

Stage 03: Assessment Report

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

Data for Settlement periods that have been subject to the Final Reconciliation Run (RF) cannot be changed. However, if an error is identified it can be compensated for in a later period that has not yet been subject to RF by using Gross Volume Correction (GVC).

P274 contends that the use of GVC can adversely affect Settlement because it results in data for Settlement Periods not reflecting actual energy volumes supplied, and therefore seeks to restrict the use of such compensatory techniques.

The P274 Alternative Modification would permit GVC but introduce a time restriction on its use.



The Workgroup Group recommends:
Approval of the P274 Alternative Modification



High Impact:
Suppliers, NHHDCs



Low Impact:
ELEXON, LDSOs

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About this document:

This document is the P274 Assessment Report which ELEXON will present to the Panel on 11 October 2012 on behalf of the P274 Workgroup. The Panel will consider the recommendations in this report and agree an initial view on whether or not P274 should be approved. P274 will then be issued for further industry consultation.

There are six parts to this report:

- This is the main document, which explains the solutions, impacts, costs, benefits and implementation approach;
- Attachment A contains the Proposed BSC Legal text;
- Attachment B contains the Proposed BSCP504 redlining;
- Attachment C contains the Alternative BSC Legal text;
- Attachment D contains the Alternative BSCP504 redlining; and
- Attachment E contains the responses to the Assessment Procedure industry consultation.



Any questions?

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Why Change?

Energy volumes that have undergone a Final Reconciliation Run may not be changed. However, the BSC permits Suppliers to use Gross Volume Correction (GVC) to compensate for errors relating to periods that have been subject to RF by adjusting energy volumes in periods not yet subject to RF. This ensures that the total gross volume of energy is correct, albeit allocated to the wrong Settlement Period. Though GVC is detailed in subsidiary documentation it is not defined in the BSC itself.

P274 contends that in extreme cases the use of GVC can result in large volumes of energy being moved around, meaning Settlement is no longer reflective of the energy flows that actually occurred in the relevant period. The Proposer contends this can have a number of adverse implications under the Code that inhibit efficiency and effective competition.

Proposed and Alternative Solutions

The P274 **Proposed** solution introduces definitions of GVC and Re-Initialisation (formalising the existing 'dummy meter exchange' process) into the BSC, restricts the use of GVC to errors that are not excessive (as determined by threshold criteria introduced into BSCP504) and for volumes within 28 months of the date of GVC application, and mandates the use of Re-initialisation for excessive error volumes. The Proposed solution also introduces detailed audit requirements for both Re-initialisation and GVC into BSCP504.

The P274 **Alternative** solution continues to allow the use of GVC under the existing rules governing the process, but introduces a definition of GVC into the BSC and limits the use of GVC to only volumes within a defined period, which would initially be five years prior to the latest RF Run at the date GVC is performed but which could be changed by the SVG.

Implementation, Impacts & Costs

P274 Proposed solution would be implemented in the next BSC Release at least **12** months from the date of approval.

P274 Alternative solution would be implemented in the next BSC Release at least **3** months from the date of approval.

Changes to the Code and BSCP504 are required. Under P274 Proposed, Suppliers and NHHDCs would need to make significant systems changes; the impact under the Alternative is much less. Both Proposed and Alternative have no impact on central systems or LDSOs.

Workgroup's Final Views

The majority of the workgroup believe that the Proposed solution is overly complex and detrimental to Applicable BSC Objectives (c) and (d).

The majority of the Workgroup believe the Alternative solution provides additional control and confidence in GVC application, whilst addressing unreasonable GVC usage, and is therefore beneficial against Applicable BSC Objectives (c) and (d).

Recommendations

The Workgroup recommends that:

- P274 Proposed should not be approved; and
- P274 Alternative should be approved.

Background

Non Half Hourly Settlement

Settlement is based on a series of Half Hourly Settlement Periods. For sites that are Half Hourly (HH) metered, data is collected every half hour and feeds directly into the Settlement Calculations.

For sites that have Non Half Hourly (NHH) meters (i.e. those that are read less frequently than every half hour) a value for each half hour is still needed for the Settlement Calculations. In order to work out the volume of energy consumed in a half hour period the consumption for a whole year is first calculated.

Where actual Meter data is available, an Annualised Advance (AA) is calculated to reflect a year's worth of consumption. Where there have been no meter reads an Estimated Annual Consumption (EAC) is used. The AA or EAC is then put into a Profile Class in order to split the years' worth of data (estimated or otherwise) into half hour Settlement Periods.

Reconciliation Runs

As time passes, actual meter readings from NHH meters become available and replace the estimated data. This takes place in Reconciliation Runs. There is an Interim Information (II) Settlement run and a Settlement Final (SF) run, followed by four Reconciliation Runs (R1, R2, R3 and RF) which are designed to provide a more accurate picture of Settlement at each successive run.

Volumes that have undergone Final Reconciliation (RF) are said to be "crystallised" and cannot be amended unless a Trading Dispute has been authorised by the Trading Disputes Committee. If a Trading Dispute has been authorised then another run, called a Post-Settlement Run (DF) can be carried out when the corrected data has been received.

Gross Volume Correction

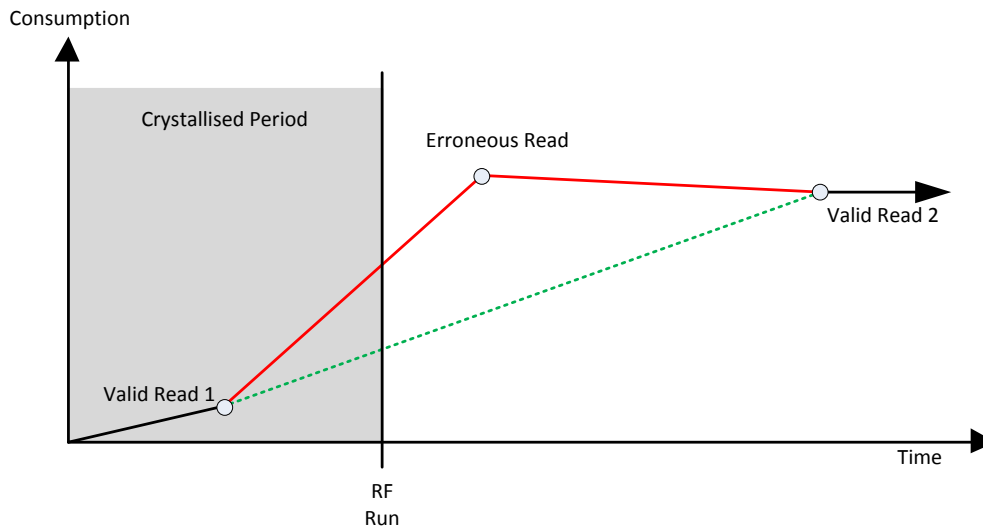
As noted above, once a Settlement Day has been subject to the RF Run, Suppliers and their agents shouldn't change any data for that day unless the Metering System in question is subject to an upheld Trading Dispute and the DF Run has been authorised.

However, Suppliers can apply an error correction technique called Gross Volume Correction (GVC). GVC can be used to correct errors where Meter Advance Periods (the period between the latest Meter read and the previous Meter read) span Settlement Dates which have already been subject to the RF Run. Whilst the data post RF cannot be changed, GVC reallocates 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 over a Meter Advance Period is correct without changing the volume of energy that has already been subject to RF Runs, but it allocates the volumes to the wrong Settlement Days.

GVC works by using 'Deeming'. Deeming is a process by which a Meter reading can be calculated where one does not currently exist. A Supplier can apply GVC to correct the error by creating a Deemed Meter Advance (DMA) for the Meter Advance Period between the last valid Meter reading and a date before the erroneous Meter read.

In the example below (Figure 1), an erroneous meter reading has been treated as valid, but a subsequent reading has shown that it was invalid. The correct rate of consumption is illustrated by the green dashed line. The erroneous reading cannot be withdrawn because the Meter Advance Period of associated AA includes dates for which RF Runs have taken place. In order to withdraw the invalid reading, GVC must be applied.

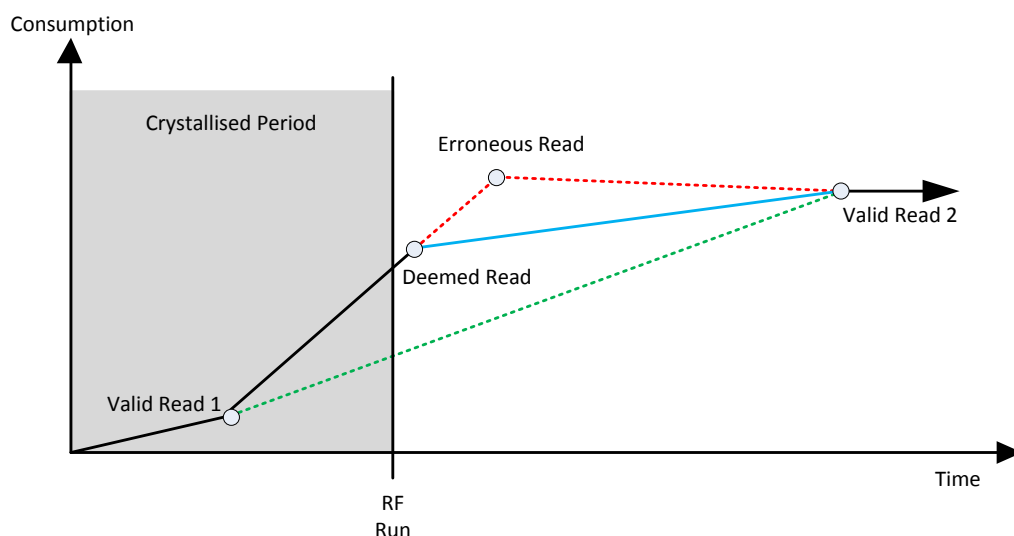
Figure 1



Please note that all diagrams in this document illustrate erroneous readings that are too high, with a subsequent correction that compensates for the over-allocation of energy. This convention has been adopted because a majority of GVC applications correct erroneously high readings. This, in turn, is because such errors are more likely to be identified by Non Half Hourly Data Collectors (NHHDC) validation and customer billing queries. It should be noted that errors (and correction) can occur in either direction.

