

# Grid Code Review Panel

**Thursday 16 December 2021**

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  
25 November 2021**





# Actions Log

## Review of the actions log





# Chair's Update

Update from the Chair



# Authority Decisions and Update



## Update:

**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>



# New modifications submitted





GC0154

Incorporation of  
interconnector  
ramping requirements  
into the Grid Code as  
per SOGL Article 119

Louise Trodden & Tom Ireland  
December 2021





# Drivers



## GB Compliance driver

### Compliance

Ofgem's decision letter regarding the Intermediate Methodologies requires the ESO to achieve alignment with the GB frameworks by incorporation relevant provisions into the appropriate sections of the Grid Code and the NETS SQSS

Such provisions include ramping arrangements as set out in article 3 of the LFC Block Operational Agreement

Ramping for BMUs is included in the Grid Code- this does not cover interconnectors

SOGL Art 119c requires ramping restrictions to be determined for power generating modules in accordance with Art 137.3 and interconnectors in accordance with 137.4



## Operational drivers

### Operational

Increasing levels of interconnection- concern if all interconnectors react to the same coupled market signal

The current interconnector ramping approach and rates are not feasible for the future- this could significantly increase the amount of reserve required

Current arrangements are in bespoke agreements and new connections are based upon a precedence that was set whilst enduring solutions were considered- not considering system capabilities

VikingLink (Denmark) is under construction now



# Assumptions

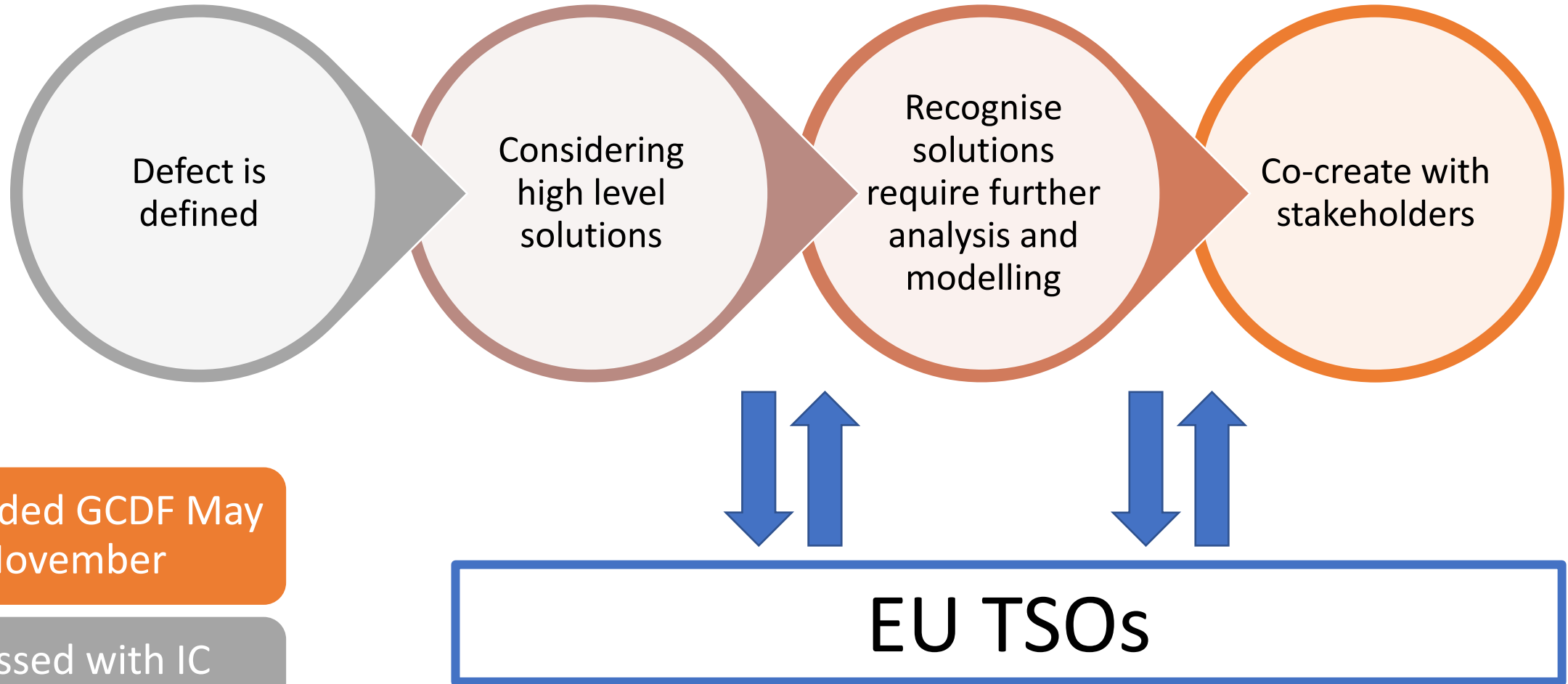
Cross border ramping is the consideration in this work. This is based on the requirements placed upon us in the letter from Ofgem. Ramping for BMUs will be considered outside this modification

