Public

Code Administrator Meeting Summary

Workgroup Meeting 9: GC0182 Standardisation of Power Flow Metering Polarity

Date: 01 September 2026

Contact Details

Chair: Ren Walker, Lurrentia.Walker@neso.energy

Proposer: Thomas Goss, Thomas.goss2@neso.energy

Key areas of discussion

The key areas of workgroup discussion were reviewing the GC0182 Legal text and Terms of Reference.

Actions Log Review

The Chair led the Workgroup through a review of the action log.

The Workgroup agreed that actions 50, 53, 54 and 55 could be closed.

Action 50 (Closed): NESO have contacted all Transmission Owners, and the NESO compliance team will continue notifying generators.
Action 53 (Closed): the Legal text now references operational metering equipment as described in CC/ECC 6.5.6
Action 54 (Closed): the metering polarity standard has been included as Annex to the Workgroup Report.
Action 55 (Closed): the Terms of Reference previously shown for GC0181 have been replaced with the correct Terms of Reference for GC0182.

The Workgroup agreed that actions 51 and 52 should remain open.

Action 51 (Open): to remain open until the Workgroup Report has been updated to clearly document the prospective and non-retrospective application of the modification.
Action 52 (Open): to remain open as the definition and application of modification and substantial modification still requires clarification.

Proposer Answers to Questions from Workgroup 8

- **Q1: What will be the date to be used for actual implementation? Will it be 18 months, 540 days or 547 days?**

The Proposer confirmed that the actual implementation date will be written explicitly in day-month-year format once the approval date is known, using 540 calendar days from approval in principle, although limited flexibility may be needed to align the cut-off with a practical date or working-week boundary.

- **Q2: Will a GB Code User automatically change to an EU Code User if there is a Modification?**

The Proposer explained that a GB Code User entering a new bilateral agreement because of a substantial modification may become an EU Code User and then be subject to the EU Code User obligations. Installation or modification of operational metering equipment alone is not intended to constitute a substantial modification where there is no material change to the plant. One Workgroup member explained that a Network Operator may remain a GB Code User because the definition of EU Code User requires its entire distribution system to have been connected after 2019, even where it has an EU Grid Supply Point. The NESO SME agreed that this scenario requires further research and clarification.

One Workgroup member asked how the terms material change and substantial modification would be interpreted in practice. The NESO SME's gave examples indicating that a like-for-like change to operational metering equipment would not normally be significant, whereas replacing a generator or adding a new unit could be substantial. One Workgroup member stressed that the Legal text must use consistent terminology because material change and substantial modification have different meanings and have previously caused uncertainty for Grid Code parties and NESO.

The Workgroup agreed that the Legal text and supporting guidance should make the trigger clearer and include practical examples. The distinction between changes to metering equipment and changes to primary plant equipment is to be taken away for further consideration.

- **Q3: Are there any other TO ES's that might mention metering, in additional to TS.3.24.70 and TS.3.24.95?**

The NESO SME presented the outcome of a review of TO Electrical Standards to determine whether any standards other than TS.3.24.70 and TS.3.24.95 referred to metering. The review found no additional standards that specifically addressed operational metering or metering polarity, although some standards contained broader references to equipment used for control, measurement and protection functions.

One Workgroup member sought clarification on whether these references were to operational metering. The NESO SME confirmed they were not, and that the references only related to measurement equipment more generally. The Workgroup member also highlighted the need to consider alignment with GC0103, which is expected to introduce a common set of TO Electrical Standards. The workgroup concluded that no further TO Electrical Standards had been identified that specifically referenced operational metering or metering polarity.

Legal Text Review

The Workgroup reviewed the updated Legal text for EU Code Users, including revised obligations linked to active power and active power measurement signals and the proposed implementation arrangements for new agreements and equipment installations after the defined cut-off date.

One Workgroup member sought clarification on how obligations would apply to GB and EU Code Users under different scenarios.

