

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

Prepared by: P215 Modification Group

<b>Date of Issue:</b>	7 December 2007	<b>Document Reference:</b>	P215AR
<b>Reason for Issue:</b>	For Use	<b>Version Number:</b>	1.0

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**Proposed Modification P215** seeks to amend the Balancing and Settlement Code ('the Code') to allow certain types of BM Units (defined as 'Credit Qualifying BM Units') to have their Credit Cover calculated using Final Physical Notifications (FPN), instead of using Credit Assessment Load Factor (CALF) values as in the current methodology.

**Alternative Modification P215** seeks to amend the Code to allow 'Credit Qualifying BM Units' to have their Credit Cover calculated using FPN. Additionally, 2 Working Days after Gate Closure, Metered Volumes from a Central Data Collection Agent run would be used in the Credit Cover of CVA registered Credit Qualifying BM Units (SVA registered Credit Qualifying BM Units would use FPN over a 5 Working Day CEI period).

### MODIFICATION GROUP'S RECOMMENDATIONS

The P215 Modification Group invites the Panel to:

- **AGREE a provisional recommendation as to whether Proposed Modification P215 should or should not be made, noting that the Group were SPLIT on this matter; and**
- **AGREE a provisional recommendation that Alternative Modification P215 should be made; and**
- **DETERMINE in light of the revised Impact Assessment information whether implementation of the P215 Proposed or Alternative Modification should include changes to National Grid systems or a solution which would avoid such changes; and**
- **AGREE the draft legal text for Proposed Modification P215; and**
- **AGREE the draft legal text for Alternative Modification P215; and**
- **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 17 January 2008; and**
- **If P215 is to be implemented without changes to National Grid Systems, 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; and**

<sup>1</sup> The current version of the Code can be found at <http://www.elexon.co.uk/bscrelateddocs/BSC/default.aspx>.

- **If P215 is to be implemented without changes to National Grid Systems, AGREE a provisional Implementation Date for Alternative Modification P215 of 6 November 2008 if an Authority decision is received on or before 27 March 2008, or 25 June 2009 if the Authority decision is received after 27 March 2008 but on or before 30 October 2008; OR**
- **If P215 is to be implemented with changes to National Grid Systems, AGREE a provisional Implementation Date for both Proposed and Alternative Modification P215 of 25 June 2009 if an Authority decision is received on or before 30 June 2008, or 5 November 2009 if the Authority decision is received after 30 June 2008 but on or before 28 November 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 contained in Appendix 4.

Parties	Sections of the BSC	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 checked="" type="checkbox"/>	F <input type="checkbox"/>	Communication Requirements Documents <input type="checkbox"/>
Transmission Company <input checked="" type="checkbox"/>	G <input type="checkbox"/>	Reporting Catalogue <input checked="" type="checkbox"/>
<b>Party Agents</b>	H <input type="checkbox"/>	<b>Core Industry Documents</b>
Data Aggregators <input type="checkbox"/>	I <input type="checkbox"/>	Ancillary Services Agreement <input type="checkbox"/>
Data Collectors <input type="checkbox"/>	J <input type="checkbox"/>	British Grid Systems Agreement <input type="checkbox"/>
Meter Administrators <input type="checkbox"/>	K <input checked="" type="checkbox"/>	Data Transfer Services Agreement <input type="checkbox"/>
Meter Operator Agents <input type="checkbox"/>	L <input type="checkbox"/>	Distribution Code <input type="checkbox"/>
ECVNA <input type="checkbox"/>	M <input checked="" type="checkbox"/>	Distribution Connection and Use of System Agreement <input type="checkbox"/>
MVRNA <input type="checkbox"/>	N <input type="checkbox"/>	Grid Code <input type="checkbox"/>
<b>BSC Agents</b>	O <input type="checkbox"/>	Master Registration Agreement <input type="checkbox"/>
SAA <input checked="" type="checkbox"/>	P <input type="checkbox"/>	Supplemental Agreements <input type="checkbox"/>
FAA <input type="checkbox"/>	Q <input checked="" type="checkbox"/>	Use of Interconnector Agreement <input type="checkbox"/>
BMRA <input checked="" type="checkbox"/>	R <input checked="" type="checkbox"/>	<b>BSCCo</b>
ECVAA <input checked="" type="checkbox"/>	S <input type="checkbox"/>	Internal Working Procedures <input checked="" type="checkbox"/>
CDCA <input checked="" type="checkbox"/>	T <input type="checkbox"/>	<b>BSC Panel/Panel Committees</b>
TAA <input type="checkbox"/>	U <input checked="" type="checkbox"/>	Working Practices <input checked="" type="checkbox"/>
CRA <input checked="" type="checkbox"/>	V <input type="checkbox"/>	<b>Other</b>
SVAA <input type="checkbox"/>	W <input type="checkbox"/>	Market Index Data Provider <input type="checkbox"/>
Teleswitch Agent <input type="checkbox"/>	X <input checked="" type="checkbox"/>	Market Index Definition Statement <input type="checkbox"/>
BSC Auditor <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"/>		
<b>Other Agents</b>		
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:

- Were **SPLIT** as to whether the Proposed Modification should be made. Though the Group agreed by majority that the Proposed Modification would better facilitate the achievement of Applicable BSC Objective (d) by simplifying administration and increasing the accuracy of the Credit Cover arrangements, the Group was split as to whether it would better facilitate the achievement of Applicable BSC Objective (c). 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 improved facilitation against (d), leading to an overall split as to whether the Proposed Modification should be made;
- **AGREED** that an Alternative Modification should be developed in order to further increase the accuracy of the Credit Cover arrangements compared with the Proposed Modification;
- **AGREED** by majority that the Alternative Modification would better facilitate the achievement of Applicable BSC Objectives (c) and (d) by further increasing the accuracy of the Credit Cover arrangements by using actual Metered Volume data and reducing ELEXON administration;
- **NOTED** that the implementation costs for the Proposed Modification were estimated to be £179,210<sup>2</sup>, and the estimated cost of associated changes to National Grid systems is £250,000;
- **NOTED** that the implementation costs for the Alternative Modification were estimated to be £363,790<sup>2</sup>, and the estimated cost of associated changes to National Grid systems is £350,000;
- **ESTIMATED** that the cost-savings of both the Proposed and Alternative Modification for Parties and BSCCo would be in the region of at least £4,200 per annum due to a reduction in the number of CALF appeals;
- **CONCLUDED** that both the Proposed and Alternative Modifications would reduce the degree to which the market as a whole can be inaccurately securitised with regard to the CEI element of Credit Cover;
- **ESTIMATED** that the Proposed Modification would tend to increase the accuracy of CEI calculation such that, with regard to the CEI element of Credit Cover, the minimum amount of security the market as a whole is required to lodge would be more accurate by approximately £2M;
- **ESTIMATED** that the Alternative Modification would tend to increase the accuracy of CEI calculation such that, with regard to the CEI element of Credit Cover, the minimum amount of security the market as a whole is required to lodge would be more accurate by approximately £10M;
- **ESTIMATED** that both the Proposed and Alternative Modifications would increase the accuracy of CEI calculation such that the peak inaccuracy of the CEI element of Credit Cover would be reduced, with the result that the market would no longer be required to be inaccurately securitised relative to the overall Metered Volume position;
- **ESTIMATED** that the market's maximum level of exposure with regard to the CEI element of Credit Cover over the 12 month period analysed by the Group, would have been reduced by £85M for the Proposed Modification and by £95M for the Alternative Modification;
- **AGREED** an Implementation Date for both the Proposed and Alternative Modifications of November 2008 or June 2009, dependent on receipt of a decision from the Authority;

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<sup>2</sup> This includes port and migrate costs which would be incurred if P215 was implemented in November 2008. June 2009 implementation would not have these costs. See section 3.14.4 for further detail.

- **AGREED** that the draft legal text delivers the intended solution for the Proposed and Alternative Modifications;
- **NOTED** that the decisions and recommendations made in this Report were made following consideration of the revised assessment of the impact on National Grid, and under the expectation that a solution would be found that would mitigate impact on National Grid; and
- **AGREED** that the Panel should determine, in light of the revised Impact Assessment information, whether implementation of the P215 Proposed or Alternative Modification should include changes to National Grid systems or a solution which would avoid such changes.

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.

## 2 DESCRIPTION OF MODIFICATION

This section outlines the solution for the Proposed Modification and Alternative Modification as developed by the 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 Definition Report ([P215 Definition Report](#), Panel 131/06).

P215 seeks to revise the provisions regarding Credit Cover in the Balancing and Settlement Code ('the Code'). The Proposer suggested that the revisions would be to the method of calculating Credit Cover with regard to 'generating BM Units' (see section 2.1 for the agreed definition of the term 'Credit Qualifying BM Unit' which was developed by the group to give effect to the intent of the Modification Proposal), with the intent that the accuracy of the calculations would be increased and consequently the amount of credit that Parties are required to lodge would be based on more accurate data than at present.

At present, Credit Cover is 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). The EI period is 29 Settlement Days, for which CEI is calculated over the most recent five Working Days and AEI calculated over the remainder of the total 29 day EI period, for which an Interim Information Settlement Run (II Run) has been carried out. Figure 1 illustrates the current arrangements for the calculation of Parties' Energy Indebtedness. The arrangements are described in greater detail in the P215 IWA ([P215 IWA](#), Panel 130/06).

The information from the 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 the maximum Generation Capacity (GC) or Demand Capacity (DC) of the BM Unit in conjunction with a value of Credit Assessment Load Factor (CALF) 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 2006 for Winter 2007), and therefore encompass BM Units' average output, Bid-Offer Acceptance (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 becomes available.

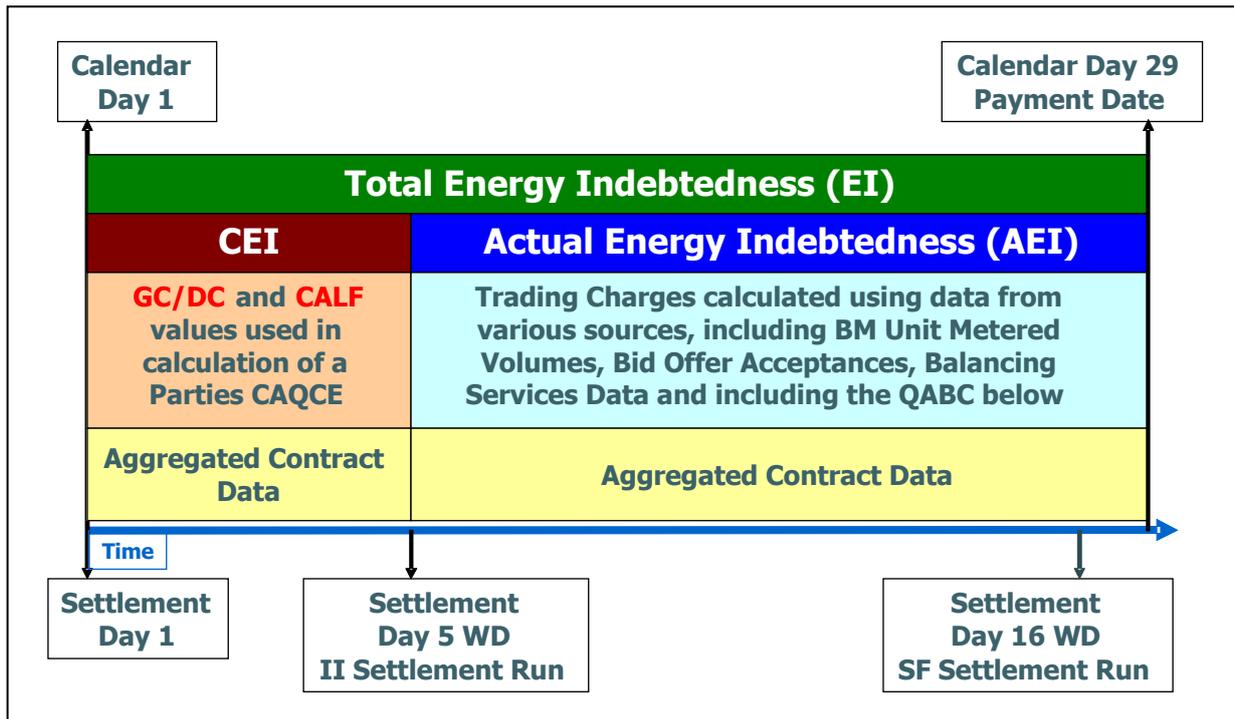


Figure 1: Current Energy Indebtedness arrangements

## 2.1 Proposed Modification

As agreed in the Definition Procedure (and detailed in the Definition Report), the provisions of the P215 Modification Proposal would apply on the basis of the following definition. It is noted that the definition was updated during the Assessment Procedure so that the terminology is now 'Credit Qualifying BM Unit' rather than a 'generating BM Unit to which P215 is applicable' (which was the original wording of the Proposer) in order to more clearly reflect the criteria.

### Definition of a Credit Qualifying BM Unit to which P215 is applicable:

*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', either because they are required to have it set to 'Yes' due to obligations placed upon them by the Grid Code or because they have elected for it to be set to 'Yes'. This is reflected in the wording of the first paragraph of the definition, which was used because the Group considered that it would be inappropriate to refer directly to the FPN flag as 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 ([P215 Definition Report](#), Panel 131/06)).