Cross –border ramping is a shared decision with the remote end EU System Operator; Therefore their involvement and coordination with this process is key to ensure a mutually acceptable solution.

ESO want to work collaboratively to achieve the right solution with the industry



# Where are we



Attended GCDF May and November

Discussed with IC community



# You said

Concerns from interconnectors	Suggestions from interconnectors
<p>Deviations</p> <p>Who to pay costs for imbalances?</p> <p>This appears to be an issue at specific times of the day</p> <p>Could this be disproportionately costly?</p> <p>ESO causes imbalances on the continental side</p> <p>Will there be reviews into the compensation on imbalance as the long and short is assumed to 'even out'?</p> <p>All focus is on ramp rate restrictions</p> <p>Removal of flexibility of IC seems blunt</p> <p>Only sharing 3 examples over 4 months does not indicate a big issue</p> <p>Restrictions on ramping moves the problem to the IC operator due to imbalances</p> <p>IC are flexible <u>plant</u> and this could prevent us responding positively in the market</p> <p>Will reduced ramping have a cost to consumers?</p>	<p>Could dynamic ramp rates help</p> <p>Solutions meets a need that cannot be reached with current EA ramp management programmes</p> <p>Only apply ramp rate restrictions when there is a system need</p> <p>IC are kept financially firm for imbalance</p> <p>Continental TSO are consulted with and in agreement</p> <p>More market-based solutions- not just a code change</p> <p>Flows are market driven - can this drive IC being part of these balancing services?</p> <p>Could the IC provide frequency response?</p>
Concerns from generators	Suggestions from generators
<p>Windfarms can also ramp quickly in both directions and with the increase in windfarms this is also going to cause system frequency issues</p> <p>Should the ramping rates for windfarms be in BC1.A.1.1</p>	<p>We should have a joined approach for all market participants</p> <p>Consistency with market participants</p> <p>Ensure that there is the lowest cost for consumers in a competitive market</p>

Windfarm comments are not in scope for this work- but will be shared to support future modifications



# High level solutions

A number of credible solutions\* have been identified that could solve the defect, in isolation or in combination, including:

- Include current bespoke IC ramping arrangements, as they are, into the Grid Code
- NGESO holds sufficient response and reserve to facilitate cross border ramping
- Develop additional tools with interconnector and EU TSOs to mitigate ramping (e.g. slow or delay)
- Changes to the GB wholesale market design to be more compatible with cross border capacity markets
- Change cross border capacity market designs
- Adjust interconnector ramp rate limits
- Dynamic ramping

\*Not an exhaustive list



# Draft co-creation plan

## Stage 1

### Engagement

- Facilitate industry meetings to share update on progress (GCDF, JSEG, EU & GB TSO's)
- Raise modification at GCRP
- Start the workgroup process

## Stage 2

### Develop solutions

- Test initial assumptions
- Understand potential accuracy for modelling/ forecasting of cross border ramping
- Develop and co create solutions with stakeholders
- Consider the TCA work

