Minutes of the Joint Grid Code Review Panel (JGCRP) 03 December 2025

Approved

13 January 2026

EirGrid SONI

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Revision History						
Revision	Date	Description	Originator	Reviewer	Checker	Approver
R0	17/12/2025	Draft Minutes	EirGrid & SONI	JGCRP Members	EirGrid & SONI	JGCRP Members
R1	13/01/2026	Approved Minutes	EirGrid & SONI	JGCRP Members	EirGrid & SONI	JGCRP Members
R2						

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1. EirGrid Member Attendance

Member	Present	Representing
Miriam Ryan	Y	Chairperson
Melissa Dunne	Y	TSO
Michael Coone	Y	TSO
Mark Lucas	N	CCGT
Jennifer Geraghty	Y	Thermal Generators
Michael McCormack	Y	Thermal Generators
Mostafa Bakhtvar	Y	Fast Acting Peaking Generators
Open Position		Synchronous Renewable Generators
William Carr	Y	Pumped Storage Generators (PSG)
Peter King	Y	Non-Synchronous Renewable Generators
Position Open		Non-Synchronous Renewable Generators
Thomas O'Sullivan Gavin McClean	Y Y	Demand Customers
Paul Troughton	Y	Demand Side Units (DSU)
Patrick Liddy alternate for Vlastik Buzek	Y	Demand Side Units (DSU)
Tom Birney	Y	Energy Storage Units (ESPS)
Tony Hearne	Y	Distribution System Operator (DSO)
Jamie Burke	Y	Public Electricity Supplier (PES)
Open Position		Independent Electricity Suppliers
Deirdre O'Leary	Y	CRU
Thomas Germaine Jessica Hutton	N Y	Transmission Asset Owner Licensee (TAO)
Matt O'Connor	Y	Market Operator (MO)
		Other TSO
Jonathan Ruddy	Y	Interconnector Owners
Daniel Moloney	Y	Solar Generators
TBC		Offshore Non-Synchronous Generators
Utkarsh Agarwal	Y	Synchronous Condenser Units (SCU)

Other Attendees:

Name	Present	Role
Saif Aldahmor	Y	Presenter from EirGrid
Arlene Chawke	Y	TSO Secretary
Kenneth Conway	Y	Observer representing CRU
Niamh Day	Y	Observer from CRU
Cian Fitzgerald	Y	Observer from Energia
Jeff Kelliher	Y	Observer representing CRU
Eoin Kennedy	Y	Observer from EirGrid
Robert Koch	Y	Presenter from EirGrid
Rioch Magan	Y	Observer from Aughinish Alumina Ltd.
Ciaran Maguire	Y	Presenter from EirGrid
Muhammad Saad Khan	Y	Observer from EirGrid
Nickey Mulvihill	Y	Observer from Aughinish Alumina Ltd.
Gill Nolan	Y	Alternate EirGrid Chairperson
Aideen O'Hagan	Y	Observer from EirGrid
Karl O'Keeffe	Y	Observer from SSE
Simon Tweed	Y	Observer from EirGrid

2. SONI Member Attendance

Attendance: Name	Present	Role
Alan Kennedy (AK)	Y	SONI GCRP Chairperson
Peter McGreevy (PmcG)	Y	SONI GCRP Secretary
Jack McGoldrick (JMcG)	Y	TSO - Member
Sam Matthews	Y	TSO - Member
Sarah Friedel (SF)	Y	TSO- Member
Brian Mongan (BM)	Y	Aggregator Member
Matt O'Kane	N	Aggregator Member - Alternative
Stephen Hemphill (SH)	N	Interconnector Owners
Sam Gibson (SG)	Y	Interconnector Owners Alternate
Stephen Brownlees (SB)	N	Generators - UKP
William HIll	Y	Generators Alternate - UKP
Keith O'Connor	N	Generators - ESB
Joseph Coyle	N	Generators Alternate - ESB

Jody O'Boyle (JO)	Y	Utility Regulator (UR)
Ben Harris (BH)	Y	Utility Regulator Alternate
Breanna McLaughlin (BMcL)	Y	Utility Regulator Observer
Niall Maguire (NM)	Y	RES- Large Scale
Andy McCrea (AMC)	N	RES- Large Scale Alternate
Krishna Anaparthi (KA)	Y	Electricity Storage
Carole Malone	Y	NIE Networks
Leonard Taggart	N	NIE Networks
Cian Fitzgerald	Y	Energy Supplier – Energia - Observer
Dan McQuaid	N	Market Operator- Member
Mustafa Alshamali	Y	Observer from SONI
David McGowan	Y	Observer from SONI

3. Introduction to JGCRP Meeting & Approval of Previous Minutes

a) Alan Kennedy (JGCRP & SONI Chairperson) welcomed all members, observers, and presenters to the meeting. He set a meeting etiquette and all members agreed to it.

b) No comments were received to the previous meeting minutes (25 September 2025), and they were automatically deemed approved. All action items were deemed closed.

