five Working Day period).</p>				
Modification Group's Recommendations				
The P215 Modification Group invites the Panel to:				
<ul style="list-style-type: none">• AGREE a provisional recommendation that Proposed Modification P215 SHOULD NOT be made;• AGREE a provisional recommendation that Alternative Modification P215 SHOULD be made;• AGREE a provisional Implementation Date for Proposed Modification P215 of 6 November 2008 if an Authority decision is received on or before 30 April 2008, or 25 June 2009 if the Authority decision is received after 30 April 2008 but on or before 13 November 2008;• AGREE a provisional Implementation Date for Alternative Modification P215 of 25 June 2009 if an Authority decision is received on or before 30 October 2008, or 5 November 2009 if the Authority decision is received after 30 October 2008 but on or before 26 March 2009;• AGREE the draft legal text for Proposed Modification P215;• AGREE the draft legal text for Alternative Modification P215;• AGREE that Modification Proposal P215 be submitted to the Report Phase; and• AGREE that the P215 draft Modification Report be issued for consultation and submitted to the Panel for consideration at its meeting of 13 March 2008.				
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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 P215.

Please note that this table represents a summary of the full impact assessment results in Appendix 4.

Parties		BSC Sections		Code Subsidiary Documents	
Distribution System Operators	<input type="checkbox"/>	A	<input type="checkbox"/>	BSC Procedures	<input checked="" type="checkbox"/>
Generators	<input checked="" type="checkbox"/>	B	<input type="checkbox"/>	Codes of Practice	<input type="checkbox"/>
Interconnectors	<input type="checkbox"/>	C	<input type="checkbox"/>	BSC Service Descriptions	<input checked="" type="checkbox"/>
Licence Exemptable Generators	<input checked="" type="checkbox"/>	D	<input type="checkbox"/>	Party Service Lines	<input type="checkbox"/>
Non-Physical Traders	<input type="checkbox"/>	E	<input type="checkbox"/>	Data Catalogues	<input checked="" type="checkbox"/>
Suppliers	<input type="checkbox"/>	F	<input type="checkbox"/>	Communication Requirements Document	<input type="checkbox"/>
Transmission Company	<input checked="" type="checkbox"/>	G	<input type="checkbox"/>	Reporting Catalogue	<input checked="" type="checkbox"/>
Party Agents		H	<input type="checkbox"/>	Core Industry Documents	
Data Aggregators	<input type="checkbox"/>	I	<input type="checkbox"/>	Ancillary Services Agreement	<input type="checkbox"/>
Data Collectors	<input type="checkbox"/>	J	<input type="checkbox"/>	Data Transfer Services Agreement	<input type="checkbox"/>
Meter Administrators	<input type="checkbox"/>	K	<input checked="" type="checkbox"/>	Distribution Code	<input type="checkbox"/>
Meter Operator Agents	<input type="checkbox"/>	L	<input type="checkbox"/>	Distribution Connection and Use of System Agreement	<input type="checkbox"/>
ECVNA	<input type="checkbox"/>	M	<input checked="" type="checkbox"/>	Grid Code	<input type="checkbox"/>
MVRNA	<input type="checkbox"/>	N	<input type="checkbox"/>	Master Registration Agreement	<input type="checkbox"/>
BSC Agents		O	<input type="checkbox"/>	Supplemental Agreements	<input type="checkbox"/>
SAA	<input checked="" type="checkbox"/>	P	<input type="checkbox"/>	Use of Interconnector Agreement	<input type="checkbox"/>
FAA	<input type="checkbox"/>	Q	<input checked="" type="checkbox"/>	BSCCo	
BMRA	<input type="checkbox"/>	R	<input checked="" type="checkbox"/>	Internal Working Procedures	<input checked="" type="checkbox"/>
ECVAA	<input checked="" type="checkbox"/>	S	<input type="checkbox"/>	BSC Panel/Panel Committees	
CDCA	<input checked="" type="checkbox"/>	T	<input type="checkbox"/>	Working Practices	<input checked="" type="checkbox"/>
TAA	<input type="checkbox"/>	U	<input checked="" type="checkbox"/>	Other	
CRA	<input checked="" type="checkbox"/>	V	<input type="checkbox"/>	Market Index Data Provider	<input type="checkbox"/>
SVAA	<input type="checkbox"/>	W	<input type="checkbox"/>	Market Index Definition Statement	<input type="checkbox"/>
Teleswitch Agent	<input type="checkbox"/>	X	<input checked="" type="checkbox"/>	Connection and Use of System Code	<input type="checkbox"/>
BSC Auditor	<input type="checkbox"/>	Z	<input type="checkbox"/>	System Operator-Transmission Owner Code	<input type="checkbox"/>
Profile Administrator	<input type="checkbox"/>			Transmission Licence	<input type="checkbox"/>
Certification Agent	<input type="checkbox"/>				
Other Agents					
Supplier Meter Registration Agent	<input type="checkbox"/>				
Unmetered Supplies Operator	<input type="checkbox"/>				
Data Transfer Service Provider	<input type="checkbox"/>				

1 Executive Summary

The key conclusions of the P215 Modification Group ('the Group') are outlined below.

The Group:

- **AGREED** by **MAJORITY** that the Proposed Modification **WOULD NOT** better facilitate the achievement of Applicable BSC Objective (c)¹, and would not better facilitate the Applicable BSC Objectives overall, because the use of FPNs only (i.e. without any Bid-Offer Acceptance volume data or Metered Volumes) in the calculation of the CEI of Credit Qualifying BM Units could introduce systematic inaccuracy in the estimation of metered volumes for some BM Unit types;
- **DEVELOPED** an Alternative Modification to increase the accuracy of the Credit Cover arrangements compared with the current baseline and the Proposed Modification;
- **AGREED** that the Alternative Modification **WOULD** better facilitate the achievement of Applicable BSC Objectives (c) and (d)², and therefore agreed **UNANIMOUSLY** that it would better facilitate the Applicable BSC Objectives overall, by increasing the accuracy of the estimation of BM Unit Metered Volumes in the calculation of CEI, increasing the accuracy of Energy Indebtedness as a reflection of the actual value at risk and reducing the administrative burden associated with the Credit Cover arrangements;
- **NOTED** the implementation costs for the Proposed Modification were estimated at £179,210³;
- **NOTED** the implementation costs for the Alternative Modification were estimated at £304,380;
- **AGREED** that the Proposed and Alternative Modifications would benefit all Parties in the market by improving the accuracy of Energy Indebtedness as an estimation of the actual value at risk;
- **AGREED** that the Proposed and Alternative Modifications would benefit some individual Parties associated with Credit Qualifying BM Units whose Energy Indebtedness is currently overestimated by potentially allowing them to reduce the amount of Credit Cover they lodge;
- **AGREED** it was not feasible to assign an accurate financial value to the identified benefits, but assessment of the market led to the conclusion that default of one or more Parties in the next decade is likely. Accuracy of the Credit Cover arrangements should therefore be optimised;
- **ESTIMATED** that the quantifiable cost-savings of both the Proposed and Alternative Modification for Parties and BSCCo would include an aspect of at least £4,200 per annum due to the expected reduction in the number of CALF appeals;
- **AGREED** an Implementation Date for the Proposed Modification of 6 November 2008 if an Authority decision is received on or before 30 April 2008, or 25 June 2009 if the Authority decision is received after 30 April 2008 but on or before 13 November 2008;
- **AGREED** an Implementation Date for the Alternative Modification of 25 June 2009 if an Authority decision is received on or before 30 October 2008, or 05 November 2009 if the Authority decision is received after 30 October 2008 but on or before 26 March 2009; and

¹ Applicable BSC Objective (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'.

² Applicable BSC Objective (d) 'Promoting efficiency in the implementation and administration of the balancing and settlement arrangements'.

³ This estimate includes the cost to port and migrate changes made to the current baseline to the new hardware baseline for November 2008 P215 implementation. Implementation in June 2009 or later does not have this cost. The BSC Agent IA (Attachment 6) contains further details on this.

- **AGREED** that the draft legal text delivers the intended solution for the Proposed and Alternative Modifications.

A description of the P215 solution is provided in Section 2. Further information regarding the Group's discussions of the areas set out in the P215 Terms of Reference is contained in Section 3, including details of the Group's recommended implementation approach and the estimated implementation costs and perceived cost-benefits of P215.

A summary of the Group's views regarding the merits of the Proposed Modification and Alternative Modification can be found in Section 4. A copy of the Group's full Terms of Reference can be found in Appendix 2, whilst a summary of the responses to the Assessment Procedure consultation and impact assessment can be found in Appendices 3 and 4 respectively.

1.1 Summary of Identified Benefits and Disbenefits

The Group's assessment of the benefits of P215 is summarised below. The Group believed that the primary benefit of P215 was the benefit to the whole market of improved protection against the risk of bad debt, due to increased accuracy of the estimation of Energy Indebtedness. The Group considered any potential savings to individual Parties to be a secondary benefit of P215.

1.1.1 Improved Protection Against Bad Debt (Applicable BSC Objective (c))

Under the P215 Proposed and Alternative Modifications the Energy Indebtedness of Parties associated with Credit Qualifying BM Units would be more accurately estimated. The market as a whole would benefit because the calculated Energy Indebtedness of each Party in the market would more accurately reflect that Party's real Energy Indebtedness (i.e. the value at risk). This improved management of risk would therefore better facilitate competition.

The benefit under the Proposed Modification is open to interpretation. Analysis showed that FPNs tend to overestimate the Metered Volumes of BM Units that are active in the Bid-Offer mechanism. Overestimation of Metered Volumes results in underestimation of the associated Credit Cover requirement. An issue with the current baseline is that the use of CALF and GC values results in generators' Credit Cover requirements being arbitrarily over or underestimated on a Settlement Period basis. The two views within the Group are that:

- P215 Proposed would cause a move from arbitrary errors in Credit Cover requirements to systematic underestimation of the requirements of some BM Unit types; **OR**
- Though P215 would cause underestimation of the requirements of some BM Unit types, the Metered Volumes of these BM Units would still be more accurately estimated than under the current baseline, so the value at risk would still be better reflected.

The Alternative Modification seeks to remove this concern by introducing earlier use of actual Metered Volumes in the Credit Cover calculation. In the Group's view this sufficiently mitigates the impact of any systematic overestimation of Metered Volumes for some BM Unit types.

The term 'value at risk' is used to describe the risk of bad debt associated with Parties due to differences between their Metered Volumes and contracted positions. The risk is the potential debt that would have to be absorbed by the other Parties in the market, if a Party were to fail. However an increase in the accuracy of estimating the *volume* at risk does not necessarily result in a proportional increase in the accuracy of the estimation of *value* at risk. More accurate estimation of volume at risk contributes to an improvement in the accuracy of the value at risk, but this effect

is limited because the volume at risk is multiplied by the Credit Assessment Report (CAP) value, which is itself an imperfect proxy for actual imbalance prices.

