

Phase

Initial Written Assessment

Definition Procedure

Assessment Procedure

Report Phase

Implementation

P354 'Use of ABSVD for non-BM Balancing Services at the metered (MPAN) level'

This Modification will allow National Grid to provide Applicable Balancing Services Volume Data (ABSVD) at the Metering Point Administration Number (MPAN) level and have the Settlement Administration Agent (SAA) allocate it to the appropriate Supplier BM Unit.



ELEXON recommends P354 is progressed to the Assessment Procedure for an assessment by a Workgroup

This Modification is expected to impact:

- SAA
- Transmission Company (TC)
- Supplier
- Non-BM Balancing Services Providers
- Balancing Mechanism Reporting Service (BMRS)
- ELEXON

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About This Document

This document is an Initial Written Assessment (IWA), which ELEXON will present to the Panel on 9 February 2017. The Panel will consider the recommendations and agree how to progress P354.

There are two parts to this document:

- This is the main document. It provides details of the Modification Proposal, an assessment of the potential impacts and a recommendation of how the Modification should progress, including the Workgroup's proposed membership and Terms of Reference.
- Attachment A contains the P354 Proposal Form.

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1 Why Change?

How is Energy Imbalance calculated for Balancing Services delivered to the Transmission Company?

The [Balancing and Settlement Code \(BSC\) Section T 'Settlement and Trading Charges' 4.6](#) defines the determination of Energy Imbalance for each Energy Account. This is designed to take into account Balancing Services delivered to the Transmission Company (TC)¹ by ensuring that these actions do not create energy imbalance.

In the case of Balancing Services instructed through the Balancing Mechanism (BM), the energy volumes are entered into Settlement through accepted Bids (proposals to reduce generation or increase consumption) and Offers (proposals to increase generation or reduce consumption).

In the case of Balancing Services instructed outside the BM, the energy volumes are entered into Settlement through Applicable Balancing Services Volume Data (ABSVD).

The ABSVD is specified in the [BSC Section Q 'Balancing Mechanism Activities', Paragraph 6.4](#) and determined in accordance with [Applicable Balancing Services Volume Data Methodology Statement](#).

What is the issue?

The Proposer has identified a defect in the current arrangements for notifying ABSVD. The TC is required to allocate the ABSVD to a BM Unit. In some cases they may be unable to do this, particularly where the Balancing Service is provided by a 'non-BM' participant.

This defect has a particular impact on those Balancing Services that can be delivered either by a BM participant (instructed through the BM), or by a non-BM participant such as a customer or aggregator (instructed outside the BM).

When Balancing Services are instructed by the TC in the BM, a Bid Offer Acceptance is issued, which results in the delivery of energy. BM participants are paid for the energy at their Offer or Bid price. This BM energy is then removed from their Energy Account as part of the Settlement process so they do not benefit or suffer from additional imbalance due to accurately delivered BM actions.

When Balancing Services are used by the TC from non-BM participants, an instruction is issued by the TC and results in the delivery of energy. The non BM participant is paid at the agreed utilisation price, but the Energy Account of the electricity Supplier responsible for the Energy Imbalances they cause does not have the associated energy removed. The additional imbalance energy created results in an additional payment to the Supplier. This is funded from customers via Residual Cashflow Reallocation Charge (RCRC) paid at the imbalance cash out price. The additional income is available for payment to the non-BM Balancing Services Provider from the Supplier.

When the TC procures and uses Balancing Services, for example, Short Term Operating Reserve (STOR), or bespoke services from non BM providers, it is understood that no account is taken of the additional imbalance energy payment made from customers to Suppliers via RCRC. The TC's assessment process compares services based on the tendered utilisation price with no account taken of the additional cost of the imbalance energy resulting from the utilisation of non-BM providers.

¹ The terms System Operator and Transmission Company are equivalent in refer to National Grid.



What are Balancing Services?

Balancing Services are used by the TC to balance supply and demand in real time. Details of accepted Balancing Services are used in the calculation of imbalance prices (also known as cash-out prices).



What is the ABSVD?

