

# **GC0176 - Introduction of Demand Control Rotation Protocol within Operating Code 6 of the Grid Code**

Workgroup 1, 03 March 2025

Online Meeting via Teams

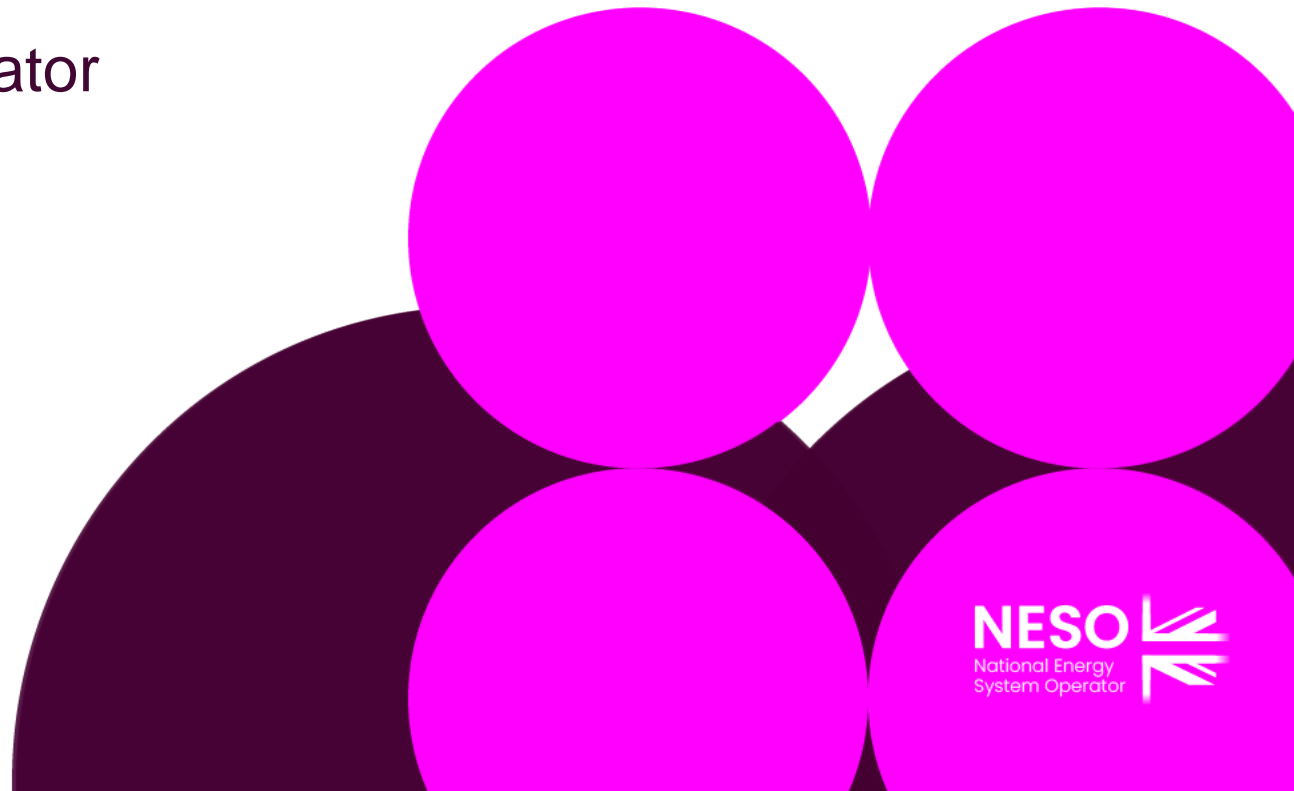
# WELCOME

# Agenda

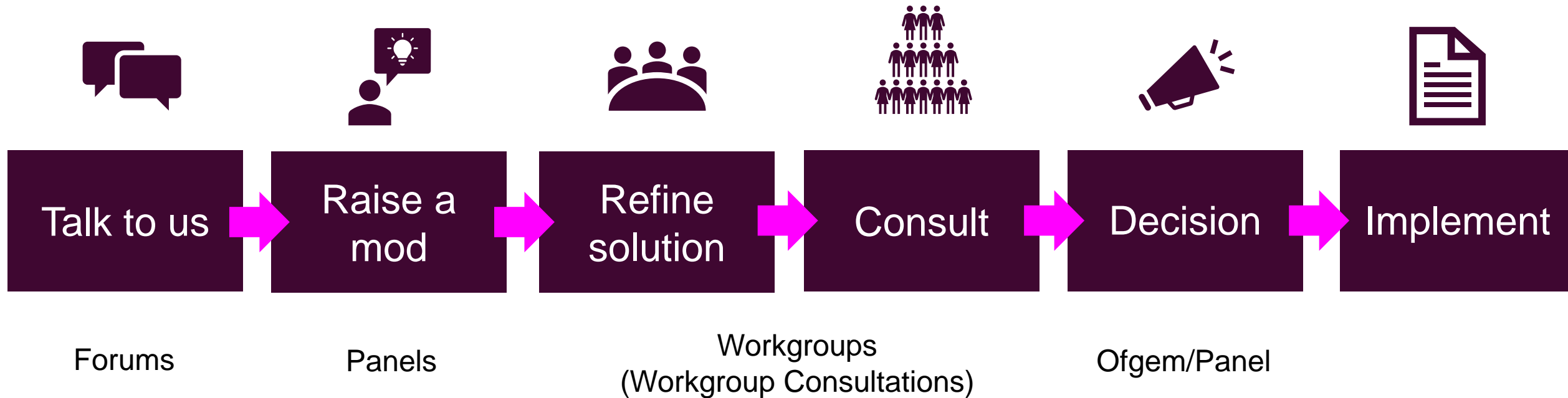
Topics to be discussed	Lead
Introductions	Chair
Code Modification Process Overview <ul style="list-style-type: none"><li>• Workgroup Responsibilities</li><li>• Workgroup Alternatives and Workgroup Vote</li></ul>	Chair
Objectives and Timeline <ul style="list-style-type: none"><li>• Walk-through of the timeline for the modification</li></ul>	Chair
Proposer presentation	Proposer
Agree Terms of Reference	All
Cross Code Impacts	All
Any Other Business & Next Steps	Chair

