

Stage 01: Initial Written Assessment

# P297: Receipt and Publication of New and Revised Dynamic Data items

This Modification Proposal seeks to ensure that the Dynamic Data Set published on the Balancing Mechanism Reporting Service reflects the revised Dynamic Data Set that is submitted to the Transmission Company by Balancing and Settlement Code Parties.



#### **ELEXON recommends:**

• Recommends P297 is progressed to a 3 month Assessment Procedure by a Workgroup



#### High Impact:

- Balancing Mechanism Reporting Service (BMRS)
- Transmission Company



#### Medium Impact:

ELEXON

# ELEXON

What stage is this document in the process?



Initial Written Assessment



Definition Procedure



Assessment Procedure



Report Phase

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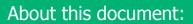
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This document is an Initial Written Assessment (IWA), which ELEXON will present to the Panel on 8 August 2013. The Panel will consider the recommendations and agree how to progress P297.

Further information is available in the P297 Modification Proposal (Attachment A).



**Any questions?** 

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#### 1 Why Change?

#### **Background**

#### What is the BMRS?

The Balancing Mechanism Reporting Service (BMRS) is a service for publishing and reporting data relating to the balancing mechanism, Settlement and the market in general. This includes data provided by the Transmission Company relating to balancing actions and indicative data relating to Balancing and Settlement, such as indicative data for each Settlement Period shortly after its completion.

All of the data published on the BMRS is indicative data, calculated from the information available at the time, and is not used within Settlement. However, its publication helps to facilitate the operation of the GB electricity market.

Market participants can choose to receive the information via a 'high-grade' service for a charge (in accordance with Section D), where the information is sent to them directly via a TIBCO<sup>1</sup> feed; or they can use the free 'low-grade' service, the BMRS website<sup>2</sup>.

#### What is Dynamic Data Set?

The market information provided on the BMRS has an important role in promoting effective competition in the generation and supply of electricity. A subset of this information is the Dynamic Data Set<sup>3</sup> used by the Transmission Company as part of determining which Bids and Offers to accept in the balancing mechanism.

The Dynamic Data Set comprises of a set of data items (currently consisting of 10 data items), each of which are defined in the Grid Code. For each relevant BM Unit, the Lead Party shall ensure that those data items forming part of the Dynamic Data Set are submitted to the Transmission Company in accordance with the provisions of the <a href="Grid Code">Grid Code</a>.

#### What is the issue?

National Grid is replacing the existing balancing mechanism system with a new 'Electricity Balancing System' (EBS) for balancing the real-time electricity supply and demand. The new system is envisaged to go live in 2014, and provides new capabilities that could be used in the Great Britain (GB) market if appropriate. As such, the Grid Code Electricity Balancing System Working Group<sup>4</sup> has been progressing changes to the Dynamic Data Set.

BSC Section Q details the information that the Transmission Company is obligated to send to BSCCo, whilst BSC Section V outlines the data that is reported on the BMRS. Therefore, details of the data items that comprise the Dynamic Data Set are not just found in the Grid Code, but also in BSC Sections Q and V.

In order to ensure that the Dynamic Data Set published on the BMRS fully corresponds to the revised Dynamic Data Set in the Grid Code, it is necessary to update Sections Q and V of the BSC.



## What is the balancing mechanism?

One of the tools used by the Transmission Company to balance electricity supply and demand close to real time.



#### What is a Lead Party?

A Lead Party, in relation to a BM Unit, means the Party registered or to be registered in respect of the BM Unit pursuant to Section K3.



#### What is the Grid Code?

The Grid Code is required to covers all material technical aspects relating to connections, to and the operation and use of the national electricity transmission system; including or, in as far as relevant to the operation and use of the national electricity transmission system, the operation of the electric lines and electrical plant connected to it or to a distribution system of any authorised distributor.

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<sup>&</sup>lt;sup>1</sup> Software which provides Parties a mechanism for automated publication of Balancing Mechanism Reporting Agent (BMRA) data to each Parties site.

<sup>&</sup>lt;sup>2</sup> http://www.bmreports.com/

<sup>&</sup>lt;sup>3</sup> http://www.elexon.co.uk/glossary/dynamic-data-set/

<sup>4</sup> http://www.nationalgrid.com/uk/Electricity/Codes/gridcode/workinggroups/ElectricityBalancingSystemGroup/

#### 2 Solution

#### **Proposed Solution**

P297 proposes to amend the BSC to reflect the changes in the Dynamic Data Set under the Grid Code. Sections Q and V of the BSC will need to be updated whilst the BMRS will need to be modified to receive and publish the new and revised Dynamic Data from the Transmission Company.

