

Modification proposal:	Distribution Connection and Use of System Agreement (DCUSA) DCP350 – Creation of Embedded Capacity Registers		
Decision:	The Authority ¹ directs this modification ² be made ³		
Target audience:	DCUSA Panel, Parties to the DCUSA and other interested parties		
Date of publication:	1 st July 2020	Implementation date:	11 th July 2020

Background

DCP350 has been proposed to address concerns that the lack of reliable data on Distributed Energy Resources (DER), connected to distribution networks, has compromised the National Grid Electricity System Operator's (NG ESO's) ability to accurately forecast power supply adequacy. This is used to propose recommendations to the Department for Business, Energy and Industrial Strategy for Capacity Market (CM) capacity procurement decisions.

This issue has been highlighted by the BEIS Panel of Technical Experts (PTE), who impartially scrutinise and quality assure the analysis carried out by NG ESO. In addition, it has been raised by a wide range of stakeholders across the energy industry that there is insufficient and incomplete data of DER available. Data on DER is important in order to economically and efficiently operate and invest in the energy system as well as ensuring a well-functioning power market. Inaccuracies in current and forecast connections data have the potential to have a high value cumulative impact on consumers, considering an annual power market of around £20bn alongside the annual costs of the CM of around £0.92bn⁴, system balancing up to £1.2bn and operating, maintaining & strengthening electricity networks of around £6bn⁵.

In 2019, the Energy Data Task Force (EDTF) set out recommendations for how to maximise the value of energy system data to consumers⁶. Ofgem and BEIS have endorsed these recommendations, and have since worked to define Energy Data Best Practice: a set of principles for industry data sharing⁸. On the 10th June 2020 Ofgem published an open letter⁹ stating our minded to position to introduce a licence condition for following data best practice guidance in the RIIO-2 price controls. In early 2020, Distribution Network Operators (DNOs) began publishing data on connections to their networks in a consistent format through the System Wide Resource Registers (SWRRs). This work was realised under Workstream 2 of the Energy Networks Association's (ENA) Open Networks Project. These datasets, while a positive step forward in data provision by the DNOs, do not contain all the necessary data fields to enable NG ESO to carry out system security analysis and wider stakeholders to utilise them effectively.

The modification proposal

DCP350 was proposed by UK Power Reserve, on behalf the PTE, on 17th July 2019. It aimed to require each DNO and Independent Distribution Network Operator (IDNO) to create a public standardised register of all sites larger than 1MW with DERs that are connected to or have an agreement to connect to their networks and influence the GB

¹ References to the "Authority", "Ofgem", "we" and "our" are used interchangeably in this document. The Authority refers to GEMA, the Gas and Electricity Markets Authority. The Office of Gas and Electricity Markets (Ofgem) supports GEMA in its day to day work. This decision is made by or on behalf of GEMA.

² 'Change' and 'modification' are used interchangeably in this document.

³ This document is notice of the reasons for this decision as required by section 49A of the Electricity Act 1989.

⁴ [Capacity Market Auction Results](#)

⁵ [Ofgem State of the Market Report 2019](#)

⁶ [Energy Data Taskforce: A Strategy for a Modern Digitalised Energy System](#)

⁸ [An early draft of Data Best Practice guidance is available](#)

⁹ [Open Letter: Review and next steps: RIIO digitalisation strategies](#)

power system. DERs includes generation, storage and demand sites that have a contract to provide demand-side response/management.

The register contains specific data fields, agreed by the Working Group and consulted on, for each connected site. It would be kept up to date by the relevant DNO or IDNO. The Working Group aligned with data elements being published through the SWRRs, thereby ensuring that these requirements can be achieved through adding to the SWRRs. The modification proposes that DNO and IDNO should populate the data items contained in the register for each site, and to then update and maintain the information on a monthly basis. The Proposer acknowledged that initially there may be some gaps or inaccuracies in the data fields, where DNOs and IDNOs do not currently hold the data or it may be out of date.

