

What stage is this document in the process?

- 01 Initial Written Assessment
- 02 Definition Procedure
- 03 Assessment Procedure
- 04 Report Phase

Stage 03: Assessment Consultation

P253: Improving the accuracy of the Credit calculation

P253 seeks to improve the accuracy of the credit calculation.

The Proposed Modification would include actual SVA (supplier) data in the II Settlement Run (5 working day after real-time) so that it can be used in the credit calculation.

The Alternative Modification would amend the BSC Systems to more accurately estimate SVA data in the II Settlement Run.



Modification Group initially recommends Approval of the Proposed Modification



High Impact:

Proposed Modification would impact Suppliers, Half Hourly Data Aggregators, Half Hourly Data Collectors, Supplier Volume Allocation Agent (SVAA), Settlement Administration Agent (SAA)
Alternative Modification would impact only SVAA and SAA



Medium Impact:

Proposed Modification would impact the Central Data Collection Agent (CDCA)



Low Impact:

Alternative Modification would impact on Suppliers, Half-hourly Data Aggregators and Half Hourly Data Collectors

P253
Assessment Consultation

6 August 2010

Version 1.0

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About this document:

The purpose of this Assessment Consultation is to obtain views or further evidence from BSC Parties and other interested parties on matters discussed in this document. The P253 Modification Group will then discuss the consultation responses before making its recommendations to the Panel on 9 September 2010.

There are 4 documents for this Assessment Consultation:

- This is the **main document**. It outlines the solution, impacts, costs, benefits and implementation approach for the change. It includes the Group's initial recommendation on whether the change should be approved.
- **Attachment A** provides further supporting details of how the Group's discussions have led it to its initial views.
- **Attachment B** contains the P253 analysis which informed the Group's views.
- **Attachment C** contains the Assessment Consultation questions and response form.



Any questions?

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Why Change?

The Interim Information (II) run is carried out 5 Working Days after real time. It is for information only and Parties do not pay invoices based on II. However, we do use II information in the credit calculation. Indeed, on average 22 of the 29 days of the Credit calculation is based on II data.

For the II run we currently use actual Metered Volumes for the Central Volume Allocation (CVA) market, but only estimated data for the Supplier Volume Allocation (SVA) market. This method of estimating Metered Volumes at the II Settlement Run causes the following issues:

- There can be inaccuracies in the forecasting of SVA data (particularly embedded intermittent generation);
- The estimation technique does not correctly forecast the usage around a Bank Holiday;
- With an increase in embedded generation in some Grid Supply Point (GSP) Groups, the GSP Group Takes (GSPGTs) have been decreasing. As SVA II volumes are based on a percentage of GSPGT, this can make a large difference to SVA volumes.

Proposed Modification

The Proposed Modification would use actual Metered Volumes from SVA Half Hourly sites in the II Settlement Run. In order to do this:

- The Supplier Volume Allocation Agent (SVAA) would carry out an II Volume Allocation Run before the II Run. The data from the SVAA would then feed into the II Run.
- Half Hourly Data Collectors and Data Aggregators would be required to provide Half Hourly Meter Reads in time for SVAA to use them in an II VAR.
- Non Half Hourly Data Aggregators would be required to provide aggregated Estimated Annual Consumption (EAC) values to the SVAA in time for the II VAR run.

Alternative Modification

The P253 Modification Group has developed an Alternative Modification which would **only impact the BSC Systems**. It is made up of two parts:

- Amend the way Bank Holidays are more accurately estimated; and
- Change the algebra used by the SAA II Run to estimate Metered Volumes for Supplier BM Units in order to make it more robust to high levels of embedded generation.

Impacts & Costs

The Proposed Modification would impact Suppliers, HHDA's, HHDC's, SVAA and the SAA. The estimated BSC Agent implementation cost for the Proposed Modification is £110,000. There would be an ongoing cost of £4,000 annually in order to store the extra data generated by the Proposed.

The Alternative Modification would only impact the SVAA and SAA. The estimated BSC Agent implementation cost for the Alternative Modification is £125,500.

The Modification Group requests you provide implementation costs for the Proposed Modification and the Alternative Modification as part of your consultation response.

Implementation

The Group recommends that P253 should be implemented on:

- **03 November 2011** if an Authority decision is received on or before 19 November 2010; or
- **23 February 2012** if the Authority decision is received after 19 November 2010 but on or before 23 February 2011.

The Case for Change

The majority of the Modification Group believes the **Proposed Modification will better facilitate Applicable Objectives (c) and (d)** when compared to the current baseline and the Alternative Modification as it would:

- increase the certainty and confidence in the credit calculation for Parties. This would reduce the need for Parties to lodge much more credit than is required by their Energy Indebtedness calculation.
- improve the accuracy of the credit calculation for all Settlement Periods.
- fix the current problems with estimating embedded generation, Bank Holidays and where GSP Group Take approaches zero.

The Group has conducted a cost-benefit analysis on the Proposed Modification and identified the following benefits:

1. For Parties whose Energy Indebtedness is currently overestimated when compare to the Proposed Modification there would be a total annual saving of **£154,138** (in the cost of credit for those Parties letters of credit).
2. For those Parties for which the amount of credit cover required was under estimated using the current credit calculation, the average underestimation was **£234,481**. This would be the average amount that the industry might lose should one of these Parties enter administration.
3. If a Party were to diminish its credit cover prior to entering Section H Default at a point when the error in the credit calculation was most favourable to that Party (i.e. the calculation was underestimating its credit requirement) then the average exposure to the industry would be **£2,990,091**.

The Group has also developed an Alternative Modification which should only impact the BSC Systems. The Group currently believes the benefits of the Proposed Modification are greater than the benefits of the Alternative Modification. However, the Group requests you provide implementation costs so that they can fully consider whether the benefits of the Proposed Modification outweigh the costs.

