

# Grid Code Review Panel

**Thursday 28 July 2022**

Online Meeting via Teams



# WELCOME

As we continue to operate in these uncertain times and following best practice from other businesses, we want to adapt to be able to facilitate the governance process in the best possible way. Since moving to virtual Panel meetings, we have found it harder to accurately capture minutes and attribute comments correctly to attendees. We are also conscious of the impact of short periods of poor sound quality. With your consent, we wish to use Microsoft Teams to record all Panel meetings to help us accurately document minutes. We want to assure you that the recordings will be explicitly used to document minutes only and the same protocol for Panel meetings still applies in terms of strict confidentiality. As has always been the case, the draft minutes will be sent to Panel and the Chair for approval each month. Once the minutes are approved, the recording will be deleted. A reminder of this and consent will be sought at the beginning of each meeting, to be noted in the minutes.

As the independent Panel Chair, we have tested the appropriateness of recording Panel meetings with Trisha McAuley who is supportive of the approach. We welcome any comments or feedback on this.

# Purpose of Panel & Duties of Panel Members

The **Panel** shall be the standing body to carry out the **functions** referred to in the Governance Rules (**GR3.1.1**)

## Functions (GR.3.2)

The **Panel** shall endeavour at all times to operate:

- in an **efficient, economical and expeditious manner**, taking account of the complexity, importance and urgency of particular Modification Proposals; and
- With a view to ensuring that the **Grid Code** facilitates **achievement of the Grid Code Objectives**.

## Duties of Panel Members & Alternates (GR.3.3)

1. Shall act **impartially** and in accordance with the requirements of the **Grid Code**; and
2. Shall not have any **conflicts of interest**.

Shall not be representative of, and shall act without undue regard to the particular interests of the persons or body of persons by whom he/she was appointed as Panel Member and any Related Person from time to time.

# Approval of Panel Minutes

**Approval of Panel Minutes from the Meeting held  
30 June 2022**





# Actions Log

## Review of the actions log



# Chair's Update

Update from the Chair

# Authority Decisions and Update



**No decisions received since the last GCRP on 30 June 2022**

**The Authority's publication on decisions can be found on their website below:**

<https://www.ofgem.gov.uk/publications/code-modificationmodification-proposals-ofgem-decision-expected-publication-dates-timetable>



# Inflight Modification Updates

**Milly Lewis, Code Administrator**



# GC0126 Withdrawal

## Implementing Profiled Stable Import and Export Limits, and reversing unimplemented aspects of GC0068

The Proposer withdrew their support for GC0126 on 11 July. A withdrawal window was opened up for 5 days from this date. No parties came forward to opt for the modification.

### GC0126 - the asks of Panel

- **AGREE** that the Modification can be withdrawn.

# GC0139 Timeline Update

GC0139	Workgroup Report issued to Panel	DFMR issued to Panel	FMR issued to Ofgem
Previous timeline	19 October 2022	18 January 2023	07 February 2023
New timeline	17 November 2022	11 March 2023	11 April 2023

**Rationale:** *Due to the comprehensive changes to the legal text more time is required.*

**Workgroups Remaining: 4**

## GC0139 - the asks of Panel

- **AGREE** that the Modification timeline can be updated.

# GC0154 Timeline Update

**Rationale:** The Workgroup agreed that a Cost Benefit Analysis needed to be completed. External Consultants have been commissioned. The Consultants have yet to confirm the timescales, once this is understood an updated timeline will be presented for approval.

# GC0155 Timeline Update

GC0155	Workgroup Report issued to Panel	DFMR issued to Panel	FMR issued to Ofgem
Previous timeline	21 September 2022	16 November 2022	06 December 2022
New timeline	22 March 2023	17 May 2023	06 June 2023

**Rationale:** The Workgroup unanimously agreed that overvoltage should be considered as part of this modification. The proposer has stated that additional research and analysis is needed in order to refine the solution.