The Group agreed it was not feasible to assign an accurate financial value to the benefit of more accurate reflection of the actual value at risk by Energy Indebtedness as the relevant factors could not be reliably quantified. However, assessment of past events and evaluation of the prevailing and expected future market conditions led the Group to conclude that over the next decade one or more Parties are likely to default or fail. The Group noted that inaccuracy in Energy Indebtedness calculation could potentially expose the market to an increased level of bad debt, which the Group believed could be of the order of millions of pounds in a worst-case scenario. The Credit Cover arrangements should therefore be as accurate as possible in order to protect the market from exposure to bad debt.

1.1.2 Increased Efficiency of Capital Resource Allocation (Applicable BSC Objective (c))

The Group concluded that under the P215 Proposed and Alternative Modification Parties could potentially allocate capital resources more efficiently. In particular, individual Parties associated with Credit Qualifying BM Units whose Energy Indebtedness is currently overestimated would potentially be able to reduce the amount of Credit Cover they lodge. This could enable capital tied up in the credit arrangements to be put to productive use. The Group believes that in general the types of Party most likely to benefit are:

- Independent merchant generators with flexible generation assets that operate in response to varying market conditions⁴; and
- Generators that use a single type of fuel.

It should be noted that Credit Qualifying BM Units whose Energy Indebtedness is currently underestimated may need to increase the amount of Credit Cover they lodge due to increased accuracy. The Group believes this would constitute a more appropriate allocation of resources.

The majority of respondents to the second P215 Assessment Procedure consultation indicated that they would expect a benefit in terms of either a cost or collateral saving under either the P215 Proposed or Alternative Modification. None of these respondents were able to provide an estimate of the expected saving.

Respondents that did not expect a significant saving acknowledged a potential for marginal savings and recognised that the Alternative also had a benefit in terms of Energy Indebtedness estimation in a plant trip.

1.1.3 Reduced Administrative Burden (Applicable BSC Objective (c))

A reduction in the use of CALF values in the Credit Cover arrangements would lead to a reduction in the number of CALF appeals. This would reduce the administrative burden of these appeals on Parties, BSCCo and the Panel Committee which considers these appeals. The Group estimated that BSCCo would realise a minimum cost reduction of £4,200 per annum due to the expected reduction in the number of CALF appeals.

⁴ The variability of the operation of this type of Party means that the use of historical data to approximate their actual metered volumes (as under the current baseline) tends to be particularly inaccurate.

2 Description of Modification

This section outlines the solution for the Proposed and Alternative Modifications, as developed by the Modification Group.

For a full description of the original Modification Proposal as submitted by Uskmouth Power Limited ('the Proposer'), please refer to the P215 Initial Written Assessment (IWA). Details of the Modification Group's refinement of the Proposed Modification in the Definition Procedure can be found in the [P215 Definition Report](#).

P215 seeks to revise the provisions regarding Credit Cover in the Balancing and Settlement Code ('the Code'). The Modification Proposal suggested revision of the method of calculating Credit Cover in respect of 'generating BM Units' with the intent that the accuracy of the calculations would be increased, and that consequently the amount of credit Parties are required to lodge would be based on more accurate data than it is presently. The Group defined the term 'Credit Qualifying BM Unit' to give effect to the intent of the Modification Proposal; the definition developed and agreed for this term can be found in section 2.1, below.

Credit Cover is currently based upon the total Energy Indebtedness (EI) of a Party, which is the sum of the Party's Credit Assessment Energy Indebtedness (CEI) and Actual Energy Indebtedness (AEI). EI is calculated over a period of 29 Settlement Days; the CEI period makes up the most recent five Working Days and AEI constitutes the remainder. AEI covers the period for which an Interim Information Settlement Run (II Run) has been carried out. Figure 1 illustrates these current arrangements for the calculation of Parties' Energy Indebtedness. The arrangements are described in greater detail in the [P215 IWA](#).

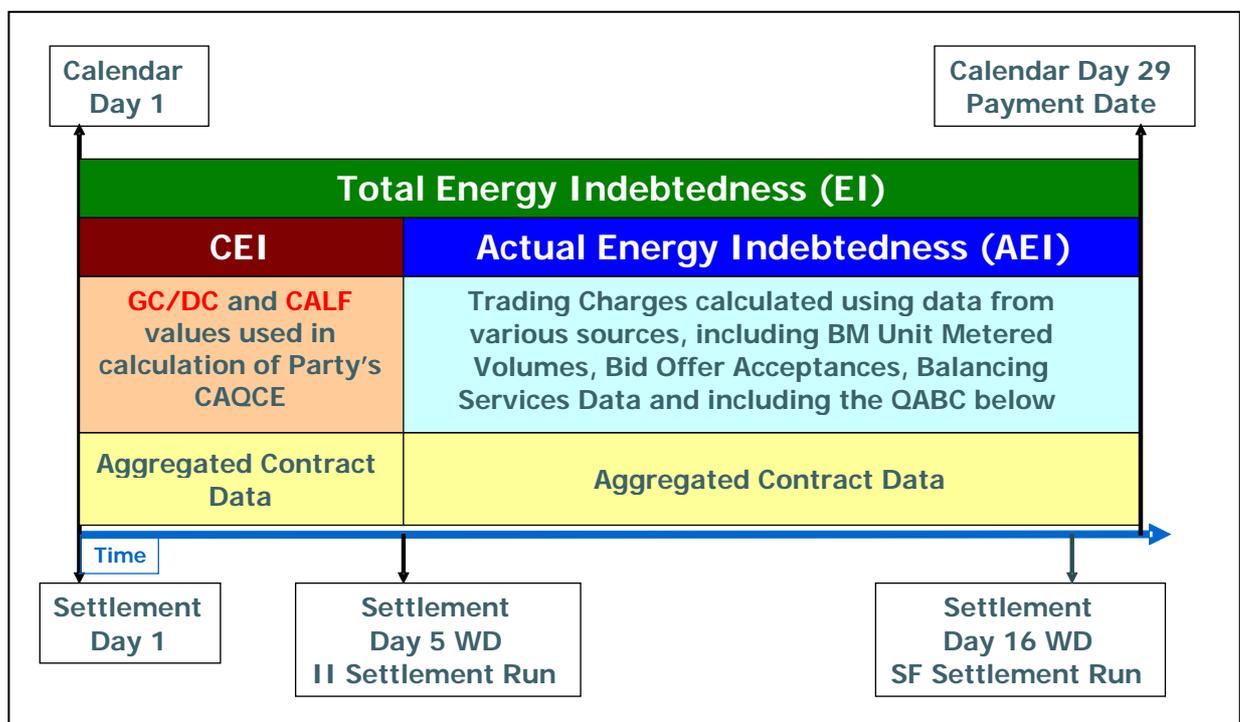


Figure 1: Current Energy Indebtedness arrangements

The information from the Initial Interim (II) Run allows actual BM Unit Metered Volume data to be used with contract data and other information to calculate AEI. The CEI calculation currently uses information on BM Units' maximum Generation Capacity (GC) or Demand Capacity (DC) in

conjunction with a Credit Assessment Load Factor (CALF) value which represents the expected operation of the BM Unit.

CALF values are based on analysis of historic data for a given BM Unit from the previous applicable BSC Season (e.g. Winter 2007 CALF values are based on Winter 2006 data), and therefore encompass BM Units' average output, BOA activity and any plant outages. It should be noted that CALF is not a parameter that varies dynamically, but is determined on a seasonal basis. CEI is a proxy estimation of Parties' imbalance, i.e. their estimated Metered Volume compared with actual contract data. CEI is used in the Credit Cover arrangements only until II Run data is available.

2.1 Proposed Modification

The provisions of the P215 Modification Proposal would apply on the basis of the following definition, agreed in the P215 Definition Procedure. This definition was updated in the Assessment Procedure so that the term used is 'Credit Qualifying BM Unit' rather than 'generating BM Unit to which P215 is applicable' (the original wording), in order to more clearly reflect the criteria.

Definition of a Credit Qualifying BM Unit:

A BM Unit shall be considered as a Credit Qualifying BM Unit if it is a BM Unit which is obliged to submit Physical Notifications due either to obligations placed on it under the Grid Code or because it has indicated its participation in the Balancing Mechanism, and which is not an Interconnector BM Unit, and to which at least one of the following criteria applies:

- *Its Production/Consumption Status flag is Production; or*
- *It is an Exempt Export BM Unit; or*
- *It has been assigned such Credit Qualifying BM Unit status by the BSC Panel (e.g. following application to the Panel for such status on the basis of evidence of operation as a delivering BM Unit).*

The Group intended that this definition would capture BM Units whose FPN flag is set to 'Yes' (due either to obligations placed upon them by the Grid Code or because they have elected for the FPN flag to be set to 'Yes'). This is reflected in the wording of the first paragraph of the definition. The Group considered that it would be inappropriate to refer directly to the FPN flag because it is a system characteristic and not a BSC term. Details of the considerations of the Group in the Definition Procedure can be found in the [P215 Definition Report](#).

2.1.1 Use of FPN to calculate CEI, in place of BMCAEC

The P215 Proposed Solution is that FPNs are used in the calculation of CEI in the Credit Cover arrangements for Credit Qualifying BM Units, in place of the BM Unit Credit Assessment Export Capability (BMCAEC). BMCAEC is the product of CALF and GC, and is used in the calculation of CEI for Production BM Units that are not Interconnector BM Units. More detail on this is provided in the [P215 IWA](#).

The Group agreed the Credit Cover arrangements should secure against Parties' indebtedness over the 29 calendar day period, taking account of imbalance position and Bid-Offer activity. The Group also considered that CEI should provide a proxy for Metered Volumes for the first five Working Days of the 29 day credit period. The Group considered that the current methodology for CEI calculation, by examining historical BM Unit data for previous corresponding BSC Seasons, takes

into account the overall effect of BOA activity and outages on a BM Unit's expected Metered Volume. However, this approach will not necessarily reflect the BM Unit's operation in Settlement Periods of the current BSC Season. Furthermore, the current CEI calculation cannot account for the dynamic variation of BM Unit output in different Settlement Periods.

The Group agreed that the use of FPNs in the calculation of CEI, without any other adjustment to the Credit Cover arrangements, was the intent of the P215 Modification Proposal. The Group was satisfied FPNs are a reasonably accurate proxy for estimating BM Unit Metered Volumes, and overall are sufficiently accurate for the purposes of the Credit Cover arrangements.

