

Public

# Meeting Summary

## Grid Code Development Forum – 02 April 2025

<b>Date:</b>	02/04/2025	<b>Location:</b>	MS Teams
<b>Start:</b>	09:00	<b>End:</b>	11:00

## Participants

Attendee	Company	Attendee	Company
Claire Newton	NESO (Chair)	Alan Creighton	Northern Powergrid
Frank Kasibante	NESO (Tech Sec)	Nina Harrington	NGED
Antony Johnson	NESO	Lisa Waters	Waters Wye Associates Ltd
Stephen Sommerville	Aurora Power Consulting (Presenter)	Maryam Begum	Cummins
Garry Cotter	Orsted (Presenter)	Gail Wilson	Ofgem
Andrew Larkins	Sygensys (Presenter)	Eibhlin Norquoy	Community Energy Scotland
Nnaemeka Anyiam	NESO	Simon Sheridan	NESO
Hazem Karbouj	NESO	Catia Gomes	NESO Code Administrator
Jay Chandarana	NESO	Nicola Barberis Negra	Orsted
Emily Ward	NESO	Obinna Unigwe	Field Energy
Bukky Daniel	EDF Renewables	David Monkhouse	National Grid
Duncan Drummond	Inchcape Wind	Teri Puddefoot	NESO Code Administrator
John Fradley	NESO	Ross Strachan	EDF Renewables
Maria Lopez	NESO	Paul Youngman	Drax

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Phillip Addison	EDF Renewables	Rajiv Jha	NESO
Ragnhild Aker Nordeng	Equinor	Mike Kay	P2 Analysis
Lizzie Timmins	NESO Code Administrator	Mohit Prajapati	EDF Renewables
Andrew Hemus	NESO Code Administrator	James Wilson	PSC Consulting
Grant McCormick	Cero Generation	Yun Lei	NESO
Tim Ellingham	RWE	Moldir Orymbekova	Our Footprints
Graeme Vincent	SPEN	Sean Gauton	Uniper
Benjamin Marshall	SSE	Martin Cahill	NESO
Graham Lear	NESO	Jamie Morgan-Wormald	NESO
Martin Aten	Uniper	Nathanael Sims	TNEI Group
Evan Stuber	CSE Storage	Chibuike Ilomuanya	SSE

## Agenda and slides

A link to the Agenda and Presentations from the April GCDF can be found [here](#)

## GCDF

Please note: These notes are produced as an accompaniment to the forum recording and slide pack presented and provide highlights only of discussion themes and possible next steps.

Meeting Opening – Claire Newton (GCDF Chair) & Frank Kasibante (GCDF Tech Sec), NESO

The meeting was opened with an overview of the agenda items that will be covered.

## Presentation: 95% Grid Code Compliance Tests – Garry Cotter (Orsted)

The Orsted representative discussed the 95% compliance tests requirement for the Hornsea 4 offshore Wind Farm. He explained the general testing requirements and the dilemma faced due to increased turbine sizes. He proposed modifying the Grid Code text to allow tests with one turbine out of service.

Regarding testing requirements, he highlighted the areas in the Grid Code, including noting specific sections, which describe different tests for reactive power capability, voltage control, and frequency control.

He noted an issue faced due to increased turbine sizes, such as blade size and hub height, which have led to higher MW ratings of individual turbines. This increase has resulted in more Power Park Modules (PPMs) having one turbine that makes up more than 5% of the total PPM capacity, complicating the 95% compliance tests.

He proposed modifying the Grid Code text to allow the 95% compliance test to be performed with one turbine out of service, suggesting that the requirement be adjusted to 95% of installed capacity or with one power park unit within the power park module out of service, whichever is less.

He also provided a hypothetical example of a wind farm with a transmission entry capacity of 1.8 GW, consisting of two offshore platforms, two balancing mechanism units, and four Power Park Modules per platform, each controlling 225 MW. He explained the test conditions and the impact of having one turbine out of service.

### Discussion themes / Feedback

A stakeholder wondered whether the 95% requirement came from ENC or RfG. NESO representatives think this requirement originated in GB but would need to confirm.

Stakeholders supported Orsted's proposal, suggesting further discussions with compliance colleagues and considering the history of the requirement noting that it makes even less sense to have the existing requirement since, increasingly, wind farms incorporate hardware in the loop in PPM.

Stakeholder suggested that Orsted could go ahead and raise the modification.

A stakeholder advised that it seemed appropriate to look at this in the round, including batteries and storage (co-located sites) as Industry would not want anything to be missed.

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A NESO representative suggested to Orsted to discuss the issue with NESO's generator and engineering compliance team and floated the possibility of a subgroup of GCDF of interested parties to progress a Modification.

A Grid Code Administrator representative noted that they could meet with Orsted offline to discuss the different Governance routes available to them.

## **Presentation: Evolving Grid Code Requirements, Grid Code vs Guidance Notes, Sub Synchronoss Oscillations –Steve Sommerville, (AURORA POWER CONSULTING)**

The Aurora Power Consulting Representative raised concerns about the impact of changing Grid Code requirements on long-duration projects. He emphasized the need for a formal way to manage changes and highlighted issues with EMT simulations.

