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**By Email Only: Alan.Kennedy@soni.ltd.uk**

**Date: 3 March 2025**

**Our Ref: NET/E/JF/1171**

Dear Alan,

**RE: Demand Connection Code (DCC) Modification to the Grid Code for Approval**

We write following our receipt and consideration of SONI's Grid Code Modification Report (**the Report** – dated 27 November 2024), and SONI's Consultation Paper on the DCC Modification (dated 4 October 2023), and Greenline and Redline versions of the proposed Modifications to the Grid Code, as re-submitted by SONI to the Utility Regulator (**the Authority**) on 27 November 2024<sup>1</sup>, served on the Authority in accordance with paragraph 2 of Condition 16 of the electricity transmission licence held by SONI (the Licence).

The Report sets out SONI's proposed modifications to the Grid Code, which would incorporate articles from the European Network Code on Demand Connection, or the Demand Connection Code (**DCC**), (European Commission Regulation 2016/1388).<sup>2</sup> The Regulation contains standards for transmission connected demand or distribution facilities. SONI requests the Authority's approval to the proposed modification (**the 'DCC Modification'**), as required pursuant to paragraph 3 of Condition 16 of the Licence.

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<sup>1</sup> Note the resubmission of the Grid Code Modification Report supersedes, for purposes of consideration, the Consultation Modification Report and Greenline and Redline versions that were submitted to the authority on 5 January 2024. The background to the January 2024 submission and December 2024 re-submission is detailed later in this Decision Letter.

<sup>2</sup> [COMMISSION REGULATION \(EU\) 2016/ 1388 - of 17 August 2016 - establishing a Network Code on Demand Connection.](#)

## The Authority's Decision

Having reviewed the material provided, the Authority has decided to approve the making of the DCC Modification. By this decision letter and in accordance with paragraph 4 of Condition 16 of the Licence, the Authority directs SONI to revise the Grid Code in the manner set out in the Report. SONI must comply with this direction forthwith.

The general background, the details of the DCC Modification, and the reasons for the Authority's decision follow.

## Background

Regulation 2016/1388 entered into force on 17 August 2016. The DCC Requirements will impact new Demand connections to the Transmission system<sup>3</sup> (demand facilities, distribution facilities, or distribution systems), and new demand facilities or closed distribution systems which could provide demand side response to a system operator. Power system requirements across different synchronous areas would be harmonised, which could assist facilitate accommodating increasing amounts of renewable generation, and the implementation of smart grids.

Article 6 (4) of Regulation 2016/1388 required the submission of a proposal for requirements of general application, to the Authority for approval. SONI and NIE Networks submitted this, in accordance with Articles 12-21 and Articles 27-30 of Regulation 2016/1388, in September 2018<sup>4</sup> (the '**General Application Document**'). The General Application Document focused on the implementation of non mandatory requirements, and requirements where the exact parameters were not specified in the DCC, with the Transmission System Operator (TSO) enjoying some level of discretion in implementation.

The Authority then, via Decision Letter in April 2019, 'part-approved' the General Application Document.<sup>5</sup> The Authority's approval was with the exception to the sections

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<sup>3</sup> Note the requirements do not apply to existing demand units, distribution systems, or closed distribution systems, with the term existing applying to units connected to the transmission or distribution network two years after the entry into force of the DCC (7 September 2018).

<sup>4</sup> [DCC-Parameter-Consultation-Northern-Ireland.pdf \(eirgridgroup.com\)](#). Note that the submission of a 'proposal for requirements of general application, or the methodology used to calculate or establish them' for approval by the competent entity (in this case the Authority), is required (in Regulation 2016/1388) within two years of the entry into force of 2016/1388.

<sup>5</sup> [20190409 Approval and RfA of the NIEN and SONI DCC Methodology.pdf \(uregni.gov.uk\)](#).

of the General Application Document relating to DCC Article 28.2 (e) and (i) and Article 18.3 - pending the inclusion of technical specifications and information exchange standards that would enable communication between Demand Units, or Demand Facilities and Distribution Systems, with the TSO. The Authority specified these should be received on, or before, June 2019. There has been liaison since between SONI and the Authority in respect of the sections of the proposal that remain unapproved, including after the first submission of this modification. However part of the requested changes remain pending, with SONI planning to make the requisite changes after the updated Grid Code modification proposal has been submitted (and decision now made).