# Modification Process

Lizzie Timmins – 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

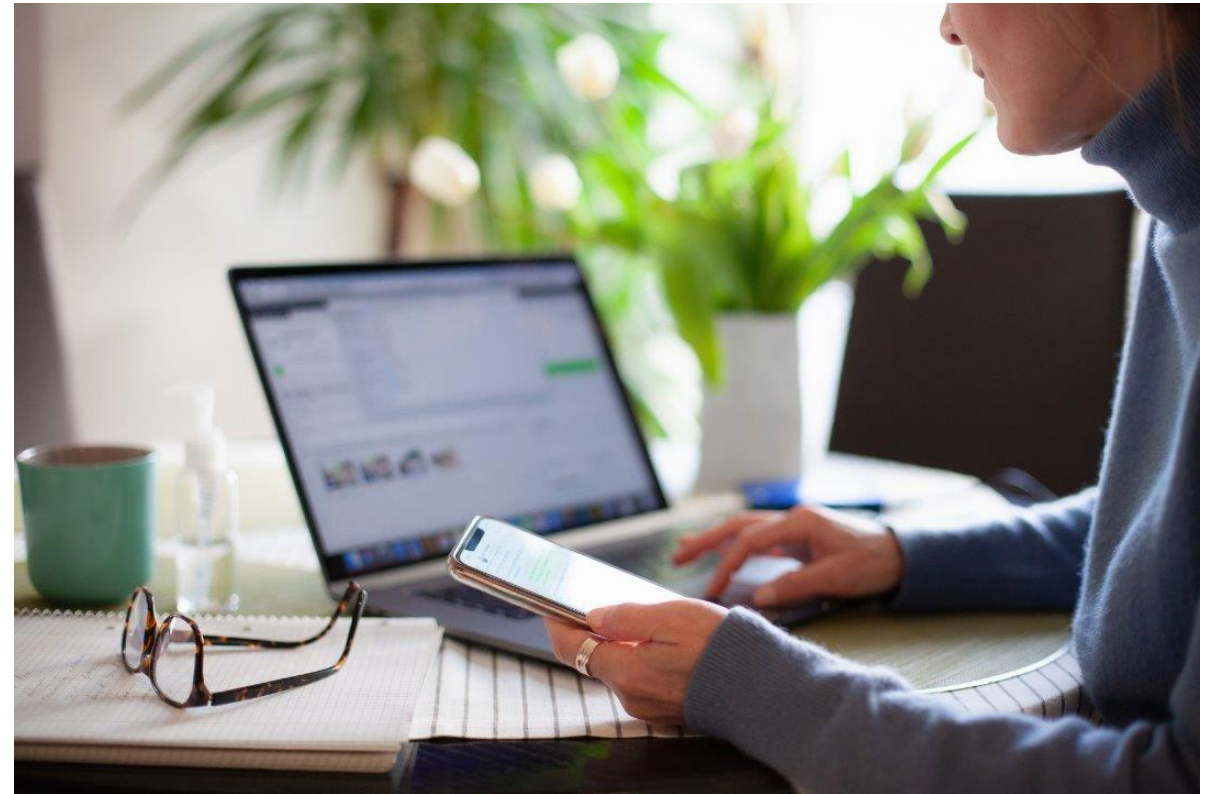


- Dependent on the Governance Route that was decided by Panel when the modification was raised
- **Standard Governance:** Ofgem makes the decision on whether or not the modification is implemented
- **Self-Governance:** Panel makes the decision on whether or not the modification is implemented
  - an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



