

Distribution Code Review Panel

Meeting 63 – Thursday 9 March 2017

Paper by Secretary

Phase 2 - DNO progress reporting on changes to RoCoF settings on sites with Power Stations <5MW

The phase 2 work is still progressing. The joint panel WG GC0079 believes that there is an economic case to seek to make changes to RoCoF settings on all generation. This covers all generation <5MW in addition to >5MW generation included in GC0035. GC0079 believes that there is no reason to include domestic scale PV in these changes, as from tests performed for GC0079 by the Power Network Development Centre, there is no RoCoF sensitive control or protection equipment in the inverters used in these applications for the ranges of RoCoF envisaged.

As with GC0035 findings, it is synchronous generators who have the only possibly significant change in risk from revised RoCoF settings. GC0079 has identified a similar set of mitigations for those cases where the risk is adjudged to merit mitigating actions. GC0079 is expected to recommend that owners of synchronous machines should undertake a risk assessment as part of the change exercise. GC0079 is currently still considering what should be recommended for such risk assessment, and where necessary, mitigation, can be best managed and, importantly, funded. It is expected that GC0079 will consult on its thinking, findings and recommendation in summer 2017.

GC0079 is also now modelling the impact of transmission faults on vector shift protection. Hitherto vector shift protection has been seen as a suitable alternative to RoCoF. However the Landulph-Langage incident in May 2016 has shown that vector shift might be susceptible to loss of discrimination for transmission faults. If this is the case, then GC0079 will include vector shift protection in its recommendations.

Full details of this work and progress can be found at:

<http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/Grid-code/Modifications/GC0035-GC0079/>