

In accordance with the requirements of Articles 4 and 7 of the Commission Regulation (EU) 2017/2196 Establishing a network code on electricity emergency and restoration

Version 2

Updated February 2023



## 1. Introduction

The Protocol on Ireland and Northern Ireland, which forms part of the Withdrawal Agreement between the UK Government and the European Union, requires SONI to comply with the Network Code on Emergency Restoration (NCER)<sup>1</sup>.

This includes an obligation to consult upon, seek Utility Regulator (UR) approval of, and publish:

- the Terms and Conditions to act as restoration service providers on a contractual basis in accordance with [Article 4] paragraph 4, (if such terms and conditions are established on a contractual basis);
- The Terms and Conditions relate to the characteristics of the service being provided as well as the possibility for aggregation and geographical location.

The UR approved the initial version of these Terms and Conditions on 11 February 2021, and that version is published on SONI's website<sup>2</sup>. The initial version of the Terms and Conditions assumed that SONI would automatically have access to sufficient system restoration services because provision of these services is mandatory for certain units under the Grid Code Connections Conditions Schedule 1.1.4, and Operating Codes 7.4.4 & 7.4.6.6.

However, it is possible that this assumption may not always hold true. Condition 29 of its TSO Licence obliges SONI to contract for the provision of such quantities and types of System Support Services at as may be appropriate to enable it to discharge its obligations under the Order, the Energy Order, the SEM Order and the Licence. This obligation includes procurement of sufficient black start services. Section OC7.4.6.8 of the Grid Code also outlines a situation where SONI might enter into specific contracts for black start services. SONI has therefore updated these Terms and Conditions to resolve this inconsistency by including a scenario where "SONI would specify conditions for aggregation and or target geographical distribution of Black Start services".

This document sets out the updated Terms and Conditions.

#### **1.1** Consultation Process

This document sets out the updates that SONI would intend to make to these Terms and Conditions. It should be read in parallel with the consultation paper<sup>3</sup> that provides the reasons behind each change to this document.

SONI will take all responses to the consultation into consideration, provide the UR with a report on the consultation exercise, update the Terms and Conditions if required and submit to UR for approval.

<sup>&</sup>lt;sup>1</sup> COMMISSION REGULATION (EU) 2017/2196 of 24 November 2017 establishing a network code on electricity emergency and restoration

<sup>&</sup>lt;sup>2</sup> SONI\_TermsandConditionsRestoration\_NorthernIreland.pdf

<sup>&</sup>lt;sup>3</sup> https://www.soni.ltd.uk/media/documents/Update-to-T+C-consultation-paper-Final.pdf

# 2. SONI Obligations Regarding Terms and Conditions related to Emergency and Restoration

### 2.1 Background

In accordance with COMMISSION REGULATION (EU) 2017/2196 of 24 November 2017 establishing a Network Code on Electricity Emergency and Restoration (NCER), the Transmission System Operators (TSO) of a member state are required to submit the proposals to the relevant regulatory authority on the following:

- the terms and conditions to act as restoration service providers on a contractual basis in accordance with [Article 4] paragraph 4, (if such terms and conditions are established on a contractual basis);
- The Terms and Conditions relate to the characteristics of the service being provided as well as the possibility for aggregation and geographical location.

Despite the UK leaving the European Union, this obligation continues to apply to SONI under the terms of Article 9 the Protocol on Ireland and Northern Ireland that is included within the Withdrawal Agreement.

#### 2.2 Relevant Network Code Articles

This paper addresses the requirements set out in four articles of the NCER. The relevant obligations are set out in turn below:

**Article 4 (1):** When applying this NCER Regulation, Member states, regulatory authorities, competent entities and system operators shall:

- (a) apply the principles of proportionality and non-discrimination;
- (b) ensure transparency;
- (c) apply the principle of optimisation between the highest overall efficiency and the lowest total costs for all parties involved;
- (d) ensure that TSOs make use of market-based mechanisms as far as is possible to ensure network security and stability;
- (e) respect technical, legal, personal safety and security constraints;
- (f) respect the responsibility assigned to the relevant TSO in order to ensure system security including as required by national legislation;
- (g) consult with relevant DSOs and take account of potential impacts on their system; and
- (h) take into consideration agreed European standards and technical specifications.

