

**Phase**

Initial Written Assessment

Definition Procedure

Assessment Procedure

Report Phase

Implementation

## P355 'Introduction of a BM Lite Balancing Mechanism'

This Modification proposes to introduce a new BM Lite classification to allow smaller generators to offer energy to the System Operator for energy balancing, in competition with the larger BM Units already in the market.



ELEXON recommends P355 is progressed to the Assessment Procedure for an assessment by a Workgroup

This Modification is expected to impact:

- BSC Parties
- Non-BM Parties
- Transmission Company
- Central Data Collection Agent (CDCA)
- Central Registration Agent (CRA)
- Settlement Administration Agent (SAA)
- Funds Administration Agent (FAA)
- ELEXON

268/04

P355

Initial Written Assessment

6 July 2017

Version 1.0

Page 1 of 19

© ELEXON Limited 2017

## Contents

<b>1</b>	<b>Why Change?</b>	<b>3</b>
<b>2</b>	<b>Solution</b>	<b>5</b>
<b>3</b>	<b>Areas to Consider</b>	<b>7</b>
<b>4</b>	<b>Proposed Progression</b>	<b>13</b>
<b>5</b>	<b>Likely Impacts</b>	<b>15</b>
<b>6</b>	<b>Recommendations</b>	<b>17</b>
	<b>Appendix 1: Glossary &amp; References</b>	<b>18</b>

## About This Document

This document is an Initial Written Assessment (IWA), which ELEXON will present to the Panel on 13 July 2017. The Panel will consider the recommendations and agree how to progress P355.

There are three 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 P355 Proposal Form.
- Attachment B contains the Authority's designation decision letter of 7 June 2017.



### Contact

**Claire Kerr**

020 7380 4293

[claire.kerr@elexon.co.uk](mailto:claire.kerr@elexon.co.uk)



268/04

P355

Initial Written Assessment

6 July 2017

Version 1.0

Page 2 of 19

© ELEXON Limited 2017

# 1 Why Change?

## Background

### What is the balancing mechanism?

National Grid, as the Transmission Company (TC), has a licence obligation to manage the Transmission System and may anticipate that more energy will be generated than consumed, or vice versa. Unchecked, this would result in system frequency falling or rising to an unacceptable degree.

The Balancing Mechanism (BM) provides a way for the TC to buy or sell additional energy close to real-time to maintain energy balance, and to also deal with other operational constraints of the Transmission System. Specifically, the BM allows Balancing and Settlement Code (BSC) Parties (if they wish) to submit:

- 'Offers' to sell energy (by increasing generation or decreasing consumption) to the system; and
- 'Bids' to buy energy (by decreasing generation or increasing consumption) from the system, at prices that the BSC Party chooses.

These 'Offers' and 'Bids' can be submitted in respect of each unit of generation or consumption (known as a BM Unit (BMU)) belonging to each BSC Party.

The TC accepts 'Offers' and 'Bids' as necessary to balance the system, and seeks to do so at least cost by taking the lowest-priced 'Offers' and accepting the highest-priced 'Bids', consistent with factors such as transmission system constraints and the BSC Parties' ability to deliver within the timescales necessary. The BM is used to balance supply and demand in each Half Hourly (HH) trading period of every day.

### What is the issue?

The Proposer contends that under the current BM, it is difficult for smaller parties to compete directly with larger generators for the provision of energy to the TC, as the GB System Operator (SO), for balancing. This is because there is a lack of access to the BM for smaller plants in a way that would allow them to compete on a level playing field with larger power stations.

When the BSC was created, it envisaged that balancing flexibility would be provided by a relatively low number of larger, flexible and discrete generation or demand managers, mainly Transmission connected, who were all full Parties to the BSC. As the power system has evolved since the New Electricity Trading Arrangements (NETA) (2001), the TC has procured Balancing Services from an increasing volume of smaller providers who are not BSC Parties and are typically instructed outside the BM (for example non-BM Short Term Operating Reserve (STOR)<sup>1</sup> is instructed via the Standing Reserve Despatch (SRD)). This creates a number of issues, such as lower levels of transparency, the need for multiple systems to deliver the same service and different treatment of imbalance charges.

