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Requirements Specification To Support Modification P76 - Anomalies associated with Negative Levels of Credit Cover

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b Distribution

Name	Organisation

c Change History

0.1 Initial Draft issued for Peer Review

0.2 Incorporates comments from the Peer Review and issued for Review by the Modification Group members.

0.3 Incorporates review comments from the Modification Group.

d Changes Forecast

1.0 Incorporate comments from Modification Group Members and is issued for formal Impact Assessment and Industry Consultation.

e Intellectual Property Rights and Copyright

II CONTENTS TABLE

1 INTRODUCTION

1.1 Introduction

This document provides the Requirement Specification for the proposed solution identified in the original Modification and the two potential alternative Modifications to the issue identified in Modification Proposal P76: Anomalies Associated with Negative levels of Credit Cover.

Modification Proposal P76 seeks to address an issue whereby a Party that has insufficient credit to cover their outstanding liabilities may not be flagged as being in Credit Default. This issue arises as a consequence of the link between the Payment Default and Credit Default procedure.

The Modification Group identified the original Modification as the most appropriate solution, however, informal feedback from the Service Provider has suggested that one of the Alternative Modifications may provide a better solution. Consequently, all three possible solutions are presented in this Requirement Specification for Impact Assessment by the Service Provider. After the results of the Impact Assessment are known, this document will then be distributed to the Industry for consultation.

1.2 Background and Related Issues

Modification Proposal P76 was raised by British Gas Trading on 8 April 2002 and subsequently considered by the Panel at their meeting of 18 April 2002. The Panel agreed that the Modification Proposal should proceed to a three month Assessment Procedure. The Assessment Report will be considered by the July Panel meeting.

The Modification Proposal seeks to address an issue whereby a party with insufficient Credit Cover to cover their existing liabilities is not flagged as being in Credit Default. This occurs due to the link between the Payment Default and the Credit Default procedures.

If a Trading Party does not pay their Trading Charges by the relevant Payment Date then they are in Payment Default, and Section M2.1.3 of the BSC requires that the amount of non-payment be deducted from the current level of Credit Cover. This new Credit Cover is notified to the ECVAA and used in the Energy Indebtedness calculations for that Trading Party.

In the specific circumstance where the amount that the Party has not paid exceeds their Energy Credit Cover, then the result will be a negative Energy Credit Cover. The rules for assessing Parties' Credit Cover Percentages do not handle this situation robustly, and may fail to place the Trading Party in Credit Default even though they do not have enough Credit Cover to secure their outstanding settlement liabilities.

The Modification Proposal suggested the following solution to this issue:

- The definition of Credit Cover Percentage in Section M3.1.1 (a) of the BSC be modified to take into account negative Credit Cover.

Additionally, the following solutions were suggested as potential Alternative Modifications:

- The definitions of Energy Indebtedness and Credit Cover could be amended so that the amount of any unpaid Trading Charges was added to Energy Indebtedness, rather than subtracted from Credit Cover.
- The definition of Credit Cover could be modified to say that non payments should be deducted from the amount of credit lodged, provided the Credit Cover never become less than zero.

The Credit Modification Group met and discussed these options at their meeting on 23 April 2002.

The Modification Group decided that further analysis was required on all three options, but decided that an amendment to the definition of Credit Cover Percentage would be the favoured option and would be chosen unless the costs received from ECVAA were deemed excessive or the consultation responses received from industry indicated unseen problems.

The Modification Group thought that an amendment to the definition of Energy Indebtedness to include unpaid charges would be a viable solution and was considered a close contender to the original Modification. However, there were concerns that this solution would be expensive and unreliable due to the necessity of the creation of a link between FAA and ECVAA to pass details of unpaid Trading Charges, as well as a change to the Energy Indebtedness calculation. The BSC Agent was approached for confirmation of this.

The Service Provider expressed concerns with the original Modification, and suggested the proposed amendment to the definition of Credit Cover Percentage would give misleading results in certain circumstances. Additionally, the difference in cost between amending the definition of Energy Indebtedness and the Credit Cover Percentage was not as great as originally thought. Due to this it was decided to distribute all three options for Detailed Level Impact Assessment to the ECVAA and FAA.

1.3 Purpose and Structure of Document

The primary purpose of this document is to describe the issue and proposed solutions to enable the ECVAA and FAA to provide Impact Assessments and to subsequently enable Parties to respond with their views on the issue and proposed solutions.

The document is structured in the following manner:

- **Summary of Proposed Modification** – a description of the Modification and any associate additional requirements.
- **Description of the Requirements for the Proposed Modification -** a description of the requirements for the Modification Proposal.
- **Description of Requirements for potential Alternative Modifications** – a description of the requirements for the potential Alternative Modifications.
- **Development Process** – a description of how this Proposal would be developed, tested and implemented.