4. Discussion Item – Power System Resilience

a) Robert Koch (TSO) presented the discussion item on Power System Resilience – see slide numbers 4 to 11.

b) No comments were received from meeting participants.

5. PROPOSAL - SPID_03_2025/MPID345 Fault Ride Through, RoCoF and Post Fault Active Power Recovery for Demand Facilities

a) Saif Aldahmor (EirGrid) presented slides on Modification Proposal SPID_03_2025 (SONI)/MPID345 (EirGrid) to panel members - see slide numbers 12 to 31.

b) Following a query from Paul Troughton (DSU), Saif highlighted that a three-phase voltage dip would be lower than a single-phase voltage dip and would propagate across the island, and so is more likely to cause the demand reduction response. Eoin Kennedy (EirGrid) also highlighted that despite different protection systems used by different companies, 3-phase faults have more of a severe impact in comparison to 1-phase faults.

c) Saif Aldahmor (EirGrid) noted that the TSOs are developing a compliance and derogation framework. The TSOs are aiming to present this to industry, at a webinar, week commencing 12 January 2026. 19 January 2026 has been set as the deadline date for comment from industry before the TSOs issue their recommendations to the Regulators.

d) David McGowan (SONI) provided the next steps for the SONI modification process – see slide 30. The opportunity for industry to attend the webinar 12 January, fits into the timeframe for the SONI Grid Code Modification Process.

e) Following a query from William Carr (Pumped Storage) on the Modification Timeline (slide 14) the TSOs agreed to change the 'Timeline' to note that up to today's meeting this item was only ever presented as a discussion item. Today is the first time it has been presented as a modification proposal to the joint panel. **ACTION: The TSOs agreed with William's observation and agreed to change the slides in advance of publication.** POST MEETING NOTE: This action is complete.

f) William Carr (Pumped Storage) also queried if the system modelling addressed other potential mitigations, such as increased response and inertia to the system. Saif Aldahmor (EirGrid) indicated that, given the level of demand reduction compared to the total system demand, and the nature of the power system, studies show a loss of 17 – 39% of demand for an N-1 scenario. The TSOs are undertaking further analysis of the impact of additional inertia and reserves but are strongly of the view that these may only serve as part mitigations to support fault ride through / recovery capability. We are not aware of any major power system globally that is able to withstand the large imbalances indicated in the analysis that would occur if this issue were not addressed by fault ride through / recovery capability.

g) Simon Tweed (EirGrid) noted that the TSOs continue to look at more system services such as faster frequency response from batteries and more inertia being available to support the system, and these supports are needed, but they are not sufficient on their own to manage the potential demand loss. The TSOs do not see system service grid solutions solving this problem on their own. The TSOs are procuring additional low carbon inertia services and designing new frequency reserve products to help support the system, but the magnitude of this issue means that the proposed requirements for demand facilities are fundamental to resolving the issue.

h) William Carr (Pumped Storage) queried the data displayed in slide 18 – is the loss of an interconnector at full export uniquely impactful to trigger a 39% demand loss, or is that just the tip of the spear and other events could be equally impactful?

i) Saif Aldahmor (EirGrid) indicated that such a scenario is one of the most critical, as a fault close to EWIC would result in loss of the HVDC export, with the voltage dip from the fault also resulting in a high loss of demand, as most of the relevant demand is connected in Dublin. However, many transmission faults, especially a fault on the transmission network around Dublin, will cause a significant reduction in demand. This level of demand reduction will increase as future non FRT capable demand increases.

j) Gavin McClean (Demand Customers) echoed William's feedback on the timelines and reiterated that up to now this topic has been a discussion item only, and that industry only received the final technical details of the modification proposal in September 2025. Gavin requested more time to review the proposed modification as presented today and also added that a technical solution is not currently available. Gavin queried the value in putting requirements into the Grid Code when the technology is not available to allow Demand Facilities to comply with the requirements. Gavin stated that one OEM has stated that they may have a possible solution, but this is not a one size fits all. The other issue with the proposed modification is that the requirements are retrospectively applied.

k) Alan Kennedy (SONI JGCRP Chairperson) explained that SONI will not be applying this requirement retrospectively, noting that SONI do not currently have any transmission-connected customers.