As the market moves to a more decentralised system, with substantial growth in smaller energy providers, the Proposer believes this will create an impact on competition. It also



### What are BM Units?

BM Units are units of trade in the Balancing Mechanism.

They are used in the BSC to account for all energy that flows on or off the Total System, which is the Transmission System and the Distribution System combined.

A BM Unit is the smallest grouping of equipment that can be independently metered for Settlement. Most BM Units consist of a generating unit or a collection of consumption meters, and the energy produced or consumed by the contents of a BM Unit is accredited to that Unit.



### 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).

268/04

P355

Initial Written Assessment

6 July 2017

Version 1.0

Page 3 of 19

© ELEXON Limited 2017

<sup>1</sup> 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](https://www.nationalgrid.com/uk/energy/balancing).

means that in the future, the SO may not have access to the energy services it requires to balance the system in the most economically and efficient manner.

The Proposer believes that under the current arrangements, the BSC is not promoting effective competition in generation and is therefore hindering the SO from operating the Transmission System in the most efficient, economic and coordinated manner. Currently, neither Supplier Volume Allocation (SVA) nor Central Volume Allocation (CVA) provides a way for independent, embedded generators to aggregate generating units at multiple sites into a single BM Unit. SVA is not open to independent generators (because of constraints outside the BSC, in the [Master Registration Agreement \(MRA\)](#) and Distribution Licence), while CVA does not allow Generating Units at multiple sites to be combined into a single BM Unit. The Proposer is strongly of the view that it is discriminatory that Suppliers (in SVA via Additional BM Units) have access to aggregation options that are not available to embedded generators (in CVA).

The Proposer also notes that the SO has operational issues with despatching smaller plants. Allowing embedded generators to aggregate themselves into larger BMUs would give the SO access to further plant for system balancing purposes. It would therefore be more efficient for the SO to have a greater choice of plant and to be able to access them all via the BM.

Furthermore the Proposer highlights that this Modification is building on the proposed Trans-European Replacement Reserves Exchange (TERRE) implementation concept. However, rather than just focussing on one EU-designed balancing product, it aims to put smaller plants on a level playing field with existing BMUs in a way so that they can sell a wide variety of energy and system products to the SO via the BM.

## Authority designation

Under [BSC Section F 'Modifications Procedure'](#)2.1.1(c), a proposal to modify the Code may be made by:

*"such other bodies representative of interested third parties as may be designated in writing for this purpose by the Authority from time to time."*

On 16 March 2017, an application for designation was submitted to the Authority on behalf of the Flexible Generators Group ("FGG"). The applicant was seeking designation under the BSC for the FGG, individual FGG members, and/or 'embedded generators' as a class of system user, to enable the raising of this Modification.

Attachment B contains the Authority's letter of 7 June 2017, where it considered it appropriate for this Modification to be raised. As such, the Authority designated [PeakGen](#) as the Proposer of the Modification and Welsh Power as the Proposer's Alternate. For the avoidance of doubt, neither the Proposer nor Proposer's Alternates are BSC Parties.



### What are Additional BM Units?

For any Supplier and any Grid Supply Point (GSP) Group, the "Base BM Unit" is the Supplier BM Unit which was registered for the Supplier, and each other Supplier BM Unit is an "Additional BM Unit". has the meaning given to that term in Section K3.3.5.



### Proposed solution

PeakGen raised [P355 'Introduction of a BM Lite Balancing Mechanism'](#) on 21 June 2017.

P355 proposes to introduce a new BM Lite classification to allow smaller generators the opportunity to offer energy to the SO for energy balancing, in competition with the larger BMUs already in the market. This will create direct BM access to parties without the need for a party to become a full BSC member.

Additionally, this Modification seeks to create individual BMUs from multiple smaller sites. These can then be despatched in direct competition to the existing BMUs, recognising that for efficiency purposes, the SO will want to despatch few larger plants rather than many smaller units.

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

- BM Lite Parties would become signatories to the BSC. A definition of a 'BM Lite Party' would therefore be introduced into the BSC.
- Creation of embedded generator BMUs 'EG BMUs'. These new EG BMUs would have the same operational requirements as any other BMUs.
- Creation of a new BSC registration system to interact with both ELEXON's Settlement systems and the TC's balancing systems.