The ABSVD is used in the calculation of Period BM Unit Balancing Services Volume, which is the volume of all energy associated with Balancing Services used in the determination of imbalance. It consists of the volume of Bid Offer Acceptances plus the Applicable Balancing Services Volume Data. ABSVD is not provided for all Balancing Services, because not all of them are covered in the ABSVD methodology, and the BSC currently allows Parties to opt out.



What is STOR?

STOR is a service for the provision of additional active power from generation and/or demand reduction. For more information please visit [National Grid website](#).

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This effectively allows non-BM participants to take account of a second income stream (imbalance revenue) when constructing tenders for services. Since this income stream is not taken into account in the procurement of STOR, this subsequently leads to inefficient procurement and also inefficient despatch decisions by the TC. It also places non-BM STOR providers in an advantageous position compared to BM STOR providers.

The Proposer estimates that since November 2015, when non-BM STOR volume data was first published, the total additional imbalance revenue amounts to around £17m at an average rate of £103/MWh. This gives an indication of the maximum saving per year to consumers that would have been achieved had this Modification been implemented alongside [P305 'Electricity Balancing Significant Code Review Developments'](#). Higher cash-out prices would increase these spill payments and therefore the potential savings.

Whilst the focus here is on the impact on BM STOR, this issue needs addressing for other types of Balancing Service which result in an imbalance payment that is not taken into account in the contract or in utilisation. It will also be needed to allow the development of demand turn off – particularly as the Supplier would be left 'short' if a customer increases demand.

In 2014, National Grid proposed a Housekeeping Modification to remove the non-BM STOR service from ABSVD Methodology as it was concerned that it could not link the MPAN to its Supplier.

This Modification addresses this concern by allowing the linking of the non-BM MPAN to its Supplier BMU so that ABSVD volume can be applied to the appropriate Supplier BMU. National Grid would be required to provide BSC Central Systems with the volume delivered by each MPAN. To do this they would potentially require additional information from the STOR provider (and may therefore need to introduce additional requirements for information provision into the standard terms and conditions of the STOR contract).



What are the MPANs and MSIDs?

Each point of entry and exit onto a Distribution System Operator's Distribution System has an associated Metering Point, and each Metering Point has an associated Administration Number (MPAN) and Metering System Identifier (MSID). MPAN is the term used in the Master Registration Agreement (MRA), while the BSC uses the term MSID, but they are one and the same.

Proposed solution

ENGIE raised [P354 'Use of ABSVD for non-BM Balancing Services at the metered \(MPAN\) level'](#) on 11 January 2017. The proposed solution is to allow the TC to provide ABSVD at the MPAN level (rather than the BM Unit level). The SAA would then allocate this to the appropriate Supplier BM Unit. Where ABSVD is provided at the MPAN level (rather than the BM Unit level), Suppliers would lose their right to opt out of ABSVD.

Whilst the Workgroup would develop the detailed solution, initial thoughts are:

- If the SAA system receives an ABSVD file containing an MPAN that it does not recognise, it would flag a warning to the SAA operator, who would use Electricity Central Online Enquiry Service (ECOES) to identify the Supplier and Grid Supply Point (GSP) Group. This information would be logged into the system, and all ABSVD for that MPAN would go to the Base BM Unit for that Supplier and GSP Group until further notice
- If the Supplier wanted the ABSVD allocated to an Additional BM Unit (rather than a Base BM Unit) they could let SAA know – but it would make no difference to energy imbalance for that Supplier
- If the customer changed Supplier, either the old or new Supplier could let SAA know, and they would update the standing data (after verifying details in ECOES)

Applicable BSC Objectives

The Proposer believes P354 will better facilitate the following Applicable BSC Objectives:

Objective (a)

The [Transmission Licence C16 Statements](#) requires National Grid to procure and use Balancing Services without discriminating between classes of users. The current procurement of non-BM services does not fully take account of all the costs of the use of these non-BM services. This creates discrimination between BM and non BM classes to the detriment of BM providers.

Objectives (b) and (c)

The TC does not consider the cost of the spill payment when contracting with non-BM services. When the full customer cost is considered (i.e. including the spill payment in non-BM energy cost) the TC is potentially allocating contracts and despatch volume in an inefficient manner that damages competition between BM and non-BM providers and results in additional customer costs.