**Article 4 (2):** Each TSO shall submit the following proposals to the relevant regulatory authority in accordance with Article 37 of Directive 2009/72/EC for approval:

- (a) the terms and conditions to act as defence service providers on a contractual basis in accordance with paragraph 4;
- (b) the terms and conditions to act as restoration service providers on a contractual basis in accordance with paragraph 4;

- (e) the rules for suspension and restoration of market activities in accordance with Article 36(1);
- (f) specific rules for imbalance settlement and settlement of balancing energy in case of suspension of market activities, in accordance with Article 39(1):
- (g) the test plan in accordance with Article 43(2). Article 4(4): The terms and conditions to act as defence service provider and as restoration service provider shall be established either in the national legal framework or on a contractual basis. If established on a contractual basis, each TSO shall develop by 18 December 2018 a proposal for the relevant terms and conditions, which shall define at least:
  - (a) the characteristics of the service to be provided:
  - (b) the possibility of and conditions for aggregation; and
  - (c) for restoration service providers, the target geographical distribution of power sources with black start and island operation capabilities.

Article 7 (1): The relevant TSOs shall consult stakeholders, including the competent authorities of each Member State, on proposals subject to approval in accordance with points (a), (b), (e), (f) and (g) of Article 4(2). The consultation shall last for a period of not less than one month.

## 2.3 Wider Obligations Placed on SONI

SONI Ltd. is a licensed Transmission System Operator in Northern Ireland and, among other roles, is responsible for the operation of the electricity transmission system in Northern Ireland. As the TSO in Northern Ireland responsible for system restoration, SONI is responsible for establishing these Terms and Conditions. The Legal Framework in Northern Ireland includes

- The Electricity (Northern Ireland) Order 19924
- The Licence to participate in the Transmission of Electricity granted to SONI Ltd5.
- The Northern Ireland Grid Code (SONI Grid Code)6
- The Northern Ireland Power System Restoration Plan
- A Guide to the Power System Restoration for Northern Ireland
- The Design of the System Restoration Plan for Northern Ireland<sup>7</sup>

In Northern Ireland, for the provision of Emergency Restoration, a Black Start Station is a Power Station identified pursuant to the relevant Generator's Connection Agreement as having the ability for at least one of its Centrally Dispatched Generating Units (CDGU) or Combined Cycle Gas Turbine (CCGT) Modules to start up as provided in the SONI Grid Code reference OC7.4.4.

The SONI Grid Code further details more specific requirements around Significant Grid Users, such as Generators, DSOs, and Demand Customers. The amount, nature and location of Black Start generation are reviewed on an annual basis and updated as necessary.

Where there is a shortfall in Black Start services foreseen by SONI, it is required to consider options available to it to resolve the situation, consistent with Conditions 3 and 29 of its licence.

<sup>&</sup>lt;sup>4</sup> The Electricity (Northern Ireland) Order 1992 (legislation.gov.uk)

<sup>&</sup>lt;sup>5</sup> 2022-11-18 SONI TSO Consolidated.pdf (uregni.gov.uk)

<sup>&</sup>lt;sup>6</sup> SONI-Grid-Code-8th-October-2020.pdf

ONI\_System\_Restoration\_Plan\_NorthernIreland.pdf

## 2.4 Legal Framework for System Restoration

The list of existing Legal Framework for System Restoration are stated in section 2.3:

- The Electricity (Northern Ireland) Order 1992 is the overarching legislation which guides inter
  alia, the requirement for participants in transmission to be certified as independent with respect
  to electricity transmission. It also creates the structure for the licencing framework and sets out
  the general duties of transmission licence holders etc.
- The Licence to participate in the Transmission of Electricity requires SONI to ensure sufficient resources to enable it to carry out the Transmission System Operator business activities (condition 3). SONI is also obliged to procure the system services that it requires (including Black Start provision) from the most economic source available (Condition 29).
- Under the SONI Grid Code and the Emergency and Restoration Network Code, SONI is required
  to establish a Power System Restoration Plan (Black Start) in the event of a partial or full
  shutdown of the power system in Northern Ireland.
- The PSRP is an emergency response plan in the event of an unplanned total or partial power system failure has occurred in Northern Ireland. It sets out guidelines and procedures, and gives examples based on certain assumptions. It does not supersede any standing operating instructions or anything set out in the Safety Rules regarding operation of the transmission system and for security purposes, sections of the plan will not be disclosed.
- SONI also produces a PSRP Booklet (A Guide to Power System Restoration for Northern Ireland)
  which is a published document that is a high level summary of the PSRP although it is not an
  operational document to be used by the TSO in the event of a blackout. The booklet covers the
  communication within different parties during a black start, establishing the status of all Black
  Start Power Stations, the division of the power system and complete restoration of the power
  system.
- Under the requirements of Articles 23 and 4.5 of the Commission Regulation (EU) 2017/2196
   SONI produced a System Restoration Plan which is a design document covering the steps taken
   to produce a Power System Restoration Plan which details the actions the TSO Control
   Engineers must take to restore the power system following a total or partial black out. SONI has
   had a Restoration Plan in place for many years. In the wake of the new Network Code
   requirements on Emergency and Restoration (NCER), the <u>System Restoration Plan (SRP)</u> was
   revised as per the requirements of Commission Regulation (EU) 2017/2196 published on the
   24 November 2017.

