Public

Grid Code Development Forum

03 December 2025

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Agenda

1	Introduction, meeting objectives and review of previous actions - **Claire Newton, NESO**
2	Code Administrator Update – **Lizzie Timmins, NESO (Code Administrator)**
3	Transition from Mandatory Frequency Response to Dynamic Regulation – **Vicky Allen, NESO**
4	Grid Code Compliance Simulations Checklists for Power Park Modules – **Tanmay Kadam, NESO**
5	NESO Control Room Expectations in the Event of Electronic Communication Failure (EDT & EDL) – **Ben Young, NESO**
7	AOB and Meeting Close - **Claire Newton, NESO**

GCDF – Objectives and Expectations

Objective
Develop ideas, understand impacts to industry and modification content discussion, in relation to Grid Code related issues.
Anyone can bring an agenda item (not just NESO!)

Expectations
Explain acronyms and context of the update or change
Be respectful of each other's opinions and polite when providing feedback and asking questions
Contribute to the discussion
Language and Conduct to be consistent with the values of equality and diversity
Keep to agreed scope

The Forum will be recorded and made available on the GCDF webpage along with summary notes.

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Code Administrator Update

Lizzie Timmins, NESO (Code Administrator)

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Key Updates since last GCDF

New Modifications / Nominations

- GC0184: Reactive Power requirements for PPMs when Operating below Maximum Active Power was presented at the November Grid Code Review Panel. The Panel did not agree that GC0174 had a clearly defined defect and scope, so the Proposer is currently considering next steps.

Decisions

- The Authority approved GC0183: Generator and Interconnector Availability During a Severe Space Weather Event on 20 November 2025.
- The Authority approved GC0174: Review of obligations to provide EU Transparency Availability Data as specified in OC2.4.7 on 28 November 2025.

Implementations

- GC0183: Generator and Interconnector Availability During a Severe Space Weather Event will be implemented on 04 December 2025.
- GC0174: Review of obligations to provide EU Transparency Availability Data as specified in OC2.4.7 will be implemented on 12 December 2025.

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Key Consultations

Workgroup Consultations	None
Code Administrator Consultations	•GC0176: Introduction of Demand Control Rotation Protocol within Operating Code 6 of the Grid Code – opens on 03 December and closes on 12 January •GC0103: The introduction of harmonised Applicable Electrical Standards in GB to ensure compliance with the EU Connection Codes – opens on 03 December and closes on 12 January
Appeals Window	None

Useful Links

Ofgem's expected decision dates/ date they intend to publish an impact assessment or consultation, for code modifications that are with them for decision are available here

Updates on all Modifications are available on the Modification Tracker here

The latest Grid Code Review Panel Headline Report and prioritisation stack are available here

If you would like to receive updates from the Code Administrator on Grid Code modifications, please join the distribution list here

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Transition from Mandatory Frequency Response to Dynamic Regulation

Vicky Allen

December 2025

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Contents

Why transition from MFR to DR?

Ofgem Derogation on MFR

Ofgem have placed a derogation on MFR that NESO must either reform or replace it by the end of 2029.

After assessing the options replacing MFR with DR was identified as the best.

Reduce Barriers to Entry

This will allow easier entry to the BM for some assets who find it difficult to deliver MFR

Consumer Savings

Significant consumer saving have been identified by moving from MFR to DR.

Estimates show that we can expect a reduce in the costs of frequency response of approx. £15m pa.

There could be additional savings if NESO is able to reduce over procurement of dynamic response services at day ahead.