In January 2024, SONI submitted a draft modification, which aimed to incorporate the DCC Network Code, with the exception of Articles 27-30, within SONI's Grid Code. After receiving this modification proposal, the Authority communicated with SONI concerning progress made on the proposed amendments specified in the 2019 Decision Letter. In reply, SONI stated two bodies of work were being progressed to close out the DCC – considering how best to address Articles 27-30 (taking account of the approach taken by EirGrid) against the Article 28.2 requirement, and an update to the Metering Code that would incorporate reference to DCC Units, which would demonstrate the Article 18.3 requirement was being addressed. After these pieces of work were completed, SONI would then *“be in a position to re-submit an updated DCC Requirements document for approval.”*

The relevant Metering Code changes were presented to the Grid Code Review Panel (GCRP) on 26 June 2024. These changes were consulted on from 5 August – 13 September 2024, with no responses received.<sup>6</sup> The GCRP then recommended the revised DCC modification be progressed for approval.

## The DCC Modification

### Introduction

SONI states the proposed modification would ensure the Grid Code *“is inclusive of the DCC Network Code requirements,”* and *“enable SONI to efficiently discharge its obligations and to comply with legislation,”* while being *“in line with the DCC Networks Code and the UR part approved DCC requirements.”*

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<sup>6</sup> [Grid Code Consultation on Metering Code Modification | SONI Consultation Portal](#).

Regulation 2016/1388 harmonises requirements, and provides a legal framework for, the connection of (large) renewable energy production plants, and demand response facilities, including Transmission connected Demand and Distribution facilities, Distribution systems, Closed Distribution Systems, and Demand Units used to provide Demand Response Services to TSOs. The Regulation aims to assist ensuring system security and the integration of renewable energy sources and demand side system services, and create fair conditions of competition and a more efficient use of the network.

SONI has decided further assessment is required to Articles 27-30 of the DCC (Demand Response Services), concerning whether these articles would be appropriate to include in the Grid Code. SONI refers to Demand Response Services *“being an optional requirement for Demand Units, which may be a potential conflict with the mandatory nature of the Grid Code.”* SONI stated this issue would *“be addressed later, as appropriate.”*

We note the Modification Proposal Form references the part approval of the General Application document, stating that, in addition to the proposed modifications *“SONI will update our Proposals for the General Application of the DCC Requirements for Northern Ireland and re-submit to the Utilities Regulator for approval.”* No such update has been received at the time of issue of this Decision Letter, although we note that changes to the Metering Code seem to have addressed the Article 18.3 requirement in our ‘part-approval’ letter. It appears resubmission of the General Application document will happen after the Authority has made a decision on this modification proposal. It would be appreciated if SONI were able to communicate an indicative timescale by which this would be done, after receiving this Decision Letter.

## **Detail of the DCC Modification**

The proposed modification is split into the following parts:

### **Planning Code**

Addition of Planning Data Requirements and Modelling Requirements to Closed Distribution System Operators.

## Connections

Adds requirements to Demand or Distribution Facilities, including Electrical Protection Schemes, Frequency Ranges, operating ranges, short circuit current values that facilities should be capable of withstanding, thresholds within Reactive Power range, information requirements before planned or unplanned events, and maintaining steady state operation within a reactive power range specified by the TSO.

### Operating Code No.4 – Demand Control

Adding mention of capabilities for demand facilities and distribution systems to enable automatic low frequency disconnection, maintaining on load tap charger blocking.

### Operating Code No.7 Contingency Planning

Adds that the TSO will specify conditions under which Demand Facilities and Distribution Facilities are capable of reconnecting to the system, Demand Forecasting, reporting requirements for Closed Distribution System Operators or Closed Distribution Systems, or being instructed to implement demand or voltage reduction.

### Addition/Modification of Defined Terms

- Closed Distribution System
- Closed Distribution Systems Operator
- DCC Unit
- Demand Facility
- Distribution Facility
- Facility
- Large Demand Customer
- Non-DCC Unit.<sup>7</sup>

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<sup>7</sup> Defined as ‘A Large Demand Customer, Closed Distribution System or Distribution System with a signed Connection Agreement, that was connected, or contracted to be, connected to the NI System before September 2019.’

