



Code Administrator Meeting Summary

Workgroup Meeting 1: Generator and Interconnector Availability

During a Severe Space Weather Event

Date: 05 August 2025

Contact Details

Chair: Claire Goult, Claire.goult@neso.energy

Proposer: Helen Newman, <u>Helen.newman@neso.energy</u>

Key areas of discussion

The aim of Workgroup 1 was to review the objectives and timeline, review the Terms of Reference, deliver the Proposer's presentation, review the draft Legal Text, and discuss any cross-code impacts.

Code Modification Process Overview

The Chair provided an overview of the Code Modification process, outlining the Workgroup's role throughout the process. The Chair highlighted the importance of Workgroup Members' input in shaping the final proposal and outlined a consultation process that includes multiple opportunities for industry feedback. The Chair also detailed the responsibilities of Workgroup Members, including communication protocols, respectful participation, and the voting process, which involves both Workgroup alternative votes and final Workgroup votes.

Objectives and Timeline

The Chair outlined the objectives and timeline for the Workgroup, emphasising the urgency status of the modification and highlighting the need for the Workgroup to gather and review all necessary information promptly.

A Workgroup Member suggested a 10-day implementation period to allow obligated parties to prepare for the new obligations following Ofgem's decision. The NESO representative confirmed they will feed this back internally and will advise the Workgroup on the outcome of internal investigations into IT system impacts and any resulting implications for the implementation timescale.





Proposer's Presentation

The Proposer delivered a presentation on GC0183. They provided background information on space weather, explained solar cycles, the risks of geomagnetically induced currents (GICs), and the need for a space weather industry protocol. The Proposer outlined the two proposed solutions (physical notifications and outage declarations) and explained why the outage declaration route was chosen. The Proposer detailed the proposal for an output usable declaration, explaining the process of issuing space weather notifications and the obligations of generators and interconnectors. The proposal aims to give NESO visibility of the operational status of key assets during space weather events, allowing for effective real-time management of the electricity system.

Generator & Interconnector Briefing

A Workgroup Member provided an in-depth explanation of space weather, its impact on the electricity system, and the risk factors involved. They explained that space weather refers to environmental conditions in space influenced by the Sun and solar wind, including phenomena like solar flares and coronal mass ejections, which can affect satellites and power grids. The Workgroup Member described how geomagnetic storms induce electric fields in the Earth's surface, driving electrical currents through conductive structures, known as geomagnetically induced currents (GICs), which can degrade or destroy transformers.

They also outlined several risk factors for GICs, including latitude, geology, proximity to the coast, network configuration, transformer characteristics, and connections to vulnerable nodes on the transmission network. They referred to the UK Government's National Risk Register, highlighting the likelihood and impact of space weather events compared to other risks, with the impact of space weather considered substantial. They also outlined potential impacts of space weather events, including regional power disruption, loss of GPS / telecommunications, aviation disruption, increased radiation doses at high altitudes, and possible disruption to ground-based digital components. The Workgroup Member noted that recovery from space weather impacts could take several months, especially if transformers need to be replaced in remote or coastal areas, highlighting the importance of preparedness and resilience planning.

Legal Text

The Workgroup reviewed the draft Legal Text for GC0183, which included the proposed changes and their implications. The following Sections of the Grid Code are impacted by GC0183:

- Glossary and Definitions
- Operating Code 2 (OC2)





• Operating Code 7 (OC7)

Workgroup Members agreed to review and revise the Legal Text offline, particularly focusing on terminology, defined terms, and interconnector-related provisions, and share the updated version at a following Workgroup meeting.

Terms of Reference

The Workgroup reviewed and agreed the Terms of Reference (ToR) for GC0183. The Chair took an action to clarify that the issue referred to in ToR (f) is specifically "space weather" and take the revised wording back to the Grid Code Panel for agreement.

Cross Code Impacts

The Workgroup discussed potential cross code impacts, including the STC and BSC, and the need for further discussions with Elexon.

Next Steps

The next Workgroup meeting will be held on 11 August 2025.

Actions

For the full action log, click here.

Action Number	Workgroup Raised	Owner	Action	Due by	Status
1	WG1	GG / AJ / GL / HN	Offline discussion to be arranged to make amendments to the draft legal text following WG1 comments.	WG2	Open
2	WG1	CG	Draft the Workgroup Consultation for members to review prior to WG2.	07 August	Open
3	WG1	CG	Create a GC0183 Collaboration Space for Workgroup members to review the documents.	07 August	Open





4 WG1 CG Clarify the role of a Workgroup WG2 Open
Observer

Attendees

Name	Initial	Company	Role
Claire Goult	CG	NESO	Chair
Ren Walker	RW	NESO	Technical Secretary
Helen Newman	HN	NESO	Proposer
Allan Holton	АН	SP Energy Networks	Workgroup Member
Andrew Larkins	AL	Sygensys	Observer
Antony Johnson	AJ	NESO	NESO SME
Charles Dolan	CD	EDF Energy – Hinckley Point C	Workgroup Member
Garth Graham	GG	SSE Generation	Workgroup Member
Graeme Vincent	GV	SP Energy Networks	Workgroup Member
Graham Lear	GL	NESO	NESO SME
Kevin Anaafi-Brown	KAB	Eleclink Limited	Alternate
Kevin Cowan	KC	EDF (Existing Nuclear Generation)	Workgroup Member
Maria Lopez	ML	NESO	Observer
Ross McFarlane	RMF	Northern Powergrid	Workgroup Member
Tim Ellingham	TE	RWE	Workgroup Member

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