Public

Code Administrator Meeting Summary

Workgroup Meeting 1: GC0184 Revising Minimum Reactive Capability Requirements within European Connection Conditions, ECC.6.3

Date: 15 October 2026

Contact Details

Chair: Sarah Williams, sarah.williams@neso.energy

Proposer : Graham Lear, graham.lear@neso.energy

Key areas of discussion

The Chair opened the first GC0184 Workgroup by setting out the agenda, which covered an overview of the Code Modification Process, a review of the current timeline, the Proposer's presentation, agreement of the Terms of Reference, cross-code impacts, and next steps.

Code Modification Process

The Chair explained that the code modification process begins with the Workgroup refining the proposal, developing legal text, and ensuring the Terms of Reference are met. This is followed by a Workgroup consultation and further refinement, before a Workgroup vote, after which the outcome is submitted to Panel, progresses through a Code Administrator Consultation, and is ultimately decided by Ofgem.

Proposer's Presentation

The Proposer outlined that GC0184 seeks to review and update the minimum reactive capability requirements within European Connection Conditions (ECC).6.3.2 to ensure they remain appropriate for a changing electricity system with increasing levels of non-synchronous generation. The proposed solution would review reactive capability requirements for new connections, assess technology capabilities and limitations, clarify requirements for storage technologies, review any Connection Conditions/European Connection Conditions (CC/ECC) misalignment and consider associated cross-code impacts. The modification is intended to apply prospectively and support future system operability and stability while minimising the need for additional plant and equipment where possible.

The Workgroup supported further investigation but agreed that more evidence is needed before developing a solution. Key concerns included whether enhanced reactive capability is technically achievable across different technologies without significant additional equipment or cost, and whether a blanket requirement would deliver proportionate benefits across Great Britain. Workgroup members called for a geographically informed cost-benefit assessment covering all user impacts and consideration of the interaction between mandatory Grid Code requirements,

existing commercial reactive power arrangements, and ENTSO-E's Requirements for Generators (RfG) 2.0 proposals.

Terms of Reference

The Workgroup generally agreed that the Terms of Reference provided a comprehensive framework for assessing GC0184, covering implementation, costs, legal text, technology capability, storage requirements, CC/ECC alignment, RfG implications, cross-code impacts and compensation arrangements. Workgroup members supported retaining them but requested that references to "Generators" in points 'o' and 'p' be broadened to "Users" to reflect the wider range of potentially affected parties. One member objected to point 'n' and its reference to the "inherent capability" of commercially available technologies, as this could imply that enhanced reactive capability, particularly at very low or zero active power output, is naturally available without additional cost, equipment or intervention. Depending on the technology and project, this may require paid Original Equipment Manufacturer (OEM) options, converter oversizing, additional controls, compensation equipment such as STATCOMs, or project-specific design changes. The Workgroup agreed that the wording should be revised and returned for further consideration.

Cross Code Impacts

The Workgroup considered potential impacts on the Distribution Code, EREC G99, System Operator Transmission Owner Code (STC) and Connection and Use of System Code (CUSC), including the treatment of High Voltage Direct Current (HVDC) and transmission-owned assets and interactions with reactive power services and compensation arrangements. Further analysis of the current baseline is needed to identify any consequential changes and ensure consistent, non-discriminatory treatment across technologies and user categories.

The Workgroup supported further investigation, subject to an evidence-based and proportionate assessment of technology capability, costs, geographic need, system benefits, and market-based versus mandatory approaches. Any revised requirements should avoid adversely affecting projects already contracted, consented, under construction or designed to current standards. Legal review is required to determine the appropriate application point and any transition or grace arrangements, and the Terms of Reference should be updated before a solution is developed.

Any Other Business

No additional matters were raised.

Next Steps

The next steps are to gather further evidence on technical capability, costs, geographic need and system benefits; assess cross-code and commercial impacts; obtain legal advice on application,

transition and protections for existing projects; revise the Terms of Reference; and use these findings to develop a proportionate solution.

Actions

For the full action log, click here.

Action Number	Workgroup Raised	Owner	Action	Due by	Status
1	WG 1	SW	Check the Workgroup membership list, including duplicated Zenobe representation and any membership corrections.	WG2	Open
2	WG 1	GL	Clarify the intended post-GC0184 position regarding CC versus ECC requirements.	WG2	Open
3	WG 1	JF	Check existing baseline requirements for HVDC converter stations, including offshore generation, interconnectors and transmission-owned bootstraps, and clarify which are within scope.	WG2	Open
4	WG 1	GL/JF	Check the legal position concerning when revised Grid Code requirements can apply to projects, including concerns raised regarding previous modelling requirements.	WG2	Open
5	WG 1	GL/JF	Determine whether a holistic power system study or control interaction/instability study has been undertaken to demonstrate the need for additional reactive power capability at zero production output.	WG 2	Open

6	WG 1	GL	Consider alignment with STC and other related code arrangements as a potential companion piece of work.	WG 2	Open

Attendees

Name	Initials	Company	Role
Sarah Williams	SW	NESO	Chair
Kayte Stanton-Hughes	KSH	NESO	Technical Secretary
Graham Lear	GL	NESO	NESO Proposer
John Fradley	JF	NESO	NESO Representative
Andrew Allan	AA	RWE	Workgroup Member
Andrew Bell	AB	RWE	Workgroup Member (Alternative)
Belinda Gonzalez	BG	Scottish Power	Workgroup Member (Alternative)
Chanura Wijeratne	CW	RES Limited	Workgroup Member
Ethan Glennie	EG	Ocean Winds	Workgroup Member (Alternative)
Fraser Scott	FS	Scottish Hydro Electric Transmission	Workgroup Member
Garry Cotter	GC	Orsted	Workgroup Member
Graeme Vincent	GV	SP Energy Networks	Workgroup Member
Harry Evans	HE	Northern Powergrid	Workgroup Member
Isaac Gutierrez	IG	Scottish Power	Workgroup Member
Joan Caamano Martinez	JCM	Scottish Hydro Electric Transmission	Workgroup Member (Alternative)
Jonjo Lavin	JL	RES Limited	Workgroup Member (Alternative)

Lamin Saidy Vulart	LSV	Qair UK	Workgroup Member
Mike Topilin	MT	Ocean Winds	Workgroup Member
Mohit Prajapati	MP	EDF Power Solutions	Workgroup Member (Alternative)
Nuno Da Fonseca	NDF	UK Power Networks	Workgroup Member
Nigel Platt	NP	Siemens Energy	Workgroup Member
Tim Ellingham	TE	RWE	Workgroup Member
Thomas O'Neill	TO	Qair	Workgroup Member (Alternative)
Alistair McLaren	AM	Baywa Re	Workgroup Observer
Cesar Gonzalez Gonzalez	CG	EDP	Workgroup Observer
Christopher Price	CP	NESO	NESO Observer
David Adeyemi	DA	NESO	NESO Observer
David Allen	DAL	NESO	NESO Observer
Emma Webster	EW	Bute Energy	Workgroup Observer
Kaleb Davis	KD	High View Power	Workgroup Observer
Kush Lohana	KL	TNEI Services Ltd	Workgroup Observer
Michail Theodoridis	MT	Vestas	Workgroup Observer
Nikos Gouloutis	NG	Fichtner Consulting Engineers UK	Workgroup Observer
Peter Woodcock	PW	RWE Offshore Wind	Workgroup Observer
Rafik Kamil	RK	Nordex UK	Workgroup Observer (Alternative)
Arshad Syed Anwar	ASA	Ofgem	Authority Representative