GC0169/173

Workgroup 1 - 24 September 2024

Online Meeting via Teams

WELCOME

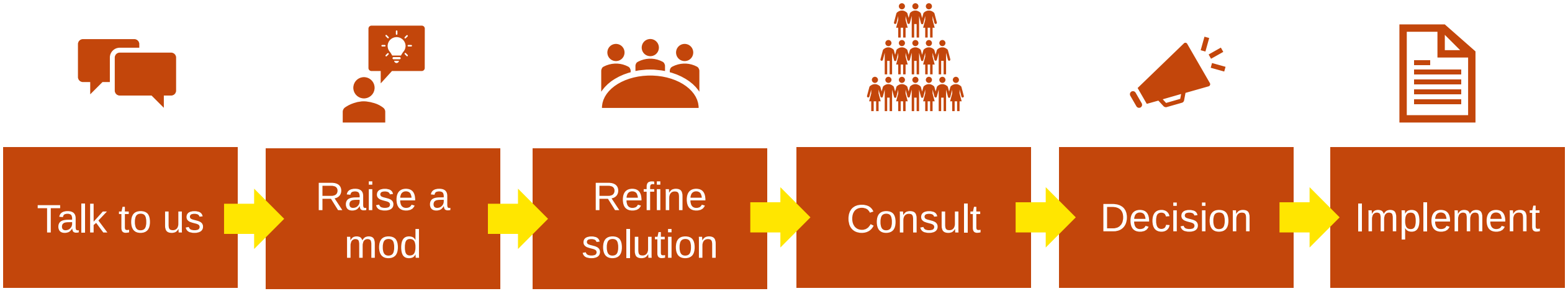
Agenda

Topics to be discussed	Lead
Introductions	Chair
Code Modification Process Overview • Workgroup Responsibilities • Workgroup Alternatives and Workgroup Vote	Chair
Objectives and Timeline • Walk-through of the timeline for the modification	Chair
Review Terms of Reference	All
Proposer presentation	Proposer
Questions from Workgroup Members	All
Agree Terms of Reference	All
Cross Code Impacts	All
Any Other Business	Chair
Next Steps	Chair

Modification Process

Jess Rivalland – ESO Code Administrator

Code Modification Process Overview



Forums

Panels

Workgroups
(Workgroup Consultations)

Ofgem/Panel

Refine solution
Workgroups

- If the proposed solution requires further input from industry in order to develop the solution, a Workgroup will be set up.

- The Workgroup will:
  - further refine the solution, in their discussions and by holding a **Workgroup Consultation**
  - Consider other solutions, and may raise **Alternative Modifications** to be considered alongside the Original Modification
  - Have a **Workgroup Vote** so views of the Workgroup members can be expressed in the Workgroup Report which is presented to Panel

Consult

Code Administrator Consultation

- The Code Administrator runs a consultation on the **final solution(s)**, to gather final views from industry before a decision is made on the modification.

