











BSC Modification Proposal Form		At what stage is this document in the process?
<h1>P363</h1> <h2>Simplifying the registration of new configurations of BM Units</h2>		<div style="display: flex; flex-direction: column; align-items: flex-start;"> <div style="border: 1px solid green; background-color: #00a651; color: white; padding: 5px; margin-bottom: 5px;">01 Modification</div> <div style="border: 1px solid blue; padding: 5px; margin-bottom: 5px;">02 Workgroup Report</div> <div style="border: 1px solid purple; padding: 5px; margin-bottom: 5px;">03 Draft Modification Report</div> <div style="border: 1px solid orange; padding: 5px;">04 Final Modification Report</div> </div>
<p><b>Purpose of Modification:</b></p> <p>This Modification looks to recognise a number of common non-standard Balancing Mechanism (BM) Unit configurations as standard BM Units and simplify the registration of non-standard BM Units.</p>		
	<p>The Proposer recommends that this Modification should:</p> <ul style="list-style-type: none"> <li>be assessed by a Workgroup and submitted into the Assessment Procedure</li> </ul> <p>This Modification will be presented by the Proposer to the BSC Panel on <b>14 December 2017</b>. The Panel will consider the Proposer's recommendation and determine how best to progress the Modification.</p>	
	<p>High Impact:</p>	
	<p>Medium Impact: Balance and Settlement Code (BSC) Parties, BSC, Transmission Company, ELEXON, Imbalance Settlement Group (ISG) and Generators.</p>	
	<p>Low Impact: BSC Panel License Distribution System Operators (LDSO)</p>	

Contents		 Any questions?
<b>1 Summary</b>	<b>3</b>	Contact: Cal Lynn
<b>2 Governance</b>	<b>4</b>	 cal.lynn@elexon.co.uk
<b>3 Why Change?</b>	<b>5</b>	 02073804206
<b>4 Code Specific Matters</b>	<b>8</b>	Proposer: Graz MacDonald
<b>5 Solution</b>	<b>9</b>	 <a href="mailto:Graz@greenfrogpower.co.uk">Graz@greenfrogpower.co.uk</a>
<b>6 Impacts &amp; Other Considerations</b>	<b>14</b>	 +44 (0)20 3876 5180
<b>7 Relevant Objectives</b>	<b>16</b>	Proposer's representative: N/A
<b>8 Implementation Approach</b>	<b>17</b>	Proposer's alternate: Harry Townsend
<b>9 Legal Text</b>	<b>17</b>	 <a href="mailto:Harry.Townshend@greenfrogpower.co.uk">Harry.Townshend@greenfrogpower.co.uk</a>
<b>10 Recommendations</b>	<b>17</b>	
Timetable		
<i>Please provide Proposer and Proposer Representative contacts and an indicative timetable. The BSC Change Analyst will update the contents and provide any additional Specific Code Contacts. The BSC Change Analyst can provide specific dates based on your Implementation Approach in Section 8.</i>		
<b>The Proposer recommends the following timetable: (amend as appropriate)</b>		
Initial consideration by Workgroup	6 Feb 2018 or 8 Feb 2018	
Assessment Procedure Consultation	29 May 2018 – 18 June 2018	
Workgroup Report presented to Panel	9 Aug 2018	
Report Phase Consultation	15 Aug 2018 – 29 Aug 2018	
Draft Modification Report presented to Panel	13 Sep 2018	
Final Modification Report published	16 Oct 2018	

# 1 Summary

## Background

The Balancing and Settlement Code (BSC) requires the configuration of Plant and Apparatus in a single BM Unit to meet certain conditions and defines a number of configurations of Plant and Apparatus that it considers to meet these conditions, e.g. Generating Unit, Power Park Module (PPM). Plant and Apparatus within a BM Unit that meet one of the configurations set out in the BSC are referred to as standard BM Units. Plant and Apparatus that do not meet one of the standard BM Unit configurations have to be approved on a case by case basis by the Imbalance Settlement Group (ISG) under delegation from the Panel.

