



# Code Administrator Meeting Summary

Workgroup Meeting 2: Generator and Interconnector Availability During a Severe Space Weather Event

Date: 11 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 Chair confirmed that the aim of Workgroup 2 was to review the draft Legal Text, review the draft Workgroup Consultation, consider Specific Consultation questions, review the Actions, and discuss the Terms of Reference.

## **Workgroup Responsibilities and Membership**

The Chair clarified the role of Observers, stating that their participation in discussions is valued but only Workgroup Members can access collaboration spaces, participate in decision-making processes, and vote. They acknowledged that the status of Observers across different Workgroups may vary, so committed to addressing this with Code Governance colleagues. The Chair suggested that Observers who wish to make more substantive contributions and to assist in meeting quoracy, should consider becoming full Workgroup Members.

# Scope of modification and BMRS notifications

The Chair reiterated a question raised by an Observer after Workgroup I on whether the scope of this modification is too narrow, as it appears to relate to geomagnetic induced currents (GIC) but does not appear to consider the impact of space weather on communications or GPS systems used for timing. They further asked whether BMRS notifications would be appropriate for the highest level of non-GIC space weather events. The Chair, NESO SME, and a Workgroup member confirmed that the modification is focused on requesting information, rather than addressing the consequences of the information received, and the known impacts on the electricity system, rather than all space weather related phenomena. They confirmed that they believe the scope of the modification is appropriate.





#### **Draft Legal Text**

The Chair and NESO SMEs led the Workgroup through the key amendments made to the draft Legal Text. The substantive amendments discussed by the Workgroup were:

#### **Glossary and Definitions**

#### **Space Weather Advisory**

A Workgroup member questioned whether the reference to EISOs should have been removed from the definition. The NESO SME confirmed that EISOs were removed, as they are included in the Grid Code definition of Control Point which refers to the Control Centre of an EISO. The Workgroup agreed to record this point in the Workgroup Consultation to ensure transparency and consistency.

#### **Space Weather Cessation Notification**

A Workgroup member asked for clarification on what information is received from the Met Office and whether "documentation" referred to the protocol or the notification itself. The NESO SME and a Workgroup member confirmed that the Company would act on Met Office advice using their international event rankings (G1-G5), and that including this clarifies the source of information for notifications. They suggested that references to the Met Office should remain in the definition. The term "conclude" was changed to "cancellation" for clarity. The Workgroup agreed that the current wording is appropriate and the rationale for including Met Office references should be explained in the Workgroup Consultation.

#### **Space Weather Output Usable Declaration**

A Workgroup member noted that the current definition refers to "...Generator, Interconnector and Restoration Contractor..." but where a Generator and Restoration Contractor are people, an Interconnector is an apparatus. They suggested using the term "Interconnector Owner". The NESO SME confirmed that "Interconnector Owner" was appropriate and would be included in the definition.

An Interconnector Workgroup member asked whether this modification is for a planned outage or an unplanned force majeure event, as there is an important distinction for Interconnector Owners and their levels of availability. The NESO SME confirmed that it should be considered a planned outage in preparation for an unplanned event. A Workgroup member noted that the purpose of the modification is to notify NESO of the plan to act as a result of a space weather event, there's no obligation to confirm what a GB TO (or RTE for a GB-France interconnector) intend to do with the substation connected to the interconnector.





#### **Space Weather Prepare Notification**

A Workgroup member asked whether there could be a document that showed the timeline and sequence of events of these notifications and if there will be any notifications issued in the 12 hours to 20 minutes of the event. A Workgroup member explained that the "Space Weather Advisory" serves as a flexible tool for NESO to communicate information in that window, without requiring direct action from parties, while notifications like "Space Weather Prepare Notification" do require action. The Workgroup also discussed ensuring consistency in terminology (e.g. "Interconnector Owner" vs. "EISO") across the legal text, with the Workgroup agreeing on the term "Interconnector Owner." The Workgroup agreed that a visual flow diagram would help clarify the sequence and timing of notifications and declarations. This Action was assigned to the Proposer.

#### Operating Code 2(OC2)

#### OC2.4.1.2.1 d)

A Workgroup member noted the removal of "EISO" and use of "Interconnector Owner". The NESO SME confirmed that instances of "EISO" and "Interconnector Owner" would be updated across all Legal Texts for consistency.

