

Embedded Capacity Register

User Guide



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1 Introduction

This user guide is to accompany the Embedded Capacity Register (ECR) as published by SSEN. Due to differences in local networks and data collection methodology, content and definition of data fields may vary in each DNO's register. Therefore, this user guide aims to provide useful information as to the assumptions underlying SSEN's data fields.

2 General Points

- 1) The register includes all generation, storage and flexible demand resources where the Installed Generation Capacity, the Export Capacity or the Import Capacity is greater or equal to 1MW
- 2) Where there is an addition to an existing development at a site, this is included in the register at a separate row during the "Accepted to Connect" phase. This means that there is more than one row for such sites. Once the addition has been connected, the additional row(s) will be combined with the original row
- 3) Where MVA is converted to MW a power factor of 0.95 is used (i.e. 1MW converts to 1.05MVA, 1MVA converts to 0.95MW)
- 4) Information on service provision to DNOs is included for all assets of 1MW or greater that are providing services. Information is also provided for assets of less than 1MW by aggregating those assets that are providing a particular service

3 General Data

This section is completed for all customers of 1MW or more in capacity. It includes generators, storage but only those demand sites that are providing services.

General Data	
MPAN	The core meter point administration number, a 13-digit reference used in Meter Point Administration Service (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.
County	Site location.
Post Code	Site location.
Grid Supply Point	This is the point of delivery from the transmission system to a distribution system that is linked with the Customer Site or the eventual connection point if the network is to change to accommodate the connection. (This may change at or after connection).
Bulk Supply Point	This is the supply point on the DNO system (representing an EHV/EHV transformation level) linked with the Customer Site. (This may change at or after connection).
Primary	This is the relevant primary substation on the DNO system linked with the Customer Site. (This may change at or after connection).
Location (X-coordinate) : Eastings	X coordinates for development site in British National Grid.
Location (Y-coordinate) : Northings	Y coordinates for development site in British National Grid.
Licence Area	This is the licence area the customer site is connected within
Primary Resource Type	<p>Meaning any of the below resource types used by technology in the production of electricity:</p> <p>Fossil Gas, Fossil coal gas, Fossil oil, Fossil oil shale, Fossil peat, Fossil brown coal/lignite, Fossil hard coal, Fossil (to be confirmed), Nuclear, Interconnector, Hydrogen, Solar, Wind, Hydro run of river, Hydro reservoir (not pumped), Hydro (to be confirmed), Marine, Geothermal, Biomass, Waste, Biofuel landfill gas, Biofuel sewage gas, Biofuel biogas from anaerobic digestion (excluding landfill & sewage), Biofuel other, Advanced fuel gasification or pyrolysis, Storage battery, Storage pumped, Storage other, Other, Data not available.</p> <p>This might not necessarily be the primary resource type. This could also be any</p>

	secondary resource type connected to the site
Primary Technology / Plant Type	<p>Meaning any of the below types technologies that export electricity onto a distribution network:</p> <p>Steam turbine (thermal power plant), Steam-gas turbine (CCGT), Gas turbine (OCGT), Onshore wind turbines, Offshore wind turbines, Photovoltaic, Engine (combustion / reciprocating), Hydro power system, Tidal lagoons, Tidal stream devices, Wave devices, Geothermal power plant, Battery, Compressed air system, Liquid air system, Other, Data not available.</p>
CHP Cogeneration	The simultaneous generation of usable heat and power (usually electricity) in a single process, thereby leading to reductions in the amount of wasted heat.
Storage Duration	Divide the storage capacity (MWh) by the installed capacity (MW) and round it down to the nearest 0.5 (half-hour). If the value is less than 0.5 before rounding, it could be rounded to 0.5 hours so that it is not zero.
Primary Resource Type - Installed Capacity (MW)	This might not necessarily be the installed capacity. This could also be the applied for capacity or the additional capacity or the total capacity of the connection point
Primary Resource Type - Installed Capacity (MVA)	The same as above in MVA using a conversion factor of 0.95
Resource Type 2	As is, any additional resource types or their installed capacities are not captured internally
Technology / Plant Type 2	
Storage Duration Type 2	
Resource Type 2 - Installed Capacity (MW/MVA)	

ANM Connection	Is the connection contingent on a flexible connection arrangement such as Active Network Management (ANM)?
Connection Status	"Connected" or "Accepted to Connect"?
Last Updated	Date on which item was last updated in the register.