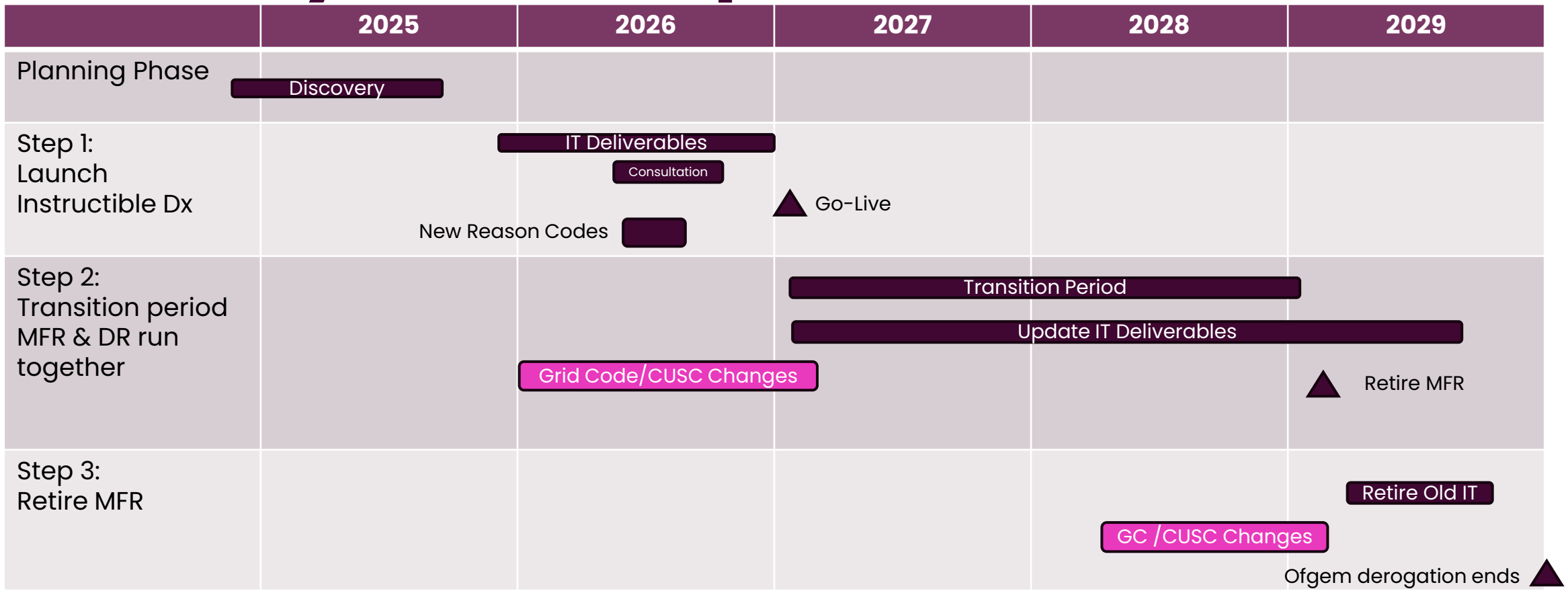
MFR = Mandatory Frequency Response DR = Dynamic Regulation

Comparison of MFR & DR

	MFR	DR
Market	Mandatory	Commercial
Participants	BMUs Only	BMUs & NBMUs
Speed	10 seconds (PSH) 30 seconds (SH)	10 seconds
Duration	30 mins (LF), Indefinite (HF)	Up to 60 mins
Direction	Bundled High & Low	High & Low
Purpose	Design as pre- and post-fault, but now only operating as pre-fault	Pre-fault
Documentation	Grid Code & CUSC	Service Terms & Procurement Rules

MFR = Mandatory Frequency Response DR = Dynamic Regulation

Delivery Roadmap



Code Change Methodology

Aim for 2026

The aim is to allow DR as an alternative to MFR. The approach will be to add the phases

"or **dynamic regulation low**" wherever "**primary"** and/or "**secondary**" response is mentioned

And

"or **dynamic regulation high**" wherever "**high**" response is mentioned

Aim for 2028

The aim here will be to remove MFR as a way of meeting the frequency response requirement in the GC. The approach will be to look to remove the phrases:

"**Primary**", "**Secondary**" and "**High**" response

This will leave only "**dynamic regulation low**" and "**dynamic regulation high**" as the only frequency response services for GC parties.

MFR = Mandatory Frequency Response DR = Dynamic Regulation

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Affected Grid Code Clauses

Glossary & Definitions

New entries for DRH & DRL

Insert into relevant other definitions

Connection Conditions (CC)

CC 6.3.7

CC A.3.1, CC A3.2, CC A3.3, CC A3.4

European Connection Conditions(ECC)

ECC 6.3.7

ECC A.3.1, ECC A.3.2, ECC A.3.3, ECC A.3.4

Planning Code (PC)

PC A.5.5

PC A.9.3.2

Data Registration Code (DRC)

DRC 6.1.4

Post Gate Closure Process (BC2)

BC 2.9.5.1

BC 2.A.2.5

Frequency Control Process (BC3)

BC 3.5.4(a), BC 3.5.4(b)

BC 3.7.1 (a), BC 3.7.1 (b) (i), BC 3.7.1 (c)

BC 3.7.2.1 (a), BC 3.7.2.1 (c)

Operational Planning & Data Provision (OC2)

OC 2.4.6.2

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Affected CUSC Clauses

4.1.3 – Frequency Response

11.3 – Definitions

Appendix 1

Appendix 3 – definition of “frequency sensitive mode” and “Mode A”

Call for Early Engagement

NESO are looking for providers of MFR to engage with our transition process early to help us identify any issues as early as possible.

NESO are also interested in holding 1-2-1 discussions with any providers of MFR who have any concerns or would like any clarifications on the process.

Please contact us here:

vicky.allen@neso.energy and
laura.burdis@neso.energy

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Any Questions?

