

Stage 01: Initial Written Assessment

What stage is this document in the process?

01 Initial Written Assessment

02 Definition Procedure

03 Assessment Procedure

04 Report Phase

P274 Cessation of Compensatory Adjustments

This Modification seeks to specify that Settlement errors that have been subject to final reconciliation cannot be compensated for in subsequent Settlement calculations.



ELEXON recommends
A 5-month Assessment Procedure by a Workgroup (including 15 WD consultation period 13/01/12 – 03/02/12)



High Impact:
LDSOs, Suppliers



Medium Impact:
NHHDCs



Low Impact:
ELEXON

188/07

P274
Initial Written Assessment

7 October 2011

Version 0.1

Page 1 of 10

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Contents

1	Why Change?	3
2	Solution	6
3	Areas for consideration	7
4	Proposed Progression	8
5	Likely Impacts	10
6	Recommendations	10
7	Further Information	10

About this document:

This document is an Initial Written Assessment (IWA), which ELEXON will present to the Panel on 13 October 2011. The Panel will consider the recommendations and agree how to progress P274.

You can also find further information in:

- Attachment A – P274 Modification Proposal



Any questions?

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188/07

P274
Initial Written Assessment

7 October 2011

Version 1.0

Page 2 of 10

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Background

Distribution Price Control

Ofgem administers a Distribution Price Control regime every five years. This sets the total revenues that each Licensed distribution System Operator (LDSO) can collect from customers at a level that allows an efficient business to finance their activities.

Ofgem also place incentives on LDSOs to innovate and find more efficient ways to provide an appropriate level of network capacity, security, reliability and quality of service. At the end of each price control period Ofgem undertakes a Distribution Price Control Review (DPCR) in order to set the controls for the next price control period.

Loss incentive scheme

One such incentive is the losses incentive scheme which is used to drive the LDSOs to achieve an efficient level of losses on their networks. This scheme adjusts LDSOs allowed annual revenues according to how they perform each year against their losses target. The LDSOs calculate losses as the difference between the electrical units entering and exiting their distribution network, where settlements data is used to measure units exiting the network.

The losses incentive scheme also has a rolling retention mechanism (LRRM) to encourage the LDSOs to undertake loss reduction initiatives throughout the price control period by guaranteeing rewards (or penalties) for a subsequent five year period. As part of the DPCR5 Final Proposals Ofgem set out how they would calculate the revenue adjustments which should apply to each LDSO as a result of the DPCR4 LRRM, which will, in part, be based on the final settlement data for 2009-10.

Gross Volume Correction (GVC)

The settlement systems, administered by the Balancing and Settlement Code (BSC), are primarily designed for the purposes of the electricity trading and retailing system. Use of settlement data to evaluate LDSO losses performance is an ancillary function.

Errors and inaccuracies in Settlement can occur. However, once a Settlement Day has been subject to the Reconciliation Final Volume Allocation Run (RF Run), data shouldn't be changed unless the Metering System in question is subject to an upheld Trading Dispute. Suppliers (and their Non Half Hourly Data Collectors) may use a technique called Gross Volume Correction (GVC) to correct errors relating to Meter Advance Periods during which some Settlement Dates have already been subject to the RF Run. The effect of using GVC is to reallocate the lost or gained energy volume to a range of Settlement Dates for which RF Runs have not yet taken place. This process ensures that the total gross volume of energy is correct, although it will be allocated to the wrong Settlement Days/Settlement Periods. The process also ensures that consumption data for Settlement Days for which RF Runs have taken place (referred to as 'crystallised' data) isn't changed.

Large scale application of GVC can distort apparent losses performance by LDSOs, and affect the associated allowed revenues. When Suppliers make abnormal adjustments to Settlement data it artificially inflates the determination of losses and LDSOs are penalised.

Group Correction Factors

GSP Group Correction Factors (GGCFs) are used to ensure that the total energy allocated to Suppliers in each Settlement Period in each GSP Group matches the energy entering the GSP Groups from the Transmission System, adjoining GSP Groups and through embedded generation.

