



Large Demand Facility Fault Ride Through

Informal Stakeholder Review

20 October 2025



1. Request for Informal Stakeholder Review

SONI is the electricity Transmission System Operator (TSO) for Northern Ireland. We are licensed and regulated by the Utility Regulator. SONI do not generate or sell electricity, rather our expert engineers plan and operate the electricity transmission system to ensure that power can flow from where it is generated to where it is needed.

EirGrid and SONI are responsible for balancing electricity supply and demand every minute of the day from national control centres, while also strategically planning for Ireland and Northern Ireland's long-term electricity needs.

EirGrid and SONI carry out regular modelling and analysis, and present potential solutions to key issues relevant to our work, so that we can continue to ensure the secure and resilient operation of the evolving electricity system.

This notification relates to the issue of grid faults in the all-island power system, in response to which large energy users automatically reduce their consumption from the grid and switch to their own, temporary, back-up sources of supply. The impact of these large demand reductions is an imbalance of supply and demand which results in a frequency deviation that is experienced by the all-island power system.

This is an issue being observed by other Transmission System Operators, particularly in the USA, and there is a growing level of focus among system operators worldwide, including the UK's National Energy System Operator (NESO) on addressing it.

SONI's priority remains to ensure system stability, power quality and security of supply for all users of the Northern Ireland power system. At present, Northern Ireland does not have any large transmission connected customers, however, SONI do have large energy user connection activity in Northern Ireland, including two deemed effective applications for data centres, therefore it is prudent for SONI to proactively manage future risks.

As per the Joint Grid Code Review Panel Meeting in September 2025, SONI are notifying industry that we are seeking stakeholder views on EirGrid and SONI's joint technical information paper "**Large Demand Facility Fault Ride-Through Issue and Proposed Solutions**".

To support stakeholder understanding and engagement, SONI is keen to make an information paper available to affected parties. This document outlines:

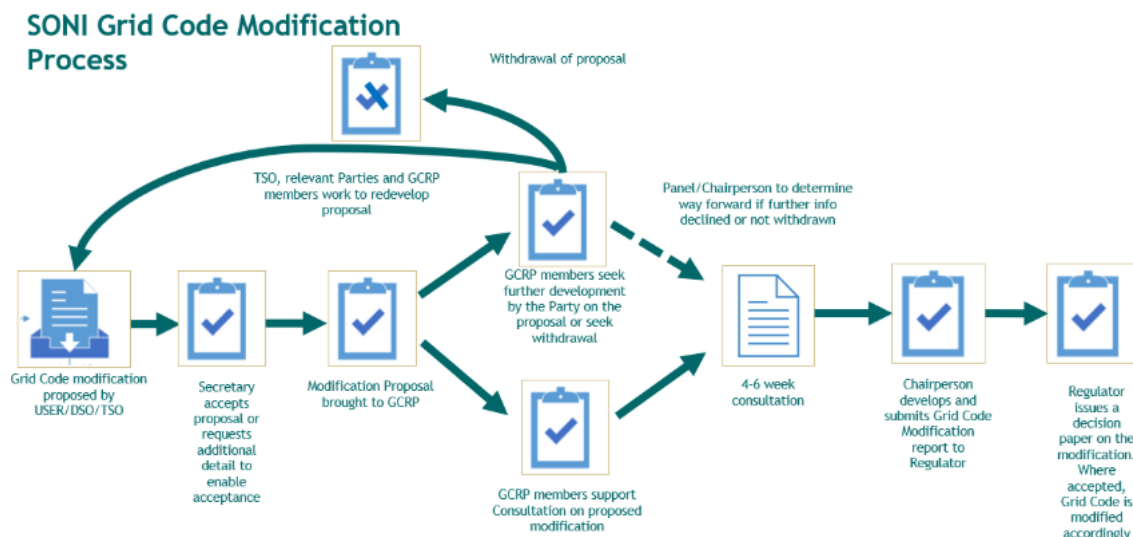
- The nature and scale of the Fault Ride Through issue within the Single Electricity Market.
- Examples of recent system events in Ireland and further afield.
- Proposed operational and technical mitigations.

- The rationale for introducing new Grid Code requirements for demand facilities.

The technical information paper is intended for informal engagement with affected parties, i.e. those parties seeking to develop a transmission demand connection; including data centre operators, and other large energy user developers.

The purpose of the information paper is to provide an early opportunity to engage in advance of SONI's proposed grid-code modification which is currently scheduled for December 2025. This informal engagement is in addition to the standard SONI Grid-code modification process which is explained below:

The Grid Code modification process that applies in SONI is well established and governed by the [SONI Grid Code Governance for Modifications](#) and SONI's [Grid Code Constitution](#). A brief overview of the process is provided in graphical format below.



SONI are committed to working with industry, government and regulators to ensure the grid-code remains up to date and that we can progress long-term solutions that ensure system stability, power quality and security of supply for all users of the Northern Ireland power system.

Next Steps

- **Informal engagement phase:** Affected stakeholders are invited to review the information paper and provide comment should they wish to do so. While comments at this stage will not be considered as consultation submissions (see

‘Formal Public Consultation’ in next steps section below), they will help shape SONI’s thinking ahead of a formal grid code modification proposal.

- SONI will email affected parties including deemed effective application holders, directly with the information paper.
 - SONI will issue an email through the grid code review panel circulation list with the information paper.
 - If you are someone seeking to develop a large energy user project which requires a transmission grid connection, please contact connections@soni.ltd.uk for further information.
- **Grid Code Modification Proposal:** SONI will consider insights from this engagement to develop a Grid Code modification proposal for consideration.
 - **Formal Public Consultation:** All stakeholders will have the opportunity to make submissions during the grid code modification public consultation phase. These submissions will be considered as part of the regulatory process.

Note: Feedback received during the informal phase is valuable but not binding. The formal SONI grid code consultation is the appropriate channel for submissions to be officially considered.