# **Modification**

At what stage is this document in the process?

DCRP/MP/23/03: Modification to DOC6 to allow protection for sites when implementing demand disconnection where technically feasible



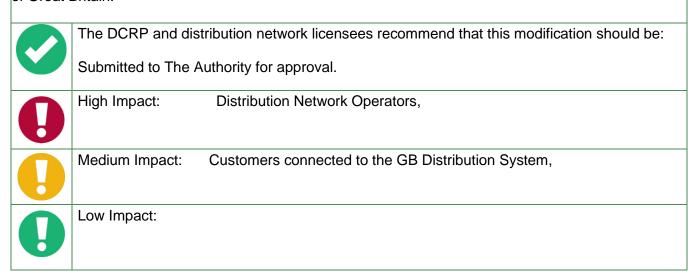
The purpose of this document is to assist The Authority in its decision to implement the proposed arrangements in the Distribution Code of Licensed Distribution Network Operators of GB. To protect supplies to critical customers when implementing Demand Control.

The proposed modifications were subject to industry consultation from 24 July 2023 to 18 August 2023.

Date of publication: 04 September 2023

#### Recommendation

The Distribution Code Review Panel (DCRP) and distribution network licensees recommend that the proposed modifications are made to the Distribution Code of Licenced Distribution Network Operators of Great Britain.



#### Contents Anv questions? **Background** 1 3 Contact: **Chris McCann** 2 The Defect 3 **Details of the Proposal** 3 3 **Distribution** Code@energynetw 4 Impacts and Other Considerations orks.org Impact on other Industry documents **2**020 7706 5105 5 4 6 Assessment against Distribution Code Objectives 5 Proposer: **DCRP** 7 Consultation 5 **Distribution Code Review Panel Discussion** 5 www.Distribution Code@energynetw 9 **Implementation** 6 orks.org 10 Recommendation 6 020 7706 5105 11 Appendices

Initial Report presented to DCRP	01 June 2023
Draft report issued for public consultation	24 July 2023
Consultation closed	18 August 2023
Final Modification Report available for Panel	29 August 2023
Final Modification Report submitted to The Authority	04 September 2023

## 1 Background

Both the Distribution Code and Grid Code include provisions for demand control that can be used in the event that a rapid reduction in connected demand is required from the GB electrical Distribution and/or Transmission systems. Such provisions are intended to be applied in more urgent time scales than those associated with the arrangements for demand disconnection in the Electricity Suplly Emergency Code (ESEC).

The ESEC sets out that certain cutomers who operate sites necessary for the deliver of services forming part of Great Britain's critical national infrastructure be excluded from planned schedules of customer disconnection in the event of national shortages of electricity generation. These customers are known as "protected customers".

The current wording in the Distribution Code and Grid Code explicitly precludes such provisions.

The Government wants to rationalise demand control provisions following its Electricity Shortfall Prioritisation Review and DNOs currently run the risk of being non-compliant with the Grid Code if "protected customer" are not disconnected as part of demand control when implementing an OC6 instruction. This modification is to specifically allow "protected customers" to be excluded from being disconnected when DNOs implement a National Grid ESO Grid Code OC6 demand control instruction.

As DNOs utilise demand control provisions to implement OC6 demand control instructions the Grid Code Review Panel (GCRP) and Distribution Code Review Panel (DCRP) agreed to propose to amendments to the Distribution Code and Grid Code in parallel. This will help to ensure that NGESO has the tools available to reduce demand to ensure the GB Electricity System remains balanced in the event of an operational situation where there is a need to reduce National Demand.

## 2 The Defect

In the current drafting of DOC6 no customer's site can be 'protected' from disconnection if a DNO receives an OC6 instruction to implement demand control via demand disconnection; DOC6 text states that "No such protection can be given under the Grid Code or this section of the Distribution Code." By having this limitation in the current drafting of DOC6, supplies to "protected customers" as designated under the ESEC cannot be excluded from demand control, even if it may be technically feasible to do so.

This modification has been designed to remove the current constraints in the DCode legal text which prevents a DNO from maintaining supplies to "protected customers" when implementing either an OC6 demand control instruction received from NGESO, or for a DNO's operational purposes in order to maintain system integrity.

# 3 Details of the Proposal

The Distribution Code Review Panel (DCRP) and Grid Code Review Panel (GCRP) agreed to form a joint workgroup to adress the current defect in the legal text and propose amendment to the DOC6 requirements of the Distribuion Code, and OC6 in the Grid Code.

The joint workgroup has proposed text changes to both codes which provide alignment of requirements across both the Distribtuion and Grid Code, in the event of an OC6 instruction being

issued by NGESO for demand reduction of upto, and including 20% of demand. This allows for the exclusion of ESEC "protected customers" from the demand disconnection stages used to implement their OC6 instruction. The proposed changes also allow for the exclusion of ESEC "protected customers" when a DNO implements DOC6 arrangements to preserve the integrity of it's distribution system.

