

GC0186: Proposed Grid Code Changes - Post Electricity System Restoration Standard (ESRS)

Workgroup Meeting 1

Thursday 11 June 10am

Online Meeting via Teams

WELCOME

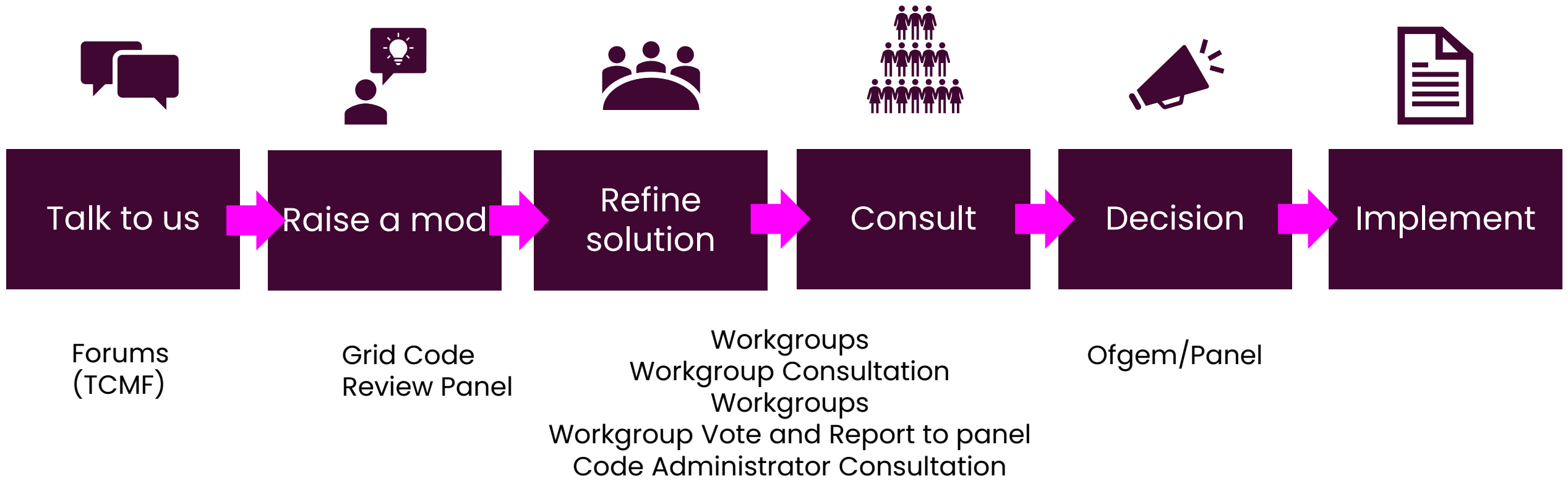
Agenda

| Topics to be discussed | Lead |
|---|----------|
| Introductions | Chair |
| Code Modification Process Overview <ul style="list-style-type: none">• Workgroup Responsibilities• Workgroup Alternatives and Workgroup Vote | Chair |
| Timeline | Chair |
| Proposer presentation | Proposer |
| Draft Legal Text Discussion | Proposer |
| Questions from Workgroup Members | All |
| Review and Agree Terms of Reference | All |
| Cross Code Impacts | All |
| Any Other Business | Chair |
| Next Steps | Chair |

Modification Process

Claire Goult – NESO Code Administrator

Code Modification Process Overview



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.