The timeline has been adjusted to allow for this work to take place.

**Workgroups Remaining: 6**

## GC0155 - the asks of Panel

- **AGREE** that the Modification timeline can be updated.

# Live Grid Code Modification Consultations

**GC0117:** Improving transparency and consistency of access arrangements across GB by the creation of a pan-GB commonality of PGM requirements

- **Workgroup Consultation:** Closes 05 August 2022

**GC0157:** Grid Code Housekeeping Modification

- **Code Administrator Consultation:** Closes 08 August 2022



# Panel Tracker

**Milly Lewis**



# Prioritisation Stack

# Workgroup Report

**GC0148: Implementation of EU Emergency and Restoration  
Code Phase II**

**Sally Musaka**

# GC0148 Summary

- GC0148 outlines the work that needs to be completed within GB to comply with retained European Law and address some other related items which neatly fit within the Emergency and Restoration Code arena.
- Grid Code Review Panel unanimously agreed that GC0148 should follow standard governance route and proceed to Workgroup.
- One solution was developed, 2 WAGCMs were brought forward by the Workgroup.
- On 27 May 2022, the Workgroup concluded they had addressed the Terms of Reference. They also concluded unanimously that the Original, WAGCM2 (7 out of 7 votes) and by a majority that WAGCM1(6 out of 7 votes) better facilitated the Applicable Grid Code Objectives than the Baseline.

# What are the GC0148 Solutions – the Original

## GC0148 Original

Update Grid Code for compliance with these requirements. This includes updates to low frequency demand disconnection, communication systems, critical tools and facilities, System Defence Plan, System Restoration Plan, Test Plan, the inclusion of smaller non-CUSC Parties and requirements for electricity storage modules during low system frequencies.

Following workgroup consultation feedback, the proposer and workgroup agreed that Distributed Restart should be removed from GC0148 solution. Work done will be transferred to GC0156 so that it can be fully developed, and discrepancies are better addressed.

- This solution seeks to provide greater robustness and resilience measures to protect the system in the event of distress and to provide additional measures to restore the system in the event of a total or partial system shutdown.
- This change would also have a positive impact on consumers through greater clarity of the industry codes, improvements and governance of the System Defence Plan, the System Restoration Plan and Test Plan.
- Ofgem's decision will be required by 2 December 2022

**Implementation Date:** 10 working days after Authority's decision



# What is the GC0148 Solution – 2 alternatives

Alternative Solution	Details	Implementation Date
WAGCM1	<p>As per the Original but:</p> <ul style="list-style-type: none"><li>• Include compliance with ERNC Article 40(2)-(4) refers to exchange of information from ESO to stakeholders. It adds on notification requirements for Emergency, Black Out and Restoration System State</li></ul>	As per the Original solution
WAGCM2	<p>Identical to WAGCM1 but also</p> <ul style="list-style-type: none"><li>• Adds in the Grid Code Definitions for Normal and Alert States. This is to ensure it is clear what the system state is in, when it is not in a Emergency/Blackout or Restoration System State</li></ul>	As per the Original Solution

# GC0148 Workgroup Consultation

The Workgroup held their Workgroup Consultation between 28 March 2022 and 27 April 2022 and received 7 non-confidential responses. Key points were;

- **Distributed Restart:** Most respondents considered that Distributed ReStart should be moved out of GC0148 and into GC0156 (Electricity System Restoration Standard). The one respondent who felt that Distributed Re-Start should be retained within GC0148 qualified their Statement with “Distributed restart amendments could be included in either the GC0148 or GC0156 proposals”
- **72 hours resilience period:** There was general support for a 72 hour mains independence resilience period (rather than the minimum 24 hour period in E&R) though a number of questions were raised as to how this would fit with the requirement to restore 100% of the demand in 5 days (120 hours).
- There was general support for the treatment of **Non-CUSC Parties** falling under the framework of E&R through contracts with the ESO so long as they are transparent, consistent and treated holistically in terms of the “Total System”

