




| DCUSA Consultation | | At what stage is this document in the process? |
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| <h2>DCP 350</h2> <h3>Creation of Embedded Capacity Registers</h3> <p><i>Date raised: 10 July 2019</i></p> <p><i>Proposer Name: Alessandra De Zottis</i> (represented by Lisa Waters)</p> <p><i>Company Name: UK Power Reserve (On behalf of the BEIS' Panel of Technical Experts (PTE))</i></p> <p><i>Company Category: Supplier</i></p> | | 01 – Change Proposal |
| | | 02 – Consultation |
| | | 03 – Change Report |
| | | 04 – Change Declaration |
| <p>Purpose of this Change Proposal:</p> <p>To require the DNOs to create a national, public register of all sites that use their networks and influence the operation of the GB power market. The Register would contain details of each connected site and would be kept up to date by the DNOs.</p> | | |
|  | <p>This document is a Consultation issued to DCUSA Parties and any other interested Parties in accordance with Clause 11.14 of the DCUSA seeking industry views on DCP 350 'Creation of Embedded Capacity Registers'</p> | |
| | <p>The Working Group recommends that this Change Proposal should proceed to consultation.</p> | |
| | <p>Parties are invited to consider the questions set in section 10 and submit comments using the form attached as Attachment 1 to dcusa@electralink.co.uk by 27 February 2019</p> | |
| | <p>The Working Group will consider the consultation responses and determine the appropriate next steps for the progression of the Change Proposal (CP).</p> | |
|  | <p>Impacted Parties: DNOs, IDNOs and CVA Registrants</p> | |
|  | <p>Impacted Clauses: A new schedule [31] defining the contents of the Embedded Capacity Register and the obligations on the DNOs to keep</p> | |

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| | the registers correct, up to date and publicly available (location to be determined). |
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| Timetable | | | |
| The timetable for the progression of the CP is as follows: | | | |
| Change Proposal timetable | | | |
| Activity | | Date | |
| Initial Assessment Report Approved by Panel | | 17 July 2019 | |
| Consultation issued to Parties | | 31 January2020 | |
| Change Report issued to Panel | | 11 March 2020 | |
| Change Report issued for Voting | | 20 March 2020 | |
| Party Voting Ends | | 10 April 2020 | |
| Change Declaration issued to Authority | | 14 April 2020 | |
| Authority Decision | | 19 May 2020 | |
| Implementation Date | | 10 Working Days following Authority approval | |

1 Summary

What?

- 1.1 While it is possible to see the generators/ and interconnectors connected to, or using, the GB transmission networks via registers held by the ESO, it is not possible to see the embedded power plants/customers/storage, unless they are active Balancing Mechanism Units (BMUs). With increasing use of embedded generation/Demand Side Response (DSR)/storage for energy balancing and system management it is important that this market becomes more transparent. While some of these assets can be found on industry registers, such as the Capacity Market Register, there is no national repository for information on all of these sites. This proposal will therefore require DNOs (including when acting outside of their distribution service area) and IDNOs to publish and maintain a register of connected distributed energy resource with a capacity greater than 1MW. Distributed energy resource includes generators, demand sites (that have a contract to provide the DNO or IDNO with DSR/DSM) and storage sites.
- 1.2 While the proposer believes that a national register will offer greatest value to the market, they recognise that this will in effect be comprised of regional registers, maintained by each DNO and IDNO, which would have identical data fields and which would allow for easy aggregation to create a GB wide view of the applicable embedded sites.

Why?

- 1.3 This CP has been proposed to address ongoing concerns of the BEIS Panel of Technical Experts (“PTE”), whose role is to impartially scrutinise and quality assure the analysis carried out by National Grid Electricity System Operator (ESO) for the purposes of informing the policy decisions for the Capacity Market (CM). In fulfilment of this role, the PTE have scrutinised the ESO’s Electricity Capacity Reports (ECRs) across number of years and believe that the lack of reliable data on embedded generation available to the ESO is impacting the ESO’s ability to accurately forecast. Without the necessary data to assess system security, the PTE believe that neither the Government nor the regulator can be sure that their policies are as robust as they could be.

- 1.4 The market needs to rely on information to economically and efficiently plan and operate their businesses, e.g. for the ESO to forecast and balance, to ensure that each DNO and IDNO knows what is on their networks, to facilitate effective competition (across the various energy markets), to inform investors and asset operators, to ensure that the industry as a whole will meet the needs of customers for secure supplies at lowest cost. The Government's Data Task Force (DTF) is looking at the how the UK as a whole can make better use of data, and this proposal is aiming to gather and presented data in a manner very much in line with the Ofgem/BEIS Energy Data Task Force's (EDTF's) goals¹.
- 1.5 The proposer suggests that the level of competition, and thus efficiency, within a market is driven by transparency, with all actors have access to additional information about the users of the system the market efficiency will increase delivering benefits to customers. The provision of transparent, robust, data that this change would deliver will facilitate:
- Generators/DSR sites/customers/storage owners being able to identify other system users in their local region which may influence operations and investments, in some instances increasing competition, in others collaboration and trading;
 - Wholesale market players will be able to identify which sites may be influencing the wholesale prices and the volume of capacity that could move between the various parts of the market (such as BM, ancillary services, etc.);
 - Investors, including customers, would be able to more easily see how the market is developing, identify gaps in the market, and consider options for future investments in technology and location;
 - New build and existing embedded sites may also be able to better understand who their projects are interacting with for connection capacity and may be able to trade rights (depending on Ofgem's charging review) or swap locations, etc. to get the most efficient outcome for their investments;
 - Suppliers may be able to improve their forecasting with a better understanding of how the market may operate, such as being able to see changes in say solar capacity on a monthly basis (as proposed in this consultation) rather than via annual updates;
 - The ESO in undertaking its market wide forecasts, such as the FES, NOA and Capacity Market Report, would have access to much more robust data on actual installed capacity of different types of resources, their de-ratings, location, etc.; and Government, Ofgem and

¹ EDTF report in June 2019 – five recommendations: digitalisation of the Energy system; maximising the value of data; visibility of data; co-ordination of asset registration; and visibility of Infrastructure and assets.

their advisers will also be able to far more easily see how well policies are working, having better data to monitor policies such as the roll out and output of renewable or new technologies, or identify if trading capacity would be practical, etc.