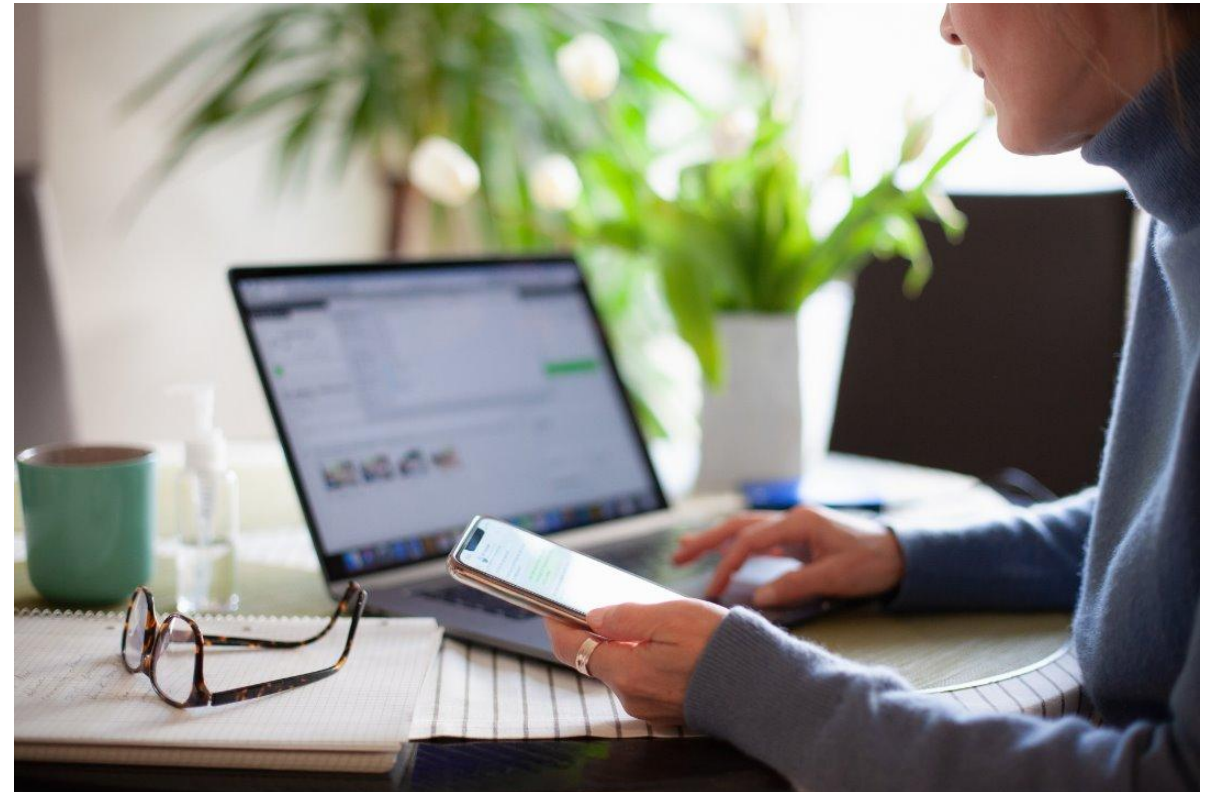
Decision



- 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

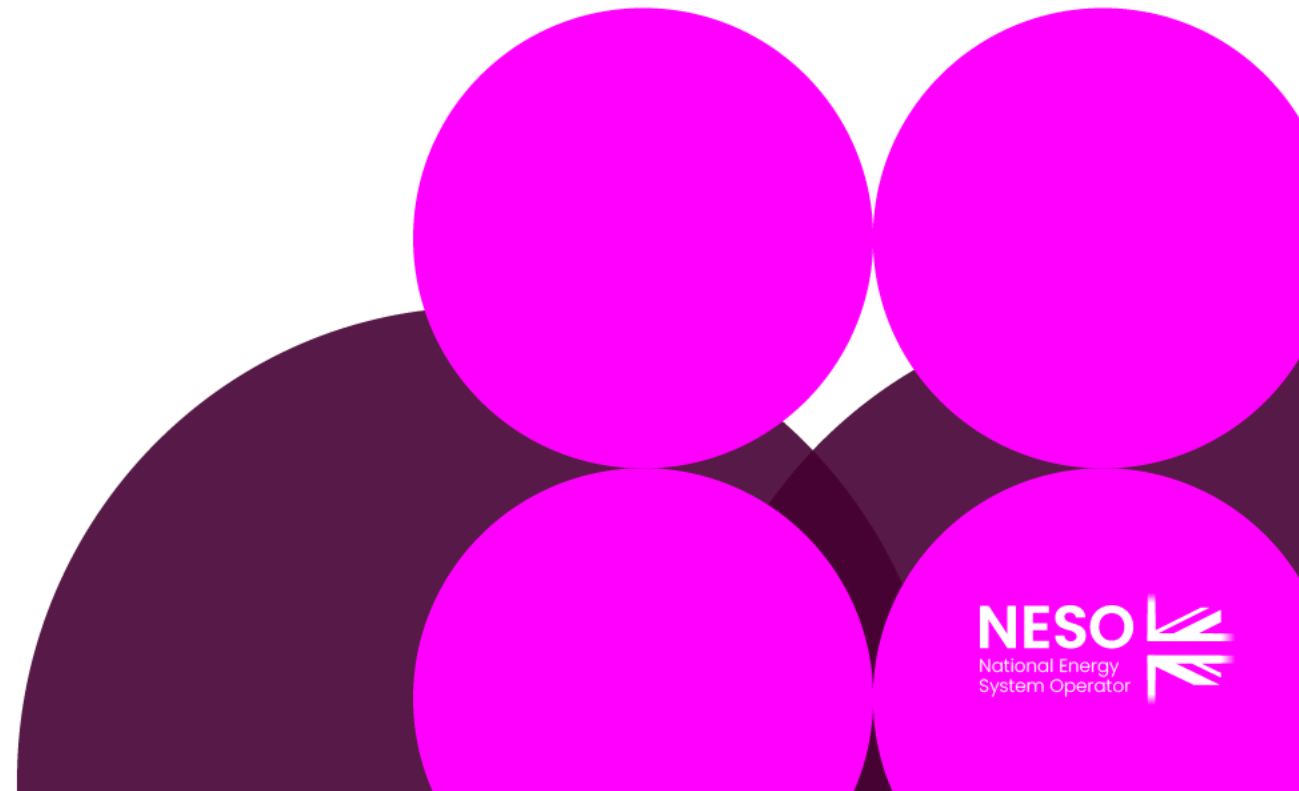
Implement

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



Workgroup Responsibilities and Membership

Claire Goult – NESO 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 Alternatives and Workgroup Vote

Claire Goult – NESO 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 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 alternative request and an indication of the impacts of those amendments or effects; and
- where possible, an indication of the impact of the proposed alternative 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 Original solution, the Workgroup will develop it as a Workgroup Alternative Modification.

Who develops the legal text for Workgroup Alternative Modifications? NESO 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 LIVE 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?