## Stage 3

### Review solutions

- CBA to complete
- Assess impacts to ENCC, remote and interconnector TSO's and consumers
- Consider TCA work

## Stage 4

### Implementation

- Conclude code modification working group and consult with industry
- Share outputs in Industry meetings
- Share report with the authority for decision

**Regular check points with remote end SOs will be scheduled in this process**



# Risks

## Scope creep

Ensure that TOR are written to support ramping for HVDC interconnectors only, not for BMU's

## TCA

TOR to reflect that there is work being considered for cross border balancing and how this impacts each work stream

## CBA

Conducting this will be a key driver, need to ensure that this is done with support from workgroup members

## Cross border

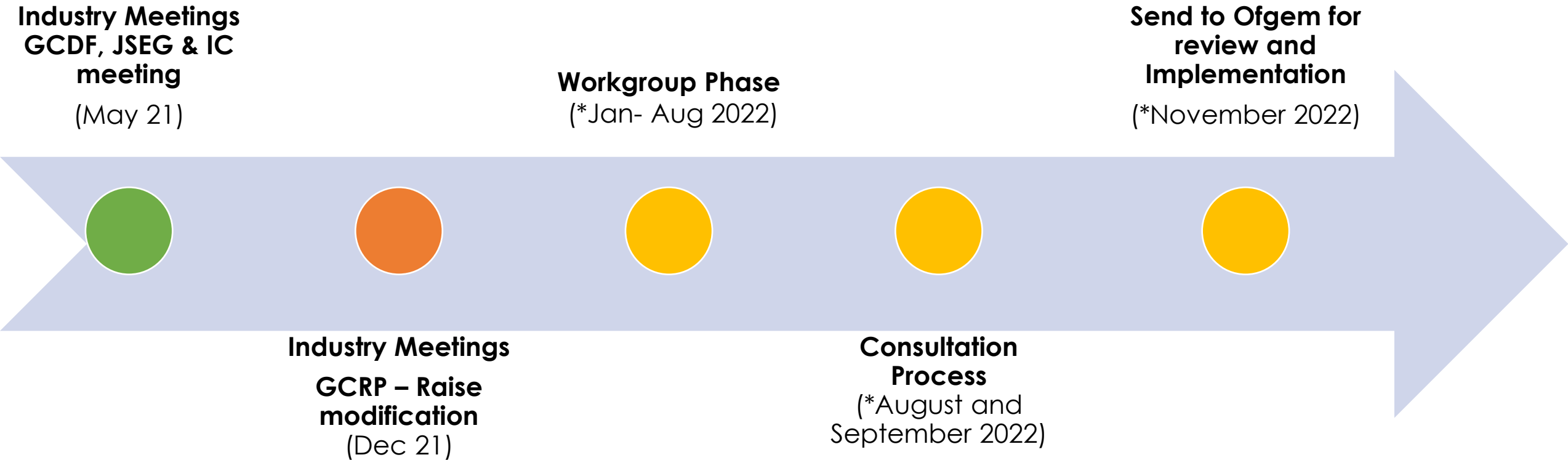
EU consideration- ensure that we have regular meetings and communications in place to ensure solution developments are shared

## Modelling

Complex modelling of solutions may be required



# Proposed timeline (\*dates are to be confirmed and subject to change)





# Ask of panel





# Critical Friend Feedback – GC0154

Code Administrator comments	Amendments made by the Proposer
<p>Critical Friend check completed with some amendments suggested.</p>	<p>All amendments were accepted by the Proposer.</p>
<p>Minor wording changes to add clarity to the text on Modification drivers</p>	
<p>Improved the wording in the implementation approach and the implementation date section to provide further clarity.</p>	<p>Timetable updated following discussion with Code Administrator.</p>



# Timeline for GC0154 – Proposed Timeline

Milestone	Date	Milestone	Date
Modification presented to Panel	16 December 2021	Final Modification Report issued to Panel to check votes recorded correctly (5 working days)	31 October 2022
Code Administrator Consultation (one calendar month)	01 September 2022 – 30 September 2022	FMR issued to the Authority	07 November 2022
Draft Final Modification Report (DFMR) issued to Panel (5 working days)	19 October 2022	Implementation Date (5 working days)	Within 10 working days of Authority decision
Panel undertake DFMR recommendation vote	27 October 2022		