How?

- 1.6 With the growth in embedded generation, to inform the market and help with market forecasts done by the ESO, a register of embedded generation would be created. This proposal seeks to introduce a standardised register, containing specific details pertaining to embedded generation, customers (including) DSR, storage sites and other technologies as they develop, that are connected or are planning to connect to each DNOs and IDNOs network. Obligations will be placed on each DNO and IDNO to populate the data items contained in the register for each site, and to then update and maintain the information on an ongoing basis. It was proposed that the registers are aggregated into a national register to be made publicly available. As a location for a national register is yet to be decided, the proposal is that regional registers will be produced step by each DNO and IDNO publishing their register on their individual websites and in the standardised format such that they may be easily amalgamated together.
- 1.7 It should be noted that the above diverges from 'intent statement' on the first page, which remains as it was when the CP was first raised. As the change progressed via discussions with a Working Group set up to develop the change, it became apparent that whilst the intent statement only mentioned DNOs, that it would also encompass IDNOs. The other aspect which diverges is that although originally envisaged to be a single national register, it was noted that the involvement of a third party who publishes such data brings extra complexities around sharing of data and so to ensure base information is published as soon as possible the change only seeks to oblige each DNO and IDNO to publish their register on their individual websites. Therefore, it is proposed that the intent statement is amended as set out below and views from industry are welcomed on the proposed amendments to the intent statement:

To require ~~the DNOs~~ each DNO and IDNO to create a ~~national~~, public register of all sites that use their networks and influence the operation of the GB power market. The Register would contain details of each connected site and would be kept up to date by ~~the DNOs~~ each DNO and IDNO.

Question 1 – Are you comfortable with the proposed amendments to the intent statement of this change?

- 1.8 The Working Group considered whether it may be better for IDNOs to provide the data to the host DNO to become integrated into each regional register. However, it was felt at the current time this may represent to greater degree of complexity and with a national register all sites would be available by region.
- 1.9 There are already a number of registers available to the market, which include;

- [The Transmission Entry Capacity \(TEC\) Register of sites connected to the transmission networks, or holding BEGAs², which is maintained by National Grid ESO;](#)
- [An Interconnector Register, also maintained by National Grid ESO;](#)
- [An Embedded Register which includes the Scottish sites connected to the distribution network, including those holding BELLAs with the ESO, providing similar information and maintained by National Grid ESO;](#)
- [The BEIS Renewable Energy Planning Database which contains data scraped from various sources including planning applications;](#)
- [The Capacity Market Register maintained by the EMR Delivery Body \(part of the ESO\);](#)
- [Contracts for Difference maintained by the EMR Delivery Body; and](#)
- System Wide Resource Registers (SWRRs) maintained by DNOs is now published and available on the DNO web pages
- Regional registers held by the DNOs.

1.10 The issue with the registers are:

- They are not a complete record of the number of sites, size, location, etc.;
- They are held in different locations;
- They are updated at different times; and
- None allow the ESO to track the actual operation of embedded assets by technology type.

1.11 The standardised register that results from this CP will provide much of the data covered by the above mentioned registers, however, it goes slightly further in the level of detail and also the agreed format of the data, giving a more complete view of the market and adding to the value the data will provide to all parties. The EDTF identified visibility of assets as a key improvement that was required in the market and the proposer identified the ESO's lack of data access as a major barrier to their role as the advisor to the government in setting the framework for policies such as the capacity market parameters. This CP seeks to specifically address these issues.

² BEGA – a Bilateral Embedded Generation Agreement allowing access to the transmission network for the purposes of market access or because a site interacts with the transmission network.
 BELLA – a Bilateral Embedded Licence Exemptible Large Power Station

- 1.12 The ESO can already collect the data from sites connected to the Transmission System, due to their operation within the BM and as a result of their connection agreements. The ESO has suggested that once the content of the embedded capacity register is finalised, that they will review the registers they hold and would expect to make any required changes to align the information contained within those asset registers to align with the new embedded asset register.
- 1.13 It is also noted that the Open Networks Project has also been working on proposals for a System Wide Resources Register that includes the data in this CP, but also commercial services data and reinforcement works. Once the wider market has access to and experience of the register the parties may also have enhancements that they would like to see in future. Whilst it is not the intent of this CP to stop such developments, the Proposer believes the GB energy market needs at least this basic data within the next few months to achieve better whole system outcomes in a rapidly changing market.

2 Governance

Justification for Part 1 Matter

- 2.1 DCP350 is considered to be classified as a Part 1 Matter, as it is designed to introduce a new requirement on network operators to share data that is not currently shared and this may potentially have a material impact on competition, notably in generation. It is for that reason that it is felt that the change should be provided to the Authority for final decision.

Requested Next Steps

- 2.2 Following a review of the Consultation responses, the Working Group will work to agree the detail of the solution for DCP 350 and if appropriate progress to the Change Report phase. The Proposer notes that the sooner this data is published the sooner that all parties will be able to benefit from it and in turn, the sooner the effects feed through to end customers and therefore have a strong desire to progress this CP in a timely manner.

3 Why Change?

General Background

- 3.1 The Proposer believes that the Government's policies around environmental goals, security of electricity supply, etc., will be more efficiently implemented if the ESO can undertake more robust forecasting and reporting on market changes to inform policy. The Panel of Technical Experts (PTE) has been disappointed by the lack of data available to the ESO on embedded generation and it is their belief that this CP will help not only the ESO, but all market players and policy makers.