Over the last ten years ELEXON has progressed an increasing number of non-standard BM Unit applications and this is projected to continue. This projection has come after ELEXON conducted a review of Metering Dispensations and non-standard BM Units, reporting its findings and recommendations to the Panel at its March 2017 Meeting ([Panel 264/08 Review of Metering Dispensations and Non-Standard BM Units – Final Report](#)). Improvements in design, cost efficiency and commercial opportunities for renewable and smaller scale generator technologies mean that there are a growing number of developments being built with these technologies. ELEXON's recent experience of the types of non-standard BM Units being presented to the ISG and expected future indications that the configuration of Plant and Apparatus at these sites will challenge the existing standard BM Unit categories and requirements.

Without change to the BSC, the installation of new technology or configurations means each individual new or re-configured site must apply for its own non-standard BM Unit.

## What is the issue?

The non-standard BM Unit application process is time-consuming for each site. The process involves applicants having to send an application letter (along with supporting documentation, e.g. single line diagrams that illustrate the configuration of the site). ELEXON drafts an ISG paper and the ISG makes the decision whether to accept the application. The decision to accept or reject is based on the content of the application letter and supporting documentation, against the standard BM Unit criteria in [BSC Section K - Clarification and Registration of Metering Systems and BM Units Section 3.1.2](#) taking into consideration any comments from the Transmission Company. The ISG considers each application on its own merits. Therefore there is no certainty for developers that a particular configuration will be agreed just because the ISG has agreed a similar one.

The BMU application process has a lead time of 60 Working Days (WD) taking into account drafting papers and ISG meetings as opposed to the 30WD required for a standard BM Unit.

## What is the proposed solution?

The solution for this Modification looks to introduce four new standard BM Units into BSC Section K, reflecting the configurations set out in the review of Metering Dispensations and non-standard BM Units. In addition we seek to introduce the ability for a Party to apply for a generic non-standard BM Unit. The generic non-standard application would be made to the Panel (it is assumed this would be delegated to the ISG) and the Transmission Company would be consulted. If agreed by the Transmission Company and Panel, the generic non-standard configuration would be added to a list on the ELEXON website. Any Party could subsequently use that agreed generic non-standard BM Unit with the agreement of the Transmission Company and ELEXON.

## 2 Governance

### Justification for proposed progression

This Modification should be progressed as a self-governance Modification for the following reasons:

- i) The configuration of the BM Unit does not have a direct impact on consumers;
- ii) Competition in generation is not materially affected because Parties can already apply for a non-standard BM Unit to the ISG. ISG can already make the decisions proposed by this Modification on a case by case basis;
- iii) There is no effect on operation of the Transmission System because parties can already request non-standard BM Units and the Transmission Company can challenge the implementation of any BM Unit that is due to participate in the Balancing Mechanism;
- iv) There is no effect on matters relating to sustainable development, safety or security of supply, the management of the market or network emergencies because ISG can already make the decisions proposed by this Modification on a case by case basis
- v) The proposals will not affect how the BSC is governed or Modifications are progressed in anyway; and
- vi) The proposals apply equally to all Parties and so there is no discrimination.

### Requested Next Steps

This Modification should be:

- Assessed by a Workgroup and submitted into the Assessment Procedure.

The solution need to be fully assessed to ensure that the final proposed solution and Legal Text meets the needs of industry as much as possible. There are also some questions that require the input of a Modification Working Group.

Another modification is being proposed to simplify the registration of some BM Units. Given the overlap between the two, consideration may want to be given to progressing the two concurrently.

## 3 Why Change?

### Background

#### What is a BM Unit?

Balancing Mechanism (BM) Units are used as units of trade within the Balancing Mechanism. Each BM Unit accounts for a collection of Plant and/or Apparatus, and is considered the smallest grouping that can be independently controlled. As a result, most BM Units contain either a Generating Unit or a collection of consumption meters. Any energy produced or consumed by the contents of a BM Unit is accredited to that BM Unit.

#### Types of BM Unit

There are several types of BM Unit, each covering different aspects of the system. Each is marked with a particular prefix to its ID, as shown below:

BM Unit	Prefix	Description
Directly Connected	T_	These BM Units are directly connected to the Transmission System.
Embedded	E_	These BM Units are embedded into a Distribution System.
Interconnector	I_	These BM Units are related to an Interconnector.
Supplier	2_	These BM Units cover Supply, and contain all of a particular Supplier's MPANs in either a Base or Additional Supplier BM Unit for a given Grid Supply Point (GSP) Group.
Supplier	C_	These Additional Supplier BM Units are registered solely for the purpose of allocating CFD Assets to them.
Miscellaneous	M_	Other types of BM Units that don't fit the above categories. This prefix does not apply to newly registered BM Units.

