

Public

GC0155

Workgroup 21, 25 March 2025

Online Meeting via Teams

WELCOME

Meeting Recording

Public

Expectations of a Workgroup Member

Contribute to the discussion

Be respectful of each other's opinions

Language and Conduct to be consistent with the values of equality and diversity

Do not share commercially sensitive information

Be prepared - Review Papers and Reports ahead of meetings

Complete actions in a timely manner

Keep to agreed scope

Email communications to/cc'ing the .box email

Your Roles

Help refine/develop the solution(s)

Bring forward alternatives as early as possible

Vote on whether or not to proceed with requests for Alternatives

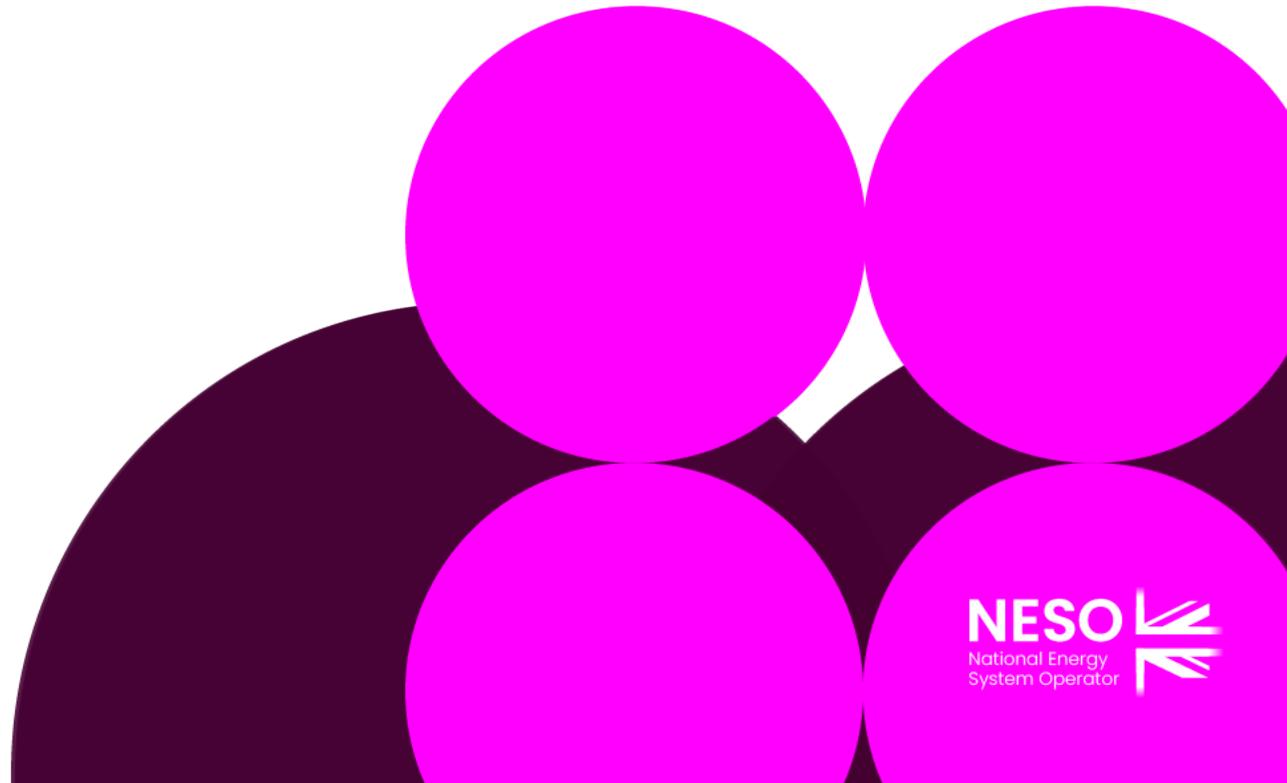
Vote on whether the solution(s) better facilitate the Code Objectives