- 3.2 There is a market wide need to better understand the role of embedded sites, and that need is becoming increasingly urgent as embedded generation, storage and DSR in particular increases. The market is in need of better data for forecasting, a fact the ESO acknowledges, but other parties are also becoming increasingly concerned by the lack of transparency in the market. For example, policy makers such as BEIS and Ofgem have challenges in fully understanding the impact and implications. Likewise, traders cannot see the volumes of different types of generation which may join the BM or TERRE in future. The market does not know the likely volumes that could access ancillary services market, the degree of competition for the provision of regional services, etc. The lack of data transparency is therefore limiting the ability of all actors to deliver the most efficient market outcome for customers.
- 3.3 Historically the ESO has created its own register using the limited data available to it. The quality of this register varies according to the datasets available and the recent closure of the Renewable Obligations and Feed in Tariff programmes have made this task substantially harder. The register also does not include all the data attributes that the ESO deems necessary to undertake its role in the most efficient and effective way. The Proposer believes that the most efficient way to get the data is to require the DNOs and IDNOs to maintain the data for their own regions as they know what is connected to their own networks, they are the first port of call for new connection requests and parties are required to notify them of any site changes under the terms of their connection agreements. As the primary source of the data, it makes most sense that the DNOs and IDNOs take responsibility for creating and maintain the registers.

Change Proposal Background

- 3.4 The Proposer advocates that DNOs and IDNOs are the industry parties best placed to create these regional registers, and keep them up to date, giving a GB wide register that the market can rely on.
- 3.5 As it is expected that data will be provided for both existing sites and those contracted to connect, it is recognised that the DNOs and IDNOs operate connection queues and individual connections can be interactive with each other. Therefore, the Proposer believes that it may be advantageous to find a way to show which prospective generators are interacting with each other. This may facilitate trading of capacity, creating co-located sites or better informing the location of new connection.

- 3.6 The Proposer believes that requiring that the MPANs associated with each site are also disclosed to allow parties to extract maximum value from the data, such that the generation from each fuel type could be collected under the BSC and past to the ESO, BEIS and Ofgem to allow for easier monitoring of aggregate emissions which could inform wider policies. It is noted that MPANs are provided in the CM Register, and by the DNOs and IDNOs for EHV sites under their charging methodology, so for many sites this data is already public, albeit some DNOs publish Customer name alongside the MPAN whilst others anonymise the customer name with a tariff or site number.
- 3.7 It is further proposed that the register will include data, that DNOs and IDNOs presently capture, that identifies each technology types and locational information for each site, as there may be an added benefit to the ESO and/or Suppliers by being able to specifically view the location of renewable generation assets and linking this with say local weather forecasts as tool to understand expected output given the operation of some renewable technologies is weather dependent. Location is also key to those looking to examine new connection opportunities. To align data provisions across transmission and distribution it has been proposed that, as well as the address, an OS Grid Reference is provided, as the CM Register already requires this data and more rural sites may be easier to locate.
- 3.8 This proposal would be to set-up the register for all sites >1MW connection capacity (as it is believed this data should be easy to locate and transpose).
- 3.9 The CP requires that the registers would be made available in the public domain, which aligns with the approach used by the ESO in publishing their registers. The Proposer notes that whilst DNOs and IDNOs do publish Long Term Development Statements (LTDS), these are password protected, and hold some of the information this CP seeks to include, but not enough information to be of value for the detailed forecasting that the ESO needs for its role in the CM. The Proposer does not support any password protection as that appears to create an unnecessary barrier to access.
- 3.10 Who owns the data needs to be considered in constructing the register, but the Proposer suggested that as connection agreements are held by the DNOs and IDNOs that the data is theirs and they can therefore publish it, as the ESO does with the data they hold. For capacity market plant the majority of the data is on the CM Registers, so would appear to present no publication issues. MPANs are also held by other bodies, such as Elexon for energy settlement, and many sites will be on other registers such as the FIT register held by Ofgem.
- 3.11 In order to make the embedded capacity registers as robust as possible, it is proposed that there is a mechanism which would allow for any data errors to be brought to the relevant DNO or IDNO's attention and an obligation on the DNO or IDNO to make any corrections upon uploading the next version.

- 3.12 It is suggested that by allowing greater information transparency, this will in turn lead to an increase in the effective use of resources and create a more efficient and competitive market. The more efficient the market is then the better the value it will deliver to customers. The Proposer believes that with greater information transparency, Ofgem and BEIS could potentially monitor the impact of, and where needed fine tune, their policies more easily to enhance the benefits for customers and the environment at a lower cost. With a target of net zero carbon by 2050 this data will provide a far better view of the uptake of technologies such as solar and changes in demand, for example as we see EV charging develop and uptake of storage technologies.
- 3.13 On a microeconomic level, the Proposer believes that placing an obligation on network companies for the provision of certain data that is not currently openly shared will allow the correct de-rating of different technology types under the capacity market. At the current time the ESO's modelling for the de-rating factors under the Capacity Market is limited by lack of data on the actual operation of the embedded generators, with a result that a TO connected 800MW gas plant has the same de-rating as a DNO connected 5MW gas fired generator. The ESO has suggested that the embedded, conventional plants may require a different de-rating than their larger competitors, but it does not have the data to support a change. It is important that the ESO are able to evaluate the contribution from embedded generation more robustly as this would ensure that capacity providers are appropriately rewarded for their contribution to security of supply.
- 3.14 Supplier balancing includes the embedded generators, as Suppliers balances at each GSP Group, and with additional data the Suppliers may be able to better understand the contracted background in any given area and use the data to inform their own forecasting. Reducing their imbalance exposure will reduce supplier costs and benefit customers. Suppliers may also be identify specific sites that could offer services to help them balance, for example customers with DSR capabilities who can help Suppliers reduce their exposure to peak prices or help manage a system stress event.
- 3.15 For traders and wholesale market participants this data will also substantially improve their market knowledge, analytics and forecasting. They will know which assets can respond to price signals, the rate of deployment of specific technologies, etc. and this is expected to enhance competition and therefore improve the efficiency of the market.

- 3.16 The Proposer acknowledges that there will likely be a cost associated with this CP. The Proposer asserts that the initial start up cost and then ongoing costs of keeping the register up to date will be outweighed by the benefits in economic and operational efficiency in the GB electricity market, which in turn will deliver benefits to customers. At this stage it is difficult to quantify the scale of the benefits, as an example and for illustrative purposes only, were this data to show that the capacity market was over buying say 100MW and the clearing price was £25/kW then this would be a saving of £2.5m for customers. As the benefits are expected to be spread across a wide variety of parties and decisions. It is suggested that the scale of benefits will outweigh the minimal costs of keeping the registers updated.

