Modification proposal:	**Grid Code GC0068: New & Revised Unit Data & Instructions**		
Decision:	The Authority[1] directs that the proposed modification to the Grid Code[2] be made		
Target audience:	National Grid Electricity Transmission PLC (NGET), Grid Code users and other interested parties		
Date of publication:	03 March 2014	Implementation Date:	Staged implementation

Background to the modification proposal

In the second quarter of 2015 National Grid Electricity Transmission (NGET)'s Balancing Mechanism (BM) System is being replaced with the Electricity Balancing System (EBS).[3] The BM System receives data from market participants, issues instructions and publishes the results to the Balancing Mechanism Reporting Agent (BMRA) and Settlement Administration Agent (SAA).[4] The existing BM System electronic interfaces for market participants to provide data, Electronic Dispatch Logging (EDL) and Electronic Data Transfer (EDT), will remain active for five years following EBS 'go live'. Approximately six months after implementation of the EBS, NGET intends to offer market participants the opportunity to move to new electronic interfaces known as 'EDT*' and 'EDL*' in order for participants to engage with the new EBS. This approach was agreed with industry at the Electricity Balancing System Group (EBSG) and through the associated IT sub-group, and was the subject of an industry consultation[5] in 2010. To facilitate these enhancements, delivered by the EBS, modification of the Grid Code is required.

Two issues papers[6] were presented at the January 2013 Grid Code Review Panel (GCRP) on Reactive Frequency Report Fax Form Information and New and Revised Balancing Code Parameters and Instructions which considered how to deliver the Grid Code changes. The GCRP asked an industry workgroup, the EBSG, to progress the proposed solutions through assessment and industry consultation. As both proposals affected the same sections of the Grid Code, Balancing Codes (BC) 1 and 2, the proposals were consolidated into one for the purposes of submitting a single modification report. The single modification is the proposed GC0068.

Alongside this Grid Code modification, NGET is proposing to make consequential changes to the Grid Code associated document known as the Data Validation, Consistency and

[1] The terms 'the Authority', 'Ofgem' and 'we' are used interchangeably in this document. Ofgem is the Office of the Gas and Electricity Markets Authority.
[2] This document is notice of the reasons for this decision as required by section 49A of the Electricity Act 1989.
[3] A replacement for the BM System, to improve functionality and resilience, was originally consulted on in 2008.
[4] More information regarding the SAA is available on: http://www.elexon.co.uk/knowledgebase/trading-settlement/
[5] http://www.nationalgrid.com/NR/rdonlyres/73CC8BC8-B070-4BF2-A24EB1A15A43A9F8/44635/Reportonbmrepconsultation2v11.pdf
[6] These papers proposed revisions and simplifications to the reactive power capability and frequency response availability information submitted by market participants (paper 13/03) and introduced new and revised Dynamic Parameters and instructions facilitated by the EBS (paper 13/04).

Defaulting Rules (DVCDR) document[7] and has also raised a Balancing and Settlement Code (BSC) modification, P297[8]. P297 was raised to ensure that the Dynamic Data Set, the Dynamic Data Parameters as they are defined in the BSC, is revised in line with the changes brought in by the EBS such that the new and revised parameters can be published on the Balancing Mechanism Reporting System (BMRS).

It is anticipated that there will also be consequential changes made to Section 6.8 of the Connection and Use of System Code (CUSC) which refers to provisions under the Grid Code for interface facilities required of BSC Trading Parties and BM Participants.

The modification proposal

The modification proposal raised by NGET (GC0068) to facilitate the Grid Code changes comprises two distinct parts: changes to the Reactive and Frequency Report Fax Form Information and New and Revised Balancing Code Parameters and Instructions.[9]

Reactive and Frequency Report Fax Form Information

BM Participants currently use fax forms to inform NGET of their Reactive Power capability and Frequency Response availability. The new EBS interface would allow electronic submission of this data as an enduring solution, although the submission of fax forms to NGET would continue to be supported. The continuation of use of fax forms led the EBSG to propose that the current fax forms, which appear in Appendices 3 and 4 of BC2, are updated. The changes to be made are to the format of the forms, in line with the views in one consultation response asking for single page forms, as well as the removal of sections that are of limited use and the renaming of column headings to remove ambiguity. In NGET's view, the updated forms will be simpler and clearer to use.

NGET proposes early implementation (four months after an Authority decision to approve GC0068) of the updates to the fax forms as these changes are not dependent on EBS implementation and would deliver early benefits to the industry, removing ambiguity in the interpretation of some of the fields in the forms.

