

Modification proposal:	Distribution Code: DCRP/MP/18/07– Revision of Engineering Recommendation (EREC) G99		
Decision:	The Authority ¹ has decided to approve ² this modification		
Target audience:	Distribution licensees, Distribution Code Review Panel, distribution network users and other interested parties		
Date of publication:	29 November 2018	Implementation date:	10 December 2018

Background

The Authority's decision on the 15 May 2018 to approve Distribution Code modification GC0102/DCRP (Implementation of the EU Network Code – Requirement for Generators)³ resulted in the introduction of two new Engineering Recommendations G98 (EREC G98)⁴ and G99 (EREC G99)⁵.

Stakeholders have since identified that there is a lack of clarity concerning LFSM-O⁶ compliance testing requirements in EREC G99, and as such consider the standard against which LFSM-O testing is undertaken to be too vague to be relied upon in the manufacturing of compliant modules in Type A⁷ and Type B size range. The existing testing standard is quantified as '*as much as possible*'. Stakeholders believe that this standard fails to specify a precise measurement or criteria against which consistent assessments can be carried out and comparative results analysed. Stakeholders consider that this ambiguity is likely to lead to inconsistent over-frequency response from Type A and Type B generators.

The modification proposal

The modification proposal defines the necessary compliance testing for LFSM-O by specifying the following:

- Clear measurable parameters for LFSM-O performance for Type A and B Generator Module in compliance testing.

This modification aims to align the compliance testing with Type C and D generators. This change should improve the consistency of over-frequency fault performance of Type A and B generator modules with a view to supporting network resilience.

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 Distribution Code: GC0102/DCRP – Implementation of the EU Network Code - Requirement for Generators: <https://www.ofgem.gov.uk/publications-and-updates/distribution-code-gc0102dcrp-implementation-eu-network-code-requirement-generators>

⁴ Engineering Recommendation G98 Issue 1 – Amendment 1 16 May 2018 Requirements for the connection of Fully Type Tested Micro-generators (up to and including 16 A per phase) in parallel with public Low Voltage Distribution Networks on or after 27 April 2019

⁵ Engineering Recommendation G99 Issue 1 – Amendment 1 16 May 2018 Requirements for the connection of generation equipment in parallel with public distribution networks on or after 27 April 2019

⁶ Limited Frequency Sensitivity Mode- Over Frequency

⁷ Type A, B, C & D Generators are defined in the Requirement for Generators network code: <http://eur-lex.europa.eu/eli/reg/2016/631/oj>

Further, this modification should result in Generator Modules having the capability to decrease active power during an over-frequency fault (loss of demand) and then returning to normal active power output to support network recovery.

The DCRP consulted on the proposed clarifications to EREC G99 between 2 July 2018 and 27 July 2018. One respondent to the Consultation commented that some terms relating to the minimum operating level of generation may be confusing. We note this comment, but agree with the DCRP that this issue is more relevant to the Grid Code and would encourage that this is addressed by a future Grid Code modification.

Detailed amendments to EREC G99 documentation⁸ are included within Appendices 1-3 of the Final Modification Report (FMR)⁹ submitted to us for decision.

Distribution Code Review Panel (DCRP)¹⁰ comments and licensee recommendation

At the DCRP Panel meeting on 9th August 2018, the DCRP considered that the modification proposal would better facilitate the Distribution Code objectives and as such should be submitted to the Authority for approval. The distribution network licensees recommended that the modifications set out in the FMR should be made to the Distribution Code.

Our decision

We have considered the issues raised by the modification proposal and in the FMR dated 16th August 2018. We have considered and taken into account the responses to the consultation on the modification proposal which are included in the FMR.¹¹ We have concluded that:

- implementation of the modification proposal will better facilitate the achievement of the applicable objectives of the Distribution Code¹²; and
- approving the modification proposal is consistent with our principal objective and statutory duties¹³.

Reasons for our decision

We note that the FMR sets out that this modification better facilitates Distribution Code objective (b) and we agree with this assessment. We also consider this modification better facilitates Distribution Code objective (a) and has a neutral impact on the other objectives.

(a) permit the development, maintenance, and operation of an efficient, co-ordinated, and economical system for the distribution of electricity

We consider that the additional definitions of over-frequency performance requirements for Type A and B generation power modules will support efforts towards more

⁸ Revised G99 Document contain in Appendix 3 labelled CDRP_MP_18_07_Appedix_3

⁹ Final Modification Report DCRP/MP/18/07/Final Modification Report to Authority Revision of Engineering Recommendation (EREC) G99 dated 16th August 2018

¹⁰ The DCRP is established in accordance with SLC 21 of the Electricity Distribution Licence.

¹¹ Distribution Code proposals, final reports and representations can be viewed at:

<http://www.dcode.org.uk/areas-of-work/> and <http://www.dcode.org.uk/consultations/>

¹² As set out in Standard Condition SLC 21.4 of the Electricity Distribution Licence available at:

<https://epr.ofgem.gov.uk/Content/Documents/Electricity%20Distribution%20Consolidated%20Standard%20Licence%20Conditions%20-%20Current%20Version.pdf>

¹³ The Authority's statutory duties are wider matters which the Panel and licensees must take into consideration and are largely provided for in statute, principally in this case the Electricity Act 1989.

comprehensive and consistent fault response, resulting in a more resilient network. For this reason, the changes to EREC G99 better facilitate this objective.

(b) facilitate competition in the generation and supply of electricity

This modification should make it more straightforward for new generation manufacturers to demonstrate compliance with LFSM-O by providing clear metrics for performance. We also consider that this should contribute to greater clarity on LFSM-O performance requirements for generator manufacturers seeking to enter the GB market. For these reasons we consider this modification better facilitates competition in the generation of electricity.

Decision notice

In accordance with SLC 21.11 of the Electricity Distribution Licence the Authority hereby directs that the modification to the Distribution Code, set out in the Final Modification Report to the Authority of 16^h August 2018, be made.

Peter Bingham
Chief Engineer

Signed on behalf of the Authority and authorised for that purpose