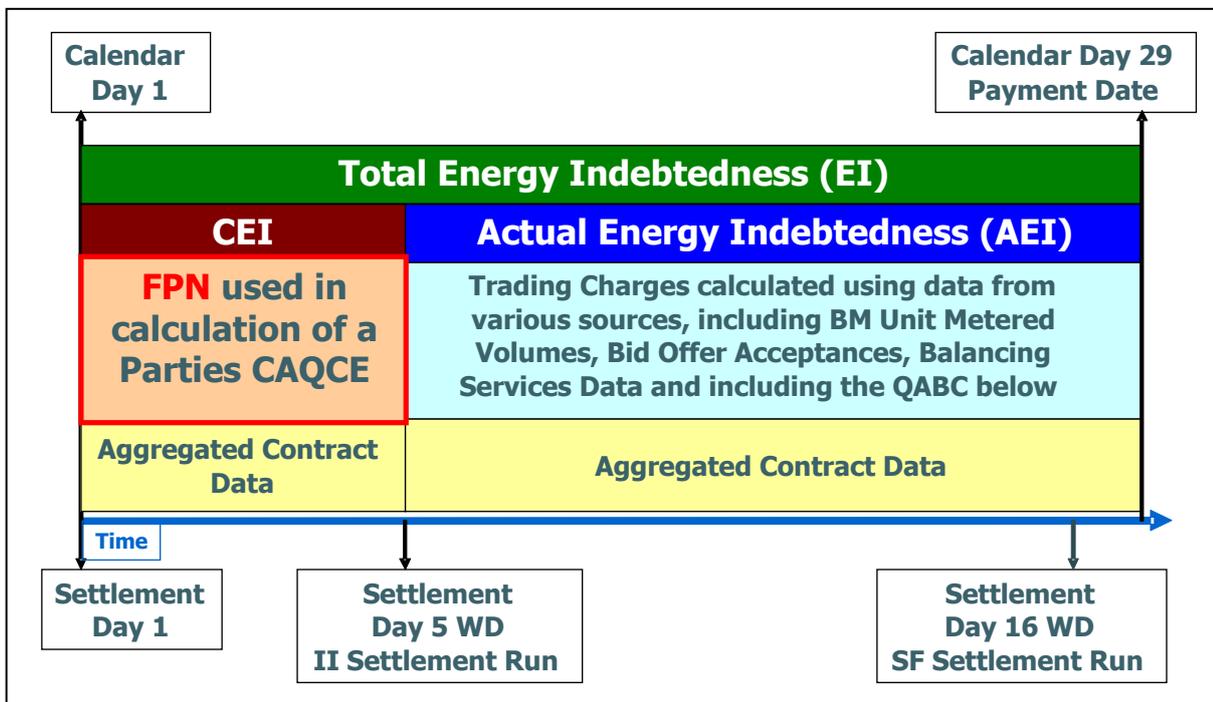
**2.1.1 Use of FPN to calculate CEI, in place of BMCAEC**

The P215 Proposed Solution is that FPNs are used in the calculation of CEI for Credit Qualifying BM Units in the Credit Cover arrangements, 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. The P215 IWA provides more detail on this ([P215 IWA](#), Panel 130/06).

The Group agreed a principle that the Credit Cover arrangements are intended to secure against Parties’ estimated indebtedness over 29 calendar days, taking account of their imbalance positions and Bid-Offer activity. The Group also considered the principle that the purpose of CEI was to provide a suitable 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 takes into account the overall effect of BOA activity and outages on a BM Unit’s expected Metered Volume, through examination of historical data for the BM Unit from previous corresponding BSC Seasons. However, this will not necessarily reflect the BM Unit’s operation in any Settlement Period of the current BSC Season. Furthermore, the existing 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 the addition of any other new information to the calculation, or any other adjustment to the Credit Cover arrangements, was the intent of the P215 Modification Proposal. The Group was satisfied that FPNs are reasonably accurate as a proxy for the estimation of BM Unit Metered Volumes, and overall are sufficiently accurate for the purposes of the Credit Cover arrangements.

Figure 2 illustrates how the arrangements for the calculation of Parties’ Energy Indebtedness would be affected by the implementation of the provisions of P215 Proposed Modification, in comparison with the current arrangements as shown previously in figure 1, above.



**Figure 2: P215 proposed Energy Indebtedness arrangements**

The Group believed that ideally 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. The Group considered that 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. The impact of including BOA data would be to materially increase the system changes

required and to introduce an alteration to the CEI timetable, and the Group considered it was not appropriate that these impacts should be considered as part of 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. At present, if no FPN is received for a BM Unit in relation to a particular Settlement Period then 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 will default to zero. The Group agreed that the current default rules are sufficiently robust to be used in the P215 provisions as the FPN information received by National Grid under the P215 provisions would be the same as it is presently.

### **2.1.3 Reporting in the ECVAA I014 Notification Report**

The ECVAA I014 Notification Report shows 'Credit Assessment Credited Energy Volume by BMU Type'. Credit Assessment Credited Energy Volume (CAQCE) is calculated using BMCAEC, BMCAIC or FPN for Production BM Units, Consumption BM Units and Interconnector BM Units respectively, and is reported accordingly. CAQCE reporting is currently split between 'Interconnector Credit Assessment Credited Energy Volume (MWh)' and 'Non Interconnector Credit Assessment Credited Energy Volume (MWh)'.

The minimum change required to the Notification Report would be to change the CAQCE split to one 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).

### **2.1.4 Approach to demand BM Units within Production (P) status Trading Units<sup>3</sup>**

The Group had noted that under the current Credit Cover arrangements, the credit liability of demand BM Units that form part of Production Trading Units is netted off against the exporting BM Units via the CALF values. All BM Units in a Production Trading Unit are assigned P status through the Trading Unit Methodology, and CEI is calculated using the GC; any demand BM Units within the Trading Unit will have P status. However, the BM Unit's activity will not be accurately reflected if the GC values of such demand BM Units are used because in most cases the GC value would be zero. The current practice of netting off the credit liability of these BM Units against the load factor of the Production BM Units in the same Trading Unit applies their demand into the Trading Unit net production estimation and hence 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, as they may represent 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 would involve the least impact on Parties by allowing the BM Units to be included in CEI using DC and CALF values calculated according to the existing methodology. ECVAA system changes would be needed to identify BM Units that would have their CEI calculated in this way and amendment to data processing and reporting.

### **2.1.5 Application process for Credit Qualifying BM Unit status**

The Group determined criteria that must be met by Parties that do not qualify automatically for status as a Credit Qualifying BM Unit but wish to apply to the Panel for assignment of such status. The Group agreed that the criteria for an application to be successful in relation to a Party's BM Unit should 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

<sup>3</sup> 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.

The Group had considered that the 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 responsibility in this area by the Panel). However, as the agreed criteria are clear, the Group felt that it was likely, and would be appropriate 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, as this can be done mechanistically. The results of applications would then be presented to the Panel (or Panel Committee). The 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 agreed that a formal application procedure should be introduced in a BSC Procedure (BSCP), and considered that BSCP15 'BM Unit Registration' would be suitable to contain the application process.

The Group agreed that where qualification for Credit Qualifying BM Unit status had been awarded following application, review of this status should be carried out annually. The Group agreed that BSCCo should carry out reviews of Credit Qualifying status in line with the GC/DC reviews performed currently. 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**

It was agreed that the Panel would have the right to, if it considered it appropriate, review (and could request that the Transmission Company provide data to assist in such review) a Lead Party's fulfilment of its obligation to submit FPNs in accordance with the Grid Code (this is a current obligation on a Lead Party under the Code). The purpose of this provision was to provide recourse in the event that a Party had submitted, or was submitting on an ongoing basis, inaccurate FPN data (i.e. that did 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.

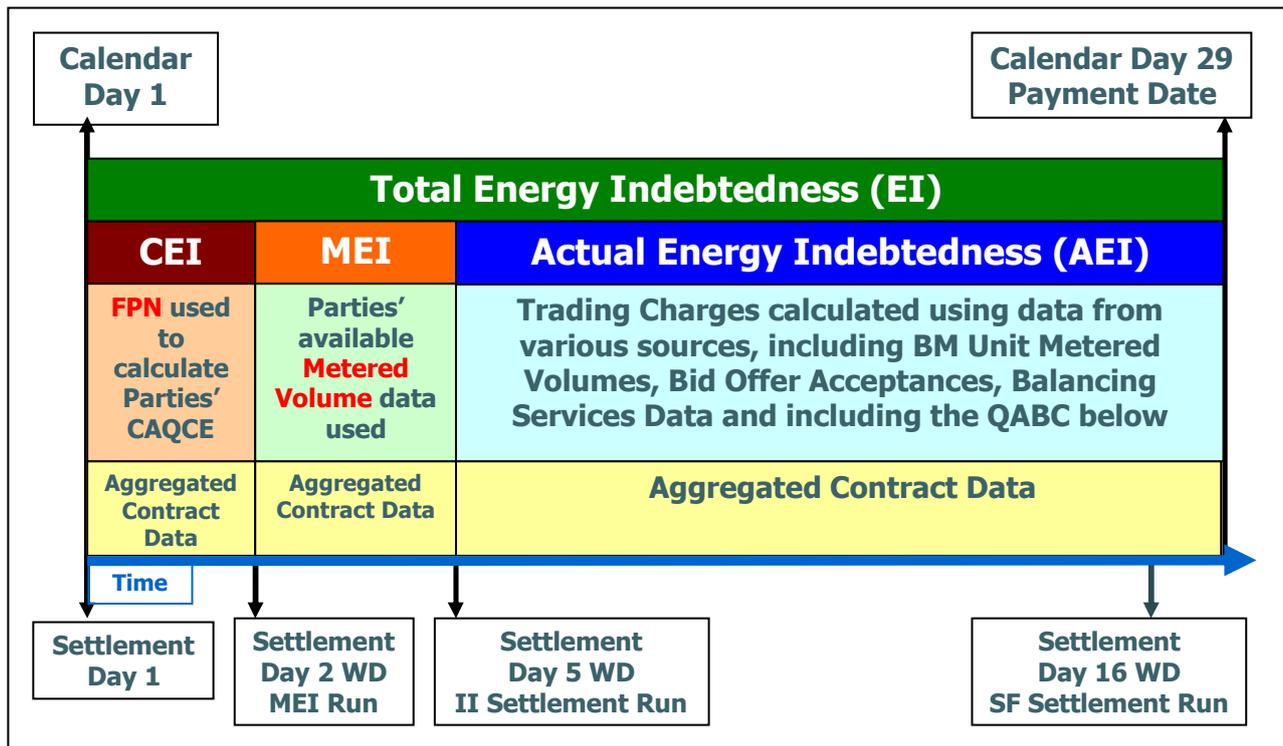
## **2.2 Alternative Modification**

The Group developed an Alternative P215 Modification whereby CEI would be calculated using FPN for Credit Qualifying BM Units, and available Metered Volume data from CDCA would be used in the calculation of Energy Indebtedness for a sub-set of 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.

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). MEI is a new concept introduced to identify the component of Energy Indebtedness calculated using metered data from 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 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 this data by this time. This data is direct from meter channels and is unvalidated at this point, but the Group believed that, even in this form, the Metered Volume data available would be significantly more accurate than a value of CEI calculated using either the current methodology or the methodology proposed by the P215 Proposed Modification. It should be noted that the results of a Credit Cover Run would only be used for Credit Cover purposes; this would not be a Settlement Run.

If no Metered Volume data is available for a BM Unit (either from the Main or Check meter) then the Energy Indebtedness would continue to be calculated using FPN data for the affected Settlement Periods.

Large generating BM Units are registered in CVA and would therefore be subject to the earlier use of Metered Volume data in the Credit Cover arrangements. The Group was comfortable that this would render the use of either BOA or Maximum Export Limit (MEL) data in the CEI period unnecessary, as the shorter duration of the CEI period would sufficiently mitigate any detrimental impact on accuracy of not including Bid-Offer Acceptances and not incorporating generator trips in the CEI component of the calculation.

All 'P' status Credit Qualifying BM Units and CVA registered Exempt Export BM Units would be subject to the shorter CEI period and earlier use of Metered Volume data of the P215 Alternative. SVA registered Exempt Export BM Units and BM Units assigned Credit Qualifying status following application would not be subject to the shorter CEI period and earlier use of Metered Volume data, but these categories would constitute only a minority of the total number of Credit Qualifying BM Units.

Credit Qualifying BM Units that are not CVA registered would use FPN data in the calculation of its CEI, over a CEI period that would remain five Working Days. The Group considered that the operation of SVA registered Exempt Export BM Units and other potential qualifying BM Units (i.e. by application) identified thus far do not involve a significant amount of BOA activity, and that the effect of an Exempt Export generator trip would not be material. The Group only identified one type of BM Unit type that is expected to

qualify through application and that is a BM Unit acting as a consolidator for export sites registered in SVA. It was noted that, though consolidator BM Units may produce significant Export amounts, they are not subject to the same trip risk as BM Units of a comparable scale that are made up of one (or a few) large generators. While a single exemptible generator that contributes its Export to a consolidator may trip, it is very unlikely that a significant number of all the contributing exemptible generators would trip at the same time.

The Group was therefore comfortable that CEI for these BM Units could satisfactorily be calculated using FPN submissions not augmented with any BOA or MEL data, without causing any material detrimental impact upon the accuracy of Credit Cover.