This occurs via the setting of their allowed revenue through the Distribution Price Control Review.

What's the Issue?

The Modification Proposal contends that GVC is a major issue for the losses incentive scheme because it allocates energy volumes to later periods than those in which the energy was consumed. This has resulted in distorting LDSOs distribution losses because the GVC adjustment artificially depresses the reportable number of units distributed for the period in which it was executed. This has had a very material impact on some LDSOs under Distribution Price Control Review 4 – running into £10s millions for most and greater than £100 million for some. LDSOs are very concerned that such issues could impact the operation of the distribution loss incentive scheme in DPCR5 in a similar manner, with comparable financial implications.

When GVC is applied, the error which has crystallised in one period is compensated for in another period. For the Supplier applying GVC, the gross uncorrected energy across both a) the period of the error and b) the period over which compensation is applied, will be correct. However, other Suppliers active in the relevant GSP Group will also be impacted to the extent that their energy volumes will be reduced during the period in which energy was over-stated and will increase during the period in which energy was under-stated. This is a natural consequence of the application of Grid Supply Point (GSP) Group Correction Factors. For example, if a Supplier is compensated this year for an overpayment last year this means that the other Suppliers benefited last year because their consumption was less than it should have been. Conversely, if a Supplier is compensated this year for an underpayment last year then all Suppliers will have their consumption increased to compensate for the previous year's underpayment.

Whilst these effects will tend to balance out, any new entrants to the supply market could be in the position where they are being allocated increased energy volumes due to the application of above-unity GSP Group Correction Factors, which in turn are caused by Suppliers using GVC to compensate for over-statements of energy during periods before the new entrant joined the market. New entrants could also experience the opposite effect, but the trend over recent years has been to the detriment of new entrants.

Additional to this impact is the effect of prices paid in the error period vs. prices paid in the compensation period. When prices are higher in the error period and a Supplier has underpaid in this period, Suppliers using GVC benefit because they account for the previous under-stated energy at a lower price than was applicable when the energy was actually consumed. However this means that the equal-and-opposite disbenefit is suffered collectively by other NHH Suppliers in the same GSP Group through the application of GSP Group Correction. Conversely when prices are higher in the compensation period and a Supplier has underpaid in the error period, the Supplier using GVC does not benefit because the compensated energy is accounted for at higher prices than those which applied when the energy was consumed. Other NHH Suppliers who overpaid in the error period (via GSP Group Correction), now underpay in the compensation period and so benefit from the higher prices in the compensation period. Similar winners and losers emerge when prices are lower in the error or compensation period and Suppliers under or over pay in the error year. The table below illustrates these effects.

Error Period	Compensation Period	Prices	Supplier applying GVC	Other NHH Suppliers in the same GSP Group
Over-payment	Under-payment	Higher in Compensation Period	Benefit	Detriment
Under-payment	Over-payment	Higher in Compensation Period	Detriment	Benefit
Over-payment	Under-payment	Lower in Compensation Period	Detriment	Benefit
Under-payment	Over-payment	Lower in Compensation Period	Benefit	Detriment

The Proposer also suggests that there may be increased use of GVC during the roll-out of Smart Meters. This is because the installation process is likely to identify errors that have previously gone undetected. If these errors are addressed using GVC, this could exacerbate the impacts on the losses incentive mechanism for LDSOs.

Related changes

This Modification proposal is one of several changes that seek to mitigate the issues with the Distribution Loss Incentive Mechanism's use of Settlement data. The other related (but not interdependent) changes are Modification P275, 'Extending BSC Performance Assurance' and several anticipated Change Proposals relating to the following areas:

- GVC and 'Dummy Meter Exchanges' Audit Records;
- Removal of Residual Negative EACs;
- Removal of Extreme EACs; and
- Addressing Settlement Data in a Balanced Manner.

