

# Grid Code Review Panel

Thursday 29 September 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**.

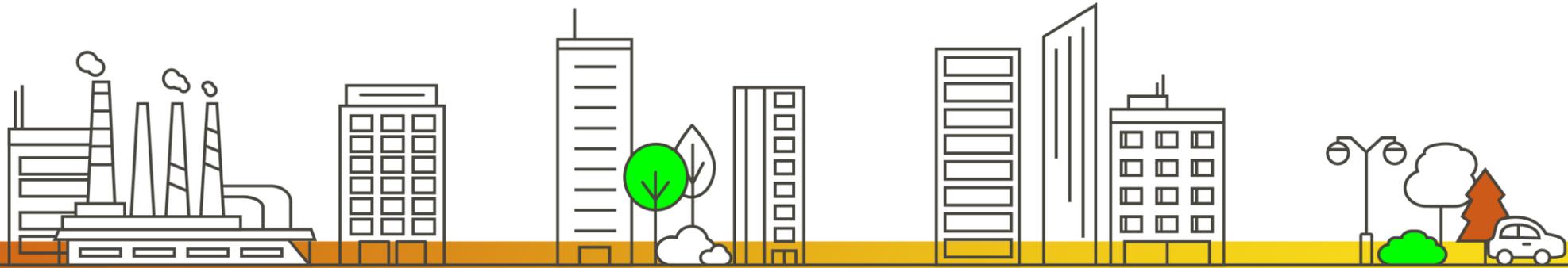
## Duties of Panel Members & Alternates (GR.3.3)

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  
25 August 2022



# Actions Log

## Review of the actions log



# Chair's Update

Update from the Chair

# Authority Decisions and 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

**Standard Governance**





GC0159 – Introducing  
Competitively Appointed  
Transmission Owners

Steve Baker and Alastair Grey

# Background

- The **Energy Security Bill** was introduced to Parliament on 6 July, which makes provisions to enable competitive tenders in onshore electricity networks.
- BEIS indicate that, through the introduction of competition, consumers could see savings of up to £1 billion on projects tendered over the next ten years
- This modification aims to introduce the concept of **Competitively Appointed Transmission Owners (CATOs)** for the purposes of introducing Onshore Network Competition for the design, build and ownership of Onshore Transmission assets.
- BEIS have indicated a preference for the FSO to run tenders to appoint a preferred bidder.
- CATOs will be appointed following a tender process and will be financed through a long Tender Revenue Stream.
- To allow **Onshore Network Competition** to be implemented effectively the competition processes, obligations, technical requirements, charges, and remuneration principles need to be embedded within the relevant codes.
- The proposed modifications will enable both early and late competition and are based upon the assumption that CATOs will be granted a Transmission Licence and will be categorised as Onshore Transmission Licensees.

# GC0159 Introducing 'CATO' Modification

- **The ESO is now raising a new mod** to cover the requirements to facilitate introduction of Competitively Appointed Transmission Owners
- **The legal text changes are to be made in association with changes to other Codes**, including STC, CUSC, SQSS and BSC
- The changes consist mainly of:
  - Introducing the **concept of Competitively Appointed Transmission Owner** into the Glossary & Definitions
  - Changes to **Safety and Technical Standards** to include CATOs
  - Definition of **Small, Medium and Large power station thresholds** within the context of CATO

# Legal Text Changes

Please note the following points of guidance regarding the legal text changes. This is not an exhaustive list of the changes so please review the legal text for full details.