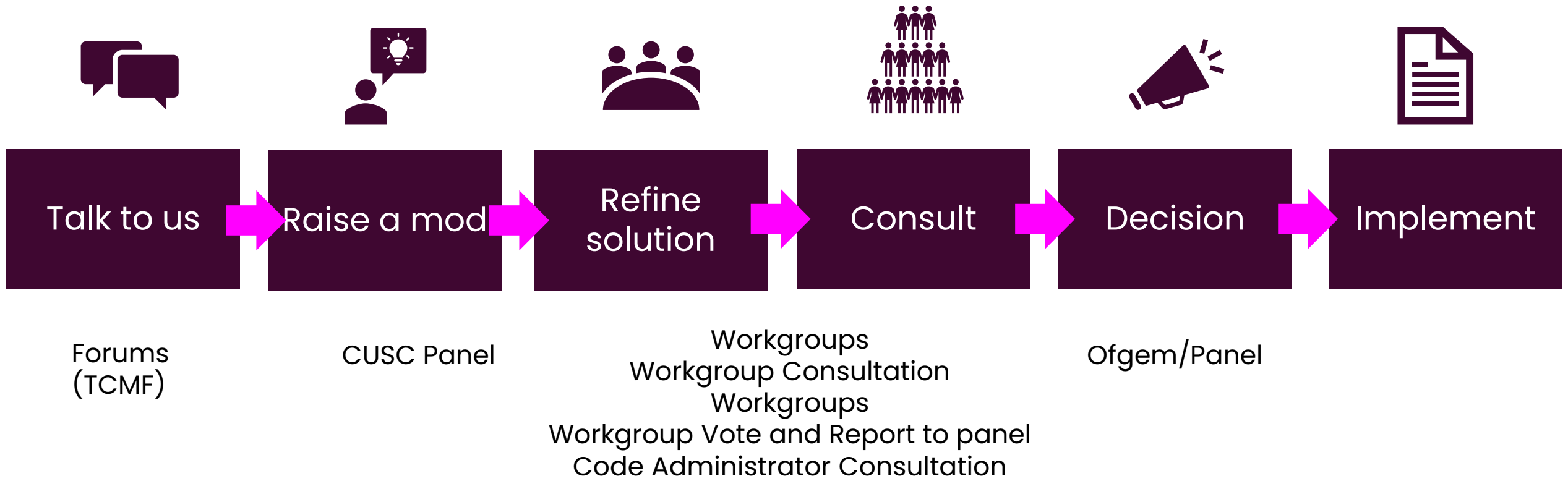
To participate in any votes, Workgroup members need to have attended at least 50% of meetings. The vote shall be decided by simple majority of those present at the meeting at which the vote takes place (whether in person or by teleconference)

Stage 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.

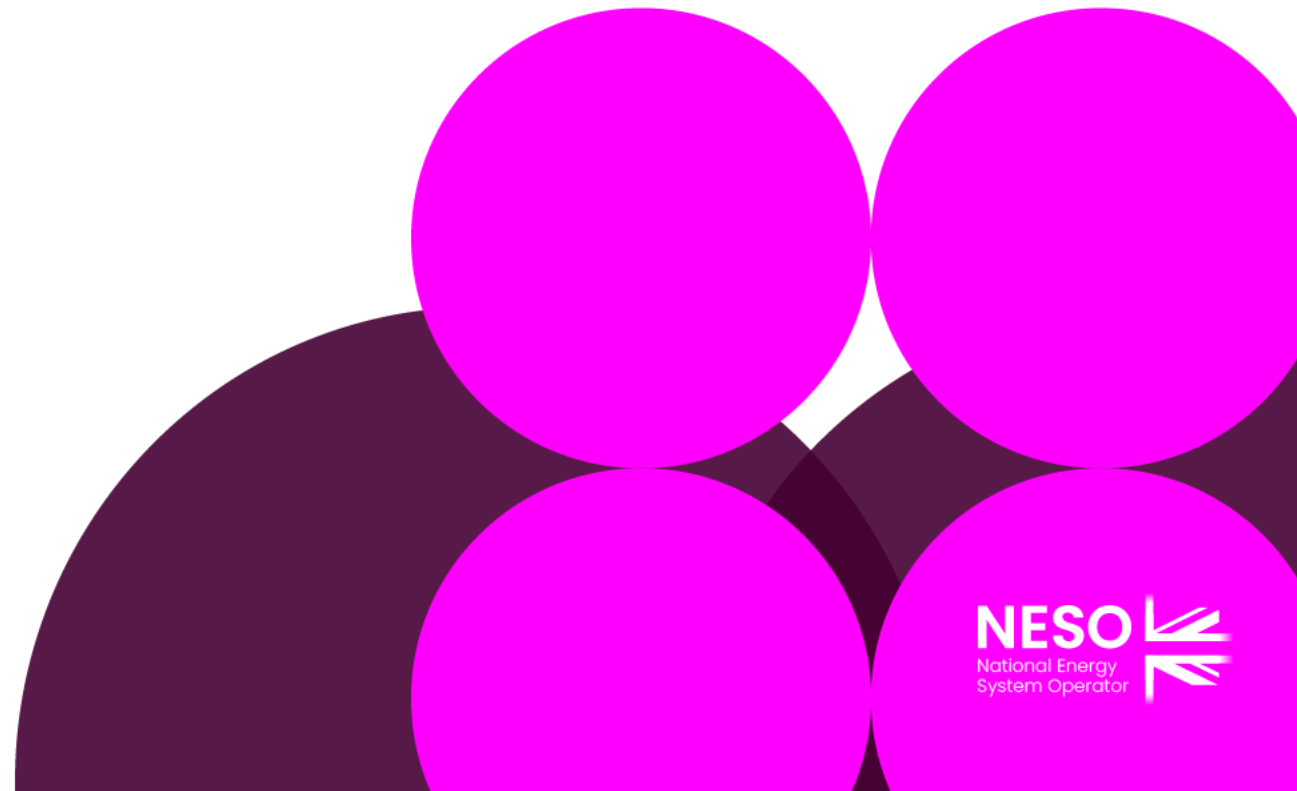
Alternate Requests cannot be raised after the Stage 2 – Workgroup Vote