2 Solution

This Modification proposes that the Balancing and Settlement Code (BSC) should be amended so that it specifies that 'crystallised' errors (i.e. errors that have been subject to final reconciliation) cannot be compensated for in subsequent Settlement calculations.

Consequent changes would be made to Code Subsidiary Documents, primarily BSCP504, 'Non Half Hourly Data Collection for SVA¹ Metering Systems Registered in SMRS²', which sets out the provisions for compensating crystallised errors and the GVC process.

The proposer contends that this would address the issues set out above in relation to the negative impacts this practice can have on new entrants, Suppliers and LDSOs. It therefore would better facilitate the achievement of **Applicable BSC Objectives (c)**.

188/07

P274
Initial Written Assessment

7 October 2011

Version 1.0

Page 6 of 10

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¹ Supplier Volume Allocation

² Supplier Meter Registration Service

3 Areas for consideration

In this section we highlight areas we believe the Panel should consider when making its decision on how to progress this Modification proposal. If P275 goes into the Assessment Procedure, then we would recommend that the areas below form the basis of the Workgroup's Terms of Reference.

Impact of GVC

GVC was introduced to the BSC to address Settlement errors and has significant benefits for Suppliers. A significant question to ask therefore would be what would be the impact on Suppliers of removing GVC?

The Workgroup may consider whether there is scope for further limiting GVC instead of completely removing it. Additional consideration could be given to whether the benefits of GVC outweigh the impact of not using it and assessing the materiality of implementing P274.

The Proposer notes a number of adverse implications of GVC. Consideration should be given to whether the suggested implications are valid and whether there are any other detrimental effects. This could include examining any broader implications of compromising the extent to which Settlement reflects actual energy flows of particular periods that may not have been fully appreciated.

CP1310

Work has already been done to try to improve GVC, such as CP1310 'Clarifications to Gross Volume Correction Process', which was implemented in February 2010 - consideration should be given to actions already taken improve GVC and the extent to which they address any issues raised by P274.

Related Changes

As discussed in the section above 'Related Changes' there are a set of proposed changes which we believe are related but not interdependent. We recommend that consideration be given to these other proposed changes as to whether they have any relevance to P274.

4 Proposed Progression

If P274 proceeds to the assessment Procedure we recommend a three/four months assessment, conducted by the Volume Allocation Standing Modification Group (VASMG), supplemented with any other relevant experts and interested Parties. Terms of Reference

We recommend the P275 Workgroup is formed of members of the VASMG and considers the following areas.

P274 Terms of Reference	
01	Development of the P274 proposed solution.
02	Changes to BSC documentation, systems and processes needed to support P274 implementation.
03	Any alternative approach.
04	Assessment of P274 against the Applicable BSC Objectives.
05	Materiality of the issue identified by P274.
06	Quantification of P274 costs and benefits where possible.
07	Impact on industry participants.

Timetable

The dates in the proposed timetable are provisional and are subject to change depending on factors such as whether they are required as P274 develops, availability of Workgroup members etc. We anticipate that there may be some overlap in the Workgroups for P274 and P275 and will try and coordinate progression of these proposed Modifications accordingly.

Proposed progression timetable for P274 Assessment Procedure	
Activity	Date
Present IWA to Panel	13 October 2011
Workgroup meeting 1	w/c 24 October
Workgroup meeting 2	w/c 7 November
Issue P275 for impact assessment (15 WD)	18 November
Impact assessment response deadline	9 December
Workgroup meeting 3	w/c 12 December
Issue P275 industry consultation (15 WD)	13 January
Consultation response deadline	3 February
Workgroup meeting 4	w/c 13 February 2012

188/07

P274
Initial Written Assessment

7 October 2011

Version 1.0

Page 8 of 10

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Estimated Progression Costs

Estimated progression costs based on proposed timetable	
Meeting costs (including Modification Group member expenses)	£2000 (based on four Workgroup meetings)
Non-ELEXON legal and expert costs	Zero
Service Provider impact assessment costs	£3000
ELEXON resource	50 man days, equating to approximately £12,000

The ELEXON resource cost is an estimate of how much time and effort it will take us to progress P274 through the Assessment Procedure and Report Phase. It includes time supporting industry groups, drafting documentation and producing legal text.