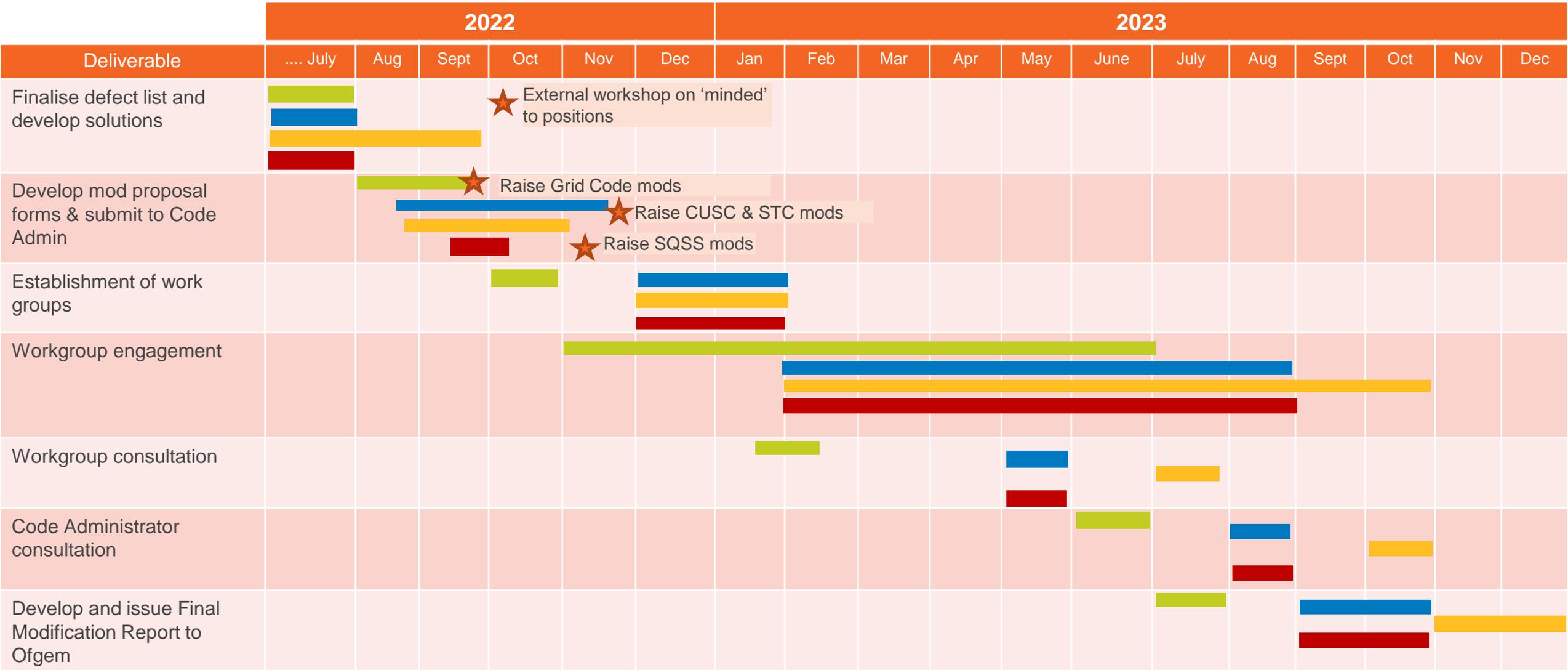
Note that the objective of this modification is to implement minimum changes to ensure continued operability of the Grid Code arrangements.

The changes listed below are made on the assumption that CATO will be introduced as a sub-category of Onshore Transmission Licensee.

Section	Legal text change
<b>Glossary &amp; Definitions</b>	introduce the CATO concept; Amend definitions, including: Onshore Transmission Licensee; Transmission Interface Points (Onshore to Onshore); E&W Transmission System; Small, Medium and Large Power Stations; Local Safety Instruction; E&W Transmission Licensee and Scottish Transmission Licensee; Remote Transmission Assets; Scottish Transmission System; Transmission Interface Circuit.
<b>Planning Code</b>	introduce amendments to Appendix C to ensure technical, design and operational criteria for CATO licensees are clarified.
<b>Operating Code</b>	introduce concept of CATO with respect to Interface Points and Boundaries of Influence as described in the Grid Code (and STC) for CATO licensees; Ensure CATO technical standards are made clear through the Grid Code including how these align with existing TO areas; Set out Governance rules/ Grid Code Review Panel representation appropriately for CATOs.
<b>Governance Rules</b>	account for CATO in <b>Governance Rules and Representation</b> , our suggested path being to group with Onshore Transmission Licensees.
<b>Balancing Code No.2;</b>	detail obligations of BMUs in relation to the commencement or termination of their participation in the BM. Relevant Demand Capacity varies across the SPT's SHETL's and NGET's network. There is a need to reference CATO concept.
<b>General Conditions</b>	Insert reference to CATO. Including GC.A.2.7 and GC.A.2.8 - add in concept of CATO to provision of data. Currently only references SPT and SHETL