Revised Balancing Code Parameters and Instructions

In order to reflect the new functionality offered by the EBS, and in line with industry views expressed in consultation responses and in workgroup discussions, it is proposed to add six new definitions to the Grid Code Glossary and Definitions. These will take the form of two 'parent' terms, Automatic Logging Device (ALD) and Electronic Data Communication Facilities (EDCF). In addition, there will be four 'child' terms for ALD and EDCF, two associated with EDL and EDT, the existing interfaces for issuing instructions and submitting data respectively, and two associated with EDL* and EDT* as the new interface for issuing instructions and submitting data respectively.

[7] This document defines the rules for data validation and consistency checking which are applied to Balancing Mechanism data received from Trading Agents and Control Points under the terms of the Grid Code. It also covers defaulting rules to be applied in the absence of expected data. Changes to the DVCDR require a change to the Grid Code, to change the reference to the DVCDR issue number in the Grid Code Glossary and Definitions section. As part of GC0068, NGET is proposing to change the Grid Code to refer to Issue 9 of the DVCDR, replacing the current reference to issue 8.

[8] http://www.elexon.co.uk/mod-proposal/p297/

[9] A complete list of the changes to be made to the Grid Code and to the associated DVCDR document appears in the GC0068 final modification report.

The removal of references to the term Day Ahead Dynamic Parameters from the Grid Code is proposed, as NGET no longer uses them. However, NGET will continue to accept data associated with Day Ahead Dynamic Parameters from market participants whose systems send this data through the EDT interface for 5 years following implementation of the changes.

The modification also proposes to transfer Dynamic Parameter details from BC1 Appendix 1 to a new BC2 appendix to coincide with the removal of references to Day Ahead Dynamic Parameters. Furthermore, Dynamic Parameter Attributes for both existing and new interfaces will appear in parallel in an appendix to BC2, since there will be a period of five years when both the existing and new interfaces will be effective in the Grid Code.

Further proposed changes made by GC0068 are:

- to replace the 'effective time' text under BC2.5.3.1 which applies to Stable Export Limit (SEL) and Stable Import Limit (SIL) submissions as they are to be dynamic in the future;

- instructions for Target Frequency to be classified as Ancillary Service Instructions within BC2 and the Ancillary Service Instructions to be duplicated to reflect continued use of existing EDT and EDL interfaces as well as the new EDT* and EDL* interfaces;

- the description of Tap Changes under Reactive Power will be updated to remain consistent with the current Operational Guidance Note on NGET instructions regarding Tap Changes;

- the introduction of text into BC2 to detail the arrangements to apply for the subsequent deviation of a BM Unit from zero following operation at zero as a result of Bid-Offer Acceptances. The proposal reflects situations of this type which are a substantial proportion of all rescheduling activity but which are not detailed in the Grid Code at present. A new term, Deviation from Zero Time (DZT), will define and identify the time at which the BM Unit will deviate from zero, improving the clarity of the current text but not introducing a new parameter for submission. The definition of the Dynamic Parameter Notice to Deviate from Zero in the appendix to BC2 has been revised to now also apply when the BM Unit's Physical Notification is non-zero.

NGET proposes implementation of the changes to Parameters and Instructions at the time of EBS 'go live' (currently envisaged in the second quarter of 2015). Market participants are to be given advanced notice of the 'go live' date and will be offered the opportunity from six months after 'go live' to use the new interfaces EDT * and EDL*.

NGET's recommendation

NGET submitted its final report for the modification proposal to us[10] on 29 January 2014. NGET's report supports the implementation of the change proposal on the basis that it better facilitates objectives (i), (ii) and (iii) of the Grid Code.[11] NGET considers that this is achieved by:

[10] On NGET's website at the following link: http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/Grid-code/Modifications/GC0068/

[11] The objectives of the Grid Code are set out in Standard Condition C14(1)(b) of NGET's Transmission Licence.

- allowing a greater range of data to be exchanged electronically between BM Participants and NGET;
- providing BM Participants with a greater range of IT options with which to exchange data with NGET;
- improving the modelling of CCGT modules, especially their start-up profiles;
- removing obligations on BM Participants to submit data that is no longer used;
- detailing the arrangements that apply when a BM Unit deviates from zero following operation at zero as a result of Bid-Offer Acceptances.

