

## Distribution Code Consultation DCRP/MP/23/03

Title: Modification to DOC6 to allow protection for sites when implementing demand disconnection where technically feasible

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### Target Audience:

This modification may have an effect on all Distribution Code Stakeholders including Distribution Network Operators, Customers connected to the GB Distribution System including Demand Side Response providers.

**Date Published: 24 July 2023**

**Deadline for responses: 17:00 Friday 18 August 2023**

### Summary:

This consultation paper is seeking the views from across industry on proposed changes to the legal text of the Distribution Code of GB to remove wording specifying that no protection to sites can be offered in the event of:

- i) an OC6 instruction issued from the National Grid Electricity Systems Operator (NGESO) to a Distribution Network Operator (DNO) requiring them to disconnect demand to preserve the integrity of the transmission system.
- ii) demand disconnection initiated by the DNO in order to preserve the integrity of the distribution system.

DNOs utilise the Distribution Operating Code (DOC) to enact demand control stages which, as currently drafted, do not allow for any site to be afforded protection should demand control be implemented by a DNO. This can result in supplies to critical infrastructure sites being interrupted. This modification proposal is to change the Distribution Code so that DNO's are permitted maintain supplies to critical infrastructure sites when they implement certain demand disconnection stages where technically feasible.

## 1 Introduction

When a DNO receives an OC6 instruction from NGESO it must begin to disconnect demand in accordance with the Grid Code. This is achieved by implementing requirements under the Distribution Code which permit the DNO to disconnect customer supplies. These requirements currently do not allow for the protection of site connected to a DNO's distribution system, regardless of whether such sites supply critical or protected customers as set out in the [Electricity Supply Emergency Code](#) (ESEC).

This modification proposal is to amend the Distribution Code to provide additional clarity to clause DOC6.1.3, which prohibits any protection to be afforded to any specific customers' sites when implementing an OC6 instruction from NGESO. This proposed change will allow for the DNOs to

configure the demand disconnection blocks to maintain supplies to ESEC protected customers where it is technically feasible to do so.

Amendments to provide clarity in clause 6.4.3 are proposed to set out the number of options available to a DNO when implementing demand disconnection to align with the current grid code requirements.

This modification proposal also introduces similar arrangements where demand disconnection is initiated by the DNO rather than on instruction from NGESO.

## 2 Defect

There has been an increased focus on the tools NGESO has 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. Under the present Grid Code OC6, and the associated Distribution Code DOC6, drafting no protection can be afforded to critical sites.

DOC6 text states that *“No such protection can be given under the Grid Code or this section of the Distribution Code.”* By having this obligation in place, the Distribution Code prevents protection of critical sites, even it may be technically feasible to do so.

This modification has been designed to remove the barriers in the legal text which prevent a DNO from maintaining supplies to certain sites in the event of implementing a demand disconnection instruction from NGESO. It also proposes to remove a similar barrier in relation to DNOs implementing certain demand disconnection where it is necessary to preserve the integrity of the distribution system.

## 3 Proposal

This proposed modification is to revise the relevant parts of DOC6 to align with the proposed Grid Code modification GC0161 related to amendments within the OC6 section of the Grid Code.

The proposed changes to both the Distribution and Grid Codes have been developed by a joint Grid Code Review Panel and Distribution Code Review Panel workgroup so that they are aligned as far as reasonably practicable. This will ensure consistency across both codes.

It was agreed at the Distribution Code Review Panel that this Distribution Code modification should be progressed under the urgency framework as set out in [The Constitution and Rules of the Distribution Code Review Panel of GB](#).

In line with this approach, it is proposed that, if approved, amendments to the Distribution Code legal text will come into effect ten days after an Authority decision.

During development of the Distribution Code legal text, three main clauses were identified as requiring amendment:

- 1) DOC6.1.2
- 2) DOC6.1.3
- 3) DOC6.4.3

DOC6.1.2 proposed amendments are to align the text with the defined term for Demand Control in the Distribution Code this will provide additional clarity on the methods available to DNOs for Demand Control.

DOC6.1.3 proposed amendments are to add wording which removes the restrictions placed on DNOs maintaining supplies to a pre-determined list of protected sites in accordance with ESEC requirements.

DOC6.4.3 proposed amendments are to align the Distribution Code with a Grid Code change implemented in the Grid Code modification GC0050, approved by the Authority in June 2014.

Below are excerpts from the relevant Distribution Code (DOC6) clauses with the proposed changes identified in red font:

- DOC6.1.2 This **Distribution Operating Code** deals with the following methods of **Demand Control**:-
- (a) ~~Customer Demand reduction, including Customer 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) (i);

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 **DNOs** 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~~ 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 be reasonably expected to deliver between four and six percent **Demand Reduction**.
- (b) Where up to five stages are made available they shall comprise:
  - (i) two **Voltage Reduction** stages between 2 and 4 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.

## 4 Applicable Distribution Code Objectives

The Applicable Distribution Code Objectives are to:

- a) permit the development, maintenance, and operation of an efficient, co-ordinated, and economical system for the distribution of electricity; and
- b) facilitate competition in the generation and supply of electricity; and
- c) 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
- d) promote efficiency in the implementation and administration of the Distribution Code.

## 5 Consultation Questions

1. Do you agree with the general intent of the proposed modification? If not, please explain your view.
2. 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?
3. Are there any other sections of DOC6 you think need to be amended under this modification? If so please explain.
4. Do you have any other relevant comments?

## 6. Next Steps

Responses to this consultation should be sent to the Distribution Code Review Panel Secretary at [dcode@energynetworks.org](mailto:dcode@energynetworks.org) by **17:00 Friday 18 August 2023** on the pro-forma provided expressly for the purpose. Responses after this date may not be considered.

## 7. Consultation Pack Contents

A copy of the DCRP/MP/23/03 Consultation pack can be found using the link below,

<http://www.dcode.org.uk/consultations/open-consultations/>

The consultation pack includes:

- A copy of the consultation paper;
- A copy of the relevant sections of the DCode - DOC6; and
- A response proforma.

**For more information, please contact:**

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