### Applicable BSC Objectives

The Proposer believes that P355 would better facilitate **Applicable BSC Objectives (a), (b), (c) and (d)** compared with the existing baseline for the reasons set out below:

#### Proposers views against Objectives (a) and (b)

The Proposer contends that the ability of the SO to stack additional plant into the merit order would see balancing become more economically efficient. Allowing smaller parties to compete on a level playing field with larger plants will also allow more efficient price discovery<sup>2</sup> and may aid liquidity in the longer term. In addition, the Proposer believes that the Proposed Modification will increase market transparency and simplify contract and despatch for Balancing Services from "non-BM" providers.

#### Proposers views against Objective (c)

The Proposer notes that the intended purpose of this Modification is to open up the provision of Balancing Services making bids and offers in the BM, and the provision of ancillary services, such as STOR and frequency response more fully available to non-BM parties. This will create a competitive market between embedded generators, Suppliers and larger generators.

### 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

268/04

P355  
Initial Written Assessment

6 July 2017

Version 1.0

Page 5 of 19

© ELEXON Limited 2017

<sup>2</sup> The price discovery process involves buyers and sellers arriving at a transaction price for a specific item at a given time.

It also allows embedded generators to create aggregated BMUs (something that Suppliers can already do) rather than having to rely on Suppliers to create these for them. They can instead take on the imbalance risk that other BM Parties face in their own right. This adds to competition between Suppliers, large generators and small generators

### **Proposers views against Objective (d)**

The Proposer contends that having an identical route for BSC and non-BSC Parties to enter the BM will allow similar and more appropriate treatment of both sets of Parties. In addition, it should allow the decommissioning of certain aspects of existing systems (for example Applicable Balancing Services Volume Data (ABSVD), the import of non-BM STOR into imbalance prices), which should simplify the Settlement process.

### **Implementation approach**

The Proposer contends that the implementation of the Proposed Modification should be achieved as quickly as possible to allow customer benefits to be secured in a timely manner. The Proposer believes that the changes should be implemented in line with TERRE go-live, currently scheduled for Q2 2019.

### **Timing**

Whilst this is not an urgent Modification, the Proposer notes that Connection Use of System Modification (CUSC) Modification Proposals [CMP264 'Embedded Generation Triad Avoidance Standstill'](#) and [CMP265 'Gross charging of TNUoS for HH demand where embedded generation is in Capacity Market'](#), were both approved by the Authority on 22 June 2017. Changes therefore need to be made as CMP264 and CMP265 will remove significant revenues from Triad payments to a large group of embedded generators from 2018.

The Authority's modelling is predicated on the position that the impacted embedded generators' parties can gain access to wholesale markets. The Proposer believes that at the current time, embedded generators do not have equal access to the BM, nor to wholesale markets. P355 therefore seeks to address BM access and as such would start to level the playing field in the energy market.

### 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 P355. 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.

#### Wider interactions

##### BSC Modifications

The Workgroup should note that there is a potential relationship with both BSC Modifications [P344 'Project TERRE implementation into GB market arrangements'](#) and [P354 'Use of ABSVD for non-BM Balancing Services at the metered \(MPAN\) level'](#). Both these Modifications are placing reliance on a Secondary BM Unit, a unit established and registered (or to be established and registered) by a Virtual Lead Party in accordance with [BSC Section K 'Classification and Registration of Metering Systems and BM Units'](#) 8. The concept of a Secondary BM Unit is that it does not include all the metered volumes for the sites it contains, only the volumes that are delivering Balancing Services (e.g. TERRE Acceptances or BOAs) to the TC. All the other metered volumes for those sites remain in the Primary BM Unit. Under P355, it is the intention that the Registrant of the BM Unit will have single responsibility for the power flows.

Additionally, there may be a potential interaction with Modification [P297 'Receipt and Publication of New and Revised Dynamic Data Items'](#) if the Workgroup agrees with the Proposer's suggestion that the new BMUs should be registered into the TC's new Electricity Balancing System (EBS). P297 is currently targeted for implementation as part of the November 2018 Release. Therefore, as part of assessing P355, the Workgroup will need to ensure that any overlap between these three live Modifications is given due consideration.