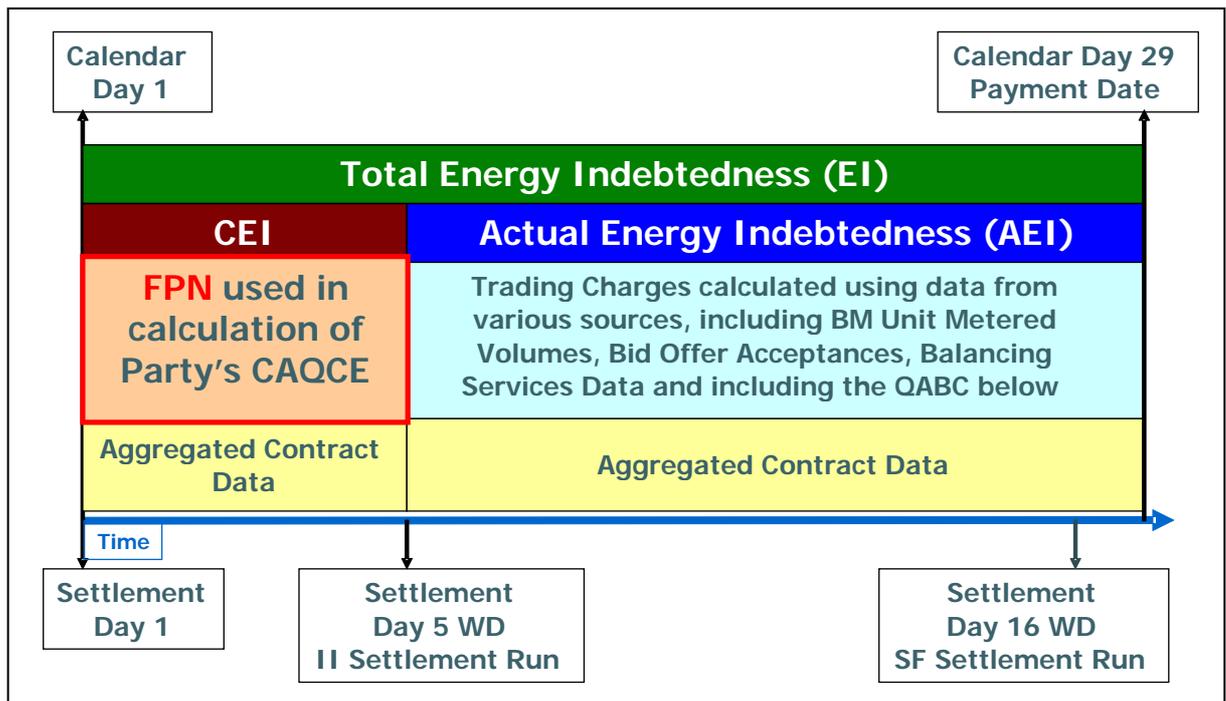


Figure 2: P215 proposed Energy Indebtedness arrangements

Figure 2 illustrates the arrangements for the calculation of Parties' Energy Indebtedness under the provisions of P215 Proposed Modification (i.e. as opposed to the current arrangements in figure 1).

The Group believed that ideally Bid Offer Acceptance (BOA) data should be incorporated into the CEI calculation (and considered options for a P215 Alternative Modification that would use FPN adjusted by BOA data). However, the Group agreed BOA data should not form part of the P215 Proposed Modification solution because it was not the intent of the P215 Modification Proposal and because inclusion of BOA data would increase the cost of implementation. Including BOA data would materially increase the required system changes and would alter the CEI timetable; the Group considered it was not appropriate for these impacts to form part of the P215 Proposed Modification.

2.1.2 Default of FPN Data

The Group examined the current default rules around FPN Data in respect of the submission of FPNs to National Grid and the use of FPNs in the calculation of CEI for Interconnector BM Units. Presently, if no FPN is received for a BM Unit in relation to a particular Settlement Period the latest FPN value submitted would be used in CEI calculation. If no FPN has previously been submitted for the BM Unit, then the FPN used will default to zero. The Group agreed these current default rules are sufficiently robust to be used in the P215 provisions.

2.1.3 System Impacts

Reporting in the ECVAA-I014 Notification Report would be changed. The ECVAA-I014 shows 'Credit Assessment Credited Energy Volume (CAQCE) by BMU Type'. Reporting is currently split between 'Interconnector Credit Assessment Credited Energy Volume' and 'Non Interconnector Credit Assessment Credited Energy Volume'.

The ECVAA-I014 would be changed so CAQCE reporting is split between 'Credit Cover calculated using FPNs' and 'non-FPN Credit Cover' (i.e. the Interconnector category would be expanded to include Credit Qualifying BM Units, rather than adding a third category for non-Interconnector FPN Credit Cover). This is an amendment to the definition, not the functionality, of the ECVAA-I014.

Other system impacts are that the CRA-I014 will contain a BM Unit 'Credit Qualifying' flag and the CRA-I015 will include BM Unit Exempt Export Data and P215 Qualifying Flag (this will impact ECVAA only, not the FAA or BMRA). Implementation of P215 Proposed would involve maintenance of 2 versions of the CRA-I020. A new version of the CRA-I020 would be received by BSCCo, and would report the new BM Unit Credit Qualifying flag. National Grid would continue to receive the current version of the CRA-I020. Further details can be found in the BSC Agent IA (Attachment 5).

2.1.4 Approach to demand BM Units within Production (P) status Trading Units⁵

All BM Units in a Production Trading Unit are assigned P status by the Trading Unit Methodology, and their CEI is therefore calculated using their assigned GC. Demand BM Units within P status Trading Units therefore have P status, despite not actually producing energy. However, BM Unit activity is not accurately reflected by the GC values of such demand BM Units (in most cases the GC value is zero). Therefore, under the current Credit Cover arrangements, the credit liability of demand BM Units that form part of Production Trading Units is netted off against that of the generating BM Units in the Trading Unit, via the CALF values. This incorporates the demand BM Units in the estimation of the Trading Unit's net production, and hence in the Party's CEI.

It should be noted that demand BM Units within P status Trading Units often tend to have a relatively small demand, and may represent only the station demand.

The Group agreed that this issue should be resolved by ECVAA system changes such that demand BM Units within P status Trading Units are identified within the system, and their CEI is calculated using CALF and DC values. This approach minimises the operational impact on Parties because the demand BM Units are included in the CEI calculation using DC and CALF values calculated using the existing methodology. ECVAA system changes are required to enable the ECVAA system to identify BM Units whose CEI would be calculated in this way and to effect the necessary data processing and reporting.

2.1.5 Application process for Credit Qualifying BM Unit status

Parties associated with BM Units that do not qualify automatically for status as a Credit Qualifying BM Unit may apply for such status to be assigned to the BM Unit. The Group agreed that the criteria for successful application would be:

- The BM Unit must be a net generator (i.e. export exceeding import) for the majority of the Settlement Periods in the previous 6 month period; and

⁵ A Trading Unit is normally a combination of several BM Units whose Production and Consumption accounts are captured under a single entity, that being the Trading Unit. Trading units are established in accordance with Section K-4 of the Code.

- The BM Unit must be a net generator (i.e. export exceeding import) in total volumes, over a 6 month period.

For the avoidance of doubt, this application process and criteria would apply only to those Parties that do not qualify under the first two criteria described in 2.1.

The Group anticipated that BSCCo (with the assistance of the applicant) would examine the Metered Volume data and determine whether an applicant should be assigned Credit Qualifying BM Unit, because the clear criteria mean this can be done mechanistically. BSCCo's decision would then be presented to the Panel (or Panel Committee with delegated responsibility in this area) for ratification. The Group agreed that a formal application procedure should be introduced in a BSC Procedure (BSCP), and considered that BSCP15 'BM Unit Registration' would be suitable.

The Group agreed that where qualification for Credit Qualifying BM Unit status had been awarded following application, review of the status would be carried out annually. The Group agreed that BSCCo should carry out reviews of Credit Qualifying status in line with the current GC/DC reviews. Determination regarding the continued qualification of BM Units would be done by reapplying the qualification criteria to the BSC Season's Metered Volume data for the BM Unit. For the avoidance of doubt, this review of Credit Qualifying BM Unit status would not apply to those BM Units that qualify automatically under the first two criteria described in 2.1, i.e. they have P status or are an Exempt Export BM Unit.

2.1.6 Review of FPN Data

The Panel would have the right, if it considered it appropriate, to review (and could request that the Transmission Company provide data to assist in such review) a Party's submission of FPNs. There is a current obligation on a Lead Party under the Code to ensure FPNs are submitted in accordance with the Grid Code. The purpose of this new provision is to provide recourse in the event that a Party has submitted, or is submitting on an ongoing basis, inaccurate FPN data (i.e. which does not represent its true operation and energy volume activity). The Group considered that this provision should be included in order to address concerns over potential submission of inaccurate FPNs as a result of P215, either intentionally or unintentionally, despite Parties' Grid Code obligations.

2.2 Alternative Modification

Under the Alternative P215 Modification developed by the Group, the CEI of Credit Qualifying BM Units would be calculated using FPN data and, in addition, Metered Volume data available from the Central Data Collection Agent (CDCA) would be used in the calculation of Energy Indebtedness for a sub-set of Credit Qualifying BM Units. The Alternative P215 Modification solution is in essence *the same as the Proposed P215 Modification solution* (as described in section 2.1), with the *addition* that Metered Volume data would be used earlier in the calculation of Energy Indebtedness for Credit Qualifying BM Units registered in CVA, as described in this section. Details of other options previously considered for a P215 Alternative Modification, and the reasons that the Group chose this solution, can be found in section 2.3 of the [second P215 Consultation Document](#).

Under the Alternative solution, CEI would be calculated for all Credit Qualifying BM Units using FPN data, in the same way as in the P215 Proposed Modification. However, in conjunction with this, and for ***CVA-registered Credit Qualifying BM Units only***, the CEI period would be shortened to two Working Days; in the interval between the CEI period and AEI period, Metered Volume data would be used to calculate Parties' 'Metered Energy Indebtedness' (MEI). The term MEI is a new

concept which would be introduced to identify the component of Energy Indebtedness calculated using metered data obtained from the CDCA before the II Run.

Metered Volume data for the MEI calculation would be gathered using a 'Credit Cover Run' at Settlement Day+2WD. The remainder of Credit Qualifying BM Units would continue to use FPN over a five Working Day CEI period. The II Run would continue to take place for all BM Units five Working Days after the relevant Settlement Period. Figure 3 illustrates the calculation of Energy Indebtedness for CVA-registered Credit Qualifying BM Units; Energy Indebtedness for other Credit Qualifying BM Units would be calculated as illustrated in figure 2.