Changes are required to Section Q to enable BSCCo to receive the Dynamic Data from the Transmission Company, and changes to Section V will enable the BMRS to publish the data submitted in accordance with Section Q.

The main impact of P297 is on BMRS rather than the BSC itself.

#### **Impact on BMRS**

The impact on BMRS is expected to be the receipt from the Transmission Company of the following new or revised data items in the Dynamic Data Set and their publication on the BMRS:

- <u>NEW</u> Data Item: Last Time to Cancel Synchronisation.
   This is a Dynamic Parameter recently introduced under Grid Code Change Proposal B/12<sup>5</sup>;
- NEW Data Item: Synchronising Interval & De-synchronising Interval at a BM Unit level.

This is a change that anticipates a Grid Code change once the Transmission Company's systems can support this definition.

 Revisions to Data Items: Run-Up Rates (Import and Export) and Run-Down Rate (Import and Export).

This will involve enabling the BMRS to accommodate up to ten rates and a reduced minimum rate of 0.02MW/min. A Grid Code change is being progressed in parallel to this Modification Proposal<sup>6</sup>; and

• Revisions to Data Items: Stable Export Limits and Stable Import Limits.

This will involve moving from a static parameter to time-varying profiles similar to

Maximum Export Limit and Maximum Import Limit. As above, a Grid Code change is
being progressed in parallel to this Modification Proposal.

#### **File format**

As well as making changes to the Dynamic Data Set, changes to the file format of the revised Dynamic Data Items will be changed from CSV to XML.



## What are 'Run-Up' and 'Run-Down' Rates?

Run-up and Run-Down rates are data items within the Dynamic Data Set.

Run-Up Rates and Run-**Down Rates** are both the rates at which a BM Unit can run down Export or Import MW. Also a set of data supplied by the System Operator for publication on the BMRS, comprising for each BM Unit: Up to three Run-Up Rate(s) expressed in MW/minute and associated Run-Up Elbow(s) expressed in MW for output (Export) and the same for input (Import).



What are Stable Export Limits and Stable Import Limits?

The **Stable Export Limit** is a positive MW value, expressing the minimum stable export operating level for BM Unit i.

The **Stable Import Limit** is a negative MW value, expressing the minimum stable import operating level for BM Unit i.

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<sup>5</sup> http://www.nationalgrid.com/NR/rdonlyres/6CBB2031-42F2-4382-9BBA-15F63F5BE797/58236/B12D.pdf

<sup>&</sup>lt;sup>6</sup> Grid Code Review Panel Paper Ref: pp13/04 from the 16 January meeting provides more information on this subject - <a href="http://www.nationalgrid.com/uk/Electricity/Codes/gridcode/reviewpanelinfo/2013/16th+January/">http://www.nationalgrid.com/uk/Electricity/Codes/gridcode/reviewpanelinfo/2013/16th+January/</a>

#### **Applicable BSC Objectives**

The Proposer believes that P297 would ensure that the Dynamic Data Set published on the BMRS is the same as that submitted to, and used by, the Transmission Company. This will benefit BSC Parties as it will help the Transmission Company to determine which Bids and Offers are accepted into the balancing mechanism, thereby promoting effective competition in the generation and supply of electricity.

Therefore, the Proposer believes that P297 would better facilitate the achievement of **Applicable BSC Objective (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'.

#### **Implementation Approach**

It is recommended that P297 is targeted for implementation on 6 November 2014 as part of the November 2014 BSC Systems Release. However the appropriate implementation approach will be considered at the P297 Workgroup meetings.



# 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 coordinated 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]

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#### **3** Things to Consider

#### **Terms of Reference**

As noted above, we need to amend BSC Sections Q and V; however we would recommend that the Workgroup looks at any other BSC Sections or Code Subsidiary Documents that may require updating to reflect the changes.

It should also be noted that the increase in the number of Run-Up and Run-Down Rates would increase the maximum number of time and power co-ordinates in a Bid-Offer Acceptance and it may be prudent to confirm the correct operation of the Balancing Mechanism Reporting Agent (BMRA) and Settlement Administration Agent (SAA) systems with the increased number of co-ordinates.

We recommend that the Terms of Reference for this Workgroup should focus on the following areas:

#### P297 Terms of Reference

What changes are needed to BSC to support P297?

Are changes needed to any Code Subsidiary Documents?

What BSC System changes are required by P297?

What are the benefits of P297?

Does P297 better facilitate the Applicable BSC Objectives than the current baseline?

Are there any Alternatives that should be considered?