The P215 Alternative impacts the ECVAA-I014 Notification Report in a similar way to the P215 Proposed Modification because CAQCE would be calculated using FPNs for Credit Qualifying BM Units. However, the CEI period for Credit Qualifying BM Units registered in CVA would be reduced from five Working Days to two Working Days. The ECVAA-I014 would also be impacted by the reporting of MEI information; this would be similar to the AEI reporting already contained in the ECVAA-I014.

## 2.3 Clarification of the P215 Solution Options Consulted Upon

In addition to the P215 Proposed Modification, the Group produced four different options for the P215 Alternative. Following the consultation and impact assessments, and the subsequent Modification Group meetings, option 3 was selected as the P215 Alternative Modification. It should be noted that option 4 was submitted for consultation, it emerged that implementation of this solution option was fundamentally unfeasible due to the associated system implications; option 4 was therefore discounted and the Group did not consider it further.

The four potential options for a P215 Alternative Modification for consultation were:

1. Use FPNs in the CEI calculation (as in P215 Proposed) initially, updated with BOA volume data when it becomes available (two hours after Gate Closure i.e. Settlement Period+4);
2. Use FPNs in the CEI calculation (as in P215 Proposed) initially, updated with both BOA volume data and MEL data (if MEL is lower than FPN) when the BOA and MEL data becomes available (two hours after Gate Closure i.e. Settlement Period+4); or
3. Use FPNs in the CEI calculation (as in P215 Proposed) for all Credit Qualifying BM Units. In conjunction with this, for **Credit Qualifying CVA registered BM Units only**, shorten the CEI period to two Working Days (and extend the AEI period accordingly), by introducing a 'Credit Cover Run' at Settlement Day+2 to extract the Metered Volume data from the Central Data Collection Agent (CDCA). Other Credit Qualifying BM Units would continue to use FPN over a five Working Day CEI period.
4. Use FPNs in the CEI calculation (as in P215 Proposed) for all 'generating BM Units'. In conjunction with this, for **Credit Qualifying CVA registered BM Units only**, shorten the CEI period to two Working Days (and extend the AEI period accordingly), by introducing a 'Credit Cover Run' at Settlement Day+2 to extract actual imbalance cash flow data (rather than just Metered Volume data) from the Settlements Administration Agent (SAA). Other Credit Qualifying BM Units would continue to use FPN over a five Working Day CEI period.

These options are each described in greater detail in the [P215 Consultation Document](#).

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

##### **3.1.1 Modification Group's Discussions**

The Group considered that the analysis conducted (see section 3.12) had demonstrated the superior accuracy of FPNs as a proxy estimation of the Metered Volumes of generating BM Units compared with the current methodology of calculating Indebtedness in the CEI period. The Group agreed that this amounted to a defect in the current Credit Cover arrangements as it showed that they do not achieve the desired level of accuracy.

##### **3.1.2 Views of Respondents to Assessment Procedure Consultation**

There was general agreement that both the Proposed Modification and the Alternative Modification would deliver a more accurate proxy estimation of Metered Volume data. Respondents were satisfied that the considerations of the Group and the results of the analysis conducted (see Attachment 3 and section 3.12) indicated that accuracy would be improved.

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

##### **3.2.1 Modification Group's Discussions**

The Group examined the material impact of the provisions proposed by P215 in relation to the risk of over- and under-collateralisation by Parties as a result of the BSC Credit Cover arrangements. Parties may always lodge excessive Credit Cover, i.e. 'over-collateralise' their position, but this area was to cover specifically the effect that the Credit Cover arrangements would have on the risk of Parties lodging too much or too little Credit Cover as a result of inaccurately calculated CEI.

The Group considered that the P215 Proposed Modification may tend to cause some Parties to be under-collateralised in comparison with the actual risk they pose to other Parties. This is because the Proposed Modification does not include any adjustment of the FPNs using Bid Acceptance volume data, which may lead to an underestimation of BM Units' actual Metered Volumes in their CEI. This could contribute to underestimation in the Parties' overall Energy Indebtedness.

##### **3.2.2 Views of Respondents to Assessment Procedure Consultation**

A respondent stated that the P215 Proposed Modification would tend to overestimate BM Unit Metered Volumes, with the result that the BM Units are under-secured (N.B. this argument was put forward by E.ON UK and was amended at the final Assessment Phase Modification Group meeting as it originally stated that the under-securitisation would result from a tendency to *underestimate* Metered Volumes). It was noted that the current baseline causes periods when Parties are required to over-collateralise (i.e. relative to their actual Metered Volume) and also periods when Parties may under-collateralise (i.e. they could theoretically lodge less Credit Cover than would be required to cover their actual Metered Volumes); the respondent believed however that these periods effectively offset each other such that Parties are required to lodge sufficient Credit Cover to secure their actual Metered Volumes. The respondent argued that to move from this situation to the arrangements of the P215 Proposed Modification would result in systemic under-securitisation in terms of the amount of Credit Cover Parties associated with Credit Qualifying BM Units are required to lodge, which would be to the detriment of Applicable BSC Objective (c).

Another respondent supported this view, commenting that the under-securitisation caused by the arrangements of P215 Proposed would be due to BOA activity not being taken into account.

One respondent believed that P215 Proposed was an improvement on the baseline, but had reservations regarding under-securitisation of subcategories of Credit Qualifying BM Units that participate in many Bid Offer acceptances because the manner of their operation means that their Metered Volume cannot be estimated with sufficient accuracy using FPNs alone. The respondent was concerned about the consequent risk to the industry this would cause.

The counter view of other respondents was that the analysis carried out in the assessment of P215 clearly showed that, despite any issue around under-securitisation of some Credit Qualifying BM Unit types, the use of FPN data in the calculation of CEI was significantly more accurate than the current methodology. It was noted that the current baseline arbitrarily requires over- and under-securitisation at different times (though this methodology does have the benefit of stability of the required level of securitisation).

A respondent believed that the P215 Proposed Modification should deliver improvement in the average accuracy of the credit indebtedness calculation, but had concerns that a generator facing financial difficulty could avoid the requirement to post more Credit Cover by declaring artificially high Physical Notifications despite Grid Code obligations (which, it was noted, are not always monitored or enforced in short timescales). This would lead to the generator being under-securitised. The respondent believed that a generator could also amend its MEL submissions in this way, so any solution utilising MEL data would still be susceptible to this issue.

A respondent argued that if the Credit Cover arrangements are to reflect the value of a default, then the calculation inputs should be as close as possible to the actual outturn liabilities at the SF Run. The respondent stated that analysis had shown use of FPN in the CEI calculation to be far more accurate than the current methodology on a Settlement Period basis, and therefore believed that the methodology of P215 Proposed would deliver a better estimation of the liabilities of Credit Qualifying BM Units.

Respondents believed that the use of BOA data in the calculation of CEI would address the issue of Parties being able to under-securitise because of overestimation of their activity in the Balancing Mechanism. However, respondents believed that the possibility remained that Parties could submit inflated FPNs when in financial difficulty, thereby avoiding the need to post more Credit Cover and effectively leaving them under-securitised relative to their actual Metered Volumes and the risk they pose to the market. This potential to enable under-securitisation would also be present if MEL data was also incorporated, though this risk would be mitigated to some extent by the fact that Parties' declared GC is the maximum value to which they can redeclare MEL.

A respondent noted that inclusion of BOA data in the CEI calculation would mitigate any potential overestimation of the Metered Volumes of BM Units that are active in the Balancing Mechanism, but believed that as only BOA volume data would be used (rather than Bid/Offer pricing data), inaccuracy would still exist in the level of security Parties are required to lodge.

Overall, with regard to P215 Proposed (FPN use), discounted solutions 'option 1' (FPN and BOA volumes) and 'option 2' (FPN, BOA volumes and update using MEL), respondents generally felt that all were more accurate than the baseline but that all had a tendency to allow under-securitisation by Parties active in the Balancing Mechanism and by Parties in difficulties that would be willing to submit inflated FPNs to avoid posting more Credit Cover in the short term. The respondents were concerned that this potential for under-securitisation would expose the market as a whole to risk of failure by generators that are not sufficiently securitised. Respondents believed that inclusion of BOA volumes in addition to FPN would increase accuracy and reduce the risks of under-securitisation of BM Units active in the Balancing Mechanism, and that use of MEL data in addition to BOA volumes and FPN would still further increase accuracy, would reduce the risk of under-securitisation of BM Units active in the Balancing Mechanism and would reduce the risk of short term under-securitisation due to submission of inflated FPNs. However, the risks of under-securitisation in the two specific circumstances noted would remain, though mitigated to some extent.

A respondent noted that the Alternative P215 Modification solution (consulted on as option 3) of CEI calculation using FPN and use of actual Metered Volume data after 2 Working Days for Credit Qualifying BM Units registered in CVA, would provide a more accurate estimation of indebtedness than use of FPN alone, and provide some protection against abuse by submission of inflated PNs.

### **3.3 Potential discrimination between generating and consuming BM Units**

#### **3.3.1 Modification Group's Initial Discussions**

The Group considered that P215 did not contain any undue discrimination between generating and consuming BM Units, as the proposed provisions were dependent upon the availability of accurate and timely FPN submissions. While there are some demand BM Units that are able to submit accurate FPNs, the majority of consuming BM Units cannot. The Group considered how any suitable consuming BM Units could be included in the P215 proposed provisions, and could not envisage how they could be incorporated into a clear cut definition. Their inclusion would likely need to be via application which would require a procedure and associated administration. Though P215 has an efficiency benefit due to the reduction in the burden of CALF administration, the need to implement a new application process could erode, if not completely remove, this benefit.

#### **3.3.2 Views of Respondents to Assessment Procedure Consultation**

A respondent noted that the P215 consultation document had stated that 'The Group was comfortable with this approach because the BM Units concerned do not exhibit significant amounts of BOA activity and that either the impact or risk of generator trip associated with them is not material.' This referred to the fact that it was proposed under both option 3 (i.e. the P215 Alternative) and option 4 that only CVA-registered Credit Qualifying BM Units would have a shorter CEI period and earlier use of MV data. The respondent argued that the impact or risk of generator trip is the same whether the generation is registered in CVA or SVA, and commented that the Group seems to be suggesting that it is acceptable to discriminate between registration method on the basis that individual volumes associated with SVA registered generation are currently likely to be (but not necessarily) smaller than those registered in CVA; the respondent stated their preference was for an arrangement which does not discriminate in this way.

#### **3.3.3 Modification Group's Conclusions**

The Group noted the view of one respondent that the application of a shorter CEI period to only those Credit Qualifying BM Units registered in CVA would unjustifiably discriminate against SVA registered BM Units. The Group considered the respondent's comment that the Group seemed to be suggesting that it is acceptable to discriminate between registration method on the basis that individual volumes associated with SVA registered generation are currently likely to be (but not necessarily) smaller than those registered in CVA; the Group agreed that this had not been the reason that they were comfortable that SVA registered Credit Qualifying BM Units would not be included.

The actual reason was that the Group had identified only two types of SVA registered BM Units that would be classed as Credit Qualifying BM Units. These are Exempt Export BM Units registered in SVA (qualifying due to Exempt Export status; NB Exempt Export BM Units may, under section K of the Code register in either SVA or SVA as they choose) and consolidator BM Units (the Group anticipated this type of BM Unit would be successful in an application for qualification). The Group considered that these *specific* types of BM Units could reasonably not be subject to a shorter CEI period because either: their associated Metered Volumes would be relatively small (Exempt Export BM Units); or because their manner of operation was such that trip of the whole BM Unit was extremely unlikely<sup>4</sup>.

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<sup>4</sup> This refers to consolidator BM Units, which are composed of many small Exemptable generators which are very unlikely to fail simultaneously.

### **3.4 Any relevant precedents from P140 and interconnector use of FPN in CEI calculation**

#### **3.4.1 Modification Group's Discussions**

The Group considered that there were no precedents that were directly relevant to their consideration of the P215 Modification Proposal, as Interconnector BM Units inherently differ from other BM Units in their mode of operation. The Group examined some of the analysis conducted for P140 and conducted similar analysis (see Attachment 3, section 4), and also considered that the FPN default rules implemented under P140 were suitable to be applied to the provisions proposed by P215.

#### **3.4.2 Views of Respondents to Assessment Procedure Consultation**

The consultation responses contained no specific comments in this area.

### **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**

#### **3.5.1 Modification Group's Initial Discussions**

It was noted as part of this area that the impact on BSC Panel processes should be minimised, and where Panel involvement is necessary there should be a guideline process and criteria. The Group believed that it is probable that any Panel involvement would be delegated to the relevant Panel Committee.

The Group discussed the Credit Default arrangements but concluded that P215 should not seek to impact these rules. The Group considered that Parties should ensure that they have lodged sufficient Credit Cover to avoid falling into Credit Default, irrespective of the calculation methodology used. The same Credit Default rules presently used would therefore apply regardless of how Energy Indebtedness was calculated.

##### **a) BSC**

Section M of the BSC would be impacted; M1.2.3 concerns calculation of CAQCE for the various types of BM Unit, and would be changed in accordance with P215 Proposed Modification, or in a slightly amended manner in the case of the potential P215 Alternative Modifications.

##### **b) Grid Code**

There will be no change to the Grid Code. If submission of FPNs by demand BM Units within P status Trading Units were to be mandated, the Grid Code would need to be changed to reflect this obligation. The Group had discussed the possibility of a potential workaround solution whereby Parties could submit FPNs directly to ELEXON, where the FPNs were to be used solely for the purposes of the Credit Cover arrangements, which would eliminate the need for a change to the Grid Code as such FPN submission would be governed by the BSC. However, the Group concluded that such a workaround would not be feasible, as they believed that it would tend to cause Parties to be uncertain regarding the purpose of FPNs and the process and requirements around their submission. FPN submission under the Grid Code also has associated obligations, for instance mandating the accuracy of FPNs, which the Group did not believe should be relinquished.

