

Modification proposal:	<b>Grid Code GC0097: Grid Code processes supporting TERRE</b>		
Decision:	The Authority <sup>1</sup> directs <sup>2</sup> that the proposed modification to the Grid Code be made		
Target audience:	National Grid Electricity Transmission PLC (NGET), the Grid Code Review Panel, Grid Code users and other interested parties		
Date of publication:	24 August 2018	Implementation date:	7 September 2018

## Background

The Trans-European Replacement Reserves Exchange (TERRE) project is the implementation project of the European platform for the exchange of balancing energy from Replacement Reserve<sup>3</sup> (RR) pursuant to Article 19 of the European Electricity Balancing Guideline (EBGL).<sup>4</sup>

The goal of the TERRE project is to develop a platform that allows the Transmission System Operators (TSOs) that use the RR process<sup>5</sup> to exchange balancing energy from this type of reserve. Through the TERRE platform, Balancing Service Providers<sup>6</sup> (BSP) in GB will be able to provide balancing services to other TSOs in addition to the GB Electricity System Operator (ESO). The ESO is expecting to utilise RR products for energy balancing in Great Britain (GB) from the TERRE platform go-live date – currently scheduled for between October-December 2019 and in advance of the deadline set in Article 19 of the EBGL for the establishment and operation of TERRE.

## The modification proposal

The modification GC0097 was raised in November 2016 by National Grid to amend the Grid Code which covers all material technical aspects relating to prequalification, operation and use of the national electricity transmission system (NETS). This proposal seeks to modify the Grid Code to set GB processes to allow market participants and the TSO to coordinate with one another to facilitate participation in the TERRE. It does this by:

- i) making the Grid Code consistent with the EBGL by:
  - a. facilitating the implementation of EBGL Article 18(3)(b), which requires terms and conditions for balancing service providers and balance responsible parties to respect the frameworks for the establishment of European platforms for the exchange of balancing energy (pursuant to Article 19).
  - b. facilitating the implementation of EBGL Article 18(4)(a,b,c), which requires the terms and conditions to (a) define reasonable and justified

<sup>1</sup> References to the "Authority", "Ofgem", "we" and "our" are used interchangeably in this document. The Authority refers to GEMA, the Gas and Electricity Markets Authority. The Office of Gas and Electricity Markets (Ofgem) supports GEMA in its day to day work. This decision is made by or on behalf of GEMA.

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

<sup>3</sup> 'Replacement Reserves' or 'RR' means the active power reserves available to restore or support the required level of FRR to be prepared for additional system imbalances, including generation reserves.

<sup>4</sup> [https://eur-lex.europa.eu/legal-content/EN/TXT/?toc=OJ:L:2017:312:TOC&uri=uriserv:OJ.L\\_.2017.312.01.0006.01.ENG](https://eur-lex.europa.eu/legal-content/EN/TXT/?toc=OJ:L:2017:312:TOC&uri=uriserv:OJ.L_.2017.312.01.0006.01.ENG)

<sup>5</sup> TSOs in Great Britain, France, Switzerland, Spain, Portugal, Italy, Czech Republic, Romania, Poland and Hungary – TSOs in Greece, Norway, Sweden, Finland and Denmark are currently observers

<sup>6</sup> 'Balancing Service Provider' means a market participant with reserve-providing units or reserve-providing groups able to provide balancing services to TSOs.

- requirements for the provisions of balancing services; (b) allow the aggregation of demand facilities, energy storage facilities and power generating facilities in a scheduling area to offer balancing services subject to conditions referred to in paragraph 5 (c); (c) allow demand facility owners, third parties and owners of power generating facilities from conventional and renewable energy sources as well as owners of energy storage units to become balancing service providers;
- ii) implementing the System Operation Guideline<sup>7</sup> (SOGL), especially Article 161(3) which requires the adoption of technical requirements for the connection of RR providing units and RR providing groups to ensure the safe and secure delivery of RR. In accordance with our decision to incorporate the new EU requirements within the existing GB regulatory frameworks<sup>8</sup>, it is proposed that the technical requirements are inserted directly in the Grid Code for our approval.

The work group took a 'minimum necessary change' approach in an effort to implement TERRE in an efficient way. Therefore, the existing GB Balancing Mechanism<sup>9</sup> (BM) processes were proposed as a template for facilitating TERRE participation.