##### Electricity Balancing Guidelines

The Proposer highlights the interaction with the requirements of the European Electricity Balancing Guideline (EB GL). The EB GL is expected to become law in late 2017. Recital (8) of EB GL states that:

*"The rules defining the role of balancing service providers and the role of balance responsible parties ensure a fair, transparent and non-discriminatory approach. Moreover, the rules concerning the terms and conditions related to balancing set out the principles and roles by which the balancing activities governed by this Regulation will take place, and ensure adequate competition based on a level-playing field between market participants, including demand-response aggregators and assets located at the distribution level."*

It is therefore important that the Workgroup takes this and any other relevant EB GL requirements into consideration as part of its discussions.

##### Other Codes

Furthermore, the Proposer highlights that P355 may have cross-code interactions with both the CUSC and Grid Code. P344 also has cross-code impacts on CUSC and Grid Code.

---

268/04

P355

Initial Written Assessment

---

6 July 2017

Version 1.0

Page 7 of 19

© ELEXON Limited 2017



The Workgroup will therefore need to take these cross-code interactions into account when developing its Proposed Modification.

## Should non-BM Parties become signatories to the BSC?

### Governance

#### Definitions

To allow the asset owners to become party to the relevant arrangements, the Proposer suggests that the impacted parties would be able to become signatories to the BSC. This will require a new BSC Party type to be defined ('BM Lite Party'). This should allow, but not require BM Lite Parties to register their Meters, create the BMUs, and Metered Volume Reallocation Notification (MVRN) all their energy flows to a Supplier, while still maintaining control over their BMU. Alternatively, impacted parties can elect to retain total control over their BSC position, and would be required to accede based on passing additional tests such as the ability to send and receive relevant BSC information. A Trading Party would also be able to register and control the BMUs on behalf of the owner, as can happen today.

It is important that the Workgroup discusses whether embedded generators themselves need to become BSC Parties/signatories under a 'Lite' arrangement. In addition, the Workgroup may want to consider whether the Proposed Modification gives BM Lite parties more flexibility than existing BM Parties and whether this is equitable.

Under P344, it is proposed that a new BSC Party type should be created ('Virtual Lead Party' (VLB)), as directed by TERRE, to allow Data Aggregators (DAs) to participate in the Replacement Reserve (RR) market. Under the current BSC arrangements there is a Lead Party for BM Units. However, in this case, a 'Virtual Lead Party' will be defined as a Lead Party for the new secondary BM Units.

The Proposer notes that the current BSC definitions of BMUs, Trading Units and compliant metering will need to be amended as part of implementing this Modification. 'EG BMUs' will not fit into the standard definitions of a BMU, Trading Unit, metering configurations, etc. and as such the new 'EG BMUs' will require new definitions. This should cover their configuration and metering to avoid parties requiring derogations from existing rules. While derogations can be used, the Proposer believes that it would be more economical to alter the rules than to require derogations on standard designs of new build plants. The Workgroup may consider if altering existing definitions to cover both conventional and EG BMUs may work best, or if creating new definitions is more economic.

#### Market Entry

The Proposer contends that a new Market Entry process is required to define a 'BM Lite Party'. Additionally, the Proposer suggests that a new Market Entry Registration process that is applicable to their activity may be appropriate. As a consequence, the BSC Market Entry BSCPs will also need updating to accommodate the new plants, new or modified systems and associated communications.

It should be noted that under P344, the new 'Virtual Lead Parties' will have to sign up to all obligations in the BSC. However, their monthly costs will be proportionate to the role that they play. For example, if the Virtual Lead Party is not going to trade energy, then their costs should be lower as all other Parties can trade energy.



#### What is the current Market Entry process?

Details of the current Market Entry process can be found on the [ELEXON website](#).

268/04

P355

Initial Written Assessment

6 July 2017

Version 1.0

Page 8 of 19

© ELEXON Limited 2017



The Workgroup will therefore need to consider whether new Market Entry and Registration processes are required or whether existing processes could be amended for BM Lite parties.