Below is our estimate of the cost incurred by the industry in assessing P274:

Estimate of total industry assessment costs					
Workgroup support	Est #mtgs	Est # att	Est effort	Est rate	Sub-total
	4	6	1.5	605	£21,780
Consultation response support	Est #con	Est # resp	Est effort	Est rate	Sub-total
	2	6	2.5	605	£18,150
Total					£39,930

Meeting costs reflect the expected number of Workgroup meetings and the industry effort spent supporting these meetings. The calculation is based upon an anticipated average number of six members at each meeting putting in an average of 1.5 man days effort per meeting. A standard rate of £605 per man day is applied.

Consultation costs represent an estimation of the anticipated industry response to consultations issued to support P274 and the approximate time and effort spent on responses. The calculation is based upon an anticipated number of 10 responses to the intended two consultations (i.e. the Assessment Procedure and Draft Modification Report consultations), and assumes each response requires 2.5 man days of industry effort. A standard rate of £605 per man day is applied.

5 Likely Impacts

Impact on BSC Parties and Party Agents

Suppliers – removal or change of GVC; and
NHHDCs – change or removal of GVC processes.

Impact on ELEXON

Area of ELEXON's business	Potential impact
GVC Guidance Documentation.	Revision or withdrawal of documentation.

Impact on Code

Code section	Potential impact
S, U.	Revision or withdrawal of reference to GVC.

Impact on Code Subsidiary Documents

CSD	Potential impact
BSCP 504.	Revision or removal of GVC processes.

6 Recommendations

On the basis of the initial written assessment, ELEXON invites the Panel to:

- DETERMINE that Modification Proposal P274 progresses to the Assessment Procedure;
- AGREE the Assessment Procedure timetable such that an Assessment Report should be completed and submitted to the Panel at its meeting on 8 March 2012;
- DETERMINE that the P274 Modification Group should be formed from members of the VASGM; and
- AGREE the Modification Group's Terms of Reference.

7 Further Information

You can find more information in:

Attachment A – P274 Modification Proposal.

4.5. MP Form

Modification Proposal – BSCP40/03	MP No: P274 <i>(mandatory by BSCCo)</i>
Title of Modification Proposal : Cessation of Compensatory Adjustments	
Submission Date <i>(mandatory by originator):</i> 29 September 2011	
Description of Proposed Modification <i>(mandatory by originator)</i> This Modification seeks to amend the Balancing and Settlement Code (BSC) so that it specifies that ‘crystallised’ errors cannot be compensated for in subsequent Settlement calculations. A direct consequence of this would be to remove the process of Gross Volume Correction (GVC). The BSC does not allow data that has already been finalised in Settlement to be changed except via the Trading Dispute process, but is otherwise silent on how crystallised errors can be treated. The options available where a crystallised error is identified are: <ul style="list-style-type: none"> • Perform a compensatory adjustment in subsequent Settlement via the GVC process so that the volumes in Settlement are accurate overall; or • Write off the crystallised error but adjust data so Settlement is accurate going forward, typically done at present by carrying out a dummy meter exchange. The Modification proposes that the BSC specifies that compensatory adjustment in subsequent Settlement cannot be employed for crystallised errors. This would be achieved by amending the relevant parts of the BSC, probably in Section S, ‘Supplier Volume Allocation’, and Section U, ‘Provisions Relating to Settlement’ (though this should be considered and confirmed as part of progression of this Modification). Consequent changes would be made to Code Subsidiary Documents, primarily BSCP504, ‘Non Half Hourly Data Collection for SVA ¹ Metering Systems Registered in SMRS ² ’, which sets out the provisions for compensating crystallised errors and the GVC process.	
Description of Issue or Defect that Modification Proposal Seeks to Address <i>(mandatory by originator)</i> This Modification contends that compensatory adjustment of volumes via the GVC process, as currently permitted by the BSC, materially compromises the extent to which Settlements accurately reflect the energy volumes supplied by Suppliers at particular periods, leading to the issues set out below. <u>Background:</u> Licensed Distribution System Operators (LDSOs) are required, through Standard Licence Condition 44B (Distribution Losses Reporting Regime), to use Settlement data to determine and report energy entering and energy exiting their networks in accordance with Regulatory Instruction and Guidance	