2 DESCRIPTION OF PROPOSED MODIFICATION

2.1 Amendment to the definition of Credit Cover Percentage

The Modification Proposal suggested an amendment to the definition of Credit Cover Percentage (CCP) that would reflect the total value of Energy Credit Cover (ECC).

Currently, Section M3.1.1 of the Code defines the CCP as:

100 * Energy Indebtedness (EI) / Energy Credit Cover (ECC).

This equation can give anomalous results (as illustrated in the table below) when the ECC is negative (this could occur when the amount subtracted from the Credit Cover due to a Payment Default exceeds the original value of Credit Cover.)

Energy Indebtedness	Energy Credit Cover	Credit Cover Percentage	Comment
9000	10000	90%	This accurately reflects the companies current credit position.
-9000	10000	-90%	This accurately reflects the companies current credit position.
9000	-10000	-90%	The indebtedness significantly exceeds the Credit Cover and as such the CCP should be greater than 100%.
-11000	-10000	110%	The Party is close to having unsecured liabilities, so the CCP should be slightly under 100%.
-9000	-10000	90%	The party has unsecured liabilities, so the CCP should be over 100%.

The Modification Group considered these scenarios and decided that they did expose the industry to unnecessary credit risk.

The following equation was considered as a solution to this problem:

CCP = 100 * (1 – Amount of Credit Cover Left / Absolute Value of Credit Cover)

Or in more formal terms:

$CCP_{pj} = \{1 - (ECC_p - EI_{pj}) / |ECC_v|\} * 100$

Where |ECC| is the absolute value of ECC.

If the ECC for a Trading Party is positive the proposed solution gives the same answers as the existing equation, however, in instances where the ECC is negative then the new equation gives answers that more accurately reflect the amount of credit that a Party has.

The Modification Group considered the new equation and decided that it resolved the identified issue.

Proposed Equation

Energy Indebtedness	Energy Credit Cover	Credit Cover Percentage
9000	10000	90%
-9000	10000	-90%
9000	-10000	290%
-11000	-10000	90%
-9000	-10000	110%
5	10	50%

It should be noted that the ECVAA, when asked for informal feedback on this solution, expressed the view that it gave misleading CCP values if the amount of Credit Cover has been significantly reduced by unpaid Trading Charges. For example, an Energy Credit Cover of 10 MWh and an Energy Indebtedness of 5 equates to a 50% CCP. The suggestion is that this value does not accurately reflect the situation if the 10 MWh Energy Credit Cover includes a significant amount of unpaid Trading Charges (e.g. letters of credit cover equivalent to 10,000 MWh, reduced by unpaid Trading Charges equivalent to 9,990 MWh).

The ECVAA therefore argued that more meaningful CCP values would result if unpaid Trading Charges were regarded as increasing indebtedness rather than reducing Credit Cover i.e. the solution described in section 3.1 of this document. It is proposed to obtain impact assessments of both solutions, in order that the Modification Group can reach a decision on which better facilitates the Applicable BSC Objectives.

3 POTENTIAL ALTERNATIVE MODIFICATIONS

3.1 Amendment to the Definition of Energy Indebtedness

The Modification Group considered amending the definition of Energy Indebtedness to include unpaid Trading Charges. This would also require an amendment to the definition of Credit Cover as unpaid Trading Charges would no longer be deducted.

The following table illustrates the effect of this, compared to the P76 solution described in section 2.1 of this document. Note that the credit cover in the first column is the actual amount of cash and Letters of Credit provided by the Party (without any adjustment for unpaid Trading Charges). Similarly, the indebtedness values in the second column are the indebtedness values calculated by ECVAA[1], without any adjustment for unpaid Trading Charges:

Credit cover	Indebtedness	Unpaid Trading Charges	CCP calculated under P76	CCP calculated under this option
£1,000,000	£50,000	£0	5%	5%
£1,000,000	£50,000	£900,000	50%	95%

As noted in section 2.1 above, the ECVAA has expressed the view that the higher value of Credit Cover Percentage in the last row of the above table is more appropriate, and would give BSC Parties additional protection against the risk of unsecured settlement liabilities.

A new interface would be required carrying details of the current values of unpaid Trading Charges for a Party from FAA to ECVAA. This value would be stored within ECVAA and added to the level of a Parties Energy Indebtedness. Every time a new file arrived carrying details of a Parties unpaid Trading Charges, this new value would overwrite the existing level of debt stored in ECVAA and be added to the Parties Energy Indebtedness.