The Group noted that the modification of the Grid Code to introduce the requirements to mandate submission of FPNs by demand BM Units within P status Trading Units would be a significant and complex change. The Group did not favour this approach.

### **c) Application Process**

The Group agreed that the 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 responsibility in this area by the Panel).

The Group discussed whether a formal procedure was required for the process of application, and submission of supporting evidence or a declaration, or whether the process could be adequately covered in a guidance document. It was agreed that a formal procedure should be introduced in a suitable BSCP. The Group considered that BSCP15 'BM Unit Registration' would be an appropriate place for the application process to sit. Details of the proposed application procedure can be found in section 2.1 'Proposed Modification', which contains a section on the application process for Credit Qualifying BM Unit status.

#### **3.5.2 Views of Respondents to Assessment Procedure Consultation**

##### **Grid Code/CUSC**

A respondent reiterated the considerations of the Group, that addressing the issue of demand BM Units within Production status Trading Units by mandating submission of FPNs by these BM Units (consulted on as 'option A') would have significant ramifications for the Grid Code and CUSC. Parties would need to become signatories to the CUSC for credit cover reasons, which the respondent believed would be inappropriate, and significant and complex changes would be required to the Grid Code. A formal review of the contractual frameworks between the Transmission Company and Users would also be needed, and the development of a new framework to accommodate demand BM Units within Production status Trading Units may be required.

The majority of respondents favoured use of ECVA system changes to allow indication of demand BM Units within Production status Trading Units that should have their CEI calculated using CALF\*DC rather than CALF\*GC (consulted on as 'option C'). Implementation of this option would not impact the Grid Code or CUSC.

#### **3.5.3 Modification Group's Conclusions**

##### **BSC**

The Group noted that the potential for Parties to be able to be under-secured via submission of inflated FPNs for BM Units might have ramifications for the BSC. It was noted that a Party in Level 1 Credit Default must get their Credit Cover Percentage (CCP) below 75% to be removed from Credit Default. If their CCP subsequently exceeds 80% they have a 24 hour Query Period before they can be placed into Credit Default again. This means that the Party could conceivably submit inflated FPNs in order to drive their CCP below 75% for a single Settlement Period, enabling them to trade for at least another 24 hours, during which time they could amass debts and Trading Charges which the market as a whole is at risk of having to pay in the event that the Party ultimately fails. The Group considered that this circumstance could potentially be addressed by introduction of 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 Credit Default without the usual 24 hour Query Period. However, the Group agreed that the Credit Default arrangements were outside the scope of P215.

It should be noted that ELEXON believes that scope exists under the current arrangements for Parties to game in a similar manner and thus escape Credit Default, though it is unlikely. The provisions of the P215 Proposed Modification would tend to make this abuse of the Credit Default arrangements by Parties more viable, while the P215 Alternative Modification would make it less feasible, because the earlier use of actual Metered Volume data would reduce the influence of manipulated CEI data on Parties' overall Energy Indebtedness and CCP.

## **Grid Code/CUSC**

The Group noted the opposition of National Grid to mandatory submission of FPNs by demand BM Units within Production Status BM Units, and noted that the majority of respondents favoured option C, use of an ECVA system changes to indicate alternative means of CEI calculation. The Group considered the associated costs identified by the BSC Agent IA for option C, and agreed that this was the option that they would use in both the P215 Proposed and Alternative Modifications to address the issue; there would therefore be no impact on the Grid Code and CUSC.

## **BSCP15**

The Group agreed 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 that:

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

The Group agreed that there should be no provision for provisional qualification to be granted on the basis of the GC/DC information of BM Units without 6 months Metered Volume data. The Group agreed that the decision on 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 outlined above.

## **3.6 Potential mandatory FPN submission by generating BM Units**

### **3.6.1 Modification Group's Initial Discussions**

This area was included to specify that consideration should be given as to whether submission of FPNs would be mandated for all generating BM Units, and also whether this would include BM Units with an output less than 100MW. The impact of mandating FPN submission for BM Units with an output less than 100MW was also considered.

The Group noted that the threshold for mandatory submission of FPNs is 100MW for generators connected to NGT's Transmission Area, i.e. England & Wales; however, different levels apply in Scotland.

The Group considered that there may be some types of BM Unit to which it would be inappropriate to apply the arrangements proposed by P215. The type of BM Unit that particularly concerned the Group was BM Units that would exhibit intermittent generation, such as wind or wave generation. The Group sought to examine analysis for such BM Units; the only data available was for wind generation BM Units.

However, this data showed that FPNs submitted by both wind generation BM Units with an output below 100MW, and those whose output exceeds 100MW, were more accurate than the current means of estimation used in CEI calculation. The Group therefore agreed that it was not necessary to make a particular exception for intermittent generators, and that there were no other BM Unit types for which an exception should be made.

As detailed in section 2.1, the Group had considered how to resolve the issue of demand BM Units within Production (P) status Trading Units<sup>3</sup>, and considered mandating FPN submission by these BM Units as an option. Under the current Credit Cover arrangements, the demand of BM Units that form part of P status Trading Units are netted off the export of the Trading Unit before the CEI is calculated. This is a necessary step because the Trading Unit's CEI is calculated using GC, and most of these demand BM Units have GC values of zero; therefore netting their import with the export of Production BM Units in the same Trading Units is the only means currently available to incorporate their demand into a Party's CEI.

The Group agreed several potential approaches to resolve this issue, which they believed each had both associated benefits and issues. The Group determined all the options should be included in the P215 Consultation in order to gauge the preference of the industry in this area. The options are:

- A. Mandatory submission of FPNs by demand BM Units within P status Trading Units;
- B. Optional submission of FPNs by demand BM Units within P status Trading Units; or
- C. ECVAA system changes so that demand BM Units within P status Trading Units are identified within the system and their CEI is calculated using CALF and DC values.

Further detail on these options can be found in the relevant section within section 2.1, above.

### **3.6.2 Views of Respondents to Assessment Procedure Consultation**

As noted in section 3.5.3, above, NG was opposed to mandating submission of FPNs by demand BM Units within P status Trading Units due to the impact on the CUSC and Grid Code.

A respondent challenged the Groups reasoning that, if it was optional for Parties to submit FPNs for the demand BM Units, they would be incentivised to do so because netting off demand was of benefit to Parties. The respondent stated that the netting off of demand from estimated generation increases the amount of credit a party must lodge for the same level of trading cover. The Group agreed with this view (see 3.6.3).

A clear majority of respondents favoured use of an ECVAA system change to indicate demand BM Units within P status Trading Units whose CEI should be calculated using CALF and DC values. Respondents commented that this option maintains consistency over all demand BM Units under the BSC but also allows Trading Units to be treated at a net level, in line with the application of trading charges, and that this option would be the most efficient solution in the long run, subject to the associated cost.

One respondent commented that the existing rules do not properly accommodate importing BM Units with 'Production' status or exporting BM Units with 'Consumption' status, and CALF values must be 'manually' adjusted to approximate the expected level. The respondent believed that an improvement to the existing rules would be to allow individual BM Unit estimated volumes to aggregate directly to the appropriate energy account, so that, for example, a Production BM Unit expected to be importing (based either on historic performance or PN) should be aggregated to the Production account as a negative volume, instead of being incorporated through reduction of the volume of other Production BM Units. The respondent commented that this appears to be option C. However, it should be noted that option C does not include the inverse of this situation, i.e. a Consumption status BM Unit expected to export, which the respondent believes should also be covered.

### **3.6.3 Modification Group's Conclusions**

The Group considered NG's arguments regarding mandatory submission of FPNs by demand BM Units within P status Trading Units (option A) and agreed that this would have an inappropriate and disproportionate impact on the Grid Code and CUSC.

It was clarified by ELEXON that there would be no incentive for Parties to voluntarily submit FPNs for these demand BM Units, as had been argued originally. The Group agreed with this assessment.

The Group considered that the only way option B could work is if FPN submission was a condition of obtaining Trading Unit status. ELEXON noted that option B would effectively result in no Credit Cover being required for the demand BM Units because there would be no incentive for Parties to submit FPNs; if the default was to revert to the current arrangements then, because the demand BM Unit is part of a Production Trading Unit, CALF\*GC would be used. Since the BM Unit is demand its GC will probably be zero, and therefore this also leads to the calculation of a zero CEI value.

The Group noted that a clear majority of respondents favoured ECVAA system change to identify an alternative method of CEI calculation (option C). The Group considered the associated costs identified by the BSC Agent IA for option C, and agreed that this was the option that would be used in both the P215 Proposed and Alternative Modifications.

### **3.7 Default P215 provisions if FPNs are not submitted**

#### **3.7.1 Modification Group's Discussions**

This area was included to ensure that a default position for the P215 provisions is considered for use in the case that an FPN is not submitted. For example, for Interconnector BM Units, the ECVAA system uses the latest available FPN in the calculations; if no previous FPN exists for the BM Unit the FPN value defaults to zero.

The Group considered the default process for the FPNs submitted by Interconnector BM Units. The FPN default process followed by the ECVAA is documented in the ECVAA URS and states that, if an FPN is not received from an Interconnector BM Unit, then 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 to be used.

Code Requirements regarding FPNs are found in sections Q3 and T3.2. Requirements reflecting the default FPN process in the ECVAA URS are located in Section T 3.2 of the Code.

The Group agreed that these requirements would be appropriate to apply to the provisions of P215. The Group noted that the defaulting of FPNs to zero if none were ever submitted would act as a natural incentive (in addition to the obligations of the Grid Code) for Parties to ensure they submit at least an initial FPN, because a continual FPN of zero would lead to the Parties having to lodge excessive Credit Cover (i.e. when compared with the BM Units contracted volume the zero FPN would make the BM Unit appear short, which would lead to it having to lodge more Credit Cover). The Group considered this would encourage smaller Parties associated with Exempt Export BM Units that had elected to submit FPNs in order to be included in the proposed Credit Cover arrangements to obtain the necessary systems to enable FPN submission.

#### **3.7.2 Views of Respondents to Assessment Procedure Consultation**

The consultation responses contained no specific comments in this area.

### **3.8 Any implications of using FPN data for a purpose other than it was originally intended**

#### **3.8.1 Modification Group's Initial Discussions**

The Group considered whether there would be any unintended implications associated with using FPN data in the manner proposed by P215, which means it would be used in a way it was not originally intended and different to its current role as a purely technical parameter. Specifically, consideration was given to the impact of using FPN in the Credit Cover calculation in addition to it being used by the System Operator (SO); for instance, would FPN become a more commercial parameter, and what effect, if any, would this have on the SO's ability to balance the System.

The Group discussed review of FPN submission following implementation of the proposed P215 provisions, in order to ensure that accurate FPNs are submitted. The Group agreed by majority that, though ELEXON could perform analysis of FPN compared with Metered Volumes, ultimate responsibility for FPN accuracy would be National Grid's, as mandated by the Grid Code. It should be noted that National Grid has stated that there are currently no obligations on them to monitor FPN submission, and that the current Grid Code provisions specify only that Users should submit FPNs in accordance with good industry practice.

The Group noted that use of the Information Imbalance charge is an option, though it is not used at the moment because there is not perceived to be any motivation for Parties to submit inaccurate FPNs.

The Group conducted analysis to examine the feasibility of Parties gaming with their FPN submissions to gain a long-term benefit in relation to the Credit Cover arrangements. The Group agreed that the analysis showed that such FPN gaming would have little benefit to BSC Parties in normal circumstances and would therefore be unlikely. The analysis, as included in the P215 Assessment consultation, can be found in Attachment 4. However, BSC Parties in financial difficulties may have different incentives for gaming the submission of FPNs.

### **3.8.2 Views of Respondents to Assessment Procedure Consultation**

The consultation responses contained no specific comments relating to use of FPNs in this regard. However, one respondent did note that they believed that, although use of MEL data would mitigate the risk of plant trip, they consider MEL a technical parameter and its use for commercial purposes would be inappropriate.

### **3.8.3 Modification Group's Conclusions**

NG commented that they regard both FPN and MEL as purely technical parameters. The views of the Group aligned with those of its initial discussions; that it would be acceptable to use these parameters in this way.

It should be noted that the FPN gaming analysis considered by the Group (see Attachment 4) concerns persistent overestimation of FPNs by BSC Parties in normal circumstances, i.e. Parties that are not in financial difficulty. The Group considered that different incentives apply for BSC Parties that are in financial difficulty.

## **3.9 Impact on National Grid of additional FPN data**

### **3.9.1 Modification Group's Initial Discussions**

This area for assessment relates to the fact that there are generating BM Units that currently do not have to submit FPNs, though they can choose to do so (i.e. Exempt Export BM Units). Therefore if FPN submission is made mandatory, or if it remains optional in these cases but is attractive due to a perceived Credit Cover benefit, more submissions may be made to National Grid. The Group assessed the possible increase in the volume of FPNs received by National Grid, and whether there would be any impact on systems and processes if there was an increase.