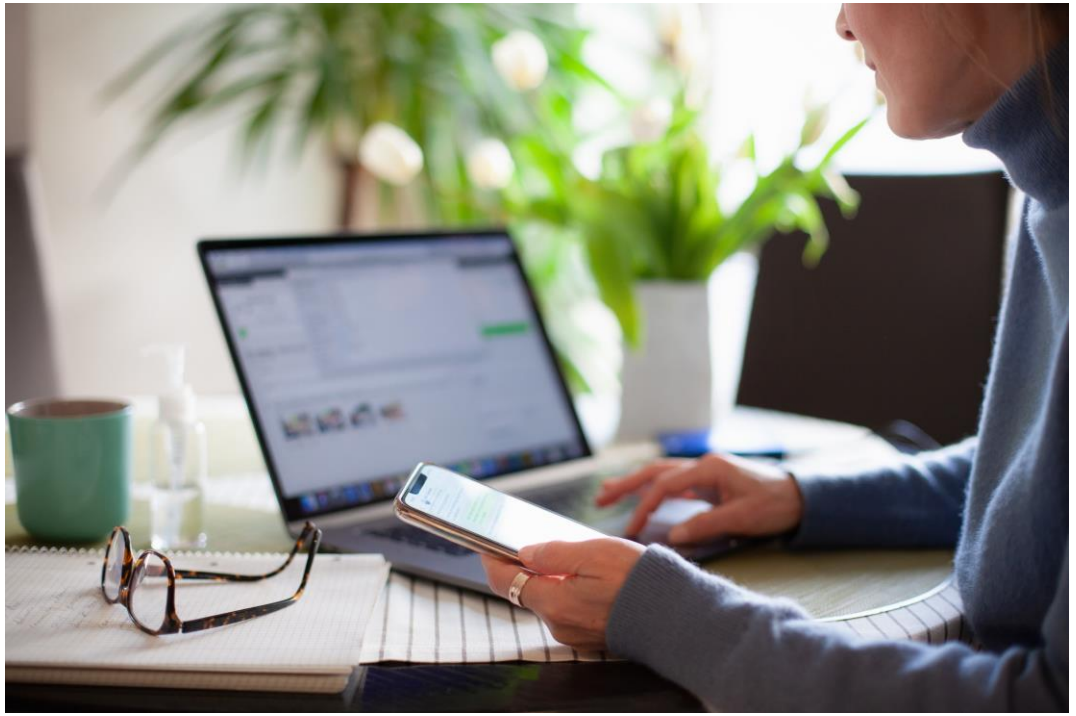
- After this, the modification report is voted on by Panel who also give their views on the solution.

Decision

- Dependent on the Governance Route that was decided by Panel when the modification was raised
- **Standard Governance:** Ofgem makes the decision on whether or not the modification is implemented
- **Self-Governance:** Panel makes the decision on whether or not the modification is implemented
  - an appeals window is opened for 15 days following the Final Self Governance Modification Report being published

Implement

- The Code Administrator implements the final change which was decided by the Panel / Ofgem on the agreed date.



Workgroup Responsibilities and Membership

Jess Rivalland – ESO Code Administrator

Expectations of a Workgroup Member

- Contribute to the discussion
- Be respectful of each other's opinions
- Language and Conduct to be consistent with the values of equality and diversity
- Do not share commercially sensitive information
- Be prepared - Review Papers and Reports ahead of meetings
- Complete actions in a timely manner
- Keep to agreed scope
- Email communications to/cc'ing the .box email

Your Roles

- Help refine/develop the solution(s)
- Bring forward alternatives as early as possible
- Vote on whether or not to proceed with requests for Alternatives
- Vote on whether the solution(s) better facilitate the Code Objectives

Workgroup Membership

Role	Name	Company
Proposer	Antony Johnson	National Grid ESO
Workgroup Member	Alan Creighton	Northern Powergrid
Workgroup Member	Andrew Hood	National Grid Electricity Distribution (NGED)
Workgroup Member	Isaac Gutierrez	ScottishPower Renewables
Workgroup Member	Graeme Vincent	SP Energy Networks
Workgroup Member	Mohit Prajapati	EDF Renewables
Workgroup Member	Lukasz Bochinski	UK Power Networks
Workgroup Member Alternate	Ife Garba	National Grid ESO
Workgroup Member Alternate	Will Topping	National Grid Electricity Distribution (NGED)
Workgroup Member Alternate	Julie Richmond	ScottishPower Renewables
Workgroup Member Alternate	Richard Wilson	UK Power Networks
Observer	Tanmay Kadam	National Grid ESO
Observer	Nicola Barberis Negra	Orsted
Observer	Mike Kay	P2 Analysis
Authority representative	Donald Eide	Ofgem

Workgroup Alternatives and Workgroup Vote

Jess Rivalland – ESO Code Administrator

What is the Alternative Request?

What is an Alternative Request? The formal starting point for a Workgroup Alternative Modification to be developed which can be raised up until the Workgroup Vote.

What do I need to include in my Alternative Request form? The requirements are the same for a Modification Proposal you need to articulate in writing:
- a description (in reasonable but not excessive detail) of the issue or defect which the proposal seeks to address compared to the current proposed solution(s);
- the reasons why the you believe that the proposed alternative request would better facilitate the Applicable Objectives compared with the current proposed solution(s) together with background information;
- where possible, an indication of those parts of the Code which would need amending in order to give effect to (and/or would otherwise be affected by) the proposed alterative request and an indication of the impacts of those amendments or effects; and
- where possible, an indication of the impact of the proposed alterative request on relevant computer systems and processes.