This Modification relates to Directly Connected and Embedded BM Units. These are BM Units for Plant and Apparatus Associated with Metering Systems Registered with the CRA.

#### Standard Configuration

A BM Unit is of a standard configuration if it meets one of the configurations set out in the BSC, Section K3.1.4. These include

- any Generating Unit, Combined Cycle Gas Turbine (CCGT) Module or PPM whose Metering System(s) for its Exports is registered in CMRS;
- the Plant and Apparatus which comprises part of, and which Imports electricity through the station transformer(s) of, a Generating Plant, where the Metering System(s) for such Imports is registered in CMRS;
- the premises of a Customer supplied by the Party which is directly connected to the Transmission System (provided that the premises are only connected at one Boundary Point);

- any two or more Offshore PPMs where the Party wishes to combine these as a single BM Unit and the Transmission Company determines that such a configuration is suitable to constitute a single Combined Offshore BM Unit.

The configurations set out in K3.1.4 are deemed to meet the requirements that a BM unit should satisfy which are set out in BSC Section K3.1.2:

- only one Party is responsible for the Exports and/or Imports;
- the Exports and/or Imports of electricity from and to the Plant and/or Apparatus comprised in the BM Unit are capable of being controlled independently of the Exports or Imports of electricity from or to any Plant or Apparatus which is not comprised in the BM Unit;
- the Metered Volumes from the BM Unit's Plant and Apparatus are submitted separately from any Plant and Apparatus not part of the BM Unit;
- the BM Unit's Imports and Exports are not measured by both CVA and SVA Metering Systems; and
- there are no smaller aggregations of the BM Unit's Plant and Apparatus satisfying (a), (b) and (c).

BM Unit are registered in accordance with BSCP15 'BM Unit Registration'. Standard BM Units take at least 30 Working Days (WDs) to register. ELEXON reviews the BM Unit configuration and if it agrees that it is standard, there is no ISG involvement in the registration process.

## Non-Standard Configurations

In certain circumstances listed in BSC Sections K3.1.5 and K3.1.6 the responsible Party may apply to the BSC Panel to determine a configuration that does or most nearly achieves the requirements for a BM Unit. Where the Panel determines such a configuration, it is known as a non-standard BM Unit. The Panel has delegated responsibility for considering such applications to the ISG. In practice Parties send an application for a non-standard BM Unit to ELEXON. ELEXON then presents the application on the applicant's behalf to the ISG for determination.

Non-standard BM Units take 60WDs to register to take into account ISG meeting schedules. Where a Party applies for a non-standard BM Unit, the Party has to provide a letter to the ISG

The circumstances in which a Party<sup>1</sup> may apply for a non-standard BM Unit are:

- where the relevant Plant and Apparatus does not fall into one of the standard configurations;
- where the relevant Plant and Apparatus do fall into a standard configuration, but the Party considers a different configuration would satisfy the requirements for BM Units; or
- where the relevant Plant and Apparatus Exports or Imports at a CVA Boundary Point at which there are other Exports or Imports for which another person is responsible.

