Modification

At what stage is this document in the process?

DCRP/MP/18/05/Final Modification Report - Implementation of the Demand Connexion Code



The purpose of this document is to assist the Authority in its decision to implement the proposed modifications to the Distribution Code which implement the Demand Connexion Code EU Network Code.

Date of publication: 29 June 2018

Recommendation

The Distribution Code Review Panel (DCRP) unanimously recommends that the proposed modifications are made to the Distribution Code.



The Proposer recommends that this modification should be:

Submitted to the Authority for approval



High Impact:

None



Medium Impact:

None



Low Impact:

All Users of the Distribution System

Contents			? Any questions?
Purpose of the Modification 3			Contact: David Spillett
Details of the Proposal		3	
Impacts on Total System and the DNOs' Systems		5 d	lcode@energynetwo
Impacts on the Users of DNOs' Systems 5		5 r	rks.org
Assessment against Distribution Code Objectives 5		5	2 020 7706 5124
Impact on other Industry documents			Proposer: Distribution letwork Licensees
Environmental Impact Assessment 6		6	
Distribution Code Review Panel Recommendation 6		- 1	
Recommendation			www.dcode@energy networks.org
Appendices		6	020 7706 5124
Timetable			
Final Modification Report available for Panel	7 June 2018		
Final Modification Report submitted to Authority	29 June 2018		

Purpose of the Modification

This modification is to implement the Demand Connexion Code (DCC) into the GB arrangements, and specifically the Distribution Code.

The Grid and Distribution Code Review Panels have been running areas of joint work implementing the EU Network Codes, with the current focus on the DCC. Guidance from BEIS and Ofgem has been to apply the new EU requirements within the existing GB regulatory frameworks. This will provide accessibility and familiarity to GB parties, as well as putting in place a robust governance route to apply the new requirements in a transparent and proportionate way.

All the work to date and previous consultation material can be found at this link:

https://www.nationalgrid.com/uk/electricity/codes/grid-code/modifications/gc0104-euconnection-codes-gb-implementation-demand

The Panels have consulted jointly on DCC implementation in March 2018 and again between 17 May and 8 June.

Details of the Proposal

Scope of the DCC

The DCC specifically sets harmonised technical standards for the connection of new transmission-connected demand facilities, new transmission-connected distribution facilities and new distribution systems, including new closed distribution systems. It also addresses the performance requirements for new demand units used by a demand facility or a closed distribution system to provide demand response services to relevant network operators - ie both National Grid and the DNOs. Demand response services are an important instrument for increasing the flexibility of the internal energy market and for enabling optimal use of networks. Historically, generation facilities have formed the backbone of providing technical capabilities to network operators. However, demand facilities are expected to play a more pivotal role in the future.

The elements of the DCC that relate to the connexion of demand to the transmission system are reflected in the Grid Code, but they have no impact for customers connected to distribution systems. A comprehensive mapping of the DCC was undertaken and published with the March consultation and is available at the hyper link above.

Similarly the DCC deals with five types of demand response services: two which relate to the modulation of real or reactive power for controlling flows of electricity on networks, and three services that relate specifically to National Grid services, ie transmission constraint management and two services for frequency control. Only the two services relating to flow control on distribution networks are picked up in the revisions to the Distribution Code, with the other three services being specified by National Grid in National Grid documentation.

Of course, distribution connected parties can provide demand side response services to National Grid, but in doing so they will be bound by National Grid's contractual and technical requirements.

Arrangements for Existing and New Demand Side Response Services to Distribution Companies

As described above, demand sides services for DNOs relating to the modulation of active power (demand) or reactive power are covered by the DCC. However the DCC only applies to those services that are procured by DNOs from new demand units.

The DCC introduces concepts of a demand facility and the demand unit. A demand facility is a customer's installation where the customer has arranged all or part of the customer's demand to be modulated as a service to network operator. Services to parties other than network operators (eg energy suppliers) are not covered by the DCC. A demand unit is a device that can be controlled in relation to the contract for demand side services within the demand facility. It is the age of the demand unit that determines whether the DCC applies or not; demand units installed and commissioned before 18 August 2019 are not required to comply with the DCC.

It is therefore quite possible that a single demand services contract with a network operator will include demand units that were commissioned before 18 August 2019 and do not have to comply with DCC requirements, and demand units commissioned after that date that do have to comply.

Development of Proposals

Demand side services in Great Britain, especially in relation to those procured by DNOs are not yet a mature market. In addition DNOs and National Grid are working together with stakeholders under the auspices of the Open Networks Project to develop and refine demand side flexibility and services. As such it is important that the GB implementation of the DCC does not set artificial or premature constraints on innovation and the development of new demand side flexible services. The approach taken has been to capture the high level DCC requirements in a common Distribution Code framework, but allow individual DNOs scope to develop the detail of individual services with their stakeholders.