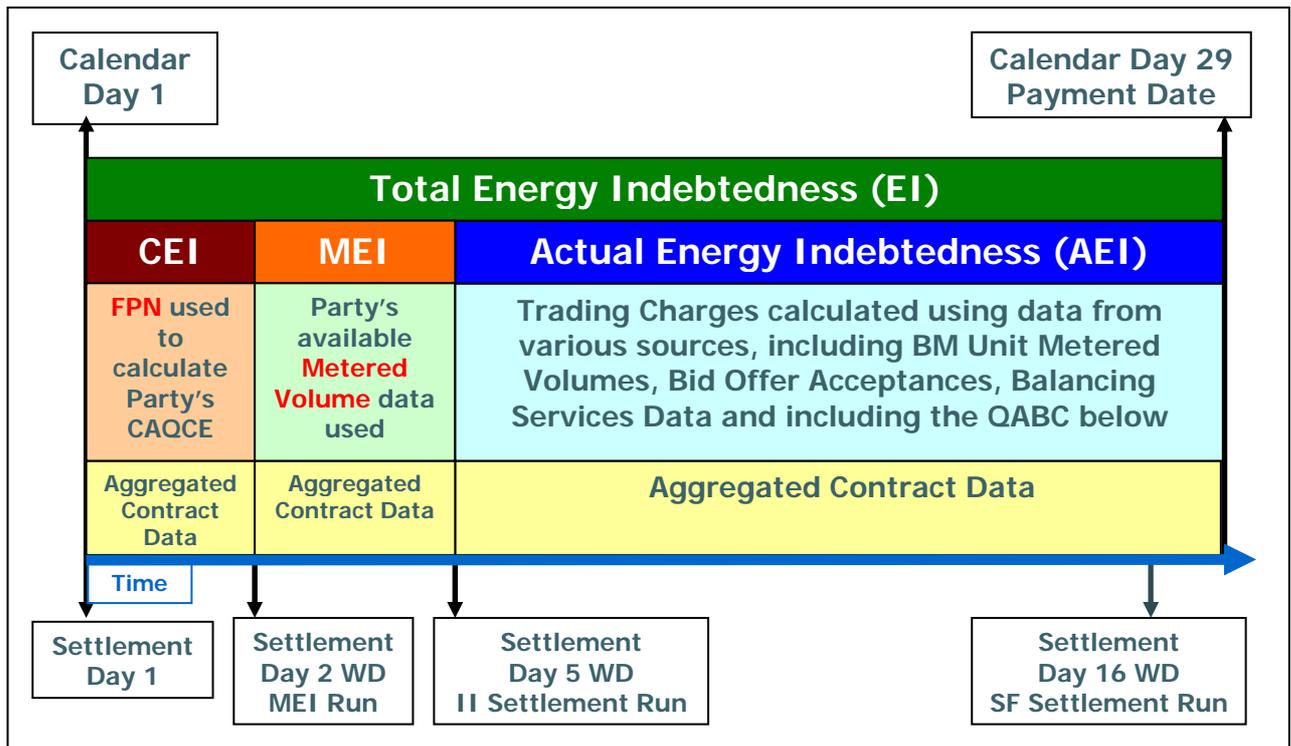


Figure 3: P215 Alternative Energy Indebtedness arrangements for CVA-registered Credit Qualifying BM Units

The Credit Cover Run would collect Metered Volume data from the CDCA. The majority of the Metered Volume data required for such a Credit Cover Run is available two days after a given Settlement Period. The CDCA has a target of collecting 98.5% of raw CVA Metered Volume data by Settlement Day+2, and typically has around 99% of the data by this time. This data is direct from meter channels and is not yet fully validated at this point, but the Group agreed that it would be significantly more accurate than a CEI value calculated using either the current methodology or the methodology proposed by the P215 Proposed Modification. The results of a Credit Cover Run would only be used for Credit Cover purposes; it would not be a Settlement Run.

If the Metered Volume data needed to calculate the MEI of a BM Unit is not available (either from the Main or Check meter), then Energy Indebtedness would continue to be calculated using FPN data for the affected Settlement Periods (i.e. revert to CEI).

The P215 Alternative requires the system changes associated with the Proposed, with the following additions:

- The CDCA Aggregation Process and Report and the SAA Settlement Calendar would be modified to incorporate the new Credit Cover Run; and

- The Credit Check would process Credit Qualifying BMUs using Meter Volume data or FPN, and derive an MEI value where appropriate.

A new version of the ECVAA-I014 Notification Report would be required, to report CAQCE for Credit Qualifying BM Units. The new ECVAA-I014 would require new fields to report MEI values in a similar manner to the current reporting of AEI. Two versions of the ECVAA-I014 would be maintained, with National Grid continuing to receive the current version, and the new version being sent to all other recipients. As with the Proposed, two versions of the CRA-I020 would also be maintained. Further details can be found in the BSC Agent IA (Attachment 5).

3 Areas Raised by the Terms of Reference

This section outlines the conclusions of the Modification Group regarding the areas set out in the P215 Terms of Reference.

3.1 *Additional P215 Assessment and Analysis*

3.1.1 Modification Group's Conclusions

On 13 December 2007, the Panel instructed the Group to undertake additional analysis in respect of the benefits of P215. After conducting additional assessment and analysis the Group concluded that both P215 Proposed and Alternative gave a benefit for some individual Parties and a collective benefit to the whole market due to increased accuracy of BM Unit Energy Indebtedness estimation. The additional analysis considered by the Group, which led to the conclusions detailed in this section, is included as Attachment 3 to this document. The benefits identified by the Group are:

- Whole market: the Energy Indebtedness of Parties associated with Credit Qualifying BM Units would be more accurately estimated, so all Parties in the market would benefit from Energy Indebtedness more accurately reflecting the actual value at risk; and
- Individual Parties: Parties associated with Credit Qualifying BM Units whose Energy Indebtedness is currently overestimated would benefit because their Energy Indebtedness would be calculated more accurately, which would potentially allow them to reduce the amount of Credit Cover they lodge (NB Credit Qualifying BM Units whose Energy Indebtedness is currently underestimated may need to increase the amount of Credit Cover they lodge due to increased accuracy).

However, the Group concluded that though the P215 provisions would better reflect the value at risk, and thus benefit the whole market, it was not possible to assign a value to the benefit of increased accuracy of Energy Indebtedness estimation. The Group agreed that it is likely that a Party will default or fail in the course of the next few years, due to the nature of the market and the prevalent and forecast market conditions, and that the Credit Cover arrangements should therefore be as accurate as possible. The Group concluded that default or failure of a Party is likely to occur over the course of the next few years because:

- Since the introduction of NETA in 2001 there have been two significant failures of Parties; one due to fraud and the other to a related credit line withdrawal. There have also been a number of smaller defaults; and
- The prevailing and expected future market conditions of high wholesale energy prices, high gas prices and low market liquidity make failure/default likely in the short- to medium-term.

The Group discussed whether there were any other potential Alternatives that should be given consideration. A Group member suggested a solution whereby MEI would be introduced as in the P215 Alternative Modification, but FPNs would not be used in the CEI calculation. CEI would continue to be calculated using GC/DC and CALF. The Group considered that this methodology might have merit, but agreed that it could not form a P215 Alternative because it does not cover all P215 Credit Qualifying BM Units. Under the P215 Alternative, Credit Qualifying BM Units registered in SVA would not have associated MEI, but their CEI would be calculated using FPN; a solution that makes no change to the manner in which the CEI of these BM Units is calculated does not fully address the defect identified under P215.

3.2 Cost Benefit of P215

3.2.1 Modification Group's Conclusions

Energy Estimation Modelling

The Group considered energy estimation modelling analysis, and concluded that both the P215 Proposed and Alternative Modifications would increase the accuracy of the required securitisation of the market in relation to the CEI period of Energy Indebtedness.

Modelling was possible only for BM Units with a GC over 100MW, as FPN submission by such BM Units is mandatory. Analysis of the accuracy of estimation of the BM Unit Metered Volumes (QM_{ij}) of generation BM Units with GC above 100MW was conducted for the current baseline, P215 Proposed and P215 Alternative methodologies. It should be noted that a negative CEI value reduces a Party's overall Energy Indebtedness and a positive value increases Energy Indebtedness.

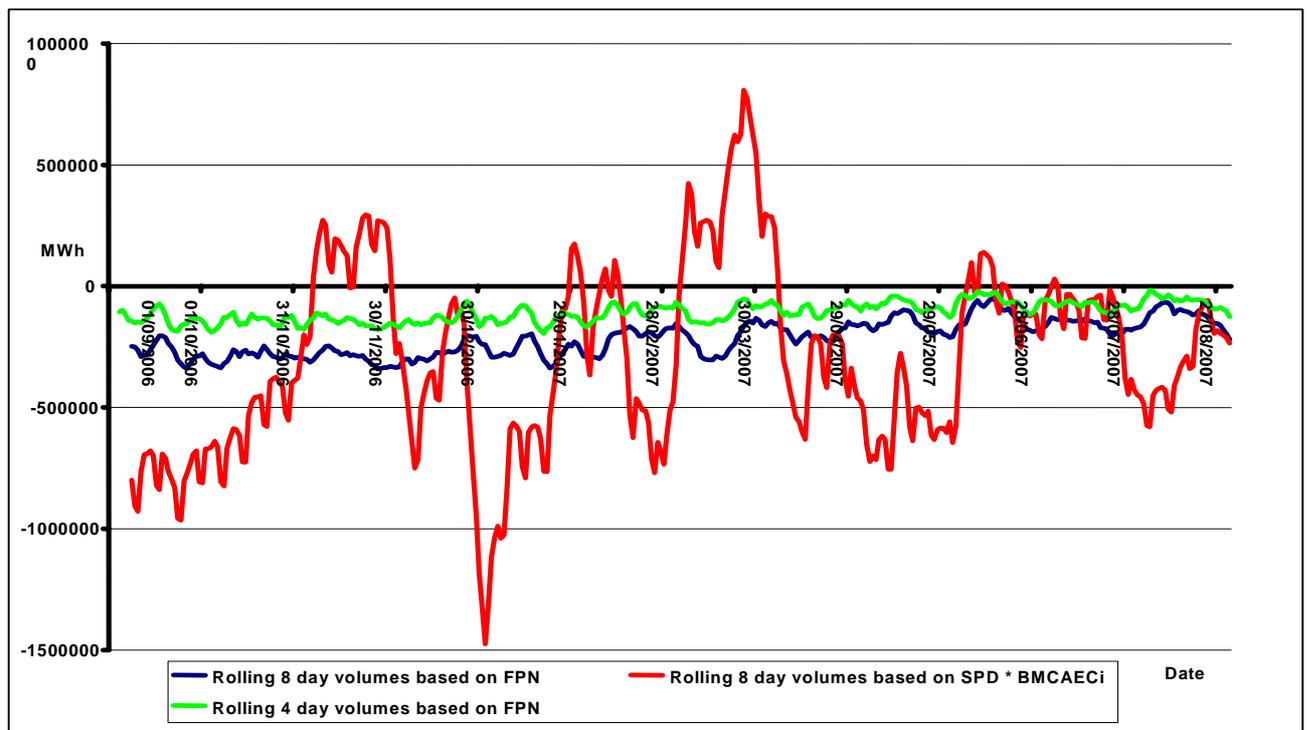


Figure 4: Modelled CEI error (MWh) calculated using various methods

On average, estimation using FPN over 8 days (P215 Proposed) is more accurate than using the baseline methodology. Using FPN over 4 days (P215 Alternative) is even more accurate, due to the effect of decreasing the CEI period, hence using less estimation and more Metered Volume

data. A negative error (below the horizontal axis in figure 4) equates to overestimation of Metered Volumes and therefore an underestimation of indebtedness. The baseline, P215 Proposed and P215 Alternative all overestimate the Metered Volumes on average. Figure 4 illustrates that the underestimation by P215 Proposed and P215 Alternative is consistent, while the error associated with the current baseline arrangements fluctuates. Figure 5 details the average underestimation of the baseline and the error associated with the Proposed and Alternative methodologies.