Question 2 - Do you understand the intent of the CP?

Question 3 – Are you supportive of the principles that support this CP, which is to increase the availability of accessible data which is expected to improve the economic and efficient and operation of the energy market, while driving towards a lower carbon economy?

4 Working Group Assessment

DCP 350 Working Group Assessment

- 4.1 The DCUSA Panel established a Working Group to assess DCP 350. This Working Group consists of representatives from DNOs, Suppliers, IDNOs and National Grid Electricity System Operator (NGESO) as well as observers from Ofgem and BEIS. Meetings were held in open session and the minutes and papers of each meeting are available on the DCUSA website – www.dcusa.co.uk.
- 4.2 Each Working Group is required to agree to work to the general Terms of Reference (ToR) set by the Panel, however, additional items may be included by the Panel during their initial assessment of the CP. It is noted that during their initial assessment of DCP 350, the DCUSA Panel agreed that in addition to the standard ToRs, the Working Group is required to consider and report on the following specific areas:
- A workstream under the Open Networks Project being facilitated by the ENA have been reviewing something similar and therefore the Working Group should engage with ENA on the relevant workstream to ensure that work isn't duplicated.
 - Some of the information being considered for the register could be private/confidential in nature and appropriate legal advice should be sought.
 - Consideration is to be given to the governance arrangements with respect to how the structure of the register is maintained and how and when it is updated.

- 4.3 The Working Group developed this consultation document to gather information and feedback from market participants on the CP.
- 4.4 Following the initial meetings of the Working Group, it was agreed that the proposed solution set out in the CP form should be further developed. In undertaking this development, the Working Group split out six components of the CPs, being:
- The exact items to be contained in the ECR and the definitions of each item;
 - The format used to publish the ECR;
 - The location(s) where the ECR is to be made available;
 - The frequency by which the ECR is to be updated;
 - The governance arrangements needed to ensure the ECR is populated in a consistent manner and a mechanism to allow for amendments to the structure of the ECR; and
 - Interactions with data privacy regulations and potentially commercially sensitive information.

The exact items to be contained in the ECR and the definitions of each item

- 4.5 The Working Group discussed the data items which the Proposer had specified within the CP form during which the group agreed that they were comfortable with all but three of the data items being included. The three data items that some Working Group members raised concerns over were:
- Customer Name (meter registrant);
 - Project Name (power station/site name); and
 - MPAN.

4.6 It was noted that the main concern related to whether publishing data such as customer name and/or MPAN would result in DNOs and IDNOs being in breach of Section 105 of the Utilities Act 2000³. The Secretariat explained that consideration will also need to be given to any GDPR related matters, especially if a single register is to be published on a public website. The Working Group's deliberations and the resulting conclusions on both topics are set out in paragraphs 4.23 to 4.26 below. The Working Group noted the work completed within Open Networks and the subsequent SWRRs that have come out of this work. When considering the items for the Embedded Capacity Register, the Working Group noted that some of these items already exist within the SWRRs and therefore when this is the case the definitions have been aligned for consistency. Subsequent to the Working Group's conclusions as to whether the aforementioned items can be included in the register, they agreed that the Embedded Capacity Register will include the following items:

General Data

- **MPAN:** The core meter point administration number, a 13-digit reference used in MPAS to identify the relevant Metering Point
- **Customer Name:** Name of party that is connected or contracted to connect.
- **Customer Site:** Name of customer site/project name.
- **Address Line 1:** Site location
- **Address Line 2:** Site location
- **Town/City:** Site location
- **Country:** Site location
- **Postcode:** Site location
- **Location (X-coordinate): Eastings (where data is held):** X coordinates for development site in British National Grid
- **Location (Y-coordinate): Northings (where data is held):** X coordinates for development site in British National Grid

³ <http://www.legislation.gov.uk/ukpga/2000/27/section/105?timeline=false>

- **Grid Supply Point:** the point of delivery from the transmission system to a distribution system that is linked with the Customer Site
- **Bulk Supply Point:** the supply point on the DNO system (representing an EHV/EHV transformation level) linked with the Customer Site
- **Primary:** the relevant primary substation on the DNO system linked with the Customer Site.
- **Licence Area:** Licence area customer site is connected within
- **Primary Resource Type:** Meaning any of the below resource types used by technology in the production of electricity:
 - Gas, Gas oil, Diesel, Marine , Wind, Solar, Biomass, Hydro, Pumped storage, Storage, Non-biodegradable Waste
- **Primary Technology / Plant Type:** Meaning any of the below types technologies that export electricity onto a distribution network:
 - Advanced Conversion Technologies, Anaerobic Digestion, Biomass (co-firing), Biomass (dedicated), Combined Cycle Gas Turbine (CCGT), Combined Heat and Power (CHP), Compressed Air Storage (CAS), Diesel Generator, Flow-state batteries, Flywheels, Fuel Cell (Hydrogen), Gas oil / kerosene Generator, Gas Reciprocating, Hot Dry Rocks (HDR), Landfill Gas, Large Scale Hydro, Liquid Air Energy Storage, Oil & AGT Generator, Open Cycle Gas Turbine (OCGT), Photovoltaic Array, Pumped Storage Hydroelectricity, Sewage Sludge Digestion, Shoreline Wave, Small Scale Hydro, Solid-state batteries, Supercapacitors, Tidal Barrage and Tidal Stream, Waste Incineration, Wind Offshore, Wind Onshore"
- **Primary Resource Type - Installed Capacity (MW):** This is the installed capacity of the "Primary Resource Type" expressed in MW.
- **Primary Resource Type - Installed Capacity (MVA):** This is the installed capacity of the "Primary Resource Type" expressed in MVA.
- **Resource Type 2:** Where there is more than one plant type at a site, the ""Resource Type 2"" and ""Resource Type 3"" fields would be used to show the resource types additional to the ""Primary Resource Type"".