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Grid Code Compliance Simulations Checklists for Power Park Modules

Tanmay Kadam – Engineering Compliance

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Purpose

- Based on the feedback received from Customers; NESO is aiming to improve the User experience when submitting the Grid Code Compliance Simulation Studies before an Interim Operational Notification (ION) can be issued

- The endeavour here is to achieve clarity and consistency in the compliance assessment of Simulation Studies by clearly articulating the key compliance aspects to reduce the number of iterations in compliance submissions

- NESO is proposing a series of comprehensive checklists outlining,
    - Required list of Simulation Cases
    - Performance Acceptance Criterion
    - Relevant Grid Code or Guidance References

- These checklists will be incorporated into NESO's 'Guidance Notes' and will also be shared with the Customer early in the compliance process

Proposal

- Three checklists are proposed in line with the Grid Code requirements for Power Park Modules covering the following:
    1. Voltage Control
    2. Frequency Response
    3. Fault Ride Through
- Prior to publishing, NESO would like to arrange a workshop to consult with interested parties to review and refine the above proposal checklists. Please register your interest by sending an email to tanmay.kadam@neso.energy.
- Currently proposed format for the checklists:

Date Received	*Project:*		
Reviewer			
Date Reviewed	*Voltage Control Studies Checklist*		
Date Sent to CCM			
Items	**Functions / Documents checklist**	**GC reference**	**Compliant / Comment**
Initial Conditions			
Complete List of Simulations			
During & Post Event			

Any Questions?

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NESO Control Room Expectations in the Event of Electronic Communication Failure (EDT & EDL)

Ben Young, NESO

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What would the NESO control room expect in the event of Electronic Communication Failure (EDT & EDL)?

Background (Balancing Code 1)

BM participants initially submit commercial data (PN & BID-Offer Data) prior to 11:00 for the next operational day. If no data is submitted at 11:00 for the next operational day then previous data will be used (i.e. defaulted) in line with the Data Validation, Consistency and Defaulting Rules until new data is submitted.

Physical Notifications (PNs) and Bid-Offer Data submitted **via EDT** can be updated at any time until Gate Closure ensuring NESO always have the latest commercial data. This data can only be submitted via EDT which is the responsibility of the participant.

Dynamic Data (ramp rates, MNZT/MZT, NDZ, NTO/NTB etc) and Maximum Export/Import Limits (MEL/MIL, SEL/SIL) can be submitted **via EDL** at any time. EDL is a NESO responsibility.

Failure of electronic communication (EDT and EDL)

In the event of a failure of EDT which meant participants were unable to submit commercial data then NESO control room would expect (in line with Balancing Code 1.4)

- Participants to follow last submitted Physical Notifications (adjusted by NESO instruction)
- Last submitted Bid and Offer data applies for instructions

In the event of a failure of EDL (in line with Balancing Code 2.6),

- NESO will issue instructions via telephone
- Participants can revise their Export/Import Limits & Dynamic Parameters via telephone

The above process enables the NESO control room to ensure they have certainty on what participants will do and enables instructions to be issued to balance the system.

EDT – Electronic Data Transfer, EDL – Electronic Data Logging

Maintaining System Security During Loss of Electronic BOA Instruction Capability

Background (Balancing Code 2)

Under normal circumstances, Bid-Offer Acceptances and Ancillary Service instructions will be given electronically by automatic logging device (EDL) and will be given to the Control Point for the BM Unit.

Failure of automatic logging device (EDL Failure)

In the event of a failure of the logging device or an outage of computer system, Bid-Offer Acceptances and Ancillary Service instructions will be given by **telephone**.

However, with the BM system now comprising hundreds of BMUs , telephone instruction process might become operationally unsustainable under certain conditions. Moreover, the volume of BOAs required to balance the system has increased considerably.

Therefore, in the event of EDL or computer system failure, where it is not possible to securely balance the system because of the number of BOAs need to be given over the telephone individually, NESO may determine that it is necessary to enable the use of **Emergency Instructions** (Balancing Code 2.9)**.**

Having determined that it is necessary to use Emergency Instructions, NESO will contact relevant Control Points to issue Emergency Instructions , including bulk Emergency Instructions, where they are reliably deliverable and necessary.

The above process enables the NESO control room to ensure system security during loss of Electronic BOA instruction Capability.

Any Questions?

Thank You

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AOB

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Large Demand Technical Requirements Expert Group

- Following the item on large demand technical requirements presented at GCDF on 05 November 2025, NESO will be launching an expert group to lead on this topic.
- The inaugural meeting for this group will be held on 27 January 2026.
- If you are interested in attending, then please contact box.techcodes@neso.energy.

AOB – Panel Representatives

- The Grid Code Review Panel (GCRP) is the group that governs the Grid Code.
- The GCRP is made up of an independent panel chair, a panel technical secretary and code administrator representative, representatives from the authority, the BSC and NESO, network operators, suppliers, offshore and onshore transmission licensees, and generators.
- GCRP meets monthly (or ad-hoc, if needed, e.g. for Urgent Mods) to carry out the following functions:
  - Evaluate and administer amendments to the code
  - Review any consequences of those amendments
  - Administer the code itself
  - Establish joint working arrangements
  - Prioritise modifications
- You can find more details, including name and contact for the Panel reps, here:

  Grid Code Panel – Panel Representatives| National Energy System Operator
- Panel representatives welcome the opportunity to hear from you to ensure your views are considered.