Grid Code Review Panel

Switching Transients

Background

Paper number pp09/33 was presented to the September GCRP and identified that National Grid was giving further consideration to whether provisions should be included within the Grid Code detailing acceptable levels of switching voltage transients. A specific issue had arisen at a site where the charging of an embedded power station's circuit may have given rise to transient over-voltages that triggered protection relays at a local transmission connected power station. This specific issue is being addressed with the affected third parties.

This paper describes the outcome of National Grid's consideration of this issue.

Current position

- There are currently no provisions within the Grid Code relating to this issue.
- Rated insulation levels are contained within the Relevant Electrical Standards (Section 1, paragraph 4.5)
    - Basic Insulation Levels (BILs) and Switching Insulation Levels (SILs) are defined for 275kV and 400kV nominal system voltages
- Whilst BILs are defined at 132kV, National Grid is not aware that, in GB, or indeed internationally, any SILs are defined for 132kV and below.

Recommendation

National Grid does not believe that it would be appropriate to introduce provisions into the Grid Code on acceptable levels of switching voltage transients.