Recommendations

The Modification Group recommend that the Proposed Modification should be approved.

2 Why Change?

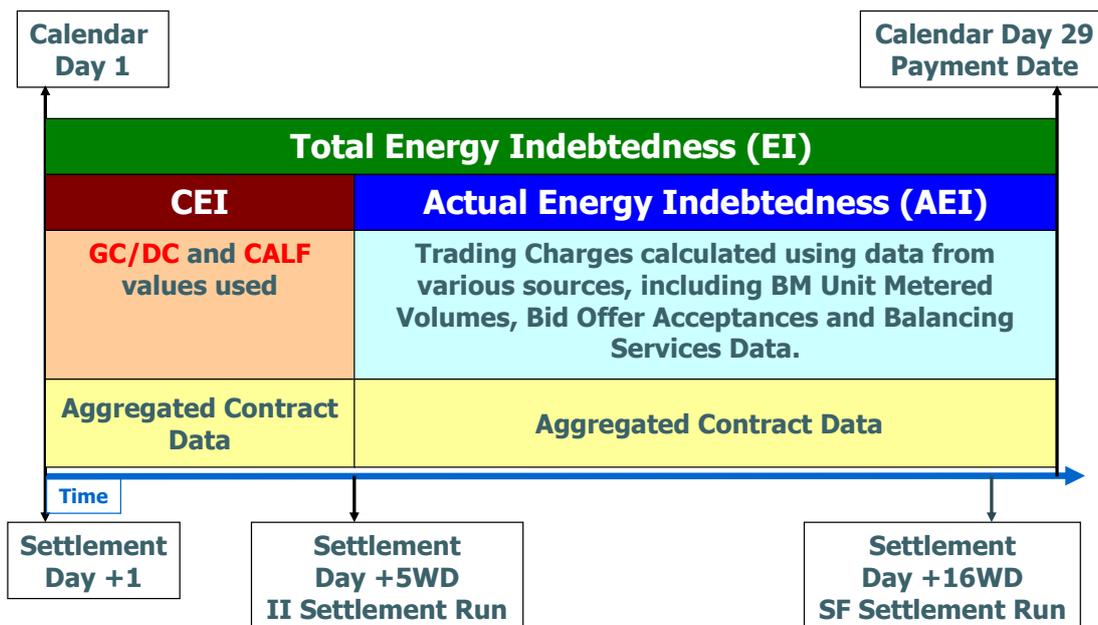
How does the Credit Calculation currently work?

Parties are required to lodge credit with ELEXON in order to cover their Trading Charges for the 29 day period between the Settlement Day and the Initial Settlement (SF) Run, when they pay, or are paid, their Trading Charges. This means that ELEXON has enough collateral to cover the Trading Charges if a Party cannot make them.

In order to assist Parties in understanding how much credit they need to lodge, the BSC Systems calculates their Energy Indebtedness, which is an estimation of a Parties imbalance volume over the 29 day period. We have two methods for doing this, one for Credit Qualifying BM Units and one for other BM Units. A Credit Qualifying BM Unit is one that is not an interconnector BM Unit and is required to submit Final Physical Notifications to the System Operator. It must also have either a Production Status Flag, Exempt Export Status or a dispensation from the Panel. However, P253 is not linked to Credit Qualifying BM Units so if you want to find out more about them then read our [guidance note](#).

P253 is concerned with how we calculate Energy Indebtedness for the other BM Units. To calculate their Energy Indebtedness we use the following method:

Figure 1: The Credit Calculation for other BM Units (not including Interconnector BM Units)



For each Settlement Period the Energy Indebtedness is made up of:

- **Credit Assessment Energy Indebtedness (CEI)** – an estimate of each BM unit's position based on the Credit Assessment Load Factor (CALF) and a measure of capacity of the BM Unit called Generating Capacity (GC) or Demand Capacity (DC);
- **Actual Energy Indebtedness (AEI)** – an estimate of a Party's Trading Charges for a given Settlement Period in MWh.

P253 is looking to change the way that we calculate Actual Energy Indebtedness, so it is worth looking more closely at how we calculate AEI.

Actual Energy Indebtedness

As we said above, AEI is an estimate of a Party's Trading Charges for a given Settlement Period. To calculate this the BSC Systems carry out an II Run 5 Working Days after the Settlement Day. The II Run give us the first view of what Parties' Trading Charges are likely to be. However, it is for information only and Parties do not pay invoices until following the SF Run.

For Central Volume Allocation (CVA) BM Units we have actual Metered Volumes which to calculate Trading Charges for the II Run.

However, the metered volumes for Supplier Volume Allocation (SVA) BM Units are not available, so we have to estimate SVA Metered Volumes. We do this by using the Grid Supply Point (GSP) Group Take – the total energy consumed by a specific geographical area (the UK is divided into 14 GSP Groups for Settlement). We calculate the proportion of the GSP Group Take that a Supplier used on a similar day that has already completed its SF Run (approximately 3 weeks previously to the Settlement Day), then multiply this proportion by the GSP Group Take for the Settlement Period in question to get an estimate of the Supplier BM Unit Metered Volume.

For more details of the current II Run calculation algebra, see Attachment A Section 1.

What's the issue?

