

Energy Networks Association

Workstream 1 – Product 8

Open Networks

System Wide Resource Register – Review of Information Currently Available

Workstream 1 – Product 8 System Wide Resource Register

Purpose

- This document aims to set out the different types of information that is currently available and published by the GBSO and DNOs for customers. Customers will often refer to this information in advance of seeking a connection to understand better the connection opportunities that exist across the network areas. This information has become more relevant and important to customers as networks become increasingly constrained.

Background

- In recent years, network companies have been more proactive at making information available publicly to customers to assist them in making early informed decisions about opportunities as to where to seek a connection to the network. This information ranges from heat maps to lists of contracted generation. With networks becoming increasingly constrained, and the shift towards generation, storage and flexible demand as the mix of distributed energy resources all seeking connection across the transmission and distribution networks, we are seeing great level of requests from customers as to widening the scope of information made available. This, coupled with increased focus on queue management, revisions to the Statement of Works process and demand for flexible services, has re-opened the debate on whether or not network companies should publish contracted queues associated with GSPs and contracted queues linked to registers of reinforcement works.

Workstream 1 – Product 8 System Wide Resource Register

Introduction

The purpose of the work under Workstream 1, Product 8 is to review the feasibility of putting in place a system-wide resource register for GB generation, storage and flexible demand for transmission and distribution.

Currently, information on DER resources is drawn from different national and regional databases and as a result may be incomplete with areas of gaps in information. The work under Product 8 is reviewing this position along with assessing what information is available and assess how this could be improved for network operators and stakeholders.

Product 8 will also consider any notification requirements and what information, currently not accessible, can be shared.

Whilst Product 8 will not develop a new resource database for implementation, it will consider and report on the feasibility of improving or adding to existing information.

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The Survey – What Information is Currently Available

Product 8 members have undertaken a survey across the GBSO and DNOs to understand what information they each currently publish. Each company reported back on what information they currently publish along with some detail as to how the information is compiled, what form the information takes and what the demand for the service is, where information is available.

The output of that survey is summarised in this document.

Workstream 1 – Product 8 Survey Results

GBSO	Descriptor of Information
TEC Register	List of all direct transmission contracted and connected sites, along with details of customer, site name along with status and capacity. Register also indicates which Transmission Owner network area the project is connected to.
Embedded TEC Register	List of all embedded generation contracted and connected sites, along with details of customer, site name along with status and capacity. Register also indicates which Transmission Owner network area the project is connected to.
Interconnector Register	List of all contracted and connected interconnector sites, along with details of customer, station name along with status and capacity. Register also indicates which Transmission Owner network area the project is connected to.
NGET Transmission works Register	List of all planned works, reference number, description of the works, linked projects and planned completion date.
LDTEC Register	List of application received by the GBSO for Limited Duration TEC. This includes customer, site, MWs, duration and application status.
STTEC Register	List of application received by the GBSO for Short Term Duration TEC. This includes customer, site, MWs, duration and application status.

Workstream 1 – Product 8 Survey Results

DNOs	Descriptor of Information
Asset Data*	Information on assets
Capacity Maps (Dynamic)	The availability of traditional capacity. This is determined by finding the difference between asset rating and peak loading for a number of assets. The minimum permitted generation and demand is calculated at a Primary level and all assets above.
Heat Maps (Static)	Fault level, thermal overload and voltage exceedance data is captured from Primary System Design and formatted into a table. This information is then translated into a coloured highlighted geographic overlay onto the EHV network.
DNO Contracted Volumes	Contracted volumes for generation are aggregated by Primary/BSP/GSP. Level of detail varies across DNOs.
DSOF*	Distribution System Operability Framework which details and describes the top operability issues to influence industry into creating/developing solutions
Flexibility Requirements*	Analysis of current and future distribution flexibility requirements is undertaken and quantified. Forecasted information on Month and Hour MW/MWh requirements are collated per nominated constraint.

* Not available from all DNOs

Workstream 1 – Product 8 Survey Results

In addition to the information reported previously, DNOs, as part of their licence obligations and Incentive of Connection Engagement (ICE) commitments, publish the following information:

- Connection Guides
- LTDS
- Common Connection Charging Methodology Statement
- ICE Plan
- GIS

It has been noted however that some information is not readily available at present to stakeholders and/or network companies. This includes:

- Transmission Heat Maps
- View of Contracted Capacity versus Installed Capacity
- GBSO visibility of all DER connected to DNO networks
- DNOs lack of visibility of FITS connected generation

Workstream 1 – Conclusion & Next Steps

Conclusions

In general, there is a good level of commonality between DNOs as to certain information that is made publicly available. There are however examples of some DNOs who are further advanced in some areas of development, e.g. development of DSOF and DFES. We also need to assess the basis upon which information is published, for example whilst all DNOs currently publish heat maps, it is important to understand if all are available on a consistent basis and whether or not there are examples of best practice that companies should bench mark against.

We key consideration for Product 8 is to identify the provisions that restrict DNOs from publishing information in relation to connected and contracted embedded generation which the GBSO is permitted to do via it's CUSC obligations. As part of this assessment, DNOs will need to consider what is required to overcome such barriers.

To more fully assess what information stakeholders would like that isn't currently available, we are now looking to engage directly with stakeholders in this regard. It is important to understand what information they would like to see made publicly available and to understand the key drivers for this information. We would also liked to understand from stakeholders if there is any significant inconsistencies between how network companies make information available and any examples of specific good practice.