# GC0154 – the asks of Panel

- **AGREE** that this Modification should follow Standard Governance (Ofgem decision) rather than the Self-Governance Criteria (Panel decision)
- **AGREE** that this Modification should proceed to Workgroup
- **AGREE** Workgroup Terms of Reference
- **NOTE** that there appear to be impacts on the Electricity Balancing Regulation (EBR) Article 18 terms and conditions held within the Grid Code
- **NOTE** the proposed timeline (draft project plan)





# GC0155 Clarification of Fault Ride Through Technical Requirements Slides for GCRP December 2021

Terry Baldwin



# History and Purpose

GC0151 Fault Ride Through- Urgent modification to codify FRT requirements following a letter published by ESO's Head of Networks



WAGCM2 proposal- An alternative was made which highlighted other areas of FRT which required clarification



During the decision process for GC0151 OFGEM noted that WAGCM2 had merit however further scrutiny was required which wasn't possible with the GC0151 Urgent modification Timetable.



GC0155 has been raised by NGESO on behalf of Alastair Frew (WAGCM2 proposer) to allow workgroup to scrutinise FRT issues highlighted.



## Purpose

This modification proposes minor changes and improvements to the existing Grid Code Fault Ride Through (FRT) requirements as a minimum but not limited to the following:

- To clarify instances where User plant is permitted to trip where required in order to clear the fault from the transmission system
- To amend requirements for generating maximum reactive current during faults which may be unachievable for many Generators
- To amend post fault active power requirements to reflect that low load Generators may have greater oscillations than the requirements currently allow for
- To provide requirements for overvoltage events following a fault



## GC0155 – Legal Text Solution

- There are proposed solutions for all four areas which require change apart from Post fault active power requirements where it was felt that the proposed solution within WAGCM2 would not resolve the issue and thus has been left open for the workgroup to find a solution.
- The draft legal as submitted for WAGCM2 without amendment has been submitted (Annex 1) as a starting point for the workgroup but will require modification.



# Panel Decision Required

- **Requesting panel to approve a standard governance approach with workgroup**

OFGEM GC0151 decision for WAGCM2;

A number of GCRP members noted in their voting statements that the changes to FRT requirements proposed under WAGCM2 whilst appearing beneficial, have not been fully scrutinised due to GC0151 being progressed as an urgent modification. We agree with this view, and therefore consider changes to the FRT requirements could be progressed as a separate modification should industry desire



# Critical Friend Feedback: GC0155

Code Administrator comments	Amendments made by the Proposer
Minor amendments in the Overview and some parts of the proposed solution	All changes accepted by Proposer
Clarification of Impacted Parties	Level of impact changed from 'Low' to 'Medium'
Amend some phrases in the 'Active Power Requirements' section to read clearer	The Proposer reworded texts in this section to match the current legal text and removed the proposed solution to allow the Workgroup freedom to determine the most suitable solution



## Timeline for GC0155 – Proposed Timeline

Milestone	Date	Milestone	Date
Modification presented to Panel	16 December 2021	Final Modification Report issued to Panel to check votes recorded correctly (5 working days)	04 July 2022
Code Administrator Consultation (one calendar month)	02 May 2022 – 02 June 2022	FMR issued to the Authority	11 July 2022
Draft Final Modification Report (DFMR) issued to Panel (5 working days)	22 June 2022	Implementation Date (5 working days)	Within 10 working days of Authority decision
Panel undertake DFMR recommendation vote	30 June 2022		



# GC0155 – the asks of Panel

- **AGREE** that this Modification should follow Standard Governance (Ofgem decision) rather than the Self-Governance Criteria (Panel decision)
- **AGREE** that this Modification should proceed to Workgroup
- **AGREE** Workgroup Terms of Reference
- **NOTE** that there appear not to be any impacts on the Electricity Balancing Regulation (EBR) Article 18 terms and conditions held within the Grid Code
- **NOTE** the proposed timeline (draft project plan)





# Inflight Modification Updates

**Nisar Ahmed, Code Administrator**



# GC0139 update

## Enhanced Planning-Data Exchange to Facilitate Whole System Planning

**Good progress being made by expert group looking at legal text. No further updates from Proposer on CIM subgroup progress.**

Meeting with workgroup members held on 06 October 2021 to define a plan for the modification.