The Group examined the number of BM Units that currently do not submit FPNs but that could choose to do so. The Group concluded that at present there was not a significant number of BM Units that could potentially begin to submit FPNs, and noted that in addition these BM Units would have relatively low export volumes. The Group considered that there would be limited impact upon National Grid even if a large proportion of Exempt Export BM Units not submitting FPNs began to submit FPNs in order to have them included in the Credit Cover arrangements.

It was agreed that the FPN data should be received from National Grid, as it is currently, and that Parties submitting FPNs should do so through National Grid. The Group asked the System Operator to identify any impacts arising from the P215 solution as part of its impact assessment.

The Group noted that if submission of FPNs by demand BM Units within P status Trading Units was mandated, the change required to the Grid Code would be significant, and may involve impact on contractual and technical obligations of National Grid. Therefore the Group agreed that FPN submission for these BM Units should not be mandated.

### **3.9.2 Views of Respondents to Assessment Procedure Consultation**

The consultation responses contained no specific comments in this area.

### **3.9.3 Modification Group's Conclusions**

The Group was satisfied that because the mandatory submissions of FPNs by demand BM Units within P status Trading Units was not progressed, no change would be required to the Grid Code, and the contractual and technical obligations of National Grid would not be impacted.

## **3.10 Impact of data requirements on Parties and BSC Agents**

### **3.10.1 Modification Group's Initial Discussions**

The Group noted that Parties need to have an Electronic Data Transfer (EDT) system in order to submit FPNs to National Grid. Parties not currently submitting FPNs would therefore 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 NG system. This requirement would have an associated cost impact on affected Parties.

The P215 Alternative Modification options would all, to a varying degree, require ECVAAs to receive data it does not currently possess. The detailed requirements around the required data were assessed as part of the BSC Agent IA.

### **3.10.2 Views of Respondents to Assessment Procedure Consultation**

The consultation responses contained no specific comments in this area.

### **3.10.3 Modification Group's Conclusions**

The BSC Agent IA identified many impacts on Central Systems which would need to be implemented to satisfy the data requirements and reporting aspects of a P215 solution. These are discussed in greater detail in section 3.11, below.

## **3.11 Impact on Central Systems**

### **3.11.1 Modification Group's Initial Discussions**

The ECVAAs I014 Notification Report currently gives 'Credit Assessment Credited Energy Volume by BMU Type', which is split between 'Interconnector Credit Assessment Credited Energy Volume (MWh)' and 'Non Interconnector Credit Assessment Credited Energy Volume (MWh)'. The Group considered that under the P215 Proposed Modification this should become split between CAQCE calculated using FPNs and non-FPN CAQCE (i.e. the Interconnector category would be expanded to include P215 generators, rather than adding a third category for non-Interconnector FPN Credit Cover). The impact on this report would vary across the different solution options the Group considered.

The extent of the potential impacts of P215 on Central Systems was assessed as part of the BSC Agent IA.

### 3.11.2 Views of Respondents to Assessment Procedure Consultation

The details of the impact on Central Systems were not available to consultation respondents, so they did not provide any specific, detailed responses in this area. However, respondents were generally supportive of the system changes proposed, dependent on the associated costs.

### 3.11.3 Modification Group's Conclusions

The Group noted the results of BSC Agent impact assessment (Attachment 6) which detailed the flows in the Central Systems which would need to be changed under implementation of the P215 Proposed or Alternative Modification. The timescales associated with implementation of the P215 Alternative Modification by the BSC Agent was not initially in line with the possibility of implementation in the November 2008 Release; therefore an updated BSC Agent impact assessment was requested in order to assess the impact of implementing some aspects of the P215 Alternative Modification in parallel in order to reduce the implementation lead time (Attachment 9). This impact assessment estimated that implementation of the P215 Alternative would be possible in a reduced timescale, and at the same cost previously identified. The reduced timescale has been used in making recommendation regarding implementation dates in this Report.

The Group noted that the NG Analysis reiterated concerns over possible risk to the accuracy of FPNs and the excessive impact of dealing with demand BM Units in Production Trading Units by mandating FPN submission, but did not identify any impact on NG systems.

A variety of ECVAAs, CRA and, in the case of the P215 Alternative, CDCA flow changes were identified in the BSC Agent impact assessment. Upon review of the BSC Agent impact assessment NG gave notification that the impact of the change to Central System flows may have a greater impact on its systems than was originally anticipated. NG undertook to update their impact assessment of P215, and provided an updated impact assessment which identified significantly increased costs and timescales compared with those previously estimated (see Appendix 4, section (d), for details).

The increased NG impact was due to the changes that would be made to the CRA-I020 and ECVAAs-I014 flows under P215. The Group agreed that the impact was sufficiently significant that ELEXON should explore possible workaround solutions in order to mitigate the impact on NG and thereby minimise the effect on the implementation of either the P215 Proposed or Alternative Modification.

**ELEXON will investigate possible workaround solutions and request an updated BSC Agent impact assessment in order to evaluate the feasibility of this option. One possibility is to retain the current version of any affected flows along with a new version, so National Grid can continue to receive the existing version.**

## 3.12 The accuracy of FPNs compared with actual Metered Volumes

### 3.12.1 Modification Group's Discussions

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 with BOA volume data. This 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. Details of the analysis, including the graphs produced, can be found in Attachment 3.

The analysis used a rolling calculation over the five Working Days of the CEI period. Graph 1(a) shows how the length in calendar days of the CEI and AEI periods that make up the total 29-day EI period varied over the analysis period of 1 September 2006 to 31 August 2007. As the MWh quantity (SPD x BMCAEC) is a

constant value over a Settlement Day and BM Units' values of CALF and GC are constant<sup>5</sup> over each three month BSC Season period, the current proxy estimation for BM Units' Metered Volumes in the CEI period (i.e. SPD x BMCAEC) mirrors the pattern of the number of CEI days, though it shifts up or down over each BSC Season as the assigned value of CALF and declared GC vary. This can be seen in graph 1(b).

Analysis of the coal (graphs 1(c), 1(d)) and gas BM Units (graphs 1(e), 1(f)) showed that their submitted FPNs are significantly more accurate than the current methodology (SPD x BMCAEC), especially when there is an outage of the BM Unit. At times of plant outage the value of (SPD x BMCAEC) continues to reflect normal operation and is therefore completely inaccurate (though the outage would be taken into account in the CALF assigned for the next relevant BSC Season one year later).

Due to the predictable and stable manner of its operation, the current methodology gave a reasonably accurate estimate for the nuclear BM Unit (see graphs 1(g), 1(h)) at times when the plant operated normally at a steady load, though when there was a change in plant output (e.g. an outage) this estimation was again completely inaccurate. The submitted FPNs of the nuclear plant provided a more accurate estimation of the BM Unit Metered Volume. The FPNs submitted by the pumped storage BM Unit (see graphs 1(i), 1(j)) were more accurate than the current methodology, though it tended to underestimate the Metered Volume. The Group was concerned that FPNs for pumped storage BM Units may not be sufficiently accurate because these BM Units have a lot of BOA activity in their normal operation, which reduces the effectiveness of FPNs as a means of estimating Metered Volumes.

The Group examined impact of the inclusion of BOA volume data on the accuracy of estimation, by comparing the accuracy of QME (FPNs adjusted by BOA volumes), FPN and the current methodology of (SPD x BMCAEC). This analysis was conducted for the coal, gas, nuclear and pumped storage BM Units. As the nuclear BM Unit had no BOA activity there was no difference between the FPN and QME data. The QME for coal showed a definite, though not drastic, improvement in accuracy over the FPN submissions. For the gas BM Unit, QME was slightly more accurate, and decreased underestimation of the Metered Volumes compared with FPN. Use of QME for the estimation of Metered Volume for the pumped storage BM Unit was much more accurate than FPNs or the current methodology, and removed the consistent overestimation of the Metered Volume that the FPNs exhibited. The Group was therefore comfortable that the use of QME would make the estimation of Metered Volumes for pumped storage BM Units sufficiently accurate for the purposes of the CEI calculation and Credit Cover arrangements.

The analysis of a wind generator BM Unit with an output greater than 100MW (see graphs 1(k), 1(l)) shows that its submitted FPNs give a good estimation of its actual Metered Volumes over a Settlement Day. The estimation is significantly more accurate than the current methodology. Examination of a wind generator BM Unit with an output less than 100MW (see graphs 1(m), 1(n)), i.e. an exemptable generator, that is not compelled to submit FPNs, showed that its FPNs were fairly accurate, and more accurate than the current methodology, though they consistently underestimated the Metered Volumes of the BM Unit. The raw data for this smaller wind generator showed that it was inherently difficult to accurately predict its Metered Volume.

The wind BM Units were included specifically as examples of what might be considered 'intermittent' generators, i.e. those that could not be expected to perform at a consistent level over a sustained period of time. The Group considered wave powered generators as another example of intermittent generation. The number of examples of such intermittent generators available to the Group was limited, and no examples of other types of intermittent generators were available besides the two wind-generation BM Units discussed above.

Having considered and compared the accuracy of FPNs, QME and the current methodology (CALF x GC) as estimates of the Metered Volumes of examples of the various BM Unit types, the Group concluded that QME and FPNs were both more accurate than the current methodology. However, the Group noted that such

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<sup>5</sup> GC values are constant once assigned, but some GC values may be changed mid-BSC Season

increased accuracy may increase the 'volatility' of the Credit Cover arrangements. Whatever their shortcomings, the current arrangements have the benefit of predictability and stability; increased accuracy in the Credit Cover arrangements could cause unpredictability in the credit requirements of BSC Parties that have difficulty managing their output against their contracted positions. The Group considered that though a benefit might be gained in terms of the accuracy of Metered Volume estimation by the use of QME or FPNs, the benefit of this accuracy may be offset to a degree by increased volatility. The Group considered that any added volatility would reduce the benefit of greater accuracy, rather than removing it completely.

### **3.12.2 Views of Respondents to Assessment Procedure Consultation**

Overall, respondents agreed with the conclusions of the Group that FPNs were a more accurate proxy for Metered Volumes than the current methodology and that the use of BOA volume data further increased accuracy. Respondents also shared the Group's concerns over the accuracy of FPNs for some particular BM Unit types and the volatility that use of FPNs could introduce to the calculation of CEI.

## **3.13 Cost Benefit of P215**

### **3.13.1 Modification Group's Discussions**

The Group agreed that the cost-benefit of the P215 Proposed and Alternative Modifications should be quantified. The Group considered that it was possible to illustrate the anticipated cost saving using information already gathered during the P215 Assessment. ELEXON provided statistics on the volume of CALF appeals to enable assessment of the potential saving due to a reduction in the administration associated with the CALF appeals process, and energy estimation modelling analysis that had been carried out for P215 Proposed was updated to include the P215 Alternative.

#### **CALF Appeals**

ELEXON examined 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 this work is carried out by Analyst-level staff, this equates to £4,200 per annum.

This estimate is probably 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.

#### **Energy Estimation Modelling**

The Group had originally requested analysis that modelled the accuracy of using FPNs as a proxy for Metered Volumes compared with the accuracy of the current methodology of calculating CEI. This analysis was included in Attachment 3 (section 4) of the P215 consultation document. Following the Group's decision on progression of a P215 Alternative Modification, the energy modelling has been updated to include modelling of CEI calculated under the P215 Alternative, i.e. using FPNs over a 2 Working Day period.

Modelling the accuracy of energy estimation for the methodologies proposed by the P215 Proposed and Alternative Modifications is possible only for BM Units with a Generation Capacity (GC) over 100MW, as FPN submission by such BM Units is mandatory. Because there is a lack of FPN data for BM Units with a GC under 100MW (i.e. Exempt Export BM Units) energy estimation analysis has not been carried out for these BM Units.

The accuracy of the current CEI methodology, the P215 Proposed CEI methodology and the P215 Alternative CEI methodology in estimating the BM Unit Metered Volumes ( $QM_{ij}$ ) of generation BM Units with GC above 100MW has been analysed.

For each generation BM Unit, for each Settlement Period, on each Settlement Date during the review period (1 September 2006 to 31 August 2007), the difference between  $FPN_{ij}$  and  $QM_{ij}$ , and between  $SPD * BMCAEC_i$  (currently based upon CALF and GC) and  $QM_{ij}$  was calculated. This data was then aggregated to provide a daily indication of the discrepancy between estimation and outcome for both methods of predicting  $QM_{ij}$

This analysis has been conducted in both MWh and financial terms, with MWh figures converted to monetary values using the Credit Assessment Price (CAP) prevalent on the respective Settlement Days. It should be noted that the use of CAP to convert Metered Volume quantities to cash figures is an approximation which means the results of this analysis should be considered as indicative only.

The CEI period for the indebtedness calculation is 5 Working Days, which typically equates to 8 calendar days of the total 29 day Energy Indebtedness period. Analysis of the current baseline therefore used rolling 8 day sums of the calculated CEI values. Under P215 Proposed the CEI period would remain 5 Working Days, so again rolling eight day sums of the calculated CEI values were used. However, under the P215 Alternative the CEI period would be reduced to 2 Working Days, and therefore rolling 4 day sums of the CEI values calculated using FPNs were used to represent the reduced number of calendar days over which the CEI would be effective (the average number of calendar days is 3.5).

It should be noted that for the Alternative Modification solution of 2 Working Days, the remaining 3 Working Days (the MEI period) should be taken into account to allow a fair comparison of the methodologies. However, under the Alternative solution the Energy Indebtedness over the MEI period would be estimated from actual Metered Volume data; since this analysis examines accuracy relative to the Metered Volume, the inaccuracy over this period should be zero. Therefore, for the purposes of this indicative analysis, the MEI period may be neglected.

