SQSS Review Panel – Modification Proposal INSERT TITLE OF MODIFICATION PROPOSAL

Date Raised: 19 Nov 2012

A Panel Paper by John-Zammit Haber National Grid

Summary

The current requirement to limit loss of infeed from an onshore transformer fault to 50% or less may not be required from a system security perspective, and the resultant investment in switchgear may therefore be unnecessary.

Users Impacted

High

Offshore Transmission Owners, Onshore Transmission Owners

Medium

Large Generators, Medium Generators

Low

Description & Background

There is a requirement for offshore connections for the loss of infeed from an onshore transformer fault to be 50% or less (Paragraph 7.13.1.1). This results in two transformers being required with a number of circuit breakers in order to quickly switch out the faulty transformer. If isolators were used then although immediately the full infeed would be lost, within approximately 15 minutes 50% of the infeed could be restored as the faulty transformer was isolated. As the loss of this infeed for this time period would not cause the system adverse effects (subject to the infeed loss criteria) then installation of the extra switchgear could be considered to lead to excessive investment costs.

Proposed Solution

It is suggested to investigate whether to remove the requirement to not lose more than 50% of the infeed during a transformer fault.

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;

It is considered that this modification would better meet the objective of being economic and efficient by reducing investment in transmission infrastructure.

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

Subject to the requirements of the infeed loss criteria, it is not believed this modification would have an adverse effect.

(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

Chapter 7, especially para 7.13.1.1, may require amendment

Impact on the National Electricity Transmission System (NETS)

[Will any of the proposed changes have an adverse impact on the NETS?]

Impact on Greenhouse Gas Emissions

Minor beneficial effect in reducing the amount of plant

Impact on relevant computer systems

n/a

Impact on core industry documents

n/a

Impact on other industry documents

n/a

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.