This current method of estimating Supplier BM Unit Metered Volumes at the II Settlement Run causes the following issues:

1. **There can be inaccuracies in the forecasting of SVA data** - some Half Hourly (HH) SVA sites (such as wind generation) don't follow a regular profile and can be unpredictable. This means that the electricity generated (or used) 3 weeks ago may not have a clear relationship with the current generation and therefore will not be accurately reflected in II data.
2. **The current method does not work for Bank Holidays** - a Supplier with mainly business customers would see considerably different metered volumes on Working Days and Bank Holidays. The current estimation method does not take this into account.
3. **The increase in embedded generation in some GSP Groups is reducing the GSPGTs** – this can have a significant impact as SVA II volumes are based on a percentage of GSPGT, this can make a large difference to SVA volumes especially when the volumes are not reflective of changes in an individual Suppliers' position. This issue is likely to become more apparent as the level of embedded generation increases.

What do we currently do if these issues arise?

Currently, if a Party's indebtedness is under or overestimated, the Party doesn't have to lodge additional credit cover. Instead they can lodge material doubt. If a Party claims material doubt they must provide evidence that the credit calculation has incorrectly estimated their indebtedness (usually in the form of metered data flows). The claim is then investigated by ELEXON. This process increases both cost and risk.

Cost is increased as additional work is required from ELEXON to respond to the claims and to manually analyse data. But the majority of the work is carried out by the Party lodging material doubt. They need to gather the supporting evidence and re-submit data every time there is a change in data (usually every working day). Therefore each material doubt claim has a cost implication on both ELEXON and the Party.

Risk is increased, as during the existence of material doubt a Party will bypass the Credit calculation process whilst the claim is investigated. This makes it much more difficult to pick up a Defaulting Party. Thus an increasing the likelihood of exposing other Parties to the risk of a Party defaulting when they have a material doubt claim active.

Over the last year 95% of all material doubt claims were related to unrepresentative indebtedness calculations. Increasing the accuracy of the Credit Calculation would reduce this figure.

Assessment Consultation question

What are the costs to your organisation of progressing a material doubt claim?

The Group invites you to give your views using the response form in Attachment C.

What's the solution?

There are two ways to tackle the above problems. Either use actual metered data from Half Hourly Supplier BM Units (the Proposed Modification), or change the BSC Systems to use the existing data in a smarter way (the Alternative Modification).

Summary

The Proposed Modification would use actual Metered Volumes from SVA Half Hourly sites in the II Settlement Run. In order to do this:

- The Supplier Volume Allocation Agent (SVAA) would carry out an II Volume Allocation Run before the II Run. The data from the SVAA would then feed into the II Run.
- Half Hourly Data Collectors and Data Aggregators would be required to provide Half Hourly meter reads in time for SVAA to use them in an II VAR.
- Non Half Hourly Data Aggregators would be required to provide aggregated Estimated Annual Consumption (EAC) values to the SVAA in time for the II VAR run.

Detailed Requirements

Changes to the BSC Systems

The following changes would need to be made to the BSC Systems:

Requirement 1 – CDCA to conduct an II VAR at SD +3WD

The CDCA would conduct a VAR three working days after the Settlement Date (SD +3WD).

Requirement 2 – CDCA to provide GSP Group takes to SVAA for the II VAR (SD +4WD)

The CDCA would provide GSP group take volumes to the SVAA one working day before the SVAA II VAR (on SD +3WD).

Requirement 3 – SVAA to load the CDCA data before the relevant II VAR

The SVAA would be required to process the GSP group take volumes and include them in the SVAA II VAR.

Requirement 4 – SVAA to conduct an II VAR

The SVAA would schedule and conduct an II VAR one working day before the SAA II Settlement Run (at SD +4WD).

Requirement 5 – SVAA to use default data if data from DAs or CDCA has not been received

If the SVAA doesn't receive data from DAs and/or the CDCA, then the defaulting rules in the SVAA Service Description Section 2.7 will apply.

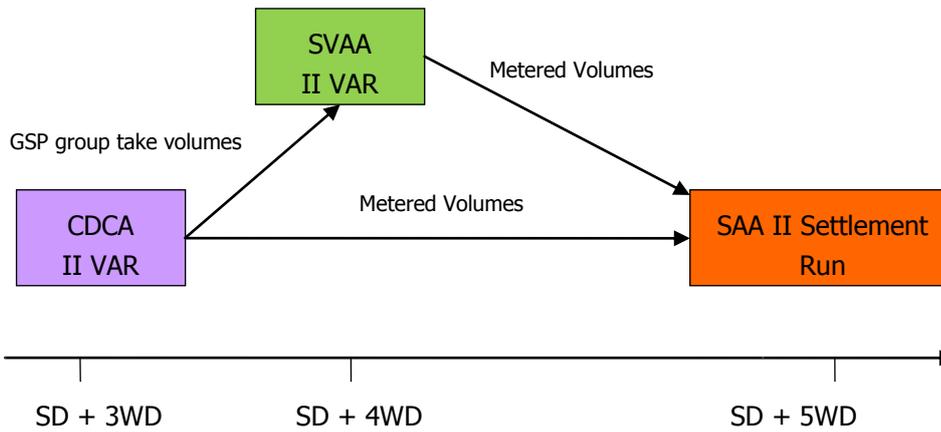
Requirement 6 – SVAA to send metered volumes to the SAA

The SVAA would send the metered volumes from the II VAR to the SAA on the same working day (SD +4WD).

Requirement 7 – SAA to receive and process SVAA and CDCA data

The SAA would receive and process metered volumes from the SVAA and CDCA, so they can be used in the SAA II Settlement run (SD +5WD)

Figure 2: Timetable for BSC Systems to complete II Run



Requirement 8 – SAA to use default data if SVAA metered volumes haven't been received

If the SAA doesn't receive SVAA metered volumes before the II Settlement Run then it would use the same defaulting procedures that are currently used for the SF run, as detailed in BSCP01.

Requirement 9 – CDCA to update CDCA Settlement Calendar

The CDCA would be required to produce a Settlement calendar with the CDCA VARs at SD +3WD.

