

Public

Special Grid Code Review Panel

Thursday 17 July 2025

Online Meeting via Teams

Public

WELCOME

Purpose of Panel & Duties of Panel Members

The **Panel** shall be the standing body to carry out the **functions** referred to in the Governance Rules **(GR3.1.1)**

Functions (GR.3.2)

The **Panel** shall endeavour at all time to operate:

- In an **efficient, economical and expeditious manner**, taking account of the complexity, importance and urgency of particular Modification Proposals; and
- With a view to ensuring that the **Grid Code** facilitates **achievement of the Grid Code Objectives**.

Duties of Panel Members & Alternates (GR.3.3)

1. Shall act **impartially** and in accordance with the requirements of the **Grid Code**; and
2. Shall not have any **conflicts of interest**.

Shall not be representative of, and shall act without undue regard to the particular interests of the persons or body of persons by whom he/she was appointed as Panel Member and any Related Person from time to time.

New Urgent Modification

GC0183: Generator and
Interconnector Availability During
a Severe Space Weather Event

Helen Newman, NESO

Garth Graham, SSE Generation

GC0183 Critical Friend Feedback

Code Administrator comments	Amendments made by the Proposer
<p>Timeline provided</p> <p>Requested clarity on sections of the Grid Code to be amended</p> <p>Requested clarity on interactions with other codes</p> <p>Provided feedback on justification for urgency</p>	<p>Proposer accepted all amendments made by the Code Administrator</p>

Background – Risk and Mitigation

- The Sun experiences 11-year cycles of solar activity; the peak of this is called Solar Maximum. The Solar Maximum of the current cycle was reached in 2025.
- During Solar Maximum and the following 2–3 years, solar storms that lead to GICs* are statistically more likely.
- GICs can potentially lead to damage to some assets across the electricity system, depending on location, geology and asset design.
- A Space Weather Industry Protocol (SWIP) is currently being drafted by NESO and stakeholders.
- The SWIP workgroup has recognised a risk that some Generators and Interconnectors may potentially alter the operational status of some assets. For example, some assets may cease operations whilst others might reduce output or flow.
- This change in operational status could lead to a shortfall in electricity supply or instability of the GB electricity system.
- To mitigate this risk, NESO will need to understand the intended positions of Interconnectors and Generators in the event of a severe space weather event to ensure the system can be effectively managed in real-time.



***Geomagnetically induced currents (GICs)** are electrical currents induced at the Earth's surface by rapid changes in the geomagnetic field caused by space weather events.

The Proposal

Following initial discussions with industry at the SWIP workgroup, we identified that there are 2 possible routes:

Physical Notification (PN)

Area of code: [BC1.4.2 (a) (2) Day Ahead Submissions]

Purpose: To obligate generators and interconnectors to notify NESO of their position within X number of hours of a space weather Notification being received.



Outage Declaration

Area of code: TBC

Purpose: In the event of a space weather Notification being issued by NESO, Generators and Interconnectors will issue an Outage Declaration to NESO setting out their anticipated availability during and after a severe space weather event.



The Proposal

We now believe that the following option may be more suitable, and we have therefore based the Proposal on this option only.

Outage Declaration

Make an amendment to the Grid Code to obligate Generators and Interconnectors to issue a 'Space Weather Outage Declaration' to NESO (and advise the market, via their REMIT (Regulation for Energy Markets Integrity and Transparency) / information submissions), setting out their anticipated availability during and after a severe space weather event, following a space weather Notification being issued by NESO.

NESO issues a **Space Weather Prepare Notification** to control centres and ESIOs and posts the Notification on the BMRS

Generators and Interconnectors issue a **Space Weather Outage Declaration** to NESO within 3 hours of receiving the Space Weather Prepare Notification

NESO has visibility of the operational status of key assets in the event of severe space weather, allowing for effective operation of the electricity system

Proposer's Justification vs Ofgem's Urgency Criteria

The Proposer recommends that this modification should be treated as an Urgent Modification proposal and be assessed by a Workgroup.

