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| Workgroup Consultation | | | |
| **GC0176:**  **Introduction of Demand Control Rotation Protocol within Operating Code 6 of the Grid Code**  **Overview:** The modification will make changes to OC6 to allow for the Demand Control Rotation Protocol (DCRP) to be formally recognised as a tool to manage shortfalls in electricity supply, over an extended period of time (i.e. 3 to 24 hours). | | **Modification process & timetable**    **Proposal Form**  11 November 2024  **Workgroup Consultation**  28 April 2025 – 20 May 2025  **Workgroup Report**  16 July 2025  **Code Administrator Consultation**  29 July 2025 – 29 August 2025  **Draft Final Modification Report**  17 September 2025  **Final Modification Report**  08 October 2025  **Implementation**  10 Business Days after Decision  **1**  **2**  **3**  **4**  **5**  **6**  **7** | |
| **Have 5 minutes?** Read our [Executive summary](#_Executive_summary_1)  **Have 40 minutes?** Read the full [Workgroup Consultation](#_Why_change?)  **Have 120 minutes?** Read the full Workgroup Consultation and Annexes. | | | |
| **Status summary:** The Workgroup are seeking your views on the work completed to date to form the final solution to the issue raised. | | | |
| **This modification is expected to have a:****High impact** on Distribution Network Operators, National Energy System Operator and Consumers | | | |
| **Modification drivers:**  Efficiency, System Security | | | |
| **Governance route** | Standard Governance modification with assessment by a Workgroup | | |
| **Who can I talk to about the change?** | **Proposer:** Frank Kasibante, NESO  [frank.kasibante1@nationalenergyso.com](mailto:frank.kasibante1@nationalenergyso.com) | | **Code Administrator** **Chair**: Lizzie Timmins  elizabeth.timmins@nationalenergyso.com |
| **How do I respond?** | Send your response proforma to[grid.code@nationalenergyso.com](mailto:grid.code@nationalenergyso.com) by **5pm** on **19 May 2025** | | |

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# Executive Summary

This modification proposes to make changes to Operating Code 6 (OC6) of the Grid Code to allow for the Demand Control Rotation Protocol (DCRP) to be formally recognised as a tool to manage shortfalls in electricity supply, over an extended period of time i.e. 3 to 24 hours.

**What is the issue?**

The Demand Control Rotation Protocol (DCRP) was created in collaboration with industry due to the possibility of tighter winter margins and additional risks (e.g. recent geopolitical events) and has been based around the Low Level Rota Disconnection Plan (LLRDP[[1]](#footnote-2)) approach in the 2005 version of the Electricity Supply Emergency Code (ESEC). The DCRP is a tool that can be used during short periods, e.g. evening peak, where there is a shortage of supply that requires electricity demand to be managed. The Grid Code does not have sufficient provision for the DCRP to be instructed during a supply shortfall, whilst ensuring there are no unintended consequences to Network Operators if BAU activities cannot be completed in this period.

**What is the solution and when will it come into effect?**

**Proposer’s solution:** The solution involves adding a new section into OC6 in the Grid Code to allow provision for the DCRP to be instructed by the National Energy System Operator (NESO) (to Network Operators) and to clarify existing arrangements relating to electricity demand reduction. It also includes amendments to other areas of OC6, Operating Code 7 (OC7) and the Glossary and Definitions to accomodate the new terminology created.

**Implementation date:** 10 Business Days following a decision to approve (ideally by 31 October 2025).

**What is the impact if this change is made?**

This modification will enable Network Operators to remain compliant with Grid Code obligations when implementing the DCRP and ensure they are not disincentivised from other obligations, in the event of a shortfall in active power. It will also benefit consumers by allowing the use of DCRP.

**Interactions**

As this modification makes changes to OC6, a Distribution Code Modification will also be required. There is also an impact on the Regulated Sections of the Grid Code (due to changes to OC6.5).

What is the issue?

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

In 2022, due to the possibility of tighter winter margins and additional risks (e.g. geopolitical events), the Demand Control Rotation Protocol (DCRP)[[2]](#footnote-3) was created. It was formalised in 2024 in collaboration with, and with endorsement from industry, through the Electricity Task Group (ETG). The 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 the DCRP can be used and does not protect Distribution Network Operators when the DCRP is enacted, e.g. reprieve from other incentivised obligations.

The DCRP can be used more flexibly, be initiated quicker and for a shorter duration than the current version of the Electricity Supply Emergency Code (ESEC), reducing the impact on individual consumers compared with the other tools set out on OC6. This will reduce unnecessary risks to GB consumers, especially during winter months.