The proposed changes to DOC6 are as follows:

- i.) Amendments to DOC6.1.2 to clarify the application of DOC6 when implementing an OC6 demand control instruction from NGESO and for actions which the DNO needs to take to protect the integrity of its distrubtion system.
- ii.) An addition to DOC6.1.3 to explain how ESEC "protected customers" can be excluded from demand disconnection arrangements, and making the point that such an exclusion cannot be guaranteed.
- iii.) Clarification in DOC6.4.3 of how demand reduction by voltage reduction can be used in conjunction with demand disconnection, that ESEC "protected customers" can be excluded from disconnection arrangements if technically feasible to do so, and again that this is not guaranteed. The clarification of the voltage reduction text better reflects the operation of voltage reduction as implemented in the Grid Code following the acceptance by The Authority of GC0050 in June 2014.

These changes are shown in Appendix 1.

# 4 Impacts and Other Considerations

## Impacts on Users of The Distribution Code

The proposed revision will have a positive impact on "protected customers" under ESEC by allowing them to be excluded from demand disconnection arrangements where it is technically feasible to do so. It provides clarity for all users on the approach DNOs will follow when reducing demand to comply with an OC6 instruction or implementing demand control locally as part of a DNO's operational requirements, such as catering for unplanned and/or unsecured network outages.

## Impacts on Total System and the DNOs System

The impact of this modification on the Total System and on DNOs' systems is broadly neutral, although DNOs may need to modify their standing approach to demand control to accommodate, where possible, the exclusion of "protected customers" from their demand disconnection schedules in their respective internal network management systems.

### **Environmental Impact Assessment**

The impact on the environment as a result of this modification is neutral.

# 5 Impact on other Industry documents

This modification will have no impact on other industry documents, other than the associated Grid Code changes as described. This change relates to the requirements as set out in the Distribution Operating Code (DOC) section of the Distribution Code only.

# 6 Assessment against Distribution Code Objectives

The proposed amendments better facilitate the Distribution Code objective:

(i) to permit the development, maintenance, and operation of an efficient, coordinated and economical system for the distribution of electricity.

The proposal has a positive effect against this objective as the proposed amendments to the Distribution Code will permit DNOs to allow "protected customers" designated under ESEC to be excluded from demand disconnection where technically feasible.

(ii) to facilitate competition in the generation and supply of electricity.

The proposal has a neutral effect on this objective.

(iii) to efficiently discharge the obligations imposed upon distribution licensees by the distribution licences and comply with the Regulation and any relevant legally binding decision of the European Commission and/or the Agency for the Co-operation of Energy Regulators; and

The proposal has a positive effect on this objective by providing alignment between the Distribution Code and Grid Code and provides the DNOs with the relevant tools to comply fully with the amended requirements in the Grid Code.

(iv) to promote efficiency in the implementation and administration of the Distribution Code.

The proposal has a neutral effect on this objective.

## 7 Consultation

The public consultation for this modification proposal received one response. This was from a Distribution Network Operator and though brief in nature, was supportive of the proposed changes. A summary of the response received is shown below.

## 7.1 Northern Powergrid

This response was fully supportive of the proposals and a provided detailed view against each of the code objectives.

### Response Summary

In conclusion the response received provided a supportive stance to the proposed amendments to the Distribution Code. A copy of the response has been included in Appendix 2 of this document for reference.

## 8 Distribution Code Review Panel Discussion

The Panel discussed the submission of this Report at the meeting held 03 August 2023. As this modification is being proposed as part of a joint working group (National Grid ESO – Grid Code modification GC0161) the panel agreed that this paper should be submitted before the next Panel meeting which is scheduled for early October 2023.

## 9 Implementation

If approved by The Authority an implementation date ten days after the agreed date of approval is proposed. This is to maintain consistency with the associated Grid Code modification proposal GC0161.

The attached version of The Distribution Code of GB included in this RTA if approved, will be the version published.

## 10 Recommendation

The Distribution Code Review Panel and licenced Distribution Network Operators recommend that this modification report should:

- be submitted to The Authority for approval; and
- subject to the agreement of The Authority the modification should be implemented ten days from the date of approval.

# 11 Appendices

Appendix 1 – Distribution Code DOC6 section with proposed changes (in red)

Appendix 2 – DCRP/23/03/PC Consultation Response Received

Appendix 3 – Distribution Code of GB TC Copy (Separate document provided)

During the Joint workgroup developing the legal text changes required, a set of the affected clauses within DOC6 were agreed and consulted on. A copy of the proposed amendments to each clause has been provided below:

- DOC6.1.2 This **Distribution Operating Code** deals with the following methods of **Demand Control**:-
  - (a) Customer Demand reduction, including Voltage Reduction initiated by the DNO. Customer Voltage Reduction, initiated by the DNO (other than following an instruction from NGESO);
  - (b) **Customer Demand** reduction by disconnection initiated by the **DNO** (other than following an instruction from **NGESO**);
  - (c) Customer Demand reduction instructed by NGESO;-
  - (d) Automatic low frequency **Demand** disconnection; or-
  - (e) Emergency manual **Demand** disconnection.