Meaning any of the below resource types used by technology in the production of electricity:

- Gas, Gas oil, Diesel, Marine , Wind, Solar, Biomass, Hydro, Pumped storage, Storage, Non-biodegradable Waste"

- **Technology / Plant Type 2:** (Defined as above for “Primary Technology / Plant Type”)
- **Resource Type 2 - Installed Capacity (MW):** This is the installed capacity of the "Resource Type 2" expressed in MW.
- **Resource Type 2 - Installed Capacity (MVA):** This is the installed capacity of the "Resource Type 2" expressed in MVA.
- **Resource Type 3:** (Defined as above for “Resource Type 2”)
- **Technology / Plant Type 3:** (Defined as above for “Primary Technology / Plant Type”)
- **Resource Type 3 - Installed Capacity (MW):** This is the installed capacity of the "Resource Type 3" expressed in MW.
- **Resource Type 3 - Installed Capacity (MVA):** This is the installed capacity of the "Resource Type 3" expressed in MVA.
- **ANM Connection:** Is the connection contingent on an Active Network Management (ANM) arrangement (including timed connections)?
- **Connection Status:** “Connected” or “Accepted to Connect”?
- **Last Updated:** Date on which item was last updated in the register.

Already Connected

- **Installed Generation Capacity (MVA):** This is the total generation connected at the site expressed in MVA.
- **Export Capacity (MW):** This is the total MW export capacity permitted as per the connection agreement.
- **Export Capacity (MVA):** This is the total MVA export capacity permitted as per the connection agreement.
- **Import Capacity (MW):** This is the total MW import capacity permitted as per the connection agreement.
- **Import Capacity (MVA):** This is the total MVA export capacity permitted as per the connection agreement.
- **Date Connected:** Date Project connected to network and energised.

Accepted to Connect

- **Accepted to Connect Generation Capacity (MVA):** This is the total additional generation that is accepted to connect at the site expressed in MVA.
- **Export Capacity (MW):** This is the total additional MW export capacity permitted as per the connection agreement.
- **Export Capacity (MVA):** This is the total additional MVA export capacity permitted as per the connection agreement.
- **Import Capacity (MW):** This is the total additional MW import capacity permitted as per the connection agreement.
- **Import Capacity (MVA):** This is the total additional MVA import capacity permitted as per the connection agreement.
- **Date Accepted:** Date customer contracted with GBSO/DNO/IDNO.
- **Target Energisation Date:** Estimated date of energisation. This date is likely to change to reflect the latest date notified by customers.

Providing Services

- **Field Tag:** Field Descriptor
- **Distribution Service Provider (Y/N):** Does the resource provide services to a DNO?
- **Transmission Service Provider (Y/N):** Does the resource provide services to the ESO or a TO?
- **Reference:** A unique reference to link to the Providing Services tab.

Accepted to Connect

- **Connection Queue Management Position:** Queue position of customer in relation to the linked reinforcement works.
- **Distribution Reinforcement Reference:** Unique reference to relevant distribution reinforcement required for connection.
- **Transmission Reinforcement Reference:** Unique reference to relevant transmission reinforcement required for connection.

- 4.7 As stated above, the Working Group notes that there are currently SWRRs that already publishes some of the data items stated above. Where this is the case the definitions have been aligned. Attachment 3 provides a spreadsheet of the data items to be included in the ECR, indicating which items are aligned with the data already provided within the SWRRs and which items are new, arising from DCP 350. The Working Group would welcome views on whether there is support for the inclusion of the data items that have been identified above and also whether other data fields should be included either now or in the future.

Question 4 – Do you agree with the data items that the Working Group have decided should be included in an ECR? If not, what items would you remove/add and why?

Question 5 - Do you have any comments on the definitions that have been used for each item proposed to be contained in the ECR?

The format used to publish the ECR

- 4.8 The Working Group considered the Proposer's view as set out within the CP form, which was that the ECR is to comply with best practice regarding accessibility and the use of widely used or open formats. During this discussion a number of options were considered with respect to the publication of a national register which would be published on a third-party website.
- 4.9 However, as detailed in Section 5 below, the Working Group agreed that with the ongoing industry work related to a common data platform, that this change would place an obligation each DNO and IDNOs to populate and publish the standardised register in their region and to between them create a nationwide register to be published on a common platform. Given the nature of the format envisage for the longer term, this is likely to be an interim step towards something based on using an existing industry platform solution, it was decided that in the meantime that the register would be set up in excel format and published in the same format by all DNOs and IDNOs.

Question 6 – Do you agree with the format chosen by the Working Group for publishing the ECR?

The location(s) where the ECR is to be made available

- 4.10 The Working Group considered the Proposer's view as set out within the CP form, which was that the ECR is to be made available on the public facing pages of the DCUSA and/or ESO website (the Public Pages) that are accessible by all. During their discussions on this topic, a number of other suggestions were made, including that the DNOs and IDNOs publish an individual ECR on their own websites or that a combined ECR could also potentially be published on the BMRS website, the ENA or other industry portals..

- 4.11 The working group, including Ofgem, discussed a practical solution whereby DNOs would publish the data online in a consistent format, which could then be consolidated by a Third Party (eg ESO) for analysis purposes.
- 4.12 The Working Group discussed the above solution with respect to the publication of a national register by a third party data and concluded that whilst ideally a combined register would be of most use to all market participants, the most expedient solution is for each DNO and IDNO to publish their individual register on own website. It was also agreed that the registers are to be made publicly available, and in the standardised format such that they may be easily amalgamated together.

Question 7 – Do you agree with the proposal that each DNO and IDNO is to publish a populated version of the common ECR on their individual website? Please provide rationale.

Question 8 – Do you believe that the publication of a national register by a third party in the future would be of most use to all market participants? If so, in what timeframe would you like to see this in place by?

The frequency by which the ECR is to be updated

- 4.13 Within the CP form, it was proposed that the ECR be updated by each DNO not less than weekly if there are changes to be made. The Working Group discussed this, with some members pointing out that a 'not less than weekly' update regime would potentially be quite onerous and may require a dedicated person to be employed on that basis.
- 4.14 To understand the frequency on which the ECR should be updated on, the Working Group agreed that it would be beneficial to know how many new connection / alteration requests are received by DNOs and IDNOs each week/month. It was agreed that a sample from within the group would be sufficient and that a wider RFI was not needed and as such, one DNO member and one IDNO member sought confirmation from with their businesses.
- 4.15 The information obtained by the IDNO member noted that they have an average of one per month having taken account of the requests they'd received over a period of couple of years.
- 4.16 The information obtained by the DNO member noted that across their licence areas they have a weekly average of 0.185 new Connection Agreements for export customers with a connection capacity greater than 1 MW, which equates to a 0.79 on a monthly basis and 9.5 annually. The member also confirmed they have a weekly average of 0.32 requests for amendments to connection agreements for export customers with a connection capacity greater than 1 MW which equates to 1.39 on a monthly basis and 16.75 annually.