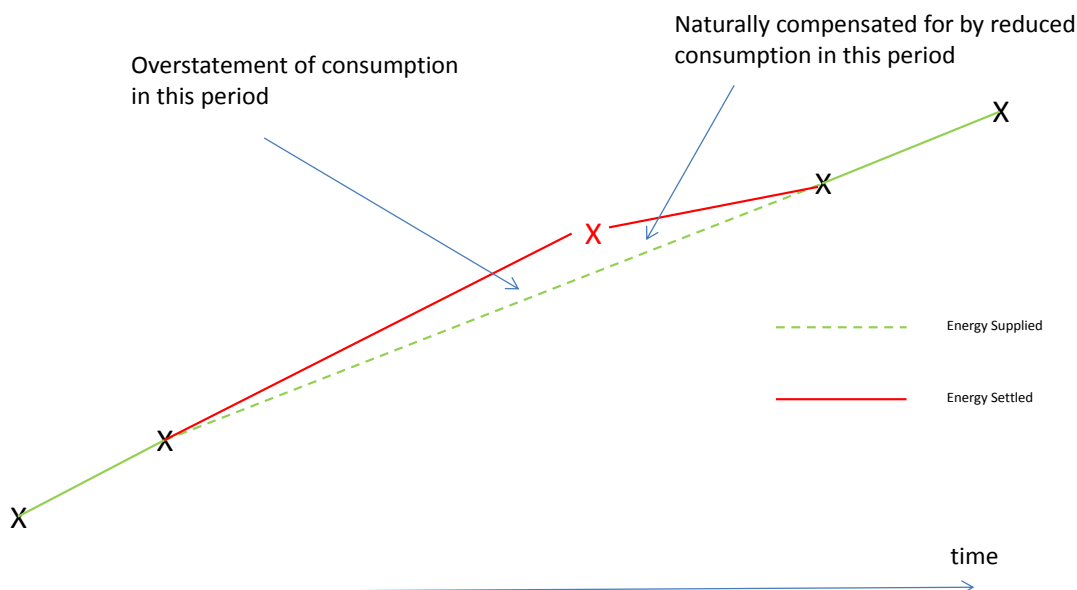
Figure 2 below shows how GVC would be applied and that after deeming a meter read what the new compensatory AA would be (the dashed red line shows how the error has reduced).

Figure 2NHH

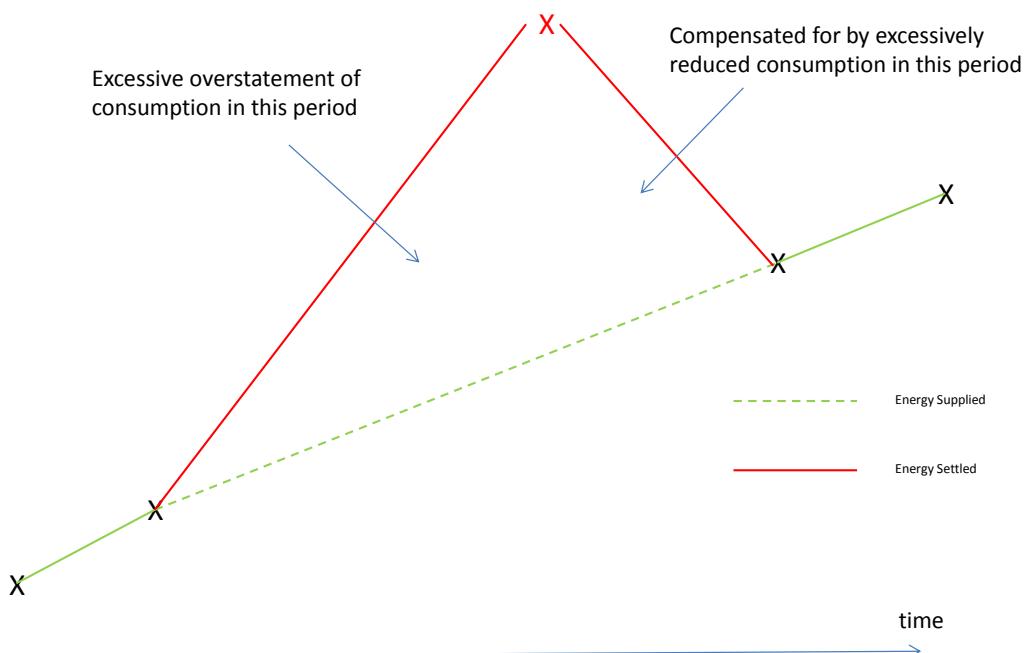


The Issue

Non Half Hourly (NHH) Settlement is such that any period of overstated consumption between two correct readings is naturally compensated for by a period of understated consumption between the same two readings. This is shown in the diagram below.



The Proposer of P274 acknowledges that GVC is an acceptable feature of Settlement, and allows for slight 'overs' and 'unders' to be compensated for. However, they believe in extreme cases, GVC can result in large volumes of energy being moved around; meaning Settlement is no longer reflective of the energy supplied on any given Settlement Day. This is shown in the diagram below.



Effect on energy volumes

For the Supplier applying GVC, the energy settled will be incorrect both in the period of the error and the period in which compensation is applied. However, the gross volume of

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energy settled across the two periods will be correct. Energy prices will vary between the period of the error and the period in which compensation is applied. This applies to both imbalance prices and wholesale prices, so the use of GVC can have financial implications for the Supplier in terms of both imbalance charging and the Supplier's contracted position.

Other NHH Suppliers active in the relevant Grid Supply Point (GSP) Group will also be impacted via GSP Group Correction. 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. The financial implications for these other Suppliers depend on the relative energy prices in the error and compensation periods and also the interaction of GSP Group Correction and imbalance charging.

Financial implications

As an example, consider a Supplier compensated via GVC in the current year for an overstatement of the Supplier's energy consumption in the previous year that resulted in an overpayment by the Supplier.

The other NHH Suppliers in the same GSP Group would have benefited in the previous year because their consumption was reduced from its actual amount due to the application of GSP Group Correction (i.e. the overstatement of the Supplier's consumption would have distorted the consumption of the GSP Group; GSP Group Correction would scale back the consumption of all Suppliers in the GSP Group so the total consumption is correct overall). However, in the present year the effect of GSP Group Correction would be to scale up the consumption of the Suppliers in the GSP Group to make up for the compensatory underpayment by the Supplier applying GVC.

Additionally, there is an issue with the prices (market and Settlement cash-out) paid in the error period vs. prices paid in the compensation period. When prices are lower in the error period and a Supplier has overpaid during that period (i.e. paid for more energy than their customers consumed), GVC will result in the Supplier being compensated at a higher price than was applicable when the energy was consumed. So the Supplier will enjoy a net benefit. The opposite will apply where a "positive GVC" has been carried out. This means that the equal-and-opposite drawback / gain is experienced collectively by other NHH Suppliers in the same GSP Group through the application of GSP Group Correction.

Equally, when prices are lower in the compensation period and a Supplier has overpaid, the Supplier using GVC does not benefit because the compensated energy is accounted for at lower prices than those applied when the energy was consumed with the opposite being the case where negative GVC has been carried out. This means that equal-and-opposite benefit / drawback is experienced collectively by other NHH Suppliers in the same GSP Group through the application of GSP Group Correction.

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 argues that there could also be issues with the use of GVC in relation to Smart Metering. Smart Meters should ultimately provide a more accurate Settlement with fewer errors. However, looking back at previous experiences with rollouts in other countries, it has been suggested that the introduction of Smart Meters would result in the identification of previously undetected errors. If such errors were addressed using GVC, the issues described would be exacerbated.

Summary of Proposer's arguments

As such the Proposer argues that GVC has a number of adverse implications under the BSC including:

- 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). This may act as a deterrent for new entrants and inhibit effective competition;
- Suppliers (both large and small) having volumes attributed to them that relate to periods of cheaper or more expensive wholesale energy prices (through the effect of GSP Group Correction Factor on the compensatory error volume). This inhibits effective competition; and
- Licensed Distribution System Operators (LDSOs) being unable to produce suitable forward looking Line Loss Factors for use in Settlement, as these are based on historical Settlement data¹. This impacts the accuracy of Settlements and inhibits effective competition.

The Workgroup's consideration of the Proposer's arguments and the counterviews that exist are set out in Section 7 of this document.

¹ LDSOs calculate and submit Line Loss Factors (LLFs) in accordance with BSCP128 'Production, Submission, Audit and Approval of Line Loss Factors'. LLFs are used to adjust metered volumes to take account for losses on distribution networks. Information on losses and LLFs can be found on the [losses page](#) of the ELEXON website.

Summary

As noted above, volumes that have been through RF are referred to as “crystallised” and the time between a meter read and the latest RF is the “crystallised period”. Equally volumes that have not yet been through RF are referred to as “fluid”, and the time between the latest RF and current date is called the “fluid period”.

P274 Proposed solution would introduce the term “Compensatory Volume”, which is the volume that would be compensated for in the fluid period as a result of an incorrect volume in the crystallised period.

The P274 Proposed solution would also introduce criteria for identifying “excessive” Compensatory Volumes and a “Re-initialisation” process to deal with them. Furthermore, P274 Proposed introduces a time constraint for using GVC when addressing Compensatory Volumes which are not deemed to be “excessive”.

‘Excessive’ Compensatory Volumes

A Compensatory Volume is considered “excessive” if the absolute Compensatory Volume, yet to be subject to Final Reconciliation for the Metering System² is:

- a) Greater than twice the Profile Class Average Estimated Annual Consumption(EAC); or
- b) Greater than a Compensatory Volume Threshold at the point of assessment.

Compensatory Volumes which are determined to be “excessive” must be addressed by using the non-compensatory correction technique called “Re-initialisation” (based on the existing “dummy meter exchange” process).

In the case where none of the error has been subject to RF, or if the Compensatory Volumes do not meet the “excessive” criteria, the existing processes in place would be used to address erroneous meter readings (including GVC in the case of crystallised error).

GVC Time Limit

P274 would also introduce a time limit on the application of GVC. Currently any DF Run must be performed within 28 months of the relevant Settlement Day(s). To align with the DF Run cut off, the P274 Proposed solution would introduce a requirement that any part of the error volume that pre-dates the DF Run cut off (currently set at 28 months) may not be compensated for. Note that this limit does not actually interact with the Disputes process, the limit only aligns with the length of the DF Run cut off.

Detailed Solution

Compensatory Volumes

The P274 Proposed solution does not propose any change to the methods Suppliers and NHHDCs use to identify errors³. It does propose that upon confirmation of an error the Compensatory Volume be determined for the MPAN.

² Across all Settlement Registers.

³ Noting that this includes assessing all cases where the reading is not within 0 and twice the expected advance; and that this includes all negative advances.

A Compensatory Volume is the volume that would be compensated for in the fluid period as a result of an incorrect volume in the Crystallised Period.

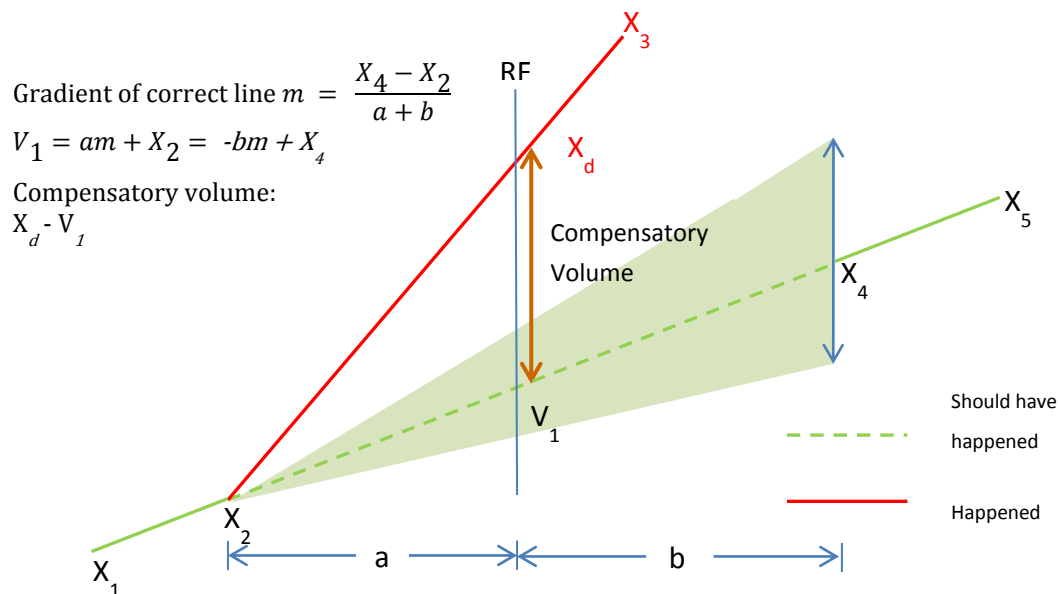
There are two scenarios to consider when calculating the Compensatory Volume:

- 1) The error reading is inside the fluid period, but the previous reading is not; and
- 2) The error reading is in the crystallised period.