## What is the issue?

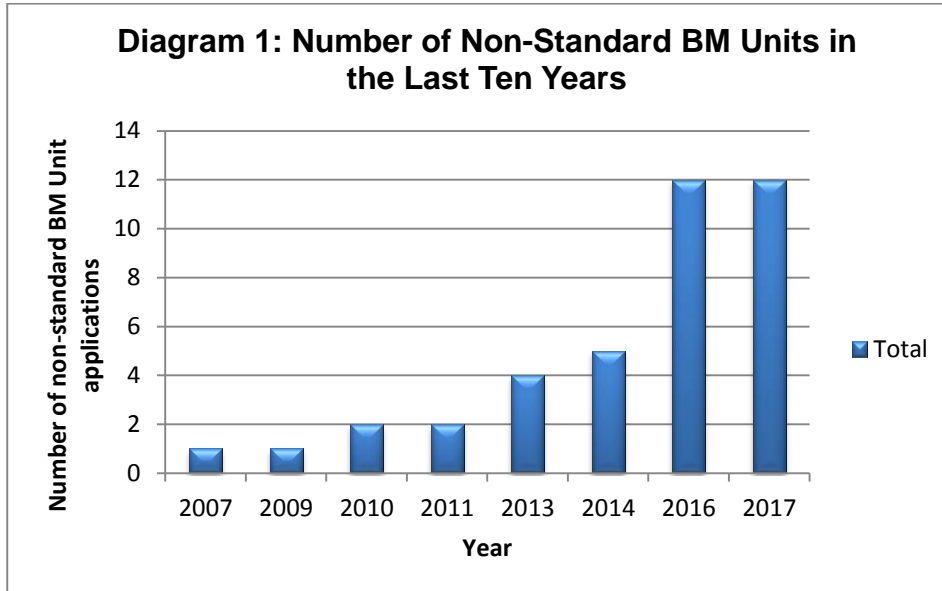
Two of the recommendations that came from the Panel (264/08) were to update the BSC to introduce new standard BMU configurations which reflect commonly used non-standard BM Unit configurations and to introduce a generic non-standard BM Unit process. Of the four non-confidential consultation responses

---

<sup>1</sup> The Code also allows the Central Data Collection Agent or Central Register Agreement to refer the question of the configuration of the BM Unit to the ISG where it considers that there is reasonable doubt as to whether the relevant Plant and Apparatus falls into one of the standard configurations.

we received to the review of Metering Dispensations and non-standard BM Units, three agreed with these recommendations and one had no comment.

Over recent years, the number of non-standard BMUs that the ISG has had to consider has sharply risen (see diagram 1<sup>2</sup>). The recent non-standard BMUs and future projected non-standard BMUs fall into a number of broad categories (e.g. treatment of low voltage Assets at Offshore Windfarms, multiple small generators connected at one point to the Distribution System).



It is clear from recent experience and expected future indications that the configuration of Plant and Apparatus at these sites challenge the existing BMU categories and requirements.

Where a non-standard BMU is applied for, the Party has to draft a letter explaining the configuration of the relevant Plant and Apparatus, requesting that the Plant and Apparatus is considered to be a non-standard BMU. ELEXON then has to draft an ISG paper based on the information provided and the views of the Transmission Company and the ISG has to consider and determine whether the BMU should be as requested. Where a site is of a standard configuration, the applicant simply applies to ELEXON to register the BMU and is not required to justify its application or receive the ISG's approval.

The ISG considers each application on its own merits, so there is no certainty for Parties that their application will be approved just because other similar applications have been approved.

Applications for a non-standard BMU have a lead time of 60WDs to take into account the time to draft papers and the ISG timetable.

To amend the BSC to add a new standard BMU configuration takes time as a Modification has to be proposed and assessed and tends to lag behind the technology changes (at least six months lead time).

The list of non-standard BMU configurations in the BSC has not been updated since November 2009.

---

<sup>2</sup> The 2017 figure is to the September [ISG198](#) meeting as opposed to the whole year.

## 4 Code Specific Matters

### Technical Skillsets

Knowledge of the BM Unit application process and in particular non-standard BM Units.

Operation of the Transmission System

### Reference Documents

[246/08 Review of Metering Dispensations and Non-Standard BM Units – Final Report](#)

[BSC Section X - Annex X-1: General Glossary](#)

[CP1493 Add a form and associated process steps to BSCP15 for registering Non-Standard BM Unit configurations](#)

[ISG193/01 Non-standard BM Unit Application for Peterborough Power Station](#)

[ISG195/06 Brigg Power Station non-standard BM Unit Application](#)

[ISG 198/01 Pen y Cymoedd Battery Modules non-standard BM Unit Application](#)

[ISG198/02 - Application for a non-standard BM Unit for West Burton B Power Station Battery Storage](#)

[ISG 198 Approved Minutes](#)

[P191 Revised definition of Balancing Mechanism Unit to include Power Park Module](#)

[P237 Standard BM Unit Configuration for Offshore Power Park Modules](#)

<http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/Grid-code/Modifications/GC0096/>