Code Modification Process Overview



Timeline

Claire Goult – NESO Code Administrator

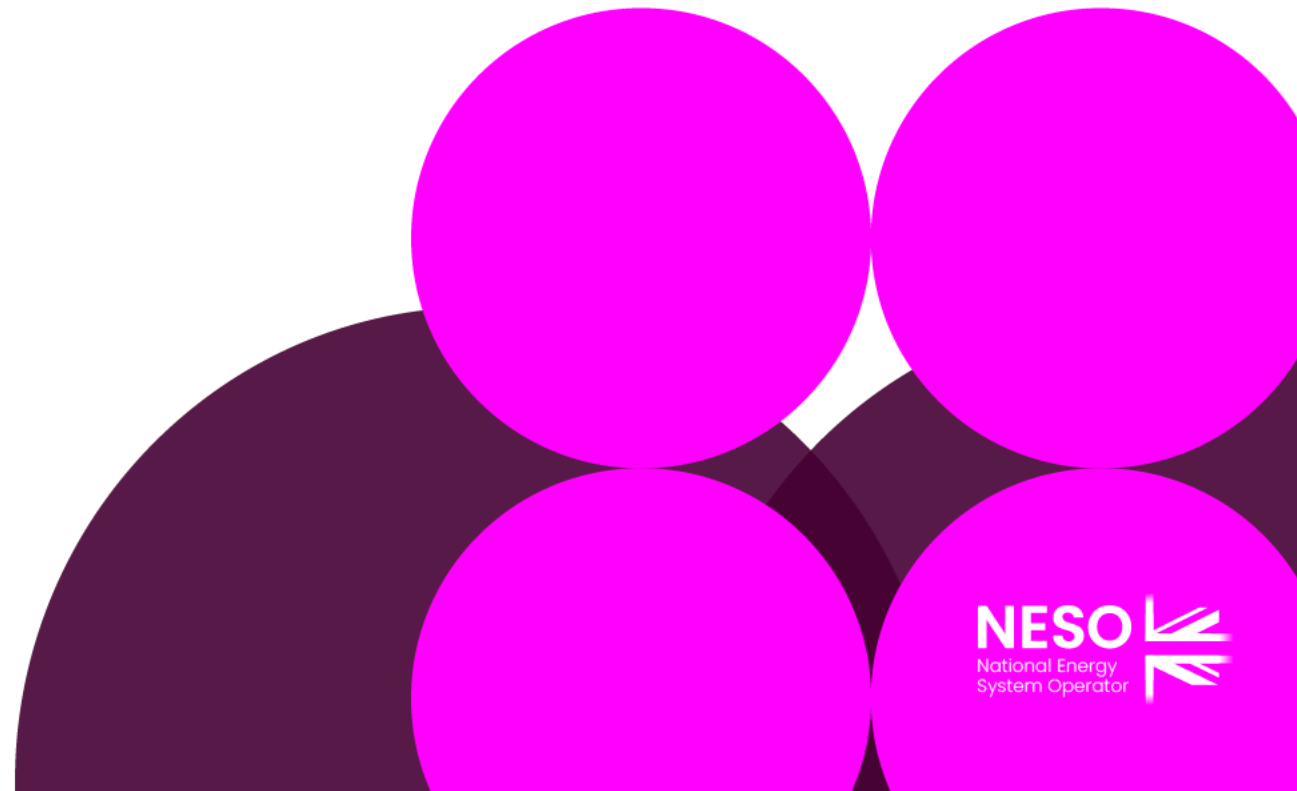


GC0186 Timeline

| Milestone | Date | Milestone | Date |
|---|--|---|----------------------------------|
| Modification presented to Panel | 26 February 2026 | Code Administrator Consultation (1 month) | 03 February 2027 – 03 March 2027 |
| Workgroup Nominations (5 Business Days) | 18 May 2026 – 26 May 2026 | Draft Final Modification Report (DFMR) issued to Panel | 22 April 2027 |
| Workgroup 1 Workgroup 2 Workgroup 3 Workgroup 4 | 11 June 2026 09 July 2026 06 August 2026 26 August 2026 | Panel undertake DFMR recommendation vote | 29 April 2027 |
| Workgroup Consultation (15 Business Days) | 03 September – 24 September 2026 | Final Modification Report issued to Panel to check votes recorded correctly | 30 April 2027 – 07 May 2027 |
| Workgroup 5 Workgroup 6 Workgroup 7 Workgroup 8 | 07 October 2026 04 November 2026 03 December 2026 08 January 2027 | Final Modification Report issued to Ofgem | 11 May 2027 |
| Workgroup report issued to Panel (papers day) | 21 January 2027 | Ofgem decision | TBC |
| Panel sign off that Workgroup Report has met its Terms of Reference | 28 January 2027 | Implementation Date | TBC |

Proposer's Presentation

Antony Johnson – NESO



Background

- During the Code Development of the Electricity System Restoration Standard (ESRS) (Grid Code Modifications GC0156, CM089, CM091, PM0128, PM0132, CMP398, CMP412) NGET queried at the STC Panel if there as any possibility of treating NGET in the same way as SPT and SHETL during a System Restoration event (particularly in respect of autonomy and switching in the post LJRP and DRZP phases).
- It was agreed the above modifications would proceed as normal until Authority Approval, and NESO would then engage with NGET, SPT and SHETL to progress the issue.
- An informal working group meeting was established in Summer 2024 which has since held regular meetings every 6 weeks or so to understand the issues and develop a way forward. The DNOs then joined these meetings in September 2025.
- As part of this work, it has since become apparent that the work will include several issues over and above the original request, many of which reside in the Grid Code (see next slide).
- The issue was presented at the February 2026 Grid Code Development Forum (GCDF), February 2026 Grid Code Review Panel and April 2026 Distribution Code Review Panel where it was agreed a joint Grid Code / D Code workgroup should be established.