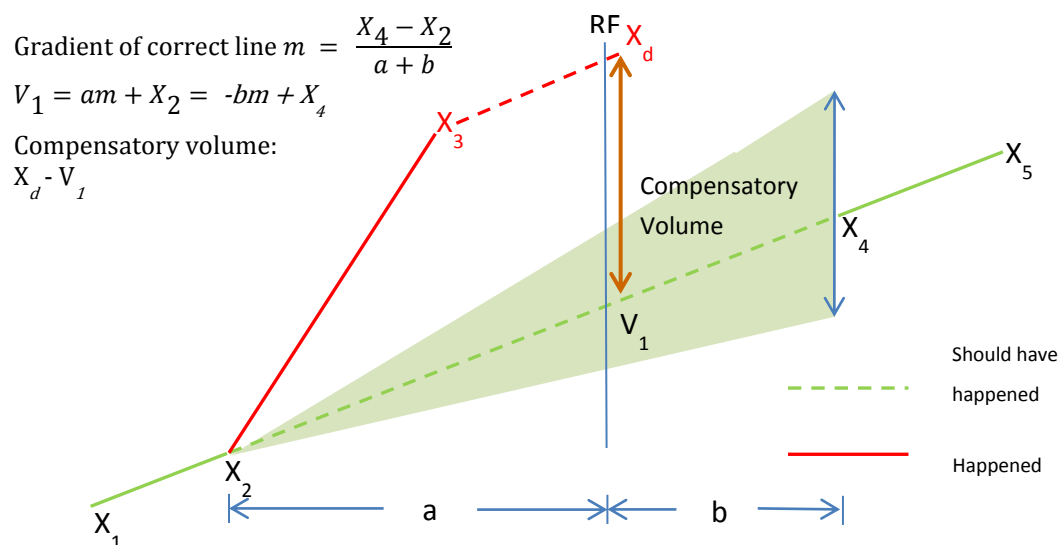
With reference to the diagrams below, for both scenarios, upon identifying that X_3 is an error, a deemed reading at the RF boundary will always be required (using the erroneous annualised consumption spanning the RF boundary), to limit the error. The Compensatory Volume is the difference between this deemed reading and what the reading should have been on this same date (V_1).

Guidance on the calculation of compensatory volumes is included as part of the redlined changes to BSCP504 in Attachment B.

Scenario 1: The error reading is inside the fluid period, but the previous reading is not.



Scenario 2: The error reading is in the crystallised period.



'Excessive' Compensatory Volumes

A Compensatory Volume is considered "excessive" if the absolute Compensatory Volume yet to be subject to Final Reconciliation for the Metering System is:

- a) Greater than twice the Profile Class Average Estimated Annual Consumption(EAC); or
- b) Greater than the Compensatory Volume Threshold at the point of assessment.

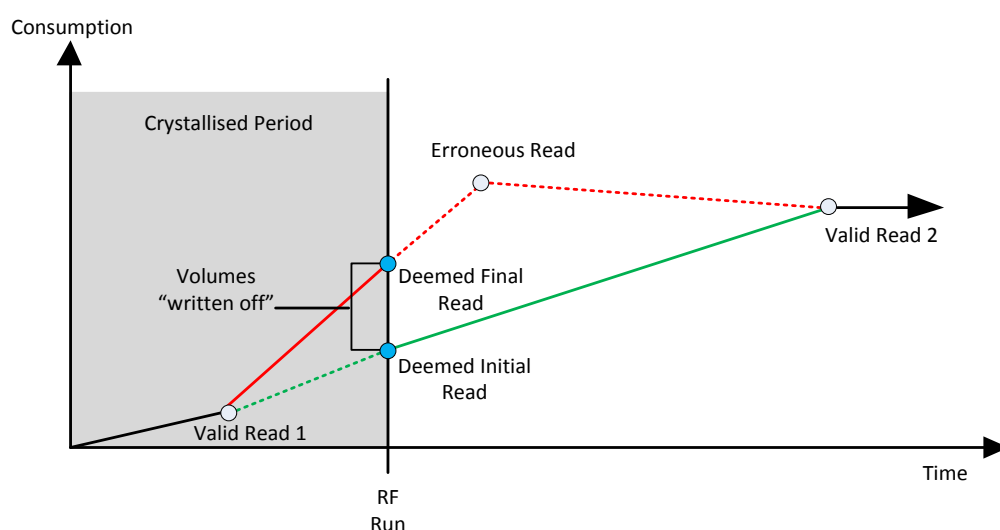
The Compensatory Volume Threshold will be determined by the Supplier Volume Allocation Group (SVG), and reviewed periodically. It is intended to be a volume broadly equivalent to the disputes threshold. For example, this could be set to disputes threshold / Credit Assessment Price, currently £3,000/£51MWh \approx 59MWh (although it would not be expected to change with every change of the Credit Assessment Price).

Compensatory Volumes which are determined to be "excessive" must be addressed by using the non-compensatory correction technique called "Re-initialisation" (see below). Where the Compensatory Volume does not meet the Excessive Compensatory Volume criteria for the mandatory application of Re-initialisation; Re-initialisation may still be applied if the Supplier should choose to do so. For example where there is insufficient reading history to apply GVC or the application of GVC would introduce further error.

Re-Initialisation

Re-initialisation comprises of deeming a final "erroneous" reading and then creating an initial "valid" reading on the same date. This is done using the same processes employed to effect a meter exchange, a correction method already undertaken in some form by most, if not all, NHHDCs and referred to as a "dummy meter exchange".

A "dummy meter exchange" (DMX) is currently used when there is insufficient reading history to apply GVC, or where compensation will introduce further error. It addresses errors going forwards, without compensating for past errors. In effect it "writes off" historic error meaning any monies owing to/owed by a Supplier because of under/over payment cannot be recouped, but ensures that the error does not continue. To complete a DMX the NHHDC deems a final read and initial read at RF. The difference between the final and initial read at RF is then "written off". The NHHDC then calculates consumption from the latest valid read back to the deemed initial read at RF.



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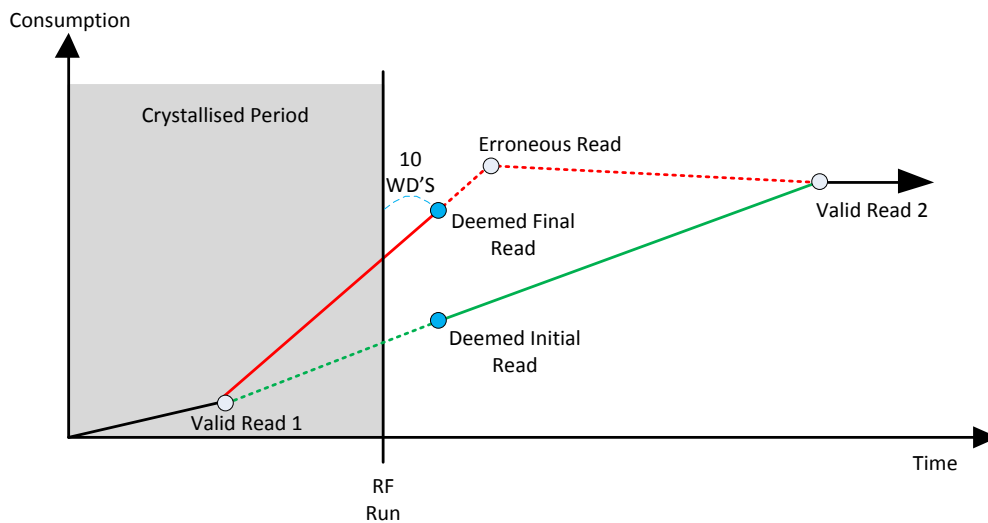
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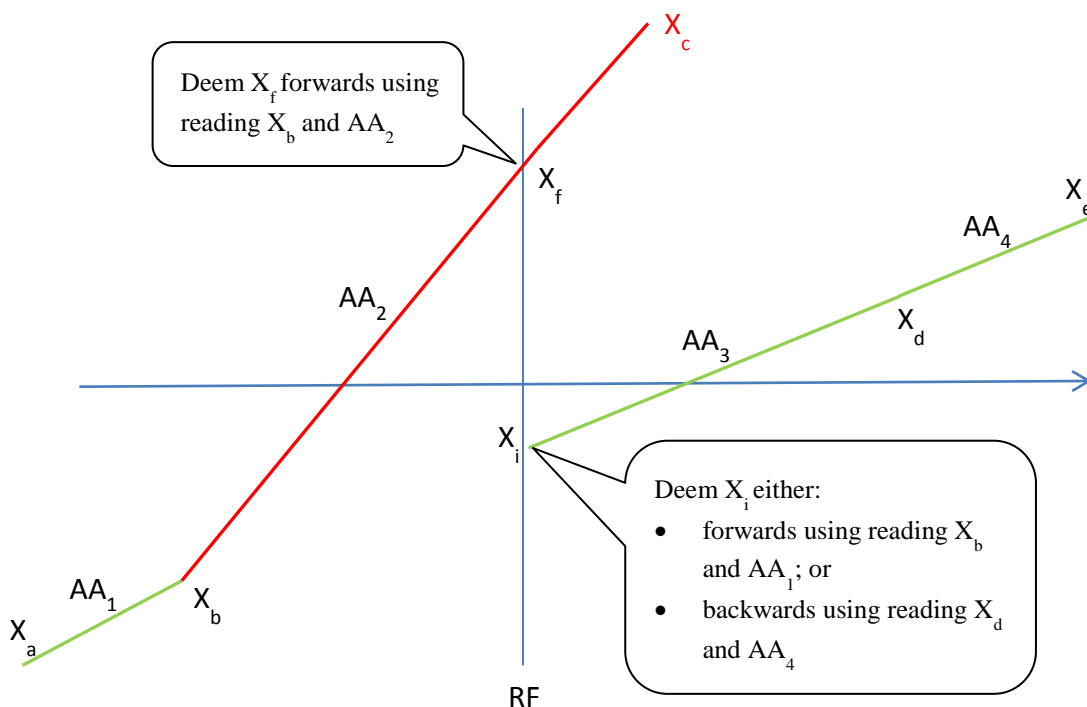
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Re-initialisation works in a similar way to the DMX process and is undertaken at RF to maximise correction within the fluid period. NHHDCs would deem a final reading, termed

an “error freezing reading”, 10 working days after the date of the latest RF Run. They do this using the erroneous EAC / AA in place on this date and the meter reading at the start of this advance. They would then deem an “initial reading” 10 working days after the latest Final Reconciliation date, using a correct reading and correct annualised consumption.