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#### **Next Steps**

We recommend the Modification P297 should progress to a 3 month Assessment Procedure so that a Workgroup can be established in order to consider P297 and the areas outlined in Section 3.

We recommend that membership of the P297 Workgroup should comprise of members from the Settlement Standing Modification (SSMG), along with any other relevant experts and interested parties.

#### Why Self-Governance?

A Modification Proposal can be progressed as Self-Governance if:

- The Panel believes that it satisfies the Self-Governance Criteria, and the Authority does not issue a contrary direction; and/or
- The Authority believes that it satisfies the Self-Governance Criteria and issues a notice to that effect.

The Proposer indicated that P297 should not be treated as a Self-Governance Modification Proposal as it is likely to have a material effect on Applicable BSC Objective (c) as it promotes effective competition in generation and supply.

Whilst we agree that there is a benefit against Objective (c), we do not envisage an overriding material impact which would warrant the decision on P297 being made by the Authority. We therefore believe that this Modification Proposal meets the Self-Governance Criteria.

#### **Timetable**

We recommend that P297 undergoes a three month Assessment Procedure, with the Assessment Report presented to the Panel at its meeting on 14 November 2013.

As part of the Assessment Procedure the Workgroup will meet to develop, and consider the merits of the Proposed Modification (and any Alternative). We believe that the Workgroup will need to undertake the activities shown in the table below, which includes 15 Working Day industry consultation. The timetable below allows for both of these and for the Workgroup to fully consider the areas highlighted in the Terms of Reference.

Proposed Progression Timetable for P297	
Event	Date
Present Initial Written Assessment to Panel	8 Aug 13
Workgroup Meeting 1	w/c 19 Aug 13
Workgroup Meeting 2	17 Sep 13
Assessment Procedure Consultation	25 Sep – 16 Oct 13
Workgroup Meeting 3	21 Oct 13
Present Assessment Report to Panel	14 Nov 13
Report Phase Consultation (12 WD consultation)	15 Nov – 3 Dec 13
Present Draft Modification Report to Panel	12 Dec 13



#### Self-Governance Criteria

A Modification Proposal 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.

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#### **Estimated Progression Costs**

The following tables contain our estimates of the costs involved in progressing P297

through the Modification Procedures under the proposed timetable:

Estimated progression costs based on pro	posed timetable
Meeting costs (including Modification Group member expenses)	£1,500 (based on three Workgroup meetings)
Non-ELEXON legal and expert costs	None
ELEXON resource	40 man days, equating to approx. £10k

Estimate of industry assessment costs					
Workgroup support	Est #mtgs	Est # att	Est effort	Est rate	total
	3	8	1.5	£605	£21,780
Consultation response	Est #con	Est # resp	Est effort	Est rate	Total
support	2	8	2.5	£605	£24,200
Total					£45,980



# What are the estimated industry assessment costs based on?

- The estimated number of Workgroup meetings and industry attendees per meeting, plus the estimated number of industry consultations and responses (including both the Assessment Procedure and Report Phase consultations);
- The assumption that each industry attendee puts in 1.5 man days of effort per meeting, and that each respondent spends 2.5 man days in effort per consultation response; and
- A standard rate of £605 per man day of effort.

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### **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

None as the proposed change would align the BSC with the Grid Code.

#### Impact on Transmission Company

Minimal impact as the Transmission Company will be obligated to submit the updated Dynamic Data.

Impact on ELEXON	
Area of ELEXON	Potential impact
Release Management	ELEXON will manage the implementation project.

Potential Impacts on Code	otential Impacts on Code		
Code section	Potential impact		
Section Q	Changes will be required to implement the solution		
Section V	Changes may be required to implement the solution		

Potential Impacts on Code Subsidiary Documents
NETA IDD Part 1
Reporting Catalogue

Impact on other Configurable Items	
None identified	

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#### **6** Recommendations

Based on this Initial Written Assessment document, ELEXON invites the Panel to:

- **DETERMINE** that Modification Proposal P297 progresses to the Assessment Procedure;
- AGREE a provisional view that the Modification Proposal meets the Self-Governance Criteria;
- AGREE the proposed Assessment Procedure timetable such that an Assessment Report should be completed and submitted to the Panel at its meeting on 14 November 2013;
- DETERMINE that the P297 Workgroup should be formed from members of the Settlement Standing Modification Group (SSMG) along with any other interested parties; and
- AGREE the Workgroup's Terms of Reference.

#### **7** Further Information

More information is available in:

Attachment A: P297 Modification Proposal Form

You can also find further information on the P297 page of the BSC website.

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