Scope

Initially it was proposed to update the Grid Code and STC/STCPs to ensure consistent treatment of NGET, SPT and SHETL during a restoration event (particularly with regard to autonomy and switching in the post LJRP and DRZP phases). Since the first meeting held in the Summer of 2024, there have been several developments which will require Grid Code changes and STC / STCP changes. Requirements include:

- Equitable treatment of NGET, SPT and SHETL during a restoration event (OC9)
- Introduction of Regional Restoration Plans (RRPs)
- Changes to OC5.7.2.1(g) to accommodate testing (deadline charge tests)
- Obligations on parties to ensure sufficient switching speed to facilitate the ESRS
- House keeping changes in particular consistency between the Planning Code (PC.A.5.7) and Data Registration Code (DRC Schedule 16).
- Requirements for Restoration Contractors with multiple sites but one Control Point
- Implications on the Distribution Code
- Confidentiality in LJRP and DRZPs between Restoration Contractors
- Distribution Code changes and other cross code impacts

We would also propose a consequential modification is made to the STC to mirror any Grid Code changes.

High Level Proposed Changes to Grid Code Sections

Glossary and Definitions

- Introduction of a new definition “Regional Restoration Plan”
- Clarifications to definition of Anchor Plant Capability
- Consequential changes as necessary to other defined terms

Planning Code

- PC.A.5.7 – Language to be improved and any updates to be consistently applied in Schedule 16 of the DRC
- PC.A.5.7 – Current requirements only refer to directly connected and Large Power Stations, and this requires review

Connection Conditions / European Connection Conditions

- Clarification around total loss of supplies and cold start
- Ability for Providers with one Control Point but multiple sites with Restoration Contracts to operate their plant in the required timescales

High Level Proposed Changes to Grid Code Sections

Operating Code 5

- OC5.7.2.1 (g) and OC5.7.2.3(d)
- OC5.7.2.1 (g) (ii) refers to energising a dead section of the Total System, in respect of Anchor Generating Units, whereas OC.5.7.2.3(a) refers to energising the busbar of the disconnected AC substation, although OC.5.7.2.3(d)(ii) has the same wording as OC5.7.2.1(g)(ii)

NGET have expressed concerns over

- i) The implications on protection systems as a result of this test,
- ii) The differences between the requirements on Anchor Generating Units and Anchor HVDC Systems and
- iii) Whether for testing purposes it would be more appropriate to energise up to the circuit breaker with the close coils removed for testing purposes

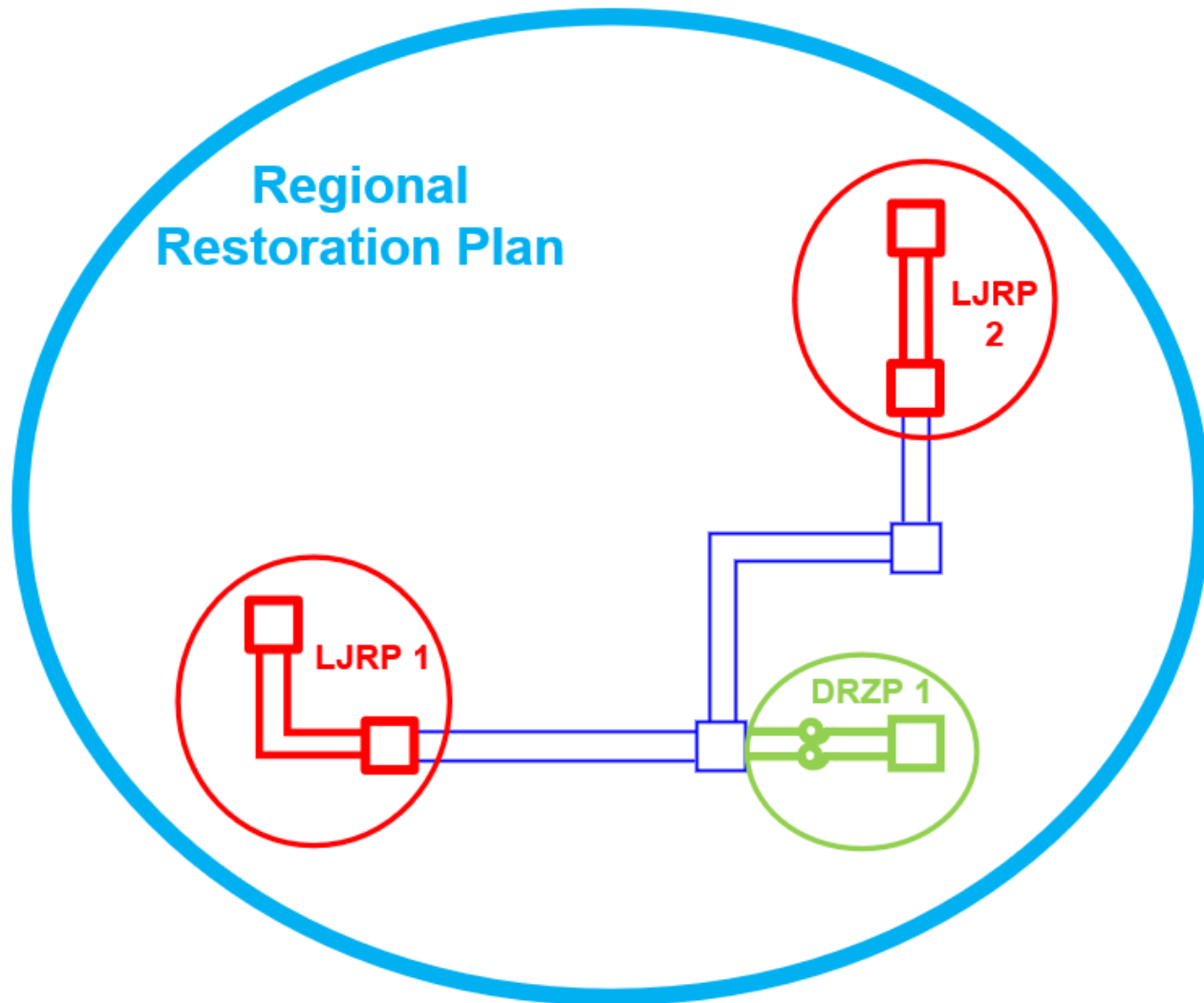
Additional testing requirements need to be included for Restoration Contractors who have one Control Point but multiple sites to ensure they can operate individual plants within the required timescales