A draft of the DCRP summary can be found in Annex 04.

## Why change?

To enable NESO, during an electricity supply shortfall, to efficiently instruct the Network Operators to utilise the DCRP, whilst ensuring they are not disincentivised.

What is the solution?

## Proposer’s solution

A new section will be created within OC6 (OC6.9) that will recognise the DCRP as a tool that can be used to manage electricity supply shortfalls. OC6.9 describes how NESO will issue instructions to Network Operators on how to reduce the demand that their network imposes on the National Electricity Transmission System which will help manage shortfalls in electricity supply. This includes how the process will be initiated, what demand Network Operators will be required to de-energise, and instructions to stop using the DCRP.

Introducing OC6.9 will mean that other areas of OC6 and OC7 need to be changed due to the new terminology being introduced and processes requiring amendments. New terminology will be added to the Glossary and Definitions.

Workgroup considerations

The Workgroup convened 4 times to discuss the identified issue within the scope of the defect, develop potential solutions, and evaluate the proposal in relation to the Applicable Code Objectives.

**Consideration of the Proposer’s solution**

The Proposer explained the background and defect of the modification, noting that the modification will make changes to Operating Code 6 (OC6) of the Grid Code to allow for the Demand Control Rotation Protocol (DCRP) to be formally recognised as a tool to manage shortfalls in electricity supply, over an extended period of time i.e. 3 to 24 hours. The Proposer also noted that extensive engagement had already been done with Network Operators on the DCRP at the Electricity Task Group (ETG) prior to raising the modification. In this regard, seven of the eight Workgroup members (plus the Proposer, along with the Observer and the Authority Representative) come from organisations that are members of ETG and five of the eleven Workgroup participants attended ETG meetings (where the DCRP has been discussed).

The Proposer confirmed that as part of their solution, they are seeking to introduce a summary version (with redacted appendices) of the DCRP as a Grid Code associated document, which will be made public, whereas the full version of the DCRP will only be made available to industry. One Workgroup member questioned why the full version can’t be made public; the Proposer confirmed that there is a security risk to making details of the instruction protocols for Network Operators public, explaining that this risk is mitigated by redacting certain content within the version shared publicly.

The Proposer’s initial intention was to list the DCRP Summary within the General Conditions as a Grid Code Relevant Electrical Standard. Following legal advice, they confirmed to the Workgroup that as the DCRP Summary is not a Relevant Electrical Standard, there was not a need to list it within the General Conditions. They also advised that they proposed to add further clarification within the Grid Code of the obligations on Network Operators, to avoid needing to have an Electrical Standard, and that the DCRP Summary did not have any additional obligations within it. The Workgroup agreed with this approach.

**Cross Code Impacts**

The Chair noted that this modification has impacts on the Network Code on Emergency Restoration and the Distribution Code. The Proposer noted that Table 2 of Annex GR.B in the Governance Rules would be amended to add the new OC6.9 section into the mapping table for the Network Code on Emergency Restoration (NCER). The Chair advised that this Workgroup was a joint Grid Code / Distribution Code Workgroup and noted that representatives from the Distribution Code Administrator had been invited to act as an Observer on the GC0176 Workgroup.

**Legal Text Discussions**

Much of the Workgroup discussion revolved around the modification Legal Text, as follows:

**Operating Code 6:**

**OC6.1.5:** The Workgroup discussed the need to add in a reference to OC6.9 to allow provision for the DCRP to be covered in the clause allowing site protection for pre-designated sites where it is technically feasible to do so. The Proposer agreed to add this to the legal text.

**OC2.2.2:** The Workgroup discussed whether the exceptions for Grid Supply Points in Scotland were still required in OC6.2.2. A NESO representative agreed to investigate this at the next ETG meeting.

**OC6.5:** The Proposer noted that NESO legal had highlighted some discrepancies in terminology throughout OC6.5 and asked the Workgroup whether they felt that addressing these would fit into the scope of GC0176. The Workgroup agreed that these could be addressed to provide clarity for Users, given that OC6.5 is proposed to be amended as part of GC0176.

**OC6.5.1:** The Workgroup noted that a new introductory paragraph in OC6.5.1 was helpful to aid in understanding of what OC6.5 aims to achieve. It was noted that all references within OC6 to OC6.5 would need to be reviewed to ensure they still refer to the correct part.