Plan Agreed as follows:-

- 1) Proposer to draft terms of reference for CIM Subgroup
- 2) Proposer to set up meeting with Dan Clarke (ENA) and Paul Hayes (Leader on CIM subgroup) to look at scope
- 3) ESO Technical Codes Team has re-circulated the draft legal text
- 4) Group of 4 experts from Workgroup to look at producing another version of the legal text by mid November (Alan C, Proposer, & ESO)
- 5) Workgroup is currently targeting a mid-March 2022 date to conclude the workgroup and finalise the report for review by Panel.
- 6) Develop the gaps in the timeline for Panel update between now and mid-march 2022.



# GC0146 update

## Solutions for frequency control of Power Park Modules

This modification was submitted by Orsted on 19 May 2020 and is trying to modify the current Grid Code to ensure developers can have a more flexible way to design frequency control and how this can be implemented in the wind farms. Currently, the Grid Code allows to control the frequency at PPM level and we are asking to consider controlling frequency at BMU level as well.

- **First workgroup meeting held 08 December 2021.**
- Main areas for further investigation/discussion were; legal implications to the statutory instrument, consideration as to whether BM Units need to be fully defined in the Grid Code instead of just a reference to BSC as now, potential issues around cross-border connections, any consequential knock-ons that are not already listed or highlighted within the proposal.
- Timeline and Terms of Reference agreed.



# Panel Tracker

**Nisar Ahmed**



# Prioritisation Stack



# Dashboard – Grid Code (as at 08 December 2021)

Category	July	August	Sept	Oct	Nov	Dec
New Modifications	0	1 <i>GC0152</i>	0	0	1 <i>GC0153</i>	2 <i>GC0154</i> <i>GC0154</i>
In-flight Modifications	18	19	19	17	15	17
Modifications issued for workgroup consultation	0	0	1 <i>GC0151</i>	0	0	0
Modifications issued for Code Administrator Consultation	1 <i>GC0150</i>	0	2 <i>GC0151</i> <i>GC0137</i>	1 <i>GC0152</i>	1 <i>GC0138</i>	1 <i>GC0153</i>
Workgroups held	7	4	2	4	4	4
Authority Decisions	1 <i>GC0109</i>	1	0	0	1 <i>GC0151</i>	0
Implementations	0	1 <i>GC0109 23</i> <i>Aug</i>	1 <i>GC0134</i>	1 <i>GC0150</i>	1 <i>GC0151</i>	1 <i>GC0152</i>





# Workgroup Reports

**None**



# Draft Final Modification Reports (DFMR)

**GC0138 – Compliance process technical improvements (EU and GB User)**

**Nisar Ahmed, Code Administrator**



# GC0138 – Issue at DFMR stage

## Issue

The Code Administrator Consultation (CAC) did not include the updated versions of Legal Text (as amended by Alan and Alastair) for ECP and OC5 documents due to an inadvertent oversight.

The Code Administrator apologies for this and we will improve our controls going forward and learn from this to mitigate any future occurrence.

## What does this mean for the Panel meeting?

This means that the recommendation vote for the DFMR will now not go ahead and the asks of Panel will change. Thanks to those who had sent in votes and voting statements for GC0138 but if you have not sent in yet then there is no need to do so now.

The changes are largely typographical and minor. However, in reviewing the legal text files again, the Proposer and ESO have identified some additional typographical changes which they would like to also include.