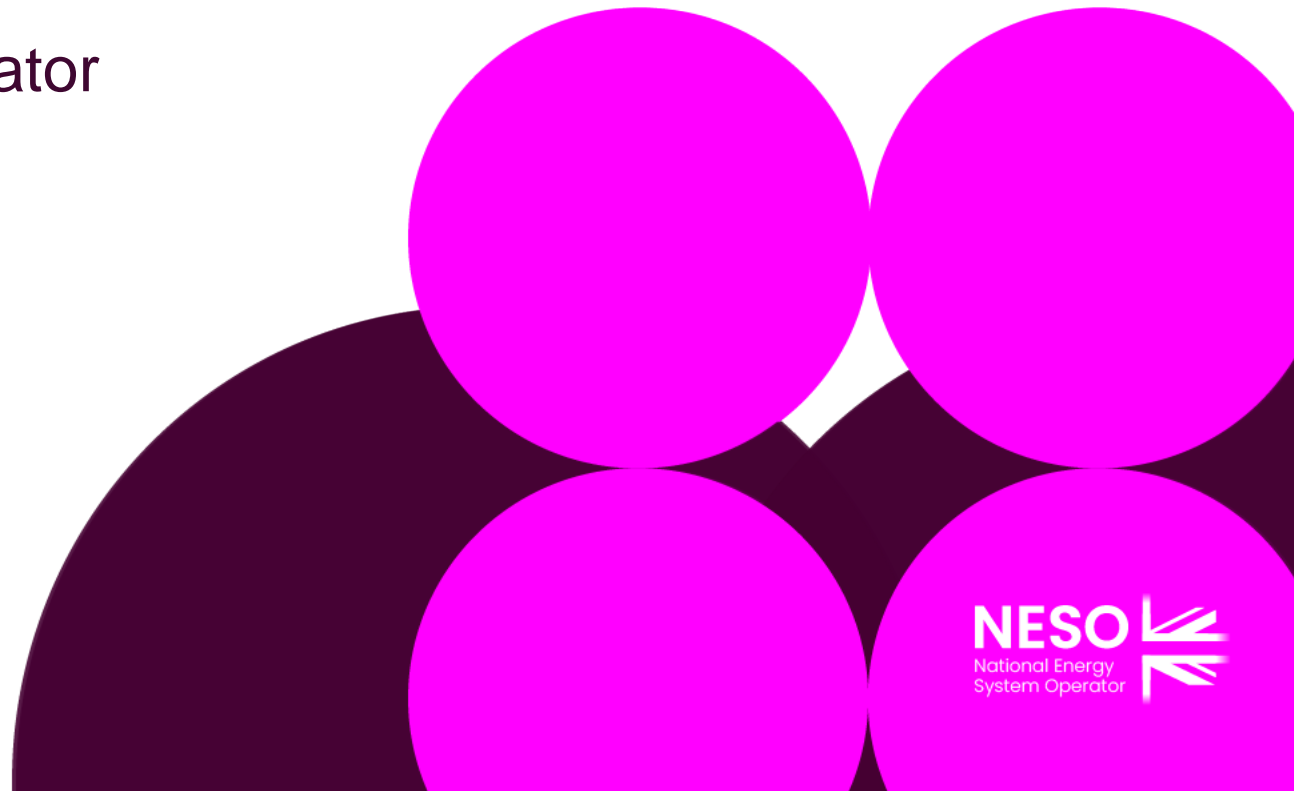
# Implement

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



# Workgroup Responsibilities and Membership

Lizzie Timmins – NESO Code Administrator



## Public 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

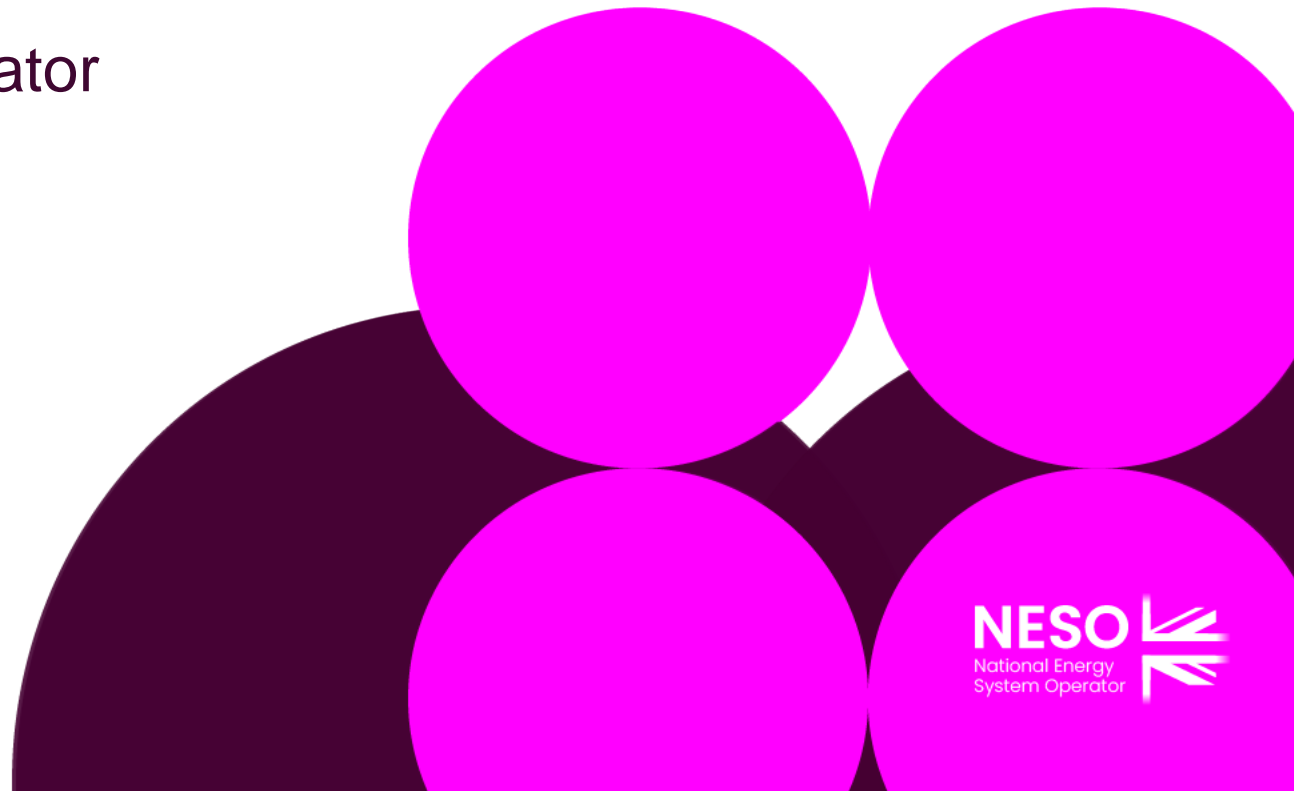


# Workgroup Membership

Role	Name	Company
Proposer	Frank Kasibante	NESO
Workgroup Member	Andrew McLeod	Northern Powergrid
Workgroup Member	Thomas West	National Grid Distribution
Workgroup Member	John Knott	SP Energy Networks
Workgroup Member	Richard Wilson	UKPN
Workgroup Member	Paul Turner	Electricity North West Ltd
Workgroup Member	Garth Graham	SSE Generation
Workgroup Member	Can Li	Green Gen Cymru
Workgroup Member	Paul Murray	Scottish and Southern Electricity Networks
Observer	Mark Dunk / Jeevan Dhaliwal	ENA
Authority Representative	Shilen Shah	Ofgem