Requirement 10 – SVAA to update SVAA Settlement Calendar

The SVAA would be required to produce a Settlement calendar with the SVAA II VARs at SD +4WD.

Requirement 11 – SAA to include SVAA and CDCA II VARs in the SAA Settlement Calendar

The SAA would need to include the II VARs for both the CDCA and the SVAA in the SAA Settlement calendar.

Requirement 12 – SVAA would not issue Interim Information (II) Volume Allocation Run (VAR) reports

The SVAA would not be issuing any reports (e.g. Supplier Settlement Reports, D0030 reports) to participants regarding the II VAR. Similarly, there would not be any obligations on Supplier Agents to issue reports regarding the II VAR to Suppliers.

Changes to Party and Party Agents' processes

The proposed changes outlined below directly relate to Data Collectors (DCs) and Data Aggregators (DAs). As Suppliers would be impacted as they are responsible for their Party Agents.

Requirement 13 – Half Hourly Data Collectors (HHDCs) to provide meter readings to DAs before II VAR

HHDCs would now be required to provide Half-hourly meter reads to DAs by SD +2WD. This data would be sent via D0036 flows across the Data Transfer Network (DTN).

Requirement 14 – Where meter readings are not available, HHDCs to use estimation methods as set out in BSCP502

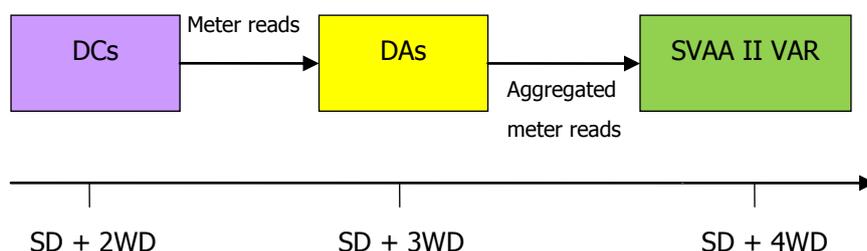
If a HHDC is unable to retrieve a genuine meter reading it would use the estimation methods detailed in BSCP502 section 4.2.1.

Requirement 15 – Data Aggregators (both Half hourly and Non-Half hourly) to provide aggregated metered volumes to the SVAA in time for the II VAR

DAs would provide aggregated meter readings to the SVAA by SD +3WD. This data would be sent via D0040, D0041 and D0298 flows across the Data Transfer Network (DTN).

Non Half-hourly Data Aggregators would not have any actual meter readings at this time and so will be required to provide aggregated Estimated Annual Consumption (EAC) values to SVAA.

Figure 3: Timetable for Data Aggregators to provide aggregated metered volumes to the SVAA



Requirement 16 – No obligations on Supplier Agents to issue reports regarding the II VAR to Suppliers

There would be no obligations on Supplier Agents to issue reports regarding the II VAR to Suppliers.

Market Domain Data (MDD) Changes

Requirement 17 – MDD Changes

Currently details of the timetable for Supplier Volume Allocation (SVA) runs are issued to SVA participants via the D0286 flow (for Non Half Hourly Data Aggregators (NHHDA)/SVAA) and the D0269/D0270 flow (for other participants including Half hourly Data Aggregators (HHDA)). Both flows are produced by Market Domain Data Manager (MDDM), and they do not currently include II data. For P253 the following would change:

- The Settlement data loaded into Market Domain Data (MDD) would need to include II data (which means adding 'II' to the list of valid Settlement Codes in the Settlement Type table);
- MDD would then produce D0269, D0270 and D0286 flows that contained II data;

Assessment Consultation question

Would P253 Proposed Modification better achieve the Applicable BSC Objectives when compared to the current arrangements? (see Section 8 for the Group's views against Applicable BSC Objectives)

The Group invites you to give your views using the response form in Attachment C.

Assessment Consultation question

What do you believe are the potential benefits of the Proposed Modification? (see Section 7 for the Cost-Benefit Analysis)

The Group invites you to give your views using the response form in Attachment C.

Summary

The Alternative Modification would only impact the BSC Systems (unlike the Proposed Modification which would impact also Supplier Agents). It is made up of two parts:

- Amend the way Bank Holidays are more accurately estimated; and
- Change the algebra used by the SAA II Run to estimate Metered Volumes for Supplier BM Units, in order to make it more robust to high levels of embedded generation.

Bank Holiday BSC Central Systems changes

For the II Settlement Runs, the SAA would calculate BM Unit Metered Volume for Supplier BM Units using data from previous Settlements Days (d') and Settlement Periods (j'). However, the rules for which previous Settlement Days d' are worked out would be amended as follows.

Requirement 1 - Bank Holidays shall no longer be used as the previous Settlement Day d' when estimating Supplier BM Unit Metered Volumes for the Interim Information Run

For a given Settlement Day d , Settlement Day d' shall be the most recent Settlement Day prior to d that is:

- The same day of the week as Settlement Day d ;
- Not a clock change day;
- A day on which an Initial Settlement (SF) Run has taken place; and
- Not a Bank Holiday.

Requirement 2 - Where the Bank Holiday is Settlement Day d , the SVAA shall use the first Sunday on which an Initial Settlement (SF) Run has taken place

Where Settlement Day d is a Bank Holiday, Settlement Period d' shall be the most recent Settlement Day prior to d that is:

- Not a clock change day;
- A day on which an Initial Settlement (SF) Run has taken place; and
- A Sunday.