## Creation of embedded generator BMUs

The aggregation of Meters into new BMUs would create 'EG BMUs'. The Workgroup should discuss whether there is value in identifying these BMUs as locational (within the same GSP Group) or non-locational. Furthermore, if locational is felt beneficial, whether it would fall under the Distribution Network Operator (DNO) region. The Proposer suggests that the minimum size of each EG BMU would be 5MWs and the maximum size of each EG BMU would be 200MWs. However, the Workgroup should discuss alternatives to these sizes. It is vital that any such parameters are set such that the SO can reasonably call these new BMUs in merit order. The new BMUs will sit within the BM framework along with the larger, existing BMUs. However, an interim solution may be to give them access to the BM via a parallel system. If this is the case, the Workgroup will need to consider who would design, operate and own the system.

These new EG BMUs would have the same operational requirements as any other BMUs, being required to submit dynamic data, face non-delivery charges, give bid/offer pairs, etc. However, the Workgroup should consider if the different characteristics of these new BMUs make it beneficial for them to offer different types of services, for example having a variety of profiles with different pricing, but we note this may depend on the EBS design. The BMU Registrant would also need to be able to update their dynamic data, bids/offers, etc. (all the same as current BMUs) via a communications system to a specified control point.

The Proposer notes that the dynamic data currently sits across the Grid Code and the BSC. It will therefore be necessary to create consolidated data requirements to be applicable to EG BMUs in the new registration system, as they are not Grid Code signatories. The Proposer also believe the rules around non-standard BMU and metering of BMUs will need to change to ensure the EG BMUs are easy to register without requiring BSC Metering Dispensations.

## Amendment to current BM Unit definition

Under P344, it is proposed that the current definition of BM Units will be amended to:

- Primary BM Units (existing definition of a BM Unit); and
- Secondary BM Units (what the 'Virtual Lead Party' will register to participate in TERRE).

The Workgroup will need to take into account this amendment to the existing BMU definition as part of its discussions on P355.

## Difference between SVA and CVA arrangements

Smaller embedded generators can participate in the BM via a licensed Supplier using Additional BMUs under the SVA arrangements. They can also participate under the CVA arrangements via a Trading Party. However, embedded generators are unable to provide Balancing Services using multiple generating sets, including those at distinct geographical

---

268/04

P355

Initial Written Assessment

---

6 July 2017

Version 1.0

Page 9 of 19

© ELEXON Limited 2017

locations under CVA, but are able to under SVA. The Proposer believes that this is discriminatory.

The Workgroup should consider the extent to which the BSC Section K rules for the configuration of BM Units constrain the aggregation of smaller plant into larger BMUs and how these constraints could be removed. Additionally, if parties were able to equate a collection of smaller generators to a large generator, whether the Registrants of the two different types of BMU still need to be subject to different BSC participation capacities and whether separate registration services would be required.

## Electricity Market Reform

The Workgroup will need to consider any interactions with the metering arrangements used under Electricity Market Reform (EMR), particularly in the case of embedded generators. For example, under the Capacity Market (CM), a party has six generation sites with six individual capacity agreements. If a party intended to combine these as a single BMU for the purpose outlined in this Modification Proposal there is the question as to whether the existing metering arrangements (including submission) for the CM would stay in place.

Parties currently have three ways to submit data:

- Through the standard BMU process;
- Sending a D0357 'Half Hourly Metered Data for the Capacity Market' data flow at MPAN level; and
- Self-submitting by sending through CSV files.

In the example above, if the Party continues to submit D0357 data flows then no change will be required to the current arrangements. However, if the metered entities are combined at a BMU level, then this may require changes to the current arrangements under P355.

## Does a new BSC Registration system need to be created?

The Proposer contends that a new BSC registration system needs to be created to interact with both ELEXON's Settlement systems and the TC's balancing systems. They note that this would allow the plants across the networks to form one BMU more easily, improve flexibility and be more robust than, in their view, the current systems. Parties wishing to offer energy into the BM would then register their Meters (or ask their Supplier to register their Meters) into the new system (potentially as duplicate data on the SVA systems until they are replaced). The Proposer suggests that the BSC Party (be they the embedded generators or Suppliers) should be responsible for registering the Meters. The Workgroup will need to consider what would happen if a Supplier is unwilling to register the Meters and discuss who the responsibility for registering Meters should fall to under the new arrangements.