To complete the Re-initialisation, the NHHDC should calculate the relevant Annualised Consumptions (AAs and EACs), using a Profile Class average or MPAN/TPR specific “initial EAC” to accompany the “initial reading”, if required.



Upon undertaking this technique, NHHDCs would be required to maintain an audit trail comprising the following data items:

- MSID;
- SSC, Profile Class, GSP Group and Energisation Status;
- Date Re-initialisation applied;
- For each Settlement Register:
 - Time Pattern Regime;
 - Error Freezing Reading; and
 - Initial Meter Reading;
- Effective Date(s); and
- Rationale for change.

Where there is an interaction with the relevant requirements for disputing and correcting Change of Supplier readings, the requirements for disputing and correcting change of Supplier readings would prevail.

Gross Volume Correction for Non excessive volumes

28 Month time limit

If the Compensatory Volume is less than the defined Excessive Compensatory Volume criteria the Supplier/NHHDC may apply GVC. However, P274 places a time limit on the volumes on which GVC may be applied. This time limit is based on the disputes run cut off. The P274 Proposed solution permits GVC to be applied where an error began before the disputes boundary (if the compensatory volume is not 'excessive' as defined by P274 Proposed), but only the part of the error volume that is within the boundary may be compensated for using GVC.

The 'boundary' or cut-off date for a dispute to run a DF is 28 months following the Settlement Day in dispute. Under P274 Proposed solution, volumes that are outside of this 28 month disputes boundary may not be compensated for using GVC.

Note that the limitation of compensation via GVC to only volumes that are within the disputes boundary period of 28 months is simply based on alignment of the GVC limiting period with the length of the DF cut off period. This is because the Proposer believes that it is appropriate that if a volume has passed the disputes cut off it should not be able to be compensated for using GVC. There is no actual link or interaction with the disputes process, the GVC limitation is just a time period that matches the length of the disputes cut of boundary. For the avoidance of doubt, even if a DF run has been authorised this would have no effect upon whether GVC could be applied to an error volume, this would still be determined based solely upon the excessive criteria and the GVC time limitation.

The NHHDC will be required to maintain an audit trail when GVC is applied.

Pre-Disputes Boundary Error

Since P274 would no longer allow GVC to be applied to volumes outside the 28 month disputes boundary, should a Supplier choose to apply GVC and part of the error volume pre-dates the disputes boundary of 28 months following the Settlement Day in Dispute, a Pre-Disputes Boundary Error should be determined.

A Pre-Disputes Boundary Error is the difference between an estimate of what the erroneous reading would have been on the disputes boundary (Settlement Date), and an estimate of what the reading should have been on the disputes boundary. When

DF

RF

Compensation

Error Compensated for

Pre-disputes Boundary Error

Error not Compensated for

Same as Pre-disputes Boundary Error

X_1

X_2

X_3

X_4

X_5

V_1

X_e

X_d

X_f

X_i

Should have happened

Happened

Legal text

The proposed redlined changes to the BSC to deliver the P274 solution can be found in Attachment A.

A new paragraph would be inserted into paragraph 2.5 of Section U: Provisions Relating to Settlement of the BSC Code. This paragraph would stipulate that the NHHDC may only apply GVC in accordance with and subject to the relevant criteria specified in BSCP504. Gross Volume Correction and Re-Initialisation would be added as new terms and definitions to Annex X-2: Technical Glossary of the BSC Code.

BSCP504 would be amended to reflect the relevant criteria and processes for applying GVC and Re-initialisation. The proposed redlined changes to the BSCP504 to deliver the P274 solution can be found in Attachment B.

The proposed redlined changes to the BSC to deliver the P274 solution can be found in Attachment A.

BSCP504 would be amended to reflect the relevant criteria and processes for applying GVC and Re-initialisation. The proposed redlined changes to the BSCP504 to deliver the P274 solution can be found in Attachment B.

Alternative Solution

The Alternative solution proposed by the P274 Modification Group is to continue to allow the use of GVC as per the current arrangements, but to limit the period for which error can be compensated to five years prior to the latest RF Run at the time GVC is performed. Under the Alternative, GVC is still used to correct errors that span Settlement Dates which have already been subject to the RF Run, as at present.

A period of five years has been chosen, firstly, to minimise any potential spike in the use of GVC with the implementation of this change by reducing the time for which error can be compensated for. A concern for this developed following a spike of GVC use after the approval of CP1310. Secondly, the period of five years was chosen as a starting point for review, so as we continue to receive more information around the use of GVC, the five year limit can be reviewed from time to time with the aim to adjusting the timescales to optimise the GVC arrangements.

Under the Alternative solution, error volumes can only be compensated for if they occurred on or after the Earliest GVC Date, defined as:

'the date five years prior to the date of the latest Reconciliation Final (RF) Run at the time that a GVC is performed, and before which error may not be compensated for'.

Where an error has occurred over a period which includes dates earlier than the Earliest GVC Date, the NHHDC shall determine how much of the crystallised error occurred before the Earliest GVC Date and how much occurred on or after. The NHHDC shall make the determination using a deemed reading or by a 'straight line' interpolation of the error (i.e. number of days in error period on or after Earliest GVC Date, divided by total number of days in the error period, multiplied by the total error volume during the period).

The NHHDC shall only compensate for the error volume occurring on or after the Earliest GVC Date. This shall be achieved by creating a 'dummy' final reading within the fluid period to take account of the allowable compensation and using a valid initial reading (or an initial reading deemed using recent valid readings). See diagram below for graphical representation.

This process is identical to the process for calculating 'pre-disputes boundary error' as described under the Proposed solution above. The only difference is that rather than having a boundary of 28 months, the boundary is 5 years prior to the relevant RF.

Note that the boundary of 'five years prior to RF' would be the limit introduced as part of implementation of P274 Alternative, but that the parameter relating to the limit, 'Earliest GVC Date' would be introduced into BSCP504 as a variable parameter. The SVG would have the ability to approve changes to this parameter, and therefore change the GVC limit under the Alternative solution.

Central Impacts of Proposed and Alternative

Implementation of either the P274 Proposed or Alternative Modification would have a minimal impact on ELEXON. The ELEXON impacts identified are the implementation of mandatory changes to the BSC and BSCP504 and consequential updates to guidance documentation and GVC training.

The effort associated with these activities is estimated to be five Man Days, with an associated cost of approximately £1,200.

Assessment of P274 has not identified any impact on central systems as a result of either the P274 Proposed or Alternative Modifications, so there is no Service Provider cost associated with the impact of either solution. Both the Proposed and Alternative solutions place restrictions on the application of GVC, and in the case of the Proposed, introduce requirements around Re-initialisation which impact Suppliers and NHHDCs.

Documentation Impacts

Proposed Modification

Impact on Code	
Section	Potential impact
Section U	Insert new section in 2.5 to the effect that, for NHH Metering Systems, where the reading history for a Metering System is manifestly incorrect and above a threshold specified in accordance with BSCP504, the NHHDC is required to re-initialise the reading history in accordance with BSCP504 and where GVC is applied it shall be limited subject to the criteria specified in BSCP504.
Section X-2	Definition of GVC and Re-Initialisation added to Glossary.

Impact on Code Subsidiary Documents	
CSD	Potential impact
BSCP504	<p>Amend Section 4.5.2 to reflect the changes to the Code and to make it clear that the use of GVC is subject to the provisions in 4.14.</p> <p>Amend Section 4.14 to add:</p> <ul style="list-style-type: none"> • A description of the Re-Initialisation process. • Requirements about the use of an 'initial' EAC to begin re-processing of the initialised history. • Criteria around GVC application including time restriction (28 months). • A requirement that the NHHDC shall keep the following as an audit trail for Re-initialisation (in a format defined in BSCP504): <ul style="list-style-type: none"> • MSID; • SSC, Profile Class, GSP Group and Energisation Status; • Date Re-initialisation applied; • For each Settlement Register: <ul style="list-style-type: none"> • Time Pattern Regime; • Error Freezing Reading;

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Impact on Code Subsidiary Documents

- Initial Meter Reading;
 - Effective Date(s); and
 - Rationale for change.
- A requirement that the NHHDC shall keep the following as an audit trail for GVC (in a format defined in BSCP504):
 - MSID;
 - SSC, Profile Class, GSP Group and Energisation Status;
 - Date GVC undertaken;
 - Settlement Date at the start of the error period (i.e. date of the last valid reading prior to the error freezing reading);
 - Settlement Date of error freezing reading;
 - Settlement Date of error correcting reading;
 - For each Settlement Register:
 - Time Pattern Regime;
 - Compensatory volume (i.e. Meter Advance between error freezing reading and error correcting reading);
 - Pre-disputes Boundary Error volume (where applicable)
 - Error volume (i.e. Meter Advance between start of error period and error freezing reading);
 - Correct volume (i.e. Meter Advance between start of error period and error correcting reading); and
 - Forward looking EAC following application of GVC.

Alternative Modification

Impact on Code

Section	Potential impact
Section U	New paragraph in Section U to the effect that where GVC is applied it shall be limited subject to the criteria specified in BSCP504.
Section X-2	Definition of GVC added to Glossary.

Impact on Code Subsidiary Documents

CSD	Potential impact
BSCP504	Amend Section 4.14 to add the time restriction around the application of GVC (five years before the relevant RF Run initially, but the limit can be changed by the SVG).

Industry Impact Assessment

The P274 Proposed and Alternative Modifications were issued for impact assessment by industry participants in April 2012. Six responses were received to the P274 industry impact assessment. Four respondents operate as both Suppliers and Party Agents, one acts in a range of Party Agent capacities (including NHHDC) and one is an LDSO.

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Financial information received in response to the impact assessment relating to the impacts and costs of the Proposed and Alternative solutions is confidential, and as such these figures are not reflected in this document. However, the Workgroup has considered the magnitude of the impacts identified and confidential information will be submitted to Ofgem for consideration.

Non-confidential impact assessment responses are available on the [P274 page](#) of the ELEXON website.

As part of the Industry Consultation in August 2012, we asked the industry to confirm any impacts not identified in the impact assessment or any further details they had become aware of. Respondents indicated no new impacts and no further details.

Impacts of Proposed Modification

Impact on BSC Parties and Party Agents

Potential impact

There will be significant impacts and costs associated with amending existing **Supplier** and **NHHDC** processes:

- Impacts and changes required to documentation relating to the adjustment of Settlement data.
- Significant impacts and one-off costs associated with Supplier and NHHDC system changes.
- Significant on-going annual costs in additional resource to manage the process.
- There will be significant impacts to GVC activities that would require staff training.
12 month lead time required for implementation.

In addition to the impacts associated directly with implementation, respondents noted that the Proposed solution could significantly limit the ability to correct and accurately re-calculate Settlement volumes.

Impacts of Alternative Modification

Impact on BSC Parties and Party Agents

Potential impact

There will be minor impacts and costs associated with amending existing **Supplier** and **NHHDC** processes:

- Impacts and changes required to documentation relating to the adjustment of Settlement data.
- Minor impacts and one-off costs associated with Supplier and NHHDC system changes.
- Little on-going annual cost in additional resource to manage the process.
- Limited impact to GVC activities that would require staff training.
3 months lead time required for implementation.

