Requirements for Generators (Exhaustive Requirements)

Grid Code Amendments and Power Park Module Setting Schedule

Consultation Paper



1. Introduction

- 1.1 SONI is required to update its Grid Code to implement the Requirements for Generators network code. The process that we must follow is set out in the Grid Code constitution and in our TSO licence. This is a multi-stage process, whereby we present our proposals to the Grid Code Review Panel, then undertake a wider consultation. We then submit a report to the Utility Regulator, who will direct the modifications that are to be made.
- 1.2 SONI presented the modifications for discussion at the Grid Code Review Panel on 9th April 2020 via teleconference. Following the feedback from the panel, SONI has finalised drafts of certain sections of the Grid Code and PPM Setting Schedule with proposed amendments to cover the incorporation of Exhaustive RfG requirements into the Grid Code and PPM Setting Schedule.
- 1.3 We are now presenting these proposed amendments for wider consultation with all affected parties.
- 1.4 The proposed amended texts of the Grid Code and PPM Setting Schedule, with both clean and redlined versions of each relevant section showing all the changes made to the existing version of the Grid Code and PPM Setting Schedule, can be found in the "Grid Codes " section of SONI's website. This consultation paper sets out a high-level summary of the proposed changes to the Grid Code and PPM Setting Schedule and SONI seeks comments from relevant parties on any aspect of the proposed amendments.
- 1.5 Section 2 of this paper provides background information. Section 3 provides a high-level overview of the proposed Grid Code modifications. Section 4 provides a high-level overview of the proposed PPM Setting Schedule modifications.
- 1.6 The deadline for submission of comments is close of business on 15th June 2020 See section 5.1 for further details. We will submit a copy of all responses to the Utility Regulator alongside our report on this consultation. [If you require your response to remain confidential you should clearly state this on the coversheet of the response. We intend to publish all non-confidential responses. Please note that, in any event, all responses will be shared with the Regulatory Authorities.

2. Background and overview

2.1 On the 17th May 2016, the Commission Regulation (EU) 2016/631 establishing a network code on requirements for grid connection of generators entered into force. This Regulation establishes a network code which details the requirements for grid connection of power-generating facilities, namely synchronous power-generating modules, power park modules and offshore power park modules, to the interconnected system. It, therefore, helps to ensure fair conditions of competition in the internal electricity market, to ensure system security and the integration of renewable electricity sources, and to facilitate European Union-wide trade in electricity. This regulation also lays down the obligations for

ensuring that system operators make appropriate use of the power generating facilities' capabilities in a transparent and non-discriminatory manner to provide a level playing field throughout the European Union. The requirements of the RfG apply from three years after its publication as per Article 72 of the RfG. The requirements of RfG do not apply to existing Power Generation Modules (PGMs).

- 2.2 The Northern Ireland (NI) Grid and Distribution Code Review Panels have been running areas of joint work implementing the EU Network Codes. This work has also been carried out as part of an all-Ireland TSO/DSO joint work package.
- 2.3 SONI and NIE Networks conducted consultation from 20th December 2017 to 9th February 2018 on proposals for the general application of "non-exhaustive" technical requirements in accordance with Articles 13 28 of the Commission Regulation (EU) 2016/631 establishing a network code on requirements for grid connection of generators. The Utility Regulator approved these consulted technical requirements on 16th November 2018. SONI then consulted a Grid Coe modification to incorporate these "non-exhaustive" RfG requirements in the Grid Code on 8th July 2019. The Utility Regulator approved these Grid Code modifications on 14th February 2020.
- 2.4 Following on from this, two mandatory exhaustive sections from RfG will be incorporated to Grid Code to close out the harmonisation of Grid Code with the RfG. SONI are proposing modifications to the Grid Code to ensure compliance with the following sections of the RfG: Operational Notification Procedure (Title III Articles 29-39) and Compliance (Title IV Articles 40-59)
- 2.5 Please note, a third mandatory section of the RfG 'Derogations' (Title V Articles 60-65), will not be included in this Grid Code modification. Networks Codes Regulations place a requirement on the Utility Regulator to consult on and publish criteria for granting derogations from the provisions of the Regulations. This process was completed between December 2016 and February 2017. Details can be found on the Utility Regulator website.
- 2.6 Compliance with this derogation process is included within the licencing framework in Northern Ireland. In Ireland, the process for derogation from Grid Code forms part of the Grid Code. While some sections of SONI's Grid Code are harmonised with the EirGrid Grid Code to ensure the operation of the all-island market, the section in the EirGrid Grid Code that refers to derogations is not harmonised across the two jurisdictions..
- 2.7 The proposed Grid Code modifications outlined in this paper are intended to cover all the modifications required in the Grid Code and PPM Setting Schedule to allow the implementation of RfG requirements into the Grid Code and PPM Settings Schedule to proceed.

