

Ofgem decision to Approve GC0139: Enhanced planning-data exchange to facilitate whole system planning (GC0139)

Decision: The Authority¹ directs² that the proposed modification to the Grid Code be made

Target audience: National Energy System Operator (NESO), the Grid Code Review Panel, Grid Code users and other interested parties

Date of publication: 27 July 2026

Implementation date: 10 August 2026

Background

Electricity North West Limited, now trading as Scottish Power Electricity North West, raised GC0139 on 12 February 2020. GC0139 was proposed to address limitations in the existing Grid Code arrangements for planning-data exchange between NESO and Network Operators(NOs). NESO submitted the Final Modification Report³ (FMR) to the Authority on 7 April 2026. For the purposes of this modification, NOs include Distribution Network Operators (DNOs) and Independent Distribution Network

¹ References to the "Authority", "Ofgem", "we" and "our" are used interchangeably in this document. The Authority refers to GEMA, the Gas and Electricity Markets Authority. The Office of Gas and Electricity Markets (Ofgem) supports GEMA in its day-to-day work. This decision is made by or on behalf of GEMA.

² This document is notice of the reasons for this decision as required by section 49A of the Electricity Act 1989.

³ [GC0139: Enhanced Planning-Data Exchange to Facilitate Whole System Planning | National Energy System Operator](#)

Operators (IDNOs). Transmission Owners (TOs) are important users of the resulting planning information, but the routine exchanges established through Planning Code (PC) PC.9 and PC.10⁴ are between NESO and NOs.

The FMR explains that existing arrangements do not provide sufficient visibility of adjacent networks for efficient and coordinated planning. This issue has become more significant as distribution networks accommodate increasing volumes of distributed generation, electricity storage and responsive demand, while transmission power flows are changing because of renewable generation, interconnectors and wider system change.

The modification proposal

GC0139 (the Proposal) introduces a materially more structured planning-data exchange between NESO and NOs. It replaces relevant elements of the existing annual submissions with routine exchange of solved Power System Models (PSMs) in the Common Information Model (CIM) format, supported by Data Registration Code schedules, PSM Scenario Documents, PSM Change Documents and, where applicable, Power System Difference Models.

The Proposal introduces PC.9 for information provided by a NO to NESO, PC.10 for information provided by NESO to a NO, and PC.G for the detailed PSM requirements. It also introduces new and revised Data Registration Code schedules and associated definitions.

In weeks 2 and 28, NOs will provide solved models covering the whole sub-transmission system, typically 132 kV in England and Wales and 33 kV in Scotland, together with

lower-voltage equivalents and relevant supporting information. In weeks 12 and 38, NESO will provide switch-level transmission models of the National Electricity Transmission (NETS), or a sufficiently detailed local representation with the remainder represented at agreed boundary nodes.

The exchanges are deliberately asymmetric because the parties need different information about the adjacent network. NO submissions are aligned to the principal minimum-demand and peak-demand planning conditions and are supported by detailed schedules and contextual documentation. NESO submissions cover a broader suite of summer and winter transmission conditions, including demand, transfer and fault-level cases. This should give each party the information needed for its planning role without requiring identical model packages in both directions.

The proposal also aligns routine planning-data exchange with the Evaluation of Transmission Impact process. Routinely submitted models should reduce reliance on bespoke modelling data and support more consistent and efficient transmission-impact assessments.

Grid Code Review Panel recommendation

The Grid Code Review Panel met on 26 March 2026 to carry out their recommendation vote. The Panel recommended unanimously that the Proposer's solution should be implemented. In reaching that recommendation, Panel members assessed the Original solution against the Applicable Grid Code Objectives. All voting Panel members identified the original solution as better than the baseline overall, with the strongest support linked to objectives (i) and (iii), relating to efficient, coordinated and economical

transmission-system development and the security and efficiency of the electricity system.

Our decision

We have considered the issues raised by the modification proposal and in the Final Modification Report dated 6 April 2026. We have considered and taken account of the responses to the industry consultation on the modification proposal which are included in the Final Report. We have concluded that:

- implementation of the modification proposal will better facilitate the achievement of the Applicable Code Objectives of the Grid Code⁴
- approving the modification is consistent with our principal objective and statutory duties⁵

Reasons for our decision

The central reason for our decision is that GC0139 addresses a material planning-data defect through a more standardised and governed exchange framework. The baseline relies heavily on separate schedules, manual interpretation and the construction of

⁴ As set out in Standard Condition E3 of the Electricity System Operator Licence.

⁵ The Authority's statutory duties are wider than matters which the Grid Code Panel Review must take into consideration and are detailed mainly in the Electricity Act 1989 as amended.

working models after data has been received. The proposed framework provides NESO, TOs and NOs with a more consistent basis for planning across transmission and distribution interfaces.

We have placed greatest weight on objectives (i) and (iii), because they relate directly to coordinated planning, economic system development and system security. We have also considered objectives (ii), (iv) and (v) where we believe the impact on these three objectives are neutral. In addition, we reviewed the consultation responses and the technical and delivery risks identified in the FMR to come to an informed decision.

