

GB SQSS Industry Review Group

Terms of Reference GSR017 – Treatment of Switch Faults in Operational Timescales

Introduction

Background

Under the current version (V2.3) of the NETS SQSS, switch faults (i.e. faults on busbar coupler and busbar section) are secured for new generation connections but only with respect to limiting the loss of power infeed to the infrequent infeed loss risk (currently 1320 MW and due to increase to 1800MW as from April 2014).

Switch faults can potentially cause wider system issues such as instability, system splits, cascade tripping and voltage collapse depending on the substation at which they occur, the network running arrangement and the demand and generation level at the time of fault.

It is proposed that the Workgroup reviews the current SQSS to determine the need case for securing against the above challenges in the event of switch faults in operational timescales.

Purpose:

The purpose of the group is to:

- a) Review the risk of switch faults and determine the extent to which switch faults should be secured given the changing mix of generation and potential reductions in system strength.
- b) Identify which switch faults should be considered and what system issues should be assessed when considering these switch faults (eg voltage collapse).
- c) Identify the relevant sections within SQSS which require modifications to mitigate the risk of switch faults at Operational timescales. Recommend the changes to the SQSS Panel.

Scope and Objectives

A number of objectives set for the working groups to:

- Review and quantify the extent of the risks associated with switch faults;
- Propose SQSS modifications to address the issues raised.

Deliverables

- Recommendation to the SQSS Panel regarding the appropriate measures to deal with the risk of switch faults.

Participants:

SQSS Review Panel, Working Group Members.

Accountability:

The individual members of the GB SQSS review group will report back to their respective companies/stakeholders as each member see fit.

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