# POAP for all CATO mods

Grid code ■ CUSC ■ STC ■ SQSS ■



# Critical Friend Feedback – GC0159

Code Administrator comments	Amendments made by the Proposer
<p>Remove duplicated points.</p> <p>Refine how Proposer's solution is presented – adopt bullet style to outline proposed changes to various sections of the Grid Code.</p> <p>Provide implementation approach i.e. whether IT system changes will be required.</p>	<p>Repeated paragraphs removed.</p> <p>Bullet points used to present proposed changes</p> <p>Proposer suggested no required changes to existing systems and processes.</p>

# Timeline for GC0159

Milestone	Date	Milestone	Date
Proposal Presented to Panel	29 September 2022	Workgroup Report issued to Panel (5 working days)	18 May 2023
Workgroup Nominations	03 October 2022 – 21 October 2022	Panel sign off that Workgroup Report has met its Terms of Reference	25 May 2023
Workgroup 1 – Understand / discuss proposal and solution(s), review and agree on Terms of Reference and Timeline, review cross code impacts, review analysis and agree next steps.	3 November 2022	Code Administrator Consultation	02 June 2023 – 02 July 2023
Workgroup 2 – Refine solution(s), draft legal text and consider potential Workgroup Consultation questions	6 December 2022	Draft Final Modification Report (DFMR) issued to Panel	19 July 2023
Workgroup 3 – Review Workgroup Consultation questions and finalise Workgroup Consultation	11 January 2023	Panel undertake DFMR recommendation vote	27 July 2023
Workgroup Consultation	25 January 2023 – 15 February 2023	Final Modification Report issued to Panel to check votes recorded correctly (5 working days)	31 July 2023 – 04 August 2023
Workgroup 4 – Review Workgroup Consultation responses, consider new points raised, refine solution, review legal text and discuss any potential alternatives	2 March 2023	Final Modification Report issued to Ofgem	08 August 2023
Workgroup 5 – Finalise solutions (including legal text) and alternatives and hold alternative vote	06 April 2023	Ofgem decision	Q4 2023
Workgroup 6 – Finalise Workgroup Report and hold Workgroup Vote	11 May 2023	Implementation Date	10 Working Days after Ofgem Decision

# GC0159 – 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

# New modifications submitted

## Urgency

**GC0160:** Grid Code Changes for BSC Mod P448 -  
“Protecting Generators subject to Firm Load Shedding  
during a Gas Supply Emergency from excessive  
Imbalance Charges”

Garth Graham



# Summary

- The BSC Modification proposes to address the risk of Generators in GB being prevented from generating this winter (due to Firm Load Shedding during a Gas Supply Emergency) by allowing such Firm Load Shedding instructions to be settled as Bids.
- As a result, and in order to ensure consistency between the BSC and the Grid Code, this Modification seeks to ensure that the actions of the affected party in terms of Physical Notifications are aligned.

# Why change (i)

- Concern about the deteriorating situation in the gas market
- Heightened risk of a GDE this winter
- If a GDE arises, then largest gas consumer sites off first for gas safety reasons
- Impacts on imbalance and credit position for gas generator BM Units

# Why change (ii)

- Quantum of the issue

		Imbalance Price		
	MW	£3,000/MWh	£6,000/MWh	£9,000/MWh
Max	2200	£158.40m	£316.80m	£475.20m
Average	1280	£92.16m	£184.32m	£276.48m
Min	900	£64.80m	£129.60m	£194.40m

# Why change (iii)

- If affected gas fired generators are impacted then will rapidly leave the market, impacting security of supply and market liquidity
- If action not taken then possible steps to seek to mitigate risk would see reduction in market liquidity and lots of additional near real time actions needing to be taken by ENCC

# Proposed Solution

- Align BSC and Grid Code PNs – so changes to Grid Code dependent on solution in P448.
- Limited to a gas curtailment situation of gas fired generator subject to firm load shedding during a gas deficit emergency interruption
- Physical Notification(s) (PN) submitted by a gas fired generator shall, throughout the gas interruption, in the reasonable view of the User, reflect the expected output of the unit as at the time just prior to the start of the gas interruption.
- PN would reflect what the affected generator would have notified had the gas not been interrupted.
- Shall take into account the amount of power already sold for delivery during the period of (gas) interruption by the User at the time of the start of the (gas) interruption and, if relevant, the relative efficiency of any (gas) interrupted unit compared with other non-interrupted (gas) units that would also be expected to deliver the power sold.
- The PNs of any interrupted unit shall, for the duration of the (gas) interruption, not be increased as a result of any power sold after the start of the (gas) interruption but may be reduced as a result of any mitigating actions taken by the relevant User.