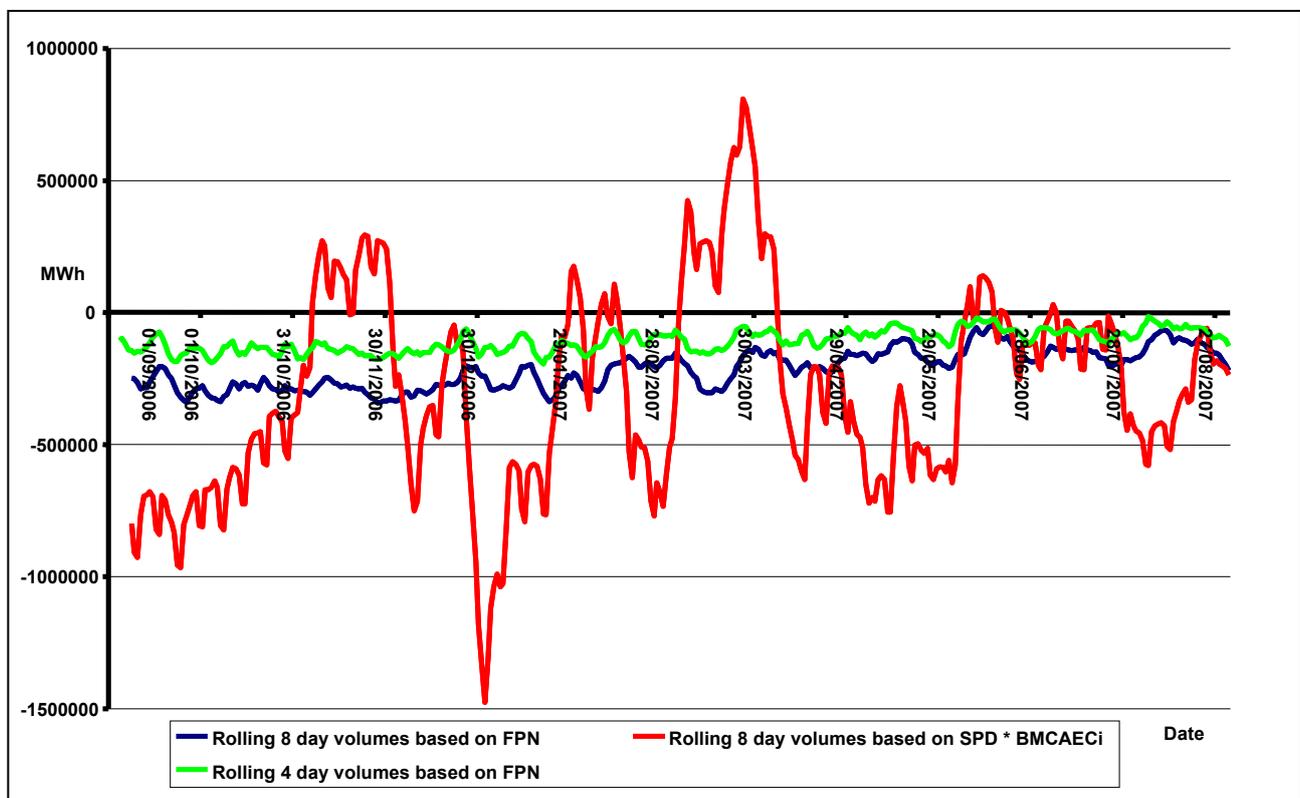


Figure 4: Modelled accuracy of CEI calculated using various methods

In this analysis (and in the graph above and table below) the values relate to Energy Indebtedness such that a negative value of CEI would tend to reduce a Party's overall Energy Indebtedness (the Party is long) and a positive value would tend to increase a Party's Energy Indebtedness (the Party is short).

On average the estimation using FPN over 8 days is more accurate than using the current methodology. Using FPN over 4 days is even more accurate; this represents the increase in accuracy that would result from decreasing the CEI period, i.e. using less estimation and more Metered Volume data. Both 8 day and 4 day FPN overestimate the Metered Volumes (as does the current method on average), as can be seen from the table below (figure 5) which shows a negative average (negative values equate to overestimation). However it can be seen that CEI calculated over 4 days using FPN gives least overestimation, i.e. 107,443MWh compared with 214,854MWh for 8-day FPN use and 294,816MWh for the current method.

Quantity	Rolling 8 day for CEI based on FPN (MWh)	Rolling 4 day for CEI based on FPN (MWh)	Rolling 8 day for CEI based on CAQCE (MWh)
Minimum	-341,875	-194,872	-1,475,629
Maximum	-50,784	-15,812	808,542
Average	-214,854	-107,443	-294,816

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

The range of the error between the estimation and actual Metered Volumes (Max-Min) calculated using the FPN methodology of P215 Proposed (~400,000MWh) is a significant reduction compared with the range associated with the current methodology (~2,300,000MWh). The range falls further for the P215 Alternative (~200,000MWh). This decrease in the range indicates that the exposure of the market as a whole is reduced. That is, though the methodologies of P215 Proposed and Alternative Modifications may overestimate BM Units' Metered Volumes, and hence consistently do not require Parties to lodge as much Credit Cover as they should to secure their Metered Volumes (allows them to be under-secured, in an absolute sense) the extremes of the market are reduced. This indicates a more stable Energy Indebtedness across these BM Units as detailed in the graph above (figure 4).

Quantity	Rolling 8 day for CEI based on FPN (£)	Rolling 4 day for CEI based on FPN (£)	Rolling 8 day for CEI based on CAQCE (£)
Minimum	-£25,709,005	-£14,654,371	-£110,967,276
Maximum	-£2,207,833	-£687,411	£60,802,345
Average	-£13,543,235	-£6,750,588	-£16,585,980

**Figure 6: Overall effect of varying accuracy in financial terms**

This is reflected in monetary terms in the table above (figure 6). The figures in this table<sup>6</sup> give an indicative illustration that, over the CEI component of the Energy Indebtedness period, the current methodology allows the industry to be, on average, under-secured by £16.5M, while the P215 Proposed solution would reduce the permitted 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 which was calculated on the basis of the CEI estimation, it would be insufficient by this amount (relative to the amount which would actually secure the whole market based on the actual Metered Volumes).

<sup>6</sup> Calculated using the value of CAP prevalent at the time of CEI calculation.

In addition, as previously noted, both the P215 methodologies are more stable than the baseline. Reference to the peak values shows that the maximum under-securitisation (i.e. which equates to the negative inaccuracy of the greatest magnitude) allowed by the current methodology over the analysis period is £111M. The maximum exposure allowed due to inaccuracy in the calculation of CEI falls to £26M under P215 Proposed, and £15M under the P215 Alternative.

Furthermore, with regard to the CEI period, the analysis indicates that due to inaccuracy of estimation the current method of CEI calculation required over-securitisation by the market of £60M at one point over the analysis period (i.e. over-securitisation compared with the security that would have been required had the Metered Volume been estimated with total accuracy). Neither the P215 Proposed nor P215 Alternative methodology would have required the market to over-secure during the review period.

It can be seen from the graph (figure 4) that although the extremes associated with the current methodology, represented by the maximum and minimum, are significantly greater in magnitude than the other values in the analysis period, they are not isolated. Compared with both the P215 Proposed and Alternative Modification methodologies the inaccuracy of the current arrangements is relatively variable and unpredictable across the whole market.

The Group therefore concluded that the P215 Proposed and Alternative Modifications would both increase the accuracy of the required securitisation of the market in relation to the CEI period of Energy Indebtedness.

### 3.13.2 Views of Respondents to Assessment Procedure Consultation

A specific section on the cost benefit analysis of P215 was not included in the P215 Assessment consultation, though some of the energy estimation analysis was included in the attached analysis. No specific comments were received from respondents concerning the cost benefit of P215.

## 3.14 Implementation Approach and Costs

### 3.14.1 Modification Group's Initial Discussions

The Group had not been able to consider the potential implementation approach for the Proposed Modification or Alternative Modification because a BSC Agent IA had not yet been completed and because a final Alternative Modification had not been selected from among the potential Alternatives the Group considered.

### 3.14.2 Results of Proposed Modification Impact Assessment

P215 Solution	Basic Solution	Panel Qualify Flag	Option C (for demand BM Units)	Panel Qualify Flag and Option C	Optional Report (option 3 only)	Maximum Total Cost
<b>Proposed Modification</b>	£88,500	£37,100	£37,100	£49,350	N/A	£137,850
<b>option 1 (discounted)</b>	£191,500	£37,100	£37,100	£49,350	N/A	£240,850
<b>option 2 (discounted)</b>	£208,400	£37,100	£37,100	£49,350	N/A	£257,750
<b>option 3 (Alternative Modification)</b>	£226,000	£37,100	£37,100	£49,350	£7,860	£283,210

The table above summarises the results of the BSC Agent impact assessment conducted for P215. The P215 Proposed Modification and 4 options for an Alternative were submitted for impact assessment. One potential Alternative, 'option 4', was subsequently identified as not feasible, so was not assessed. Following the P215 consultation and impact assessments, the Group selected option 3 as the P215 Alternative Modification.

#### **a) BSC Agent Impact**

It was noted that the BMRA, CRA, CDCA, SAA, ECVAA, TAA and FAA services would be impacted. The CRA and ECVAA functions are affected in various ways 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.

The total estimated BSC Agent implementation cost for the P215 Proposed Modification is £137,850 with an associated timescale of 21 weeks. These costs are reflected in the summary table of costs for the solution options impact assessed by the BSC Agent.

#### **b) BSC Party and Party Agent Impact**

Parties that act as generators and operate export BM Units identified impacts. The identified impacts encompassed changes to credit calculation systems used for validation of Credit Cover position and update of internal systems to accept the amended ECVAA-I014 Notification Report. The Proposed Modification would take 6 months for Parties to implement. Parties reported that the Proposed Modification would cost £15,000.

Other respondents identified only minimal impacts, to processes and administration.

#### **c) Transmission Company Impact**

Following the BSC Agent impact assessment, National Grid gave notification that the IS impact of P215 would be greater than they originally anticipated. NG will therefore submitted an updated impact assessment providing details of the impact of the IS changes associated with the Proposed and Alternative Modifications.

National Grid estimated that implementation of the Proposed P215 Modification would cost £250,000, and that a decision by the Authority by June 2008 would allow delivery of the required changes by June 2009. This impact is due to the Panel Qualifying Flag that could be added to the CRA-1020 which National Grid receives from ELEXON. Further details can be found in Appendix 4, paragraph (d).

The Group believed this impact, with the associated implications for the cost and lead time of implementation of P215, could be avoided or mitigated by using a workaround solution. Such a solution could involve removing the impact on the relevant flow, or maintaining the current version for use by National Grid in parallel with the introduction of a new version. It was anticipated that the cost of such a solution would be reasonable, and the Group conducted its considerations on this belief and produced recommended provisional Implementation Dates accordingly.

#### **d) BSCCo Impact**

ELEXON would be impacted by implementation activities related to P215 (changes to configurable items and other system documentation), management of solution development and arrangement of participant testing. ELEXON would also need to adopt the new methodology operationally. Further details of the impacts may be found in Appendix 4.

### **3.14.3 Results of Alternative Modification Impact Assessment**

#### **a) BSC Agent Impact**

The CRA, CDCA and ECVAA functions are affected in various ways 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.

The total estimated BSC Central Agent implementation cost for the P215 Alternative Modification (option 3 in the costs table above) is £283,210 with an associated timescale of 26 weeks. These costs are reflected in the summary table of costs for the solution options impact assessed by the BSC Agent.

#### **b) BSC Party and Party Agent Impact**

Parties that act as generators and operate delivering BM Units identified impacts. The identified impacts encompassed changes to credit calculation systems used for validation of Credit Cover position and update of internal systems to accept the amended ECVAA-I014 Notification Report. The Alternative Modification would take 6 months for Parties to implement. The maximum cost identified by Parties for the P215 Alternative was £60,000.

Other respondents identified only minimal impacts, to processes and administration.

#### **c) Transmission Company Impact**

Following the BSC Agent impact assessment and the final Assessment Procedure Modification Group meeting, National Grid gave notification that the IS impact of P215 would be greater than they originally anticipated. NG therefore submitted an updated impact assessment providing details of the impact of the IS changes associated with the Proposed and Alternative Modifications.

The revised impact on NG was greater than that originally identified. National Grid estimated that implementation of the P215 Alternative Modification would cost £350,000, and that a decision by the Authority by June 2008 would allow delivery of the required changes by June 2009. This is based on the impact of the Panel Qualifying Flag on the CRA-1020 (as above) and the additional impact on the ECVAA-1014 due to reporting MEI data. Further details can be found in Appendix 4, paragraph (d).

The Group believed this impact, with the associated implications for the cost and lead time of implementation of P215, could be avoided or mitigated by using a workaround solution. Such a solution could involve removing the impact on the relevant flows, or maintaining the current versions for use by National Grid in parallel with the introduction of new versions. It was anticipated that the cost of such a solution would be reasonable, and the Group conducted its considerations on this belief and produced recommended provisional Implementation Dates accordingly.

#### **d) BSCCo Impact**

ELEXON would be impacted by implementation activities related to P215 (changes to configurable items and other system documentation), management of solution development and arrangement of participant testing. ELEXON would also need to adopt the new methodology operationally. Further details of the impacts may be found in Appendix 4.

