

Public

Code Administrator Meeting

Summary

Workgroup Meeting 3: GC0178 Temporary Overvoltage – Specification of Limits and Clarification of Obligations

Date: 10 September 2025

Contact Details

Chair: Catia Gomes, catia.gomes@neso.energy

Proposer: Bieshoy Awad, bieshoy.awad@neso.energy

Key areas of discussion

The Chair outlined the agenda for the meeting, including a review of Workgroup membership, observer arrangements, Terms of Reference, and outstanding actions, before progressing discussions on the objectives of GC0178 and the ongoing consultant-led requirements analysis.

Action log Review

Action 1 – The Proposer advised this needs to be deferred until AP was ready to share the relevant information. The Chair agreed and reassigned the action to AP. (Remains open)

Action 2 The revised 132 kV limit values currently used by SP Energy Networks was shared with the Workgroup. (Closed).

Action 4 The Chair advised it is too early to review the Terms of reference and proposal form (remain open)

Action 5 The Proposer advised that an external consultant had been engaged to undertake the requirements analysis. (Closed).

Summary of the Proposal

The Workgroup received a refresher on the objectives of GC0178, with the Proposer explaining that the modification seeks to address the absence of explicit Temporary

Overvoltage (TOV) limits within the Grid Code by defining network limits, clarifying User obligations during overvoltage events, and ensuring a consistent approach to compliance across the generation fleet. It was proposed that new generating plant would be designed to withstand the agreed TOV limits, whilst existing plant would only be required to comply with the TOV levels experienced at their specific connection point, with the aim of minimising retrospective modifications and associated costs.

During the discussion, a Workgroup member requested that it be noted that existing plant will not have been designed to any future TOV limits and that retrospective application of new requirements could result in additional costs for affected parties and also sought clarification on the differing treatment of existing and new plant and welcomed the proposal's intention to provide flexibility and avoid unnecessary modifications to existing assets. The Chair confirmed that these concerns would be recorded in both the summary and Workgroup Report.

A different Workgroup member reiterated their disagreement with NESO's interpretation of Grid Code provision CC.6.1.7 and the retrospective application of TOV requirements. They argued that generating plant cannot be expected to withstand all post-fault overvoltage conditions and raised concerns regarding the impact on legacy plant, offshore configurations and the potential costs of compliance. They advised that they intend to develop an Alternative Request to reflect his position. The Chair acknowledged the differing views within the Workgroup and encouraged alternative solutions to be brought forward, noting that all positions would be clearly recorded for Ofgem's consideration

Review of the work required by PSC

The Workgroup reviewed the scope of work to be undertaken by PSC to support the development of GC0178. The Proposer outlined that the analysis would focus on establishing a common understanding of Temporary Overvoltage terminology and causes, reviewing applicable industry experience and standards, assessing the impact of TOVs on network users and equipment, evaluating potential mitigation measures, and undertaking detailed modelling to inform the specification of appropriate Grid Code limits and compliance requirements.

Workgroup members discussed the proposed methodology in detail, with several members seeking assurance that the analysis would appropriately reflect real network conditions. Two Workgroup members raised concerns regarding the use of generic models and advocated for the use of site-specific and manufacturer models where

appropriate, particularly where outputs could ultimately inform codified requirements. Discussion also considered the interaction between Temporary Overvoltages, system strength, offshore connections, phase shift events and converter-based technologies. The Proposer clarified that generic models would be used primarily to help define and understand the underlying phenomena, whilst more detailed site-specific assessments would utilise representative network and plant models where required.

The Workgroup welcomed the appointment of PSC and emphasised the importance of a transparent and evidence-based approach. PSC introduced their project team and relevant experience, and it was agreed that they would provide regular updates to the Workgroup as the analysis progresses.

Team introductions

The Workgroup was introduced to the PSC team appointed to undertake the GC0178 analysis. The Proposer advised that PSC had been engaged to support the technical assessment and would participate in future Workgroup discussions as the analysis progressed. PSC representatives Kah-Leong Koo, James Wilson and Dimitrios Vozikis outlined their relevant experience in transmission planning, Electro-Magnetic Transient (EMT) and Root Mean Square (RMS) studies, offshore wind, High Voltage Direct Current (HVDC) systems, grid code compliance and Temporary Overvoltage assessments. Workgroup members welcomed the appointment of PSC and emphasised the importance of a transparent, impartial and evidence-based approach to the analysis. Members requested visibility of the project plan, methodology, milestones and underlying assumptions as the work develops. PSC confirmed that the study would be driven by technical evidence and industry experience, with findings and recommendations being regularly shared with the Workgroup to support the development of the modification.

Any other Business

The Chair discussed the future meeting cadence and agreed that Workgroup meetings should align with the progress of the PSC analysis to ensure productive discussions. It was agreed that PSC would provide a detailed project plan, including milestones and timescales, at the next Workgroup meeting, with an updated timeline to be presented to the Grid Code Review Panel thereafter. The Chair also encouraged Workgroup members

to continue providing feedback and to ensure any discussions held outside of meetings were brought back to the Workgroup for transparency.

Next Steps

The invites will be sent for the next Workgroup meeting, scheduled for 03 November and PSC will share with the Workgroup the key milestones, deliverables and timescales.

Actions

For the full action log, click [here](#).

Action Number Raised	Workgroup	Owner	Action	Due by	Status
1	WG1	AP	The Proposer to ascertain whether the analysis that took place to develop the TGN 288 limits took the impact on G59 and G99 protection and advise Workgroup members on the outcome.	WG4	Open
4	WG2	All	Review the Terms of Reference and Proposal form.	Ongoing	Open
6	WG3	BA/KLK	Review and discuss questions relating to the proposed TOV limits and methodology and report the outcomes back to the Workgroup.	Ongoing	Open

Attendees

Name	Initial	Company	Role
Catia Gomes	CG	NESO	Chair
Sarah Williams	SW	NESO	Tech Sec
Bieshoy Awad	BA	NESO	Proposer
Afshin Pashaei	AP	National Grid	Workgroup Member
Ahmed Shafiu	AS	Siemens Energy	Workgroup Observer
Arshad Syed Anwar	ASA	Ofgem	Authority Representative
Belinda Gonzalez Parrado	BGP	Scottish Power Renewables	Workgroup Member Alternate
Cornel Brozio	CB	SP Energy Networks	Workgroup Member
Dimitrios Vozikis	DV	PSC	Consultant
Deborah Ritzmann	DR	Physical Laboratory (NPL	Workgroup Observer
Graham Lear	GL	NESO	NESO Representative
Graham Vincent	GV	SP Energy Networks	Workgroup Alternate
James Wilson	JW	PSC	Consultant
John Hylands	JH	SSE Renewables	Workgroup Alternate
John Reilly	JR	EDF (Existing Nuclear)	Workgroup Member
Jose Ribbecca	JRi	Orsted	Workgroup Member

General

Kah-Leong Koo	KLK	PSC	Consultant
Martin Aten	MA	Uniper	Workgroup Member
Mike Kay	MK	P2 Analysis Ltd	Workgroup Observer
Murali Venkata	MV	Siemens Energy	Workgroup Observer
Nicola Barberis Negra	NBN	Orsted	Workgroup Alternate
Owen Curran	OC	Siemens Gamesa Renewable Energy	Workgroup Observer
Paul Youngman	PY	Drax	Workgroup Member
Tobias Siepker	TS	Siemens Gamesa Renewable Energy	Workgroup Observer