# Applicable Objectives

- **(a) Positive:** will better facilitate as it will allow the ESO to operate the NETS more efficiently, economically and in a more coordinated manner by continuing to have the affected plant available after a GDE situation.
- **(b) Positive:** will better facilitate by promoting liquidity in traded markets in timescales running up to real time.
- **(c) Positive:** will better facilitate Applicable Grid Code Objective (c) as this change will facilitate the affected generators continuing to participate in the market and operate for system stability purposes in light of a GDE.
- **(d) & (e) Neutral**

# Critical Friend Feedback – GC0160

Code Administrator comments	Amendments made by the Proposer
<p>Suggested shortening the 'Overview' section to remove duplication</p> <p>Sought clarify on timing/ choice of governance and provided suggested timeline</p> <p>Suggested rewording the 'Why Change?' section to make the consequential nature of the modification clearer.</p> <p>Clarification within 'What is the proposer's solution?' section that the GC0160 solution is depended on the BSC P448 modification solution.</p> <p>Added Ofgem Urgency Criteria points within the Proposer's justification for governance route</p> <p>Added acronyms</p>	<p>Proposer accepted all amendments made by the Code Administrator with the exception of the recommended timeline due to a preference of keeping the 2 modifications aligned.</p>

# Ofgem's Urgency Criteria

Ofgem's current view is that an urgent modification should be linked to an imminent issue or a current issue that if not urgently addressed may cause:

- a) A significant commercial impact on parties, consumers or other stakeholder(s); or
- b) A significant impact on the safety and security of the electricity and/or gas systems; or
- c) A party to be in breach of any relevant legal requirements.

More information can be found at:

<https://www.ofgem.gov.uk/sites/default/files/2022-08/Urgency%20Guidance%20-%20FINAL.pdf>

# Proposer's Justification vs Ofgem's Urgency Criteria

The Proposer recommends that this modification should be treated as an Urgent Modification proposal and be assessed by a Workgroup.

Ofgem's Urgency Criteria	Proposer's Justification
a) A significant commercial impact on parties, consumers or other stakeholder(s).	This is evidenced, in respect of the significant commercial impact, by the quantum(s) shown in the table in Section 1 in the GC0160 Proposal document
b) A significant impact on the safety and security of the electricity and/or gas systems.	In terms of the significant impact on the security of the electricity system this is evidenced by what can be expected, should the proposed solution not be taken forward, if a GDE situation arises and the affected generators are (due to the resulting imbalance cost / associated credit cover) placed into Administration/ Liquidation / Receivership as these types of appointed organisation(s) are highly unlikely to be able to maintain the plant within the marketplace in the short to medium term (see, for example, Calon Energy administration situation – which, to be clear, did not arise from a GDE) when gas supplies are restored with the associated detrimental impact on security of the electricity system (as well as detrimental effect on the marketplace)
c) A party to be in breach of any relevant legal requirements	n/a

# Timeline for GC0160 – Proposed Urgent Timeline - Workgroup

Milestone	Date	Milestone	Date
Modification presented to Panel	29 September 2022	Code Administrator Consultation (1 calendar month)	15 October 2022 to 15 November 2022
Workgroup Nominations (3 Working Days)	29 September 2022 (2pm) to 04 October 2022	Draft Final Modification Report (DFMR) issued to Panel	16 November 2022
Ofgem grant Urgency	30 September 2022 (5pm)	Panel undertake DFMR recommendation vote	17 November 2022 (before 12pm)
Workgroup 1 (assuming Ofgem have granted Urgency) Joint workgroups with the BSC mods proposed	04 October 2022	Final Modification Report issued to Panel to check votes recorded correctly	17 November 2022 (2pm to 4pm)
Workgroup Consultation (3 working days)	06 October 2022 (9am) – 10 October 2022 (5pm)	Final Modification Report issued to Ofgem	17 November 2022 (4pm)
Workgroup 2 - Assess Workgroup Consultation Responses and Workgroup Vote	12 October 2022	Ofgem decision	21 November 2022 (5pm) *
Workgroup report issued to Panel	13 October 2022	Implementation Date	23 November 2022 *
Panel sign off that Workgroup Report has met its Terms of Reference	14 October 2022 (before 10am)		