# GC0138 – Asks of the Panel

In accordance with Governance Rule 22.4(ii), the Panel will need to:

- 1) Decide whether or not the changes are typographical and minor, in which case the matter will be directed to the workgroup for approval and we can have the recommendation vote in January 2022 (no requirement to re-issue CAC).
- 2) If Panel decide that the changes are not minor then can instruct for a further Code Administrator Consultation to be issued for a calendar month and we can have a recommendation vote in February 2022 (as would miss papers day for January – unless Panel agree to accept late papers for GC0138 in January 2022).

**Code Admin Recommendation:** My recommendation would be to issue another Code Administrator Consultation as industry should have an opportunity to review the legal text which would be implemented.

*GR.22.4(ii)*

*if the change required is not considered to be a typographical error then the Grid Code Review Panel may direct the Workgroup to review the change. If the Workgroup unanimously agree that the change is minor the Grid Code Review Panel may instruct the Code Administrator to make the appropriate change and the Panel Chairman will undertake the Grid Code Review Panel Recommendation Vote, otherwise for changes that are not considered to be minor the Code Administrator shall issue the Grid Code Modification Proposal for further Code Administrator consultation, after which the Panel Chairman will undertake the Grid Code Review Panel Recommendation Vote;*



**\*\* Based on re-issue of CAC**

# GC0138 Timeline (Panel take 5 WD for review)

Milestone	Date
Panel to review the updated Legal Text (5 Working Days)	17 Dec – 23 Dec 2021
Re-Issue CAC	29 Dec – 04 Feb 2022 (allow for Christmas Holidays and New Year break)
DFMR presented to Panel for recommendation vote	24 Feb 2022
Final Modification Report issued to Panel to check votes recorded correctly (5 working days)	28 Feb 2022 – 04 Mar 2022
FMR Issued to the Authority	07 March 2022
Authority Decision	TBC
Implementation	Within 10 days of receiving the Authority decision



**\*\* Based on re-issue of CAC**

# GC0138 Timeline (Panel take 1 WD for review)

Milestone	Date
Panel to review the updated Legal Text (1 Working Day)	17 Dec
Re-Issue CAC	17 Dec – 17 Jan 2022 (no allowance for Christmas Holidays and New Year break)
DFMR presented to Panel for recommendation vote	27 Jan 2022
Final Modification Report issued to Panel to check votes recorded correctly (5 working days)	31 Jan 2022 – 04 Feb 2022
FMR Issued to the Authority	07 Feb 2022
Authority Decision	TBC
Implementation	Within 10 days of receiving the Authority decision



The background features several decorative yellow lines. In the top left, there are several thin, curved lines that sweep upwards and to the right. In the bottom left, there are a few more thin, curved lines. On the right side, there are several thick, parallel diagonal lines that slope upwards from left to right. A single horizontal line runs across the bottom of the slide, just above the logo.

# Reports to Authority

**None**





# Implementation Update

**None**



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# Governance

None





# Grid Code Development Forum and Workgroup Day(s)



**Rob Wilson, NGESO**



# Grid Code Development Forum – Previous and Next

**24 November 2021**

**Cancelled due to no agenda items**

**5 January 2022**

## **Whole System Technical Code**

*The WSTC Team will provide an update on the project following the closure of the first consultation.*

## **SQSS Review**

*An update is due to be provided in relation to how stakeholders will be consulted on the SQSS review moving forward following the October GCDF presentation.*

## **Electricity Restoration Standard**

*An update to be provided in reference to the Ofgem consultation which aims to introduce an Electricity System Restoration Standard.*



# Standing Items

- **Distribution Code Panel update (Alan Creighton)**
- **JESG Update (information only)**



# JESG Update

**Joint European Stakeholder Group meeting for December was held 14 December 2021.**

[Agenda](#)

[Presentation pack](#)

**The date of the next JESG meeting will be held 11 January 2022.**



# Updates on other industry codes



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# Blockers to Modification Progression

(February, May, August, November)





# Horizon scan

(February, May, August, November)



# Electrical Standards

**DM/DR disarming instructions - new codes**





## **Grid Code Panel – DM & DR**

**Proposed modifications to NGENSO NETA  
Despatch Instruction Guide & NGENSO EDL  
Instruction Interface Valid Reason Codes**