Agenda

Topics to be discussed	Lead
Welcome	Chair
Objectives and Timeline <ul style="list-style-type: none">Action Log	Chair
Update on GC0155/GC0178	Proposer
Any Other Business	Chair
Next Steps	Chair

Objectives and Timeline

Teri Puddefoot – ESO Code
Administrator



Action log

Action number	WG raised	Owner	Action	Comment	Due by	Status
45	WG10	Ofgem	Ofgem Check with Legal if CRM should be put in place if applying retrospectively.	Chair to chase email.	WG20	Open
49	WG12	All	Consider TOV graph, what palatable limits might be.	Requires further elaboration.	WG20	Open
61	WG15	All	Workgroup members to provide feedback on why BCA doesn't work and how they feel they can better comply.	To be provided during WG discussions and documented within the WG consultation document.	WG20	Open
65	WG16	All	Provide challenge and provide feedback on risks re Operation During Temporary Overvoltages section.	To be provided during WG discussions and documented within the WG consultation document. Include how the system is currently managed. WG need more data and when TOV occur and how this and Frequency is managed.	WG20	Open
66	WG16	All	Provide feedback on the Issues with the current requirements and validate that these points are correct.	To be provided during WG discussions and documented within the WG consultation document.	WG20	Open

Action log

Action number	WG raised	Owner	Action	Comment	Due by	Status
67	WG18	BA/AP	Consider the technical feasibility of different magnitudes and the overall impact this would have on the stability of the system.	Ongoing discussions and considerations for consultant review.	WG20	Open
68	WG18	All	Have further discussions with manufacturers with everyone present or obtain written documents from them to understand if TGN288/ RFG-2 figures can be met or if other levels need to be considered. Also carry out some case studies on specific plant to understand how the solution may be implemented in reality.	BA is currently conversing with a generator on conceptual ideas with further conversations to be arranged.	WG20	Open
70	WG19	BA	Include worked examples in the consultation document.		WG20	Open

Update on GC0155/GC0178

Teri Puddefoot – Chair

Bieshoy Awad – Proposer

Terms of Reference – GC0155

Workgroup Term of Reference	Location in Workgroup Report (to be completed at Workgroup Report stage)
a) Implementation and costs;	
b) Review draft legal text should it have been provided. If legal text is not submitted within the Grid Code Modification Proposal the Workgroup should be instructed to assist in the developing of the legal text; and	
c) Consider whether any further Industry experts or stakeholders should be invited to participate within the Workgroup to ensure that all potentially affected stakeholders have the opportunity to be represented in the Workgroup. Demonstrate what has been done to cover this clearly in the report	
d) Consider EBR implications	
<p>e) Changes and clarifications to the existing Grid Code Fault Ride Through (FRT) requirements specifically but not limited to consideration of the following areas:</p> <ul style="list-style-type: none"> i. Clarify instances where User plant is required to trip in order to clear transmission system faults ii. Amending requirements for generating maximum reactive current during faults where these may be unachievable for some generators iii. Amending post-fault active power requirements to consider whether generators at low load may have greater levels of oscillation than permitted iv. To consider clarifying and or defining requirements for over-voltage during a fault 	
f) Consider and address any cross code impacts on other codes especially Distribution Code (e.g. G99 requirements)	

Timeline update for GC0155

	Workgroup Report issued to Panel	DFMR issued to Panel	FMR issued to Ofgem	Decision Date	Implementation Date
Previous timeline	20 November 2024	19 February 2025	12 March 2025	TBC	TBC
New timeline	17 September 2025	03 December 2025	22 December 2025	TBC	TBC

- Workgroup 22 – 24 April 2025
- Workgroup 23 – 14 May 2025
- Workgroup Consultation – 04 June to 25 June

GC0178 Temporary Overvoltage

Issue:

The Grid Code does not include specific limits on temporary overvoltage and it does not explicitly specify requirements on how generation should respond during a temporary overvoltage event.