How do Alternative Requests become formal Workgroup Alternative Modifications? The Workgroup will carry out a Vote on Alternatives Requests. If the majority of the Workgroup members or the Workgroup Chair believe the Alternative Request will better facilitate the Applicable Objectives than the current proposed solution(s), the Workgroup will develop it as a Workgroup Alternative Modification.

Who develops the legal text for Workgroup Alternative Modifications? ESO will assist Proposers and Workgroups with the production of draft legal text once a clear solution has been developed to support discussion and understanding of the Workgroup Alternative Modifications.

Can I vote? and What is the Alternative Vote?

To participate in any votes, Workgroup members need to have attended at least 50% of meetings. The vote shall be decided by simple majority of those present at the meeting at which the vote takes place (whether in person or by teleconference)

Stage 1 – Alternative Vote

- Vote on whether Workgroup Alternative Requests should become Workgroup Alternative Grid Code Modifications.
- The Alternative vote is carried out to identify the level of Workgroup support there is for any potential alternative options that have been brought forward by either any member of the Workgroup OR an Industry Participant as part of the Workgroup Consultation.
- **Should the majority of the Workgroup OR the Chair believe that the potential alternative solution may better facilitate the Grid Code objectives than the Original then the potential alternative will be fully developed by the Workgroup with legal text to form a Workgroup Alternative Grid Code modification (WAGCM)** and submitted to the Panel and Authority alongside the Original solution for the Panel Recommendation vote and the Authority decision.

Can I vote? and What is the Workgroup Vote?

Stage 2 – Workgroup Vote

- 2a) Assess the original and Workgroup Alternative (if there are any) against the relevant Applicable Objectives compared to the baseline (the current code)
- 2b) Vote on which of the options is best.

Alternate Requests cannot be raised after the Stage 2 – Workgroup Vote

Objectives and Timeline

Jess Rivalland – ESO Code Administrator

Proposed Timeline for GC0169/0173 as at 24 September 2024

Milestone	Date	Milestone	Date
Modification presented to Panel	26 June 2024	Code Administrator Consultation (1 calendar month)	30 July 2025 to 30 August 2025
Workgroup Nominations (15 business Days)	02 July 2024 to 23 July 2024	Draft Final Modification Report (DFMR) issued to Panel (5 business days)	17 September 2025
Workgroups 1 to 6	24 September 2024 16 October 2024 12 November 2024 03 December 2024 08 January 2025 04 February 2025	Panel undertake DFMR recommendation vote	25 September 2025
Workgroup Consultation (15 business days)	10 February 2025 to 03 March 2025	Final Modification Report issued to Panel to check votes recorded correctly	29 September 2025 to 06 October 2025
Workgroups 7 to 10	20 March 2025 14 April 2025 14 May 2025 18 June 2025	Final Modification Report issued to Ofgem	07 October 2025
Workgroup report issued to Panel (5 business days)	16 July 2025	Ofgem decision	TBC
Panel sign off that Workgroup Report has met its Terms of Reference	24 July 2025	Implementation Date	10 business days after decision

Review Terms of Reference

Jess Rivalland – ESO Code Administrator

Terms of Reference GC0169

a) Implementation and costs
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
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
d) Consider EBR implications
e) Ensure that the Workgroup consider the outstanding issues of GC0136 within their area of expertise whilst noting that some areas may require specialist knowledge or study work (eg CP.A.3.2.1) as noted in Annex 1 of the Proposal Paper.

Terms of Reference GC0173

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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
d) Consider EBR implications
e) Ensure that the workgroup address the inconsistencies between the Connection Conditions, European Connection Conditions, Compliance Processes, European Compliance Processes and G99.
f) Ensure the workgroup review the applicability of storage data for thermal storage units which are not believed to have an impact on the Total System

Proposer's Solution: Background;
Proposed Solution;
Scope; and
Assessment vs Terms of Reference

Antony Johnson – NGESO

GC0169 – Material Grid Code Changes arising from Grid Code Modification GC0136

Workgroup 1

24 September 2024

Overview

- During Grid Code modification GC0136 (Non-material changes to the Grid Code following implementation of the EU Connection Codes) a number of material changes were identified requiring further work which necessitated a further modification
- The purpose of this modification is to address those issues arising from Grid Code Modification which can reasonably be addressed without requiring specialist input or detailed modelling and analysis.

