

Alan Kennedy
SONI Limited
Castlereagh House
12 Manse Road
Belfast
BT6 9RT

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

Date: 22 September 2026

Our Ref: NET/E/JF/1528

Dear Alan,

RE: SPID_03_2025: Large Demand Customers Fault Ride Through (FRT) Modification

We write following our receipt and consideration of SONI's Grid Code Modification Report¹ (**the Report** – dated 27 April 2026, including Greenline and Redline versions of the proposed Modifications to the SONI Grid Code), an Information Paper prepared by EirGrid and SONI on the issue (dated November 2025), and SONI's Consultation Paper on the Large Demand Customers Grid Code Modification (dated 17 January 2026, accompanied by the three responses received to this Consultation), as submitted by SONI to the Utility Regulator (**the Authority**) on 27 April 2026, 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 place new requirements upon Large Demand Users connecting to the Transmission Network, driven by risks to system stability. SONI requests the Authority's approval to the proposed modification (**the 'FRT Modifications'**), as required pursuant to paragraph 3 of Condition 16 of the Licence.

¹ [SONI - Upcoming Proposals.](#)

The Authority's Decision

Having reviewed the material provided, the Authority has decided to approve the making of the FRT Modifications. 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 FRT Modifications, and the reasons for the Authority's decision follow.

Background

The Information Paper supplied outlines some of the challenges stemming from the increasing amount of connected data centres on the all-island system, presently concentrated in the Greater Dublin area. During transient faults on the transmission system, most data centres automatically reduce consumption and switch to their own back up supplies, to ensure continuity of service. These large demand reductions, if not recovered as quickly as generation reductions, can result in an imbalance of supply and demand, causing frequency deviations experienced across ROI and Northern Ireland. Such imbalances could be very high, as the number of data centres on the system, and the proportion of data centre demand against total system demand, increase (to levels above that seen in the UK and Europe). These events could also trigger the activation of high levels of generation tripping defence measures. Steps taken to address the issue include implementation of operational measures, including placing limits on Interconnector exports, or changing dispatch positions of generation and storage, which could have negative impacts on the operation of the Northern Ireland system. Projected levels of data centre demand, in ROI, in the very near future, would mean there is potential for high RoCoF and frequency zenith² events to occur across Ireland, without mitigating policies.

² RoCoF refers to the rate of change of frequency that will occur when there is a frequency deviation, and can act as a measure of how robust the grid is. The operational limit is plus or minus 1.0Hz/s, although some projections of future demand showed RoCoF going outside this security level. A Frequency Zenith refers to the maximum system frequency observed in the immediate aftermath of a fault event, with the operational limit at 51.0 Hz – SONI/EirGrid, *Large Demand Facility Fault Ride-Through Issue and Proposed Solutions: Information Paper Prepared by EirGrid and SONI*.

Three workshops were held by EirGrid and SONI in October 2024, October 2025 and November 2025, presenting initial plans to stakeholders for a Grid Code modification proposal that would aim to mitigate these issues.

The December 2025 meeting of the SONI Grid Code meeting raised no objections to the FRT Modifications being raised for consultation. SONI consulted upon them from 17 January 2026 to 20 February 2026.

The FRT Modifications

SONI states in the Modification Report that there are five main areas where requirements for large demand facilities will change:

- **Fault Ride Through** – Must remain connected during and after voltage dips caused by faults in accordance with a specified voltage-time profile.
- **Post Fault Active Power Recovery** – Must restore at least 90% of their pre-fault demand within 500 milliseconds after the voltage at their connection point to the transmission network recovers to 90% of nominal.
- **Rate of Change of Frequency (RoCoF)** – Facilities must remain connected during rate of change of frequency up to 1 Hz/s measured over 500ms.
- **Voltage and Frequency Ranges** – the operational limits for transmission connected demand facilities have been updated.
- **Compliance and Derogation** – This will only apply to data centre connections in ROI (EirGrid is developing procedures to manage compliance) but *“no such connections have been made to the NI transmission network and in principle SONI Grid Code Connections Conditions are not applied retrospectively.”*

SONI states that the FRT Modifications would mitigate material threats to system stability, including impacts in Northern Ireland, caused by the level of data centre connections to the all-island system, that could potentially threaten security of supply. SONI states that the FRT Modifications would facilitate future connections of data centres to the Northern Ireland system, and support objectives of the Grid Code, including the development, maintenance and operation of an efficient, coordinated and

economical transmission system, and promote the security and efficiency of the Transmission system.

Consultation Responses and Other Feedback

SONI received three responses to their consultation on the proposed modification. These raised issues concerning the retrospective application of Grid Code modifications on existing connectees, and the number of OEMs who had developed technical solutions which would enable compliance with the FRT Modifications.