Requirement 3 - The solution would be used for all England and Wales Bank Holidays

The following Settlement Days shall be considered Bank Holidays:

- New Year's Day
- Good Friday
- Easter Monday
- Early May Bank Holiday
- Spring Bank Holiday
- Summer Bank Holiday
- Christmas Day
- Boxing Day

Changing the algebra used to estimate Metered Volumes for Supplier BM Units

The second part of the Alternative Modification would change the algebra used by the SAA II Run to estimate Metered Volumes for Supplier BM Units, in order to make it more robust to high levels of embedded generation. Full details of the revised algebra are provided below (see requirement 3), but the key ideas can be summarised as follows:

- Instead of **multiplying** the Metered Volumes from the previous period by a factor, the new algebra **adds** a share of the change in GSP Group Take to each Metered Volume.
- The amount of energy allocated to each Supplier BM Unit depends on the gross total of Import and Export for each BM Unit (not just the net Metered Volumes). This requires additional information to be sent to SAA from SVAA (see requirements 1 and 2).

This option is a more sophisticated version of one considered by the Issue 38 Standing Group.

Requirement 1 – SVAA to send Gross Volumes to SAA

Currently the SAA-I007 flow from SVAA to SAA (which is also known as the P0182) contains a single net energy value for each Supplier BM Unit and Settlement Period. SVAA will now also be required to provide the gross amount of Import and Export. The SAA-I007 flow will therefore contain two energy values for each Supplier BM Unit and Settlement Period:

- The BM Unit Allocated Demand Volume (BMUADV_{ij}). No change is required to this item – it will continue to be calculated and reported as currently, as the sum of Corrected Component (CORC_{iNj}) for Import Consumption Component Classes, **minus** the sum of CORC_{iNj} for Export Consumption Component Classes.
- A new data item, the BM Unit Allocated Gross Volume (BMUAGV_{ij}), defined as the sum of CORC_{iNj} for Import Consumption Component Classes, **plus** the sum of CORC_{iNj} for Export Consumption Component Classes.

In order to minimise costs and maintain consistent file formats between Run Types, SVAA will provide BMUAGV_{ij} values for Reconciliation Runs as well as Initial Settlement (SF) Runs (even though SAA has no need of Reconciliation data).

Requirement 2 – SAA to load Gross Volumes

The SAA file loader for the SAA-I007 flow will be amended to store BMUAGV_{ij} for each Supplier BM Unit and Settlement Period. Note that this value is not used in Initial Settlement or Reconciliation – its only purpose is for estimating Metered Volumes in subsequent II runs.

In order to minimise costs and maintain consistency between Run Types we assume that SAA will load and store all BMUAGV_{ij} data provided by SVAA (although the II estimation process only needs data for Initial Settlement, and will not actually use data for Reconciliation Runs).

In order to minimise industry impact the BMUAGV_{ij} values will not be reported to Parties (i.e. no change is required to the SAA-I014).

Requirement 3 – More Robust Algebra for Calculation of Supplier BM Unit Metered Volumes in II Run

In place of the current method, SAA will calculate Metered Volumes for Supplier BM Units at II in accordance with the following equation:

$$QM_{ij} = QM_{ij'} - \Delta GSPGT * BMUAGV_{ij'} / \sum_i BMUAGV_{ij'}$$

where ΔGSPGT is the change in GSPGT between period j' and period j . The value of ΔGSPGT shall be calculated in accordance with the following sign convention:

- A positive value of ΔGSPGT indicates that the GSP Group is importing more energy (or exporting less energy) in period j than period j'
- A negative value of ΔGSPGT indicates that the GSP Group is importing less energy (or exporting more energy) in period j than period j'

To illustrate the new requirement, consider a hypothetical GSP Group that contains only 3 Supplier BM Units. The GSP Group Take in period j' was 100 MWh (of Import), and this was split between the 3 BM Units as follows:

	BM Unit 1	BM Unit 2	BM Unit 3
Total Import (i.e. sum of $\text{CORC}_{iNj'}$ for Import CCCs)	700 MWh	800 MWh	50 MWh
Total Export (i.e. sum of $\text{CORC}_{iNj'}$ for Export CCCs)	100 MWh	750 MWh	600 MWh
$\text{BMUADV}_{ij'}$ reported to SAA	600 MWh	50 MWh	-550 MWh
$\text{QM}_{ij'}$ value calculated by SAA	-600 MWh	-50 MWh	550 MWh
$\text{BMUAGV}_{ij'}$ reported to SAA	800 MWh	1550 MWh	650 MWh

In period j the GSP Group Take is 300 MWh (of Import), so the value of ΔGSPGT is $300 - 100 = +200$ MWh. The Metered Volumes for the three BM Units are therefore calculated as follows:

- For BM Unit 1, $\text{QM}_{ij} = -600 - 200 * 800 / (800+1550+650) = -653.333$ MWh
- For BM Unit 2, $\text{QM}_{ij} = -50 - 200 * 150 / (800+1550+650) = -153.333$ MWh
- For BM Unit 3, $\text{QM}_{ij} = 550 - 200 * 650 / (800+1550+650) = 506.667$ MWh

Requirement 4 – Settlement Day Implementation

The change to calculation of Metered Volumes in the II run should be implemented on a Settlement Day basis i.e. the II run for any Settlement Date on or after the Implementation Date should use the new method of calculating Metered Volumes.

Of course, the nature of the process is such that these II runs (for Settlement Dates on or after the Implementation Date) are using data produced by SVAA for Settlement Dates three weeks previously (some of which will be prior to the Implementation Date). So, in order to achieve the overall objective of a Settlement Date implementation, the system changes should be implemented as follows:

- The change to the SAA-I007 interface should be implemented on a Calendar Day basis i.e. as soon as the Implementation Date is reached, SVAA should start including BMUAGV_{ij} data in the SAA-I007 flow, and SAA should start loading it (irrespective of which Settlement Date the run relates to). Given that SVAA performs the SF run approximately 15 Working Days (or three weeks) after the Settlement Date, this means that BMUAGV_{ij} data will be available for calendar days I-21 and later (where I is the Implementation Date).
- The first II runs carried out by SAA following the Implementation Date will continue to use the old rules (because the change to the II Run is being implemented on a Settlement Date basis, and these runs relate to Settlement Dates prior to the Implementation Date). The first II run to use the new rules will be that for Settlement Date I, carried out 5 Working Days (1 week) after the Implementation Date (i.e. I+7).