3. High-level overview of proposed Grid Code modifications

Introduction

3.1 The incorporation of RfG into the Grid Code has resulted in a number of changes. This consultation paper will therefore provide a high-level summary of the main Grid Code changes; consequently, respondents are encouraged to read the red-line version of the Grid Code available on the SONI website in order to review all RfG exhaustive modifications in their entirety.

Glossary and Definitions

3.2 Commissioning / Acceptance Test Panel term defined in Grid Code. This defined term is currently in use in the PPM Settings Schedule. It is proposed the operational notification procedure currently used by PPMs will be extended to cover non-PPM plant.

Planning Code

3.3 PC.D6 has been amended to capture the requirement for the TSO to provide data required by Users to carry out requested simulations.

Connection Conditions

- 3.4 CC1.4 added to capture the requirement for RfG Generating Units to notify TSO of any modifications which may impact compliance.
- 3.5 CC10.1.6 and CC10.1.8 added to detail TSO participation in testing of RfG Generating Units and the requirement to provide testing schedules and procedures.
- 3.6 CC15 has been added to detail the operational notification procedure for RfG Generating Units connecting to the Transmission System
- 3.7 CC16 has been added to detail the operational notification procedure for RfG Generating Units connecting to the Distribution System. The inclusion of a new defined term **Commissioning / Acceptance Test Panel** replicates the definition from the PPM Setting Schedule. The Commissioning /Acceptance Test Panel is made up of representatives of SONI and NIE Networks and jointly issue Operational Notifications for Distribution Connected Generating Units. Please note, the Operational Notification terminology replaced the Compliance Certification terms in the PPM Settings Schedule in a previous modification, published February 2020. This proposal extends the current operational notification procedure from PPM plant to all Generating Units connected to the distribution system.
- 3.8 CC.S2.1.12 and CC.S2.2.7 have been updated to the change in terminology from compliance certificates to operational notification as follows:

Existing Term	New Network Code Term
Energisation Notice	Energisation Operational
	Notification
Temporary Compliance Certificate	Interim Operational Notification
Final Compliance Certificate	Final Operational Notification
Restricted Compliance Certificate	Limited Operational Notification

Table 1: Mapping of existing terminology to new Network Code terminology

3.9 As this is merely a change in the terminology it is proposed that it will apply for all plant, including plant that does not need to be RfG compliant. For clarity, an existing generating unit operating under a temporary compliance certificate will be issued with a Final Operational Notification and not a Final Compliance Certificate once the compliance process has been successfully completed.

Operating Code

3.10 OC11.4 has been included to provide provision for the TSO to delegate compliance monitoring to third parties. This does not reflect the current SONI position on compliance monitoring but due to the mandatory nature of these RfG requirements it is to be added to Grid Code.

4. High-level overview of proposed PPM Setting Schedule modifications

4.1 New Operational Notification Network Code terminology was incorporated in to PPM Settings Schedule in February 2020. This modification changes the references in the PPM to the new Grid Code terminology. Minor changes in Section 1.0 Glossary of Terms and Section 5.0 Compliance Procedures

5. Next steps

- 5.1 The consultation period will run for 1 month. Users are invited to send their comments to SONI via the GridCode@soni.ltd.uk email by close of business on 15th June 2020. In the meantime, should any Users have any queries or require a meeting with SONI, they should contact SONI via GridCode@soni.ltd.uk
- 5.2 Following receipt of comments in relation to this Consultation Paper and the expiration of the period for making comments, SONI will, in accordance with paragraph 2 of Condition 16 of its Licence, send to the Northern Ireland Authority for Utility Regulation (the "Authority"):
 - 5.2.1 a report on the outcome of its review;
 - 5.2.2 the proposed revisions to the Grid Code which SONI (having regard to the outcome of such review) reasonably thinks fit for the achievement of the objectives of the Grid Code referred to in paragraph 1(b) and (c) of Condition 16 of the SONI Licence; and

- 5.2.3 Any written representations or objections from electricity undertakings or the Republic of Ireland System Operator (including any proposals by such persons for revisions to the Grid Code not accepted by SONI in the course of the review) arising during the consultation process and subsequently maintained. If you require your response to remain confidential you should clearly state this on the coversheet of the response. We intend to publish all non-confidential responses. Please note that, in any event, all responses will be shared with the Regulatory Authorities.
 - 5.3 Following the end of the consultation period and the discussions to be held with the Authority, revisions to the Grid Code will be finalised and published on the SONI website once approval has been received from the Authority.