The Workgroup will also need to discuss whether ELEXON's existing CVA services have the capabilities to deliver the Proposed Modification. The Workgroup will need to look at whether the current registration process is a barrier and if so, what new or improved capabilities are needed to remove any barrier. From this, the Workgroup will need to consider whether an entirely new registration system is required to make it easier for Parties to register their BMUs.

The Proposer also notes that the owners of the assets will be able to create embedded generator BMUs (EG BMUs) by allocating a number of their Settlement Meters into a new BMU. They suggest that the new BMUs would be registered into the EBS system by the TC. From there, the Proposer notes that the new BMUs would be despatched along with other BMUs in the BM to meet the SO requirements, and contends that the money flows to pay or charge the new BM Lite Registrants, would be the same as for the existing BM related data flows. However, the current system will need to connect into the new registration system that BM Lite plants are registered into. The Workgroup will help develop the desired business/information architecture, if required, as part of its assessment of the Modification.

### **Metered Volume Reallocation Notification**

The Proposer notes that the new registration system needs to allow for the use of MVRNs. This is so that BMU Lite energy can be allocated to a different party's energy account than the Party registering and/or owning the BM Lite/embedded generator power station. Each BMU could only have MVRNs applied to it in line with the current rules (a percentage or set volume reallocation). The Workgroup may need to make changes to existing rules to allow embedded generators to transfer the energy using a MVRN to a Supplier while still maintaining control over their BMU.

### **BSC Charges**

The Proposer notes that BSC charges associated with BMU registrations need to be reduced. However they highlight that this is outside the scope of P355.

### **Demand Side Response (DSR)**

The Proposer believes that the potential new arrangements could be expanded to cover DSR and aggregators. However, they note that this will involve a more complex solution. In order to deliver market access in a timely manner, the Proposer highlights that this Proposed Modification does not include DSR, but a Modification to cover DSR arrangements could be raised to run in parallel. They note that the P354 Workgroup discussed potential issues regarding the data flows between Suppliers, aggregators and DSR providers. Subsequently, the Proposer is of the view that resolving these issues may lead to P355 taking longer to be implemented and has therefore excluded DSR from the scope of this Modification.

### **Areas to consider**

The table below summarises the areas we believe a Modification Workgroup should consider as part of its assessment of P355:

Areas to Consider
Do embedded generators themselves need to become BSC Parties/signatories under a 'Lite' arrangement?
Does the Proposed Modification give BM Lite parties more flexibility than existing BM Parties? Is this equitable?

268/04

P355

Initial Written Assessment

6 July 2017

Version 1.0

Page 11 of 19

© ELEXON Limited 2017

Areas to Consider
Is a new Market Entry process required for BM Lite Parties? If so, what changes need to be made to the current Market Entry process?
Should the current arrangements permit non-locational EG BMUs?
Should the new EG BMUs offer different types of services e.g. have a variety of profiles with different pricing?
What should be the minimum and maximum size of EG BMUs?
To what extent do the BSC Section K rules for the configuration of BM Units constrain the aggregation of smaller plant into larger BMUs? How can these restraints be removed?
Are there any interactions with Additional BM Units through EMR?
Does a new registration system need to be created or can we use existing CVA services to deliver the solution? <ul style="list-style-type: none"> <li>Who should be responsible for aggregating BM Unit data?</li> <li>Who should be responsible for registering the Meter? What if a Supplier is unwilling to register the Meters?</li> <li>Will the new system allow for the use of MVRNs?</li> <li>Is the current registration process a barrier? If so, what new or improved capabilities are needed to remove any barrier?</li> </ul>
What changes are needed to CUSC and Grid Code to support P355?
What changes are needed to BSC documents, systems and processes to support P355 and what are the related costs and lead times?
Are there any Alternative Modifications?
Should P355 be progressed as a Self-Governance Modification?
Does P355 better facilitate the Applicable BSC Objectives than the current baseline?

## 4 Proposed Progression

### Next steps

We recommend that P355 is progressed to an eight month Assessment Procedure for consideration by a Workgroup. For rationale behind this recommendation, please see the timetable section below.

### Self-Governance

The Proposer is not requesting that P355 is progressed as a Self-Governance Modification as they anticipate that this Modification will have a material effect on the operation of the national electricity transmission system. This is on the basis that the Modification enhances the tools available to the SO to balance the system. We agree that it does not meet the Self-Governance criteria (as defined in BSC Annex X-1).