	Baseline: Rolling 8 day CEI (CAQCE) Actual Error (MWh)	P215 Proposed: Rolling 8 day CEI (FPN) (MWh)		P215 Alternative: Rolling 4 day CEI (FPN) (MWh)	
		Actual Error	Difference from Baseline	Actual Error	Difference from Baseline
Minimum	-1,475,629	-341,875	1,133,754	-194,872	1,280,757
Maximum	808,542	-50,784	-859,326	-15,812	-824,354
Average	-294,816	-214,854	79,962	-107,443	187,373

Figure 5: Overall effect of varying accuracy in energy volume terms

There is a significant reduction in the range of error between the proxy metered volumes and the actual Metered Volumes for the P215 Proposed methodology when compared with the corresponding error of the current baseline. The range is decreased further by the P215 Alternative methodology. Though the methodologies of P215 Proposed and Alternative both tend to overestimate BM Units' Metered Volumes, the extreme values and variability are reduced. This is illustrated graphically in figure 4.

Figure 6 indicates that the baseline allowed the market to potentially under-secure itself by an average of £16.5M due to CEI inaccuracy. The P215 Proposed solution would reduce potential under-securitisation to £13.5M and the P215 Alternative solution would further reduce it to £6.75M. To clarify, this does not mean the market was actually under-secured by this amount, but that, for the CEI period, *if* the level of security lodged was exactly that indicated by the relevant CEI calculation, and *if* the actual imbalance prices were always equal to CAP, the market *could* have less Credit Cover lodged than would be required on the basis of actual Metered Volumes. Because of the assumptions made in this analysis, the figure should be treated as indicative order of magnitude estimates, not exact values.

	Baseline: Rolling 8 day CEI (CAQCE) Actual Error (£)	P215 Proposed: Rolling 8 day CEI (FPN) (£)		P215 Alternative: Rolling 4 day CEI (FPN) (£)	
		Actual Error	Difference from Baseline	Actual Error	Difference from Baseline
Minimum	-£110,967,276	-£25,709,005	£85,258,271	-£14,654,371	£96,312,905
Maximum	£60,802,345	-£2,207,833	-£63,010,178	-£687,411	-£61,489,756
Average	-£16,585,980	-£13,543,235	£3,042,745	-£6,750,588	£9,835,392

Figure 6: Overall effect of varying accuracy in financial terms

Both the P215 Proposed and Alternative methodology are more accurate and less volatile than the baseline.

Reference to the peak values shows that the greatest potential under-securitisation (equating to the negative error of the greatest magnitude) allowed by the baseline methodology over the

analysis period was of the order of £111M. The maximum exposure allowed due to inaccuracy in the calculation of CEI falls to the order of £26M under P215 Proposed, and £15M under the P215 Alternative. Again, it is important to note these are 'order of magnitude' estimates.

The Group considered whether the P215 Proposed or Alternative solutions might be refined to further improve the accuracy of indebtedness calculation without introducing unreasonable cost and complexity or producing anomalous results. The Group could not identify any refinement that would be within the scope of P215 and would further increase the accuracy of the estimation of actual indebtedness for all types of Credit Qualifying BM Unit.

The Group considered whether it would be appropriate to apply a 'haircut' to the calculations under P215 Proposed or Alternative to further reduce their inaccuracy, given that under these estimations the error appears to be relatively constant (i.e. compared with the error under the baseline). However, the Group noted that at present a Level 1 Default Notice is issued when the Energy Indebtedness of a Party breaches 80% of its Credit Cover. This means that Parties must lodge an amount of value of credit which is greater than any anticipated indebtedness they may incur. The Group noted that this means that the Code baseline already requires a 25% 'haircut' in the amount of credit cover each Party must provide. The Group agreed that this mechanism would continue to be appropriate for P215 Proposed and Alternative Modifications, both of which are more accurate Metered Volume proxies than the existing baseline. The Group also noted that CAP is an imperfect estimate for actual imbalance prices, and would introduce a degree of inaccuracy even if a totally accurate Metered Volume proxy was used.

CALF Appeals

The Group considered the number of CALF appeals received over the previous four years (BSC Season Spring 2004 – Winter 2007), including the number of BM Units associated with each appeal. The appeals considered all related to generating plant which would be classed as Credit Qualifying BM Units. ELEXON estimated that it spends 28 man days per year processing CALF appeals. Assuming that Analyst-level staff carries out this work, this equates to £4,200 per annum.

This estimate is slightly conservative as it assumes all the work would be carried out by Analysts with no involvement from more senior personnel. Additionally, CALF appeals are considered by the ISG, and the estimate of the ELEXON effort takes no account of the time required by ISG members to consider CALF appeals.

3.3 Conclusions regarding the other Areas Raised

With regard to the following areas raised by the P215 Terms of Reference, details of the Modification Group's discussions and the relevant responses to the first P215 Assessment Procedure consultation can be found in the initial P215 Assessment Report (Attachment 7) and the [second P215 Consultation Document](#). Only the final conclusions of the Group, and salient points raised in response to the second P215 consultation, are included in this section.

3.3.1 Demonstration of the defect in the existing Code requirements as a result of the current Credit Cover arrangements

The Group concluded that FPNs are a more accurate proxy estimation of the Metered Volumes of generating BM Units than the current methodology. The Group agreed that this constitutes a defect in the current Credit Cover arrangements because they do not deliver the desired level of accuracy.

3.3.2 Impact of P215 on the risk of over- and under-collateralisation by Parties due to the BSC Credit Cover arrangements

Parties may 'over-collateralise' by lodging excessive Credit Cover; this area specifically addressed the effect that the Credit Cover arrangements would have on the risk of Parties lodging too much or too little Credit Cover due to inaccurate CEI calculation.

The Group concluded the P215 Proposed Modification may tend to cause some Parties to be under-collateralised relative to the actual risk they pose to the market. The Proposed Modification does not utilise actual Metered Volume data or adjust FPNs using Bid Acceptance volume data, which may lead to an underestimation of BM Units' actual Metered Volumes in their CEI. Therefore the overall Energy Indebtedness of some Parties could be underestimated.

Additionally, under P215 Proposed, a generator in financial difficulty could avoid being required to post more Credit Cover by declaring artificially high Physical Notifications (i.e. despite Grid Code obligations), leading to the generator being under-secured. The Group concluded that the P215 Alternative resolved this issue because inflated FPNs would be detected earlier due to the MEI run after two working days, limiting their impact on Parties indebtedness.

3.3.3 Potential discrimination between generating and consuming BM Units

The Group concluded P215 does not unduly discriminate between generating and consuming BM Units, because the proposed provisions depended on the availability of timely, accurate FPN submissions. Though some consuming BM Units can submit accurate FPNs, the majority cannot.

In reply to a consultation response, the Group explained in the second P215 consultation document the justification for the application of CEI periods of different length to SVA and CVA registered BM Units under the P215 Alternative. The reasoning was based on evaluation of the two identified types of SVA registered BM Units that would be classed as Credit Qualifying BM Units.

3.3.4 Any relevant precedents from P140 and interconnector use of FPN in CEI calculation

The Group concluded that no precedents were directly relevant because Interconnector BM Units operation differs inherently from that of other BM Units. The P140 FPN default rules were considered suitable for the P215 provisions.

3.3.5 Any consequential impact of using FPN instead of CALF and GC/DC on the BSC, Grid Code or other codes and associated processes

Panel Processes: The Group sought to minimise the impact on BSC Panel processes and, where Panel involvement is necessary, provide a guideline process and criteria. The Group believed it is probable that Panel involvement would be delegated to the relevant Panel Committee.

The Group agreed assignment of Credit Qualifying BM Unit status by the BSC Panel should be determined by application to, and approval by, the BSC Panel (or a Panel Committee delegated this responsibility). The Group agreed that a formal application procedure should be introduced in a suitable BSCP, and agreed BSCP15 'BM Unit Registration' was appropriate.

The Group agreed it was appropriate that the qualifying criteria should be located in a BSCP, as it would be appropriate that they are subject to the Change Process. The Group agreed that the criteria should be as described in section 2.1.5, and that qualification should always be based on Metered Volume data. Monitoring of the continuing qualification of BM Units should be done by re-verification of the qualification criteria.

Credit Default Arrangements: The Group concluded that P215 should not seek to impact the existing Credit Default arrangements. Parties must lodge Credit Cover sufficient to avoid Default, irrespective of calculation method; the Credit Default rules should apply regardless of how Energy Indebtedness is calculated. The current Credit Default rules would apply under both P215 Proposed and Alternative.

Details of the impact on BSC Sections can be found in Appendix 4. Though Credit Default is outside the scope of P215, the potential for Parties to under-secure by submitting inflated FPNs may consequentially impact the BSC; the issue could potentially be addressed by introducing a 'Credit Default Exit Query Period' whereby, for instance, for 24 hours after a Party has left Credit Default that Party may be placed back into default without the usual 24 hour Query Period.

The Group considered advice from ELEXON, and concluded that:

- Scope for similar abuse of the Credit Default arrangements exists under the current arrangements, though it is unlikely;
- The P215 Proposed Modification would tend to make such abuse more viable; and
- The P215 Alternative Modification would make such abuse less feasible than under the baseline or P215 Proposed because earlier use of actual Metered Volume data limits the impact of inaccurate CEI data on Parties' overall Energy Indebtedness and CCP.

Grid Code: There would be no impact on the Grid Code, because FPNs would continue to be submitted to National Grid. However, the Group felt it was important to note that though under P215 Proposed or Alternative FPNs would effectively become a commercial parameter under the BSC, FPN submission would still be in accordance with the Grid Code. Particularly notable is that small generators that 'opt in' to P215 by electing to submit FPNs must be signatories to the Grid Code and CUSC, with all associated obligations.

3.3.6 Potential mandatory FPN submission by generating BM Units

The Group considered several potential approaches to resolve the issue of demand BM Units within Production (P) status Trading Units. Details were included in the initial P215 Consultation.

One option was mandatory FPN submission by demand BM Units within P status Trading Units. The Group concluded that the impact of this approach on the Grid Code and CUSC would be inappropriate and disproportionate, following consideration of arguments from National Grid.

The Group agreed that the approach of making ECVA system changes so that demand BM Units within P status Trading Units are identified and their CEI calculated using CALF and DC values would be used in both P215 Proposed and Alternative Modifications.

3.3.7 Default P215 provisions if FPNs are not submitted

The Group considered the Interconnector BM Unit default process, and agreed the same process would be appropriate for the P215 provisions. The default process is that if an FPN is not received from an Interconnector BM Unit, the last FPN received from that BM Unit is used; if an FPN has never been received from the BM Unit, an FPN of zero is used.