## 5 Solution

### Proposed Solution

#### New standard BM Unit configurations

Amend BSC Section K3.1.4 to include the following configurations to be recognised as new standard BM Unit configurations:

- Any combination of Generating Units where all the Generating Units are connected to the Distribution<sup>3</sup> System at a single Boundary Point and all units are in normal operation, controlled together for instance.
- Two or more onshore PPMs that are controlled as a single entity, with the express agreement of the Transmission Company (using similar wording to K3.1.4(g) for Combined Offshore BM Units);
- Offshore PPMs or Combined Offshore BM Units (COBMU) including any related onshore and / or offshore Plant and Apparatus which are supplied at low voltage and which are connected at different Boundary Point(s) to the PPM or COBMU, subject to explicit thresholds that are to be determined by the Modification Workgroup in consultation with the Transmission Company<sup>4</sup>; and
- Plant and Apparatus situated onshore and / or Offshore which are supplied at low voltage and that have more than one Transmission System Boundary Point (TSBP) for the sole purpose of supporting the operation of an Offshore PPMs<sup>4</sup> **Error! Bookmark not defined.**, subject to explicit thresholds that are to be determined by the Modification Workgroup in consultation with the Transmission Company;

The legal text relating to the two amendments above relating to Offshore PPMs and low voltage Plant and Apparatus must be flexible enough to allow for all possible combinations of Offshore PPMs or Combined Offshore BM Units and low voltage Plant and Apparatus. For example if there was an offshore windfarm with two PPMs and onshore and offshore low voltage Plant and Apparatus, at least the following should be allowable configurations:

- One BM Unit combining the two or more PPMs (as a Combined Offshore BM Unit with the agreement of National Grid), plus onshore and offshore low voltage Plant and Apparatus;
- Two BM Units, one for each PPM and each containing specific low voltage Plant and Apparatus;
- Two BM Units, one for each PPM, one of which contains all of the low voltage Plant and Apparatus;
- Three BM Units, one for each PPM and a separate BM Unit containing all low voltage Plant and Apparatus;

---

<sup>3</sup> The Modification Working Group in consultation with the Transmission Company may wish to consider whether similar Transmission Connected sites should be included. Only Distribution connected sites are included here as all non-standard BM Units applied for so far have been distribution connected.

<sup>4</sup> The Modification Working Group in consultation with the Transmission Company may wish to consider whether this should be widened to Plant and Apparatus which are supplied at low voltage and which are connected at different boundary points to any Generating Unit, CCGT, PPM or COMBU.

- Four BM Units, one for each PPM, one (or more) for onshore Low voltage Plant and Apparatus and one (or more) for offshore low voltage Plant and Apparatus;

The Modification Working Group should also consider whether there are additional standard BM Units to those above that should be added to BSC Section K3.1.4. These could be types of non-standard BM Units that have been applied for since the final report from the review of Metering Dispensations and Non-Standard BM Units was presented to the Panel. They could also be other configurations of Plant and Apparatus that the Modification Working group know are likely to be used in the future and would benefit now from being included as a standard BM Unit in the BSC. In all cases, the Modification Working Group and Transmission Company should agree that the proposed configuration of Plant and Apparatus is suitable to be a single standard BM Unit in all cases.

The following two suggestions should be considered:

- Two or more Generating Units that were previously part of a single standard Combined Cycle Gas Turbine (CCGT) BM Unit, where the steam turbine has been removed leaving an Open Cycle Gas Turbine (OCGT) should be considered to be a standard BM Unit; and
- An electricity storage module should be considered to be a Standard BM Unit, subject to Grid Code Modification GC0096.

### **Proposed Solution – generic’ non-standard BM Unit process**

In addition to adding the new standard BM Units into the BSC, this Modification introduces a ‘generic’ non-standard BM Unit process. If a Party has a non-standard BM Unit application that they feel will be repeated across more than one site (by that Party or other Parties), instead of applying for a site specific non-standard BM Unit (as currently), they would apply for a generic non-standard BM Unit detailing the configuration of Plant and Apparatus and criteria to be met for that type of non-standard BM Unit. A form would be included in [BSCP15 BM Unit Registration](#) to apply for this. It could be combined with the non-standard BM Unit form proposed under [CP1493 ‘Add a form and associated process steps to BSCP15 for registering Non-Standard BM Unit configurations’](#) or could be a separate form.

