

Modification proposal:	Grid Code GC0107/113: The open, transparent, non-discriminatory and timely publication of the generic and/or Power Generating Module specific values required to be specified by the relevant TSO(s) and / or relevant system operator et al., in accordance with the Requirements for Generators (GC107) and Demand Connection Conditions (GC113)		
Decision:	The Authority ¹ has decided to reject this modification proposal ²		
Target audience:	National Grid Electricity System Operator (NGESO), Grid Code users and other interested parties		
Date of publication:	29 May 2020	Implementation date:	N/A

Background

The European Third Energy Package came into force on 3 September 2009. The Requirement for Generators (RfG) and the Demand Connection Code (DCC) codes are part of a suite of European Regulations developed following implementation of the Third Package.

- COMMISSION REGULATION (EU) 2016/631 of 14 April 2016 establishing a network code on requirements for grid connection of generators (RfG) – specifies the technical connection requirements that new generators must abide by.³
- COMMISSION REGULATION (EU) 2016/1388 of 17 August 2016 establishing a Network Code on Demand Connection (DCC)– specifies the technical connection requirements that new distribution networks connecting to the transmission system, new demand users connecting to the transmission system and new customers wanting to provide demand side response services, must abide by.⁴

Both the RfG and the DCC require general and specific technical requirements to be met. These general and specific values are to be set by the relevant Transmission System Operator (TSO). Both GC0107 and GC0113, collectively referred to as the “modification proposal” seek to obligate Network Operators to publish the technical requirements of general or specific applications arising from the application of the RfG and the DCC.

We recently approved Grid Code modifications GC0100⁵, GC0101⁶ and GC0102⁷, which incorporate the European Regulations into the Grid Code.

¹ 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.

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

³ Commission Regulation (EU) 2016/631 of 14 April 2016 establishing a network code on requirements for grid connection of generators (referred to as the RfG); http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:JOL_2016_112_R_0001

⁴ Commission Regulation (EU) 2016/1388 establishing a network code on demand connection (referred to as the DCC); http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2016.223.01.0010.01.ENG&toc=OJ:L:2016:223:TOC

⁵ Ofgem decision for GC0100; https://www.ofgem.gov.uk/system/files/docs/2018/05/qc0100_d.pdf

⁶ Ofgem decision for GC0101; https://www.ofgem.gov.uk/system/files/docs/2018/05/qc0101_d.pdf

⁷ Ofgem decision for GC0102; https://www.ofgem.gov.uk/system/files/docs/2018/05/gc102_d.pdf

The modification proposals

Both GC0107 and GC0113 were raised by SSE Generation Limited, referred to as the "Proposer", in November 2017 and April 2018 respectively. GC0107 seeks to obligate Network Operators to publish the technical requirements of general or specific applications arising from the application of the RfG. GC0113 seeks to obligate Network Operators to publish the technical requirements of general or specific applications arising from the application of the DCC. Due to the similarities of the modification proposals, in April 2018, the Grid Code Review Panel (GCRP) decided to consider the two proposals in a single workgroup. The workgroup convened 11 times, and formed two Workgroup Alternative Grid Code Modifications (WAGCM1 and WAGCM2) for both GC0107 and GC0113.

The Original Proposal within the modification proposal will require the parties responsible for the specification of a value, and the value (or range of values) itself, in accordance with the RfG or DCC, to be recorded and published. The parties responsible for the specification of values are the Transmission System Operator and Power Generating Facility Owners. The values themselves are set by the Electricity System Operator (ESO), Transmission Owners, Distribution Network Operators (DNOs), Offshore Transmission Owners, Independent Distribution Network Operators (iDNOs), and potentially Competitively Appointed Transmission Owners in the future.

The Original Proposal stipulates that the values shall be harmonised by the parties concerned, recorded in spreadsheet form and published by the ESO. Specific values applied at less than four sites need not be reported to ease the burden of the proposal. The Proposer notes, where technical capability deviates from GB technical requirements (including the RfG and DCC general or specific requirements), a derogation would be required and therefore Ofgem would have view of this⁸, providing some transparency. The modification proposal also specifies a timeline and process for publication and updating of the spreadsheet.

The values in question cover a range of areas critical to the operation of the NETS including frequency requirements, reactive power capability and voltage control requirements and fault ride through capability. For example:

- paragraph 1 (a)(ii) of Article 13 of the RfG specifies the minimum time periods for which a type A power-generating module has to be capable of operating on different frequencies, deviating from a nominal value, without disconnecting from the network. For some frequency ranges the time period of operation required is explicitly specified, however for 48.5 Hz to 49.0 Hz, this is to be specified by each TSO. In this instance, the value is specified in Grid Code Connection Condition CC.6.1.3.
- paragraph 1 (a)(ii) of Article 13 of the RfG states that "the relevant system operator, in coordination with the relevant TSO, and the power-generating facility owner may agree on wider frequency ranges, longer minimum times for operation or specific requirements for combined frequency and voltage deviations to ensure the best use of the technical capabilities of a power-generating module, if it is required to preserve or to restore system security". It is therefore possible to bilaterally agree on an alternative value.