A GC0104 consultation on the development of the proposals for the Grid and Distribution Codes was undertaken from 8 March 2018 to 29 March 2018.

Feedback from the formal consultation in March, together with some specific discussions with stakeholders on their response to that consultation, were used to develop the draft of the Distribution Code for the consultation that ran from 17 May to 8 June.

Stakeholders in general agreed that the relative immaturity of the market called for a light touch and flexible approach.

The feedback from the March consultation, and the DNOs' response is attached as appendix 4. The feedback from the 17 May to 8 June consultation, and the DNOs' response, is attached as appendix 3. The complete responses to the March consultation are included as appendix 5.

Distribution Code modifications

A new section of the Distribution Code, DPC9, has been created to hold the high level requirements that providers of DSR services to DNOs need to comply with. The drafting allows for DNOs to contract with customers individually to provide demand side services, or with aggregators. In both cases the drafting expects that the customer will have identical compliance requirements, but in the latter case the aggregator has the responsibility to ensure the customer's compliance with the requirements.

In following up with a number of stakeholders post the March consultation a suggestion was made to restructure DPC9 slightly and to combine the drafting of the roles of Demand Services Provider and Customer. This did seem a sensible simplification of DPC9, and already has the support of some DNOs and aggregators (ie Demand Services Providers). Stakeholders were asked this specific question in the 17 May consultation and those that responded did state their preference for this simplified version. It is this version that is now being proposed for inclusion in the Distribution Code.

Compliance Requirements

A set of proformas for customers and aggregators to use to demonstrate compliance etc has been created. Although the DCC makes a distinction between customers connected above or below 1kV in relation to compliance documentation, stakeholders have agreed with DNOs that there is no effective difference and therefore a single proforma for all customers and aggregators will suffice.

Post the March consultation some stakeholders suggested a simplification to form DSR3 – ie the form for recording Demand Unit compliance. Where a Demand Unit consists of passive components that are not voltage or frequency sensitive, and where its control equipment is similarly insensitive, the Demand Facility Owner can confirm this rather than specifically demonstrate it. This proposal is now being carried forward.

Given the ongoing developments in the demand side services markets it is proposed that these proformas are not fixed, by inclusion in the Distribution Code, and are used more as guidance for the minimum data transfers that are required. A copy of the proformas will be maintained on the Distribution Code website and will be maintained by the ENA. This is analogous to the approach taken with the application forms for generation connexions where the ENA maintain a standard form intended to be used by all DNOs.

The proposed proformas are attached as appendix 2

Impacts on Total System and the DNOs' Systems

There is no impact on the Total System.

Impacts on the Users of DNOs' Systems

There are no new impacts on Users of DNOs' systems.

Assessment against Distribution Code Objectives

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

The proposal has a neutral impact on this objective.

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

The proposal has a neutral impact on this objective.

(iii) Efficiently discharge the obligations imposed upon DNOs by the Distribution Licence and comply with the Regulation (where Regulation has the meaning defined in the Distribution

Licence) and any relevant legally binding decision of the European Commission and/or Agency for the Co-operation of Energy Regulators.

The proposal implements the DCC and is therefore a positive contribution against this objective.

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

The proposal has a neutral impact on this objective.

Impact on other Industry documents

There are no impacts on other industry documents.

Environmental Impact Assessment

There are no environmental impacts associated with this proposed modification.

Distribution Code Review Panel Recommendation

At the meeting of the Distribution Code Review Panel (the Panel) held on 7 June 2018, the Panel agreed to the submission of the Report to Authority, subject to there being no significant new issues raised by stakeholders, as the Panel agreed that the Modification proposal better facilitated the objectives of the Distribution Code.

Recommendation

The Licenced Distribution Network Operators and the DCRP 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 from the date the revised Distribution Code is published. This date is recommended as 6 August 2018.

Appendices

Appendix 1	Proposed DPC9 Distribution Code Text	
Appendix 2	Proposed Installation Document proformas	
Appendix 3	Responses to the 17 May – 8 June consultation	
	Northern Powergrid	
	Western Power Distribution	
Appendices 4 and 5	Responses to the March consultation	

- ADE
- Electricity North West

- Flexitricity
- SP Energy Networks
- Northern Powergrid
- RWE Supply and Trading
- SP Generation
- SSE Generation
- UK Power Reserve Ltd
- Western Power Distribution