SONI states in the Report that they understand OEMs have suggested that a range of options to ensure compliance would come to market in 2026 or 2027, with the earliest connection/energisation date of a data centre to the Northern Ireland system projected to not be before 2030, which would provide what SONI believe is “*sufficient time*” for equipment compliant with the FRT Modification to be sourced by Northern Ireland located data centres. SONI suggests that the “*Connection Agreement execution date could be used as a suitable check point for determining the applicability of the new technical requirements.*”

The Authority issued a call for views on the FRT Modification on our website, on the 30 April 2026.³ Two responses were received. One response was supportive of the proposed modification, on the basis it would have a positive impact on integrating renewable generation, and operating the system at higher System Non-Synchronous Penetration (SNSP) levels. The other response supported the principle of maintaining system security, but called the Authority’s attention to matters such as the scope of the measures proposed in terms of what type of technologies they may apply to, the impact of concurrent operational measures, and the timelines for delivering technical solutions to ensure compliance.

Liaison with CRU

We have liaised with CRU on the Proposed Modification. Final discussion took place in September 2026. We are aware that CRU has approved an analogue (the **Sister Modification Proposal**) of the Proposed Modification.

³ [Call for feedback launched on SONI’s proposed modifications to Grid Code | Utility Regulator.](#)

Condition 16

Condition 16 of the SONI TSO licence confirms that SONI shall not action proposed modifications (revisions) to the Grid Code in the absence of the approval of the Authority. It also provides for the Authority to make appropriate directions about revisions to the Grid Code.

Decision

Our Decision is to Approve (under Condition 16 of the SONI TSO Licence) the FRT Modifications as explained in the Report.

In making the Decision we have had regard to:

- (i) the matters referred to above
- (ii) the framework provided by Condition 16
- (iii) the making of the CRU approval on the Sister Modification Proposal.
- (iv) our statutory principal objective and general duties (as applicable) under Art 12 of the Energy (NI) Order 2003 (**Art 12**)

We note that the CRU approval of the Sister Modification Proposal is in no way determinative of our decision, which we have taken independently.

The Authority considers that approval of the Proposed Modification is aligned with its Article 12 objectives and duties, which include an obligation to have regard to the need to secure that all reasonable demands for electricity are met, and to protect the public from dangers arising from the generation and transmission of electricity.

The Report, and the Information Paper supplied, outline potential negative implications on the Northern Ireland system if the present wording of the Grid Code is maintained, which does not apply Fault Ride Through requirements to large demand users. These negative implications could affect Interconnector flows and Dispatch decisions, and even security of supply. Although we recognise the concerns raised about the timing of application, and state of development of equipment that would ensure compliance, we observe that SONI has provided reasons why these concerns would be less acute at the likely time of connection of data centres to the Northern Ireland system.

We note that the modification will not be retrospective in the strict legal sense as it does not change the legal consequences of past actions. This is because the modification applies only to future connections, with compliance being assessed at a point which no relevant applicant has yet reached.

We have had regard to concerns that applying the new requirements to applicants who have accepted a Connection Offer would have cost and timing impacts, and is undesirable in principle. SONI has stated that the circumstances in this case are exceptional. SONI has communicated to the Authority, in follow up communication of 9 June 2026, that the one data centre with an accepted offer to the Northern Ireland system, was aware of the requirements, and their connection offer makes direct reference to likely future requirements. The prospective connectee was aware SONI would request to be permitted to seek compliance with the new technical requirements, if reasonably achievable, at the point of executing the Connection Agreement. SONI has highlighted the potential detriment to system stability of letting a non compliant facility connect.

Therefore, the proposed requirements would apply to this prospective connectee at the point of execution of the connection agreement, and all other future connection offers made to transmission connected demand facilities would be required to comply with the proposed requirements, either via an updated Grid Code, or the inclusion of these requirements within the connection offer.

We also note that SONI is confident that suitable technical solutions to meet the requirements in the modifications will be available by the point that the first connectee to be affected would be ready for connection. If such solutions are not available by that time, the connectee may apply for a derogation from the new requirements using the usual process under the Grid Code.

Finally, we note that analogous requirements are already imposed on generators and other non-demand grid users. The modification will close the current gap by applying the requirements to relevant demand-side users.

In basic summary, we consider the Application as well-founded for the reasons set out in the Report to include, importantly, to facilitate the

attainment of the objectives (for the Grid Code) set out in Condition 16(1) of the Licence.

To the extent that might be considered necessary the Authority hereby directs SONI (in accordance with paragraph 4 of Condition 16 of the SONI TSO Licence) to revise the Grid Code in the manner reflected in the Proposed Modification.

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

This Decision will be entered on the electricity register and published in the normal way.

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