# Workgroup Alternatives and Workgroup Vote

Lizzie Timmins – 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 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 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)

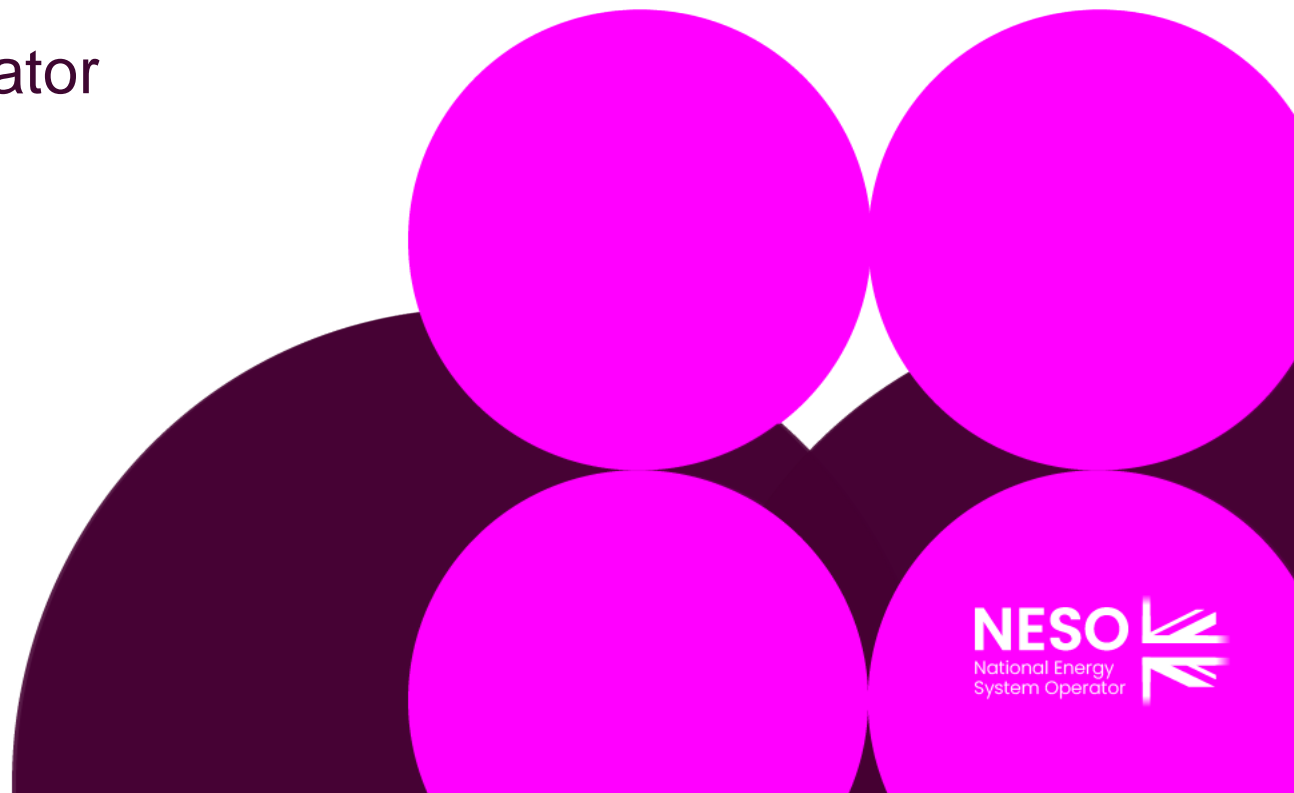
## Stage 2 – Workgroup Vote

- 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

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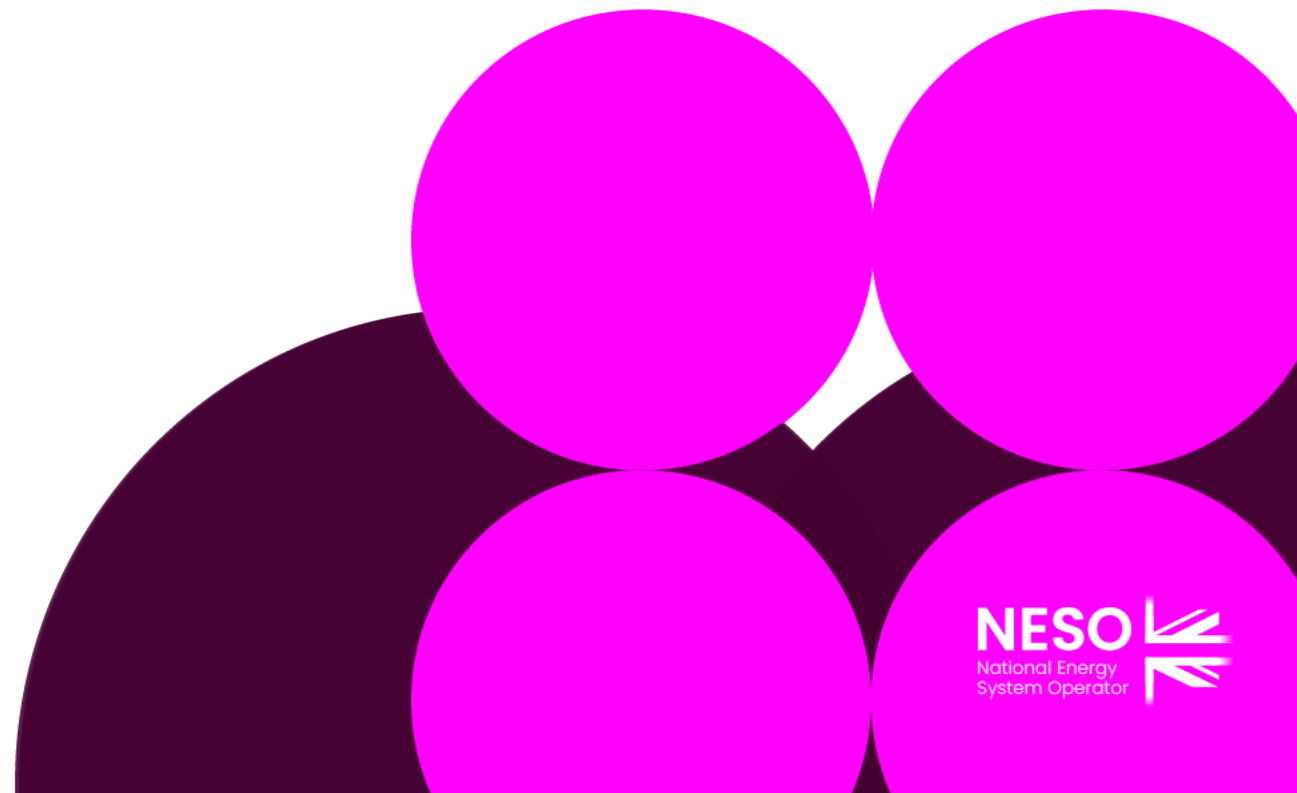


# Timeline for GC0176 as at 24 February 2025

Milestone	Date	Milestone	Date
Modification presented to Panel	12 December 2024	Code Administrator Consultation (1 month)	29 July 2025 – 29 August 2025
Workgroup Nominations (15 business Days)	17 December 2024 – 10 January 2025	Draft Final Modification Report (DFMR) issued to Panel	17 September 2025
<b>Workgroup 1</b> Workgroup 2 Workgroup 3	<b>03 March 2025</b> 26 March 2025 23 April 2025	Panel undertake DFMR recommendation vote	25 September 2025