Ofgem's Urgency Criteria	Proposer's Justification
a) A significant commercial impact on parties, consumers or other stakeholder(s).	N/A
b) A significant impact on the safety and security of the electricity and/or gas systems.	<p>There is a risk to security of supply of the electricity system due to the current position at the peak of the solar cycle being reached in 2025.</p> <p>The Space Weather Industry Protocol Workgroup have recently identified a risk to system stability due to the potential for Generators and Interconnectors to alter the operational status of some assets in the energy market based on the risk to their assets. This could lead to system instability or a shortfall in supply.</p> <p>As it stands, under the current information processes, there may be insufficient time for NESO to be aware and thus manage any changes in Generators and Interconnector planned availability during an anticipated or actual severe space weather event.</p>
c) A party to be in breach of any relevant legal requirements	N/A

GC0183 Proposed Urgent Timeline

Milestone	Date	Milestone	Date
Modification presented to Panel	17 July 2025	Code Administrator Consultation (1 calendar month due to likely impact to Regulated Sections)	19 September 2025 to 20 October 2025
Workgroup Nominations (8 Business Days)	17 July 2025 to 29 July 2025	Draft Final Modification Report (DFMR) issued to Panel (2 Business Days)	27 October 2025
Ofgem grant Urgency	29 July 2025 (5pm)	Panel undertake DFMR recommendation vote	30 October 2025
Workgroup 1 (assuming Ofgem have granted Urgency) Workgroup 2 Workgroup 3	05 August 2025 11 August 2025 18 August 2025	Final Modification Report issued to Panel to check votes recorded correctly	30 October 2025
Workgroup Consultation (7 Business Days)	19 August 2025 to 29 August 2025	Final Modification Report issued to Ofgem	30 October 2025
Workgroup 4 Workgroup 5	04 September 2025 10 September 2025	Ofgem decision	TBC – requested as soon as possible
Workgroup report issued to Panel (2 Business Days)	15 September 2025	Implementation Date	10 Business Days after implementation
Panel sign off that Workgroup Report has met its Terms of Reference	18 September 2025 (Special Panel required)		

GC0183 Asks of Panel

- **AGREE** that this Modification has a clearly defined defect and scope
- **AGREE** that this Modification should proceed to Workgroup
- **NOTE** that there appear to be impacts on the Electricity Balancing Regulation (EBR) Article 18 terms and conditions held within the Grid Code
- **VOTE** whether or not to recommend Urgency
- **AGREE** timetable for Urgency
- **AGREE** Workgroup Terms of Reference
- **NOTE** next steps:
 - Under Grid Code Section GR.23.4, we will now consult the Authority as to whether this Modification is an Urgent Grid Code Modification Proposal
 - Letter to be sent to Ofgem 17 July 2025
 - Ofgem approval of Urgent treatment sought by 5pm on 29 July 2025
 - 1st Workgroup to be held 05 August 2025

Prioritisation Stack

Mod Number	Previous Priority No:	Priority No	Title
GC0139	1	1	Enhanced Planning Data Exchange to Facilitate Whole System Planning
GC0155	2	2	Clarification of Fault Ride Through Technical Requirements
GC0176	3	3	Introduction of Demand Control Rotation Protocol within Operating Code 6 of the Grid Code
GC0178	4	4	Temporary Overvoltage – Specification of Limits and Clarification of Obligations
GC0168	5	5	Submission of Electro Magnetic Transient (EMT) Models
GC0174	6	6	Removal of obligation to provide EU Transparency Availability Data as specified in OC2.4.7
GC0169	7	7	Material changes identified from Grid Code Modification GC0136 and Consistency of requirements between the Connection Conditions and European Connection Conditions
GC0173	7	7	Consistency of Technical and Compliance Requirements between GB and European Users
GC0164	8	8	Simplification of Operating Code No.2
GC0103	9	9	The introduction of harmonised Applicable Electrical Standards in GB to ensure compliance with the EU Connection Codes
GC0179	10	N/A	Removal of Balancing Code No.4 from the Grid Code
GC0140	11	10	Grid Code Sandbox: enabling derogation from certain obligations to support small-scale trials of innovative propositions

Activities ahead of the next Panel Meeting

Papers Day	16 July 2025
Panel Meeting	24 July 2025 Faraday House

Close

Penny Garner

Acting Independent Chair,
Grid Code Review Panel