#### OC2.5.1 a)

An amendment to the Legal Text was made following discussions after Workgroup 1.

#### OC2.5.1 b) and OC2.5.2 b)

The Workgroup discussed whether nuclear generators should have explicit allowance in the proposal to deviate from their declared output if required for nuclear safety, without being in breach of compliance of the proposal. The NESO SME stressed the importance of advanced notice to plan system stability, preferring to know if units might come off rather than being surprised by sudden trips.

The Workgroup proposed adding wording "Unless there is a risk of damage to plant or personnel, in which case The Company shall be notified without undue delay" to both to both OC2.5.1 b) and OC2.5.2 b). The Nuclear Generation Workgroup member agreed to review this with nuclear colleagues, while the Proposer will discuss the issue with senior colleagues to ensure any such change does not invalidate the overall proposal.

#### OC2.5.2 a)

A Workgroup member raised concerns about whether generators could feasibly respond with Space Weather Output Usable Declaration within a 20–60 minute window before a space weather event occurs. Another Workgroup member clarified that the requirement is to respond "without undue delay" and in cases where there is little warning, it may take longer, but the intent is to provide information as soon as possible. The Workgroup agreed to clarify this in the Workgroup Consultation to address industry concerns.



# NESO National Energy System Operator

#### **Public**

#### OC2.5.4

The Workgroup noted that the reference to "Space Weather Output Usable Declaration" was incorrect and should be "Space Weather Outcome Statement". The Legal Text was updated accordingly.

#### Operating Code 7 (OC7)

#### OC7.4.9 b)

The Chair noted that the reference to "EISO" had been removed.

#### **Workgroup Consultation**

The Chair noted that most typographical and formatting suggestions left by Workgroup Members in the Workgroup Consultation have been accepted and that only substantive issues will be addressed.

#### **Draft Legal Text discussions**

The Chair asked the Workgroup if they wanted to include detailed Legal Text discussions in a table, embedded into the main body of the Workgroup Consultation as discussion points, or as a separate document in the Annex. The NESO SME suggested embedding the discussion points into the main body of the Consultation to avoid duplication of the draft Legal Text which will already be annexed. The Workgroup agreed to this suggestion.

The Workgroup discussed whether outcome statements should be required for all notification types or only for "expected" notifications, questioning if impacts experienced during "possible" notifications should also trigger outcome statements. The Workgroup agreed that "expected" notifications will be issued when an event has occurred, and outcome statements are tied to these. This process will be clarified in the flow diagram already assigned to the Proposer.

#### **Specific Workgroup Consultation Questions**

The Workgroup discussed and agreed to the inclusion of several Specific Workgroup Consultation questions:

- 7. Do you believe that the proposed legal drafting currently developed for OC2 is best included in OC2 or BC1 bearing in mind the Space Weather timescales involved?
- 8. Do you believe it is appropriate to have a consequential modification in the STC to ensure TOs declare their asset capability during a Space Weather event in similar way to Network





# Public Operators?

9. As currently drafted, there is no change to BC1, however, do you believe the changes as proposed in OC2 would have an impact on EBR Article 18 terms and conditions?

#### What is the impact of this change?

A Workgroup member suggested clarifying that Transmission Owners (TOs) are not obligated to issue a "Space Weather Output Usable Declaration" to NESO, as they have existing routes to do so. The Workgroup confirmed that TOs are not directly obligated by the Grid Code, but may be affected by future STC changes, and agreed to add relevant footnotes for clarification.

An Interconnector Workgroup member raised concerns that the proposal appears to require market participants to notify the market (via REMIT) of their intentions to change output before actually making the decision to do so. They noted that under REMIT, notifications are only required when a change in position is certain, so the proposal would go beyond REMIT obligations.

A Workgroup member clarified that the intent of the proposal is for parties to notify NESO and the market of their intended actions if a second notification (Space Weather Possible Notification) is issued, to ensure transparency and avoid NESO having information that the wider market does not. This is to prevent any risk of insider information and to support market stability. Another Workgroup member supported this statement, emphasising that the proposal's effectiveness relies on NESO and the market being informed of intended actions in advance, even if those actions are conditional on a future event.