Corrections arising from GC0136

- These issues are detailed in Annex 3 of the GC0136 of the Final Modification Report (Updated as Annex 1 in the Grid Code Proposal Modification Form)
- The opportunity has been taken to identify which items can reasonably be addressed by a Workgroup without requiring specialist resource
- In summary these include:-
  - Glossary and Definitions - Caution Notice / Consistency of SI units / Interconnector Scheduled Transfer / Intraday Cross-Zonal Gate Closure Time
  - Change Grid Code references of SHETL to SHET
  - OC9.6.4 – Requires more work in formulation and to ensure the action is clear
  - BC2.13 – Interconnector Scheduled Transfer / Intraday Cross-Zonal Gate Closure Time / relationship with Glossary and Definitions
  - Ensure consistency between Grid Code and G99
  - General Conditions - Re-word Paragraph GC.5.2 and GC5.4 and confirm if clauses GC11.2 and GC15.1 can be simplified

Next Steps

- Note that one issue identified following Grid Code Modification GC0136 is of a specialist nature and outside scope – this issue has been addressed separately
- Note that this is a combined Grid Code / Distribution Code Workgroup as some changes will be required to G99
- Workgroup members to advise of any other issues relevant to this proposal

GC0173 – Alignment between the Grid Code Connection Conditions, European Connection Conditions, Compliance Processes and European Compliance Processes

Workgroup 1

24 September 2024

Overview

- Following the Implementation of the European Connection Network Codes (Requirements for Generators (RfG), Demand Connection Code (DCC) and HVDC Network Code) into the GB Grid Code a number of inconsistencies were identified between the Connection Conditions and European Connection Conditions.
- A few other material issues also need correcting for consistency purposes for example data required in respect of thermal storage technologies as required under the Planning Code in addition to some related issues in the European Compliance Processes (ECPs) and consistency with G99.
- The purpose of this modification is to address these issues whilst ensuring the provisions of the EU Connection Network Codes are retained.

Alignment between Connection Conditions and European Connection Conditions and General Corrections

- Propose to remove thermal storage technologies in PC.A.3.4.1 eg Latent Heat Storage, Thermochemical Storage and Sensible Heat Storage
- CC/ECC3.3.2 – Change GB Generator and EU Generator to Embedded Medium Power Station not subject to a Bilateral Agreement
- Frequency Sensitive Relays CC/ECC.6.3.13
  - CC.6.3.12 prohibits the use of rate of change of frequency relays which was not carried over into the ECC's when RfG was implemented.
- Mandatory Ancillary Services CC/ECC.8.1
  - Clarification required between CC/ECC.8.1 - CC.8.1 defines Ancillary Services requirements in terms of Large and Medium Power Stations and ECC.8.1 defines the requirements in terms of Type C and Type D Power Generating Modules.
  - Amend ECC.8.1 (c) as it is contradicts ECC.8.1 (a) for directly connected Medium Power Stations.
  - Clarification for Embedded Medium Power Stations (BEGAs) defining the requirement for an MSA other than in respect of Embedded Small Power Stations
- ECP.A.6.4 and ECP.A.6.2 - correct ECC References
- ECP.A.6.8.1 is not well written and should be updated to improve clarity

Interactions between Grid Code and G99

- Fault Ride Through: The Grid code specifies the simulation requirements in ECP.A.3.5 which includes unbalanced as well as balanced Supergrid voltage faults. This is missing from G99 where it only asks Users to provide unbalanced fault simulations
- Voltage Control Testing: +-4% step injection test is missing from G99

Next Steps

- Note that this is a combined Grid Code / Distribution Code Workgroup as some changes will be required to G99
- Workgroup members to advise of any other issues relevant to this proposal

Agree Terms of Reference

Jess Rivalland – ESO Code Administrator

Terms of Reference GC0169

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Cross Code Impacts

Jess Rivalland – ESO Code Administrator

Any Other Business

Jess Rivalland – ESO Code Administrator

Next Steps

Jess Rivalland – ESO Code Administrator