High Level Proposed Changes to Grid Code Sections

Operating Code 9

- Introduce the concept of Regional Restoration Plans within the structure of OC9
- Introduce a new section on Regional Restoration Plans (Establishment, Testing Provisions and Operation)
- Equitable treatment of NGET, SPT and SHETL (mainly autonomy and flexibility) but still allowing for differences where necessary and permitting for some limited control of generation in Scotland were agreed
- Clauses to be introduced to ensure TOs and DNOs can switch at sufficient speed to meet the requirements of the ESRS (10 minutes has been suggested)
- Ensure DNOs are happy with the proposals and consider any Distribution Code changes.
- Take the opportunity to address any house keeping changes as necessary

Regional Restoration Plans (RRPs)



There will be an RRP for each of the 7 regions on the network (2 Scot & 5 E&W).

RRP's will detail how the local power islands created by LJRP's and DRZP's in each region will be used to create regional power islands. RRP's will also consider other priorities in each region such as CNI and secondary generation

Regional power islands will be synchronised together until there is a single power island across the network.

Data Registration Code/Other

Data Registration Code

- Principle areas of update relate to Schedule 16 in particular ensuring consistency between Grid Code PC.A.5.7 and OC5.
- The opportunity will also be taken to correct any housekeeping issues associated with DRC Schedule 16 and clarify / add new tests where necessary

Other

- Other sections of the Grid Code will be updated to either:
 - i) Correct, improve or clarify errors introduced through GC0156; and
 - ii) Update the Code in respect of consequential changes as a result of the updates reflected on the previous slides

Progress to Date

So far substantive progress has been made to developing the Grid Code legal text, in particular:

- **European Connection Conditions (ECC)**
- **Operating Code 5 (OC5)**
- **Operating Code 9 (OC9)**
- Some minor changes have been made to the **Glossary and Definitions** which requires further work

Draft legal text has been prepared

At the GCDF/ GCRP and DCRP:-

- There was overall support for this modification
- Several comments were received from Stakeholders regarding assurances that for those parties currently working towards the ESRS requirements by 31 December 2026, this proposed modification would not introduce additional requirements over and above those already in the code
- NESO would stress that these requirements are for clarification and improvement. NESO are not looking to introduce additional requirements or costs at the last minute

Further Work Required

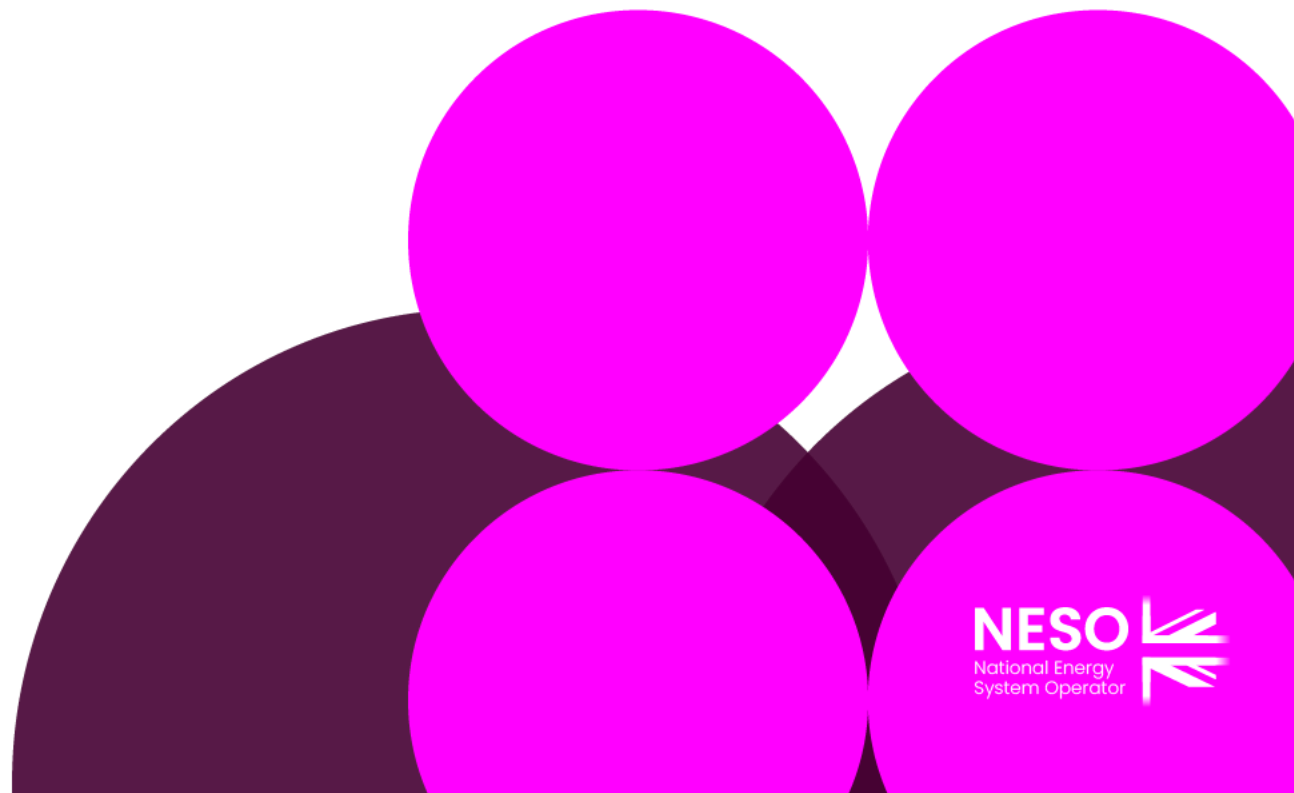
- Update outstanding Sections of legal text (in particular)
 - Glossary and Definitions
 - Planning Code
 - Connection Conditions
 - Data Registration Code
 - Other consequential sections of code as necessary
- Refine currently developed legal text
 - European Connection Conditions
 - Operating Code 5
 - Operating Code 9
- Start preparing Draft Consultation / Workgroup Report
- Consider raising consequential STC/STCP Change