4 Already Connected

This section is completed for all customers of 1MW or more in size that are already connected to the network. It includes generators, storage but only those demand sites that are providing services.

ALREADY CONNECTED	
Installed Generation Capacity (MVA)	This is not necessarily the installed capacity. This could also be the applied for capacity or the additional capacity or the total capacity of the connection point
Export Capacity (MW)	This is the total MW export capacity permitted as currently recorded in our systems
Export Capacity (MVA)	This is the total MVA export capacity permitted as currently recorded in our systems
Import Capacity (MW)	This is the total MW import capacity permitted as currently recorded in our systems
Import Capacity (MVA)	This is the total MVA export capacity permitted as currently recorded in our systems
Date Connected	Date Project connected to network or energised, or electrical works completed.

5 Accepted to Connect

This section is completed for all customers of 1MW or more in size that have agreements in place to connect to the network. It includes generators, storage but only those demand sites that are providing services.

Accepted to Connect Generation Capacity (MVA)	This is considered to be the same capacity as the primary resource type installed capacity
Export Capacity (MW)	This is the total additional MW export capacity permitted as currently recorded in our systems
Export Capacity (MVA)	This is the total additional MVA export capacity permitted as currently recorded in our systems
Import Capacity (MW)	This is the total additional MW import capacity permitted as currently recorded in our systems
Import Capacity (MVA)	This is the total additional MVA import capacity permitted as currently recorded in our systems
Date Accepted	This is the date the customer contracted with GBSO/DNO/IDNO.
Target Energisation Date	Estimated date of energisation. Subject to change as the definite connection date approaches

6 Reinforcement

This section includes all assets of 1MW or greater that that have agreements in place to connect to the network and where the connection is contingent on the completion of network reinforcement. It includes generators, storage but only those demand sites that are providing services.

Reinforcement Works	
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. The

	provision of sole-use distribution assets are not included.
Transmission Reinforcement Reference	Unique reference to relevant transmission reinforcement required for connection.

Network Reinforcement	
Distribution (or Transmission) Reinforcement Reference	This is a cross-reference from the DNO_Connections tab. It is a unique reference to relevant distribution (or transmission) reinforcement required for connection.
Works Reference	Reinforcement Reference Number.
Works Description	Reinforcement Title/Summary Description.
Works Completion Date	Planned Completion Date of Works.
Reinforcement Driver	Is reinforcement classed as "general reinforcement" or "connections driven"?
Reinforcement Type	Is reinforcement to enable increased thermal ratings, increased fault levels etc? Suggested categories are: "thermal uprating", "voltage reinforcement", "short circuit uprating", "condition based replacement", "harmonics related" or "other".
Licence Area	Licence area where works will be delivered.

7 Providing Services

This section includes all assets of 1MW or greater that are providing services to network companies including the ESO. Information is also provided for assets of less than 1MW by aggregating those assets that are providing a particular service.

Services Provided	
Distribution Service Provider (Y/N)	Whether the resource provide services to a DNO?
Transmission Service Provider (Y/N)	Whether the resource provide services to the ESO or a TO

Reference	A unique reference to link to the Providing Services tab.
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Distribution Services	
Asset Reference	This is a cross-reference from DNO_Connections tab. This indicates particular assets of 1MW or greater that are providing services.
Aggregated Service	Whether resources being aggregated to provide this part of the service
Service Identifier	This field identifies the particular network company service area.
Grid Supply Point	This is the GSP linked to resource (or to the aggregated group of resources).
Type of Service	The type of service being provided.
MW Provided	This is the MW amount of service provided.
Contract End Date	End-date of ongoing contract.
Exclusivity	Whether a contract require customer site to limit provision of services to other parties