### Workgroup membership

We recommend that the P355 Workgroup should comprise of participants who are involved in the BM, any interested non-BM Parties along with any other interested parties.

### Timetable

We recommend that P355 undergoes an eight month Assessment Procedure, with the Assessment Report being presented to the Panel at its meeting on 8 March 2018. However, if the solution develops such that we need to procure a new registration system or provide legal drafting for a large number of BSC sections, a minimum four-month extension will be required. Alternatively, if P355 progresses quicker than anticipated, we would seek to bring the Assessment Report back to the Panel at an earlier meeting.

The BSC allows the Panel to set an Assessment Procedure timetable which is longer than three months where the Panel believes this is justified by “the particular circumstances of the Modification Proposal (taking due account of its complexity, importance and urgency)”, (Section F2.2.9), and provided the Authority does not issue a contrary direction.

The proposed timetable provides for development of the solution and completion of any supporting analysis required. This will include:

- any changes required to the BSC and current BSC Central Systems;
- any changes to SO systems; and
- potential interactions with P344, P354, P297, EB GL, Grid Code, CUSC and EMR.

In addition it appears likely that a separate industry impact assessment and Assessment Procedure consultation will be needed to best facilitate the assessment of P355.



#### 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.

268/04

P355  
Initial Written Assessment

6 July 2017

Version 1.0

Page 13 of 19

© ELEXON Limited 2017

Proposed Progression Timetable for P355	
Event	Date
Present Initial Written Assessment to Panel	13 Jul 17
Workgroup Meeting	W/B 31 Jul 17
Workgroup Meeting	W/B 28 Aug 17
Workgroup Meeting	W/B 25 Sep 17
Industry Impact Assessment	13 Oct 17 – 3 Nov 17
Workgroup Meeting	W/B 11 Dec 17
Assessment Procedure Consultation	19 Jan 18 – 9 Feb 18
Workgroup Meeting	W/B 12 Feb 18
Present Assessment Report to Panel	8 Mar 18
Report Phase Consultation	9 Mar 18 – 23 Mar 18
Present Draft Modification Report to Panel	12 Apr 18
Issue Final Modification Report to Authority	19 Apr 18

268/04

P355  
Initial Written Assessment

6 July 2017

Version 1.0

Page 14 of 19

© ELEXON Limited 2017

## 5 Likely Impacts

This is our initial view of the probable impacts of this Modification. The detailed impact of the Modification will be fully assessed as part of the Assessment Procedure.

### Impact on BSC Parties and Party Agents

Party/Party Agent	Potential Impact
BSC Parties	BSC Parties will be required to make the corresponding adjustments to their systems and processes.

### Impact on Transmission Company

The TC's systems will need some adjustments to allow registration of the new BMUs into the Balancing System. Additionally, the TC will require some changes to EBS to allow it to register these new style BMUs into its own systems.

### Impact on BSCCo

ELEXON will be required to implement this Modification.

### Impact on BSC Systems and processes

BSC System/Process	Potential Impact
CDCA	Changes may be required to implement this Modification.
CRA	
SAA	
FAA	

### Impact on BSC Agent/service provider contractual arrangements

BSC Agent/service provider contract	Potential Impact
CDCA	BSC Agents may be required to implement this Modification.
CRA	
SAA	
FAA	

### Impact on Code

Code Section	Potential Impact
Section A	Changes may be required to implement this Modification.
Section D	
Section G	

268/04

P355  
Initial Written Assessment

6 July 2017

Version 1.0

Page 15 of 19

© ELEXON Limited 2017



Impact on Code	
Code Section	Potential Impact
Section H	
Section K	
Section M	
Section N	
Section Q	
Section T	
Section U	
Section V	
Section X Annex X-1	
Section X Annex X-2	

Impact on Code Subsidiary Documents
To be determined. A new BSCP may be required or alternatively, changes made to existing BSCPs e.g. around registering BMUs, aggregation rules, Market Entry etc.

Impact on Core Industry Documents and other documents	
Document	Potential Impact
Connection and Use of System Code	Consequential changes may be required as a result of implementing this Modification.
Grid Code	

Impact on Consumers
No direct impact, but the customers should benefit from additional competition in the BM. Those who wish to sell generation services to the SO should also find market access easier and the process of market entry less onerous.