This application would be passed to the Transmission Company for their comment and then taken to the Panel for approval. The Panel could approve, reject or defer the application. Potentially the Panel could approve the application as a site specific BM Unit as opposed to generically if enough information about a specific site was provided as part of the generic application and the Panel did not feel comfortable approving it on a generic basis and /or suggest that industry is consulted on the generic proposal.

If rejected, this would not preclude the Party applying for a site specific application for a site meeting the criteria proposed by the generic application. If deferred, the Party would need to provide further information to a subsequent Panel meeting, where again the application could be approved, rejected, deferred or approved on a site specific basis if appropriate.

If the Panel saw a number of similar applications on a site specific basis from a number of Parties, it could propose a generic non-standard BM Unit which would follow the process above.

If approved, the generic BM Unit configuration and the conditions that a site had to meet to use it would be added to a list maintained by ELEXON and published on the BSC Website.

If a Party then wanted to register a BM Unit that they felt fitted one of the agreed generic non-standard BM Units on the list on the BSC website, they would complete the normal BSCP15/4.1 form to register a BM Unit. On this form they would need to state that they were using a generic non-standard BM Unit, the type of generic non-standard BM Unit and if appropriate how they felt that the configuration of their Plant and Apparatus met the conditions of the relevant approved generic non-standard application.

The BSCP15/4.1 form and associated documents would be sent to the Transmission Company with a request for comments or any objections to the application in line with the current BM Unit application process.

If the Transmission Company agreed the application and ELEXON believed that it met the criteria of the generic non-standard BM Unit, then the application would proceed as any other standard BM Unit application with no need to refer the application to the Panel.

Should either ELEXON or the Transmission Company believe that it did not meet the generic criteria for the non-standard BM Unit being applied for, ELEXON would ask the applicant to complete the non-standard BM Unit process and take the matter to the Panel for decision. This could be an application for a site specific non-standard BM Unit or could be an application for a new generic BM Unit.

Is it expected that the Panel would delegate the management of this process to the ISG.

Periodically ELEXON would review the list of generic non-standard BM Units and propose a Modification to the BSC to add any appropriate non-standard BM Units to the list of standard ones in section K3.1.4 of the BSC. For efficiency purposes, it is expected that there would be more than one generic non-standard BM Unit to be added to the BSC.

These processes would need to be added to section K3 of the BSC and the process steps included in BSCP15. There may also need to be new definitions added to [BSC Annex X-1](#). Form BSCP15/4.1 would need to be updated to add generic non-standard BM Unit as a type of BM Unit configuration, however it would not specifically quote the generic non-standard BM Unit configuration (if the types of approved generic non-standard BM Units were included in the BSCP, every time a new generic non-standard BM Unit was approved, the BSCP would have to be updated by the formal Change Proposal process). A section would also need to be added to form BSCP15/4.1 for Parties to explain which generic non-standard BM Unit they were applying for and how their configuration met this non-standard BM Unit. A new form would need to be added to BSCP15 to apply for generic non-standard BM Units, or the form proposed by CP1493 for BM Units would need to be adapted to include generic non-standard BM Units.

The introduction of a new generic non-standard BM Unit process is aimed to speed up the application process for common types of non-standard BM Units. It is not intended to replace the process of updating the BSC with additional types of standard BM Units as they become widespread.

It should be noted that there were two types of generic non-standard BM Units approved by the Panel for NETA Go-Live<sup>5</sup>, so this isn't a new concept, however it is not set out in the BSC and no generic non-standard BM Units have been approved since NETA.

An alternative solution that the Modification Group may wish to consider would be to remove all BM Unit types from the BSC and make them a separate document under the ownership of the ISG. Any BM Units on this document would be a standard BM Unit, which would replace BSC Section K3.1.4. New BM Units could be added to this document in the same way as the proposed generic non-standard BM Unit process described above. The non-standard BM Unit process would remain in place for those few one off sites

---

<sup>5</sup> Panel paper 14/007 list the following generic non-standard BM Units:

- Auxiliary feeds to a power station which are embedded within a distribution system but registered centrally. These feeds may be registered in their own rights as BM Units or as part of the station loads
- Auxiliary Gas Turbine Generators or diesel generators on nuclear power stations which are regarded as being part of the station demand and therefore one non-standard BM Unit is registered to include the station demand and Auxiliary generators.

where it would not be appropriate for the configuration to be available for multiple sites without further review by the ISG.