It was originally proposed that the registers are aggregated into a national register to be made publicly available. The Working Group agreed that it is not necessary to achieve the objectives of this proposal for DNOs & IDNOs to share data with a third party for it then to be centrally published. The proposal was therefore adjusted to account for DNOs & IDNOs producing and publishing regional registers on their individual websites in a standardised format such that they may be easily amalgamated together. The overarching design and formal rules/obligations are set out within the proposed DCUSA legal text, however the specific fields and their definitions will be maintained within the register so that they can be amended without the need for a change proposal.

The Proposer considers that the proposal has a positive impact on DCUSA objectives 1, 2 and 3 and has a neutral effect on the other objectives. In particular, the proposer argues that this modification will:

- Help inform forecasting and planning of system developments and operational requirements.
- Improve the development of a more competitive and economically efficient electricity market by helping investors to reach decisions on location, technology choices, etc., helping to inform market entry and exit in a more efficient manner.
- Aid policy makers to design more effective policies to drive market developments for consumer benefit as well as meeting wider Government targets.

DCUSA Parties' recommendation

In each party category where votes were cast (no votes were cast in the Supplier or DG party category), there was majority (>50%) support for the proposal and for its proposed implementation date. In accordance with the weighted vote procedure, the recommendation to the Authority is that DCP350 is accepted. The outcome of the weighted vote is set out in the table below:

DCP350	WEIGHTED VOTING (%)									
	DNO ¹¹		IDNO/OTSO ¹²		SUPPLIER		CVA Registrant		DG ¹³	
	Accept	Reject	Accept	Reject	Accept	Reject	Accept	Reject	Accept	Reject
CHANGE SOLUTION	53%	47%	0%	100%	n/a	n/a	100%	0%	n/a	n/a
IMPLEMENTATION DATE	53%	47%	100%	0%	n/a	n/a	100%	0%	n/a	n/a

¹¹ Distribution Network Operator

¹² Independent Distribution Network Operator/Offshore Transmission System Operator

¹³ Distributed Generation

Our decision

We have considered the issues raised by the proposal and the Change Declaration and Change Report dated 9th April 2020. We have considered and taken into account the vote of the DCUSA Parties on the proposal which is attached to the Change Declaration. We have concluded that:

- implementation of the modification proposal will better facilitate the achievement of the Applicable DCUSA objectives;¹⁴ and
- directing that the modification is approved is consistent with our principal objective and statutory duties.¹⁵

Reasons for our decision

We consider this modification proposal will better facilitate Applicable DCUSA Objectives 1, 2 and 3 and has a neutral impact on the other applicable objectives.

Applicable DCUSA Objective (1) - the development, maintenance and operation by each of the DNO Parties and IDNO Parties of an efficient, co-ordinated, and economical Distribution System.

The Proposer, as well as the majority of the Panel and consultation respondents, believes that the proposed solution would better facilitate this objective. A number of respondents state that this improved data could help to unlock the opportunities of system flexibility. One DNO did not agree that this objective is necessarily better facilitated by the proposed change as the DNO continues to develop, maintain and operate an efficient, co-ordinated, and economical Distribution System with the data sets it already holds.

Our Position

We agree that the DCP350 proposal will better facilitate the first DCUSA objective. Improved data that is shared with connection customers and regularly updated with errors identified and corrected will enable DNOs to better invest in and manage their networks. In addition, publicly shared data will enable the industry as a whole to utilise and develop the electricity system more effectively. Opportunities for improvement would expect to be seen in coordinated investment planning between electricity transmission network owners and other DNOs as well as enabling prospective customers to make better decisions about their projects.