Solution:

Our proposal is to:

- Introduce a limit, both in terms of magnitude and duration, on temporary overvoltage following secured events.
 - This limit would need to be maintained by TOs in design timescales and by NESO in operational timescales.
- Clarify the requirements on how plant needs to perform during temporary overvoltage:
 - Reactive support
 - Ride through
 - Any other considerations
- Ensure the requirements apply to all generation plant, including what is already connected, but provide a mechanism to minimise, or delay, the impact on existing generation fleet.
- Consider how compliance with temporary overvoltage requirements applicable to generation plant would be assessed.

GC0178 Temporary Overvoltage

Engagement:

- Originally, temporary overvoltage was being considered as part of GC0155: Fault Ride Through.
 - It was felt that the solution for temporary overvoltage requirements was moving beyond the initial intent of GC0155 and slowing down the progress of this modification.
 - It was agreed at Grid Code Review Panel on 27 February 2025 to split temporary overvoltage into a separate modification.
 - As such a lot of engagement has already been had through GC0155 Workgroups, and the starting point of the solution will be the work to date from this modification.
 - GC0155 Workgroup members will be asked to join this Workgroup with additional Workgroup members from other interested industry parties.

Governance route:

- We believe the Standard Governance route to be appropriate for this modification:
 - The proposal has an impact on NESO, Generators, and TOs and needs to be refined with inputs from all affected parties.
 - Impact assessment and cost benefit analysis need to be informed by the industry.
 - The standard governance route is therefore appropriate to ensure the solution to this issue is properly thought out and assessed by industry.

Terms of Reference – GC0178

Workgroup Term of Reference	Location in Workgroup Report (to be completed at Workgroup Report stage)
a) Implementation and costs;	
b) Review and develop draft legal text;	
c) Consider whether any further Industry experts or stakeholders should be invited to participate within the Workgroup to ensure that all potentially affected stakeholders have the opportunity to be represented in the Workgroup. Demonstrate what has been done to cover this clearly in the report;	
d) Consider implications to sections linked to the Regulated Sections of the Grid Code;	
e) Define appropriate limits for temporary overvoltage, both in terms of magnitude and duration, to be guaranteed by design and complied with in operational timescales;	
f) Clarify the requirements on how plant need to perform during temporary overvoltage in terms of reactive support, ride through, and otherwise;	
g) Consider how compliance with temporary overvoltage requirements applicable to generation plant would be assessed;	
h) Where possible, ensure the proposal does not require unnecessary modifications to existing User plant.	

GC0178 Proposed Timeline

Milestone	Date	Milestone	Date
Modification presented to Panel	27 March 2025	Code Administrator Consultation	09 November 2026 to 09 December 2026
Workgroup Nominations (20 business Days)	01 April 2025 to 01 May 2025	Draft Final Modification Report (DFMR) issued to Panel (5 business days)	20 January 2027
Workgroups 1-8	13 May 2025 25 June 2025 13 August 2025 23 September 2025 06 November 2025 15 December 2025 04 February 2026 18 March 2026	Panel undertake DFMR recommendation vote	28 January 2027
Workgroup Consultation (20 business days)	30 March 2026 to 29 April 2026	Final Modification Report issued to Panel to check votes recorded correctly	01 February 2027 to 08 February 2027
Workgroups 9-12	19 May 2026 01 July 2026 12 August 2026 23 September 2026	Final Modification Report issued to Ofgem	09 February 2027
Workgroup report issued to Panel (5 business days)	21 October 2026	Ofgem decision	TBC
Panel sign off that Workgroup Report has met its Terms of Reference	29 October 2026	Implementation Date	10 Business Days after Authority Decision

Any Other Business

Teri Puddefoot – NESO Code
Administrator

Next Steps

Teri Puddefoot – NESO Code Administrator