### **3.14.4 Modification Group's Conclusions**

The Group agreed the solution aspects for the Proposed and Alternative Modifications as described in this report. The Group agreed the modification should be implemented as part of a Release.

The Modification Group therefore 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;
- An Implementation Date for the Proposed Modification of 25 June 2009 (taking account of ISIS porting), if an Authority decision is received after 30 April 2008 but on or before 24 December 2008;
- An Implementation Date for the Alternative Modification of 6 November 2008, if an Authority decision is received on or before 30 April 2008; and
- An Implementation Date for the Alternative Modification of 25 June 2009 (taking account of ISIS porting), if an Authority decision is received after 30 April 2008 but on or before 24 December 2008.

### PROPOSED MODIFICATION IMPLEMENTATION COSTS<sup>7</sup>

	Implementation Cost (Nov 08)	Implementation Cost (June 09)	Tolerance
<b>Service Provider<sup>8</sup> Cost</b>			
Change Specific Cost	£137,850	£137,850	+/-0%
Total Service Provider Cost	£137,850	£137,850	+/-0%
<b>Implementation Cost</b>			
External Audit	£0	£0	+/-0%
Design Clarifications	£0	£0	+/-0%
Additional Resource Costs	£0	£0	+/-0%
Additional Testing and Audit Support Costs	£0	£0	+/-0%
<b>Total Demand Led Implementation Cost</b>	<b>£137,850</b>	<b>£137,850</b>	<b>+/-0%</b>

<b>Port and Migrate Costs</b>				
<b>Service Provider Cost</b>	Port and Migrate	£22,000	£0	+/-0%

<b>ELEXON Implementation Resource Cost<sup>9</sup></b>	88 man days	88 man days	+/- 10%
	£19,360	£19,360	
<b>Total Implementation Cost</b>	<b>£179,210</b>	<b>£157,210</b>	<b>+/- 20%</b>

<sup>7</sup> 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](http://www.elexon.co.uk/documents/Change_and_Implementation/Modifications_Process_-_Related_Documents/Clarification_of_Costs_in_Modification_Procedure_Reports.pdf)

<sup>8</sup> BSC Agent and non-BSC Agent Service Provider and software costs.

<sup>9</sup> The ELEXON Implementation Resource cost would be substantially increased P215 was not implemented within a scheduled release.

## ALTERNATIVE MODIFICATION IMPLEMENTATION COSTS<sup>10</sup>

		Implementation Cost (Nov 08)	Implementation Cost (June 09)	Tolerance
<b>Service Provider<sup>11</sup> Cost</b>				
	Change Specific Cost	£283,210	£283,210	+/-0%
	Total Service Provider Cost	£283,210	£283,210	+/-0%
<b>Implementation Cost</b>				
	External Audit	£0	£0	+/-0%
	Design Clarifications	£0	£0	+/-0%
	Additional Resource Costs	£0	£0	+/-0%
	Additional Testing and Audit Support Costs	£0	£0	+/-0%
<b>Total Demand Led Implementation Cost</b>		£283,210	£283,210	+/-0%

<b>Port and Migrate Costs</b>				
<b>Service Provider Cost</b>	Port and Migrate	£50,000	£0	+/-0%

<b>ELEXON Implementation Resource Cost<sup>9</sup></b>	139 man days	man days	+/-10%
	£30,580	£30,580	
<b>Total Implementation Cost</b>	£363,790	£313,790	+/-20%

### 3.15 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.

<sup>10</sup> 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](http://www.elexon.co.uk/documents/Change_and_Implementation/Modifications_Process_-_Related_Documents/Clarification_of_Costs_in_Modification_Procedure_Reports.pdf)

<sup>11</sup> BSC Agent and non-BSC Agent Service Provider and software costs.

## 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.

### 4.1 Proposed Modification

#### 4.1.1 Modification Group's Initial Discussions

The initial **MAJORITY** view of the Modification Group was that the Proposed Modification **WOULD NOT** better facilitate the achievement of Applicable BSC Objective (c) when compared to the current Code baseline.

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

The Group agreed by majority that the Proposed Modification would have a neutral impact on Applicable BSC Objectives (a) and (b). One member believed that the Proposed Modification would not better facilitate the achievement of Applicable BSC Objectives (a) and (b) because they believed that a potential, perceived incentive to game with FPN submissions would be introduced, which would have a negative impact on both the ability of the Transmission Company to discharge the obligations of the Transmission Licence and on the efficient, economic and co-ordinated operation of the GB transmission system.

#### 4.1.2 Views of Respondents to Assessment Procedure Consultation

The majority view of respondents to the Assessment Procedure consultation was that the Proposed Modification would better facilitate the achievement of **Applicable BSC Objective (c)**.

The following arguments were expressed by respondents in support of this view:

- Competition would be stimulated by reduced Party costs and released capital) and (d) (simplified process, reduced administrative burden – subject to results of full BSC Agent IA).
- Analysis has shown use of FPN to be far more accurate than the current methodology on a Settlement Period basis; if the credit arrangements are to reflect the value of a default if one occurs then the calculation inputs should be as close as possible to the actual outturn liabilities at the SF Run.
- More accurate proxy for Metered Volumes.
- Improved accuracy compared with the baseline.

A minority of respondents believed that the Proposed Modification would not better facilitate the achievement of **Applicable BSC Objective (c)**.

The following arguments were expressed by respondents in support of this view:

- FPNs are suitable Metered Volume proxy but would not securitise against BOA activity; therefore concerned that market under-securitisation could present a risk to generators.
- The Modification Group's analysis, in seeking an accurate proxy for Metered Volume in the CEI calculation, clearly shows that FPN volumes should be adjusted to incorporate accepted Bid and Offer volumes. While the baseline causes both periods of over- and under-collateralisation (in effect, offsetting each other), the likely trend for the Proposed would be to overestimate metered volumes over the long term, resulting in under-securitisation.

The unanimous view of respondents to the Assessment Procedure consultation was that the Proposed Modification would better facilitate the achievement of **Applicable BSC Objective (d)**.

The following arguments were expressed by respondents in support of this view:

- Simplified process leading to reduced administrative burden (subject to results of full BSC Agent IA).
- Simplified arrangements.

#### 4.1.3 Modification Group's Assessment

##### Applicable BSC Objective (c)

The Modification Group was split over whether or not the Proposed Modification would or would not better facilitate the achievement of **Applicable BSC Objective (c)** when compared to the current Code baseline. Some members of the Group believed that the Proposed would better facilitate (c) for the following reasons:

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

Other Group members Group believed the Proposed would not better facilitate (c) for the following reasons:

- FPNs appear to overestimate the Metered Volumes of some classes of BM Units.
- The overestimation of the Metered Volumes of some classes of BM Units would cause a move from arbitrary errors in securitisation to a methodology where some BM Unit types may be systematically under-securitised.
- Systematic under-securitisation would expose Parties to risk, and therefore discourage new entrants to the market.
- Use of FPNs alone doesn't secure against cashflows arising from Bids/Offers.
- Though using FPN to calculate CEI improves accuracy, it is insufficient to justify the proposed change.

##### Applicable BSC Objective (d)

The unanimous view of the Modification Group was that the Proposed Modification would better facilitate the achievement of **Applicable BSC Objective (d)** when compared to the current Code baseline, for the following reasons:

- The process of estimating Metered Volumes for use in the Credit Cover would be simplified due to the reduction in CALF appeals.
- 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). Two Group members did believe that Objective (b) would not be better facilitated because there would be a slight risk to the accuracy of FPNs because an incentive, or perceived incentive, could be introduced for Parties to amend their FPN for Credit reasons.

#### 4.1.4 The Group's considerations following receipt of updated National Grid analysis

The Group reconsidered their views against the P215 Proposed Modification following receipt of the updated National Grid analysis. The Group noted that ELEXON would explore means of reducing the impact on National Grid, would obtain impact assessments relating to any workaround solutions in this area, and believed that a workaround solution could be found that would mitigate the impact on National Grid and which would have a reasonable associated cost.

One Group member maintained their position that, overall, P215 Proposed would not better facilitate the Applicable BSC Objectives, but noted that the National Grid estimated implementation cost now meant that they believed that Objective (d) is not better facilitated compared with the baseline (previously the member had believed that (d) was better facilitated by the Proposed but this was outweighed by the negative impact on Objective (c)).

Two Group members maintained their view that P215 Proposed would better facilitate the Applicable BSC Objectives overall due to the greatly increased accuracy of CEI calculation using FPNs compared with the current methodology, and noted that they would maintain this position even if the National Grid implementation costs were incurred, as they believed that the benefit of increased accuracy would remain. These members noted that the National Grid costs were unexpectedly high.

None of the other Group members changed their views on P215 Proposed, based on the expectation that a workaround solution with a reasonable cost would be found that would remove or mitigate the impact on National Grid.

## 4.2 Alternative Modification

### 4.2.1 Modification Group's Initial Discussions

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

The Group also believed that all the Alternative options would be better than the current baseline as they increase the accuracy of the information entering the Credit Cover arrangements.

The Group agreed by majority that Alternative Modification options 1 and 2 would have a neutral impact on Applicable BSC Objective (a) and (b). One member believed that options 1 and 2 would not better facilitate the achievement of Applicable BSC Objectives (a) and (b) because the concerns around gaming FPNs remained.

The Group unanimously agreed that Alternative Modification options 3 and 4 would have a neutral impact on Applicable BSC Objective (a) and (b).

The Group agreed by majority that all the Alternative Modification options would have a neutral impact on Applicable BSC Objective (d). A single member disagreed, as they believed that all the options would better facilitate Applicable BSC Objective (d) because all are more accurate, and as such would all ultimately lead to increased efficiency.

### 4.2.2 Views of Respondents to Assessment Procedure Consultation

The majority view of respondents to the Assessment Procedure consultation was that all the Alternative Modification options would better facilitate the achievement of the **Applicable BSC Objectives**, and that of these, option 4 would best facilitate the Objectives.

However, option 4 had to be discounted because its implementation was not feasible. The respondents' views in this area are therefore not directly applicable to consideration of facilitation of the Applicable BSC Objectives. The Group considered points raised by respondents in its considerations of the areas raised by the Terms of Reference.

### 4.2.3 Modification Group's Conclusions

A majority of the Group believed that the Alternative would be better than the current baseline due to the increased accuracy achieved through the use of more actual Metered Volume data. A minority of the Group believed the Alternative was not better than the baseline because the CEI calculation still does not take into

account Bid/Offer prices, because it would introduce increased volatility and therefore more risk for Parties and because the cost of managing credit would be increased.

The majority view of the Modification Group was that the Alternative Modification would better facilitate the achievement of **Applicable BSC Objectives (c) and (d)** when compared to the Proposed Modification, for the following reasons:

#### **Applicable BSC Objective (c)**

- More accurate because actual Metered Volume data would be used.

#### **Applicable BSC Objective (d)**

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

A minority of the Modification Group believed that the Proposed Modification would not better facilitate the achievement of **Applicable BSC Objectives (c) and (d)**, for the following reasons:

#### **Applicable BSC Objective (c)**

- Volatility of the Credit Cover arrangements would be increased, thus increasing the risk for Parties.
- Parties' cost of managing credit would increase.

#### **Applicable BSC Objective (d)**

- The Alternative does not simplify the arrangements as the Proposed does (the Alternative is neutral against the baseline in this respect).

The Group agreed that the Alternative Modification would have a neutral impact on Applicable BSC Objective (a) and (b). A Group member 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); however, the rest of the Group believed the Alternative would be neutral in this respect.

#### **4.2.4 The Group's considerations following receipt of updated National Grid analysis**

The Group reconsidered their views against the P215 Alternative Modification following receipt of the updated National Grid analysis. The Group noted that ELEXON would explore means of reducing the impact on National Grid, would obtain impact assessments relating to any workaround solutions in this area, and believed that a workaround solution could be found that would mitigate the impact on National Grid and which would have a reasonable associated cost.

One Group member changed their position. Previously the member had believed that overall the Alternative would better facilitate the Applicable BSC Objectives in comparison with both P215 Proposed and the current baseline; they now believed that the Alternative would not better facilitate the Applicable BSC Objectives compared with either P215 Proposed or the baseline. This was because they believed that the National Grid estimated implementation cost means that Objective (d) is not better facilitated compared with the baseline (previously the member had believed that (d) was better facilitated by the Proposed, and that this outweighed a negative impact on Objective (c)).

The member argued that though using FPNs is more accurate than GC/CALF, giving a theoretical benefit to the market as a whole through a greatly reduced range of over- and under-securitisation, they doubted that the gain would be achievable in practise. Whether the CEI period was 5 or 2 days, Parties would need quick access to a credit line equivalent to having a CALF value of zero. A Party would need to have an extremely

flexible credit line in place in order to save on the costs of security; the member believed that such facilities are rare, at best.

Two Group members maintained their view that the P215 Alternative would better facilitate the Applicable BSC Objectives overall due to the greatly increased accuracy of CEI calculation using FPNs combined with increased use of Metered Volume data. These members noted that they would maintain this position even if the National Grid implementation costs were incurred, as they believed that the benefit of increased accuracy would remain. The members noted that the National Grid costs were unexpectedly high.

None of the other Group members changed their views on P215 Proposed, based on the expectation that a workaround solution with a reasonable cost would be found that would remove or mitigate the impact on National Grid.

