SQSS Review Panel – Modification Proposal Review of Offshore Networks

Date Raised: 05 Oct 2010

A Panel Paper by GB SQSS REVIEW GROUP SECRETARY ON BEHALF OF THE 3 TRANSMISSION LICENSEES (SHETL, SPT AND NGET).

Summary

The existing NETS SQSS criteria pertaining to offshore generation connections were not developed for the generation connections envisaged for the Round 3 developments. Whilst they specify some requirements for offshore networks in providing transmission capability, those were intended to be subject to future review, and they do not address all of the issues that arise, such as the use of HVDC cables with a rating above 1800MW. Consequently, the NETS SQSS Review Group instigated a review of the offshore criteria, to ensure that they continue to facilitate the development of an overall economic, efficient, and secure system.

Users Impacted

Onshore and Offshore Transmission Owners, System Operator

Description & Background

The following five questions will be addressed:

- 1. <u>MITS design criteria</u> The circuit loss criteria that should be applied in Main Interconnected Transmission System (MITS) design when offshore networks provide capacity (ie N-1, N-2)
- 2. <u>Capacity Provided</u> The appropriate capacity of connections for round 3 zone wind farms to the transmission system
- 3. <u>Interconnection of windfarms</u> The benefits in constraint reduction of interconnecting wind farms
- 4. The treatment of wind generation in wider infrastructure analysis Are the current criteria appropriate for a system with high volumes of offshore wind generation?
- 5. The capacity of offshore HVDC links The use of HVDC cables of greater capacity than the infeed loss limits in the context of offshore networks

Proposed Solution

The solution will be determined through due consideration of the above questions

Assessment against SQSS Objectives

(i) facilitate the planning, development and maintenance of an efficient, coordinated and economical system of electricity transmission, and the operation of that system in an efficient, economic and coordinated manner;

The proposals will determine the optimum design and connection criteria for the offshore transmission system, taking into account security of the system, costs etc

(ii) ensure an appropriate level of security and quality of supply and safe operation of the National Electricity Transmission System;

The proposals will determine the optimum design and connection criteria for the offshore

transmission system, taking into account security of the system, costs etc

(iii) facilitate effective competition in the generation and supply of electricity, and (so far as consistent therewith) facilitating such competition in the distribution of electricity;

n/a

(iv) facilitate electricity Transmission Licensees to comply with their obligations under EU law.

n/a]

Impact & Assessment

Impact on the SQSS

Chapters 2, 4 and 7 will be reviewed and may be amended.

Impact on the National Electricity Transmission System (NETS)

n/a

Impact on Greenhouse Gas Emissions

n/a

Impact on relevant computer systems

n/a

Impact on core industry documents

Not known

Impact on other industry documents

Supporting Documentation

Have you attached any supporting documentation [NO]

If Yes, please provide the title of the attachment:

Recommendation

The SQSS Review Panel is invited to:

Progress this issue to a Workgroup for further analysis and discussion

<u>Document Guidance</u>
This document is used to raise a Modification Proposal at the SQSS Review Panel. Incomplete forms will not be processed and the Proposer may be asked to clarify any information that is not clear.

Guidance has been provided in square brackets within the document but please contact the SQSS Review Panel Secretary James Cooper (james.cooper3@nationalgrid.com) if you have any queries.