Review Terms of Reference

The Workgroup reviewed the Terms of Reference for GC0182. The Chair confirmed that Terms of Reference a) – d) are standard Terms of Reference which were covered at the previous Workgroup meeting therefore the Workgroup reviewed Terms of Reference e) – g). These are as follows:

e) Consider the implementation arrangements of the new electrical standard considering Grid Code and BCA obligations.; The Workgroup agreed this ToR had been adequately addressed through previous discussions and documented in the Workgroup Report.

f) Consider the alignment of the Governance processes for the modification and the Electrical Standard. NESO outlined the proposed alignment of the Grid Code modification, STCP modification and Electrical Standard to ensure a coordinated governance process.

g) Consider clarity on Power Flow (Active vs Reactive). The Workgroup reviewed whether further clarification was required on active and reactive power flows and concluded that the diagrams and sign conventions within the Electrical Standard were sufficiently clear and that the Workgroup's conclusion should be recorded in the Workgroup Report.

AOB

None

Next Steps

The Chair asked the Workgroup to review the Workgroup Report and Electrical Standard, provide comments or amendments using tracked changes, and return comments by midday on Friday. Workgroup 10, Monday 7 September will be used to resolve comments, confirm that discussions have been captured, sign off the Workgroup Report and hold the Workgroup Vote. The completed Workgroup Report is scheduled for submission to the Grid Code Review Panel on 16 September.

Actions

Action Number	Workgroup Raised	Owner	Action	Due by	Status
50	WG7	PP	To investigate the appropriate approach and permissions for contacting affected parties about metering polarity issues, including how to communicate relevant guidance and potential impacts.	WG9	Closed
51	WG8	All	Clarification of Prospective vs Retrospective Application and Media Figures: Ensure the Workgroup Report and wider publication clearly state that the proposal is prospective only, not retrospective, and clarify the illustrative nature of the £100 million figure in light of recent media reports.	WG10	Open
52	WG8	TG/HG	Legal Text Review and Mutual Agreement Scenarios: Review and update the legal text to clarify scenarios requiring mutual agreement, including the use of terms such as "modification" and "upgrade", and ensure alignment with the correct	WG9	Open

			definitions and obligations for GB and EC code users.		
53	WG8	TG/HG	Legal Text Terminology Consistency: Review the use of the term "operational metering equipment" in the Legal text and the proposed standard, ensuring consistency and appropriateness in light of the discussion on whether signals originate from metering or measurement equipment.	WG9	Closed
54	WG8	TG/HG	Inclusion of Metering Polarity Standard in Report Annex: Include the latest version of the metering polarity convention electrical standard as an annex to the Workgroup Report and code consultation documents for transparency.	WG9	Closed
55	WG8	RW	Clarification of Terms of Reference for Modification	WG9	Closed
56	WG9	HG	Clarify how substantial or material modifications are determined for network operators and ensure the distinction and trigger are expressed consistently in the legal text, supported by appropriate examples.	WG10	New
57	WG9	HG	Confirm whether network operators remain GB code	WG10	New

			users or transition to EU code users when entering a new bilateral connection agreement, and determine the resulting obligations for the metering polarity standard.		
58	WG9	RW	Record in the Workgroup Report that Terms of Reference G was considered and explain the conclusion regarding active and reactive power-flow clarity.	WG10	New
59	WG9	RW	Capture in the Workgroup Report that the previously cited cost figures were illustrative, that actual costs are in the hundreds of thousands rather than hundreds of millions, and that the modification is forward-looking rather than retrospective.	WG10	New

Name	Initial	Company	Role
Ren Walker	RW	NESO	Chair
Andrew Hemus	AH	NESO	Technical Secretary
Thomas Goss	TG	NESO	Proposer
Alan Convery	AC	SP Transmission	Workgroup member
Andrew Urquhart	AU	SSE Generation	Workgroup member
Arshad Syed Anwar	AA	Ofgem	Authority Representative

Graeme Vincent	GV	SP Transmission	Workgroup member
Hao Guo	HG	NESO	NESO Representative
Pritesh Patel	PP	NESO	NESO Representative
Roger Carter	RC	Transmission Investment	Workgroup member
Tim Ellingham	TE	RWE	Workgroup member alternate