Workgroup Consultation (15 business days)	28 April 2025 – 19 May 2025	Final Modification Report issued to Panel to check votes recorded correctly	30 September 2025 – 07 October 2025
Workgroup 4 Workgroup 5	03 June 2025 01 July 2025	Final Modification Report issued to Ofgem	08 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 Ofgem decision

# Proposer's Solution

Rebecca Scott – NESO

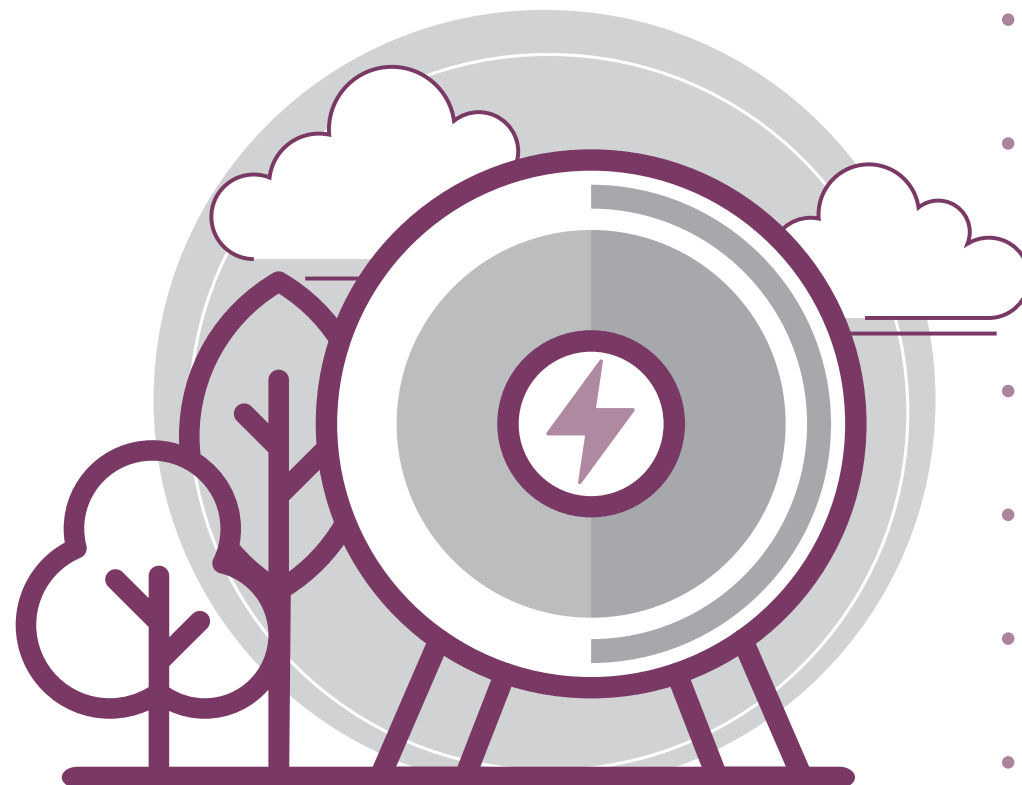


# Demand Control Rotation Protocol (DCRP)

The Demand Control Rotation Protocol (DCRP) was **created in 2023** in response to recent geopolitical changes in the global energy sector. For the Winter period 2024/25, we formalised DCRP procedures with DNOs. The final protocol was **signed off by industry (ETG) and circulated in October 2024 after five periods of review during 2024.**