\* Dependent on agreement on BSC modification timeline

# Timeline for GC0160 – Proposed Urgent Timeline - Code Administrator Consultation

Milestone	Date	Milestone	Date
Modification presented to Panel	29 September 2022	Final Modification Report issued to Panel to check votes recorded correctly	16 November 2022 (2pm to 4pm)
Ofgem grant Urgency	30 September 2022 (5pm)	Final Modification Report issued to Ofgem	16 November 2022 (4pm)
Code Administrator Consultation ((1 calendar month)	13 October to 13 November 2022	Ofgem decision	21 November 2022 (5pm) *
Draft Final Modification Report (DFMR) issued to Panel	15 November 2022	Implementation Date	23 November 2022 *
Panel undertake DFMR recommendation vote	16 November 2022 (before 12pm)		

\* Dependent on agreement on BSC modification timeline

# What can only be changed by Urgency – Grid Code

Milestone	Standard Timescale	Referenced in Governance Rules of Grid Code	Referenced in CACOP V5.1	Referenced in Terms of Reference	Comments
<b>Workgroup Nominations</b>	15 working days	No	No	No	15WD appears to be industry practice but nothing preventing Panel agreeing to a shorter period without the need for Urgency
<b>Workgroup Consultation</b>	15 working days	GR.20.11	Yes - Principle 10 ( <i>Standard 15 Business Days</i> )	Yes	CACOP Principle 10 states a standard 15 business days. Panel can agree to a shorter period without the need for Urgency.
<b>Workgroup Report to Panel</b>	5 working days	GR.23.7	No	No	Panel can agree to a shorter period without the need for Urgency.
<b>Code Administrator Consultation</b>	1 calendar month	GR.21.3	Yes - Principle 10 ( <i>Standard 15 Business Days</i> )	No	CACOP Principle 10 states a standard 15 business days. GR.21.3 states 1 calendar month.
<b>DFMR to Panel</b>	5 working days	GR.22.3	No	No	Must be 5WD notice (GR.22.3)
<b>FMR to Panel to check Votes</b>	5 working days	GR.22.5	No	No	Must be 5WD notice (GR.22.5)

# GC0160 – the asks of Panel

- **AGREE** that this Modification should proceed to Workgroup
- **NOTE** that there appear to be any impacts on the Electricity Balancing Regulation (EBR) Article 18 terms and conditions held within the Grid Code
- **VOTE** whether or not to recommend Urgency
- **AGREE** timetable for Urgency
- **AGREE** Workgroup Terms of Reference
- **NOTE** next steps:
  - Under Grid Code Section GR.23.4, we will now consult the Authority as to whether this Modification is an Urgent Grid Code Modification Proposal
    - Letter to be sent to Ofgem 29 September 2022
    - Ofgem approval of Urgent treatment sought by 5pm on 30 September 2022
    - 1<sup>st</sup> Workgroup to be held 04 October 2022



# Inflight Modification Updates

**Milly Lewis, Code Administrator**

# Timeline Updates

## **GC0139:** Enhanced Planning Data Exchange to Facilitate Whole System Planning

- *Due to the comprehensive changes to the legal text more time than anticipated is needed for the subgroups to complete their review ahead of sharing with the wider Workgroup.*
- *A check-in meeting is scheduled for the 04 October, where the legal text subgroup will update the workgroup on their progress.*

## **GC0154:** Incorporation of interconnector ramping requirements into the Grid Code as per SOGLA119

- *There have been further delays to the publishing of the tender for the CBA.*
- *The next Workgroup meeting will be 06 October and a revised timeline will be provided to the Grid Code Review Panel as soon as possible.*