The proposed code modification addresses and provides details on the following aspects of implementing TERRE into GB:

- It specifies the data items and processes necessary for data submission to the GB ESO for participation in TERRE.
- It provides details on the dispatch process for TERRE as well as interactions with the BM.
- It sets out the pre-qualification requirements for GB participation in TERRE, including:
  - the technical requirements;
  - the availability requirements; and
  - requirements on the control quality.
- It details the obligations for coordination between the GB ESO and DNOs to manage participation from distribution-connected BSPs.
- It describes the reporting obligations to the Balancing and Settlement Code Company (BSCCo) based on actions taken by the GB ESO for TERRE.
- It aligns the Grid Code with the Balancing and Settlement Code (BSC), which will allow Secondary BMUs to be aggregated at a wider geographical area (Grid Supply Point Group, GSPG, rather than Grid Supply Point, GSP, level).
  - Location information of the sub-components of these BMUs (meters) will be reported to the ESO (and DNO) in order for them to understand where on the network RR provision will have an effect.

The solution foresees that from go-live of the TERRE platform all existing BM units (BMUs) will be assumed as pre-qualified for participating in TERRE, and there will be a simple function that allows units to state whether they wish to be part of the market or

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<sup>7</sup> Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation

<sup>8</sup> Implementing the Electricity EU Network Codes, 18 December 2014: <https://www.ofgem.gov.uk/ofgem-publications/92240/openletteronencimplementationandconsultationonnemodesignation-pdf>

<sup>9</sup> This is one of the tools National Grid uses to balance electricity supply and demand close to real time. The balancing mechanism is used to balance supply and demand in each half hour trading period of every day.

not. The intention of the proposer was to implement the modification in time for GB to participate in TERRE when the central platform commences its parallel run phase.<sup>10</sup>

### **Grid Code Review Panel recommendation**

At the Grid Code Review Panel meeting on 14 June 2018, the Panel members unanimously voted in favour of the original proposal against the applicable objectives recommending that it is better than the baseline and should be implemented.

### **Impact assessment**

We considered whether we should carry out a section 5A Impact Assessment (IA) on GC0097. We reached the conclusion that we do not consider it necessary, appropriate or practicable to publish a section 5A IA. The reasons for reaching this conclusion are described below.

This modification will implement the technical requirements for a new balancing market in GB. While participation for BSPs is voluntary, the impact of TERRE will be the creation of new revenue streams that are likely to affect how parties will compete within the TERRE and the broader balancing services market. The implementation of TERRE will also be a fundamental change to how the ESO procures balancing services by allowing the ESO to access new cross-border providers. We have not reached a definitive conclusion on whether such potential impacts are important for the purposes of section 5A of the Utilities Act 2000. To the extent that the proposal is important we explain below are reasons for not undertaking a section 5A IA.

The implementation of a European platform for the exchange of balancing energy from replacement reserves is required by Article 19 of the EBGL. In addition, Article 18(3)(b) requires that the national terms and conditions for balancing service providers and balance responsible parties must respect the framework for the establishment of European platforms for the exchange of balancing energy pursuant to Article 19. As delivering this requirement is not optional, and given that the EBGL has already been subject to an IA,<sup>11</sup> we believe that the impacts of the decision are already well-understood.

In addition, the proposed processes and formats for submitting TERRE bids under the approach proposed by the modification are similar to those currently used for the BM.

A section 5A IA would, also in this respect, simply replicate considerations of the impacts which have already been undertaken, in circumstances where the Authority has very limited discretion as to its decision. As such, we do not consider, it necessary, appropriate or practicable to publish a section 5A IA. Nor do we consider that such publication and consultation would be in the best interests of stakeholders and consumers.

### **Our decision**

We have considered the issues raised by the modification proposal and in the Final Modification Report dated 26 June 2018. We have considered and taken into account the

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<sup>10</sup> The TERRE parallel run is scheduled for August 2019 – October 2019 and expected to be a full TSO wide end-to-end test, providing full test coverage, except for the physical dispatch of RR services or physical monetary transfers.

<sup>11</sup> EBGL Impact Assessment can be accessed here:

[https://ec.europa.eu/energy/sites/ener/files/documents/20130610\\_eu\\_balancing\\_master.pdf](https://ec.europa.eu/energy/sites/ener/files/documents/20130610_eu_balancing_master.pdf)

responses to the industry consultation on the modification proposal which are included in the Final Modification Report<sup>12</sup>. We have concluded that:

- implementation of the modification proposal will better facilitate the achievement of the objectives of the Grid Code;<sup>13</sup> and
- approving the modification is consistent with our principal objective and statutory duties.<sup>14</sup>

### **Reasons for our decision**

We consider this modification proposal will better facilitate Grid Code objectives (i), (ii), (iii), and (iv).

#### ***(i) to permit the development, maintenance and operation of an efficient, co-ordinated and economical system for the transmission of electricity***

GC0097 should improve the efficiency, co-ordination and economic operation of the electricity system. TERRE should lead to greater competition for RR as the ESO will have access to BSPs outside GB, increasing the options available to the ESO to balance the National Electricity Transmission System (NETS). GB BSPs will also be able to provide services to other SOs.