- 4.17 Given the above, the Working Group agreed that DNOs and IDNOs should update the register on a monthly basis and in drafting the legal text, have included a point in time for each month on which each DNO and IDNO will be expected to publish their register. It was agreed that for consistency, the publication of the register is not dependant on whether any updates have been made to it or not. The Working Group are seeking views from industry as to whether they agree with the Working Group's proposal for the frequency by which the ECR is to be updated.
- 4.18 *The working group noted that some of the ECR data will change over time, for example if a site is providing ancillary services. The holder of this data is the ESO, not the DNOs. While the ESO publish some of this data on their various websites there is no formal requirement on them to provide the data to the DNOs. Furthermore, the ESO often provides unit names rather than site details so it will not always be easy for a DNO to translate the site ID used by the ESO into a site location on the new register. The Proposer therefore felt that a future obligation on the ESO to provide this information to the DNOs, in a matching format, would help ensure the data is robust. While the DCUSA cannot be used to put obligations on to the ESO, the issue was noted to Ofgem and the Proposer suggested the ESO commit to providing the data informally or raised a code change to obligate it (either to the CUSC or the Grid Code).*

Question 9 – Do you agree with the proposal to mandate that the ECR is to be updated on a monthly basis on a set date?

The governance arrangements needed to ensure the ECR is populated in a consistent manner and a mechanism to allow for future amendments to the structure of the ECR

- 4.19 To ensure the each register is consistent in its format and equally that it is populated using a consistent/common approach by all DNOs and IDNOs, the Working Group agreed the need for a set of rules and definitions to be created, It was agreed that overarching design and formal rules/obligations should be set out within the legal text and items such as the specific fields and their definitions should be maintained outside of the DCUSA text and potentially within the register so that they can be amended without the need for a CP to be raised. It was also agreed that the specific fields and their definitions are to be referenced by DNOs and IDNOs when populating the register to ensure consistency and for interested market participants to be able to understand the data contained in the register.

- 4.20 It was agreed that a process by which updates can be made to the template register would also be needed and that this process can be controlled by the Panel who'd review any request to alter the content as the market develops. i.e. a new technology joins the market. The draft legal text for DCP 350 is provided as Attachment 4 and contains the process by which proposed amendments can be put before the Panel, by any party, who will determine whether or not to accept the requested amendment and how this is communicated to DNOs and IDNOs and the wider market.
- 4.21 As well agreeing items to be added to the register, the Panel would agree the timetable by which additions should be added. This may be very quickly or may require consultation with the market to agree the definitions of the items to be added. It is vital that the market understands what each data item is, as common understanding will improve competition.
- 4.22 The Working Group proposes that the following items should be also be included in the register and thus stipulated in the legal text:
- (a) Contact details for each DNO and IDNO so that a site which believes its details are incorrect can contact for a correction;
 - (b) A date to show when the register was last updated
 - (c) Links to maps for each DNO region so that parties can identify regions referred to;
 - (d) Where applicable, links to each DNO's heat map;
 - (e) To avoid any doubt as to the reasons a field may be left blank, an instruction that the words 'data not available' are to be used where data is not held for a specific field against a site.

Question 10 - Do you believe that the governance arrangements proposed by the Working Group as to how the ECR is populated will lead to DNOs and IDNOs updating it in a consistent manner?

Question 11 - Do you agree with the Working Group's proposed mechanism to deal with future amendments to the structure of the ECR?

Interactions with data privacy regulations and potentially commercially sensitive information

- 4.23 As noted under paragraph 4.2 above, the Panel requested that in addition to the standard ToR, that the Working Group consider and report on three specific areas, which included seeking appropriate legal advice with respect to some proposed items to be included in the ECR that could be private/confidential in nature.

Guidance obtained by the Secretariat

4.24 Following Working Group discussions related to this change and potential data privacy regulations and potentially commercially sensitive information the Secretariat had a conversation with the DCUSA Ltd legal advisors, during which the legal advisors highlighted that the legal issues to consider include:

1. *"First and foremost, the question is whether or not sharing this information (with specific entities or publicly) is a 'good idea'. Questions of data sharing always involve a balance of policy considerations – the collective benefit of sharing the data, against the dis-benefit to the entity whose data is being shared.*
2. *The legal implications are important but definitely secondary. This is because there is no law that stops data sharing, only laws that prevent unjustified data sharing. If there is a sensible and justifiable reason for sharing the data, then this will enable the legal hurdles to be cleared.*
 - a. *section 105 of the Utilities Act 2000, which places a duty of confidentiality on licence holders;*
 - b. *the contractual confidentiality obligations owed to connectees under the connection contracts (primarily the NTC) and owed to suppliers under the DCUSA; and*
 - c. *the Data Protection Act 2018, which prevents the processing (including disclosure) of personal data without a lawful basis (which would include legal obligation or legitimate interest)."*

4.25 Further to this which the group noted as being in line with the view provided by Ofgem below, but not official legal advice in itself, the DCUSA Ltd legal advisors provided a useful summary of the legal implications which was used by the Working Group as a guide:

3. *"If Ofgem approves a change to the DCUSA which obliges distributors to share or publish this information, then it will be a licence obligation and section 105 will not prevent disclosure. Amendment of the DCUSA would also deal with (b) above, because the contractual provisions in the NTC and DCUSA allow for disclosure where required for licence compliance.*
4. *The data protection angle is very slightly more complicated. Compliance with a legal obligation is a lawful basis for processing, but this reference to legal obligation excludes contractual obligations. As the DCUSA is a contract, you might think that you can't rely on this, but because compliance with the DCUSA is also a licence obligation (arising from statute), this should be sufficient. Even if it wasn't, Ofgem's assessment of the data sharing pursuant to its statutory duties would basically be an assessment of whether there was a legitimate interest in sharing the data, and so distributors could rely upon this same legitimate interest assessment."*