Draft Legal Text Discussion

Antony Johnson – NESO

Workgroup Member Questions

All



Review and Agree Terms of Reference

All

Terms of Reference

- | |
|--|
| 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; and |
| d) Consider implications to sections linked to the Regulated Sections of the Grid Code |
| e) Consider whether it is appropriate to treat NGET, SPT and SHE Transmission in the same way (allowing for Regional differences where agreed) during a Restoration event. |
| f) Introduce the concept of Regional Restoration Plans (RRPs) into the Grid Code drafting. |
| g) Consider changes to OC5.7 with regard to deadline charge tests to ensure fit for purpose tests whilst ensuring consistency and efficiency where necessary. |
| h) Consider whether it is appropriate to introduce a requirement into the Grid Code to ensure TOs and Network Operators can switch at sufficient speed to facilitate the Electricity System Restoration Standard |

Terms of Reference

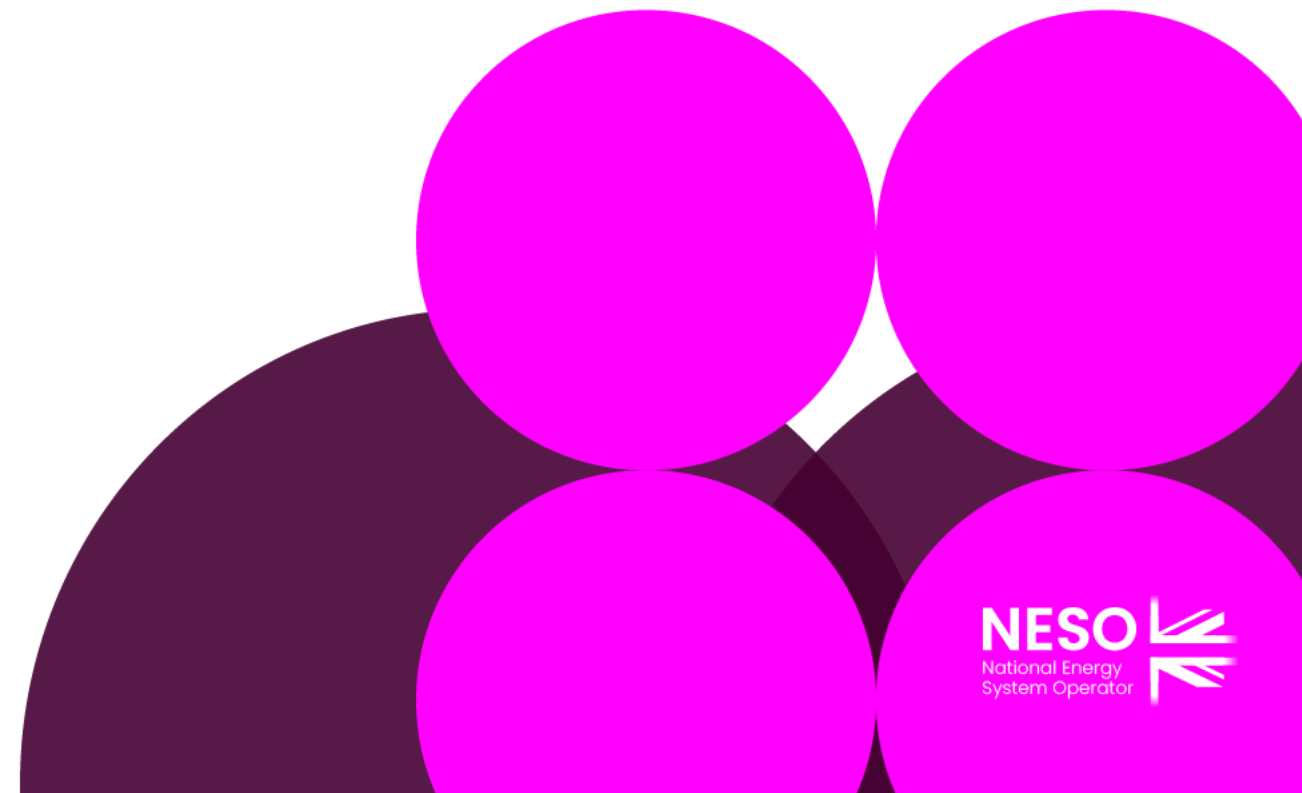
- i) Review Planning Code PC.A.5.7 to ensure the requirements apply to CUSC parties, other than Large and Directly Connected Power Stations
- j) Ensure consistency between Data Registration Code (DRC) Schedule 16 and other sections of the Grid Code.
- k) Consider the arrangements to enable Restoration Contractors with one Control Point and multiple sites with Restoration Contracts to meet the requirements of their Restoration Contracts, particularly in terms of timescales.
- l) Ensure that the Grid Code places a requirement on relevant parties to ensure that LJ RPs, DRZPs and R RPs contain a sufficient level of confidentiality, especially between Restoration Contractors and CUSC Parties (excluding relevant Network Operators).
- m) Consider any cross code impacts.
- n) Ensure the proposed changes arising from this modification do not have a negative impact on CUSC Parties who are already working to meet the requirements of Grid Code modification GC0156.
- o) Consider any housekeeping changes identified to those parts of the code that are to be updated as part of this modification.