This Modification will remove the spill revenue from non-BM providers allowing all providers to compete for the provision of these services on an equal basis. This will facilitate competition between different types of provider (Objective (c)) and provide a better deal for the end consumer, resulting in an overall more economic system (Objective (b)).

Objective (d)

The Settlement process was carefully designed so as to isolate the accurate delivery of Balancing Services from any changes to a parties' energy imbalance. This process has



What are the Applicable BSC Objectives?

(a) The efficient discharge by the Transmission Company of the obligations imposed upon it by the Transmission Licence

(b) The efficient, economic and co-ordinated operation of the National Electricity Transmission System

(c) Promoting effective competition in the generation and supply of electricity and (so far as consistent therewith) promoting such competition in the sale and purchase of electricity

(d) Promoting efficiency in the implementation of the balancing and settlement arrangements

(e) Compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency [for the Co-operation of Energy Regulators]

(f) Implementing and administering the arrangements for the operation of contracts for difference and arrangements that facilitate the operation of a capacity market pursuant to EMR legislation

(g) Compliance with the Transmission Losses Principle

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been side-stepped by the growth of non-BM Balancing Services without the application of ABSVD. Putting it back into ABSVD will correct this inefficiency.

Implementation approach

The Proposer has requested that P354 should be implemented on **2 November 2017** as part of the November 2017 BSC Systems Release.

This date has been requested for three reasons:

- to improve Balancing Services procurement and dispatch decisions as soon as possible;
- to remove the advantageous position of non-BM STOR versus BM STOR in the procurement of STOR as soon as possible; and
- to allow consumers to benefit from the cost reductions arising from this Modification at the earliest possible date.

Please note that the achievability of this implementation date is dependent upon the development timescales for TC and BSC systems required by the solution developed by the P354 Workgroup.

3 Areas to Consider

In this section we highlight areas which we believe the Panel should consider when making its decision on how to progress this Modification Proposal, and which a Workgroup should consider as part of its assessment of P354. We recommend that the areas below form the basis of a Workgroup's Terms of Reference, supplemented with any further areas specified by the Panel.

How P354 will impact the Transmission Licence C16 Statements and ABSVD Methodology?

The BSC change is one element of a number of changes required to implement a solution to this issue. The full solution will also impact the Transmission Licence C16 Statements and the ABSVD Methodology and is described below for completeness.

For non-BM instructed Balancing Services, ABSVD would be applied based on the delivered volume to the Supplier for each relevant MPAN with a BSC process to identify the relevant Supplier BMU and GSP group for that MPAN. The TC would provide the delivered volume of (e.g. non-BM STOR) for each MPAN to the BSC. The metered volume is obtained from the Standing Reserve Despatch (SRD) system and TC Settlement system, with non-BM Balancing Services providers providing half hourly metered volume per MPAN for their sites based on disaggregated SRD delivered energy². The BSC process would identify the relevant Supplier BMU which would be credited or debited with the delivered volume via the existing ABSVD variable.

ABSVD would be based on delivered rather than instructed non-BM energy which means that the relevant Supplier will not be subject to imbalance charges due to non-delivery. This approach is different to that used for BM ABSVD, and the justification for this is based on the smaller materiality and to assist Suppliers and non-BM Balancing Services providers in this transition. In the case of non-BM STOR, penalties will already apply for under-delivery under the STOR contracts. Using delivered volume also helps non-BM Balancing Services providers who may 'over instruct' to ensure the instructed volume is delivered within the appropriate tolerance.

Key features:

- ABSVD for non-BM Balancing Services providers would be applied to the Supplier based on the MPAN with the BSC process identifying the relevant Supplier;
- ABSVD would be based on delivered metering (as monitored by SRD). The implication of this is that there is no imbalance issue for the provider or aggregator to deal with; and
- It would require a modification to the ABSVD Methodology to add ABSVD based on delivered energy for non-BM STOR this can be covered off in the upcoming ABSVD/C16 annual consultation or via an ad hoc change. The proposed BSC change will make identification of the relevant Supplier possible for the large majority of MPANs.

² It is our understanding that non-BM Balancing Services providers need to keep this data for audit purposes at the moment.

When should the TC provide non-BM ABSVD to SAA and how should the SAA allocate the ABSVD volume to the appropriate Supplier BM Unit?