View provided by Ofgem

- 4.26 The Working Group noted that Ofgem and BEIS have recently been undertaking a number of initiatives related to data and the need for industry data to be more open and transparent. With this understanding, the group sought feedback from Ofgem as to a view of how Distributors might be able to publish data that would otherwise be prohibited by Section 105 of the Utilities Act. In summary, the view provided by Ofgem is that DNOs have an obligation to develop and maintain an efficient, co-ordinated and economical system of electricity distribution, and if publishing connection data is required to achieve this then this code modification should progress. There are options to publish such data under the current legal framework. Acknowledging concerns around sharing customers' data, Ofgem encouraged all DNOs to contact users/connectees to identify and address confidentiality/privacy, where necessary through redaction. "Following consideration of the guidance received from DCUSA Ltd legal advisors and Ofgem, the Working Group are comfortable that the proposal can be legally implemented.

Question 12 - Do you believe that the Working Group has sufficiently covered off concerns related to data privacy regulations and potentially commercially sensitive information, specifically given the range of benefits as described in sections 1 and 3? And if not, then what else do you consider that Working Group needs to do?

5 Code Specific Matters

Consideration of related industry workstreams

- 5.1 The Working Group discussed how this CP crosses over with a number of ongoing industry workstreams, noting that there are some are directly related to this CP and some others designed to facilitate possible enduring solutions. In developing this CP, the Working Group has, where possible, maintained consistency with the other ongoing workstreams.
- 5.2 Both the Open Networks Project and Energy Data Task Force are looking into this issue. However, the PTE believes there is now a pressing need to start to make progress on creating a register as the Capacity Market in particular needs more robust forecasting on embedded plant to deliver the policy intent. The Proposer has liaised with both these groups and they see no reason that their work could not build on this proposal in future. The Proposer has also spoken to those working on the Open Networks proposal and they were supportive of the principles behind the CP as it builds on work they have been doing on regional registers.
- 5.3 This is an issue that is often discussed in relation to the ESO's forecasting role, with National Grid planning to deliver such a register itself under its ESO Ambition Document, as well as mentioning the need for such data in documents such as its Forward Plan – see: <https://www.nationalgrideso.com/document/141256/download>

<https://www.nationalgrideso.com/about-us/business-plans/forward-plans-2021>

- 5.4 The Government's Panel of Technical Experts, for the past few years, has also recommended that the ESO gets better data on embedded power plants in order to improve the forecasting underpinning the capacity market:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/723234/Panel_of_Technical_Experts_2018_Report_on_the_ECR.pdf

- 5.5 The Open Networks Project has a workstream looking at a System Wide Resources Register (product 8) the details of which are here:

<http://www.energynetworks.org/electricity/futures/open-networks-project/open-networks-project-workstream-products.html/workstream-1-t-d-process.html>

The Energy Data Task Force is also looking across industry data:

- 5.6 <https://es.catapult.org.uk/impact/specialisms/energy-data-taskforce/>

6 Relevant Objectives

Assessment Against the DCUSA Objectives

- 6.1 For a DCUSA Change Proposal to be approved it must be demonstrated that it better facilitates the DCUSA Objectives. There are five General Objectives and six Charging Objectives. The full list of objectives is documented in the DCUSA.
- 6.2 The Proposer considers that the following DCUSA Objectives are better facilitated by DCP 350.

| DCUSA General Objectives | Identified impact |
|--|-------------------|
| 1. The development, maintenance and operation by the DNO Parties and IDNO Parties of efficient, co-ordinated, and economical Distribution Networks | Positive |
| 2. The facilitation of effective competition in the generation and supply of electricity and (so far as is consistent therewith) the promotion of such competition in the sale, distribution and purchase of electricity | Positive |
| 3. The efficient discharge by the DNO Parties and IDNO Parties of obligations imposed upon them in their Distribution Licences | Positive |
| 4. The promotion of efficiency in the implementation and administration of the DCUSA | None |

| | |
|--|------|
| 5. Compliance with the Regulation on Cross-Border Exchange in Electricity and any relevant legally binding decisions of the European Commission and/or the Agency for the Co-operation of Energy Regulators. | None |
|--|------|

- 6.3 The rationale provided by the Proposer set out in the CP form, provided as Attachment 2 is detailed below.
- 6.4 The provision of robust, transparent data on the number, size, types and location of embedded market participants will help in the development and operation of a more competitive and economically efficient market. This will help policy makers design more effective policies and drive market developments to deliver secure, economic supplies for customers as well as meeting wider Government targets. It will help inform forecasting and future planning of system developments by the ESO, DNOs and IDNOs. Inform forecasting of Suppliers and contracting and operations by other participants. It will also help investors to reach decisions on location, technology choices, etc., helping to inform market entry and exit in a more efficient manner.
- 6.5 By improving transparency and market knowledge, the GB electricity market can operate more efficiently which will ultimately benefit customers. The modification therefore better fulfils objectives 1, 2 and 3.

Question 13 – Do you consider that DCP 350 better facilitates the DCUSA General Objectives?

If so, please detail which of the General Objectives you believe are better facilitated and provide supporting reasons.

If not, please provide supporting reasons

7 Impacts & Other Considerations

Significant Code Review Impacts

TCR SCR Interaction

- 7.1 Ofgem has recently concluded its Targeted Charging Review (TCR) and is progressing its Significant Code Review (SCR) around access to and charging for networks. One of the issues Ofgem has faced has been the limited accessible and transparent data on the number and types of assets connected across the DNO networks. Creating the register may enhance Ofgem's access to data and in future inform any further enhancements to the new regime.