### 4.3 Final Recommendation to the Panel

On the basis of the above assessment the Modification Group:

- were **SPLIT** as to whether or not the Proposed Modification should be made, and were therefore unable to make a recommendation to the Panel; and
- agreed a **MAJORITY** recommendation to the Panel that the Alternative Modification **SHOULD** be made.

Details of the Group's recommended Implementation Date and legal text can be found in Section 3.

## 5 TERMS USED IN THIS DOCUMENT

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

Acronym/Term	Definition
FPN	Final Physical Notifications
CEI	Credit Assessment Energy Indebtedness
CALF	Credit Assessment Load Factors
GC	Generation Capacity
DC	Demand Capacity
P/C	Production/Consumption
QM	BM Unit Metered Volume
CVA	Central Volume Allocation
SVA	Supplier Volume Allocation
CAQCE	Credit Assessment Credited Energy Volume
QABC	Account Bilateral Contract Volume
BMCAEC	BM Unit Credit Assessment Export Capability
BMCAIC	BM Unit Credit Assessment Import Capability
SAA	Settlements Administration Agent
SVAA	Supplier Volume Allocation Agent

CDCA	Central Data Collection Agent
PN	Physical Notification
NG	National Grid
QME	Period Expected Metered Volume
ECVAA	Energy Contract Volume Aggregation Agent
EDT	Electronic Data Transfer
SPD	Settlement Period Duration

## 6 DOCUMENT CONTROL

### 6.1 Authorities

Version	Date	Author	Reviewer	Reason for Review
0.1	27/11/07	Dean Riddell	David Jones, Roger Harris, Natasha Hall	For peer review
0.2	29/11/07	Dean Riddell	David Jones	For quality review
0.3	29/11/07	Dean Riddell	P215 Group	For Modification Group review
0.4	04/12/07	Dean Riddell	Emrah Cevik	For technical review
0.5	06/12/07	Dean Riddell	David Jones	For quality review
1.0	07/12/07	Change Delivery		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: [insert hyperlink to website page containing all documents relating to the proposal]

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

## ESTIMATED COSTS OF PROGRESSING MODIFICATION PROPOSAL<sup>12</sup>

<b>Meeting Cost</b>	£3,000
<b>Legal/Expert Cost</b>	£5,000
<b>Impact Assessment Cost</b>	£10,000
<b>ELEXON Resource</b>	94 man days £20,260

These costs have changed from those provided in the Definition Report, in order to reflect that a meeting of the P215 Modification Group was held in addition to those previously scheduled to take place in the Assessment phase.

### 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)
David Jones	ELEXON (Chairman)	Y	Y	Y	N	Y	Y	Y	N	Y
Chris Stewart	ELEXON (Chairman)	N	N	N	Y	N	N	N	Y	N
Dean Riddell	ELEXON (Lead Analyst)	Y	Y	Y	Y	Y	Y	Y	Y	Y
Rekha Patel	Proposer's representative	Y	Y	Y	Y	Y	Y	Y	Y	Y
Lillian Macleod	National Grid	N	Y	N	Y	Y	Y	Y	Y	Y
Ben Sheehy	E.ON UK	Y	Y	Y	Y	Y	Y	Y	Y	Y
Dave Wilkerson	Centrica	N	Y	Y	N	Y	N	Y	Y	Y
Andrew Colley	Scottish and Southern	Y	Y	N	Y	Y	Y	Y	Y	N
Colin Prestwich	Smartest Energy	Y	Y	Y	Y	N	Y	N	Y	N
Edward Hunter	npower	Y	Y	Y	Y	Y	Y	Y	Y	Y
Gary Henderson	SAIC	Y	Y	Y	Y	Y	Y	N	Y	Y
Attendee	Organisation	14/8	04/9 (Tel)	20/9	27/9	16/10	24/10	29/10	16/11	04/12 (Tel)
Natasha Hall	ELEXON (Lawyer)	N	N	Y	N	N	N	Y	Y	Y
Richard Hall	Ofgem	Y	Y	Y	Y	Y	Y	Y	Y	N
David Lewis	EDF	N	N	N	N	N	N	N	N	N
Tom Selby	E.ON UK			Y	N	N	N	N	N	N
Mark Gribble	LogicaCMG	Y	N	Y	Y	Y	Y	Y	N	Y

<sup>12</sup> 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](http://www.elexon.co.uk/documents/Change_and_Implementation/Modifications_Process_-_Related_Documents/Clarification_of_Costs_in_Modification_Procedure_Reports.pdf)

John Guest	LogicaCMG			N	Y	Y	Y	Y	Y	Y
Jonathon Blott	LogicaCMG								Y	N
Rob Smith	National Grid			Tel	N	N	N	N	N	Y
Emrah Cevik	ELEXON	Y	Y	Y	Y	Y	N	Y	N	Y
Roger Harris	ELEXON	Y	Y	Y	Y	Y	Y	Y	Y	Y
John Lucas	ELEXON								Y	Y

## MODIFICATION GROUP TERMS OF REFERENCE

### TERMS OF REFERENCE

(Version 1.0)

#### APPENDIX FOR MODIFICATION PROPOSAL P215

**Modification Proposal P215 will be considered by the P215 Modification Group formed from members of the Settlement Standing Modification Group (SSMG), whose areas of expertise include Credit Cover arrangements, BM Unit Classification and Central Volume Allocation.**

#### P215 – Revised Credit Cover Methodology for Generating BM Units

##### 1. DEFINITION PROCEDURE

- 1.1 The Modification Group will carry out a Definition Procedure in respect of Modification Proposal P215 pursuant to section F2.5 of the Balancing and Settlement Code.
- 1.2 The Modification Group will produce a Definition Report for consideration at the BSC Panel Meeting on 13 September 2007.
- 1.3 The Modification Group shall consider and/or include in the Definition Report as appropriate:
  - The definition of a generating BM Unit to which Modification Proposal P215 is applicable, including consideration of:
    - Parameters available for use as basis of a definition (e.g. Production/Consumption Status);
    - Use of historical data to assign status as a generating BM Unit;
    - Impact of a dynamic approach, e.g. based on producing/consuming status each Settlement Period;
    - Impact of the ability of Exempt Export BM Units to choose their P/C Status (i.e. regardless of the Status assigned to the Trading Unit to which they belong);
    - Impact of possible definitions on Central Systems, NG systems and Party systems;
    - Any impact of possible definitions on the submission of Final Physical Notifications (e.g. would FPN submission be mandatory for all such 'generating BM Units');
    - Considerations and outcome of the P200 Modification Group's assessment of a similar definition and any relevant considerations/analysis of Standing Issue 22;
    - Whether status as such a 'generating BM Unit' should be voluntary;
    - Any analysis that can be performed to support consideration of a definition (e.g. to identify types/groups of BM Units that submit accurate FPNs);

- The possible definitions considered by the Group, and the Group's favoured definition(s); and
- The results of an Industry Consultation on the views of the Modification Group on the definition of a generating BM Unit.

## **2. ASSESSMENT PROCEDURE**

- Demonstration of the defect in the existing Code requirements as a result of the current Credit Cover arrangements;
- The material impact of the provisions of P215 in relation to the risk of over- and under-collateralisation by Parties as a result of the BSC Credit Cover arrangements;
- Potential discrimination between generating and consuming BM Units;
- Any relevant precedents from P140 and the interconnector use of FPN in CEI calculation;
- Any consequential impact of using FPN instead of CALF and GC/DC on the BSC, Grid Code or other codes and associated processes - impact on BSC Panel processes should be minimised and where Panel involvement is necessary there should be a guideline process and criteria;
- Whether submission of FPN would be mandated for all generating BM Units, and whether this would include BM Units with output < 50MW (and the impact of mandating for < 50MW);
- A default position for the P215 provisions if FPN is not submitted, e.g. for interconnectors the ECVAA system uses the latest available FPN in calculations and if no previous FPN exists for the BM Unit the FPN value defaults to zero;
- Whether there are any implications of using FPN data for a purposes other than it was originally intended, i.e. any impact of using FPN in the Credit Cover calculation in addition to it being used by the System Operator (SO), for instance would FPN become a more commercial parameter, and would this affect the SO's ability to balance the System.
- Impact on National Grid of additional FPN data (i.e. from < 50MW generators if FPN submission is mandatory, or optional but attractive);
- Impact of data requirements, for instance if the ECVAA needs data (e.g. QM) it does not currently possess to determine a BM Unit's generating status, is there an impact on BSC Agents that would supply the data, e.g. the SAA;
- Impact on Central Systems; and
- The accuracy of FPNs compared with actual Metered Volumes.

### APPENDIX 3: RESULTS OF ASSESSMENT PROCEDURE CONSULTATION

9 responses (representing 39 Parties and 1 non-Party) were received to the 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).

Q	Consultation question	Yes	No	Neutral				
1.	Do you believe Proposed Modification <b>P215</b> would better facilitate the achievement of the Applicable BSC Objectives?	6	2	1				
2.	Do you believe the potential Alternative option 1 (FPN & BOAs) would better facilitate the achievement of the Applicable BSC Objectives?	4	3	2				
3.	Do you believe the potential Alternative option 2 (FPN & BOAs & MEL) would better facilitate the achievement of the Applicable BSC Objectives?	5	3	1				
4.	Do you believe the potential Alternative option 3 (Use FPN to calculate CEI then utilise Metered Data for CVA Parties from Settlement Day +2) would better facilitate the achievement of the Applicable BSC Objectives?	5	3	1				
5.	Do you believe the potential Alternative option 4 (Use FPN to calculate CEI, and shorten the CEI period for qualifying CVA BM Units by using Metered Volume and pricing data) would better facilitate the achievement of the Applicable BSC Objectives?	6	2	1				
6.	Which option, if any, do you believe best facilitates the Applicable BSC Objectives <b>when compared to the Proposed Modification?</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>All</b>	<b>None</b>	<b>Neutral</b>
		0	1	0	5	1	1	1
7.	If you would qualify for the P215 solution but do not currently submit FPNs would you seek to use the P215 arrangements?	3			2		4	
8.	How do you believe the issue of demand BM Units within P status Trading Units should be addressed?	<b>A</b>	<b>B</b>	<b>C</b>	<b>Neutral</b>			
		1	2	5	1			
9.	Do you believe there are any other potential P215 Alternatives that have not been identified so far and that should be progressed as part of the Assessment Procedure?	1		7			1	
10.	Are there any further comments on P215 that you wish to make?	3		6			0	

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 5.

## 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 have been identified as impacted by P215.

For details of the costs associated with these impacts, please refer to Section 3.

### 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; data base 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.

A copy of the full 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 7.

### d) Impact on Transmission Company

Following the BSC Agent impact assessment and the final Assessment Procedure Modification Group meeting, National Grid gave notification that the IS impact of P215 would be greater than they originally

anticipated. NG therefore undertook to submit an updated impact assessment providing details of the impact of the IS changes associated with the Proposed and Alternative Modifications.

A copy of the full original Transmission Company impact assessment is attached as a separate document (Attachment 8); a copy of the full revised Transmission Company analysis is also attached (Attachment 10).

The revised Transmission Company analysis identified that there would be a significant impact on National Grid as a result of the changes that would be made to the CRA-I020 and ECVA-1014 flows as part of the implementation of P215. National Grid identified that the proposed modifications to the CRA-1020 file and ECVA-1014 file as outlined in the BSC Agent impact assessment would affect approximately eight National Grid IS systems, which are associated with key business processes such as billing and BMU registration, which in turn are utilised in real time Balancing Mechanism systems.

National Grid stated that the understanding of the changes required to their IS Systems included a degree of uncertainty, though ELEXON and the BSC Agent had provided as much detail as possible of the impact on the flows, given that the full system solution will not be established until such time as the P215 Proposed or Alternative Modification is approved. National Grid also noted that another factor in their analysis was that specific resource would need to be made available, which is currently employed on other regulatory driven IS projects; the lead time for National Grid to implement P215 would depend in part on the availability of this resource. The associated costs and lead time specified in the updated National Grid impact assessment therefore reflect National Grid's uncertainty regarding the potential implications of P215 implementation.

National Grid estimated that implementation of the Proposed P215 Modification would cost £250,000, and that a decision by the Authority by June 2008 would allow delivery of the required changes by June 2009. This impact is due to the Panel Qualifying Flag that would be added to the CRA-1020 which National Grid receives from ELEXON.

National Grid estimated that implementation of the P215 Alternative Modification would cost £350,000, and that a decision by the Authority by June 2008 would allow delivery of the required changes by June 2009. This is based on the impact of the Panel Qualifying Flag on the CRA-1020 (as above) and the additional impact on the ECVA-1014 due to reporting MEI data.

The analysis noted that the impact of the relatively long lead time might be mitigated if it was possible to retain the existing data flows in their current form for the purposes of the SO for a period beyond implementation of P215, and then aligning the different data flows at a future date. National Grid requested that ELEXON explore this possibility.

**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.

A copy of the draft legal text to give effect to these changes can be found in Appendix 1.

**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.

<b>Document</b>	<b>Impact of Proposed/Alternative Modification</b>
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**

<b>Document</b>	<b>Impact of Proposed/Alternative Modification</b>
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 – P215 Analysis.

Attachment 4 – FPN 'Gaming' Analysis.

Attachment 5 – Collated P215 consultation responses.

Attachment 6 – BSC Agent impact assessment.

Attachment 7 – Collated Party and Party Agent impact assessments.

Attachment 8 – Transmission Company impact assessment.

Attachment 9 – Updated BSC Agent impact assessment.

Attachment 10 – Revised Transmission Company analysis.