## Metering Code

Changes are made to definition of Customer<sup>8</sup> and Demand<sup>9</sup> with wording also changed to refer to ‘Generation and Demand Metering Sub Codes.’

A Sub Code 4 on Operational Metering is inserted, it specifies the practices used to monitor Large Demand Customers, Closed Distribution Systems and individual Demand Facilities, and the response of each. It also lists the measuring criteria and calibration for active and reactive power measurement. It supplements the Main Code of the Metering Code.

## Procedural history of the DCC Modification

The DCC Modification Proposal was presented to the GCRP meeting in September 2023. SONI issued a six week consultation concerning the proposed Modification in October 2023.<sup>10</sup> No responses were received.

The relevant Metering Code changes SONI had referenced in communication with the Authority were presented to the GCRP on 26 June 2024, with it being stated in the meeting that the Metering Code changes were an addendum to the January 2024 DCC Modification proposal (all the points from which have been carried forward to the December 2024 modification proposal). The Metering Code additions and changes were then consulted on from 5 August – 13 September 2024<sup>11</sup>, with no responses also received. The changes were then added to the December 2024 application.

There are therefore no written representations or objections to which the Authority must have regard to as part of its decision-making process.

SONI prepared the Report and submitted this to the Authority.

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<sup>8</sup> “A person who is supplied with or sold electricity by a Supplier.”

<sup>9</sup> “Any facility which consumers electrical energy and is connected to the Transmission System at one or more Points of Supply. Demand may comprise a Large Demand Customer, Closed Distribution System, DCC Unit or other Demand Facility, as defined in the Grid Code.”

<sup>10</sup> [SONI Consultation Paper: Demand Connection Code Modification | SONI Consultation Portal.](#)

<sup>11</sup> [Grid Code Consultation on Metering Code Modification | SONI Consultation Portal.](#)

## SONI's Rationale for the DCC Modification

SONI says approval of the proposed modification would ensure the Grid Code's accuracy, that the Grid Code is in line with the DCC Network Code, and "*provide future Demand Connections with certainty over requirements.*" SONI says that the Grid Code objectives of maintaining an efficient transmission system, facilitating competition, promoting security and efficiency of the transmission and distribution systems, and promoting efficiency in the implementation and administration of the Grid Code, would be supported by approval of the proposed modification.

## The Authority's Decision and Reasons

Having reviewed the Report and its supporting documentation, the Authority has decided to approve the DCC Modification.

We recognise that following this decision SONI will review if, and how, Articles 27-30 of the DCC Code should be incorporated into the Grid Code, and address the remaining action areas relating to the Authority's 2019 'part approval' of the General Application document. We continue to encourage SONI to do this as soon as possible.

The Authority considers that approval of the DCC Modification is in line with its electricity functions under Article 12 of the Energy (Northern Ireland) Order 2003 (the Energy Order). Under Article 12, in exercising its electricity functions, the Authority should have regard to, in relation to our principal function of protecting the interests of consumers, promoting effective competition between persons engaged in the generation, transmission, distribution, or supply of electricity, and ensuring all reasonable demands for electricity are met.

Integration of these DCC Network Code requirements into the Grid Code has the potential to facilitate the connection of more Demand Connections to the Transmission System, thereby promoting competition and interaction with distribution connectees, within a defined framework, across different forms of generation, including large renewable energy plants, and small scale renewable generators. Providing a framework for these connections has the potential, with the number of renewables on the system set to increase in response to Energy Strategy<sup>12</sup> targets, to allow a greater number of

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<sup>12</sup> [The Path to Net Zero Energy.](#)

renewables to be managed by the TSO more efficiently, contributing to a consistent and reliable supply of electricity.

By this decision letter and in accordance with paragraph 4 of Condition 16 of the Licence, the Authority directs SONI to revise the Grid Code in the manner set out in the Report.

This approval shall be effective from the date of this letter. Please proceed to publish an updated version of the Grid Code on SONI's website.

We trust this is satisfactory. Should you have any further queries please contact Jody O'Boyle.

Yours sincerely,



Jillian Ferris

**Head of Networks**  
**Duly authorised by the Authority**