DCRP has been created, as reasonably practicable, using current obligations under OC6.5.3. However, OC6.5.3 does not fully cover what the protocol endeavours to achieve as it **limits the flexibility of when it can be used and does not accurately represent how DCRP would be used in practice.**

We have agreed with industry (ETG) to raise a modification to Operating Code 6 that considers the Demand Control Rotation Protocol (DCRP) as a stand-alone tool.





# What is the Issue?

Operating Code 6 (OC6) contains the tools which enables the National Energy System Operator (NESO) and Electricity Distribution Companies to reduce Demand on the National Electricity Transmission System to either avoid or relieve operating problems. It is designed to be used at no or short notice.

In 2022, due to the possibility of tighter winter margins and additional risks (e.g., recent geopolitical events), the Demand Control Rotation Protocol (DCRP) was created. It was formalised in 2024 in collaboration with, and with endorsement from industry.

DCRP is a tool that can be used during short periods, e.g., evening peak, where there is a shortage of supply that requires Demand to be managed. The current protocol has been created in line with current OC6 obligations. However, OC6 restricts how DCRP can be used and does not protect Distribution Network Operators (DNOs) when DCRP is enacted, e.g., relieve from other incentivised obligations.

DCRP can be used more flexibly, initiated quicker and for a shorter duration than under the Electricity Supply Emergency Code (ESEC), reducing the impact on individual consumers. This will reduce unnecessary risks to GB consumers, especially during winter months.



## The Solution

### **Drafted and sent before Workgroup 1:**

- Create a new section of OC6 (OC6.9) that will recognise DCRP as a tool in its own right.
- Amendments to OC6.5.3 to recognise the use of fast blocks and to complete housekeeping to ensure consistent use of terminology.
- Introduction of the DCRP Summary as a Grid Code Associated Document.
- Amendment to the General Conditions to reference the Associated Document for the DCRP Summary.
- Amendment to OC6 Glossary to include new definitions that have been included as part of OC6.9.

### **Requires drafting:**

- Introduction of a new notice to cover Demand Control Rotation.
- Amendment to OC7 to include the new notice.
- Review timings in OC6.5.4.

### **Requires updating (pending modification):**

- Full DCRP (industry version)
- DCRP Summary (public version)

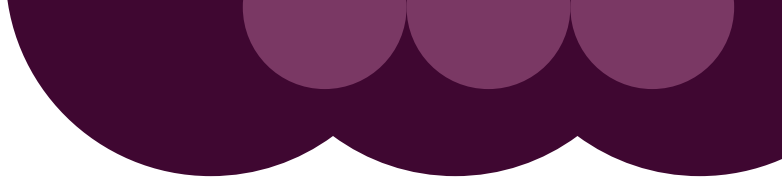
All changes to The Grid Code need to be reflected in the D-Code



## OC6.9 Demand Control Rotation Review of Drafted Content

- OC6.9.1 The Demand Control Rotation Protocol (“DCRP”) is owned and managed by **The Company**. DCRP is designed to address anticipated short-term forecasted shortages in electricity supply of less than 48 hours to meet Demand on the National Electricity Transmission System, in order to prevent an **Event**. **The Company** will undertake a review at least every two years in consultation with the **Network Operators** to make such amendments to the DCRP as required. **The Company** will be responsible for ensuring the appropriate finalisation and circulation to the **Network Operators** of the DCRP after each review. Each **Network Operator** must have in place such systems and processes that will enable it, following an instruction from **The Company**, to enact the requirements outlined in the DCRP. DCRP addresses short-term issues to the **National Electricity Transmission System** in order to prevent unplanned **Demand Disconnections**, or at the extreme, the Total Shutdown of the **National Electricity Transmission System**. DCRP outlines how **Demand** reduction will be delivered whilst ensuring the protection to Protected Sites (as defined in the Electricity Supply Emergency Code).
- OC6.9.2 **The Company** will issue a Demand Control Rotation notice to **Network Operators** as soon as reasonably practicable after the scheduled Emergency Response Team call, as further explained in the DCRP. This shall be approximately eight hours in advance of **Demand** reduction needed.

Ask for Workgroup: Do we want to create a new notice, or will the current “High Risk of Demand Reduction” notice be sufficient?



# OC6.9 Demand Control Rotation

## Review of Drafted Content

- OC6.9.3      Following the direction from **The Company**, **Network Operators** will make eight **Load Blocks** available within eight hours and 14 **Load Blocks** that are not **Fast Blocks** within 24 hours, or as soon as reasonably practicable. **Fast Blocks** will be reserved for delivering obligations under OC6.5.3.
- OC6.9.4      **Load Block** disconnections start occurring, **Network Operators** will rotate demand based on the activation schedules issued by **The Company**, as further explained in the DCRP-. **Fast Blocks** will be exempt from being communicated in the activation schedules. The final activation schedules will be issued by **The Company** one hour before **Demand** reduction is expected to take place, in accordance with the DCRP. **Network Operators** must reduce **Demand** as per these instructions.
- OC6.9.5      During a Demand Control Rotation period, it is accepted that **Network Operators** may not be able to meet relevant obligations and delivery incentives in their licences.
- OC6.9.6      When Demand Control Rotation is no longer required, **The Company** will issue a stand down notice in accordance with the timelines provided in the DCRP, and **Network Operators** will revert back to normal network configuration and operation.