# GC0148 Workgroup Terms of Reference

Workgroup Term of Reference	Location in Workgroup Report
a) Implementation and costs;	<p><b><u>Page: 23</u></b></p> <p>There may be some costs in terms of comms resilience and critical tools and facilities, but most Users have them already, so it is considered relatively low. There will be additional costs with regards to communications, infrastructure but this is more of an issue relating to Electricity System Restoration Standard (ESRS) and will be picked up as part of GC0156</p>
b) Review draft legal text should it have been provided. If legal text is not submitted within the Grid Code Modification Proposal the Workgroup should be instructed to assist in the developing of the legal text; and	<p><b><u>Page: 20</u></b></p>
c) Consider whether any further Industry experts or stakeholders should be invited to participate within the Workgroup to ensure that all potentially affected stakeholders have the opportunity to be represented in the Workgroup. Demonstrate what has been done to cover this clearly in the report.	<p>The workgroup consisted of appropriately experienced personnel. Specialist knowledge was called in in respect of the Control Telephony requirements.</p>
<p>d) Consider how the following remaining elements of the Network Code Electricity Emergency and Restoration (NCER) can be implemented in the GB Grid Code:</p> <p>i) Articles 15(5) – 15(8), 41 and 42(1)(2) and (5) of the NCER which have an implementation date of 18 December 2022.</p> <p>ii) Articles 15(9), 48(3) and 50 which are consequentially related to Articles 15(5) – 15(8), 41 and 42(1)(2) and (5) of the NCE</p> <p>iii) The outstanding issues arising from implementation of the NCER carried out through Grid Code modifications GC0127 and GC0128, namely a) whether and, if appropriate, how the NCER should apply to Non-CUSC Parties and b) the requirements applicable to Electricity Storage Modules when transitioning from an import mode of operation to an export mode of operation during low system frequencies.</p>	<p><b><u>Pages: 8 to 15</u></b></p>

# GC0148 Workgroup Terms of Reference

Workgroup Term of Reference	Location in Workgroup Report
e) Whilst it is not proposed to implement the recommendations / findings of the Distributed Re-Start Project as part of this modification, where time allows and the Workgroup believe it is appropriate and efficient, then the Workgroup may consider if it is expedient to include those elements of the Distributed Re-start project that have been finalised and agreed by affected stakeholders in this modification. Alternatively, the Workgroup should make code changes in such a way as to facilitate the future delivery of code changes associated with the Distributed Re-Start Project	<b><u>Pages: 16 to 18</u></b>  Requirements for Distributed ReStart has been discussed by Workgroup and they have decided this should be moved to GC0156.
f) Following the 9 <sup>th</sup> August 2019 System frequency incident, the E3C's initiated work (being carried out by the Electricity Task Group) on the low frequency demand disconnection (LFDD) scheme. The Workgroup should ensure that they are familiar with this work and ensure that the solution developed in GC0148 is co-ordinated with any code changes that <i>may be required to implement the findings of the ETG work</i> .	As part of the solution a meeting has been held with those involved in the E3C work to ensure their solution is consistent with the development of the GC0148 solution.
g) As a joint workgroup (as recommended by the Proposer), consider the impact on the Distribution Code and EREC G99.	<b><u>Pages: 18 and 23</u></b>
h) Consider any other cross codes impacts.	<b><u>Pages: 18 and 23</u></b>

# GC0148 - the asks of Panel

- **AGREE** that the Workgroup have met their Terms of Reference
- **AGREE** that this Modification can proceed to Code Administrator Consultation
- **NOTE** that this Modification does not impact the Electricity Balancing Regulation (EBR) Article 18 terms and conditions held within the Grid Code
- **NOTE** the ongoing timeline