**OC6.5.4:** The Workgroup discussed the need to separate out Demand Disconnection and Voltage Control to provide clarity to Network Operators. The Workgroup also discussed that the use of four Fast Load Blocks (each of circa 5% of a Network Operator’s demand) could be codified as part of Demand Disconnection, rather than the existing three Demand Disconnection stages. This is due to all Network Operators agreeing that they currently have provision for Four Fast Load Blocks to be disconnected in a Demand Control situation. The Network Operators that provide Voltage Reduction noted that they did this in addition to (and not instead of) the four Fast Load Blocks, so the legal text was amended to reflect this. OC6.5.3(b) was also amended to change the reference to Grid Supply Points to the Network Operators licensed area, to reflect what happens in reality.

**OC6.5.5:** The Workgroup discussed the existing timelines for instructions and whether they were still relevant for the DCRP. Additional notices (and timings) were added within OC6.9. The Workgroup discussion also covered whether the additional 20% demand reduction in OC6.5.4 should come from (none Fast) Load Blocks and how this should be specified in the text. It was suggested that the text should be amended to specify that the additional 20% demand reduction will come from Load Blocks, rather than Fast Load Blocks. Following this, the Workgroup noted it would be clearer to remove reference to percentages within the text as this is referenced within the definitions of Fast Blocks and Load Blocks. The Workgroup also noted that the existing timescales within OC6, for additional demand reduction(s), would remain the same.

**OC6.5.6:** The Proposer asked the Workgroup whether they thought any amendments were required in OC6.5.6 due to changes in OC6.5.4 and OC6.5.5. One Workgroup member queried whether there was a need to consider whether OC6.5.6 instructions (apart from using 4 Fast Load Blocks) could be issued whilst the DCRP is activated.

**OC6.9.2:** The Original proposed Legal Text suggested a review of the DCRP every two years. One Workgroup member thought that this was too often, so the Proposer amended this to obligate a review every five years. One Workgroup member raised concerns that NESO could potentially change the DCRP and expect Network Operators to comply with it immediately; they noted that there needed to be a safeguard in the Grid Code to ensure stakeholders were consulted on any changes to the DCRP and the Authority should approve those changes (given (a) the practical effects, on end consumers, if it was utilised ‘in anger’ and (b) the interaction with NCER documentation, which requires Authority approval to any changes). The Proposer also agreed that the need to agree any transitional arrangements to reflect any changes to the DCRP should be codified. The Proposer added further detail into OC6.9.2 to outline required engagement with Network Operators on review of the DCRP and for Authority approval of the agreed DCRP.

**OC6.9.3, OC6.9.4, OC6.9.5 and OC6.9.7:** The Proposer explained the intended use and timing of the proposed new DCRP notices, with Workgroup members discussing the potential of notices being used as triggers prior to the notice instructing Demand Control Rotation. A Workgroup member, noting the interaction with REMIT, confirmed that in their view, market participants would require NESO to issue notices directly to industry, rather than for industry to rely on spotting notices shared, for example, on social media. Workgroup members noted that rather than the one notice proposed in the Proposer’s solution, there would be a need for a series of notices scheduled at differing times, as follows:

* A notice from NESO to all Network Operators and market participants 7-8 hours ahead, to provide notice of possible implementation of the Demand Control Rotation Protocol;
* A notice, from NESO, to each relevant Network Operator (copied to market participants) to instruct them to implement the Demand Control Rotation Protocol;
* A notice, from NESO, to each relevant Network Operator (copied to market participants) to instruct them to stop implementing the Demand Control Rotation Protocol. Several Workgroup members noted that this notice could not take effect immediately, as the Network Operator’s network might need to be reconfigured to return to ‘business as usual’ normal operations.

These notices were added to the legal text by the Proposer following Workgroup feedback. The Workgroup agreed that defining "Demand Control Rotation Period" as a specific term in the Grid Code would be beneficial for clarity and consistency.

**OC6.9.6:** The proposed Legal Text originally included provision for Network Operators to have an exemption from certain obligations and delivery incentives outlined in their licences. The Authority representative noted the importance of understanding which incentives and licence requirements Network Operators might not be able to meet during a Demand Control Rotation Period. They suggested that the Authority could consider ex-post derogations when evaluating incentives and also mentioned the need to check from a legal perspective whether the text in OC6.9.6 is applicable within the bounds of the existing licence, rather than through primary legislation. The Authority Representative took an action to consider these issues and provided the Workgroup with a letter previously sent to the Electricity Networks Association (ENA) regarding derogations (**Annex 05**). Several Network Operator Workgroup members expressed concern with this, noting that even though the DCRP would be beneficial to society, it would not be beneficial for Network Operators to implement it over ESEC due to the lack of protection to them if they fail to meet obligations over a prolonged use of the DCRP. The Proposer advised that they also had this concern and wanted to find a solution which ensured a neutral application (whereby Network Operators were not unduly penalised if the DCRP was utilised by NESO).