In addition to the impacts associated directly with implementation, respondents noted that the Alternative solution could limit the ability to correct and accurately re-calculate Settlement volumes.

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Proposed Solution Implementation Approach

If approved, the Implementation Date of the P274 Proposed Modification would be:

- The next suitable BSC Release at least **12** months from the date of approval.

Changes to the Code, subsidiary documents and required system changes would take effect from the Implementation Date.

The changes to BSCP504 will accompany the P274 Modification Report for consideration and approval along with the BSC legal drafting. BSC and BSCP504 changes will be publicised following approval so participants can familiarise themselves with the new requirements prior to implementation.

Alternative Solution Implementation Approach

If approved, the Implementation Date of the P274 Alternative Modification would be:

- The next suitable BSC Release at least **3** months from the date of approval.

Changes to the Code, subsidiary documents and required system changes would take effect from the Implementation Date.

The changes to BSCP504 will accompany the P274 Modification Report for consideration and approval along with the BSC legal drafting. BSC and BSCP504 changes will be publicised following approval so participants can familiarise themselves with the new requirements prior to implementation.

Summary

The majority of the Workgroup did not believe that a defect exists within the BSC in relation to Gross Volume Correction and therefore believed that the Proposed Modification is not better than the current arrangements. However, the majority of the Group believed that Alternative Modification adds control to the GVC process and is an improvement on the baseline and the Proposed Modification.

Therefore the Group's initial recommendation was that the P274 Alternative Modification should be approved.

The Workgroup believed the Alternative has benefits against Objective (c), around additional GVC control and (via the introduction of an audit trail) transparency, and Objective (d), due to addressing unreasonable use of GVC and use of a flexible approach.

Request for Information

The Workgroup issued a request for information to help it assess the contentions made by P274, the materiality of the defect identified and the potential benefits and drawbacks. The request for information asked industry participants:

- How often they used compensatory techniques;
- Whether they anticipate their usage to increase in the future;
- Whether they would use 'dummy meter exchanges' more often if compensatory techniques were prohibited;
- What impact the removal of compensatory techniques would have on Trading Disputes;
- What clarification you would need to ensure a consistent approach to the removal of compensatory techniques is adopted by NHHDCs; and
- What systems changes NHHDCs would need to make as a result of the removal of compensatory techniques.

These questions do not all directly relate to the P274 Proposed or Alternative solutions because the information request was issued prior to the solutions being finalised. For instance, participants were asked what the effect would be on how they choose to use 'dummy meter exchanges' whereas the Proposed solution mandates Re-initialisation in specified circumstances.

Impact of removing compensatory corrective techniques

All respondents expected an increase in the use of other non-compensatory corrective techniques if GVC was removed. The majority of respondents believed that the number of disputes would increase if GVC was removed, though one felt the trading disputes process would not be impacted due to the application of alternative corrective techniques. It was also noted that the increase in time and resources to view cases and investigate sites could negate the benefit of correcting error.

Changing NHHDC systems to apply 'dummy meter exchanges' instead of GVC would require a fairly significant amount of work because the current processes are manual and more frequent application of 'dummy meter exchanges' would require automation.

Issues raised by respondents

Respondents also noted concerns around identifying and preventing the compensatory advances for under-settlement from taking place automatically. The Workgroup considered the issues raised as part of its development of the P274 Proposed solution.

A respondent suggested that the removal of compensatory correction techniques would degrade the accuracy of Settlement data because known errors in the volume of energy entered into the Settlement process would not be addressed. Another respondent contended that prohibiting compensatory correction techniques without mandating alternative arrangements would introduce further error due to biased use of the dummy meter exchange process (i.e. application biased toward over-Settlement, leading to degradation in the accuracy of Settlement data).

A respondent also contended that the use of a dummy meter exchange can introduce inaccurate data into the NHHDC system (i.e. as a result of mismatches between initial/final readings and the Meter Technical Details) and there were concerns regarding the resulting data discrepancies that would exist between the NHHDC and other parties.

Another concern was the impact that the resulting reads may have on Supplier Licence Condition 12, where, without additional controls such as audit trails, the dummy meter exchange could imply that a visual inspection of the metering system has been carried out by the meter operator when no such inspection has actually taken place.

Analysis of data received

The analysis of data provided by respondents is set out in the table below.

Compensatory advances	Instances	per cent	volume (MWh)	£
increase (i.e. correcting understated energy)	589	22%	15,749	881,944
Decrease (i.e. correcting overstated energy)	2,109	78%	- 47,485	2,659,160
Total	2,698			
Gross Volume			63,234	3,541,104
Net volume			- 31,736	1,777,216

This is based on detailed data for 2,698 instances of GVC that were carried out between August and October 2011. 4,027 instances were reported for this period by Suppliers and NHHDCs with an aggregate 38.5% share of the market.

A number of Workgroup members questioned whether the sample was sufficiently representative, but acknowledged that the restriction on the size of the sample was due to the responses received to the Workgroup's request for information.

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Workgroup discussions

Defect Identified in the Modification Proposal

The Workgroup discussed whether the defect identified by the Modification Proposal was a valid defect in the BSC. The majority of the Workgroup felt that as GVC is a permitted correction technique under the Code, use of it did not constitute a defect. Workgroup members felt the Proposal had been raised because of the impact GVC has had on the Distribution Losses Incentive Mechanism (DLIM), which is not governed by the BSC and which they did not believe was relevant to establishing a defect in the BSC.

The Proposer clarified that impact on DLIM and Distribution Price Control Regime (DPCR) was important but should be considered background from a BSC perspective. The identified BSC defect is that excessive adjustment of energy volumes in periods not yet subjected to RF in order to compensate for errors relating to periods that have been subject to RF means Settlement does not accurately reflect the energy flows that took place in the relevant period. This leads to the issues set out in the Modification Proposal.

The Workgroup accepted that this was a valid contention for consideration via an Assessment Procedure, although several members were doubtful that Assessment would ultimately demonstrate a BSC defect. Some Workgroup members believed that if the GVC process was causing issues for Suppliers (small or large) then a Supplier would have raised a Modification.

P274 also argued that the attribution of volumes to new entrants that relate to periods before they began trading may act as a deterrent for new entrants (which are likely to be small Suppliers), thereby inhibiting competition. However, Workgroup members contended that GVC is a comfort for new entrants, who know that any exceptions that are identified once the relevant data is crystallised can be corrected and any monies overpaid can be recouped.

Settlement accuracy

The Proposer believed that removing or limiting GVC would provide an additional incentive to Suppliers to ensure that volumes are correct before RF. However, some of the Workgroup believed that it was not always possible to obtain accurate data in time, even if there was greater incentive to do so (i.e. no GVC) and that this was the reason for GVC. These members argued that error does not exist just because GVC is available to correct it, but that some error is unavoidable despite the best endeavours of Suppliers. They contended that GVC is a sensible and pragmatic means of taking this error into account and promoting overall Settlement accuracy.

The Workgroup also noted that Settlement performance was the highest it had ever been. Some members argued that this meant the negative effects contended by P274 (moving energy volumes between Settlement (periods) would have a negligible impact in practice.)

Trading disputes

The Workgroup considered that removing GVC would be likely to cause more trading disputes to be raised as a result of Suppliers using the trading disputes process to address errors they would no longer be able to correct using GVC.

The request for information included a question on participant's views on the impact on the number of trading disputes raised. As noted above, the majority of respondents believed that the number of disputes would increase if GVC was removed. The Workgroup considered that substantiated its initial view.

A Workgroup member believed that effectively moving the process of making corrections from GVC into the disputes process was an inefficient way to address error. The Workgroup considered that GVC was initially introduced on the grounds of efficiency, and in particular to reduce the need for Trading Disputes to deal with errors post RF.

Increased use of the Disputes process would increase the administrative burden, and associated costs, of the process both centrally and for Parties raising disputes. Alternatively, to mitigate the consequential impact on the disputes process of removing, or limiting, GVC the disputes threshold could be raised to restrict the number of disputes raised and manage the resource needed to administrate the disputes process.

Short term impact on GVC use

CP1310, 'Clarifications to Gross Volume Correction Process' was implemented in February 2010 with the aim of placing restrictions on the use of GVC. The Workgroup considered that the introduction of CP1310 resulted in an increase in the application of GVC before the restrictions took effect. Because CP1310 was implemented in February 2010 it was too early to determine the long term impact but there was likely to be a reduction in the use of GVC compared to the period prior to CP1310 implementation (2009 - 2010).

The Workgroup considered whether the P274 Proposed solution would result in a similar spike in GVC use prior to its implementation. The Workgroup suggested that implementation of the Proposed Modification could cause a short term increase in GVC use prior to its introduction, but were unable to quantify how this might compare with the increase caused by the implementation of CP1310. The Workgroup considered that the roll out of smart meters was likely to cause an increase in GVC (due to identification of errors on the traditional meters being replaced).

Impact of 'writing off' error

Application of Re-initialisation under P274 Proposed 'writes off' part of the error for the Supplier concerned but the overall Settlement volume will be correct due to the application of GSP Group Correction Factor. In the case where a Supplier has to 'write off' overstated units (i.e. accept the error), the other Suppliers in the GSP Group would be attributed with understated units (collectively summing to the overstated units), balancing Settlement overall.

While noting that consumers are outside the scope of the BSC Modification Process, the Workgroup considered the effect of writing off errors upon Suppliers. The Proposer argued that while a Supplier that had to write off overstated units might contend that their costs had increased (meaning they would have to either absorb the additional cost or pass it on via increased prices) other Suppliers would have reduced costs (which they could choose to pass on via reduced prices). Thus Suppliers that address errors more effectively would benefit (and consequently their customers may benefit) and Suppliers that are less effective would not benefit (and potentially their customers could experience a negative impact). The Proposer argued that this would promote competition between Suppliers.

Writing off error through Re-initialisation would not prevent any Supplier (large or small) exercising the existing Disputes Process to address the written off error. Re-initialisation does not preclude use of the defined Disputes Process so any excessive errors post Final Reconciliation that could have a major financial impact for a Supplier (large or small) can still be addressed. The counterview is that the consequence of this would be increased use of the Disputes process, as considered by the Workgroup.

If the introduction of the Proposed solution resulted in errors that could neither be corrected via GVC nor addressed by the disputes process because they are below the disputes threshold, Suppliers may seek to aggregate errors to achieve an overall error that can be addressed via a dispute. This does not preclude aggregation at present, but it would need to be determined under the governance of the disputes process whether aggregation is permitted, particularly with respect to errors that could previously have been dealt with using GVC, in the circumstances that would prevail following implementation of the Proposed solution.

Development of P274 Alternative

The majority of the Workgroup believed the Proposed solution was overly complex and would place excessively onerous obligations on Suppliers and Agents. They argued that as the Proposer believed a major issue for GVC was that it can compensate backwards for a significantly long period, an alternative approach would be to place limits around how far back GVC can be applied. They contended that this approach would be far less complex and onerous and would utilise processes already in place, requiring only minor changes to implement.