# GC0148 Next Steps

Milestone	Date
Code Administrator Consultation	03 August 2022 to 05 September 2022
Draft Final Modification Report issued to Panel	21 September 2022
Draft Final Modification Report presented to Panel	29 September 2022
Final Modification Report issued to Panel to check votes recorded correctly (5 working days)	4 October 2022
Submission of Final Modification Report to Ofgem	12 October 2022
Ofgem Decision required by	02 December 2022



# Draft Final Modification Reports

**GC0141: Compliance Processes and Modelling  
amendments following 9th August Power Disruption**

# Solution(s)

## Solution/summary of solutions:

The Workgroup considered the seven key elements of the solution separately. In four of the seven elements, variations on that element were considered as well as comparison to the Original solution and baseline Grid Code. For the other elements, the Original solution was compared with the baseline Grid Code.

- **Independent Engineer solutions:** *Original (required), baseline (not required) and two variations (Min threshold 100MW, Min threshold 100MW (inc of Users at LON status or material change))*
- **Methodology for sharing SSCI/SSTI Studies:** *Original (ESO/TO share as required), baseline (not required) and three variations (ESO/TO share with remote access, Consultant sees data, Consultant sees data and completes studies)*
- **RMS and EMT Modelling:** *Original (fully encrypted specification) and baseline (not required)*
- **Fault Ride Through definition and retrospectivity:** *Original (adds requirement) and baseline (not required)*
- **Compliance Repeat Plan Studies:** *Original (users submit every 5 years), baseline (no requirement) and one variation (material changes from submission made to achieve FON)*
- **Enhanced Fault Ride Through Studies:** *Original (agreed at start of process) and baseline (not required)*
- **Provision of torsional/shaft data from older plant:** *Original (users provide all retrospective data), baseline (no requirement before 1st April 2015) and one variation (provide data prior to 1st April 2015 when asked)*

# Code Administrator Consultation Responses

## Summary of Code Administrator Consultation Responses :

- Code Administrator Consultation was run from 06/06/2022 to 08/07/2022 and received 5 non-confidential responses (0 confidential responses). Key points were:
  - There was no clear preference on solutions shown from the Code Administrator Consultation responses
  - Most respondents were supportive of the implementation approach
  - A respondent stated that the revised CC 6.3.15 will apply to any existing LEEMPS and it will not be reasonable to impose these new fault ride through requirements retrospectively to LEEMPS. There is no explanation in the consultation of how these new requirements can be achieved with existing plant and on this basis the proposed new text in CC.6.3.15 should not be implemented.
  - The respondent expressed that as the DNOs will need to implement the new PC.A.5.3.2 – which means implementing PC.A.9, but as PC.A.9 does not include any embedded plant within its scope, it is unclear whether NGESO will or will not expect these models from LEEMPS.

## GC0141 - Baselined Legal Text at Code Administrator Consultation

- Code Administrator Consultation for GC0141 opened on the 06 June 2022
  - The Legal Text sections of the Grid Code used for the GC0141 CAC were on the correct baseline version at the time of issue
  - The GC0138 modification was approved by the Authority on the 10 June 2022 for implementation on the 24 June 2022
  - GC0138 contained changes to the **Compliance Processes** and **European Compliance Processes** sections of the Grid Code with GC0141 also requiring change to those same sections
  - The implementation of GC0138 on the 24 June 2022 has resulted in the CP and ECP sections of the Grid Code for GC0141 now on a previous baselined version
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- A review has been completed on the paragraphs within CP and ECP that were amended as part of GC0138, and these paragraphs have **not** been amended as part of the submitted changes for GC0141
  - **As there are no impacts on GC0141 as a result of the GC0138 implementation, the ask from the Panel is that the GC0141 modification does not need to go back through the Code Administrator Consultation process with the relevant sections re-baselined before sending to Ofgem for a final decision**



# GC0141 Next Steps

Milestone	Date
Draft Final Modification Report presented to Panel	28 July 2022
Final Modification Report issued to Panel to check votes recorded correctly (5 working days)	01 August 2022
Submission of Final Modification Report to Ofgem	09 August 2022
Ofgem decision date	TBC
Implementation Date	10 Days after Ofgem decision