The term "Demand Control" is used to describe any or all of these methods of achieving a Demand reduction.

Data relating to Demand Control should be expressed in MW.

DOC6.1.3 The situation where it is necessary to reduce **Demand** due to Civil Emergencies is dealt with in **Distribution Operating Code**, DOC9.

The Electricity Supply Emergency Code issued by the lead government department for energy emergencies (as amended from time to time) provides that in certain circumstances consumers are given a certain degree of "protection" when rota disconnections are implemented pursuant to a direction under the Energy Act 1976. No such protection can be given under the-**Grid Code** or this section of the **Distribution Code** \*except:

- (a) In relation to **Customer Demand** reduction by disconnection initiated by the **DNO** in accordance with DOC6.1.2 (b); and
- (b) In relation to those **Demand** disconnection stages referenced in DOC6.4.3 (a) and DOC6.4.3 (b)(ii).

In which case protection may be given, where technically feasible, to pre-designated protected sites, although, even in these situations, protection cannot be guaranteed. The list of pre-designated protected sites is compiled and kept up to date by **DNO**s in accordance with the terms set out in the Electricity Supply Emergency Code.

- DOC6.4.3 The **DNO** will arrange to have available within the **DNO's Distribution System**, four or five stages of **Demand Control**.
  - (a) Where four stages are made available they shall comprise four **Demand** disconnection stages each of which can reasonably be expected to deliver between four and six percent **Demand** Reduction.
  - (b) Where five stages are made available they shall comprise:
    - (i) Two **Voltage Reduction** stages between two and four percent, each of which can reasonably be expected to deliver around 1.5 percent **Demand** reduction; and
    - (ii) Three **Demand** disconnection stages, each of which can reasonably be expected to deliver between four and six percent **Demand** reduction.

in integral multiples of between four and six per cent. These stages may include the use of **Voltage Reduction** and/or other forms of **Demand Control** determined by the **DNO**. As stated in DOC6.1.3, protection may be given, where technically feasible, in relation to those **Demand** disconnection stages referred to in DOC6.4.3, although, even in these situations, protection cannot be guaranteed.

# DCRP/23/03/PC: Modification to DOC6 to allow protection for sites when implementing demand disconnection where technically feasible

Stakeholders are invited to respond to this consultation, expressing their views or providing any further evidence on any of the matters contained within the consultation document. Stakeholders are invited to supply the rationale for their responses to the set questions.

Please send your responses and comments by 17:00, Friday 18 August 2023 to <a href="mailto:dcode@energynetworks.org">dcode@energynetworks.org</a> and please title your email 'Consultation Response DCRP/23/03/PC Modification to DOC6 to allow protection for sites when implementing demand disconnection where technically feasible' Please note that any responses received after the deadline may not receive due consideration by the Working Group.

Any queries on the content of the consultation pro-forma should be addressed to DCode Administrator on 020 7706 5105, or to dcode@energynetworks.org

Respondent	Alan Creighton
Company Name	Northern Powergrid
No. of DCode Stakeholders Represented	2
Stakeholders represented	Northern Powergrid Northeast plc, Northern Powergrid Yorkshire plc
Role of Respondent	Distributor
We intend to publish the consultation responses on the DCode website. Do you	Y

agree to this response being
published on the DCode
website? [Y/N]

	Question	Response	Secretariat Response
Q1	Do you agree with the general intent intent of the proposed modification? If not, please explain your view.	Yes	Noted, thank you.
Q2	Do you believe that the proposed modification, as set out in the DCRP/MP/23/03 Consultation Pack, better facilitate the Applicable Distribution Code Objectives?	Yes.  The proposal better facilitates Distribution Code Objective a) as it enables DNOs to implement a Grid Code OC6 instruction in such a way as to protect supplies to critical customers as established under ESEC where technically feasible. In this way it enables DNO to implement an OC6 instruction that help ensure the integrity of the total system whilst minimising the impact on critical customers.	We appreciate your feedback against the code objectives, these have been considered and reflected in the Report to The Authority.
		The proposal better facilitates Distribution Code Objective c) as it aligns with the proposed Grid Code modification GC0161 and hence facilitates DNOs complying with the Grid Code as required by a DNO's distribution licence.	

	Question	Response	Secretariat Response	
		The proposal is neutral with respect to Distribution Code Objective b) and d).		
Q3	Are there any other sections of DOC6 you think need to be amended under this modification? If so please explain.	No.	Noted.	
Q4	Do you have any other relevent comments?	No.	Noted, thank you.	

Please provide comments relating to the specific technical content of the proposed modifications<sup>1</sup>

Page / line No	Clause/ Subclause	Paragraph Figure/ Table	Type of comment (General/ Technical/Editorial)	COMMENTS	Proposed change	OBSERVATIONS OF THE SECRETARIAT on each comment submitted
						See comments above.

<sup>1</sup> Add more rows if required

Please see separate document provided with this report.

• DCRP/MP/23/03\_RTA\_DCode\_v53\_TC