## Amendment to OC6.5.3

OC6.5.3 a) Whether a **National Electricity Transmission System Warning – High Risk of Demand Reduction** or **National Electricity Transmission System Warning – Demand Control Imminent** has been issued or not:

- i. provided the instruction relates to not more than 20 per cent of its total **Demand**; and
- ii. if the instruction relates to less than 20 per cent of its total **Demand**, is in
  - two voltage reduction stages of between 2 and 4 percent, each of which can reasonably be expected to deliver around 1.5 percent **Demand** reduction; and
  - up to three **Demand Disconnection** stages, each of which can reasonably be expected to deliver between four and six percent **Demand** reduction,

each **Network Operator** will abide by the instructions of **The Company**, which should specify whether a voltage reduction or **Demand Disconnection** stage is required; or

iii. if the instruction relates to less than 20 per cent of its total **Demand**, is in four **Demand Disconnection** stages each of which can reasonably be expected to deliver between four and six per cent **Demand** reduction,

each **Network Operator** will abide by the instructions of **The Company** with regard to **Demand** reduction under OC6.5 in relation to **Fast Blocks only**, without delay, unless otherwise agreed with **The Company**.



## Asks for Workgroup

- Note: a new version of DCRP and the public-facing version will need to be created once there is a clear direction for OC6.9.
- Do we complete a “housekeeping” review of OC6.5 to ensure consistent use of terminology as there are current discrepancies?
- OC6.5.3 (b): is this what happens in reality? Does the wording need to be looked at in order to accurately represent what happens? (see text below)
- Are the timelines in OC6.5.4 still relevant in relation to DCRP?

OC6.5.3 (b) The **Demand** reduction must be achieved within the **Network Operator's System** as far as possible uniformly across all **Grid Supply Points** (unless otherwise specified in the **National Electricity Transmission System Warning – High Risk of Demand Reduction**) either by **Customer** voltage reduction or by **Demand Disconnection**.



# New Definitions

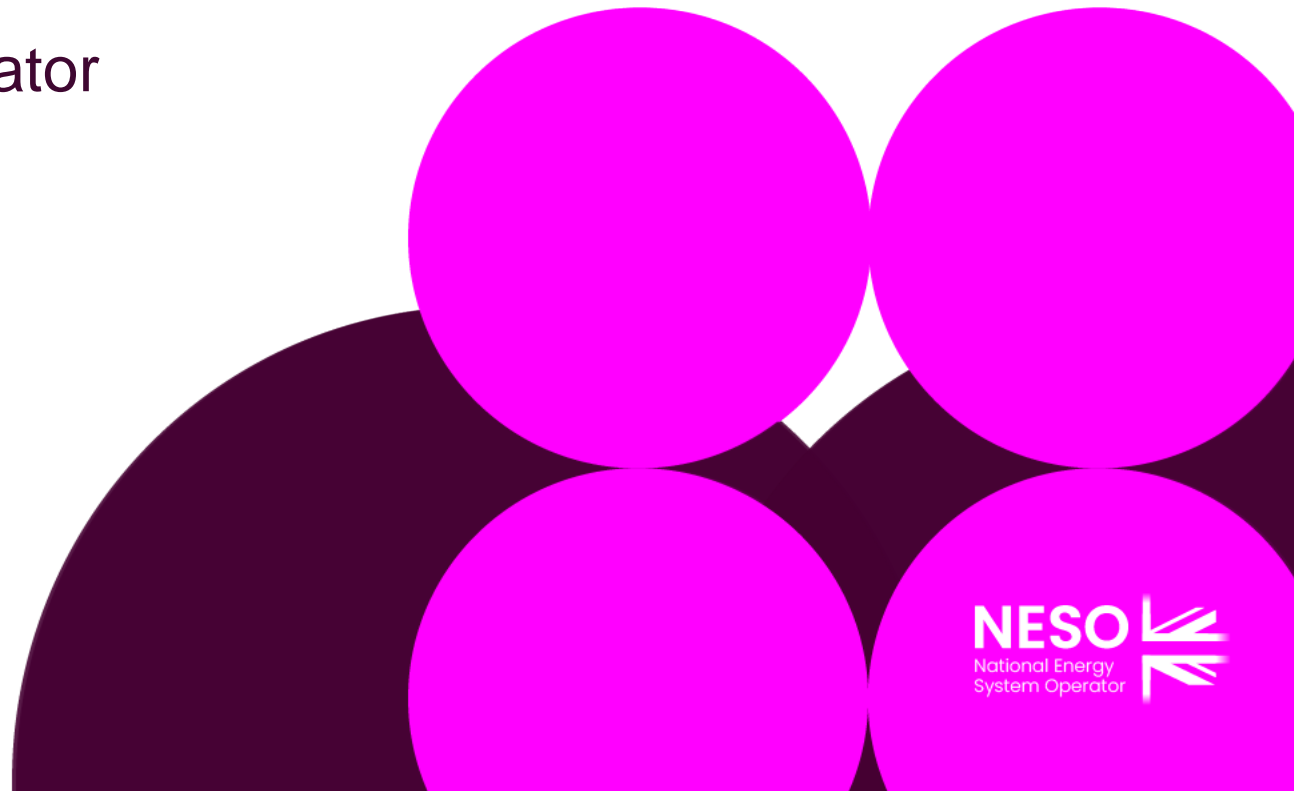
Term	Definition
Fast Blocks	<b>Load Blocks</b> that can be disconnected by <b>Network Operators</b> at very short notice, allowing them to be used during an <b>Event</b> . <b>Fast Blocks</b> have the suffix letters R, S, T, U.
Load Blocks	Each <b>Network Operator User System</b> consisting (wholly or mainly) of electric lines used for distribution of electricity from <b>Grid Supply Points</b> or <b>Generating Units</b> or <b>Power Generating Modules</b> or other entry points to the point of delivery to <b>Customers</b> , or other <b>Users</b> , divided into 18 x 5% (approximately) <b>Load Blocks</b> , with a suffix letter (A, B, C, D, etc.) attributed to each.

