

GSR029 workshop 1

Meeting minutes

Meeting name

Date:	06/06/2022	Location:	Teams
Start:	1:30PM	End:	4:30PM

Participants

Attendee	Attend/Regrets	Attendee	Attend/Regrets
Rob Wilson	Attend	Bieshoy Awad	Attend
Can Li	Attend	Le Fu	Attend
Alan Creighton	Attend	Garth Graham	Attend
Roddy Wilson	Attend	Thomas McCormack	Attend
Cornel Brozio	Attend		

Agenda

#	Topics to be discussed
1.	SQSS section 3 compliance process
2.	P2/7 compliance process
3.	Differences between two processes
4.	Proposed solutions

Discussion and details

Workshop discussion

CBA

It is discussed that DNO can carry out Cost Benefit Analysis (CBA) to demonstrate compliance with EREC P2/7 when the remedial works indicates that the options are not economically justifiable and/or do not align with its asset management strategy. It is not intended to adopt the same approach in SQSS Section 3 as this option should only be exercised under a strict set of occasions for specific demand groups. The number of GSPs in the transmission network is manageable through the normal derogation process in case similar circumstances occur.

Flexible demand

It is suggested that double counting of the demand security contribution from flexible demand might occur due to the complexity of current market arrangement and information availability issues. There needs to be enduring approaches for this issue. Generally, there are two types of flexible demand:

- the way consumers change their behaviour of energy consumption
- commercial contracts entered with customers to vary their demand based on network requirement, e.g. storage plants asked to not take demand at the time of peak locational demand.

Demand security contribution from the former category would be counted towards the reduction of the group demand size and for the latter category there would be enough information to assess their contribution. A few examples would be included in the final workgroup report.

Reference to EREP 130

The proposed reference to EREP 130 in SQSS could be legally problematic when trying to establish compliance with SQSS. It is proposed that the reference will be specifically aimed for a particular version (Issue 3 2019) and also to clearly state that it is acting as a guidance only and compliance to EREP 130 will not be required.

Table 3.2 is NGET only

Table 3.2 in SQSS specifies the effective contribution of embedded large power stations to demand group importing capacity in NGET's transmission system. There isn't similar requirement for SPT or SHET. This proposal seeks to replace Table 3.2 with the reference to RERP130 and introduce the aligned requirement on all three transmission areas.

Demand security contribution data submission

It is suggested that DNO's current assessment of contribution from power stations and flexible demand is only needed when there is still network deficiency after taking into account the network capacity, transfer capacity and capacity from contracted power stations and flexible demand. The workgroup will need to decide whether to:

- request the DNO to submit the data for the GSPs where such assessment has been carried out;
- request the DNO to establish the demand security contribution for all GSPs;
- or set up a process for TOs to workout network deficiency at certain GSPs and request the DNO to submit the relevant data.

This is subject to discussions in a Grid Code workgroup and not the focus of this SQSS modification.

Storage definition

There are different definitions of storage in various codes and standards. The new definition to be introduced in SQSS should clearly define the characteristic of storage while ensuring no confusion should be caused with the existing definitions. The proposed definition follows the implicit treatment of pumped storage in SQSS where it is treated as a power station and it defined storage as the physical asset that stores and converts electricity, different to the definition in Grid Code. Hence, it is suggested that the name of storage could be identified as Electricity Storage Plant to avoid confusion.

Storage guidance

EREP 130 does not provide clear guidance on how to treat storage. There are limited number of examples on storage in EREP 130. Although the details of how to assess storage consistently remains an issue, P2/7 establishes the principle that storage can contribute to the size of group demand and demand security, which should also be established in SQSS. From a standard perspective, the modification proposal should include storage as part of the suggested change. From an implementation perspective, the issue needs to be jointly addressed by DNOs and TOs.

Different categories of storage and their treatment

There are a few different categories of electricity storage such as:

- battery in power stations

- standalone battery
- aggregated vehicle to grid (V2G)
- flywheels
- pumped storage

The treatment of these storage plants will be different at each GSP and its individual behaviour. However, the principle to be followed remains consistent – storage can contribute to the size of group demand and demand security.

For the examples of the listed storage, it is recommended to adopt the approached listed below.

Storage in power stations	If the storage is bundled within a power station, its contribution would be indirectly accounted for when assessing that power station.
Standalone battery	Needs to be assessed based on its own characteristics.
Aggregated vehicle to grid (V2G)	V2G is not generally treated as storage rather than demand side management as its purpose is energy consumption instead of converting electricity into energy and converting it back to electricity.
Flywheels	Needs to be assessed based on its own characteristics.
Pumped storage	Needs to be assessed based on its own characteristics.

Risk for demand security contribution by commercial services

It was discussed that the risk may arise for demand security contribution from commercial services as the contract might change or end early when the interest or priority changes with the customer.

In respect of limiting this risk, it is currently specified in SQSS clause 3.14 that the combined contribution from large power stations shall never have a greater impact on system security than the loss of the largest circuit infed to the group. In the proposed changes, this will be updated to reflect that the combined contribution from non-network options shall not exceed this limit. The risk should be assessed in the annual process.

In the case when a commercial contract ends early or does not renew, there are two options available – one is to seek another party to provide the service and the other one is to go for derogation.

Week 24 data

Week 24 data is mainly used by the transmission licensee to establish the system model and setting up demand profile.

Purpose of alignment of the two processes

Currently in some scenarios, TO and DNO have had conflicted messages to customers. By aligning the two standards, demand groups would be able to be assessed consistently and the transmission and distribution networks could be planned and invested in a coordinated and efficient manner. This can maximise consumer value by balancing cost and security of supply.

Academic study

It was raised that whether there is value to conduct similar academic study to the one done during P2/7 development. Such study would be time consuming and be unlikely to give a different answer. This would be outside the scope of the alignment. The purpose of the modification is to align the SQSS, where required, with EREC P2/7 and/or EREP 130. We should not be trying to repeat the P2/7 analysis or establish anything beyond this.