¹ Supplier Volume Allocation

² Supplier Meter Registration Service

Modification Proposal – BSCP40/03

MP No: P274

(mandatory by BSCCo)

(RIGs). This information is the primary input into the Distribution Loss Incentive Mechanism (DLIM), which is effected through Special Condition CRC³ 7 (Adjustment of licensee's revenues to reflect distribution losses performance).

LDSOs are required to report this information for the Distribution Price Control Review 5⁴ (DPCR5) so that the DLIM for this period can operate, and for the DPCR4⁵ period so that the DLIM for this period can be closed down and so that the DLIM targets for the DPCR5 period can be set.

The incentive / penalty was £48/MWh for the DPCR4 period and is £60/MWh for the DPCR5 period. As a consequence, the financial implications of the DLIM for each LDSO can run into many £100s millions for each 5 year price control period.

Determination of the inputs to the DLIM – both in terms of target setting and of performance measurement – is based on Settlement data. As a consequence, the DLIM is reliant on the quality of this data. More specifically, effective operation of the mechanism is reliant on the Settlement data used to set the targets being consistent with the Settlement data used to measure performance.

However, the scale of Supplier adjustments to Settlement data in the 14 months reconciliation window increased significantly in the five year DPCR4 period. The principal reason for this was an increased focus by Suppliers in addressing Settlement data quality issues using a variety of techniques currently permitted under the BSC. This has created an inconsistency between the basis of the target setting and performance measurement components of the DLIM. For DPCR4, this is having a very material impact on LDSOs – running into £10s millions for most and greater than £100 million for some. Ofgem is soon to consult on the most appropriate means of addressing this for DPCR4.

LDSOs are very concerned that such issues could impact the operation of the DLIM in DPCR5 in a similar manner, with comparable financial implications. This creates uncertainty for LDSOs in their regulated allowable revenue and uncertainty for Suppliers in the Distribution Use of System (DUoS) costs they will incur. Impacts such as more volatile energy prices and / or increased energy prices could also affect consumers, though this is outside the scope of the BSC.

LDSOs and Suppliers set up an industry working group under the Distribution Charging Methodology Forum (DCMF) to consider these issues. These ran over an 11 week period from June to August. This group concluded that the primary issue lies with the design of the DLIM. However, Ofgem has indicated that there is no scope for making any fundamental changes to the DLIM effective in DPCR5. Consequently, LDSOs want to ensure, to the extent that it is possible, that Settlement data better supports operation of the DLIM.

Issue:

The increased level of adjustments to Settlement data described above have been effected by Suppliers using a range of techniques currently permitted under the BSC. One such technique, purportedly used

³ Charge Restriction Condition.

⁴ Running for the 5 year period starting on 1st April 2010.

⁵ Running for the 5 year period ending on 31st March 2010.