Moreover, through the TERRE information submitted to the BSCCo, and made available to users via the Balancing Mechanism Reporting Service,<sup>15</sup> there should be greater transparency of SO-SO trades and the netting of TSO imbalance needs. Combined, this should result in greater liquidity in the market, therefore increasing operational efficiencies and making the NETS more economical to operate due to the greater amount of balancing options available to the ESO.

In addition, the introduction of TERRE will provide easier access to the BM by BSPs located at the distribution level and introduce the processes involved in ensuring increased co-ordination between the ESO and DNOs.

We therefore consider that by facilitating the implementation of TERRE, the GC0097 solution should better facilitate objective (i).

#### ***(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)***

By facilitating the introduction of the new TERRE platform operating arrangements into the GB market, GC0097 will help to expand the provision of balancing services from a national to a European level. This is likely to promote increased competition between BSPs from different countries.

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<sup>12</sup> Grid Code proposals, final reports and representations can be viewed on NGET's website at: <http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/Grid-code/Modifications/> GC0097 can be found at: <https://www.nationalgrid.com/uk/electricity/codes/grid-code/modifications/gc0097-grid-code-processes-supporting-terre>

<sup>13</sup> As set out in Standard Condition C14(1)(b) of NGET's Transmission Licence, available at: <https://epr.ofgem.gov.uk/>

<sup>14</sup> 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.

<sup>15</sup> The Balancing Mechanism Reporting Service (BMRS) is the primary channel for providing operational data relating to the GB Electricity Balancing and Settlement arrangements.

The cross border sharing of RR should increase the ESOs access to a wider range of RR providers as well as increase access to potentially cheaper energy from interconnected markets. The modification will also allow GB BSPs wider access to provide balancing services to the ESO in a level-playing field with traditional providers. This should increase supply of services overall and as a result increase competition for the provision of balancing services from generation and from the demand side. Additionally, the changes will also facilitate access to the BM, which should maximise competition in that market.

We therefore consider that the proposal better facilitates objective (ii).

***(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 modification proposal will facilitate the implementation of TERRE in GB, which will in turn allow the ESO to access new cross-border sources of replacement reserves to ensure the operational security of the electricity system. It also gives the ESO more direct access to bids in other European markets.

GC0097 also promotes operational efficiency through the use of current processes and formats for the BM, by extending them to TERRE. This should reduce the need for investment in new systems by market participants already active in the BM market. For new entrants, it should mean that the majority of their investment to prequalify for participation in TERRE can also be used for prequalification to the BM.

Moreover, the modification sets out robust minimum technical criteria for the participation in the market. These are in line with the requirements specified in the SOGL and build upon the criteria currently set for participation in STOR. This should ensure that activation of BSPs through TERRE does not create significant risks for the electricity system.

In this respect, we consider that it better facilitates objective (iii).

***(iv) to efficiently discharge the obligations imposed upon the licensee by this license and to comply with the Electricity Regulation and any relevant legally binding decisions of the European Commission and/or the Agency.***

The modification proposal directly aims at ensuring GB compliance with EU legislation. The EBGL entered into force on 18 December 2017. Article 19 of the EBGL mandates those TSOs using the RR products to develop a European platform for the exchange of balancing energy from RR.

This modification proposal facilitates the implementation of EBGL Article 18(3)(b) which requires that the national terms and conditions for balancing service providers and balance responsible parties must respect the framework for the establishment of European platforms for the exchange of balancing energy pursuant to Article 19 EBGL.

The modification proposal also facilitates the implementation of EBGL Article 18(4)(a,b,c) which defines requirements for the provisions of balancing services, allow aggregation in order to offer balancing services, and allow the specified trading parties to become balancing service providers

The SOGL entered into force on 14 September 2017. SOGL Article 161(3) requires the connecting TSO to adopt the technical requirements for the connection of RR providing units and RR providing groups to ensure the safe and secure delivery of RR. By inserting

those requirements into the Grid Code, this modification further facilitates the efficient discharge of the licensee's obligation.

We therefore consider that the modification proposal better facilitates objective (iv) by complying with the EBGL and SOGL electricity regulations.

### **Decision notice**

In accordance with Standard Condition C14 of NGET's Transmission Licence, the Authority hereby directs that Grid Code modification proposal Grid Code GC0097: 'Grid Code processes supporting TERRE' be made.

**Louise van Rensburg**

**Interim Deputy Director – SO and Whole System, Systems & Networks**

Signed on behalf of the Authority and authorised for that purpose