Impacts on other Industry Codes

Consideration of confidentiality provisions in the Distribution Code

- 7.2 It was brought to the Working Groups attention that during a meeting of the ENA ON WS2:P1 working group, a concern was raised based on legal advice provided by one of the DNOs, which relates to a potential need for a change to the Distribution Code. The clause of concern in the distribution code is DIN6 of the Distribution Code which states:

“CONFIDENTIALITY

The Distribution Code contains procedures under which the DNO’s Distribution Business, in pursuance of its obligation as a DNO, will receive information from Users relating to the intentions of such Users. The DNO shall not, except in pursuance of specific requirements of the Distribution Code, disclose such information to any User or other person without the prior written consent of the provider of the information, subject to the requirements of the Distribution Licence (Condition 39).”

- 7.3 The Working Group considered whether a code modification should be raised in order to clarify this clause and maintain consistency across all industry documents and ensure that the clause in the Distribution Code would not hinder the ability of DNOs and IDNOs to publish the data contained in the proposed ECR. To assist the Working Group in their consideration of this item, during their discussion with the DCUSA legal advisors, the Secretariat raised this item as being considered by the group. The conclusion provided to the Working Group was that whilst there is benefit in amending the clause in the Distribution Code, the clause itself should not be a blocker to the publication of the data contained in the ECR.
- 7.4 Further to this, the Secretariat highlighted that within the Distribution Planning and Connection Code section of the Distribution Code, there appeared to ‘specific requirements’ that would support their ability to disclose information provided by Users relating to the intentions of such Users. Specifically, under clause DPC2 ‘Objectives’ which is shown in the extract below:

| DISTRIBUTION PLANNING AND CONNECTION CODE (DPC) | |
|--|--|
| DISTRIBUTION PLANNING AND CONNECTION CODE 2 | |
| DPC2 | OBJECTIVES |
| | The objectives of the Distribution Planning and Connection Code are to:- |
| | (a) Enable the DNO’s Distribution System to be planned, designed and constructed to operate economically, securely and safely. |
| | (b) Facilitate the use of the DNO’s Distribution System by others and to specify a standard of supply to be provided. |
| | (c) Establish technical conditions which facilitate the interfacing of Systems at points of entry to and exit from the DNO’s Distribution System . |
| | (d) Formalise the exchange of System planning data. |
| | (e) Provide sufficient information for a User to assess opportunities for connection and to plan and develop his System such as to be compatible with the DNO’s Distribution System . |

- 7.5 The Working Group considered the information provided, and don't believe there is a direct need for a complementary change to be raised to the Distribution Code to facilitate the desired outcomes of DCP 350. It was however thought to be something that should be carried out in due course.

Environmental Impacts

- 7.6 In accordance with DCUSA Clause 11.14.6, the Working Group assessed whether there would be a material impact on greenhouse gas emissions if DCPs 350 were implemented. The Working Group did not identify any material impact on greenhouse gas emissions from the implementation of this CP.

Engagement with the Authority

- 7.7 Ofgem has been fully engaged throughout the development of the CPs as an observer of the Working Group.

8 Implementation

- 8.1 It is proposed that this CP should be implemented 10 Working Days after Authority approval.

Question 14 – Are you supportive of the proposed implementation date being 10 Working Days following Authority approval?

9 Legal Text

- 9.1 The legal text for DCP 350 is provided as Attachment 4.
- 9.2 The legal text sets out that each DNO and IDNO will build and maintain an ECR covering their licence area(s) alongside the governance arrangements needed to ensure the ECR is populated in a consistent manner and a mechanism to allow for future amendments to the structure of the ECR.
- 9.3 The detail around the specific items to be contained in the ECR and the definitions of such items will be referenced within the ECR itself and not in the DCUSA, thereby enhancing the ability to modify the ECR without the need to raise a CP to do so.

Question 15 – Do you have any comments on the draft legal text for DCP 350?

10 Consultation Questions

- 10.1 The Working Group is seeking industry views on the following consultation questions:

| No. | Questions |
|-----|---|
| 1 | Are you comfortable with the proposed amendments to the intent statement of this change? |
| 2 | Do you understand the intent of the CP? |
| 3 | Are you supportive of the principles that support this CP, which is to increase the availability of accessible data which is expected to improve the economic and efficient and operation of the energy market, while driving towards a lower carbon economy? |
| 4 | Do you agree with the data items that the Working Group have decided should be included in an ECR? If not, what items would you remove/add and why? |
| 5 | Do you have any comments on the definitions that have been used for each item proposed to be contained in the ECR? |
| 6 | Do you agree with the format chosen by the Working Group for publishing the ECR? |
| 7 | Do you agree with the proposal that each DNO and IDNO is to publish a populated version of the common ECR on their individual website? Please provide rationale. |
| 8 | Do you believe that the publication of a national register by a third party in the future would be of most use to all market participants? If so, in what timeframe would you like to see this in place by? |
| 9 | Do you agree with the proposal to mandate that the ECR is to be updated on a monthly basis on a set date? |
| 10 | Do you believe that the governance arrangements proposed by the Working Group as to how the ECR is populated will lead to DNOs and IDNOs updating it in a consistent manner? |
| 11 | Do you agree with the Working Group's proposed mechanism to deal with future amendments to the structure of the ECR? |
| 12 | Do you believe that the Working Group has sufficiently covered off concerns related to data privacy regulations and potentially commercially sensitive information, specifically given the range of benefits as described in sections 1 and 3? And if not, then what else do you consider that Working Group needs to do? |
| 13 | Do you consider that DCP 350 better facilitates the DCUSA General Objectives? If so, please detail which of the General Objectives you believe are better facilitated and provide supporting reasons. If not, please provide supporting reasons. |
| 14 | Are you supportive of the proposed implementation date being 10 Working Days following Authority approval? |
| 15 | Do you have any comments on the draft legal text for DCP 350? |

- 10.2 Responses should be submitted using Attachment 1 to dcusa@electralink.co.uk **no later than, close of play on 27 February 2019**.
- 10.3 Responses, or any part thereof, can be provided in confidence. Parties are asked to clearly indicate any parts of a response that are to be treated confidentially.

11 Attachments

- Attachment 1 – DCP 350 Consultation Response Form
- Attachment 2 – DCP 350 Change Proposal Form
- Attachment 3 – Proposed Embedded Capacity Register Items and Definitions and SWRR Comparison
- Attachment 4 – DCP 350 Draft Legal Text