Terms of Reference

- | |
|--|
| p) Consider whether it is appropriate to include, at this stage, the role that CATO's might have in the future in relation to RRP's. |
| q) Identify and consider the costs and resource implications for the parties affected by the proposal. |
| r) Consider how the RRP's will be implemented/instructed. |
| s) Consider the implications for Network Operators (DNO) of the modification proposal. |
| t) Consider whether there are any changes required to the Distribution Code (DCode), particularly DOC9. |

Cross Code Impacts

All



Interactions

CUSC

European Network
Codes

BSC

EBR Article 18
T&Cs¹

STC

Other
modifications

SQSS

Other

This modification will have an impact with the Distribution Code, especially DOC5 and DOC9. It is therefore proposed this modification is run as a joint Grid Code / Distribution Code workgroup.

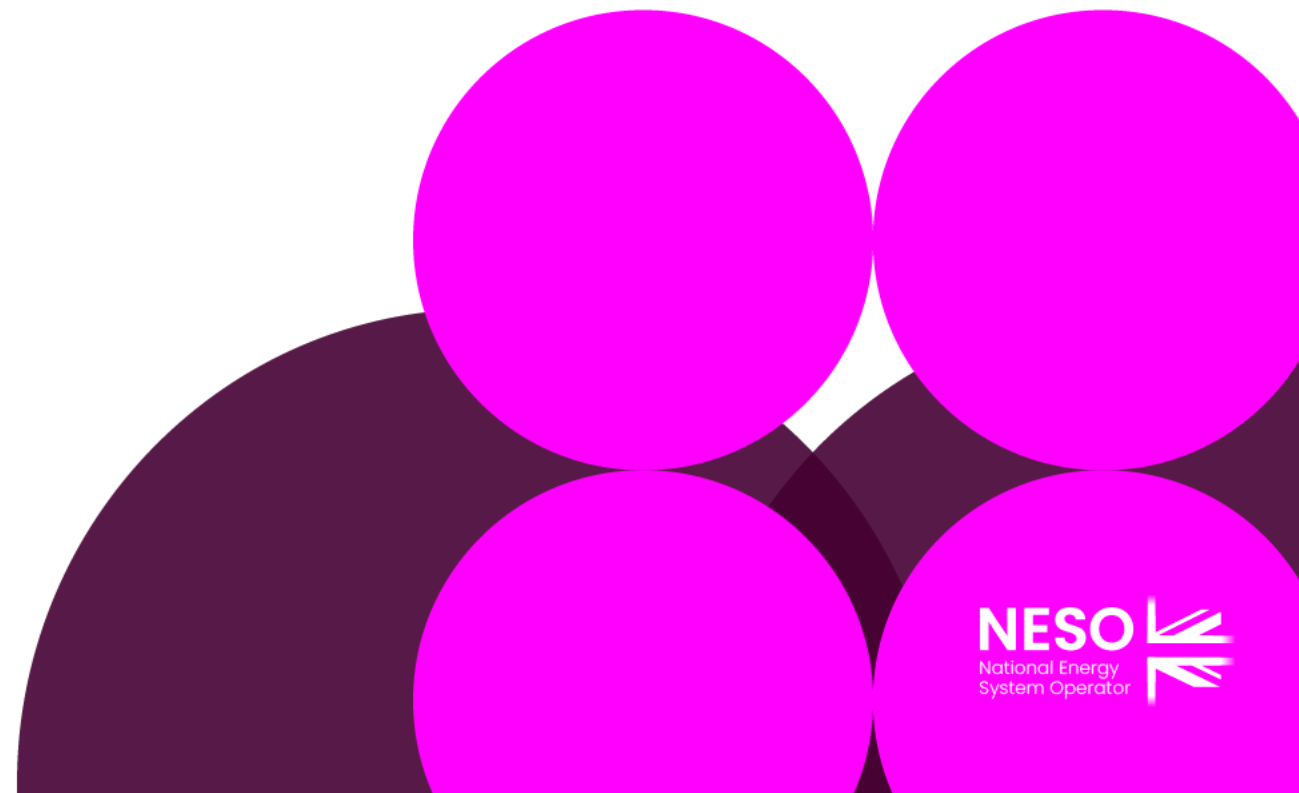
In addition, there will be changes to the STC and STCPs, in particular STCP 06-1. It is therefore proposed a separate STC modification is raised shortly after this Grid Code modification so that consequential changes developed through this Grid Code modification are reflected in the STC and STCPs.

The Proposer notes that proposed changes to OC9.4 will have an **EBR impact**.

Possible impacts on BSC drafting? – Raised by Jacob Snowden

Any Other Business

Claire Goult – NESO Code Administrator



Next Steps

Claire Goult – NESO Code Administrator