Applicable DCUSA Objective (2)– the facilitation of effective competition in the generation and supply of electricity and (so far as is consistent with that) the promotion of such competition in the sale, distribution and purchase of electricity

The Proposer as well as the vast majority of the Panel and Consultation respondents believe that the proposed solution would better facilitate this objective. A number of DNOs believe providing another source of data and improving information transparency will have a positive impact on competition. One market participant felt that this information will help investors/developers in connection and operation of new generation and demand response.

¹⁴ The Applicable DCUSA Objectives are set out in Standard Licence Condition 22.2 of the Electricity Distribution Licence.

¹⁵ The Authority's statutory duties are wider than matters that the Parties must take into consideration and are detailed mainly in the Electricity Act 1989 as amended.

Our Position

We agree that the DCP350 proposal will better facilitate the second DCUSA objective. Market participants require transparency of market data in order to have confidence to invest. By being able to identify the location and types of current and future embedded/distributed energy resources, market participants can make improvements to business cases for investing and assessment of commercial risk. It would also improve the ability for energy resources to be optimised and utilised once connected. DNOs and NG ESO will be able to better assess where connections could offer services for network management or system operation and therefore should introduce greater levels of competition into these markets.

Applicable DCUSA Objective (3) - the efficient discharge by each of the DNO Parties and IDNO Parties of the obligations imposed upon them by their Distribution Licences.

The Proposer as well as the majority of the Panel and Consultation respondents believe that the proposed solution would better facilitate this objective. A DNO felt that this objective is likely to be better facilitated in respect of proposed Whole Electricity System Licence Condition [D17]~[7A] on Electricity Distributors and transmission owners.¹⁶ A market participant felt that this should support the connection of more low carbon generation and better coordinate connections and help identify users that can be utilised to manage their networks more efficiently while maintaining security of supply.

Our Position

We agree that the DCP350 proposal will better facilitate the third DCUSA objective. Under Section 9 of the Electricity Act 1989¹⁷, electricity transmission and distribution networks are required to be developed and maintained in an efficient, coordinated and economical manner. The proposed Whole Electricity System Licence Condition [D17]~[7A] was consulted on in March 2020, and is designed to further enable whole electricity systems outcomes; it is our opinion that this does not restrict DCUSA modifications making specific improvements to data sharing where there is a well-defined need.

Electricity transmission and distribution networks are also required to enable an easily navigable process for customers connecting to their network. This modification may improve the provision of timely connections as potential connectees can better understand what is already connected to DNO networks and tailor their applications accordingly.

Data Collection and Provision

By approving this modification, the requirement to produce this data has been entered into the DCUSA and henceforth it is a requirement for DNOs and IDNOs to complete these Electricity Capacity Registers. This data should be provided from existing sources held by the DNO or already publicly available and completed according to the timescales of this modification to best endeavours. Where data is not available, it should be requested from customers or other stakeholders (ie. NG ESO). We encourage collaborative working between DNOs, IDNOs, NG ESO, suppliers as well as network customers to achieve a complete and accurate dataset. Processes may need to be established between data holders to ensure the updating of customer data when changes

¹⁶ [Statutory consultation on the proposed Whole Electricity System Licence Condition \[D17\]~\[7A\] for Electricity Distributors and transmission owners](#)

¹⁷ [Electricity Act 1989, c.29, Part I, Licencing of Supply etc., Section 9](#)

occur (eg. site ownership). We anticipate that collecting and sharing this data will have benefits to the DNOs in the running of their organisations and operation of their networks. Where collection and provision of this data incurs costs beyond what would reasonably be expected for a business improvement project of this nature, we advise them to outline required additional costs which can be managed through the existing price control mechanisms.