### Areas requiring consideration

The proposed solution aligns with the recommendations from the review of Metering Dispensations and non-standard BM Units. Throughout the solution there are additional considerations that the Modification Working Group may wish to discuss that go beyond the recommendations:

- Thresholds for the size of low voltage assets to be combined with PPMs. These need to be determined by the Modification Working Group and the Transmission Company. The threshold needs to be explicit and self-explanatory so there is no question as to whether a site does or does not meet the threshold.
  - The Transmission Company has given the following initial suggestion in relation to thresholds for Low Voltage Assets: 'From a technical point of view, any onshore demand aggregated in the offshore BM Unit would give rise to an inaccurate indication of the flows on the cable to shore. This would become apparent if the demand was greater than metering inaccuracy, say 0.5% to 1%.'
  - The Modification Working Group in consultation with the Transmission Company may also wish to consider whether this should be widened to Plant and Apparatus which are supplied at low voltage and which are connected at different boundary points to any Generating Unit, CCGT, PPM or COMBU.
- The Modification proposes that any combination of Generating Units where all the Generating Units are connected to the Distribution System at a single Boundary Point and all Generating Units are controlled as a single entity be added as a standard BM Unit. The Modification Working Group in consultation with the Transmission Company may wish to consider whether similar Transmission Connected sites should be included and if so any size thresholds.
- The addition of two or more Generating Units that were previously part of a single standard Combined Cycle Gas Turbine (CCGT) BM Unit, where the steam turbine has been removed leaving an Open Cycle Gas Turbine (OCGT) as a standard BM Unit.
  - Since the review, the ISG has approved two of these type of non-standard BM Units ([ISG193/01](#) and [ISG195/06](#)). If this should be a standard configuration, the Transmission Company should decide whether it wished to give its express agreement to each application.
  - Initial feedback from the Transmission Company is that they would be comfortable with this being a standard BM Unit.
- The addition of an electricity storage module as a standard BM Unit
  - Terminology around electricity storage modules / batteries is currently being considered as part of [Grid Code Modification GC0096](#). The current thinking is that electricity storage units would be Generating Units, in which case it may be useful to explicitly state in section 3.1.4 that an electricity storage module (or similar term, depending on the outcome of GC0096) is a single standard BM Unit.
  - Initial feedback from the Transmission Company is that they would be comfortable with this being a standard BM Unit.
  - Since the review, the ISG have considered two non-standard BM Unit applications for Electricity Storage Modules, ([ISG198/01](#) and [ISG198/02](#)).

- The Modification Working Group could also consider whether any switching of the battery units comprising each electricity storage module (where there is more than one energy storage unit with an interconnection with another below the Settlement Meter) can be allowed under the BSC<sup>6</sup>. The ISG considered this issue as part of paper ISG198/02 (see the minutes for details).
- Instead of adding the proposed configurations above to the existing list of standard BM Units in the BSC (K3.1.4) and creating a generic non-standard process, all standard BM Unit types described in K3.1.4 could be removed from the BSC and incorporated in a separate document maintained by the Panel. New BM Unit configurations could then be added to this document in the same way as the proposed generic non-standard BM Unit process described above, i.e. by approval by the Panel, which would be less time consuming than the Modifications process and allow the Panel to more quickly react to and recognise changes in market participation. The non-standard BM Unit process would remain in place for those instances where the Panel consider it would not be appropriate for the configuration to be made a standard configuration.

---

<sup>6</sup> Currently switching of PPMs between BM Units is allowable. The BM Units are identified as a 'Switching Group'. This is defined in the BSC Section K3.1.4A-3.1.4D.