Objective (i) to permit the development, maintenance and operation of an efficient, coordinated and economical system for the transmission of electricity

We consider that GC0139 better facilitates objective (i). The existing arrangements are no longer adequate for the volume and complexity of distributed energy resources, storage, changing demand and evolving transmission power flows. Replacing fragmented submissions with solved, standardised models and supporting documentation should reduce manual interpretation and model reconstruction, improve consistency and provide a stronger basis for coordinated planning.

The Workgroup considered several exchange options and selected a hybrid approach using a limited number of CIM models supported by schedules. This avoids requiring a separate model for every forecast condition, while retaining a practical means of exchanging information that is not yet suited to model-based representation.

Confirming the Proposal sufficiently in advance of 1 January 2028 also provides the regulatory certainty needed for profile development, investment, coordinated trials and

operational readiness.

Objective (iii) subject to paragraphs E3.2(b)(i) and E3.2(b)(ii), to promote the security and efficiency of the electricity generation, transmission and Distribution Systems in the National Electricity Transmission System Operator Area taken as a whole

We consider that GC0139 better facilitates objective (iii). More complete and consistent information about adjacent networks, embedded generation, electricity storage, demand, power flows and fault contributions should help NESO, TOs and NOs plan with lower uncertainty and assess a wider range of system conditions.

The Proposal concerns planning data, not real-time operational or observability data. Any future requirement for additional real-time asset information would require separate consideration through the appropriate governance route.

Data, digitalisation, and governance

GC0139 and the Long Term Development Statement (LTDS)⁶ share the use of CIM and Common Grid Model Exchange Specification (CGMES) v3 foundations, but they serve different purposes and will require different profiles. LTDS is a regulated DNO publication of distribution planning information. The Proposal establishes a controlled, two-way planning-data exchange between NESO and NOs. The Grid Code profile must therefore be developed against the specific requirements of PC.9, PC.10 and PC.G.

⁶ [Long Term Development Statement direction | Ofgem](#)

Ofgem's 2022 CIM decision established CIM as the expected standard for suitable network data exchanges, identified CGMES v3 as the core standard and anticipated national governance for Great Britain (GB) profiles and extensions.

GB CIM governance has since developed materially. Ofgem's current LTDS page confirms that the British Standards Institute (BSI) Engagement Hub hosts the latest LTDS technical artefacts and version history and provides the principal route for technical queries, confirmed decisions and development of new profiles.

GC0139 implementation should reuse common concepts, governance processes, validation approaches and technical learning from LTDS where appropriate, while preserving justified differences between the exchanges. The Grid Code remains the source of the regulated GC0139 obligations. Technical governance may develop and maintain the supporting profile, but it cannot change the scope or substance of those obligations without the applicable Grid Code governance process.

The Proposal does not decide whether the exchanged models should be made publicly available. Any wider disclosure or access decision must be considered separately under the relevant licence, code, security and data-governance requirements.

The current LTDS position also shows why implementation testing matters. Ofgem's May 2026 decision retains interoperability testing, requires structured stakeholder engagement on the updated LTDS outputs and confirms the BSI Hub as the location of record for technical artefacts. That is relevant implementation experience, but it is not evidence that the separate Grid Code profile is already complete.

Implementation and transition

We recognise that successful implementation requires further technical and operational work. The FMR identifies the need to complete the Grid Code CIM profile, develop software and business processes, establish secure exchange arrangements, support parties with less experience of CIM-based modelling and undertake trial exchanges between NESO and NOs.

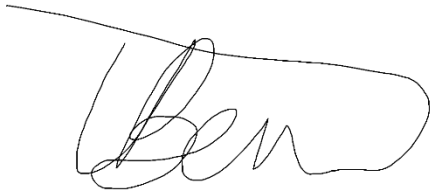
The approved Grid Code text will be implemented ten business days after this decision, while the new PSM obligations will take effect on 1 January 2028. We consider that this period provides an appropriate implementation runway for necessary investment, profile development, vendor preparation, coordinated testing and remediation.

NESO and NOs should begin this work promptly. The FMR identifies a need for trial exchanges and coordinated implementation, including possible establishment of a dedicated NESO-NO implementation group. These expectations do not create additional conditions of approval, but they form part of our assessment that the identified delivery risks are manageable within the proposed timetable.

Decision notice

In accordance with Standard Condition E3 of the Electricity System Operator Licence, the Authority hereby directs that Grid Code modification proposal GC0139: “Enhanced Planning-Data Exchange to Facilitate Whole System Planning” be made.

The modification is to be implemented 10 business days after this decision. The new Power System Model obligations will take effect on 1 January 2028.

A handwritten signature in black ink, appearing to read 'Liam', with a long horizontal stroke extending to the right.

Liam Bennett

Head of Energy System Digitalisation

Signed on behalf of the Authority and authorised for that purpose