The Group concluded that defaulting FPNs to zero if none were ever submitted would provide a natural incentive (in addition to Grid Code obligations) for Parties to submit at least an initial FPN. This would encourage smaller Parties associated with Exempt Export BM Units, which had elected to submit FPNs, to obtain the necessary systems to submit FPNs.

3.3.8 Any implications of using FPN data for a purpose other than it was originally intended

At present FPN is a purely technical parameter; use in Credit Cover calculation could lead to FPN becoming more commercial. There was concern that this could adversely affect FPN accuracy, and thus affect the SO's ability to balance the System, in spite of Grid Code obligations.

The Group concluded that 'gaming' of FPN submissions by Parties seeking to gain a long-term benefit in the Credit Cover arrangements would deliver little benefit to those Parties in normal circumstances, and was therefore unlikely under either P215 Proposed or Alternative. However, Parties in financial difficulties may have different incentives to game by submitting inflated FPNs to avoid having to lodge more Credit Cover. The Group concluded that this was a risk under P215 Proposed, but under P215 Alternative the risk was effectively mitigated by the shorter CEI period.

The Information Imbalance charge, currently set to zero, could be used to encourage accurate FPNs. However, the Group considered that it had not been demonstrated that FPN accuracy would tend to decrease, or that Grid Code obligations would not be sufficient to ensure accuracy. The Group concluded that change to the Information Imbalance charge should not form part of P215.

3.3.9 Impact on National Grid of additional FPN data

The Group concluded there would be limited impact on National Grid even if many Exempt Export BM Units began to submit FPNs. The Group agreed the ECVAA should continue to receive FPN data from National Grid, and Parties should submit FPNs to National Grid. No change is required to the Grid Code, and the contractual and technical obligations of National Grid are not be impacted.

3.3.10 Impact of data requirements on Parties and BSC Agents

A Party requires an Electronic Data Transfer (EDT) system to submit FPNs to National Grid. Parties not currently submitting FPNs would need to procure such a system in order to do so. A widely used standard commercial EDT package is available, as well as a basic National Grid system.

Responses to the P215 Assessment consultations did not contain any responses from small (i.e. Exemptable) generators that would need to amend their systems to submit FPNs to be included under P215. Large Parties associated with Exemptable generation indicated that they would be unlikely to undertake system changes to submit FPNs for these types of plant because of P215. The Group therefore could not estimate further the impact on generators of opting to submit FPNs.

It should be noted that Exemptable generators would not be burdened by an automatic requirement to invest in their systems, because they would not automatically fall under the P215 provisions. These generators could choose whether to submit FPNs after considering their own business case and cost/benefit analysis

3.3.11 Impact on Central Systems

The BSC Agent impact assessment (Attachment 5) details the Central System impact of P215 Proposed or Alternative. A range of ECVAA, CRA and (for the P215 Alternative) CDCA flows are impacted. The IA includes assessment of parallel implementation of aspects of the P215 Alternative Modification, alternate means of effecting some ECVAA change, and implementation options developed to mitigate National Grid impacts.

The Group agreed implementation of P215 Proposed or Alternative would be via maintenance of two versions of the CRA-I020 and (for P215 Alternative only) two versions of the ECVAA-I014. This avoids significant system impact on National Grid due to changes to the CRA-I020 and ECVAA-

1014 flows. Details of the potential impacts and costs, and the options considered to mitigate them, can be found in the [second P215 Consultation Document](#).

3.3.12 Accuracy of FPNs compared with actual Metered Volumes

The Group conducted analysis of the accuracy of FPNs compared with actual Metered Volume data. In addition, the Group carried out similar analysis of the current method of estimating Metered Volume for the purposes of the CEI calculation, i.e. Settlement Period Duration (SPD) multiplied by BMCAEC, and also the quantity Period Expected Metered Volume (QME_{ij}) which is FPN adjusted using BOA volume data. The analysis was conducted across a range of different types of BM Units including coal, nuclear, pumped storage, gas, and both large and small wind powered plant.

The Group concluded that QME and FPNs are both more accurate than the baseline methodology. The Group considered whether the benefit of increased accuracy of Metered Volume estimation might have an associated increase in the volatility of the real-time credit requirements of market participants. The Group concluded that if FPNs accurately reflect Parties contracts and behaviour, then Credit Cover requirements calculated using FPNs would actually be more predictable than under the baseline. The Group believed that in any case any volatility introduced into credit requirements would be an acceptable consequence of greater accuracy that Parties would accept and manage as part of participating in the market.

The [first Assessment Procedure Consultation](#) and the initial P215 Assessment Report (Attachment 7) contain more detail on this.

3.4 Implementation Approach and Costs

3.4.1 Results of Proposed Modification Impact Assessment

PROPOSED MODIFICATION IMPLEMENTATION COSTS ⁶				
		November 2008	June 2009	Tolerance
Service Provider⁷ Cost	Change Specific Cost	£137,850	£137,850	+/- 0%
	Total Service Provider Cost	£137,850	£137,850	+/- 0%
Implementation Cost	External Audit	£0	£0	+/- 0%
	Design Clarifications	£0	£0	+/- 0%
	Additional Resource Costs	£0	£0	+/- 0%
	Additional Testing & Audit Support Costs	£0	£0	+/- 0%
Total Demand Led Implementation Cost		£137,850	£137,850	+/- 0%

⁶ 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

⁷ BSC Agent and non-BSC Agent Service Provider and software costs.

PROPOSED MODIFICATION IMPLEMENTATION COSTS ⁶				
		November 2008	June 2009	Tolerance
Service Provider Cost	Port and Migrate	£22,000	£0	+/-0%
ELEXON Implementation Resource Cost		88 man days £19,360	88 man days £19,360	+/- 10%
Total Implementation Cost		£179,210	£157,210	+/- 20%

a BSC Agent Impact

CRA and ECVAAs functions are affected by the P215 Proposed Modification; a detailed list of impacts is provided in Appendix 4. Software changes, process changes, documentation changes and testing would be required.

Total estimated BSC Agent implementation cost for the P215 Proposed Modification is £137,850 with an associated timescale of 20 weeks. The BSC Agent IA (Attachment 5) details the impacts.

b BSC Party and Party Agent Impact

Parties that act as generators and operate delivering BM Units identified impacts. Impacts include changing credit calculation systems used to validate Credit Cover position and update of internal systems to accept the amended ECVAAs-1014 Notification Report. The Proposed Modification would take a maximum of 6 months for Parties to implement, at a cost of approximately £15,000 for each affected Party (estimated by two IA respondents).

Other respondents identified only minimal impacts to processes and administration.

c Transmission Company Impact

There is no impact on the Transmission Company because implementation of P215 Proposed would be via maintenance of two versions of the CRA-I020. This avoids significant system impact with large associated cost. The System Operator would seek to amend their systems when opportune, to remove the need to maintain dual versions. Details of the potential impacts and costs, and the options considered to mitigate them, can be found in the [second P215 Consultation Document](#).

Respondents to the second P215 consultation supported this approach. However, one respondent, though supporting the implementation approach, believed National Grid's quoted costs to be excessive, noting that they are much greater than costs associated with similar previous Modifications (P140 and P2 were cited). The respondent did not view P215 as a requiring major system changes (particularly National Grid's), and was concerned that such high cost estimates could unduly obstruct future Modifications.

The Group noted that National Grid had explained the impact and associated cost, but shared the concern that there was a risk that National Grid costs could become perceived as an obstacle to BSC change. In the case of P215, the Group noted that if the workaround that allowed the proposed implementation approach had not been available, the National Grid costs could have affected the Group's view of the cost benefit of P215. This could have resulted in the Group concluding that P215 was not viable due to National Grid costs which appear excessive when compared with the actual impact on National Grid's operational activities.

d BSCCo Impact

BSCCo would implement the change and provide operational support for the new process; details of the impact on BSCCo can be found in Appendix 4. Additionally, BSCCo would undertake monitoring of FPN accuracy, both ongoing and on an ad-hoc basis as requested by National Grid. BSCCo FPN monitoring would be in line with existing market monitoring and ELEXON anticipates that it would be absorbed into existing efforts and would have a negligible impact.

3.4.2 Results of Alternative Modification Impact Assessment

ALTERNATIVE MODIFICATION IMPLEMENTATION COSTS⁸				
		June 2009	November 2009	Tolerance
Service Provider⁹ Cost	Change Specific Cost	£273,800	£273,800	+/- 0%
	Total Service Provider Cost	£273,800	£273,800	+/- 0%
Implementation Cost	External Audit	£0	£0	+/- 0%
	Design Clarifications	£0	£0	+/- 0%
	Additional Resource Costs	£0	£0	+/- 0%
	Additional Testing & Audit Support Costs	£0	£0	+/- 0%
Total Demand Led Implementation Cost		£273,800	£273,800	+/- 0%
Service Provider Cost	Port and Migrate	£0	£0	+/-0%
ELEXON Implementation Resource Cost		139 man days £30,580	139man days £30,580	+/- 10%
Total Implementation Cost		£304,380	£304,380	+/- 20%

a BSC Agent Impact

CRA, CDCA and ECVAAs are affected by the P215 Alternative Modification; a detailed list of impacts is provided in Appendix 4. Software changes, process changes, documentation changes and testing would be required.

Total estimated BSC Agent implementation cost for the P215 Alternative Modification is £273,800, with an associated timescale of 25 weeks. The BSC Agent IA (Attachment 5) details the impacts.

⁸ 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

⁹ BSC Agent and non-BSC Agent Service Provider and software costs.

b BSC Party and Party Agent Impact

Parties that act as generators and operate delivering BM Units identified impacts. Impacts include changing credit calculation systems used to validate Credit Cover position and update of internal systems to accept the amended ECVA-1014 Notification Report. The Alternative Modification would take a maximum of 6 months for Parties to implement with estimated costs ranging from approximately £3,000 (Parties using a User Group system) to £50,000 (large Parties that perform a large amount of forecast and validation).

Other respondents identified only minimal impacts to processes and administration.

c Transmission Company Impact

There is no impact on the Transmission Company because implementation of P215 Alternative would be via maintenance of two versions of the CRA-1020 and ECVA-1014. This avoids significant system impact with large associated cost. The System Operator would seek to amend their systems when opportune, to remove the need to maintain dual versions. Details of the potential impacts and costs, and the options considered to mitigate them, can be found in the [second P215 Consultation Document](#).

The views of consultation respondents aligned with those for the implementation approach of the Proposed Modification. The Group's concerns regarding National Grid costs also applied to the Alternative Modification implementation approach.

d BSCCo Impact

BSCCo would implement the change and provide operational support for the new process; details of the impact on BSCCo can be found in Appendix 4. Additionally, BSCCo would undertake monitoring of FPN accuracy, both ongoing and on an ad-hoc basis as requested by National Grid. BSCCo FPN monitoring would be in line with existing market monitoring and ELEXON anticipates that it would be absorbed into existing efforts and would have a negligible impact.