## 6 Impacts & Other Considerations

### Impacts

This change Impacts:

- BSC Parties:
  - By simplifying the registration process for some current non-standard BM Units by removing the need to submit a non-standard BM Unit application;
  - By simplifying the registration process for some future non-standard BM Units by removing the need to submit a non-standard BM Unit application after a generic configuration is agreed.
- ELEXON:
  - Reducing the number of non-standard BM Unit registrations received will allow ELEXON to focus on other areas of Settlement and provide increased customer service.
- ISG (it is assumed that this process would be delegated to the ISG who currently determine non-standard BM Unit applications):
  - Reducing the number of non-standard BM Unit registrations received will allow the ISG to focus on other areas of Settlement and provide increased customer service.
- Transmission Company:
  - By clarifying what are acceptable BM Unit configurations under the BSC. The Transmission Company would still review every BM Unit application (standard, site specific non-standard and generic non-standard applications).

The process impacted is:

- BM Unit registration.

The documents impacted are:

- BSC Section K and potentially Annex X-1; and
- BSCP15 BM Unit registration.

No systems are impacted by this change.

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

At the time of submitting this proposal, the Authority is conducting two SCRs:

- [Market-wide Half Hourly Settlement](#); and
- [Targeted Charging Review](#)

It is not believed that this Modification will impact the market-wide Half Hourly (HH) Settlement SCR as the changes proposed will only effect the CVA market.

It is not believed that this modification will impact the Targeted Charging Review SCR as this Modification does not change where and how the Plant and Apparatus is connected to the Total System.

The Proposer requests that this Modification be exempt from the Significant Code Review process.

It does interact with Grid Code Modification GC0096 'Energy Storage' which proposes changes to the Grid Code to better define and accommodate the connection of electricity storage to the Transmission System.

It is not envisaged that P363 will impact other significant industry change projects, but this will be assessed during the Assessment Phase.

### **Consumer Impacts**

This Modification does not directly impact customers.

### **Environmental Impacts**

None identified

## 7 Relevant Objectives

Impact of the Modification on the Relevant Objectives:	
Relevant Objective	Identified impact
a) The efficient discharge by the Transmission Company of the obligations imposed upon it by the Transmission Licence	Neutral
(b) The efficient, economic and co-ordinated operation of the National Electricity Transmission System	Neutral
(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	Positive
(d) Promoting efficiency in the implementation of the balancing and settlement arrangements	Positive
(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]	Neutral
(f) Implementing and administrating the arrangements for the operation of contracts for difference and arrangements that facilitate the operation of a capacity market pursuant to EMR legislation	Neutral
(g) Compliance with the Transmission Losses Principle	Neutral

### Rationale

#### Applicable BSC Objective (c):

Adding to the list of Standard BM Units would remove the perceived difference in treatment between established, traditional Plant and a growing number of non-traditional Plant. The change therefore breaks down a perceived barrier to entry by levelling the playing field and improving speed and efficiency of BM Unit registration.

It also improves the efficiency for generators so that they don't have to apply for non-standard BM Unit configurations for configurations of a nature that have been previously accepted by the ISG and Transmission Company.

Introducing a generic non-standard BM Unit process improves the efficiency for generators to apply for non-standard BM Unit configurations multiple times for new configurations that would be similar across a number of sites.

#### Applicable BSC Objective (d):

Adding to the list of Standard BM Units and introducing a generic non-standard BM Unit process removes a potential barrier to entry for Parties employing new technologies or operational practices because of the more protracted current registration process for non-standard BM Units and a lack of certainty over whether BM Unit configurations will be accepted by the ISG.



## 8 Implementation Approach

This change is a document only change. It should be implemented as part of the first standard BSC release following approval for implementation.

## 9 Legal Text

The Proposer believes that appropriate legal text is best developed as part of the Assessment of this Modification. However, it is anticipated that changes will be required to the following BSC Sections and Code Subsidiary Documents:

- Section K 'Classification and Registration of Metering Systems and BM Units'
- Potentially Section X-1 'Definitions and Interpretation'
- BSCP15 'BM Unit Registration'
  - Section 3.1 Registration of BM Unit Associated with Metering Systems Registered with the CRA
  - Form BSCP15/4.1 Registration of BM Units for a CVA Metering System
  - A new process (and form) for generic non-standard BM Units will need to be developed.

## 10 Recommendations

### Proposer's Recommendation to the BSC Panel

The BSC Panel is invited to:

- Agree that P363 be progressed as a Self-Governance Modification Proposal; and
- Agree that P363 be sent into the Assessment Procedure for assessment by a Workgroup.