We believe the Workgroup should discuss the arguments of P354 and determine the timescales for the provision of non-BM ABSVD to the SAA and how the SAA should allocate the volume to the Supplier BM Unit. For instance, the Workgroup should consider the process on Change of Supplier and the fall-back solution if MRA Executive Committee (MEC) does not agree ECOES access for SAA.

Should Suppliers be allowed to opt out of receiving MPAN-level ABSVD?

Currently, the Lead Party has a right to opt out of receiving BMU-level ABSVD. P354 proposes that this right should not be extended to MPAN-level ABSVD. The Workgroup should consider whether the Suppliers should be able to opt out of receiving MPAN-level ABSVD and, if they agree, how this would happen.

How should the MPAN-level ABSVD be reported?

The current BMU-level ABSVD is published on BMRS and in the SAA Settlement Reports. The Workgroup should assess whether non-BM data supplied at the MPAN level should be reported in the same way as BMU-level ABSVD is currently reported.

Does this Modification impact a Significant Code Review (SCR) or other significant industry change projects, if so, how?

The Proposer noted that [P344 'Project TERRE implementation into GB market arrangements'](#) is also considering the participation of non-BM Units in delivering Replacement Reserves. The Workgroup may also wish to take into account the impact of P354 on other significant change projects.

What is the impact of P354 on consumers?

The Proposer believes that this proposed Modification would lead to an increased level of competition between non-BM and BM providers. If a Non-BM Balancing Services Provider becomes a BM participant the spill payment would be lost - this potentially amounts to around 50% of the energy income, yet costs will be compared to the remaining non BM providers who can tender a lower utilisation price as they will get the spill payment. By switching the spill payment to be a direct energy payment (providers may adjust the energy price to compensate for the reduce spill payment) non-BM participants can move to be BM providers without a loss of spill income. The Proposer believes that this will in turn allow non-BM and BM Balancing Services providers to compete effectively for the delivery of services with resulting consumer benefits driven by increased levels of competition and optimal despatch decisions from the TC.

Areas to consider

The table below summarises the areas we believe a Modification Workgroup should consider as part of its assessment of P354:

Areas to Consider
How P354 will impact the Transmission Licence C16 Statements and ABSVD Methodology?
When should the TC provide non-BM ABSVD to SAA and how should the SAA allocate the ABSVD volume to the appropriate Supplier BM Unit?
Should Suppliers be allowed to opt out of receiving MPAN-level ABSVD?
If Suppliers will be allowed to refuse, how should they act?
How should the MPAN-level ABSVD be reported?
Does this Modification impact a Significant Code Review (SCR) or other significant industry change projects, if so, how?
What are the implications for customers of adjustments being made to their Supplier's imbalance positions?
What changes are needed to BSC documents, systems and processes to support P354 and what are the related costs and lead times?
Are there any Alternative Modifications?
Should P354 be progressed as a Self-Governance Modification?
Does P354 better facilitate the Applicable BSC Objectives than the current baseline?
What is the impact of P354 on consumers?



What is the Self-Governance Criteria?

A Modification that, if implemented:

(a) is unlikely to have a material effect on:
 (i) existing or future electricity consumers; and
 (ii) competition in the generation, distribution, or supply of electricity or any commercial activities connected with the generation, distribution, or supply of electricity; and
 (iii) the operation of the national electricity transmission system; and
 (iv) matters relating to sustainable development, safety or security of supply, or the management of market or network emergencies; and
 (v) the Code's governance procedures or modification procedures; and

(b) is unlikely to discriminate between different classes of Parties.

Next steps

We recommend that the Modification is progressed to a four month Assessment Procedure for consideration by a Workgroup.

Workgroup membership

We recommend that the P354 Workgroup should be comprised of any participants who are involved in the in Balancing Services (including non-BM Balancing Services providers) and demand response, along with any other interested parties.

Timetable

We recommend that P354 undergoes a four months Assessment Procedure, meaning the Workgroup will submit the Assessment Report to the Panel at its meeting on 8 June 2017.

As part of the Assessment Procedure, the Workgroup will need to develop and consider the merits of the Proposed Modification (and any Alternative Modification it may wish to raise). We will issue the solution for industry consultation (11 Working Days duration) for industry to comment on the Proposed (and any Alternative) solution.