Are Workgroup members happy with these additional definitions?  
Are there any other terms we need to include?



# Agree Terms of Reference

Lizzie Timmins – NESO Code Administrator

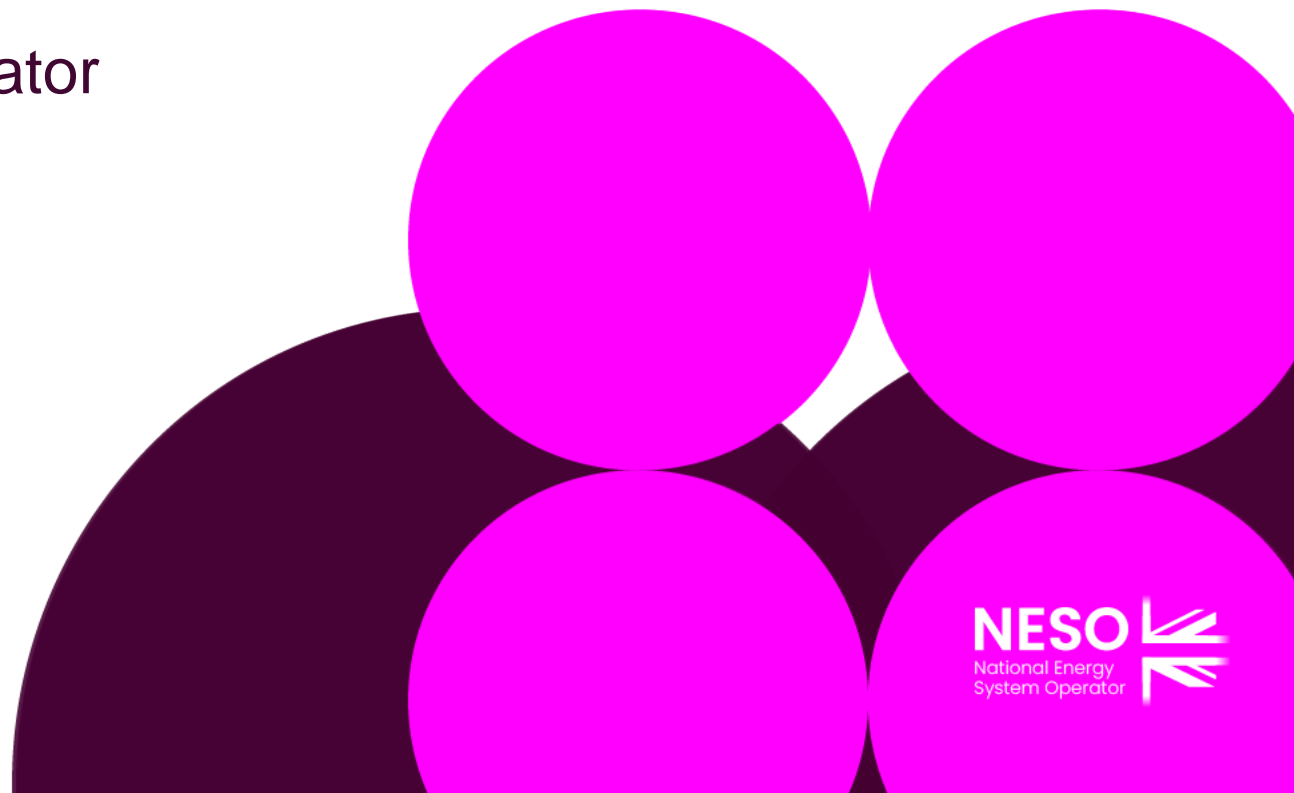


# Terms of Reference

Workgroup 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 the implications for Network Operators (DNO/iDNO's) of the modification proposal, including the design and implementation of the Demand Control Restoration Protocol;
f)	Consider how the Demand Control Restoration Protocol (DCRP) will be instructed;
g)	Consider the ownership and governance of the Demand Control Restoration Protocol;
h)	Review the proposal to ensure there are no unintended consequences with other aspects of OC6; for example, overlap and / or interaction between OC6 demand control / disconnection blocks, LFDD blocks and Demand Control Restoration Protocol rotation blocks.
i)	Identify DNO/iDNO licence / regulatory obligations and incentives could be impacted by the Demand Control Rotation Protocol and whether the Grid Code could exempt a DNO/iDNO from those licence / regulatory obligations and incentives;
j)	Consider whether there are any changes required to the Distribution Code (DCode), particularly DOC6.

# Cross Code Impacts

Lizzie Timmins – NESO Code Administrator





# AOB & Next Steps

Lizzie Timmins – NESO Code Administrator