The presenter:

- Raised concerns about the impact of changing Grid Code requirements on long-duration projects, noting that the Grid Code, guidance notes, and technical requirements can change over the project lifecycle, leading to technical and financial implications.
- Highlighted issues with EMT simulations, which are a frequent cause of delay in compliance studies. He suggested that a separate group might be needed to address the complexities of EMT simulations.
- Emphasised the need for a formal way to manage changes in Grid Code requirements over the contract lifecycle to ensure clarity on technical requirements and avoid delays and additional costs.
- Expressed concerns about the use of guidance notes to introduce additional requirements and the ambiguity in their wording. He suggested involving stakeholders in drafting guidance notes and ensuring clarity.
- Expressed concerns about the ambiguity in the wording of guidance notes, particularly in relation to GC0141, which makes it difficult to interpret the requirements. He suggested that guidance notes should be given a similar level of scrutiny as Grid Code Mods and suggested involving stakeholders in drafting guidance notes to ensure clarity and avoid misinterpretation.
- Discussed the significant impact of the SSO (Sub Synchronous Oscillation) requirements on project timelines and costs, in particular the number of studies required. He highlighted the need for a formal consultation and better understanding of the consequences, e.g., substantial delays in project completion and financial burdens for developers and NESO.
- Emphasised the need for a formal consultation on the SSO requirements to ensure that all stakeholders understand the consequences and can provide input on the proposed changes.

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### Discussion themes / Feedback

A NESO representative responded to Aurora's concerns, explaining that SSO studies can be automated and completed within a few weeks. He acknowledged the feedback, which is being considered and incorporated in the next version of the guidance note, which is expected to be released around June 2025. The SSO studies can be automated, which significantly reduces the time required to complete them. He mentioned that some customers have successfully submitted results within two to three weeks.

In terms of the governance of guidance notes, one stakeholder noted an approach being used in GC0168 to put forward the guidance as an Electrical Standard, which means it will undergo more scrutiny. The same stakeholder noted that they had completed SSO studies over the course of a weekend, using automation.

A stakeholder queried which version of the guidance they should follow for in-flight projects. The NESO representative suggested to use the current version of the guidance note, until the updated version is published. The GCDf chair suggested we use this forum to update attendees when the revised guidance note has been published, due to the level of interest.

In terms of versions of guidance note, a NESO representative noted that the underlying Grid Code requirements have not changed. The guidance notes are an interpretation of how the requirements can be demonstrated. If users have alternative views on conducting the studies, they are welcome to do so after consultation with NESO.

## **Presentation: The Grid Code development process and achieving CP2030 – Andrew Larkins, Sygensys**

The Sygensys representative provided his views on the Grid Code development process, questioning its ability to meet the needs of users and consumers. He highlighted issues with timescales, stakeholder involvement, and data considerations.

The presenter:

- Raised concerns about the timescales of the Grid Code development process, noting that it is seen as slow, which can discourage involvement from all but the most committed stakeholders.
  - Highlighted issues with stakeholder involvement, suggesting that the process is dominated by large incumbents and does not adequately consider the impact on smaller players and new entrants.
  - Discussed the challenges related to data considerations in the Grid Code development process, emphasising the need for detailed work and unbiased analysis to support modifications.
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- Questioned how the Grid Code development process represents the voice of consumers and the impact on the end consumer, suggesting that there is a need for a stronger focus on consumer interests.

### Discussion themes / Feedback

#### **Discussion**

The Chair and a Code Governance representative responded to Sygensys' points, noting that the Code Administrator is independent from NESO and explaining the Governance process, prioritisation of modifications, and efforts to improve stakeholder engagement. They acknowledged the challenges and welcomed further feedback. In response to some of the challenges raised and discussed, the Code Governance representative suggested a standing agenda item at future GCDF meetings with a Code Governance update (e.g. in-flight Mods, Mods open for Workgroup nominations and consultations, expected decision dates of Mods with Ofgem).

Stakeholder discussion included:

- The difficulty in keeping track of workgroups and Code updates from NESO – noting there is an appetite to get involved, but it can be challenging to keep up with developments (see point above about a Code Governance update at future meetings).
- The benefits of in-person focussed meetings on specific topics, with relevant parties in the room – with an example given of a recent HND (Holistic Network Design) meeting, as an effective way to maximise input from interested parties in a targeted timeframe.
- Views on NESO as Code Manager (Energy Code Reform), examples of other Codes (the BSC) being a good example of describing the Mod process on the website, and the relative speed of critical friend checks across Codes.
- That open governance is not a barrier to Mod progression, but rather NESO's internal prioritisation of resource on Mods.

Points raised by the Code Governance representative included:

- Currently the highest priority Grid Code Modification is GC0139 (which is not a NESO modification); modification priority is determined by Panel members.
  - For opposing views within Workgroups, the process allows for Workgroup Alternative Requests, which are voted on by Workgroup members and can become Workgroup Alternative Grid Code modifications.
  - Where stakeholder groups have not been represented on Workgroups, the Code Administrator has reached out to them to invite them to Workgroups, provide them with information and to respond to Workgroup and Code Administrator Consultations.
  - Citizens Advice were invited to become a Panel member on the Grid Code Review Panel however declined to do so for the 01 January 2025 – 31 December 2026 term of office.
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- The process also provides for an urgent modification route – 2 modifications raised in 2023 that took less than 6 months for example.
- Meetings need to and are designed to be accessible to all, but smaller parties cannot always resource longer meetings.

Syngensys thanked NESO for the chance to raise this in the group and provoke this discussion.

## AOB

### GC0178 on Temporary Overvoltage

A NESO representative introduced GC0178, a modification on temporary over voltage (TOV), and invited [Workgroup nominations](#), which will close on 01 May 2025. He explained the need for specific limits and clarified requirements for plant performance and compliance.

There was also a discussion on how to access the Outlook invitations for GCDF.

The Chair thanked the attendees and presenters for their contributions and closed the meeting.

The next GCDF will be held on the **07 May 2025** with the **01 May 2025 being the deadline for agenda items and presentations**.

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