**16 December 2021**

Charlotte Watts, ESO



## Background

- Dynamic Moderation and Dynamic Regulation are due to launch in spring next year
- As part of the design of the services, we have introduced the capability of disarming/re-arming units to support the operational needs of the system
- ESO will send providers an instruction to turn off and providers will only resume once ESO send a re-arming instruction
- For BM units, ESO will send reason codes to providers to disarm and re-arm
- The introduction of the new reason codes requires the following documents to be updated and approved by the Panel:
  - NGESO NETA Despatch Instruction Guide
  - NGESO EDL Instruction Interface Valid Reason Codes



## Background

- EBR Article 18 DM/DR consultation ends on 15 December
- Throughout the consultation, we have engaged with providers to answer their questions on the new function
- Following the end of the consultation, Ofgem have two months to review the content
- DR will then launch in late March and DM will launch in April
- As the services are due to launch in the spring, we aim to identify the new codes early to give plenty of notice to providers and also allow time for system development



# Proposed Changes

New EDL reason codes are proposed:

- One to disarm contracted response provision "DNS"
- Three to re-arm each service: "DC", "DM", "DR", and subsidiary codes to future-proof for an optional market: "DCH", "DCL", "DMH", "DML", "DRH", "DRL".

## NGESO NETA Despatch Instruction Guide added paragraphs to section 4:

From September 2020, NGESO has begun a move to three new response products, Dynamic Containment (DC), Dynamic Moderation (DM) and Dynamic Regulation (DR). Initially these will be procured in a day ahead auction, and a new disarm reason code has been added to cease provision of these contracted services in real time. A new reason code has been added for each of these services to serve as a re-arm code to return to contracted provision, these codes can also be used if NGESO implements an optional market for any of these services.

- **A DNS reason code** will be used to indicate that a provider should cease provision of contracted response services at the Start time. Note this does not remove the grid code obligation to provide Limited Frequency Sensitive Response.
- **A DC reason code** will be used to indicate that contracted DC (Low and High) should resume at the Start time. If an optional market is introduced, then this code will be used to arm DC response. DCL, and DCH codes have also been added for the separate High and Low aspects of the service.
- **A DM reason code** will be used to indicate that contracted DM (Low and High) should resume at the Start time. If an optional market is introduced, then this code will be used to arm DM response. DML, and DMH codes have also been added for the separate High and Low aspects of the service.
- **A DR reason code** will be used to indicate that contracted DR (Low and High) should resume at the Start time. If an optional market is introduced, then this code will be used to arm DR response. DRL, and DRH codes have also been added for the separate High and Low aspects of the service.





# Forward Plan Update/Customer Journey)

**None**





# AOB

- **GC0109 implementation update**  
**Rob Wilson**
- **GC0151 reporting update**  
**Rob Wilson**





# GC0109 implementation update

Rob Wilson

Dec 2021



# Recap of GC0109 impact

GC0109 was implemented in the Grid Code on 23 Aug 2021

In the final report, of the 22 warnings or alerts identified by the workgroup, 3 were removed from the scope as they were redundant or low value and resulted in unmanageable numbers of notifications and 15 were already published on BMRS by the ESO, 7 on a voluntary basis (these are now mandated)

The remaining four new notifications in BMRS relate to:

- Capacity Market notices
- ESEC instructions for rota disconnections
- Emergency instructions to TOs (for which advice from BEIS prohibits identification of specific equipment)
- Requests to interconnectors for emergency assistance

All of these have now come up with the exception of rota disconnections.



# Screenshot from BMRS – 29 Aug 2021

Two of the four categories of new warnings/alerts to add to BMRS had occurred:

ELEXON

BMRS

LECTRICITY DATA SUMMARY

REMIT

TRANSPARENCY

TRANSMISSION

DEMAND

GENERATION

BALANCING

Home

>

Transmission

>

System Warnings

System Warnings

Warning Date/Time (GMT)	Warning Text
2021-08-29 06:27	A request for Emergency Assistance has been agreed on a GB connected Interconnector. Volume of request is 400 MW from GB from 07:00 29/08/2021 to 08:00 29/08/2021.
2021-08-27 10:10	NGESO has requested a Transmission Owner discontinue an outage within relevant Emergency Return to Service time, under STC Section C Part 2 (7).