Modification Proposal – BSCP40/03	MP No: P274 <i>(mandatory by BSCCo)</i>
<p>extensively by some Suppliers, is “Gross Volume Correction” (GVC).</p> <p>GVC compensates for volume errors that have crystallised in the Final Reconciliation (RF) run by introducing an equal and opposite error in periods that have not yet been subject to the RF run. This is on the basis that where an error has occurred it is better to have the correct volume settled, regardless of whether the error volume is associated with the actual period (days, months and, sometimes, years) in which it accrued. As a consequence the extent to which Settlement reflects the energy flows on the days being settled is compromised materially.</p> <p>GVC was legitimised by Modification P176 in 2005, largely on the grounds of efficiency, in that it would reduce the need for Trading Disputes to deal with errors post RF. This Modification contends that the broader implications of compromising the extent to which Settlement reflects actual energy flows of particular periods may not have been fully appreciated under P176 and should be considered further.</p> <p>Use of GVC is a major issue for the DLIM as it precludes adequate determination of when energy flows took place. This creates uncertainty for LDSOs in their regulated allowable revenue and uncertainty for Suppliers in the DUoS costs they will incur. This uncertainty could ultimately impact consumers, though this is outside the scope of the BSC.</p> <p>In addition, GVC has a number of adverse implications under the BSC, including:</p> <ul style="list-style-type: none"> • New entrants having volumes attributed to them that relate to periods before they started trading (through the effect of GSP Group Correction Factor on the compensatory error volume) – which acts a deterrent for new entrants and so inhibits effective competition; • Suppliers (big and small alike) having volumes attributed to them that relate to periods of cheaper wholesale energy prices (through the effect of GSP Group Correction Factor on the compensatory error volume) – which inhibits effective competition; and • LDSOs being unable to produce suitable forward looking Line Loss Factors for use in Settlement (as these are based on historical Settlement data) – which impacts the accuracy of Settlements and so inhibits effective competition. <p>The likely impact of the rollout of Smart Metering should also be considered. Smart Meters should ultimately provide for more accurate Settlement and fewer errors, experiences from rollouts elsewhere in the world suggest that introduction of Smart Meters can identify errors that had gone undetected. The rollout of Smart Meters in Great Britain could result in many errors being detected and if such errors were addressed using GVC the issues described above – for the DLIM and the BSC – would be exacerbated.</p>	
<p>Impact on Code <i>(optional by originator)</i> BSC Sections S and U.</p>	

Modification Proposal – BSCP40/03	MP No: P274 <i>(mandatory by BSCCo)</i>
Impact on Core Industry Documents or System Operator-Transmission Owner Code <i>(optional by originator)</i> None.	
Impact on BSC Systems and Other Relevant Systems and Processes Used by Parties <i>(optional by originator)</i> To be confirmed during assessment of proposal.	
Impact on other Configurable Items <i>(optional by originator)</i> BSCP504 NHH Data Collection for SVA Metering Systems in SMRS.	
Justification for Proposed Modification with Reference to Applicable BSC Objectives <i>(mandatory by originator)</i> The modification would remove the practice of compensatory adjustments for data that has already been finalised in Settlement. This would address the issues set out above in relation to new entrants, Suppliers and LDSOs. The proposed modification therefore better facilitates Applicable BSC Objective (c) (the promotion of effective competition in the generation and supply of electricity, and (so far as consistent therewith) promoting such competition in the sale and purchase of electricity).	
Is there a likely material environmental impact? <i>(mandatory by originator)</i> No.	
Urgency Recommended: Yes / No <i>(delete as appropriate) (optional by originator)</i> No.	
Justification for Urgency Recommendation <i>(mandatory by originator if recommending progression as an Urgent Modification Proposal)</i>	
Self-Governance Recommended: Yes / No <i>(delete as appropriate) (mandatory by originator)</i> No.	
Justification for Self-Governance Recommendation <i>(mandatory by originator if recommending progression as Self-Governance Modification Proposal)</i>	
Should this Modification Proposal be considered exempt from any ongoing Significant Code Reviews? <i>(mandatory by originator in order to assist the Panel decide whether a Modification Proposal should undergo a SCR Suitability Assessment)</i> Yes; there is no ongoing SCR relevant to this Modification Proposal.	

Modification Proposal – BSCP40/03	MP No: P274 (mandatory by BSCCo)
Details of Proposer:	
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Attachments: Yes / No (delete as appropriate) (mandatory by originator)	
No.	
If Yes, Title and No. of Pages of Each Attachment:	