Ideally, this file transfer and upload would take place in timescales that would enable the new levels of indebtedness to be calculated in time for the next Gate Closure. However, this may not prove to be cost effective and so ECVAA are also asked to provide costs for the interface to run in time for Gate Closure of period one for the next Settlement Day. ECVAA are also asked to consider whether there may be any more cost efficient way for the same requirement to be matched.

These amendments would remove the possibility of a negative Energy Credit Cover arising and would resolve the issue identified by Modification Proposal P76.

The Modification Group originally considered that this solution would be too expensive as a new interface carrying details of unpaid Trading Charges between FAA and ECVAA would be required. However, informal feedback from the ECVAA indicated that the costs would be similar to the originally proposed amendment to the definition of Credit Cover Percentage.

However, during the review process a Modification Group member expressed the view that unpaid trading charges should be deducted from Credit Cover as this was the purpose of it. This member expressed the concern that deducting unpaid trading charges from the Energy Indebtedness might lead to parties being able to default paying trading charges for longer until they were flagged as being in Credit Default.

[1] Strictly speaking the ECVAA calculates indebtedness values in MWh rather than GBP. However, for the purposes of this example, all values are shown converted to GBP.

3.2 Amendment to the Definition of Credit Cover

The final solution is that the definition of Credit Cover is amended to state that Credit Cover can never become less than zero. Even if a Party has a Payment Default value that is greater than their Credit Cover value, the Credit Cover will never have a value of less than zero.

This would remove the inaccuracies associated with negative levels of ECC and would have the lowest costs in terms of system development as it would only minimally impact FAA processes and have no impact on ECVAA. However, it would not always accurately reflect the amount of credit that a Party had. This would occur in cases where a Party has not paid Trading Charges that are greater than their current level of Credit Cover (in these cases the level of Credit Cover for that Party should be negative).

The FAA interface to ECVAA would have to be amended to replace negative values of Credit Cover with zero. This is not anticipated to be a significant change to the existing process and should be a low cost solution. Due to the ease of implementation of this option it was also decided to send this solution out for Impact Assessment.

4 ECVAA AND FAA DEVELOPMENT PROCESS

ELEXON recognise that responsibility for design, testing and implementation required by Modification Proposal P76 lies with the ECVAA and/or FAA. Any modifications by ECVAA and/or FAA would require close co-operation with ELEXON during the Design, Testing and Implementation phases.

In order to gain assurance that changes made are consistent with the requirements, ELEXON requires visibility of these processes and involvement in the testing and implementation stages. The following sections give an indication of the control points required during design, testing and implementation and are supplied to provide a basis on which ECVAA can quote.

The ECVAA development process should conform to previously agreed testing strategies. Acceptance Criteria will be more fully defined at a later stage but will ensure that the solution works correctly and that existing processes will not be negatively impacted.

4.1 Design

ELEXON intend that responsibility for the correctness of the design should remain with ECVAA and/or FAA, but that ELEXON should have the opportunity to review it, and identify apparent inconsistencies with the requirements. The following processes are proposed to achieve this:

- ELEXON will review changes to the System Specification and Design Specification, and identify any evident inconsistencies with the URS, but will not sign off the documents.

4.2 Testing

ELEXON intend that responsibility for any software testing should remain with ECVAA and/or FAA but that ELEXON should have some visibility of the process and involvement in this process; in order to gain assurance that the integrity of existing systems is maintained. The following processes are proposed to achieve this:

- As part of the response to this document, ECVAA will provide a statement of what testing is required and their proposed testing strategy. This statement will be reviewed by ELEXON, and should explain how ECVAA will demonstrate that the changes are ready for live operation, and that there is no unplanned impact on pre-existing facilities.
- ELEXON will be provided with information on test plans, test scripts and other test documentation that they may request. ELEXON will review these documents, and identify any evident inconsistencies with the agreed testing strategy, but will not sign them off.
- ELEXON will create their own test scripts and validate any changes to ECVAA and/or FAA systems.
- ELEXON will have the option of witnessing appropriate elements of ECVAA and/or FAA testing.

ECVAA will provide ELEXON with a test report, summarising the testing carried out, and the results of those tests. The report will also describe any observations found during testing, and the steps taken to resolve them.

4.3 Implementation

ELEXON anticipate the following interaction with ECVAA and/or FAA during the implementation process:

- As part of the impact assessment of this document, ECVAA and/or FAA will provide a high-level statement of their proposed implementation approach (describing, for example, whether a phased approach is proposed). ELEXON will review and sign off this high-level implementation strategy.

Implementation date(s) for the changes described in this document will be agreed in advance by ELEXON and ECVAA/FAA.