The Workgroup felt that restricting the use of GVC to just over six years (five years plus RF⁴) will capture the majority of “unreasonable” GVCs and add a new measure of control to the process, providing greater financial certainty to all industry parties. At the same time, GVCs that would be captured by this control would still be sufficiently infrequent that the application of the Alternative Solution could be easily “ring-fenced” within Supplier/DC systems and processes. These arguments formed the basis for the development of the P274 Alternative solution set out in Section 4.

Implementation Approach – Proposed Solution

Lead Time:

The group discussed what they thought was a reasonable lead time for implementation of the proposed solution and thought a minimum of twelve months would be required. This was based on the Industry Impact Assessment responses where respondents indicated they needed anywhere from 3 months to 18 months. The group discussed the different lead times and agreed they were likely to be driven by the type of organisation responding e.g. the company saying 3 months was a Supplier only company, whereas the companies quoting 12-18 months were Supplier/Party Agents. Lead time also varied depending on existing IT commitments.

Other matters attributing to the work groups decision for the minimum 12 month lead time, included the automating of systems to detect instances requiring Re-initialisation, deal with the anticipated volumes and the need to consider BSC Audit issues/requirements.

⁴RF occurs approximately 14 months after the Settlement Day.

Re-qualification:

The issue of re-qualification was raised by a group member. They reasoned that the systems changes required could be perceived as significant and therefore could trigger re-qualification. This would therefore add a minimum of 3 months to any agreed implementation time. The group felt that further discussion was required around re-qualification following a recent PAB meeting where the topic was discussed. The argument was that re-qualification may not be sufficiently robust for major systems changes. ELEXON was asked to investigate this claim further. ELEXON have found no precedents, where all relevant impacted market participants have undergone requalification as a result of a Modification or Change Proposal. A requirement for market participants to re-qualify under these circumstances would represent a major departure from the current Qualification processes, which are reliant on self-assessment. This is a wider issue than Modification Proposal P274.

Increase of GVC prior to rules change:

Given the minimum 12 month lead time suggested for implementation (not including potential re-qualification), the Proposer raised concerns about the possibility of an increased use of GVC leading up to any more restricted use of it as a correction technique. Similar to what happened with CP1310. If Suppliers were aware that GVC would be changed in the following year it might be an incentive to undertake another data cleansing exercise that could result in an increase in the use of GVC. The group discussed the merits of introducing a two-step implementation of the proposed solution. Whereby the use of GVC changes would be implemented immediately following approval but the Re-initialisation process could be implemented 12 months later. The group felt that this approach may not be permissible under the governance requirements for the Modification process and was likely to introduce administrative complications. The proposer and the Workgroup decided that it would be best left alone.

These arguments formed the basis for the P274 Proposed solution implementation approach solution set out in Section 6.

Implementation Approach – Alternative Solution

The majority of those who responded to the Industry Impact Assessment indicated that they would only require one month lead time for implementation on the basis that only minor changes would be required to existing processes.

This formed the basis for the P274 Alternative solution implementation approach solution set out in Section 6.

Summary of Assessment Consultation Responses

The Workgroup considered the responses received to the P274 Assessment consultation. The full collated responses are available on the [P274 webpage](#). Eight responses were received, covering a variety of participant types. Four large organisations (that act in multiple capacities, including Supplier and various Party agent roles) responded, two respondents were Party agents (including NHHDC), one respondent was an LDSO and one respondent was a small Party that is a Supplier and generator.

Proposed vs. current arrangements:

Of the eight responses received to the Assessment Consultation, six believed that the Proposed Modification **would not** better facilitate the achievement of the Applicable BSC Objectives overall compared with the existing baseline. It was stated that the Proposed solution would have a detrimental impact on Applicable BSC Objectives C and D for the following reasons:

- Writing off energy would be detrimental to Suppliers and therefore to competition.
- The gross volume of energy will not be settled correctly and the increased uncertainty around energy volumes could adversely affect the market.
- New entrants are likely to be deterred from entering the market due to their inability to correct error and adverse charging under this proposal.
- Unnecessarily complex and expensive to deliver.
- Removal of GVC will leave to parties seeking recourse via the Trading Dispute Committee which will adversely impact efficiency.
- Stepping away from GVC, as a principle, means that Settlements would no longer be an accurate reflection of energy actually supplied.
- GVC is already sufficiently audited and controlled, and no actual defect in the BSC has been identified that necessitates such a change.

In addition to the reasons above, one respondent stated that since the introduction of GVC no Trading Party impacted by the use of GVC has ever raised a dispute concerning its use. Moreover, the BSC Auditor randomly checks that the use of GVC is being applied correctly by Trading Parties, and to their knowledge no issues with its application have been reported.

The same respondent noted that the use of GVC by Suppliers is seen as a pragmatic way to resolve error without the need for the formal dispute process, under BSCP11, to be invoked. The current baseline reconciles energy volumes, whereas this proposed Modification will involve writing off energy volumes which seems counter intuitive to the aims of the Balancing & Settlement Agreement. Furthermore, if Suppliers are forced to write off error, it is customers who ultimately pay the price, as Suppliers are unlikely to absorb the cost of writing off error.

In addition, the same respondent stated that the Proposed solution allows for different 'crystallised periods' depending on whether a GSP Group is in the Dispute (DF) Process or not. To them, this seems counter intuitive to promoting efficiency in the BSC (Objective d).

Of the eight who responded to the Assessment Consultation, two (the LDSO and the small Supplier/generator) believed that the Proposed Modification **would** better facilitate the achievement of the Applicable BSC Objectives overall compared with the existing baseline for the following reasons:

- Creates a strong incentive for suppliers to settle the correct volumes within 14 months.
- Reduces the possibility that new entrants would have energy volumes attributed to them that relate to periods before they began trading which removes a potential deterrent for new entrants, promoting effective competition.
- Improves LDSO's ability to produce suitable forward looking Line Loss Factors (based on historical Settlement data) for use in Settlement, increasing Settlement accuracy which would tend to promote effective competition.
- Reduces the extent to which Suppliers (large and small) may have energy volumes attributed to them that relate to periods with different wholesale energy prices (through the effect of GSP Group Correction Factor on the compensatory error volume), which would tend to promote effective competition.
- Improvement to the accuracy of settlement reflecting the flow of energy within the 28 month disputes boundary.
- Addresses unreasonable GVC usage, i.e. application of GVC over periods beyond the 28 month disputes boundary.

Alternative vs. current arrangements:

Of the eight who responded to the Assessment Consultation, four believed that Alternative Modification solution **would** better facilitate the achievement of the Applicable BSC Objectives (c) and (d) for the following reasons:

- Limits the use of GVC over extensive periods and improves control of its use with the audit trail requirements.
- Additional control would be created to further cement the GVC process and ensure "unreasonable" GVCs are not performed.
- The ability to redress errors is important to new Suppliers and as such, removing that ability is detrimental to competition.
- The Alternative solution is an improvement on the existing processes.
- The Alternative solution will limit the time period to which GVC can be applied and therefore provide additional control and transparency over the current baseline.
- The time limit for which GVC can be recovered can be reviewed each year with the aim to tighten the timescales as the Industry improves and build flexibility into the future arrangements
- By having an approach of looking for continuous improvement you should minimise any spike in corrections and thus any adverse impact on the Distribution Losses Incentive Mechanism.

Of the eight who responded to the Assessment Consultation, three believed that Alternative Modification solution **would not** better facilitate the achievement of the Applicable BSC Objectives (c) and (d) for the following reasons:

- Alternative would restrict GVC usage to a period not exceeding 6 years and 2 months, this limit is too long to bring about the benefits to competition.
- The volume of GVC carried out where the start of the error period extends more than 5 years past the final reconciliation date is not significant.

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- If an error is discovered then it is only right to correct the whole error rather than introduce an arbitrary cut off and only allow for part of the error to be compensated.
- The only practical benefit that this change introduces is the robust auditing of GVC activities and CP1360 has already been raised to address this issue. The alternative modification therefore fails to meet the requirements of BSC Objective (d).

One respondent, the small Supplier/generator) gave a neutral response. They believed that the Alternative Modification might possibly be better than the existing baseline, but that any positive effect of the Alternative would be minimal.

Proposed vs. Alternative:

Of the eight who responded to the Assessment Consultation, six believed the Alternative Modification **would** better facilitate the achievement of the Applicable BSC Objectives overall compared with the Proposed Modification for the following reasons:

- GVC should continue to be allowed and ultimately better achieves objective C.
- The Alternative provides an added layer of control by applying a time limit; which in turn can be reviewed to introduce flexibility into the arrangements which promotes efficiency.
- The Alternative would make the use of GVC more controlled.
- The Alternative maintains the integrity of the settlement process by ensuring that the gross volume of energy is accurate and that no energy is written-off.
- The Alternative is less complex, cheaper and faster solution to implement than the Proposed solution.
- The proposed Modification would introduce an extra layer of complexity; in terms of its technical solution; as well as applying different rules for different GSP groups (Depending on whether or not they are in the Dispute Process) which would not enhance efficiency.

Of the eight who responded to the Assessment Consultation, two (the LDSO and the small Supplier/generator) believed the Alternative Modification **would not** better facilitate the achievement of the Applicable BSC Objectives overall compared with the Proposed Modification for the following reasons:

- The proposed modification would be of considerable benefit to the industry. It locks in errors that have passed the RF run.
- 14 months is more than sufficient time to fix an error and it should not be necessary to adjust later periods to make up for unresolved errors.
- Limits the extent to which energy is settled in periods other than those which it was consumed by both volume and time.
- The Alternative only limits the use of GVC by time.

Implementation impacts – Proposed Solution

We received eight responses to the P274 Assessment Consultation. Of those who responded seven believed that the Implementation of the Proposed solution would impact their organisation and one did not.

The majority of respondents who said they would be impacted stated that there would be significant impacts on their systems and processes. For example, one respondent stated

that systems and processes for correcting settlement errors using GVC were developed as a result of BSCP504. Another respondent believed that the Proposed solution would dramatically change the processes available and would require extensive system and process changes resulting in possible one off costs associated with IT.

Some of the respondents also stated that there would be a need to deliver NHHDC training following the changes.

One of the biggest concerns for one of the respondents was the ongoing costs they would incur due to the value of any over settled volumes, which under the Proposed solution, would be written off. It would also adversely impact their ability to bring their Settlement and Billing portfolios into alignment.

It was also noted, that although P274 gives the appearance of retaining GVC as a corrective technique, the threshold limits placed on corrective advances would make GVC redundant in reality, removing the Supplier's ability to recover over-payment of charges.

Despite the impacts to their organisation, one respondent noted that they would benefit from the fact that GVC would be used less frequently and only on limited volumes. They would be less affected by the GSP group correction and the resulting distortions in pricing.

Legal text – Proposed Solution

Of the eight who responded to the Assessment Consultation, seven believed that the Proposed legal text delivered the Proposed solution and one did not.

It was stated that the legal text is robust and detailed enough to ensure the Proposed solution is delivered. It was also noted that the amendments to the text are complex and lengthy, but this fairly reflects the nature of the proposal.

The one respondent who did not agree with the Legal text listed a number of sections that they believed needed amending. These suggested changes were brought to the Workgroup at their meeting on the 20 September 2012. It was there that the Proposer agreed to make changes to the legal text in section 4.14.2, 4.14.3 and 4.14.5.