Proposed Progression Timetable for P354	
Event	Date
Present Initial Written Assessment to Panel	9 Feb 17
Workgroup Meeting	W/B 20 Feb 17
Central Impact Assessment	13 Mar 17 – 31 Mar 17
Workgroup Meeting	W/B 3 Apr 17
Assessment Procedure Consultation	27 Apr 17 – 12 May 17
Workgroup Meeting	W/B 15 May 17
Present Assessment Report to Panel	8 Jun 17

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5 Likely Impacts

Impact on BSC Parties and Party Agents

Party/Party Agent	Potential Impact
Supplier	Under the proposed solution, the imbalance cash flow resulting from non-BM ABSVD, which is paid to Suppliers, will be removed.

Impact on Transmission Company

We expect the Transmission Company to be impacted by the implementation of P354 to deliver MPAN-level ABSVD to BSC Systems.

Changes to the ABSVD Methodology will be required to implement this Modification.

Impact on BSCCo

To be determined

Impact on BSC Systems and processes

BSC System/Process	Potential Impact
BMRS	If the Workgroup require that the new MPAN-level ABSVD is published on BMRS once it has been assigned to a BMU.
SAA	SAA manual processes should be amended to add a process for the SAA operator to identify the appropriate Supplier BMU from ECOES. SAA would need to identify the Supplier when data is first sent for a given MPAN, or when SAA is subsequently notified of a Change of Supplier.

Impact on Code

Code Section	Potential Impact
Section Q	Changes will be required to implement this Modification.

Impact on Core Industry Documents and other documents

Document	Potential Impact
Ancillary Services Agreements	Changes will be required to implement the Modification.

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Other Impacts	
Item impacted	Potential Impact
Non-BM STOR Providers	P354 aims to remove the imbalance cash flow resulting from non-BM ABSVD which is paid to Suppliers, but passed on to the non-BM provider, who will be impacted if this flow will be removed.

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6 Recommendations

We invite the Panel to:

- **AGREE** that P354 progresses to the Assessment Procedure;
- **AGREE** the proposed Assessment Procedure timetable;
- **AGREE** the proposed membership for the P354 Workgroup; and
- **AGREE** the Workgroup's Terms of Reference.

Appendix 1: Glossary & References

Acronyms

Acronyms used in this document are listed in the table below.

Acronym	
Acronym	Definition
ABSVD	Applicable Balancing Services Volume Data
BPD	BM Unit Period Data
BPI	BM Unit Period Information
BM	Balancing Mechanism
BMRS	Balancing Mechanism Reporting Service
BSC	Balancing and Settlement Code
BUI	BM Unit Period Information
ECOES	Electricity Central Online Enquiry Service
GSP	Grid Supply Point
MEC	MRA Executive Committee
MPAN	Metering Point Administration Number
MRA	Master Registration Agreement
MSID	Metering System Identifier
RCRC	Residual Cashflow Reallocation Charge
SAA	Settlement Administration Agent
SRD	Standing Reserve Despatch system
STOR	Short Term Operating Reserve
TC	Transmission Company

External links

A summary of all hyperlinks used in this document are listed in the table below.

All external documents and URL links listed are correct as of the date of this document.

External Links		
Page(s)	Description	URL
3	BSC page on the ELEXON website	https://www.elexon.co.uk/bsc-related-documents/balancing-settlement-code/bsc-sections/
3	Applicable Balancing Services Volume Data Methodology Statement	http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/Balancing-framework/Transmission-license-C16-statements/

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External Links		
Page(s)	Description	URL
3	Short Term Operating Reserve on the National Grid website	http://www2.nationalgrid.com/uk/service/s/balancing-services/reserve-services/short-term-operating-reserve/
4	P305 page on the ELEXON website	https://www.elexon.co.uk/mod-proposal/p305/
5	P354 page on the ELEXON website	https://www.elexon.co.uk/mod-proposal/p354/
5	Transmission Licence C16 Statements on the National Grid website	http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/Balancing-framework/Transmission-license-C16-statements/
9	P344 page on the ELEXON website	https://www.elexon.co.uk/mod-proposal/p344/

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