**Operating Code 7:**

The Workgroup reviewed the amendments made to OC7 Appendix 1. One Workgroup member noted that the ‘To: For Information’ column should refer to Market Participants and the Authority for the notices introduced by GC0176. The Proposer also noted that there were further amendments to OC7 which needed to be made.

**Glossary and Definitions:**

The Workgroup discussed several new proposed definitions required through the introduction of the DCRP. Workgroup members suggesting renaming ‘Fast Blocks’ to ‘Fast Load Blocks’ and asked for clarification on whether the definition of Load Block applies to (i) DNOs only or (ii) DNOs and transmission connected IDNOs, and whether the approximate percentages and suffix letters used in the Load Blocks definition are appropriate. The Proposer confirmed that the solution applied to (ii) DNOs and transmission connected IDNOs, as all are Network Operators as defined in the Grid Code. One Workgroup member noted that the 4-6% of demand is assumed to be based on the system peak and suggested that the wording should specify this to avoid different interpretations. The Workgroup recognised that this was a complex area and agree that, at the moment, the existing interpretation would be sufficient. There was also discussion on how Load Blocks are calculated and the consistency around this, however the Workgroup agreed this was out of scope of the modification.

The Workgroup agreed that additional definitions were required for the new notices proposed for the DCRP, and also requested that a definition be added for Demand Control Rotation Period for clarity, as this is mentioned within OC6.9.7.

When reviewing the new notices defined to enable the DCRP, the Workgroup discussed the distinction between the terms ‘notices’ and ‘warnings’ in the Grid Code. The Workgroup confirmed that a ‘warning’ is typically used to alert parties about something that may happen, while a ‘notice’ requires action. The Workgroup also agreed that the terms should be used consistently and appropriately to reflect the actions required, deciding to use ‘notices’ for all three new communications, reflecting the need for action by the Network Operators.

**Governance Rules:**

The Workgroup noted that GC0176 has an impact on the NCER due to changes to OC6.5. The Proposer advised that OC6.9 would be added to the mapping table within Annex GR.B Table 2, which the Workgroup agreed with.

**Draft Legal Text**

The draft Legal Text for this change can be found in **Annex 03**.

What is the impact of this change?

This modification will enable Network Operators to remain compliant to Grid Code obligations and ensure they are not disincentivised from other obligations, in the event of a shortfall in active power. It will also benefit consumers by allowing the use of the DCRP.

## Proposer’s assessment against Code Objectives

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| **Proposer’s assessment against Grid Code Objectives** | |
| Relevant Objective | **Identified impact** |
| (i) To permit the development, maintenance and operation of an efficient, coordinated and economical system for the transmission of electricity | **​​Positive​**  ​​DCRP, as a formal tool, shall be used to effectively manage shortfall in supply of active power. |
| (ii) Facilitating effective competition in the generation and supply of electricity (and without limiting the foregoing, to facilitate the national electricity transmission system being made available to persons authorised to supply or generate electricity on terms which neither prevent nor restrict competition in the supply or generation of electricity); | **​​Neutral​**  ​​ |
| (iii) Subject to sub-paragraphs (i) and (ii), to promote the security and efficiency of the electricity generation, transmission and distribution systems in the national electricity transmission system operator area taken as a whole; | **​​Positive**  ​​DCRP aims to manage the system under events when there is a shortfall in supply to ensure system stability. |
| (iv) To efficiently discharge the obligations imposed upon the licensee by this license and to comply with the Electricity Regulation and any relevant legally binding decisions of the European Commission and/or the Agency; and | **​​Positive​**  ​​This modification will enable Network Operators to remain compliant to Grid Code obligations and sure they are not disincentivised from other obligations, in the event of a shortfall in active power. ​ |
| (v) To promote efficiency in the implementation and administration of the Grid Code arrangements | **​​Neutral​**  ​​ |

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| **Proposer’s assessment of the impact of the modification on the stakeholder / consumer benefit categories** | |
| Stakeholder / consumer benefit categories | **Identified impact** |
| Improved safety and reliability of the system | **​​Positive​**  ​​It is aimed at effectively managing scenarios where there has been a shortfall in active power to meet required Demand. |
| Lower bills than would otherwise be the case | **​​Neutral​**  This change will not intend to introduce impacts to consumers’ bills. |
| Benefits for society as a whole | **​​Positive​**  **​​**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. |
| Reduced environmental damage | **​​Neutral​**  ​​​​It is not anticipated to have negative impacts on the environment. |
| Improved quality of service | **​​Neutral​** ​ |

When will this change take place?