l) Miriam Ryan (EirGrid GCRP Chairperson) further added that retrospection is not unique to this modification proposal and applies to all EirGrid Grid Code modifications. Miriam further noted that, given the level of issues that the system is currently experiencing with Demand Facilities, retrospective application of the proposed Grid Code requirements is critical to system security.

m) Gavin McClean (Demand Customers) pointed out that EirGrid is the outlier in comparison to other TSOs from around the world. Gavin stated that the application of this requirement will lead to mass non-compliance given that only one OEM is close to a solution, but this fix cannot be applied to all facilities.

n) Saif Aldahmor (EirGrid) commented that engagement with industry showed that demand facilities must transfer to their backup systems to protect sensitive IT equipment from voltage dips longer than 20 ms, as indicated by the ITIC standard. This feedback highlighted the need for demand to be restored only after fault clearance, leading to the introduction of a post-fault active power recovery requirement. The TSOs took that feedback on board and proposed that Demand Facilities return at least 90% of their pre-fault Demand within 500 milliseconds of the Transmission System Voltage recovering to 90% of the nominal Voltage.

o) Gavin McClean (Demand Customers) noted that the 500 ms recovery time is the requirement that is difficult to comply with, and that this requirement was only received in September. Discussions with OEMs before September would not have included this proposed requirement.

p) Eoin Kennedy (EirGrid) reiterated that industry feedback was received during the bilateral engagement, and this feedback is acknowledged in the presentation slides. Further engagement and development of the compliance and derogation framework will also incorporate industry feedback.

q) Gavin McClean (Demand Customers) queried the status of the compliance and derogation framework, indicating that the proposed Grid Code modification should not be recommended without it.

r) Simon Tweed (EirGrid) responded that the Grid Code modification has been under development for some time, and is an urgent system need. The development of the compliance and derogation framework is underway, and the TSOs' recommendations to the Regulators will include the framework as a supporting document. The TSOs will host a

webinar in January to discuss the proposed framework with industry ahead of submission of the recommendation paper and accompanying framework to the Regulators.

s) Miriam Ryan (EirGrid GCRP Chairperson) noted that the overall derogation process is detailed in the Grid Codes. The compliance and derogation framework will have to adhere to the governance as described in the Grid Codes and will align with those overarching principles.

t) Rioch Magan (Aughinish Alumina) queried the merit of pushing ahead with the proposed modification when all parties will need to seek a derogation, expressing that any site with conventional motors will require a derogation, and at least 90% active power recovery within 500 ms could harm grid stability and is neither desirable nor achievable due to protection constraints.

u) Simon Tweed (EirGrid) noted that the TSOs have engaged with many customers on the proposed requirements and both SONI and EirGrid understand the challenges ahead. The TSOs have weighed compliance with this requirement against the security of the power system. The TSOs recognise the importance of the compliance and derogation framework in understanding a customer's feasible path to compliance, and the importance of submitting the proposed framework to the CRU together with the modification recommendation. But due to the urgency in addressing this issue, the TSOs' priority is progressing the modification proposal at this JGCRP meeting.

v) Thomas O'Sullivan (Demand Customers) expressed support for comments from Gavin McClean and Rioch Magan. Thomas noted, speaking as a consumer of electricity, that running a refinery is part of the economy, and it is vitally important that Ireland has a world class grid to support the economy and future growth and to attract new business. Thomas supports EirGrid and SONI in highlighting this issue and developing solutions. However, Thomas further noted that based on the evidence, the proposed Grid Code requirements are not technically achievable and so are not a rational way to progress.

w) Miriam Ryan (EirGrid GCRP Chairperson) noted that EirGrid will ask members if they recommend or do not recommend the proposed modification. Miriam reiterated that this issue is of critical importance to system security, requiring the TSOs to progress with recommending the modification to the Regulators for approval, but reassured members that their views and concerns will be captured in the recommendation papers.

x) Thomas O'Sullivan (Demand Customers) expressed that other options merit consideration, and that although the intention is to gather recommendations, there are other potential solutions to be explored. Thomas also noted that the TSOs should consider the reputational damage associated with non-compliance.

y) Miriam Ryan (EirGrid GCRP Chairperson) noted that the TSOs work very closely with existing customers to achieve compliance and SONI and EirGrid are committed to continue working with all users to mitigate non-compliance.

z) Alan Kennedy (SONI JGCRP Chairperson) clarified that from a SONI process point of view, the proposed modification will go to public consultation, and all consultation responses will be passed to the UR.

aa) William Carr (Pumped Storage) queried the retrospective requirement of the EirGrid Grid Code, asking if the TSOs can choose not to retrospectively apply the proposed requirements.