The Workgroup agreed to clarify the issue in the Workgroup Consultation and that the flow diagram should illustrate the notification process and obligations under both the proposal and REMIT. The Chair encouraged the Interconnector Workgroup member to raise these concerns in their Workgroup Consultation response.

#### Implementation of notices

An Interconnector Workgroup member raised concerns about the practicalities of implementing notifications, especially regarding system changes and the timeline for market participants. The NESO SME explained that while the Legal Text definitions would be in the Workgroup Consultation, the format of the BMRS notifications would not. They suggested the Interconnector Workgroup member should refer to the current BMRS notifications for reference.

# Terms of Reference (ToR)





The Chair noted that revised wording for ToR (f) had been discussed and proposed by Grid Code Review Panel (GCRP) members and might contradict the wording previously agreed by the Workgroup. Workgroup members noted that the MOD and IET work (referenced in the revised ToR (f)) is not directly relevant to this proposal, as the proposal is focused on information provision to NESO and not on the technical analysis behind asset declarations. The Chair proposed that the Workgroup's preferred version of the ToR should be presented to the GCRP at the next Panel meeting, noting that further discussion during that Panel meeting may be required to reach agreement.

#### **Actions**

The Chair confirmed that Actions 1-4 had been addressed during the Workgroup meeting, so would be closed. New Actions raised during the Workgroup meeting will be circulated as soon as possible.

#### **Timeline**

A Workgroup member suggested that to allow for an earlier Workgroup Consultation publication and a longer response period, the Workgroup could consider finalising the draft Workgroup Consultation by the next day and agreeing among the Workgroup by email, with a short meeting later in the week if needed. The Chair confirmed that they would need to consider the internal deadlines required for a thorough Legal Text review before committing to bringing the Workgroup Consultation publication date forward. The Workgroup agreed to keep to the original timescales for Workgroup 3 but to consider holding a short meeting later in the week if required.

### **Next Steps**

The Chair confirmed that they will circulate the updated Legal Text and the Workgroup Consultation for further review and comments. Actions from the meeting will be sent to the respective owners for confirmation of wording and responsibilities. The Chair will update the Workgroup on any changes to the timescale for issuing the Workgroup Consultation following progress made by the Proposer and NESO Legal.

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# **Actions**

For the full action log, click <u>here.</u>

Action Number	Workgroup	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	Closed
2	WG1	CG	Draft the Workgroup Consultation for members to review prior to WG2.	07 August	Closed
3	WG1	CG	Create a GC0183 Collaboration Space for Workgroup members to review the documents.	07 August	Closed
4	WGI	CG	Clarify the role of a Workgroup Observer.	WG2	Closed
5	WG2	CG	Send updated legal text (G&D, OC2, OC7) and Workgroup consultation for final review.	TBC	Open
6	WG2	AJ / GL	NESO Legal Team to review draft legal text.	TBC	Open
7	WG2	HN	Create a flow diagram to demonstrate the time sequence of the notifications.	TBC	Open
8	WG2	HN / JZH	Discuss KC comments on legal text sections OC2 2.5.1 b) and OC2 2.5.2 b).	TBC	Open
9	WG2	CG	Update ToR and take slide to GCRP.	TBC	Open

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# **Attendees**

Name	Initial	Company	Role
Claire Goult	CG	NESO	Chair
Matthew Larreta	ML	NESO	Technical Secretary
Helen Newman	HN	NESO	Proposer
Ali Gill	AG	EDF (Existing Nuclear Generation)	Alternate
Andrew Urquhart	AU	SSE Generation	Alternate
Antony Johnson	AJ	NESO	NESO SME
Calum Beckwith	СВ	VPI	Observer
Charles Dolan	CD	EDF Energy – Hinckley Point C	Workgroup Member
Garth Graham	GG	SSE Generation	Workgroup Member
Graeme Vincent	GV	SP Energy Networks	Alternate
Graham Lear	GL	NESO	NESO SME
Kevin Cowan	KC	EDF (Existing Nuclear Generation)	Workgroup Member
Maria Lopez	ML	NESO	Observer
Patrick Murphy	PM	Eleclink Limited	Workgroup Member
Ross McFarlane	RMF	Northern Powergrid	Workgroup Member
Tim Ellingham	TE	RWE	Workgroup Member

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