

All interested parties
Stakeholders in Northern Ireland and beyond
and other regulatory bodies

Ref: NET/E/TH/147

Date: 1 October 2019

To whom it may concern

Request for Amendment of the Northern Ireland TSOs' proposal to meet the requirements of EU Regulation 2017/2196 Emergency Restoration

In accordance with Commission Regulation (EU) 2017/2196 of 24 November 2017 establishing a network code guideline on electricity emergency and restoration (hereafter referred to as **NC ER**), the Utility Regulator (UR) received six proposals on 19 December 2018 from the TSO (SONI) regarding Methodologies to meet the requirements of Articles 4.2(a-f) and Article 4.5.

This letter sets out the UR decision to request an amendment to SONI's proposals to meet the requirements of NC ER and outlines the next steps.

Background

Under Article 4 of the NC ER regulation the relevant TSO must produce a series of proposals for submission to the relevant regulatory authority for approval. The documents that require approval are contained in Article 4.2 as follows:

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;
- (c) the list of SGUs responsible for implementing on their installations the measures that result from mandatory requirements set out in Regulations (EU) 2016/631, (EU) 2016/1388 and (EU) 2016/1447 and/or from national legislation and the list of the measures to be implemented by these SGUs, identified by the TSOs under Art. 11(4)(c) and 23(4)(c);
- (d) the list of high priority significant grid users referred to in Articles 11(4)(d) and 23(4)(c) or the principles applied to define those and the terms and conditions for disconnecting and re-energising the high priority grid users, unless defined by the national legislation of Member States.
- (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).

The further requirements contained in Article 4.5 of the NC ER only require the regulatory authority to be notified of the developments.

The proposals that SONI submitted were referenced slightly differently than to the specific requirements in Article 4 of the NC ER. The following proposals were consulted on and subsequently submitted to the UR:

- 1) The terms and conditions to act as defence service provider and as restoration service provider for Northern Ireland
- 2) Significant Grid Users Northern Ireland
- 3) The rules for suspension and restoration of market activities for Northern Ireland and the specific rules for imbalance settlement and settlement of balancing energy in case of suspension of market activities for Northern Ireland
- 4) Design of the System Defence Plan for Northern Ireland
- 5) Design of System Restoration Plan for Northern Ireland

The consultation received two responses from Moyle Interconnector Limited ('Moyle') and Northern Ireland Renewables Industry Group (NIRIG). No objections were received in relation to the consultation with one response being out of scope.

This letter sets out our decision to request amendment to the methodologies submitted.

Decisions

The UR has reviewed the six Proposals in line with the requirements of the NC ER regulation, the wider objectives of Regulation (EC) 2017/2196 and the UR's statutory duties and obligations.

The request for amendment to the proposals is attached as an annex to this letter and constitutes the reasons for the UR's decision. In line with the attached Annex the UR hereby requests an amendment to the NC ER proposals as highlighted.

The UR requires SONI to consult on the amended proposals for a minimum of 4 weeks to ensure full transparency with all key stakeholders.

Next Steps

The TSO must make the amendments necessary to address the points set out in attached annex within four months of this decision.

If you have any queries regarding the information contained within this letter please contact jody.oboyle@uregni.gov.uk or aidan.girvan@uregni.gov.uk.