3.4.3 Views of Respondents to Assessment Procedure Consultation

All respondents to the second P215 consultation that did not take a neutral position supported the implementation approach proposed by the Group, described below.

3.4.4 Modification Group's Conclusions

The Group agreed both P215 Proposed and Alternative should be implemented in a Release, if approved. Implementation of either P215 Proposed or Alternative would be via maintenance of two versions of the CRA-1020 and (for P215 Alternative only) two versions of the ECVA-1014.

The Modification Group agreed the following recommended implementation approach for P215:

- An Implementation Date for the Proposed Modification of 6 November 2008 if an Authority decision is received on or before 30 April 2008, or 25 June 2009 if the Authority decision is received after 30 April 2008 but on or before 13 November 2008.
- An Implementation Date for the Alternative Modification of 25 June 2009 if an Authority decision is received on or before 30 October 2008, or 05 November 2009 if the Authority decision is received after 30 October 2008 but on or before 26 March 2009.

3.5 *Legal Text*

The Modification Group has reviewed and discussed the text and agreed that it delivers the solutions developed by the Group. A copy of the draft legal text can be found in Appendix 1.

A respondent to the second P215 consultation believed that additional comfort would be provided if the legal text provided explicit provision for the BSC Panel to act in the case of systematic overestimation of FPNs. The Group considered that Grid Code provisions would be the usual recourse for such abuse, but that in any case the broad provisions for default under Section H of the Code enabled the Panel to take any necessary action. The Group therefore concluded that the legal text was satisfactory and that no specific provisions should be added.

4 **Assessment of Modification Against Applicable BSC Objectives**

This section outlines the views of consultation respondents and the Modification Group regarding the merits of P215 against the Applicable BSC Objectives.

The Group's views prior to the Assessment Procedure extension, further analysis and second Assessment Procedure Consultation can be found in the initial P215 Assessment Report (Attachment 7).

4.1 *Proposed Modification*

4.1.1 **Modification Group's Conclusions**

The **MAJORITY** view of the Modification Group was that the Proposed Modification **WOULD NOT** better facilitate the achievement of Applicable BSC Objective (c) when compared with the existing Code baseline, for the following reasons:

Applicable BSC Objective (C)

The majority view that achievement of Applicable BSC Objective (c) would not be facilitated was based on the following reasons:

- FPNs overestimate the Metered Volumes of some BM Unit types;
- Overestimation of the Metered Volumes of some BM Unit types would cause a move from arbitrary errors in Credit Cover requirements to a situation where the Credit Cover requirement of these BM Unit types may be systematically underestimated;
- Systematic underestimation of Credit Cover requirements could cause a trend of market under-securitisation, which would expose Parties to risk, and therefore discourage new entrants to the market;
- Use of FPNs alone does not secure against cash flows arising from Bids and Offers; and
- Though using FPN to calculate CEI improves accuracy, the benefit is insufficient to justify the proposed change.

The minority view that achievement of Applicable BSC Objective (c) would be facilitated was based on the following reasons:

- Use of FPNs would significantly increase the accuracy of the estimation of BM Unit Metered Volumes in the calculation of CEI; and

- Energy Indebtedness would more accurately reflect the actual value at risk.

The **UNANIMOUS** view of the Modification Group was that the Proposed Modification **WOULD** better facilitate the achievement of Applicable BSC Objective (d) when compared with the existing Code baseline, for the following reasons:

Applicable BSC Objective (d)

- The process of estimating Metered Volumes for use in the Credit Cover would be simplified due to the reduction in CALF appeals; and
- The administrative burden associated with the Credit Cover arrangements would be reduced, due primarily to fewer CALF appeals.

The Group agreed that the Proposed Modification would have a neutral impact on Applicable BSC Objectives (a) and (b). A minority of the Group believed that the Proposed Modification would not better facilitate Objective (b), because an incentive, or perceived incentive, could be introduced for Parties to amend their FPNs for Credit Cover reasons.

The conclusion was therefore that the **MAJORITY** view of the Modification Group was that the Proposed Modification **WOULD NOT** better facilitate the achievement of Applicable BSC Objectives overall when compared with the existing Code baseline.

Group members who believed that the Proposed Modification would better facilitate the achievement of Applicable BSC Objective (d) but not (c) believed that the arguments against (c) outweighed the improvement against (d), leading them to believe that the Proposed Modification would not facilitate the achievement of Applicable BSC Objectives overall.

4.1.2 Views of Respondents to Assessment Procedure Consultation

Respondents to the second Assessment Procedure consultation were split as to whether the Proposed Modification would better facilitate the achievement of the Applicable BSC Objectives overall when compared with the existing Code baseline.

The arguments expressed by respondents were aligned with those expressed by the Group.

4.2 Alternative Modification

4.2.1 Alternative Modification compared with Proposed Modification

4.2.1.1 Modification Group's Conclusions

The **UNANIMOUS** view of the Modification Group was that the Alternative Modification **WOULD** better facilitate the achievement of Applicable BSC Objective (c) when compared with the Proposed Modification, for the following reasons:

Applicable BSC Objective (c)

- More accurate estimation of Metered Volumes than the Proposed Modification because actual Metered Volume data would be used; and
- Energy Indebtedness would more accurately reflect the actual value at risk.

The **MAJORITY** view of the Modification Group was that the Alternative Modification **WOULD** better facilitate the achievement of Applicable BSC Objective (d) when compared with the Proposed Modification, for the following reasons:

Applicable BSC Objective (d)

The majority view was based on the following reasons:

- Administration reduced and the earlier use of Metered Volume data gives comfort regarding the non-inclusion of BOA data in the CEI calculation.

The minority view was based on the following reasons:

- Would not simplify the arrangements in the manner that the Proposed does.

The Group agreed that the Alternative Modification would have a neutral impact on Applicable BSC Objectives (a) and (b) when compared with the Proposed Modification. The minority of the Group who had concerns over potential motives to 'game' FPN submissions under the Proposed Modification believed that this risk was mitigated by the use of Metered Volume data, and therefore the Alternative improved on the Proposed with regard to Objective (b), but the rest of the Group believed the Alternative was neutral in this respect.

The **UNANIMOUS** view of the Modification Group was that the Alternative Modification **WOULD** better facilitate the achievement of Applicable BSC Objectives overall when compared with the Proposed Modification.

4.2.1.2 Views of Respondents to Assessment Procedure Consultation

The unanimous view of respondents to the Assessment Procedure consultation was that the Alternative Modification would better facilitate the achievement of the Applicable BSC Objectives overall when compared with the Proposed Modification.

The arguments expressed by respondents were aligned with those expressed by the Group.

4.2.2 Alternative Modification compared with Existing Code Baseline

4.2.2.1 Modification Group's Conclusions

The **UNANIMOUS** view of the Modification Group was that the Alternative Modification **WOULD** better facilitate the achievement of Applicable BSC Objectives (c) and (d) when compared with the existing Code baseline, for the following reasons:

Applicable BSC Objective (c)

- Use of a combination of FPNs and actual Metered Volumes would significantly increase the accuracy of the estimation of BM Unit Metered Volumes in the calculation of CEI; and
- Energy Indebtedness would more accurately reflect the actual value at risk.

Applicable BSC Objective (d)

- The administrative burden associated with the Credit Cover arrangements would be reduced, due primarily to fewer CALF appeals; and
- Use of FPNs and Metered Volume data would increase accuracy, which would increase efficiency.

The Group agreed that the Alternative Modification would have a neutral impact on Applicable BSC Objectives (a) and (b) when compared with the existing Code baseline.

The **UNANIMOUS** view of the Modification Group was that the Alternative Modification **WOULD** better facilitate the achievement of Applicable BSC Objectives overall when compared with the existing Code baseline.

4.2.2.2 *Views of Respondents to Assessment Procedure Consultation*

The unanimous view of respondents to the Assessment Procedure consultation was that the Alternative Modification would better facilitate the achievement of the Applicable BSC Objectives overall when compared with the existing Code baseline.

The arguments expressed by respondents were aligned with those expressed by the Group.

4.3 *Final Recommendation to the Panel*

On the basis of the above assessment, the Modification Group therefore agreed a **UNANIMOUS** recommendation to the Panel that:

- The Proposed Modification **SHOULD NOT** be made; and that
- The Alternative Modification **SHOULD** be made.

Section 3 contains details of the Group's recommended Implementation Dates and legal text.

5 Terms Used In This Document

Other acronyms and defined terms take the meanings defined in the Code.

Acronym/Term	Definition
BMCAEC	BM Unit Credit Assessment Export Capability
BMCAIC	BM Unit Credit Assessment Import Capability
CALF	Credit Assessment Load Factors
CAQCE	Credit Assessment Credited Energy Volume
CDCA	Central Data Collection Agent
CEI	Credit Assessment Energy Indebtedness
CVA	Central Volume Allocation
DC	Demand Capacity
ECVAA	Energy Contract Volume Aggregation Agent
EDT	Electronic Data Transfer
FPN	Final Physical Notifications
GC	Generation Capacity
NG	National Grid

Acronym/Term	Definition
P/C	Production/Consumption
PN	Physical Notification
QABC	Account Bilateral Contract Volume
QM	BM Unit Metered Volume
QME	Period Expected Metered Volume
SAA	Settlements Administration Agent
SPD	Settlement Period Duration
SVA	Supplier Volume Allocation
SVAA	Supplier Volume Allocation Agent

6 Document Control

6.1 *Authorities*

Version	Date	Author	Reviewer	Reason for review
0.1	05/02/08	Dean Riddell	Roger Harris	For peer review
0.1	05/02/08	Dean Riddell	P215 Modification Group	For Modification Group review
0.1	05/02/08	Dean Riddell	Emrah Cevik	For technical review
0.3	08/02/08	Dean Riddell	David Jones	For quality review
1.0	08/02/08	Change Delivery	BSC Panel	For Panel decision

Appendix 1: Draft Legal Text

Draft legal text for the Proposed Modification is attached as a separate document, Attachment 1.

Draft legal text for the Alternative Modification is attached as a separate document, Attachment 2.

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=235>

Date	Event
27/07/07	Modification Proposal raised by Uskmouth Power Limited
09/08/07	IWA presented to the Panel
14/08/07	First Definition Procedure Modification Group meeting held
23/08/07	Definition Procedure consultation issued
31/08/07	Definition Procedure consultation responses returned
04/09/07	Second Definition Procedure Modification Group meeting held
13/09/07	Definition Report presented to the Panel
20/09/07	First Assessment Procedure Modification Group meeting held
27/09/07	Second Assessment Procedure Modification Group meeting held
16/10/07	Third Assessment Procedure Modification Group meeting held
24/10/07	Fourth Assessment Procedure Modification Group meeting held
29/10/07	Fifth Assessment Procedure Modification Group meeting held
02/11/07	Request for Party/Party Agent impact assessment issued
05/11/07	Requirements Specification issued for BSC Agent impact assessment
05/11/07	Assessment Procedure consultation issued
15/11/07	Assessment Procedure consultation responses returned
16/11/07	Sixth Assessment Procedure Modification Group meeting held
04/12/07	Seventh Assessment Procedure Modification Group meeting held
13/12/07	Assessment Report presented to the Panel (2 month extension of Assessment)
04/01/08	Eighth Assessment Procedure Modification Group meeting held
17/01/08	Assessment Procedure consultation issued
01/02/08	Ninth Assessment Procedure Modification Group meeting held
14/02/08	Assessment Report presented to the Panel

ESTIMATED COSTS OF PROGRESSING MODIFICATION PROPOSAL ¹⁰	
Meeting Cost	£4,500
Legal/Expert Cost	£5,000
Impact Assessment Cost	£10,000
ELEXON Resource	130 man days £27,040

These costs have changed from those provided in the Definition Report, due to additional Assessment of P215.