**Implementation date**

10 Business Days following approval – ideally by 31 October 2025.

**Date decision required by**

17 October 2025 to allow implementation before the start of the 2025 winter period (which starts on 01 November 2025), as this is when the DCRP tool is most likely to be needed.

**Implementation approach**

It is envisaged that NESO and Network Operators will need to make minor changes to allow the initiation of DCRP.

Interactions

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| ​​☐​CUSC | ​​☐​BSC | ​​☐​STC | ​​☐​SQSS |
| ​​☐​European Network Codes | ​​☐​ EBR Article 18 T&Cs1 | ​​☐​Other modifications | ​​ ​Other |

As this modification makes changes to OC6, changes to the Distribution Code are required; this modification has been progressed under a joint Grid Code/Distribution Code Workgroup, with observers on the Workgroup who represent the Distribution Code Administrator.

The legal text changes introduced in this modification will impact the Regulated Sections of the Grid Code (due to changes to OC6.5).

If this modification is approved, a change will be required to the System Defence Plan.

How to respond

**Standard Workgroup Consultation questions**

1. Do you believe that the Original Proposal better facilitates the Applicable Objectives?
2. Do you support the proposed implementation approach?
3. Do you have any other comments?
4. Do you wish to raise a Workgroup Consultation Alternative request for the Workgroup to consider?
5. Does the draft legal text satisfy the intent of the modification?
6. Do you agree with the Workgroup’s assessment that the modification does not impact the European Electricity Balancing Regulation (EBR) Article 18 terms and conditions held within the Grid Code?

**Specific Workgroup Consultation questions**

1. The proposed solution currently applies to all Network Operators, which includes Transmission Connected IDNOs. Do you agree that Transmission Connected IDNOs should be included? If not, please provide your rationale.

The Workgroup is seeking the views of Grid Code Users and other interested parties in relation to the issues noted in this document and specifically in response to the questions above.

Please send your response to [grid.code@nationalenergyso.com](mailto:grid.code@nationalenergyso.com) using the response pro-forma which can be found on the [GC0176 modification page](https://www.neso.energy/industry-information/codes/gc/modifications/gc0176-introduction-demand-control-rotation-protocol-within-operating-code-6-grid-code).

In accordance with Governance Rules if you wish to raise a Workgroup Consultation Alternative Request please fill in the form which you can find at the above link.

*If you wish to submit a confidential response, mark the relevant box on your consultation proforma. Confidential responses will be disclosed to the Authority in full but, unless agreed otherwise, will not be shared with the Panel, Workgroup or the industry and may therefore not influence the debate to the same extent as a non-confidential response.*

Acronyms, key terms and reference material

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| **Acronym / key term** | **Meaning** |
| BSC | Balancing and Settlement Code |
| CUSC | Connection and Use of System Code |
| DCRP | Demand Control Rotation Protocol |
| DNO(s) | Distribution Network Operator(s) |
| EBR | Electricity Balancing Regulation |
| ESEC | Electricity Supply Emergency Code |
| ETG | Electricity Task Group |
| GC | Grid Code |
| IDNO | Independent Distribution Network Operator[[3]](#footnote-4) |
| LLRDP | Low Level Rota Disconnection Plan |
| NCER | Network Code on Emergency Restoration |
| OC6 | Operating Code 6 (of the Grid Code) |
| OC7 | Operating Code 7 (of the Grid Code) |
| STC | System Operator Transmission Owner Code |
| SQSS | Security and Quality of Supply Standard |
| T&Cs | Terms and Conditions |

**Reference material**

* [Electricity Supply Emergency Code](https://www.gov.uk/government/publications/electricity-supply-emergency-code)

Annexes

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| **Annex** | **Information** |
| Annex 01 | GC0176 Proposal form |
| Annex 02 | GC0176 Terms of reference |
| Annex 03 | GC0176 Legal Text |
| Annex 04 | DCRP Summary |
| Annex 05 | Ofgem letter to DNOs |

1. Paragraph 3.8 of the 2005 version of ESEC “*The LLRDP is likely to be used in situations where there is a low (percentage) level reduction in demand that needs to be achieved, and this needs to be achieved over, perhaps, a one 3 hour period, such as the weekday tea-time peak demand for electricity and which might occur for a few days*.” [↑](#footnote-ref-2)
2. Due to national security reasons, the full Demand Control Rotation Protocol will not be a publicly available document. A summary of the protocol will be created that will be included in the Grid Code as an associated document. [↑](#footnote-ref-3)
3. These can be connected at transmission (to the NETS) or connected at distribution (and via a DNO network, to the NETS). [↑](#footnote-ref-4)