Yours sincerely



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Director of Networks

Section	Amendment Required
Alignment of Alert State Definitions	<ul style="list-style-type: none"> • The UR require SONI to map the System Operation Guideline (SOG) definitions of System States to its operations and ensure that the appropriate Grid code clauses, processes, procedures and communication systems formats (that detail interactions with market participants, neighbouring TSOs and EU counterparts) are amended to align with the SOG system states. • The UR also require that SONI ensure compliance is maintained with the requirements of Article 15 of SOG on reporting operational security indicators, ensuring that the above mapping exercise aligns with the required reporting timelines.
Hierarchy of Actions	<ul style="list-style-type: none"> • The UR requires SONI to provide a clear hierarchy of actions and conditions that outline transition from alert state to emergency state and that trigger the activation of the System Defence Plan (SDP) and the responsibilities that this places on the system defence service providers.
High Priority Significant Grid Users (SGU)	<ul style="list-style-type: none"> • According to Article 4(2) of the NC ER it requires the TSOs to submit to the Regulatory Authority the list of High Priority SGUs (Significant Grid Users). • The UR requests that SONI fully clarifies the current approach to prioritising certain significant grid users in line with the Grid Code and restoration procedures, in cooperation with NIE Networks, and also assesses the most appropriate future process for prioritising grid users (demand and generation). The UR expects that following this analysis and assessment, SONI and NIE Networks may submit to the UR a list of High Priority Significant Grid Users compliant with the requirements of Article 4.2(d), Article 11.4(d) and Article 23.4(d) of the NC ER.
Definition of an Emergency/Restoration relevant SGU	<ul style="list-style-type: none"> • The UR require SONI to provide greater detail on what constitutes a SGU (generation and demand) that is captured by the requirements of the NC ER and what the roles and responsibilities of such SGUs are during system defence (emergency) and system restoration (black out and restoration) states.
Terms and Conditions of Restoration and Defence Service Providers	<ul style="list-style-type: none"> • Insufficient detail has been provided in the submitted Terms and Conditions document and the UR request that SONI will need to provide further detail on the services it will utilise during emergency, blackout and restoration states. • SONI should ensure that the documents and procurement principles within their revised proposals are compatible with the requirements of Article 4(1). • SONI is required to submit separate documents which focuses on the Terms and Conditions for Defence Service providers and one that focuses on the Terms and Conditions for Restoration Service providers.
Rules for suspension and restoration of	<ul style="list-style-type: none"> • SONI should provide further detail on whether it has analysed the case for market suspension if a communications or market systems

market activities	<p>failure or cyber-attack leads to the loss of data transfer tools or facilities and therefore the ability to maintain secure markets is not available.</p> <ul style="list-style-type: none"> • Additional detail should be provided on the impact of not suspending market operations on the forwards or capacity markets in SONI's submission, despite the linkages that exist. • The UR requests that SONI consider the further potential impacts of their proposal (not to suspend market operations) on system operations, market incentives, market manipulation, capacity and forward markets, and resettlement actions that could arise in the event of a total blackout, a partial blackout, loss of communications, market systems outages or loss of data transfer tools and functions etc. SONI should engage with all affected parties and disclose any impact on affected parties in the amended proposals.
Rules for imbalance settlement and settlement of balancing energy following market suspension	<ul style="list-style-type: none"> • The UR requests that SONI examine the rationale behind the proposal not to develop additional rules with regard to the point above. • SONI refers to the Trading and Settlement Code (TSC) Part B for existing rules that cover market suspension during normal state. • The UR therefore requests that SONI provide detail on the existing TSC clauses and TSC changes required to align with the amended proposal.
Requirement to specify SGU measures	<ul style="list-style-type: none"> • Article 4.2(c) of the NC ER requires SONI to list measures to be implemented by the SGUs utilised by SONI in its System Defence and System Restoration processes. SONI did not include this in its submission to the UR. • The UR requests that SONI amend the document to fully incorporate all measures required of the specified SGUs and their roles and responsibilities in relation to System Defence and System Restoration.
Demand Disconnection	<ul style="list-style-type: none"> • The UR requests that SONI fully clarifies the current approach to prioritising certain significant grid users in line with Grid Code and restoration procedures, in cooperation with NIE Networks and also assesses the most appropriate future process for prioritising grid users (demand and generation).
Application for Energy Storage Devices	<ul style="list-style-type: none"> • Energy storage devices that are connected to the TSO's and DSO's networks need to be treated in accordance with Article 15.3 and 15.4 of the NC ER and the frequency thresholds relevant for energy storage units need to be outlined within the System Defence Plan. • The TSO needs to ensure that the amended version of the SGU document contains provisions that outline the implications of Article 15(a) for storage units and also that such units are informed of such requirements and that the System Defence plan lists the relevant thresholds and procedures application to energy storage. • The UR requests that SONI address the points raised and ensure that the revised proposals are in compliance with Articles 4.2, 11.4(c) and 23.4(c) of NC ER.