We acknowledge concerns raised in the consultation and panel responses about publishing specific customer data. Relevant to this topic is our intention to include a licence obligation for network companies to follow our data best practice guidance when working with data. Early drafts of the guidance are publically available¹⁹ and these address themes such as treating data as “presumed open” to all and conducting an associated data sensitivity triage process. This triage process outlines that network companies and other data owners should be able to justify and evidence where data should not be shared due to confidentiality concerns. In addition, it outlines that some data may be required and shared with industry partners for specific purposes. Where concerns remain about the publication of data, DNOs should consider any relevant regulations²⁰. This issue could be further assisted by the DNOs taking initiatives such as

- contacting affected customers to make them aware that data will be published.
- setting up a registration system in order to access the DER registers whereby a stakeholder must provide details and verification prior to being provided access.

If organisations determine that additional code modifications, to DCUSA or other codes, would be required to enable the sharing of specific data or to be able to keep these registers up to date with the latest customer information, these should be raised.

Alignment and future direction

Provision of these register is an important next step in the transparency of electricity system data collection and sharing. We welcome the efforts of the DNOs, through this change proposal working group and consultation, to provide suggestions to resolve data gathering and provision issues. We encourage data holders to work together to drive continuous improvement in this respect.

We acknowledge concerns raised by DNOs about the coordination of various initiatives to improve electricity system data. The SWRRs are now published with improvements due in July 2020. As the Change Report sets out, this additional data requirement should build on the data already published through the SWRRs. The change proposal is in line with the objectives of the ENA Open Networks project and contributes towards other initiatives such as the FLEXr²³ and RecordDER projects. We view it as within the ability of DNOs and the ENA to coordinate their input into multiple initiatives to ensure objectives remain aligned and outputs efficient. We anticipate the ENA’s Data Working Group (DWG) is capable of ensuring coordination of this activity with the wider initiatives for bringing about digitalisation and better use of data.

Delivery of the improved ways of working with data described by this proposal will make progress toward the vision and recommendations made by the EDTF. In particular, recommendations 1 (Increased Digitalisation), 2 (Maximising the Value of Data), 3 (Visibility of Data), 4 (Asset registration strategy) and 5 (Visibility of infrastructure and

¹⁹ [Modernising Energy Data- Data Best Practice, latest release \(v0.21\)](#)

²⁰ The data which is to be published as a consequence of the modification relates to DER of 1MW and above. We consider that in the circumstances the majority of the data is likely to relate to companies and other organisations, rather than be personal data relating or attributable to an identifiable individual to which the Data Protection Act/ GDPR would apply.

²³ [Consultation: Flexr- the energy data sharing service.](#)

assets). It also aligns with our objective to reform Distribution Standard Licence Condition 25, the Long Term Development Statements²⁵. These seek to amend the obligations placed on DNO to publish data which can further enhance opportunities for prospective network customers to connect to distribution networks.

Recognising that a number of respondents to the consultation felt that this register should be consolidated into a national register of all energy resources (including those at transmission level) with improved functionality, we encourage DNOs and relevant stakeholders to develop proposals for how this can be achieved and the appropriate form for such a dataset. This is in line with Action 11 raised in our open letter to network companies where we gave feedback and next steps on the topic of their Digitalisation Strategies. At this stage it appears that the accountability and ownership for developing this dataset is improved through each DNO being responsible for their own registers and there would be a risk of fragmentation of data. However, once local datasets are established, we view that a national register would further deliver against DCUSA objectives 1 and 2.

We note the ambition of some parties to achieve a greater dataset of DERs to lower connection capacities such as 30kW (all with half hourly MPANs) or 50kW (fully capture the deployment of DG installations at commercial and industrial sites). In addition, it has been suggested to consider how to include aggregated assets that provide services. This would also further deliver against DCUSA objectives 1 and 2, and so encourage DNOs and relevant stakeholders to consider how this can be achieved.

Decision notice

In accordance with standard licence condition 22.14 of the Electricity Distribution Licence, the Authority hereby directs that modification proposal DCP350: Creation of Embedded Capacity Registers be made.

Chris Thackeray
Head of GB Wholesale Markets

Signed on behalf of the Authority and authorised for that purpose

²⁵ [Key enablers for DSO programme of work and the Long Term Development Statement](#)