⁸ Licensees not in a position to comply with a technical code or standard may submit a request to Ofgem for derogation from the licence requirement. Further information on derogations can be found on our website; <https://www.ofgem.gov.uk/licences-codes-and-standards/standards/technical-standards/derogations-standards>

Under the terms of this modification proposal, both values would need to be published in the spreadsheet template (provided the bilaterally agreed specific value was applied at four or more sites).

WAGCM1 for both GC0107 and GC0113 is the same as the Original Proposal, except there would be no ongoing activity for DNOs, or iDNOs, unless Engineering Recommendation G99 is modified such that the data is required.

WAGCM2 for both GC0107 and GC0113 is the same as the WAGCM1 with the exclusion of Distribution connected parties, without a Connection and Use of System Code or other ESO bilateral contract, from the scope of the modification.

A workgroup consultation on GC0107 ran from 23 July 2019 to 6 September 2019, receiving 5 responses. A similar consultation for GC0113 ran from 1 November to 22 November 2019 receiving four responses. The responses were not in favour of the modifications. Some respondents expressed concern over the potential cost and non-compliance risk to Network Operators, and that a further Distribution Code modification would be required to clarify the obligations on the iDNOs.

A Code Administrator Consultation ran from 14 February 2020 to 6 March 2020 receiving six responses. Four responses from Network Operators or the ESO did not believe any proposals within the modification proposal better facilitated the Applicable Grid Code Objectives than the baseline, whilst 2 responses from Generators were in favour of the Original Proposal.

The workgroup voted separately for GC0107 and GC0113 on 27 November 2019. In the final vote, for both GC0107 and GC0113, there were three votes for the baseline, two for the Original Proposal, one for WAGCM1 and one for WAGCM2.

Grid Code Review Panel recommendation

The GCRP voted separately for GC0107 and GC0113 on 26 March 2020. For both GC0107 and GC0113, there were four votes for the Original Proposal, five votes for the baseline, and no votes for either WAGCM1 or WAGCM2. As there was no majority vote for either GC0107 and GC0113 or for any of their respective WAGCMs, the GCRP recommendation is that no change is made to the Grid Code.

Our decision

We have considered the issues raised by the modification proposals and in the Final Modification Report dated 9 April 2020. We have considered and taken into account the responses to industry's consultation(s) on the modification proposals which are included in the Final Modification Report⁹. We have concluded that:

- implementation of modification proposals GC0107 and GC0113 will not better facilitate the achievement of the Grid Code objectives.¹⁰

Reasons for our decision

⁹ Grid Code proposals, final reports and representations can be viewed on NGESO's website at: <http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/Grid-code/Modifications/>

¹⁰ As set out in Standard Condition C14(1)(b) of the Electricity Transmission Licence, available at: <https://epr.ofgem.gov.uk/>

We consider the modification proposals will have a negative impact on Grid Code objectives *iv* and *v*, and no impact on the other Grid Code objectives;

(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.

As noted during the GCRP vote, and demonstrated by the mapping exercise undertaken by the workgroup, the majority of values and settings other than those of local site-specific interest, that this modification proposal seeks to make more transparent, were set during GB implementation of RfG and DCC (GC0100, GC0101, GC0102), and are therefore already publicly available. Specific values that differ from these require a derogation and are therefore also publicly available. Values and settings that have local site-specific interest are rare, and transparency of these are unlikely to have wider industry benefit. Therefore, the Final Modification Report provides minimal evidence of tangible benefits of the modification proposal which does not outweigh the increased cost and responsibility to Network Owners and the ESO arising from the modification proposal. We therefore believe the modification proposals will have a negative impact on this Grid Code objective.

We note and support efforts to increase transparency across all industry codes. However, in practise the modification proposals appear to increase transparency over settings and values arising from the application of the RfG and DCC that are predominantly site-specific in nature, and therefore have little benefit for wider industry.

(v) to promote efficiency in the implementation and administration of the Grid Code arrangements

We believe that the modification proposals will have a negative impact on this Grid Code objective for the same reasons as for objective *iv*, above. Furthermore, we consider the increased administrative work for Network Owners and the ESO that the modification proposals would require would not provide sufficient benefit for wider industry.

Decision notice

In accordance with Standard Condition C14 of the Transmission Licence, the Authority has decided that modification proposal Grid Code GC0107/113: "The open, transparent, non-discriminatory and timely publication of the generic and/or Power Generating Module specific values required to be specified by the relevant TSO(s) and / or relevant system operator et al., in accordance with the Requirements for Generators (GC107) and Demand Connection Conditions (GC113)" should not be made.

Martin Queen

Principal Engineer – Systems & Networks

Signed on behalf of the Authority and authorised for that purpose