The Authority's decision

The Authority has considered the issues raised by the modification proposal and in the final Report dated 29 January 2014. The Authority has considered and taken into account the responses to NGET's consultation on the modification proposal which are included in the final Report.[12] The Authority has concluded that:

1. implementation of the modification proposal will better facilitate the achievement of the objectives of the Grid Code[13]; and
2. approval of the modification is consistent with the Authority's principal objective and statutory duties.[14]

Reasons for the Authority's decision

We recognise the fundamental issue that this modification seeks to address, namely, to best facilitate the enhancements that the new EBS offers whilst at the same time allowing BM Participants time to adapt to the new format.

We set out below our reasons against those applicable Grid Code Objectives which we consider are impacted by the modification. We consider there is either a neutral or no impact on Grid Code objective (iv).

Objective (i) 'to permit the development, maintenance and operation of an efficient, coordinated and economical system for the transmission of electricity'

We agree that this proposal will facilitate the EBS to enhance the range of data exchanged aiding the precision with which NGET can model the capabilities of BM Units on the system and therefore permits more efficient and economical despatch. For this reason we consider that the proposal better facilitates this objective.

Objective (ii) 'to facilitate competition in the generation and supply of electricity (and without limiting the foregoing, to facilitate the national electricity transmission system being made available to persons authorised to supply or generate electricity on terms which neither prevent nor restrict competition in the supply or generation of electricity)'

[12] Grid Code proposals, final reports and representations can be viewed on NGET's website at: http://www.nationalgrid.com/uk/Electricity/Codes/gridcode/consultationpapers/

[13] As set out in Standard Condition C14(1)(b) of NGET's Transmission Licence, see: https://epr.ofgem.gov.uk/Content/Documents/Electricity%20transmission%20full%20set%20of%20consolidated%20standard%20licence%20conditions%20-%20Current%20Version.pdf

[14] The Authority's statutory duties are wider than matters which NGET must take into consideration and are detailed mainly in the Electricity Act 1989 as amended.

We agree that the efficiency gains from the EBS, facilitated by this proposed modification may reduce the balancing costs faced by market participants, thus supporting competition in electricity generation and supply.

We note that increasing the number of Run-Up and Run-Down Rates and the introduction of time-varying SEL/SIL would have a positive impact on this objective as it allows CCGT Modules to better model their complex run-up and run-down profiles. This potentially reduces their exposure to imbalance charges and facilitates competition in the generation of electricity. We also note that the transfer of Dynamic Parameter text to BC2 and the revisions to the Tap Changes text and simplifications to the Reactive and Frequency Response Fax forms should mitigate potential confusion regarding information requirements. The removal of Day Ahead Dynamic Parameters should reduce the overheads faced by BM Participants, again reducing barriers to entry and thereby increasing competition in the generation of electricity.

Objective (iii) 'subject to sub-paragraphs (i) and (ii), to promote the security and efficiency of the electricity generation, transmission and distribution systems in the national electricity transmission system operator area taken as a whole'

We agree that the proposed modification would improve the precision and capability for information exchanged between NGET and BM Participants in the operation of the Balancing Mechanism. The improved capabilities provided by the EBS will allow greater accuracy, detail and timeliness in the submissions from generators. NGET can issue electronic rather than telephone instructions of simultaneous tap or target frequency changes and the simplification of the Reactive and Frequency Response Fax forms will ensure that the correct data is used in assessing the security of the NETS.

Decision notice

In accordance with Standard Condition C14 of NGET's Transmission Licence, the Authority, hereby directs that modification proposal Grid Code GC00068: 'New & Revised Unit Data & Instructions' be made.

Implementation

We agree with NGET's recommendation that the changes to the Reactive and Frequency Report Fax Form Information in BC2 Appendices 3 and 4[15] should be implemented ahead of the EBS being in place, ie within 4 months following the date of this decision.

We agree that it is appropriate for the remaining Grid Code changes under GC0068, relating to Revised Balancing Code Parameters and Instructions and the associated changes to the Data Validation, Consistency and Defaulting Rules to be implemented following confirmation of the go-live date for the EBS. We note that the final Report sets out that NGET will provide advance notice of implementation. We expect NGET to communicate this to all affected users and interested parties in a timely manner. We also expect NGET to ensure that any Grid Code changes that may be developed in the period between this decision and the date of implementation of the remaining GC0068 changes take those changes into account (and vice versa).

[15] With the exception of new paragraphs BC2.A.3.4 in both appendices 3 and 4, which will be implemented at a later date alongside the remaining GC0068 changes – see paragraph 3.21 of the final Report.

Emma Kelso

Signed on behalf of the Authority and authorised for that purpose