This II run will use SF data for a Settlement Date three weeks prior to that (i.e. I-14), which means the required BMUAGV_{ij} data will already be available to SAA.

Changes to Party and Party Agents' processes

None anticipated.

Assessment Consultation question

Would P253 Alternative Modification better achieve the Applicable BSC Objectives compared to the current arrangements? (see Section 8 for the Group's views against Applicable BSC Objectives)

The Group invites you to give your views using the response form in Attachment C.

Assessment Consultation question

Would P253 Alternative Modification better achieve the Applicable BSC Objectives compared to the Proposed Modification? (see Section 8 for the Group's views against Applicable BSC Objectives)

The Group invites you to give your views using the response form in Attachment C.

Assessment Consultation question

What do you believe are the potential benefits of the Alternative Modification?

The Group invites you to give your views using the response form in Attachment C.

Assessment Consultation question

Do you agree with the Modification Group's conclusion to exclude changes to the way Scottish Bank Holidays from the Alternative Modification Bank Holiday solution (for more details see Attachment A, pages 12 to 17 and Attachment B, pages 15 to 38).

The Group invites you to give your views using the response form in Attachment C.

Proposed Modification

Costs

ELEXON Cost		ELEXON Service Provider cost	Total Cost
Man days	Cost		
Currently being assessed	TBC	£110,000 implementation cost + £4,000 annual ongoing cost (for storing the additional data)	£110,000 implementation cost+ £4,000 annual ongoing cost

Indicative industry costs

A number of respondents to the Impact Assessment noted significant impacts. However, no indicative costs were provided. The Modification Group would appreciate if you could provide indicative costs.

Impacts

BSC Parties / Party Agents	
Type of Party / Party Agent	Potential impact
Supplier	There would be increased accuracy in the credit calculation and therefore their indebtedness would be more accurate. Reduce the need for material doubt claims, thus reducing the costs incurred in making a claim.
Half Hourly Data Collectors	Would be required to submit meter reads to the DA by two working days before the SVAA II VAR.
Data Aggregators	Would be required to submit data to the SVAA 1 working day before the II VAR.

Impact on BSC Systems and process

BSC System/Process	Potential impact
SAA	The SAA would be required to use HH SVA data in the II run.
SVAA	SVAA would be required to accept GSP Group take volumes from CDCA and use them in the II VAR. SVAA would be required to carry out a VAR at II and send the output to SAA.
CDCA	CDCA to submit GSP Group takes to SVAA before the II VAR

Impact on BSC Agent/service provider contractual arrangements	
BSC Agent/service provider contract	Potential impact
BSC Agents	None identified.

Impact on ELEXON	
Area of ELEXON's business	Potential impact
Credit cover management	The improved credit calculation should decrease the number of material doubt claims ELEXON has to assess.

Impact on Code	
Code section	Potential impact
R5	CDCA to provide GSP group take data to SVAA for II.
Annex S-2	Obligation on NHHDA's to provide data to SVAA for II.
T4	Remove need for estimating HH SVA data.
T5	SVAA to send data to SAA.
U2	Change timing of VARs to include II.

Impact on Code Subsidiary Documents	
CSD	Potential impact
BSCP01	Change to VAR frequency.
BSCP502/503	Change in timescales to get II data to SVAA.
BSCP508/509	SVAA to carry out an II VAR and provide data to SAA.
BSCP536	If a change is made to performance levels for 100kW data.
SAA URS/ SD	To expect and use data from SVAA for II.
SVAA URS/SD	To provide data to SAA for II.
CDCA URS	To provide group take to SVAA for II.
IDD Part 2	II data for SVAA run.

Impact on other Configurable Items	
Configurable Item	Potential impact
SAA/SVAA Settlement Calendar	Add in VAR dates.

Alternative Modification

Costs

ELEXON Cost		ELEXON Service Provider cost	Total Cost
Man days	Cost		
Currently being assessed	TBC	£125,500	£125,500

Indicative industry costs

The Modification Group believe the Alternative Modification should not directly impact Parties or Party Agent. We would like you to confirm this.

Impacts

BSC Parties / Party Agents

No impact identified

Impact on BSC Systems and process

BSC System/Process	Potential impact
SAA	<p>The SAA would be amended to:</p> <ul style="list-style-type: none"> more accurately estimate Supplier BM Unit Metered Volumes for the II Run for Bank Holidays; load Gross Volumes; and use different algebra for the II Run to estimate Metered Volume.
SVAA	<p>The SVAA would be required to: send Gross Volumes to SAA</p>

Impact on BSC Agent/service provider contractual arrangements

No impact identified

Impact on ELEXON

Area of ELEXON's business	Potential impact
Credit cover management	<p>The improved credit calculation should decrease the number of material doubt claims ELEXON has to assess for Bank Holiday periods and where GSP Group Take approaches zero.</p>

Impact on Code

Code section	Potential impact
T4	Amend SVA data estimation rules

Impact on Code	
T5	SVAA to send data to SAA.

