

Modification proposal:	Grid Code GC0037: Offshore Balancing Mechanism Unit Configuration		
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:	29 November 2013	Implementation Date:	10 working days after Authority decision

Background to the modification proposal

A number of intermittent onshore or offshore generating units (Power Park Units) may link together to form a Power Park String under the terms of the Grid Code. Power Park Strings may then be aggregated into Power Park Modules (PPMs). A single PPM or a number of PPMs can form a Balancing Mechanism Unit (BM Unit)³ under the terms of the Balancing and Settlement Code (BSC).⁴

On 27 January 2010 BSC Modification P240, 'Switching Plant and Apparatus between Balancing Mechanism Units', was implemented following approval by the Authority.⁵ P240 enabled Power Park Strings to be moved between BM Units in operational timescales under the BSC (where the BM Units have been registered as part of a switching group), replacing a re-registration process which previously took at least 30 working days to complete. Underpinning this modification was the need to maximise output from offshore Generators in the event of an outage on an offshore transmission connection.

In the event of an outage, the role of the system operator, National Grid Electricity Transmission plc (NGET), is to coordinate the operation of the National Electricity Transmission System (NETS).⁶ As such NGET can issue instructions to Users to control power flows to and from the NETS.⁷ To coordinate effectively NGET needs to know what generation capacity is connected to which networks and therefore requires information on the composition of BM Units. Generators are currently required to provide information on the composition of PPMs through the PPM Availability Matrix and are required to notify any changes to NGET by fax.⁸ No record is currently kept of the relationship between PPMs and BM Units. However, knowledge of the composition of BM Units at any given

¹The terms 'the Authority', 'Ofgem' and 'we' are used interchangeably in this document. Ofgem is the Office of the Gas and Electricity Markets Authority.

²This document is notice of the reasons for this decision as required by section 49A of the Electricity Act 1989.

³Balancing 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. See <http://www.elexon.co.uk/reference/technical-operations/balancing-mechanism-units/>

⁴Follows the approval of BSC modification P237: <https://www.ofgem.gov.uk/ofgem-publications/61906/p237d.pdf> in November 2009.

⁵<https://www.ofgem.gov.uk/ofgem-publications/61903/p240d.pdf>

⁶As required by the Grid Code Planning Code and Operating Code.

⁷Grid Code Balancing Code 2.9 refers.

⁸See Grid Code Balancing Code No.1.

time is important because this is the basis on which NGET would issue any control instructions.

A workgroup⁹ was established by the Grid Code Review Panel (GCRP) in the wake of P240 to consider the information exchanges between NGET and Users that enable NGET to coordinate the operation of the NETS. It concluded that there was a need to define the link between PPMs and BM Units, specifically because NGET can only instruct BM Units and not the individual PPMs that form those BM Units.¹⁰ The workgroup also felt that the current requirement to notify changes to the composition of BM Units formed by PPMs by fax placed an excessive and unnecessary burden on all parties and was inflexible.

The modification proposal

NGET (the 'Proposer') raised Grid Code modification GC0037 to address the two main conclusions of the workgroup which are outlined above. It would make the following modifications to the Grid Code:

- Amend the PPM Availability Matrix and associated provisions in the Grid Code and its appendices to reflect the link between PPMs and BM Units; and
- Amend the provisions of the Grid Code to relax the requirement to re-submit a PPM Availability Matrix by fax in the event of a change in the composition of a BM Unit. Telephone contact with NGET would be used initially, with NGET following up with a request for a fax submission if deemed necessary. No modification is proposed to the original Matrix submission which is currently made by fax.

NGET consulted on the proposed changes and received five responses. All respondents agreed that it was desirable to modify the Grid Code both to oblige Users to inform NGET which PPMs are linked with each BM Unit and to relax the requirement on communicating changes to the PPM Availability Matrix by fax.

NGET's recommendation

NGET submitted its report to the Authority on 28 October 2013 and updated it on 7 November 2013. The report supports the implementation of the modification proposal on the basis that it better facilitates Grid Code Objectives (i), (ii) and (iii).

The Authority's decision

We have considered the issues raised by the modification proposal and in the final Report dated 28 October 2013 and updated on 7 November 2013. We have considered and taken into account the responses to NGET's consultation on the modification proposal which are included in the final Report.¹¹ We have concluded that:

1. implementation of the modification proposal will better facilitate the achievement of the objectives of the Grid Code¹²; and
2. approving the modification is consistent with the Authority's principal objective and statutory duties.¹³

⁹The Offshore Balancing Mechanism Unit Configuration Workgroup was established in November 2010.

¹⁰The possibility for additional information to be provided under the Grid Code was raised in the P240 report, although it was not a prerequisite for acceptance of P240.

¹¹Grid Code proposals, final reports and representations can be viewed on NGET's website at:

<http://www.nationalgrid.com/uk/Electricity/Codes/gridcode/consultationpapers/>

¹²As set out in Standard Condition C14 (1)(b) of NGET's Transmission Licence.

Reasons for the Authority's decision

We agree that GC0037 would better facilitate Grid Code objectives (i) and (iii) for the reasons set out below. We consider that there is no impact on objectives (ii) and (iv).

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

NGET considered that improving the information provided to NGET, by establishing a clear relationship between PPMs and BM Units, meant that the transmission system operation would be co-ordinated more effectively. All respondents agreed with this view.

We agree that GC0037 better facilitates this objective. The modifications regarding the use of the PPM Availability Matrix, to link PPMs to particular BM Units, should assist NGET as the system operator. It would allow the system operator to understand the active and reactive power output for each BM Unit, in addition to changes made to the BM Unit's composition in operational timescales. As the BM Unit is the entity that NGET can instruct, we agree that recording and maintaining information about the composition of a BM Unit at this level will aid NGET's operational decision making.

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)'

The final Report notes that the proposal does not place restrictions on connection design, which NGET considers could facilitate competition when compared to alternative solutions that may be more restrictive. All respondents agreed with this view.

We do not agree that GC0037 better facilitates this objective. We acknowledge that the working group considered a number of options that would have addressed the lack of association between PPMs and BM Units through imposing greater restrictions on connection design, which could in turn have a negative effect on competition. However, there is no substantive evidence presented in the final Report that the changes being proposed by GC0037 better facilitate competition, when compared to the current arrangements. We therefore consider that the proposal has no impact on this objective.

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'

The working group considered that reducing the volume of information required to be exchanged between generators and NGET whilst providing for appropriate operational liaison would facilitate the transmission system being operated efficiently, safely and securely. All respondents agreed with this view.

We agree that GC0037 better facilitates this objective by reducing the volume of information which must be formally exchanged by fax between NGET and Users while ensuring appropriate levels of operational liaison remain through potentially quicker telephone notification. NGET retains the option to request fax notification if necessary.

¹³The 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.

The increased flexibility by which information would be exchanged should assist in more efficient operation of the transmission network and so better facilitates this objective.

Decision notice

In accordance with Standard Condition C14 of NGET's Transmission Licence, the Authority, hereby directs that modification proposal Grid Code GC0037: '*Offshore Balancing Mechanism Unit Configuration*' be made.

Paul O'Donovan

Head of Regulatory and Support Services, Offshore Transmission

Signed on behalf of the Authority and authorised for that purpose