# Live Grid Code Modification Consultations

**GC0158:** Reversing Unimplemented Aspects of GC0068

- **Code Administrator Consultation:** Closes 03 October 2022

# Grid Code Modification Tracker

**Milly Lewis**

# Prioritisation Stack

Grid Code - Prioritisation Stack   

Mod Number	Previous Priority No:	Priority No	Title
GC0139	1		Enhanced Planning Data Exchange to Facilitate Whole System Planning
GC0148	2		Implementation of EU Emergency and Restoration Code Phase II
GC0156	3		Implementation of the Electricity System Restoration Standard
GC0117	4		Improving transparency and consistency of access arrangements across GB by the creation of a pan-GB commonality of PGM requirements
GC0154	5		Incorporation of interconnector ramping requirements into the Grid Code as per SOGL Article 119
GC0155	6		Clarification of Fault Ride Through Technical Requirements
GC0157	7		Grid Code Housekeeping
GC0158	8		Reversing unimplemented aspects of GC0068
GC0140	9		Grid Code Sandbox: enabling derogation from certain obligations to support small-scale trials of innovative propositions
GC0103	10		The introduction of harmonised Applicable Electrical Standards in GB to ensure compliance with the EU Connection Codes
GC0159			Introducing Competitively Appointed Transmission Owners
GC0160			Grid Code Changes for BSC Mod P448 - "Protecting Generators subject to Firm Load Shedding during a Gas Supply Emergency from excessive Imbalance Charges"



# Draft Final Modification Report

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

# Solution(s)

## **Solution/summary of solutions:**

- The Grid Code will need to be updated to be compliant with these requirements. This includes updates to low frequency demand disconnection, communications systems, critical tools and facilities, the 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.
- Two Workgroup Alternatives were raised, which combined the original solution (including the implementation date) with compliance against Article 40 (2) – (4) ERNC.
  - WAGCM1 adds on the notification requirements for emergency, blackout and restoration system states.
  - WAGCM2 is identical to WAGCM1, but also incorporates the definitions for normal and alert states.

# Code Administrator Consultation Responses

## Summary of Code Administrator Consultation Responses :

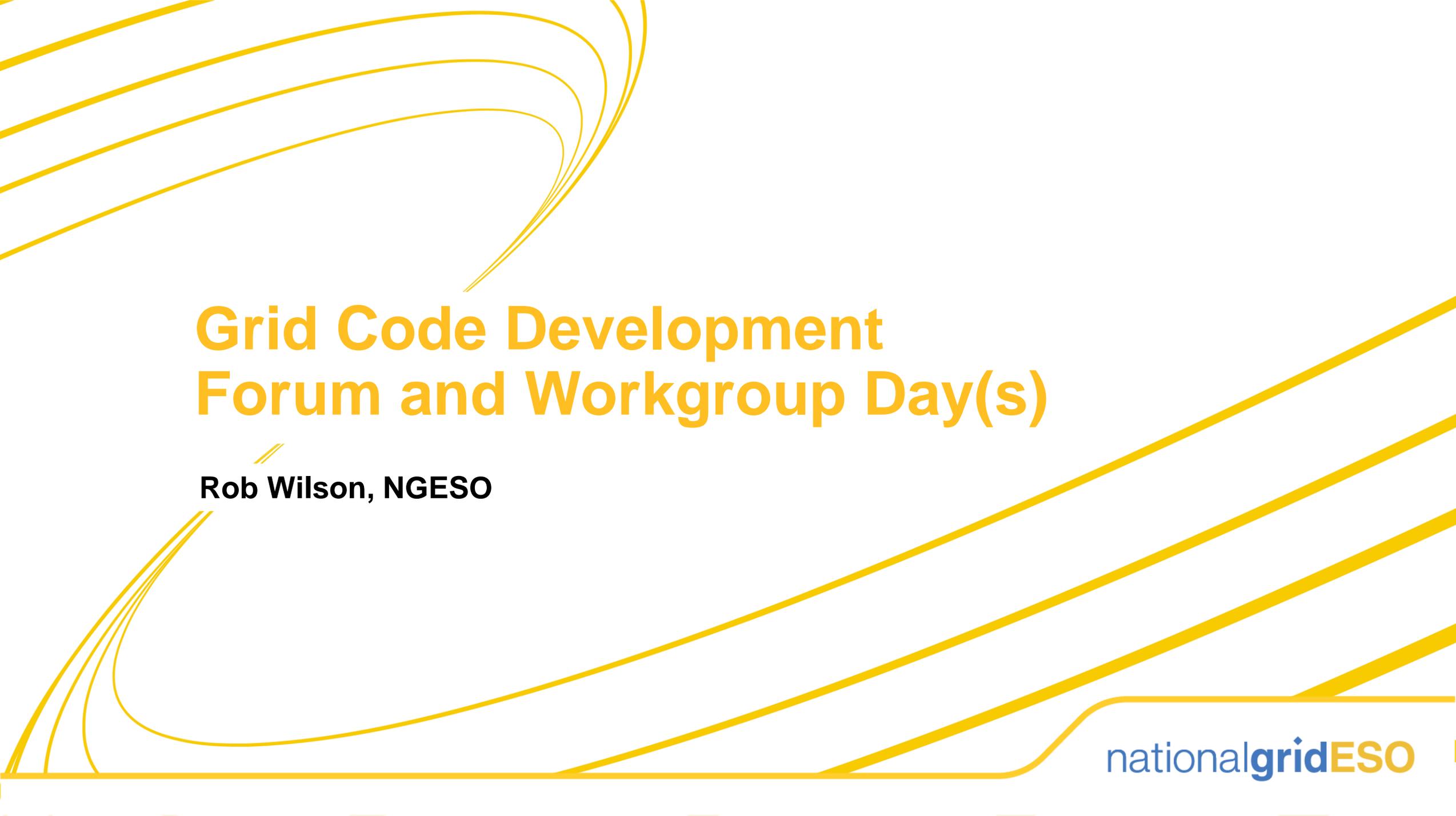
- Code Administrator Consultation was run from 03/08/2022 to 05/09/2022 and received 2 non-confidential responses. Key points were:
  - Both respondents felt that the Original and WAGCM2 better facilitated the Grid Code Objectives.
  - Both respondents supported the implementation approach.
  - No legal text issues identified.