You can find further details on the changes made and the Workgroup's discussions in section 9 of this document.

Implementation impacts – Alternative Solution

Of the eight responses we received to the P274 Assessment Consultation, five believed that the Implementation of the Alternative solution would impact their organisation and three did not.

The majority of the respondents who believed they would be impacted implied that the impact would be minimal. One respondent believed that the implementation of the Alternative solution would be relatively straightforward, as the number of instances affected would be low, and could be ring-fenced within the existing GVC process. It was noted by another respondent that no automation would be required to their systems and training can be restricted to members in NHHDC teams.

One respondent, who agreed that there would be no direct impact to their organisation, advised that the Alternative solution would have a negative effect on them because the proposed 5 year limit is an inadequate solution. Under it they would continue to be subject to the existing problems that are caused by use of GVC to correct errors.

Legal text – Alternative Solution

Of the eight responses we received to the P274 Assessment Consultation, seven believed that the Proposed legal text delivered the Alternative solution and one was neutral.

There were a few comments and suggested changes made by respondents who agreed with the legal text. For example, it was stated that although keeping an audit trail for dummy meter exchanges is a good idea in principle, it needs to be clarified that this text only refers to dummy exchanges performed as part of the GVC process.

One respondent remained neutral, stating that they did not wish to comment on the Alternative legal text as they do not support the Alternative Solution as it would not resolve the problems in the GVC.

The full collated responses are available on the [P274 webpage](#).

Audit Requirements

Following the Workgroup's review of the P274 Assessment Consultation responses, the Workgroup agreed to remove the audit requirements from the Alternative solution.

The Workgroup noted a respondent's comment that an audit trail for dummy meter exchanges should include only dummy meter exchanges performed as part of the GVC process. The respondent believed that the wide and varied usage of dummy meter exchanges meant that an audit requirement that applied to any activity termed a dummy meter exchange would be too onerous on participants.

The Workgroup considered that the text had been based on that developed for CP1360, and that explicit consideration had not been given under P274 to whether the audit requirement should apply to all dummy meter exchanges or a specific sub-set. Some Workgroup members questioned whether it had been explicitly agreed that the audit requirements (in relation to both GVC and dummy meter exchanges) would form part of the Alternative solution, though there was general agreement that increased audit requirements would be beneficial.

The Workgroup further noted that the question of the applicability of the audit requirements for dummy meter exchanges did not arise under the Proposed Modification because in the provisions of the Proposed solution the audit requirements apply to Re-initialisation, which is clearly defined as part of the solution.

Some Workgroup members believed that the inclusion of audit requirements in the Alternative solution would make the relatively simple solution more complex, and questioned whether the inclusion of audit requirements (for GVC or dummy meter exchanges) under the Alternative solution was necessary given the original scope of P274.

The Workgroup also noted that CP1360 was raised specifically to introduce such audit requirements into the GVC and DMX processes, but had been delayed by the uncertainty around GVC caused by the progression of P274. Workgroup members believed that there were opposing risks associated with the audit requirements being included in the P274 Alternative solution or not that needed to be considered. If the audit requirements were included, the scope and complexity of the Alternative solution is increased. This complication is not absolutely necessary because the audit requirements can be introduced via a Change Proposal (a Modification is not required for these changes particularly) and the audit requirements had not been developed specifically as part of the P274 Alternative solution but had been based on the work done under CP1360. Conversely, if the audit requirements were excluded from the P274 Alternative, there is a risk of CP1360 being rejected and the beneficial audit requirements being lost altogether.

ELEXON clarified to the Workgroup that from the perspective of the BSC change process it was completely up to the Workgroup to determine whether it believed it was appropriate to include the audit requirements in the Alternative solution. If P274 were to be rejected, or if the Alternative was approved but did not include the audit requirements, the introduction of audit requirements could still be taken forward under CP1360 or another Change Proposal.

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The Workgroup determined by majority that the audit requirements should not be included in the Alternative solution. The audit requirements that were included in the BSCP504 drafting issued as part of the P274 Assessment Procedure industry consultation have therefore been removed from the P274 Alternative solution.

The legal text for the Alternative Solution can be found in Attachments C (Code) and D (BSCP504).

The Proposer confirmed that the audit requirements consulted upon would remain part of the P274 Proposed solution.

Re-qualification

Two consultation respondents were concerned that the 12 month implementation lead time for P274 Proposed would not be viable if the changes involved resulted in NHHDCs being required to re-qualify en masse. These comments reflected concerns raised previously by some Workgroup members that if the systems changes required are considered significant they could trigger re-qualification, which the members believed would add a minimum of 3 months to NHHDC's implementation lead time.

The need for re-qualification is based on the relevant Party or agent's self-assessment of risks associated with their actions (e.g. replacement of systems, business expansion, etc). ELEXON advised the Workgroup that there have been multiple changes to Supplier and agent systems and there is no precedent for all relevant participants being required to re-qualify as a result of a BSC Modification or Change Proposal. ELEXON's view was that such market-wide re-qualification would not be required under P274. Such widespread, effectively mandatory, re-qualification would represent a major departure from the current re-qualification processes, which are based on self-assessment, and would need to be considered by the PAB.

In light of the clarification provided to it, the Workgroup considered that there was no reason for P274 Proposed to trigger re-qualification by all NHHDCs, and that therefore the implementation approach consulted upon remained appropriate.

Changes to the Proposed Solution

Scenario Changes

Following the Workgroup's review of the P274 Assessment Consultation responses the Proposer agreed to some amendments and clarifications of the Proposed Solution, resulting in changes to scenarios 1, 2 and 3 set out in the BSCP504 drafting.

Scenario 1:

A response to the Assessment Consultation suggested a correction to scenario 1 was required because they did not believe that the Proposed Legal Text would deliver the P274 Proposed solution. However, the Workgroup considered that the BSCP504 drafting issued for consultation accurately reflected the documented P274 Proposed solution, and therefore the respondent's suggested change would be an alternative approach.

In the P274 Proposed solution consulted upon, in scenario 1 the Compensatory Volume (to be compared with the threshold value to determine whether a GVC would be excessive) is determined using the error read in the fluid period (X_3 in scenario 1). Under the suggested alternative approach an extra deemed read at the RF boundary would be used to

determine the Compensatory Volume to assess whether or not the 'excessive' threshold is breached.

An implication of the alternative approach of calculating the Compensatory Volume at RF, rather than at the error read (where the error read is in the fluid period), is that the calculated error would be smaller. The corollary to this effect is that the calculated volume will be less likely to exceed the GVC threshold and be considered 'excessive'. Note that it was always the case that where the error read is in the crystallised period (i.e. scenario 2) the Compensatory Volume is calculated at RF.

The Compensatory Volume under the alternative approach is therefore a more accurate reflection of the volume that will be compensated for if GVC takes place (i.e. the energy in the crystallised period). A complication is that the RF boundary advances whereas the error read is fixed, so basing the determination of whether to perform a GVC or Re-initialisation on a deemed read at the RF boundary introduces the additional complexity that the determination is sensitive to when the assessment is made. The compensatory volume could be under the threshold if assessed today, but be over the threshold if assessed tomorrow.

The Proposer agreed that the suggested alternative approach would deliver a Compensatory Volume more reflective of the crystallised error, but was concerned about the obligations around the error read, X_3 . The Proposer was concerned was around whether there was any risk that the error read (in the fluid period) might not be removed from Settlement, since if this was the case the argument for determining Compensatory Volume at the RF boundary would be weakened. However, Workgroup members confirmed that in both GVC and Re-initialisation the error read, X_3 , would always be removed.

The Workgroup considered that the Proposed solution should be amended in line with the suggested alternative approach and, following the Workgroup's discussion and confirmation that the error read would always be removed, the Proposer agreed.

Scenario 2:

Another point made by the same respondent suggested that the BSC should acknowledge that where an error is not reported, a compensatory advance may occur. For example, the meter advance $X_d - X_4$ is not picked up by DC validation because negatives can be treated as valid if the previous reading was deemed, or (as the respondent stated) a signification period of time has elapsed.

The respondent had concerns from an auditing point of view, and that these instances would not be picked up as X_2 is valid. The Proposer had reservations surrounding the suggested changes as he believed that this was outside the scope of P274 as it will not be increasing the number of these instances.

Following the discussion with the Workgroup at its meeting in September 2012, the Proposer advised that Scenario 2 can be made more generic to collectively represent the situation where the error reading is pre the RF boundary. A deemed reading at RF would always be required, this being based on annualised consumption that left crystallised consumption unchanged (regardless of whether this was a 14 month deemed EAC, a normal EAC, or, in some albeit more unlikely cases, an AA).

Scenario 3:

Another response to the Assessment Consultation suggested a removal of scenario 3 as they did not believe that the Proposed Legal Text would deliver the P274 Proposed solution.

Whilst discussing the Assessment Consultation responses, the Workgroup suggested the removal of this scenario as it was not helpful in the understanding of the Proposed Solution.

The Proposer advised that this scenario was trying to describe the situation where an error reading was pre RF boundary but a subsequent reading had been processed (giving rise to an AA) without identifying the error. Following the Workgroups discussions and the Proposers discussions with ELEXON, the Proposer agreed that this scenario should be removed.

Changes to the Alternative Solution

Legal Text Changes

BSCP504 Section 4.14.3:

The Alternative solution developed by the P274 Modification Group is to continue to allow the use of GVC as per the current arrangements, but to limit the period for which error can be compensated to 5 years prior to the latest RF Run at the time GVC is performed.

The Ofgem representative requested clarification around how the Workgroup had decided that the limiting period for error compensation should be five years prior to the latest RF Run.

The Workgroup clarified that the period of 5 years was chosen, firstly, to minimise any potential spike in the use of GVC with the implementation of this change. A concern for this developed following the spike of GVC use after the approval of CP1310. Secondly, the Workgroup anticipates that the period of five years is a starting point for review; as we receive more information around the use of GVC the five year limit can be reviewed and adjusted by the SVG (as the relevant Panel Committee).

Following this discussion the Workgroup agreed that the definition of 'Earliest GVC Date' introduced into BSCP504 under the Alternative should be amended such that it is a flexible parameter that can be reviewed and changed by the SVG. The Workgroup also agreed that some minor corrections should be made to Section 4.14.3 of the BSCP504 drafting for the Alternative.

Proposed vs. current arrangements:

The **majority** of the Workgroup believe that the Proposed Modification **would not** better facilitate the achievement of the Applicable BSC Objectives overall compared with the existing baseline.

They believed that P274 Proposed would have a detrimental impact on Objectives (c) and (d) for the following reasons:

Objective (c):

- Restriction of the use of GVC (and because redress via the Trading Disputes process would be unfeasible due to the cost of raising a dispute exceeding the compensation

that would be received) would decrease the accuracy of the reflection in Settlement of the gross volume of energy supplied by each individual Supplier, which would reduce the degree to which Settlement reflects Suppliers' actual activities, which would tend to have a detrimental impact on competition;

- Creates a barrier to entry as new Suppliers (particularly small Suppliers that have less resource) are likely to have difficulty managing data and addressing issues and restricting use of GVC takes away a straightforward means of correction.