# GC0141 – the asks of Panel

- **AGREE** whether or not the proposed changes to the legal text are typographical
- **NOTE** that this Modification does not impact the Electricity Balancing Regulation (EBR) Article 18 terms and conditions held within the Grid Code?
- **VOTE** whether or not to recommend implementation
  - *Does the GC0141 Original proposal and WAGCM1-14 better facilitate the objectives than the current Grid Code arrangements?*



# Grid Code Development Forum and Workgroup Day(s)



**Rob Wilson, NGESO**

# Grid Code Development Forum – Previous and Next

**6 July 2022**

## ***Early Competition Workstream***

*An overview was provided in relation to the Early Competition Project with key project milestones, and a preview of the Code Change Modification Plan to enable Early Competition.*

## ***Digitalised Whole System Technical Code Project Update***

*An updated was shared on the Alignment, Simplification and Rationalisation (ASR) Workstream of the Digitalised Whole System Technical Code including current progress and future key tasks.*

**3 August 2022 (Deadline for Agenda items - 27<sup>th</sup> July)**

*Agenda items TBC, but future agenda items will include:*

- ***Grid Code modification in relation to a change to Slope Tolerance (CC.A.7.2.2.3. and ECC.A.7.2.2.3)***

# Standing Items

- **Distribution Code Panel update (Alan Creighton)**
- **JESG Update (Milly Lewis)**

# JESG Update

**Joint European Stakeholder Group – 12 July 2022**

[Meeting materials and Headline Report](#)

**Next meeting – 09 August 2022**

# Updates on other industry codes

**GSR029:** Review of Demand Connection Criteria to Align with EREC P2/7

- **Workgroup nominations:** Closes 05 August 2022





**AOB**

- **Grid Code Panel Election Update**

A dramatic landscape featuring snow-capped mountains under a cloudy sky. Several bright, glowing orange lines, resembling energy or data paths, curve across the foreground and middle ground. The text "Grid Code Review Panel Elections Update - 2022" is overlaid in white on the lower left.

# Grid Code Review Panel Elections Update - 2022

national**grid**ESO



# Election Process

This election takes place every two years. It will determine the Grid Code Review Panel members and Alternates for the period **01 January 2023 – 31 December 2024**.

The following seats are available to be Elected:

	Panel Member Seats	Alternate Member Seats
Generator	4	2
Supplier	1	1
Onshore Transmission Owner	1	1
Offshore Transmission Owner (OFTO)	1	1

For the avoidance of doubt, this election does not apply to any other seats on the Grid Code Review Panel. The Network Operator seats including alternatives will be appointed by the DNOs via the Energy Network Association.

In order to be eligible to vote, or to nominate a candidate in the election, you must be a CUSC Schedule 1 party or have Materially Affected Party status on **31 August 2022**.

Voting will only commence if more nominations are received than seats available in the respective categories.

# What's happening next...

Date	Milestone
<b>Monday 5th September 2022</b>	Invitations will be sent out to CUSC Schedule 1 Users/Materially Affected Parties to nominate candidates to stand for election.
<b>Friday 30th September 2022</b>	Nomination Forms to be returned no later than 5.00pm
<b>Monday 10th October 2022</b>	List of candidates and voting papers to be circulated, or we will announce the outcome of the Elections.
<b>Thursday 10th November 2022</b>	Voting papers to be returned no later than 5pm.
<b>Monday 28th November 2022</b>	Election results will be announced.
<b>1st January 2023 – 31<sup>st</sup> December 2024</b>	Newly elected Panel Members and Panel Alternate Members will take up office.

# Next Panel Meeting

**10am on 25 August 2022 - Teams**

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**Papers Day – 17 August 2022**

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**Modification Proposals to be submitted by 10 August 2022**

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# Close



**Trisha McAuley**  
Independent Chair, GCRP