Impact on Code Subsidiary Documents	
CSD	Potential impact
SAA User Requirements Specification/ Service Description	The SAA would be amended to more accurately estimate Supplier BM Unit Metered Volumes for the II Run for Bank Holidays.
SVAA User Requirements Specification/ Service Description	Would be amended to document new requirements
IDD Part 2	Amend the SAA-I007 flow from SVAA to SAA to provide Gross Volumes to SAA

Impact on other Configurable Items
None identified.

Assessment Consultation question
What are the impacts and costs of the Proposed Modification on your organisation?
The Group invites you to give your views using the response form in Attachment C.

Assessment Consultation question
What are the impacts and costs of the Alternative Modification on your organisation?
The Group invites you to give your views using the response form in Attachment C.

6 Implementation

BSC Agent timescales

The BSC Agents would require 8 months to implement either the Proposed or Alternative Modifications.

Party and Party Agent timescales

The longest implementation timescale provided by impact assessment respondents for the Proposed Modification was one year. As part of your Assessment Consultation response, please would you provide implementation timescales for the Proposed Modification and the Alternative Modification.

Initial implementation timescales

In order to finalise Implementation Dates the Group will need to know how long it will take you to implement P253. Pending the Assessment Consultation responses, the Modification Group consider a one year implementation time period to be appropriate for both the Proposed Modification and Alternative Modification.

The Group also considers that P253 should be implemented in a scheduled BSC Systems Release. Considering the Authority's target of reaching a decision within 5 weeks of receiving the Final Modification Report (which is likely to happen on 19 October) gives the following Implementation Dates.

Initially, the Modification Group recommends that P253 Proposed or Alternative Modifications should be implemented on:

- 3 November 2011 if an Authority decision is received on or before 19 November 2010; or
- 23 February 2012, if the Authority decision is received after 19 November 2010 but on or before 23 February 2011.

Assessment Consultation question

Do you support the implementation option preferred by the Modification Group for the Proposed Modification?

Please let us know if your implementation timescales would differ from the proposed Implementation Dates

The Group invites you to give your views using the response form in Attachment C.

Assessment Consultation question

Do you support the implementation option preferred by the Modification Group for the Alternative Modification?

Please let us know if your implementation timescales would differ from the proposed Implementation Dates

The Group invites you to give your views using the response form in Attachment C.

Summary

The Group conducted a Cost-Benefit Analysis for the Proposed Modification. The majority of the Group believes that the benefits of the Proposed Modification clearly outweigh the costs. However, the Group notes that no Party and Party Agent costs have been provided and these are a key consideration for the cost-benefit analysis. The Group hopes that Parties and Party Agents will be able to provide indicative implementation costs as part of their response.

Costs

Known costs:

- BSC Agents Implementation costs - **£110,000**
- BSC Agents ongoing cost - **£4,000**

Unknown Costs

- Party and Party Agent Implementation and ongoing costs – Please would you provide implementation costs for the Proposed Modification and Alternative Modifications as part of your response.
- ELEXON implementation costs (to be determined as part of the Assessment Consultation).

Benefits

The Group identified two main benefits:

1. The amount that Parties whose Energy indebtedness is currently overestimated when compare to the Proposed Modification would be able to save on their letter of credit costs under the Proposed Modification (Benefit 1)
2. The amount of potentially unsecured trading charges that would be removed under P253 (over the market and for an average Party) (Benefit 2 and Benefit 3)

To learn more about how we calculated the benefits see Attachment B pages 50 to 53.

Benefit 1

For Parties whose Energy Indebtedness is currently overestimated when compare to the Proposed Modification there would be a total annual saving of **£154,138** (in the cost of credit for those Parties).

Benefit 2

For those Parties for which the amount of credit cover required was under estimated using the current credit calculation when compared to the Proposed Modification, the average underestimation was **£234,481**. This would be the average amount that the industry might lose should one of these Parties enter administration.

Benefit 3

If a Party were to diminish its credit cover prior to entering Section H Default at a point when the error in the credit calculation was most favourable to that Party (i.e. the calculation was underestimating its credit requirement) then the average exposure to the industry would be **£2,990,091**.

Conclusion

The majority of the Group believes the estimated benefits clearly outweigh the known costs. The conclusions we can make are:

1. If Parties who currently have overestimated Energy Indebtedness are prepared to reduce their credit cover to maintain the same credit cover percentage (50%) then those annual savings would outweigh the single year of BSC Agent Implementation costs (**£154,138 per year credit cost savings compared to a one off £110,000 implementation cost plus an annual £4,000 ongoing cost**)
2. Furthermore, if a Party who currently has an underestimated Energy Indebtedness were to go into administration, it is possible the industry could lose an average of **£234,481**.
3. In addition, if a Party undertook a strategy to diminish its credit cover prior to entering Section H Default at a point when the error in the credit calculation was most favourable to that Party, then the average exposure of the industry would be **£2,990,091**.

Cost-Benefit Analysis for the Alternative

The Group is looking to complete similar Cost-Benefit Analysis for the Alternative Modification. If the Group takes forward the Alternative Modification this analysis be provided for you to consider as part of the Report Phase Consultation (issued mid September). In the mean time the Group recommends you consider the Alternative Modification analysis in Attachment B.



Proposed Modification vs. current arrangements

The **majority** of the Modification Group believes the Proposed Modification **would better facilitate Applicable BSC Objectives (c) and (d)** when compared to the current arrangements.

A **minority** of the Group believe the Proposed Modification **would not better facilitate Applicable BSC Objective (d)** when compared to the current arrangements.