Design of the System Defence Plan	<ul style="list-style-type: none"> SONI are obliged under Article 4.5 to notify the UR of the System Defence Plan and provide at least the following elements of the plan in its notification: The objectives of the system defence plan, including the phenomena to be managed or the situations to be solved; The conditions triggering the activation of the measures of the system defence plan; The rationale of each measure, explaining how it contributes to the objectives of the system defence plan, and the party responsible for implementing those measures; and The deadline set out pursuant to Article 11 for the implementation of the measures. The UR notes that not all the above points have been addressed in the submission of the System Defence Plan and requests that SONI addresses each of the points above in the amended submission. SONI also needs to clarify if its interpretation of remedial actions is in line with that of the NC ER Article 18.1 and SOGL Article 21, 22 and 23, as it is not clear if the remedial actions such as those outlined in Article 22 of SOGL could be utilised in Emergency State.
Measures to be included in the system defence plan	<ul style="list-style-type: none"> SONI should further address the requirements of Articles 11.2, 11.3 and 11.4. The UR requests that SONI further considers the requirements of Article 11 and mapping of the existing measures identified by the TSO should be conducted during the revision of the SDP. The UR also requests that SONI identify instances where it does not have existing processes or measures in place to comply with NC ER requirements and provide detail that demonstrates compliance or at the very least outline a detailed timetable of work that is required to achieve compliance.
Automatic under frequency control scheme	<ul style="list-style-type: none"> SONI has referred to the Northern Ireland Grid Code sections OC 4.4 and CC 6.9, however there is no specification as to how the references within the Grid Code match the requirements of the NC ER. The UR requests that SONI are more specific with how the references in the Grid Code match the requirements of the NC ER. SONI made no reference to the requirements placed on energy storage devices as required by Article 15.3. Article 15.4 requires the frequency thresholds at which the automatic switching or disconnection of energy storage units shall occur to be established in the SDP proposal. Additionally SONI has not detailed how energy storage units can support the system during under frequency events.
Automatic Over Frequency Control Scheme	<ul style="list-style-type: none"> SONI in the SDP proposal refers to the Grid Code and commercial agreements. SONI refer to the CC5 section and Connections Conditions Schedule 1 of the NI Grid Code however nothing is specifically referenced within the NC ER proposal.

	<ul style="list-style-type: none"> • The UR requests that SONI are more specific with how the references in the Grid Code match the requirements of the NC ER. • No further details has been provided as to what the frequency thresholds are for high frequency response services on the HVDC interconnector, as required by Article 16.2. • The UR requests that SONI confirm if these are defence services and if this is the case then the terms and conditions for contracting of such services need to be captured in the Terms and Conditions documents.
Automatic Scheme against Voltage	<ul style="list-style-type: none"> • In the SDP it states that SONI has identified the system services required to operate the power system with increased levels of renewable/non-synchronous generation and that specific products have been procured and contracted to allow SONI the ability to manage system voltage, which are detailed in Appendix 7.1. • However this appendix is not visible in the submission. • The UR request that SONI provide more clarity surrounding this.
Frequency Deviation Management	<ul style="list-style-type: none"> • According to the NC ER articles 18.3 and 18.4, the TSO is entitled to establish an active power set-point for SGUs and DSPs (Defence Service Providers). • The UR requests that SONI include a required set of measures as per Article 18.
Voltage Deviation Management Procedure	<ul style="list-style-type: none"> • The UR request that SONI ensure that the detail contained within the SDP which references the NI Grid Code addresses the requirements of Article 19 of the NC ER.
Power Flow Management	<ul style="list-style-type: none"> • The UR request that SONI ensure that the detail contained within the SDP related to power flow management meets in full the requirements of Article 20 of NC ER.
Assistance for Active Power Procedure	<ul style="list-style-type: none"> • SONI referenced OC2.6.4(e) of the NI Grid Code, however it is difficult to see how this relates to the requirements within Article 11.5(b, IV) and Article 21 of the NC ER. • The UR requests that SONI re-submit a proposal with clear referencing indicating how the requirements of the grid code comply with the NC ER requirements.
Design of System Restoration Plan (SRP)	<ul style="list-style-type: none"> • In SONI's submission it stated that the current System Restoration Plan is being reviewed to strongly align with the NC ER, the UR requests a submission of this revised copy which should indicate more clearly how the requirements of the NC ER are met.
Measure to be included in the System Restoration Plan	<ul style="list-style-type: none"> • The UR requests that the revised plan meets the requirements of Article 23.4.
Re-Energisation Procedure	<ul style="list-style-type: none"> • UR requests that the updated version of the SRP should meet fully the requirements of Article 26.