# Screenshot from BMRS – 3 Dec 2021

CMN & cancellation occurred:

System Warnings	
Warning Date/Time (GMT)	Warning Text
2021-12-03 14:02	Electricity Capacity Market Notice Cancelled Posted by National Grid Electricity System Operator at 14:01 on 03/12/2021 The Capacity Market Notice originally active from 17:30 on 03/12/2021 has been cancelled from 13:36 on 03/12/2021
2021-12-03 14:00	Electricity Capacity Market Notice Currently Active Posted by National Grid Electricity System Operator at 13:55 on 03/12/2021 Commencement time of notice : 17:30 on 03/12/2021 Circumstances that triggered notice : Margin below threshold set out in capacity market rules Transmission Demand and Operating Margin (MW) : 42518 Aggregate Capacity of BM Units expected (MW) : 42472 Additional Capacity (MW) : No definitive information regarding capacity is currently available to the electricity system operator. Capacity Market participants are advised to review the System Warnings page on BMRS for potential operational warnings from the Electricity System Operator. This notice is published pursuant to Rule 8.4.6 / 11.3.5 of the Capacity Market Rules Participants are also advised to pay close attention to De-rated Margin (DRM) information on the BMRS website that will be updated 3 times (4-hour, 2 hour and 1 hour ahead) in advance of the commencement time of this Capacity Market Notice. For further information, please contact <a href="mailto:emr@nationalgrideso.com">emr@nationalgrideso.com</a> and see the FAQ at <a href="https://gbcmn.nationalgrideso.com/faq">https://gbcmn.nationalgrideso.com/faq</a>
2021-11-26 00:25	NGESO has requested a Transmission Owner discontinue an outage within relevant Emergency Return to Service time, under STC Section C Part 2 (7). Issued by Simon Williams at 00:23 on 26/11/2021
2021-11-26 00:23	NGESO has requested a Transmission Owner discontinue an outage within relevant Emergency Return to Service time, under STC Section C Part 2 (7). Issued by Simon Williams at 00:23 on 26/11/2021



# Thoughts?

- Getting the CMN warning onto BMRS took less than an hour
- Code requirement is 'reasonable endeavours' with a target of 15 mins
- It happened exactly at shift handover
- The ESO has no special access to Capacity Market information. We rely on the same emails/text alerts that any industry parties can subscribe to
- Automating this process to make it faster would cost approx. £150k which doesn't seem good value



# GC0151 reporting update – Rob Wilson

## Multiple faults:

- Storm Arwen caused 50+ transmission faults in a short timeframe including several lines that DAR'ed successfully and then retripped multiple times
- What is the best way of reporting these?
- Proposal is that we either do this as attached or by summing up the circuits that tripped and number of faults on each

## Voltage waveforms:

- We are proposing to include voltage waveforms for each event taken as a RMS interpretation from the fault Contrade data
- The full data files are massive but can be supplied for any event on request
- Full waveform data is likely to be of limited value where the source is not the generator's connection point other than for information on the time-stamping and nature of the fault

## Timing:

- We are proposing to put data onto the incident reporting page for the previous month
- If a Significant Incident Report is requested from a user due to a suspected FRT issue any associated data will be shared with them as soon as possible
- Sharing of real time data identifying faults on the system is a security and commercial risk and has been advised against in other contexts (eg GC0109)
- Analysing data on faults and obtaining appropriate waveform data from TOs can take some time – 1.5 weeks for all of the Storm Arwen events
- We could share unverified data sooner but would this be of value?



# Next Panel Meeting

**10am on 27 January 2022 at  
Faraday House**

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**Papers Day – 19 January 2022**

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**Modification Proposals to be  
submitted by 12 January 2022**

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# Close



**Trisha McAuley**  
Independent Chair, GCRP