# GC0148 – the asks of Panel

- **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 GC0148 Original proposal, WAGCM1, and WAGCM2 better facilitate the objectives than the current Grid Code arrangements?*
- **NOTE** next steps
  - A decision is required by 02 December 2022.

## GC0148 Next Steps

Milestone	Date
Draft Final Modification Report presented to Panel	29 September 2022
Final Modification Report issued to Panel to check votes recorded correctly (5 working days)	04 October 2022
Submission of Final Modification Report to Ofgem	12 October 2022
Ofgem decision date	By 02 December 2022
Implementation Date	10 working days after Authority decision

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# Grid Code Development Forum and Workgroup Day(s)

**Rob Wilson, NGENSO**

# Grid Code Development Forum – Previous and Next

**7 September 2022**

## ***CUSC Modification Update – CMP376, Queue Management Process***

*An update was shared on CUSC modification CMP376, which is seeking to formally introduce improvements to the Queue Management Process as developed through the ENA Open Networks project.*

## ***Early Competition Workstream – Grid Code Modification***

*Further detail was provided around the Grid Code Modification that was discussed earlier in the Grid Code Review Panel to support the implementation of Early Competition.*

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

*An update was shared on the Alignment, Simplification and Rationalisation (ASR) and Digitalisation Workstreams of the Digitalised Whole System Technical Code project including current progress on the particular aspects of the Grid Code that are currently being reviewed*

**5 October 2022 (Deadline for Agenda items - 28 September)**

*Agenda items TBC*

# Standing Items

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

# JESG Update

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

[Meeting materials and Headline Report](#)

**Next meeting – 11 October 2022**

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# Updates on other industry codes

**AOB**

**Update on 2023 Grid Code Review Panel Dates**  
**Update on Grid Code Review Panel Elections**

## Grid Code 2023 - Panel dates

Grid Code	Panel Dates	Papers Day	Modification Submission Date	Grid Code Development Forum
January	26 (Face to Face Meeting)	18	11	4
February	23	15	8	1
March	30	22	15	8
April	27 (Face to Face Meeting)	19	12	5
May	25	17	10	3
June	29	21	14	7
July	27 (Face to Face Meeting)	19	12	5
August	24	16	9	2
September	28	20	13	6
October	26 (Face to Face Meeting)	18	11	4
November	23	15	8	1
December	14	6	29/11	22/11

# Next Panel Meeting

**10am on 27 October 2022 -  
Faraday House**

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**Papers Day – 19 October 2022**

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

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**Close**



**Trisha McAuley**

Independent Chair, GCRP