bb) Miriam Ryan (EirGrid GCRP Chairperson) noted that the European Connection Codes are not retrospectively applied with exception, if a user modernises or refurbishes existing plant. Melissa Dunne (TSO) also noted that retrospective application of the EirGrid Grid Code is captured in a user's connection agreement.

cc) William Carr (Pumped Storage) noted that the original proposed modification for discussion has been split into two modification proposals, one for the DCC requirements and one for the Non-DCC requirements, and that applying the Non-DCC requirements will not require a CBA. William queried the CRU on whether it would have all the necessary information to make a decision if the modification proposal has been split up, and with no requirement for a CBA for the Non-DCC requirements.

dd) Deirdre O'Leary (CRU) noted that, in terms of CRU decision making, the CRU have made it clear that EirGrid will need to submit both a modification recommendation paper and an accompanying compliance and derogation framework in tandem, as it would be difficult to make a decision without both submissions. The CRU require full sight and understanding of those details before a decision can be made.

ee) Jamie Burke (PES) added that this requirement will drive costs for the TSOs too for a solution that may or may not work. Jamie recommended that the TSOs add a cost comparison analysis to the recommendation paper.

ff) Simon Tweed (EirGrid) explained that the primary driver for the proposed requirements is to maintain power system security. If this issue is not resolved, system security is at risk. Currently, mitigation measures are impacting the market, such as needing to restrict exports on Interconnectors to reduce the risk to the system. It is infrequent that the market is driving exports in recent times, so those costs may not be huge at the minute, but that could change in future. But the main driver is system security, not cost.

gg) Patrick Liddy (DSUs) agreed that energy users need a reliable and secure grid, but echoed support for William's comments on the retrospective application of the requirements. Patrick queried if there an argument for grouping all users affected into existing, contracted and not yet started to support the TSOs in achieving the necessary compliance quickly.

hh) Saif Aldahmor (EirGrid) noted that the TSOs have presented on the results of system studies, and that this issue resulted in the TSOs deciding not to increase the SNSP limit from 75% to 80%. The issue relates to the significant impact of the reduction of customer demand on grid stability, particularly concerning RoCoF (Rate of Change of Frequency), frequency limits, and overall security margins. Increases in demand that does not meet the fault ride through / power recovery requirements will further impact on the security of the grid. The system requires operational means, system services and enhanced capability from demand facilities to resolve this issue.

ii) Gill Nolan (EirGrid) also noted that connection agreements already far exceed 800 MW of demand.

jj) Eoin Kennedy (EirGrid) stated that the mitigation measures in place, such as over-frequency generation shedding (e.g. tripping of wind farms), can only get us so far in terms of managing the issue.

kk) Alan Kennedy (SONI JGCRP Chairperson) expressed that the material discussion should remain within the JGCRP meeting, and the panel recommendation process will take place at the individual GCRP meetings.

ll) Thomas O'Sullivan (Demand Customers) supports the TSOs in providing a secure grid but cannot support implementing a modification that provides a false sense of security. Thomas supports Patrick's suggestion of grouping Demand Facilities into existing and contracted.

mm) Simon Tweed (EirGrid) ended the discussion by reiterating the need for urgency in addressing this issue, and that the TSOs intend to recommend the modification proposal to the Regulators for approval. Simon noted that the modification proposal will set the standard. There has been extensive work done across industry in Ireland and abroad. This is a global issue, and OEMs are actively working on solutions to fix the problem. The TSOs recognise different customer types have different challenges and will support individual customer engagement. The TSOs are actively working on the design of the compliance and derogation framework and OEM solutions are under development.

6. Regulatory Updates

a) Niamh Day (CRU) provided an update on behalf of the CRU, see slide 34.
b) Paul Troughton (DSU) queried the status of a DSU market modification. It was noted that this is out of the scope of the Grid Code.
c) Miriam Ryan (EirGrid GCRP Chairperson) informed the panel that EirGrid will be issuing several recommendation papers to the CRU before the Christmas holidays. Following a query from William Carr (Pumped Storage) on MPID 339 FASS recommendation paper, Miriam confirmed that this will be issued to the CRU before the Christmas holidays.
d) Ben Harris (UR) provided an update on behalf of the UR. One application for modification – currently processing 3 and hoping to send one in near future with 2 after that.

7. AOB

a) Following a request from William Carr (Pumped Storage) to extend the review period of the meeting minutes, Miriam Ryan (EirGrid GCRP Chairperson) noted that the review period had already been extended to take account of the Christmas holiday period, and to allow sufficient time to adhere to the timelines for the next webinar on the Derogation and Compliance Framework.