Impact on the Environment
No direct impact, but overall carbon emissions should be lowered from a more efficient despatch of power stations.

Other Impacts	
Item impacted	Potential Impact
Non BM-Parties	There will be a direct impact on non BM-Parties who wish to go into the BM.
EMR	Changes may be required to implement this Modification.

268/04

P355

Initial Written Assessment

6 July 2017

Version 1.0

Page 16 of 19

© ELEXON Limited 2017

## 6 Recommendations



We invite the Panel to:

- **AGREE** that P355 progresses to the Assessment Procedure;
- **AGREE** the proposed Assessment Procedure timetable;
- **AGREE** the proposed membership for the P355 Workgroup; and
- **AGREE** the Workgroup's Terms of Reference.

### Recommendation

We recommend the Panel submits P355 to an eight month Assessment Procedure.

268/04

P355  
Initial Written Assessment

6 July 2017

Version 1.0

Page 17 of 19

© ELEXON Limited 2017

## 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
BM	Balancing Mechanism
BMU	Balancing Mechanism Unit
BSC	Balancing and Settlement Code
BSCP	Balancing and Settlement Code Procedure
CM	Capacity Market
CSV	Comma Separated Values
CUSC	Connection Use of System Code
CVA	Central Volume Allocation
DA	Data Aggregator
DNO	Distribution Network Operator
DSR	Demand Side Response
EBS	Electricity Balancing System
EMR	Electricity Market Reform
FAA	Funds Administration Agent
FGG	Flexible Generators Group
GSP	Grid Supply Point
HH	Half Hourly
MRA	Master Registration Agreement
MVRN	Metered Volume Reallocation Notification
NETA	New Electricity Trading Arrangements
SAA	Settlement Administration Agent
SO	System Operator
SRD	Standing Reserve Despatch
STOR	Short Term Operating Reserve
SVA	Supplier Volume Allocation
TC	Transmission Company
TERRE	Trans-European Replacement Reserves Exchange

268/04

P355

Initial Written Assessment

6 July 2017

Version 1.0

Page 18 of 19

© ELEXON Limited 2017

## 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	STOR page on the National Grid website	<a href="http://www2.nationalgrid.com/uk/services/balancing-services/reserve-services/short-term-operating-reserve/">http://www2.nationalgrid.com/uk/services/balancing-services/reserve-services/short-term-operating-reserve/</a>
4	MRA website	<a href="https://www.mrasco.com/mra-products/master-registration-agreement">https://www.mrasco.com/mra-products/master-registration-agreement</a>
4	BSC Sections page on the ELEXON website	<a href="https://www.elexon.co.uk/bsc-related-documents/balancing-settlement-code/bsc-sections/">https://www.elexon.co.uk/bsc-related-documents/balancing-settlement-code/bsc-sections/</a>
4	PeakGen website	<a href="http://www.peakgen.com/">http://www.peakgen.com/</a>
5	P355 page on the ELEXON website	<a href="https://www.elexon.co.uk/mod-proposal/p355/">https://www.elexon.co.uk/mod-proposal/p355/</a>
6	CMP264 page on the National Grid website	<a href="http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/CUSC/Modifications/CMP264/">http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/CUSC/Modifications/CMP264/</a>
6	CMP265 page on the National Grid website	<a href="http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/CUSC/Modifications/CMP265/">http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/CUSC/Modifications/CMP265/</a>
7	P344 page on the ELEXON website	<a href="https://www.elexon.co.uk/mod-proposal/p344/">https://www.elexon.co.uk/mod-proposal/p344/</a>
7	P354 page on the ELEXON website	<a href="https://www.elexon.co.uk/mod-proposal/p354/">https://www.elexon.co.uk/mod-proposal/p354/</a>
7	P297 page on the ELEXON website	<a href="https://www.elexon.co.uk/mod-proposal/p297/">https://www.elexon.co.uk/mod-proposal/p297/</a>
9	Market Entry page on the ELEXON website	<a href="https://www.elexon.co.uk/reference/market-entry-and-exit/market-entry/">https://www.elexon.co.uk/reference/market-entry-and-exit/market-entry/</a>