SONI will ensure that the power system has sufficient black start services in Northern Ireland subject to Connection Condition Schedule (CC.S1.1.4) of the SONI Grid Code which relates to black start capability for generators, as well as conditions outlined in the Connection Agreements. SONI is required to assess the impact of new users connecting to the power system in Northern Ireland and the ability of these users to provide black start services. During the restoration of the Northern Ireland Power System it is split into 3 subsystems with each containing a Black Start Power Station. Currently all three NI Power Stations capable of providing Black Start are being utilised within the PSRP. New Conventional Generators [CDGU's] applying to connect to the Transmission system will be required to provide Black Start services as per Grid Code specified in the Connection Code to ensure security of the Northern Ireland Power System.

Where there is a shortfall in Black Start services foreseen by SONI, it is required to consider options available to it to resolve the situation, consistent with Conditions 3 and 29 of its licence.

Code	Guidance On	Reference
The Electricity (Northern Ireland) Order 1992	Overarching legislation	Non specific
The Licence to participate in the Transmission of Electricity granted to SONI Ltd	Availability of Resources and Undertaking of Ultimate Controller	Condition 3
	Economic Procurement of System Services	Condition 29
SONI Grid Code - Connection	Black Start Capability	CC.S1.1.1.4
Code		CC.S2.1.4
		CC.S2.2.4
SONI Grid Code - Operational Code	Black Start Procedure	OC7.4
SONI Grid Code - Operational Code	Re-Synchronisation of De- Synchronised Islands	OC7.5
SONI Grid Code - Operational Code	Black Start Testing	OC11.6
Northern Ireland Power System Restoration Plan (NI PSRP)	Specific Details and Generator procedures on emergency restoration	Entire procedure
A Guide to Power System Restoration for Northern Ireland	Generator procedures on emergency restoration	Entire procedure
The System Restoration Plan Design Document	Compliance with the requirements of Commission Regulation (EU) 2017/2196	Articles 23 and 4.5 of the Commission Regulation (EU) 2017/2196

Table 1 - Legal Framework for System Restoration

## 3. Terms and Conditions Applicable in Northern Ireland

Under normal conditions, based on the requirements of the Emergency and Restoration Code and the specific requirements for users connecting to the transmission system, the terms and conditions to act as a Restoration Service Provider are held in the existing national legal framework, as opposed to in a specific contract.

SONI does not propose any additional modifications to the existing SONI Grid Code clauses. SONI does not propose to specify conditions at this time for aggregation or target geographical distribution of Black Start services, unless there is a potential shortfall in the provision of services available to SONI.

The amount and availability of Black Start generation is, at this time, sufficient for system security, and is kept under review. However, if the availability of Black Start generation were to change materially, SONI would specify conditions for aggregation and or target geographical distribution of Black Start services. Any location specific terms and conditions would be aligned with the technical provisions set out in this document and would include commercial terms approved by the Utility Regulator on a case by case basis, in line with its statutory duties. SONI anticipates that the commercial terms would be limited to those which reflect market conditions and therefore would not be considered to be more favourable than those that might reasonably be available on the market. If appropriate, SONI or the UR might undertake benchmarking of the prices included in the contract to ensure that the payments correspond to a market price in the context of the technical circumstances pertaining at the time.

The UR will assess the costs of any contract that we propose and will only approve cost recovery of it is consistent with its duties, as set out in Article 12 of the Energy Oder (NI) 2003 and Article 8 of the Emergency and Restoration Network Code. SONI will only enter contracts where the UR has approved cost recovery.