Objective (d):

- Introduces significant additional complexity and cost to the BSC arrangements;
- The arrangements are excessively onerous on Suppliers and Supplier Agents;
- There is no defect in the BSC so changes are unnecessary and would therefore negatively impact the efficiency and effectiveness of the BSC arrangements;
- The issues identified by P274 arose due to the implementation of CP1310 and are unlikely to recur, so the proposed changes are unnecessary and would therefore negatively impact the efficiency and effectiveness of the BSC arrangements;
- Audit controls around GVC are sufficient and no BSC Audit issues have been raised around GVC use, whereas the Proposed solution would add complexity that could create BSC Audit issues;
- Under the baseline, energy volumes are reconciled but under the Proposed solution energy volumes would be written off (which is counter to the general approach of the BSC arrangements) and writing off energy in this way would mean Settlement would less accurately reflect the gross volume of energy supplied by each Supplier.

A **minority** of the Work group believed that P274 Proposed **would** better facilitate Objectives (c) and (d) for the following reasons:

Objective (c):

- Reduces the possibility that new entrants would have energy volumes attributed to them that relate to periods before they began trading (through the effect of GSP Group Correction Factor on the compensatory error volume), which removes a potential deterrent for new entrants and therefore promotes competition;
- Reduces the extent to which Suppliers (large and small) may have energy volumes attributed to them that relate to periods with different wholesale energy prices (through the effect of GSP Group Correction Factor on the compensatory error volume), which would tend to promote effective competition;
- Improve LDSOs' ability to produce suitable forward looking Line Loss Factors (based on historical Settlement data) for use in Settlement, increasing Settlement accuracy which would tend to promote effective competition;
- Addresses unreasonable GVC usage (i.e. application of GVC over excessively long periods).

Objective (d):

- Provides an additional incentive to settle the correct volume of energy within the 14-month reconciliation window;
- Review of threshold is possible so introduces flexibility into the arrangements which promotes efficiency.

Alternative vs. current arrangements:

Changes from the Workgroup's initial views are caused by the removal of Audit requirements from the Alternative and the inclusion of a new argument relating to Objective (c) in the minority view against the Alternative.

The **majority** of the Workgroup believed that the Alternative Modification solution **would** better facilitate the achievement of the Applicable BSC Objectives (c) and (d) for the following reasons:

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Objective (c):

- Provides additional control around GVC and confidence in GVC application, which should be generally beneficial for competition;
- Addresses unreasonable GVC usage (i.e. application of GVC over excessively long periods);

Objective (d):

- Review of threshold is possible so introduces flexibility into the arrangements which promotes efficiency.

A **minority** of the Workgroup believed that P274 Alternative would have a slight detrimental impact on Objectives (c) and (d) for the following reasons:

Objective (c):

- Accurate data, and therefore correcting errors, generally promotes effective competition, and if an error is identified it should be corrected in its entirety (which GVC currently permits); the Alternative imposes a limit on the extent to which errors can be corrected and therefore acts counter to the promotion of effective competition.

Objective (d):

- Adds additional complexity to the arrangements for no benefit;
- It has not been demonstrated that a change is required.

Proposed vs. Alternative:

The **majority** of the Workgroup believed the **Alternative** Modification would better facilitate the achievement of the Applicable BSC Objectives overall compared with the Proposed Modification.

The majority of the Workgroup believed that P274 Alternative would have a positive impact on Objectives (c) and (d) compared with the Proposed for the following reasons:

Objective (c):

- Introduces reasonable controls around GVC use while retaining GVC as a sensible means of correcting errors.

Objective (d):

- Introduces much less additional complexity to the GVC process than the Proposed.

A **minority** of the Workgroup believed that P274 **Proposed** would better facilitate the achievement of Objectives (c) and (d) compared with the Alternative for the following reasons:

- Limits the extent to which energy is settled in periods other than those in which it was consumed by both volume and time (as opposed to the Alternative which only limits the use of GVC by time);
- The Alternative would have no significant practical impact.

10 Recommendations

The P274 Modification Group invites the Panel to:

- AGREE an initial recommendation that Proposed Modification P274 should not be made;
- AGREE an initial recommendation that Alternative Modification P274 should be made;
- AGREE an initial Implementation Date for Proposed Modification P274 of the next BSC Release at least 12 months from the date of approval;
- AGREE an initial Implementation Date for Alternative Modification P274 the next BSC Release at least 3 months from the date of approval ;
- AGREE the draft legal text for Proposed Modification P274;
- AGREE the draft legal text for Alternative Modification P274;
- AGREE that Modification Proposal P274 be submitted to the Report Phase; and
- AGREE that ELEXON should issue P274 draft Modification Report for consultation and submit results to the Panel to consider at its meeting on 13 December 2012.

11 Further Information

More information is available in

Attachment **A**: BSC Legal Text Proposed

Attachment **B**: BSCP504 Redlining Proposed

Attachment **C**: BSC Legal Text Alternative

Attachment **D**: BSCP504 Redlining Alternative

Attachment **E**: Assessment Consultation Responses

All consultation and impact assessment responses are on the P274 page of the ELEXON [website](#).

Appendix A: Initial Solution Options

This section provides additional detail of the Workgroup's discussions on solutions which ultimately were not progressed.

Initial solution development

The Proposer presented two potential solution options (with a sub option to remove RF deeming) for discussion by the Workgroup:

- Solution Option 1 – withdrawal of part-crystallised advances; and
- Solution Option 2 – re-initialising reading history.

Under the first option, withdrawal of part-crystallised advances would be permitted for errors relating to meters in GSP Groups subject to disputes. Additionally, the solution could allow invalid Annualised Advances (or EACs) to be withdrawn and replaced up to the point at which they had fully "crystallised" at the DF Run, on the condition that the Metering System in question being subject to an authorised Trading Dispute.

The Workgroup considered that this was too complex and presented a number of problems. Withdrawal of partially crystallised values would erode the significance of RF, i.e. DF would effectively be equivalent to RF in all but three GSP Groups (i.e. all but three GSP Groups are currently subject to disputes), which is counter to the direction of the industry over recent years. The Workgroup noted that there is currently no mechanism for separating erroneous threshold-crossing advances from other settlement advances in the RF/DF period, and the disputes run is applied against all advances in the eleven authorised GSPs. If this solution option was employed there would no longer be any meaningful way to monitor post-RF changes. In addition DC systems would require significant changes to accommodate this solution.

The group considered that if neither of the non-compensatory techniques (withdrawal of part-crystallised advances or re-initialisation) was applied, a compensatory effect (similar to GVC) would occur naturally under Settlement. However, such natural compensation would tend to be greater than that which would occur via GVC (because GVC compensates from RF instead of allowing an erroneous read to crystallise). If application of the non-compensatory techniques is optional Suppliers could choose not to apply them and allow natural compensation to occur. This would exacerbate the issues identified by the Proposer, therefore the group agreed that use of a non-compensatory technique should be mandatory under P274 Proposed and to facilitate this, thresholds would have to be applied to determine circumstances where use of non-compensatory techniques is mandated.

The group noted that error freezing is inherent in GVC and agreed this is beneficial and should be incorporated into the re-initialisation solution. The Proposer acknowledged this element of GVC is beneficial and agreed it should form part of the re-initialisation solution.

In light of the Workgroup's considerations the Proposer agreed that withdrawal of part-crystallised advances would not form part of the Proposed solution. Instead the Workgroup and Proposer developed a solution that would permit restricted use of GVC, recognising that GVC contains a beneficial "error freezing" component, which limits the error in one period that will be compensated for in another. This led to the development of the Proposed solution which allows GVC for errors below a defined excessive volume to

enable Suppliers and Non Half Hourly data Collectors (NHHDCs) to minimise the Compensatory Volume associated with them.

The second option put forward by the Proposer became the foundation of the proposed solution. The following table sets out the benefits and disadvantages of the initial proposed solution compared with the solution carried forward.

Relative merits of solution options 1 and 2

BENEFITS	
Solution option 1 withdrawal of part-crystallised advances	Solution option 2 re-initialising reading history
<p>A simpler change than re-initialising the reading history, particularly if it is determined that the latter requires changes to NHHDC validation to address asymmetries in the identification of errors.</p> <p>Where the Metering System is in a GSP Group in which DF runs are being carried out, allows for accurate Settlement back to the DF boundary (assuming that advances part-crystallised at DF can also be corrected).</p>	<p>Independent of the disputes process (i.e. has the same results whether or not DF runs are carried out).</p> <p>Avoids the situation where a bad reading history prevents the processing of subsequent good readings (e.g. after a smart or AMR meter has been installed).</p>
DISADVANTAGES	
solution option 1 withdrawal of part-crystallised advances	solution option 2 re-initialising reading history
<p>Creates a disbenefit to Suppliers with large portfolios in GSP Groups in which DF runs are not being carried out.</p> <p>The ability to correct additional errors in GSP Group in which DF runs are still being carried out, may act as disincentive to end the disputes process.</p> <p>DF runs will not be exclusively for the purpose of correcting errors via authorised Trading Disputes.</p>	<p>More complicated than allowing the withdrawal of part-crystallised advances.</p> <p>It has been asserted that re-initialisation would be biased towards cases of over-settlement, because DC validation is more likely to detect readings that are too low compared to those that are too high, and this would lead to degradation in the accuracy of settlement data. This would seem to be the case with GVC as well, so further consideration needs to be given to the risk of asymmetry.</p>

Benefits and disadvantages of the sub-option – removal of RF deeming

Benefits	Disadvantages
Consistency with the removal of GVC, as deeming at RF also creates a compensatory effect.	It could be argued that the 14 month deeming rule creates a compensatory adjustment to the extent that the metered consumption differs from the EAC on which the Metering System

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	<p>was previously settled, but the magnitude of the compensation should, on average, be less than where GVC is applied. This is because GVC is specifically targeted at errors.</p> <p>Additional cost to NHHDCs as a result of removing the RF deeming rule.</p> <p>Additional cost of EAC/AA system change.</p> <p>Removing RF deeming would result in changes to crystallised data.</p>
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Relative merits of proposed solutions and Gross Volume Correction

BENEFITS	
Proposed Solutions	Gross Volume Correction
<p>Ensures that the volume of energy in the 'fluid' period (i.e. up to the latest Final Reconciliation run) is correctly allocated.</p> <p>Provides an incentive to settle the correct volume of energy within the 14-month reconciliation window, to avoid the costs of Trading Disputes.</p>	<p>Ensures that the total energy settled across the 'error' and 'compensation' periods is correct.</p> <p>Provides an alternative to the Trading Disputes process.</p>
DISADVANTAGES	
Proposed Solutions	Gross Volume Correction
<p>Crystallised error is effectively "written off", unless the Supplier chooses to raise a Trading Dispute.</p> <p>Would lead to an increase in the number of Trading Disputes and in the associated costs.</p>	<p>The volume of energy settled in both the 'error' and 'compensation' periods is incorrect.</p> <p>The Supplier carrying out GVC will gain or lose as a result of differences in energy prices in the 'error' and 'compensation' periods, with other Suppliers experiencing the reverse effect through GSP Group Correction.</p> <p>New market entrants may be subject to gains or losses as a result of compensatory adjustments made in respect of errors that pre-date their market entry dates.</p> <p>Allows Suppliers to make corrections of a comparable magnitude to those in the Trading Disputes process, but without the controls provided by the Trading Disputes process.</p>

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