Applicable Objective (c)

Benefits

- The Proposed Modification gives Parties a more accurate view of their credit exposure and would increase the certainty and confidence in the credit calculation. This would reduce the need for Parties to lodge much more credit than is required by their Energy Indebtedness calculation and give them an opportunity to reduce their cover, thus reducing their credit costs. This would increase competition as new entrants and smaller Parties, who generally have more difficulties in lodging credit, would need to go less 'long' when lodging credit.
- There would be a reduction in unsecured credit risk which is both a benefit against (c) and (d). It would be a benefit under (c) as all Parties would have their Energy Indebtedness more accurately calculated.
- Parties with embedded generation would have their Energy Indebtedness more accurately calculated.

Disadvantages

- None

Applicable Objective (d)

Benefits

- Analysis indicates that the Proposed Modification would improve the accuracy of the credit calculation:
 - with regards to embedded generation.
 - on the Bank Holidays and for Settlement Days where a Bank Holiday is currently used as a reference day.
 - where GSPGT approaches zero. This is a real problem which will become more prevalent as the levels of embedded generation increase.
- The Proposed Modification would lead to a reduction in the number of instances where material doubt needs to be raised when the GSP Group Take tends to zero. There would be a general increase in the accuracy of the credit calculation, leading to fewer manual interventions by ELEXON and their Agents in the credit process.
- The Proposed Modification would lead to a reduction in unsecured credit risk which is both a benefit against (c) and (d). It would be a benefit under (d) as the default process is a manual and time consuming process for ELEXON to administer.

Disadvantages

- The Proposed Modification could be potentially expensive to implement for Party Agents as they would have to provide Half Hourly Metered Volumes and EACs in shorter

Recommendation

Initially, the Modification Group recommends approval of the P253 Proposed Modification.

The Group currently believes the benefits of the Proposed Modification are greater than the benefits of the Alternative Modification.

The Group requests you provide implementation costs so that they can fully consider whether the costs of the Proposed Modification outweigh the benefits

timescales. However, these costs have only been alluded to and no actual estimates were returned in the Impact Assessment.

- The Proposed Modification would have a £4,000 ongoing cost to store the additional data.

Alternative Modification vs. current arrangements

The Modification Group **unanimously** believe the Alternative Modification **would better facilitate Applicable BSC Objective (d)** when compared to the current arrangements.

A **majority** of the Group also believe the Alternative Modification would better facilitate **Applicable BSC Objective (c)**, although they noted that the **major improvements were to be found under Applicable Objective (d)**.

Applicable Objective (c)

Benefits

- Would increase the certainty and confidence in the credit calculation for Parties. This would reduce the need for Parties to lodge much more credit than is required by their Energy Indebtedness calculation. This would increase competition as new entrants and smaller Parties, who generally have more difficulties in lodging credit, would need to go less 'long' when lodging credit.

Disadvantages

- None

Applicable Objective (d)

Benefits

- Would improve the accuracy of the credit calculation on the Bank Holidays and for Settlement Days where a Bank Holiday is currently used as a reference day.
- Would fix the current problem where GSPGT approaches zero. This is a real problem which potentially could expose the industry to unlimited liabilities which will become more prevalent as the levels of embedded generation increase.

Disadvantages

- Would not improve the accuracy of the credit calculation for embedded generation (although this is neutral against the current arrangements).

Alternative Modification vs. Proposed Modification

The **majority** of the Modification Group believes the **Proposed Modification is better than the Alternative Modification under Applicable Objective (d)**.

A **minority** also believes the **Proposed Modification is better than the Alternative Modification under Applicable Objective (c)**.

A **minority** believes the **Alternative Modification is better than the Proposed Modification under Applicable Objective (d)**.

Proposed is better under Applicable Objective (c)

- Proposed Modification would give Parties a more accurate view of their credit exposure. This would increase certainty and confidence in the credit calculation. It would allow some Parties to reduce their credit, as they currently lodge much more credit than is required by their Energy Indebtedness calculation. This would increase competition as new entrants and smaller Parties, who generally have more difficulties in lodging credit, would need to go less 'long' when lodging credit.

Proposed is better under Applicable Objective (d)

- Proposed Modification offers the more accurate credit calculation as it applies to embedded generation, the GSP Group Take issue and the Bank Holiday issue. The Alternative Modification is a partial solution. It applies to particular points in time – Bank Holidays and moments when GSP Group take approaches zero. However, the Proposed would be an enduring solution which would improve the credit calculation for all Settlement Period. It would also improve the accuracy of the credit calculation with regards to estimating embedded generation.
- The Proposed Modification would reduce unsecured credit risk, which the Alternative Modification may not do.

Alternative is better under Applicable Objective (d)

- Alternative Modification offers a more appropriate approach as it delivers some of the benefits of the Proposed Modification without impacting the industry to the same extent.
- The Proposed Modification could be potentially more expensive to implement for Party Agents than the Alternative Modification (which should not impact Party Agents).

If the Proposed is better why do we have an Alternative?

Under the BSC the Group only can develop an Alternative Modification where the majority believe the Alternative Modification is better than the Proposed Modification. Currently, the Group prefer the Proposed Modification, as they believe it will deliver greater benefits than the Alternative Modification for reasonable cost. If this situation persists then the Group would be unable to take forward the Alternative Modification.

However, the Group notes that no industry implementation costs have been provided. And industry implementation costs are an important factor when considering the merits of the Proposed and the Alternative Modifications. The Group is also interested to know your views about the Proposed Modification and the Alternative Modification.

Hence the Group are consulting on the Proposed Modification and the Alternative Modifications despite preferring the Proposed Modification.

9 Further Information

More information is available in

Attachment A: Detailed Assessment.

This information includes:

- Further information on the current Supplier BM Unit estimation process
- Modification Group membership
- Modification Group discussions
- Process followed for P253
- Summary of the analysis

Attachment B: P253 Analysis

Attachment C: Assessment Consultation response form

A complete version of the impact assessment responses received are available on the [P253](#) page of the ELEXON website.