Modification Group Membership

Member	Organisation	14/8	04/9 (Tel)	20/9	27/9	16/10	24/10	29/10	16/11	04/12 (Tel)	04/01	01/02
David Jones	ELEXON (Chairman)	Y	Y	Y	N	Y	Y	Y	N	Y	Y	Y
Dean Riddell	ELEXON (Lead Analyst)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Rekha Patel	Proposer's representative	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
Lillian Macleod	National Grid	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
Ben Sheehy	E.ON UK	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Dave Wilkerson	Centrica	N	Y	Y	N	Y	N	Y	Y	Y	Y	Y
Andrew Colley	Scottish and Southern	Y	Y	N	Y	Y	Y	Y	Y	N	Y	Y
Colin Prestwich	Smartest Energy	Y	Y	Y	Y	N	Y	N	Y	N	(Tel; part mtg)	N
Edward Hunter	npower	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Gary Henderson	SAIC	Y	Y	Y	Y	Y	Y	N	Y	Y	N	Y

Attendee	Organisation	14/8	04/9 (Tel)	20/9	27/9	16/10	24/10	29/10	16/11	04/12 (Tel)	04/01	01/02
Natasha Hall	ELEXON (Lawyer)	N	N	Y	N	N	N	Y	Y	Y	N	N
Richard Hall	Ofgem	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N
Katie Brennan	Ofgem										Y	Y
Phillippa Pickford	Ofgem										N	N

¹⁰ 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

David Lewis	EDF	N	N	N	N	N	N	N	N	N	N	N
Tom Selby	E.ON UK			Y	N	N	N	N	N	N	N	N
Mark Gribble	Logica	Y	N	Y	Y	Y	Y	Y	N	Y	N	N
John Guest	Logica			N	Y	Y	Y	Y	Y	Y	N	N
Jonathon Blott	Logica								Y	N	N	N
Rob Smith	National Grid			Tel	N	N	N	N	N	Y	N	N
Emrah Cevik	ELEXON	Y	Y	Y	Y	Y	N	Y	N	Y	Y	N
Roger Harris	ELEXON	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
Chris Stewart	ELEXON (acting Chairman)				Y	N	N	N	Y	N	N	N
John Lucas	ELEXON								Y	Y	N	N

Modification Group Terms Of Reference

Appendix 2 of the initial P215 Assessment Report (Attachment 7) contains the Terms of Reference.

Appendix 3: Results of Second Assessment Procedure Consultation

8 responses (representing 44 Parties and 0 non-Parties) were received to the second P215 Assessment Procedure consultation.

A summary of the consultation responses is provided in the table below (bracketed numbers represent the number of Parties and non-Parties represented by respondents).

Details of the arguments made by respondents can be found in Sections 3 and 4, along with the Modification Group's consideration of these arguments. Full copies of the consultation responses are attached as a separate document (Attachment 4).

Details of the results of the first P215 Assessment Procedure consultation can be found in Appendix 3 of the initial P215 Assessment Report (Attachment 7).

Q	Consultation question	Yes	No	N/A	Neutral
1	Do you believe Proposed Modification P215 would better facilitate the achievement of the Applicable BSC Objectives?	4	4		
Q	Consultation question	Yes	No	N/A	Neutral
2	Do you believe Alternative Modification P215 would better facilitate the achievement of the Applicable BSC Objectives when compared to the current baseline?	8			
Q	Consultation question	Yes	No	N/A	Neutral
3	Do you believe Alternative Modification P215 would better facilitate the achievement of the Applicable BSC Objectives when compared to the Proposed Modification?	8			
Q	Consultation question	Yes	No	N/A	Neutral
4	Do you support the implementation approach described in the consultation document? In particular, do you support the approach that two versions of the CRA-I020 and (under the Alternative only) ECVAA-I014 would be maintained?	7			1
Q	Consultation question	Yes	No	N/A	Neutral
5	Would implementation of P215 Proposed or Alternative impact your systems, particularly the changes to the ECVAA-I014 associated with the P215 Alternative?	7	1		
Q	Consultation question	Yes	No	N/A	Neutral
6	Do you believe there are any alternative solutions not identified and that should be considered within the remaining P215 timetable?		8		
Q	Consultation question	Yes	No	N/A	Neutral
7	If you would qualify for P215, but do not currently submit FPNs, would you seek to use the P215 arrangements	1	2	5	
Q	Consultation question	Yes	No	N/A	Neutral
8	Would Proposed or Alternative Modification P215 affect how you manage your Credit Cover?	4	3	1	
Q	Consultation question	Yes	No	N/A	Neutral
9	Would you expect a saving in terms of cost or collateral due to Proposed or Alternative Modification P215? Can you provide an estimate?	5	2	1	
Q	Consultation question	Yes	No	N/A	Neutral
10	Do you believe that Proposed or Alternative Modification P215 would better secure the market as a whole against the risk of bad debt, compared with the baseline?	6 (4 Alt only)			2
Q	Consultation question	Yes	No	N/A	Neutral
11	Do you believe that the legal text provided delivers the Proposed and Alternative Modification P215 solutions agreed by the Modification Group?	8			
Q	Consultation question	Yes	No	N/A	Neutral
12	Does P215 raise any issues that you believe have not been identified so far and that should be progressed as part of the Assessment Procedure?		8		
Q	Consultation question	Yes	No	N/A	Neutral
13	Are there any further comments on P215 that you wish to make?	1	7		

Appendix 4: Results of Impact Assessment

During the Assessment Procedure an impact assessment was undertaken in respect of all BSC systems, processes, documentation and parties. The following areas have been identified as impacted by P215. Please refer to Section 3 for details of the costs associated with these impacts.

a Impact on BSC Systems and Processes

System / Process	Impact of Proposed/Alternative Modification
CDCA	Alternative only: add new run mode to CDCA Aggregation Process; CDCA Aggregation Report module to generate a new BMU Meter Volume flow.
CRA	Proposed and Alternative: CRA-I014 and CDCA-I020 to report BM Unit qualifying flag; CRA-I015 to include BM Unit Exempt Export data, P215 qualifying flag and Demand BMU system changes; CRA-I014 to report Demand BMUs; database to include P215 and Demand BM Units; CRA BMU Screen to include P215 and Demand Qualifying tick-boxes.
ECVAA	Proposed and Alternative: ECVAA BM Unit loader to read new flag value; database to include qualifying flag. Alternative only: create new BMU Meter Volume loader for ECVAA; ECVAA Database to hold BMU Meter Volumes; ECVAA-I014 to report MEI value in new field.
Credit Check	Proposed and Alternative: process Demand Qualifying BMUs correctly (use DC rather than GC); process P215 Qualifying BMUs using Meter Volume data or FPN and derive an MEI value for impacted parties.

The BSC Agent impact assessment is attached as a separate document, Attachment 6.

b Impact on BSC Agent Contractual Arrangements

No impact identified.

c Impact on BSC Parties and Party Agents

Parties that operate as generators are impacted by both the P215 Proposed and Alternative Modifications. They may need to update any systems and software used in Metered Volume forecasting and Credit Cover modelling. Parties will have to ensure that their systems are still able to accept the amended BSC Agent flows (see **a** above).

Full copies of the Party and Party Agent impact assessment responses are attached as a separate document, Attachment 5.

d Impact on Transmission Company

No impact identified (due to implementation method, as previously discussed).

e **Impact on BSCCo**

Area of Business	Impact of Proposed/Alternative Modification
Change Implementation	Implementation of changes to configurable items and other system documentation. Management of solution development and arranging participant testing, in conjunction with the ECVAA service provider.
CVA Data/Operations	Amendment of guidance documentation, information sheets, LWIs. Provide information for Trading Operations Report, provide support to Industry on the new methodology. Train staff in the new methodology, support implementation.
Corporate Services	Support implementation – assurance, audit software development.
Legal	Support assessment and implementation.

f **Impact on Code**

Code Section	Impact of Proposed/Alternative Modification
Section K	New paragraph 3.7 added to define a Credit Qualifying BM Unit and specify associated requirements.
Section M	Paragraph 1.2.3 amended in accordance with P215 to specify where different methods of CEI calculation should be applied; new paragraph 1.8 added relating to review of FPN data. <i>Alternative only:</i> Paragraph 1.2.1 amended to incorporate MEI into the calculation of Energy Indebtedness, and to include MEI in the provisions for material doubt.
Section Q	Amend paragraph 3.1.1 with regard to the submission of FPNs for the purposes of status as a Credit Qualifying BM Unit.
Section R	<i>Alternative only:</i> Amend to reflect new requirements on the CDCA.
Section U	<i>Alternative only:</i> Amend to include the Credit Cover Volume Allocation Run.
Section X-1	Insert new definition of Credit Qualifying BM Unit after the definition of Credit Facility. <i>Alternative only:</i> Amend definition of Volume Allocation Run.
Section X-2	<i>Alternative only:</i> Add the necessary definitions and acronyms.

g **Impact on Code Subsidiary Documents**

Document	Impact of Proposed/Alternative Modification
ECVAA Service Description	Add the new algorithm for the calculation of CEI for Generating BMUs from the FPN (and for calculating the total CEI for a Party). Amend the ECVAA-I014.

Document	Impact of Proposed/Alternative Modification
CVA Data Catalogue	Amend the ECVAA-I014.
BMRA Service Description	Possible impact, dependent on current system operation.
BSCP15	Application process for Credit Qualifying BM Unit status.

h Impact on Core Industry Documents/System Operator-Transmission Owner Code

No impact identified.

i Impact on Other Configurable Items

Document	Impact of Proposed/Alternative Modification
Logica IDD part 1	Amend the ECVAA-I014.
BMRA URS	Possible impact, dependent on current system operation.

j Impact on BSCCo Memorandum and Articles of Association

No impact identified.

k Impact on Governance and Regulatory Framework

No impact identified.

Appendix 5: List of Attachments

Attachment 1 – Draft legal text for the Proposed Modification.

Attachment 2 – Draft legal text for the Alternative Modification.

Attachment 3 – Additional P215 Analysis.

Attachment 4 – Responses to second P215 Consultation.

Attachment 5 – BSC Agent impact assessment.

Attachment 6 – Transmission Company analysis.

Attachment 7 – Initial P215 Assessment Report and attachments.