

Distribution Code Review Panel**Meeting 70 – 7 June 2019****Future likely updates to G99****Paper by Code Administrator****1 Background**

Papers [DCRP_18_04 and DCRP_18_04] outlined the current modifications that are in progress and envisaged for G99 in the coming months.

This paper outlines other known issues with G99 that are not urgent, but which should be resolved in good time before it comes into force in April 2019.

2 Issues**2.1 Fast track storage applications**

G98 and G99 both need to be updated in the near future to replicate the fast track application for domestic storage that has recently been developed for G83 and G59.

2.2 Type tested interface protection

Two workshops were held with stakeholders on 30 April and 17 May on type testing and commissioning in general. The commissioning of type tested interface protection was a particular topic that was discussed in depth and a short summary of the implications agreed by all the workshop participants. This summary broadly lines up with G99 drafting, but following the extensive discussion it is agreed that there are probably a few clarifications that can be made to G99 to ensure the understanding of the summary document is fully embedded in G99.

2.3 Subtle interface protection testing differences between synchronous and asynchronous power generating modules

Late in the drafting process it was noticed that the detailed testing requirements for synchronous and asynchronous generation differed slightly. These differences are not material to the testing of the functionality. They are a product of the different development of these requirements in G83 and G59 at different points in history. Although the differences are not material, it will be highly inconvenient for testers or manufacturers working on both types of generation. It is proposed to align the settings on those used for synchronous generators, which is generally a very slight relaxation for asynchronous generators. It is not thought to be at all contentious -but it needs drawing formally to the attention of all who might be affected via a public consultation.

2.4 Interface protection testing for high RoCoF

It has been noticed that the historic tests to prove RoCoF stability do not have a test for a high but short duration RoCoF. It is proposed that a test of something like 2.0 Hzs-1 for 0.45s (ie within the definite time of the standard setting) should be added to G99 for all generation types. As this test is a single additional test well within the capability of the majority of test sets in field use, it is not expected to present any problems, and will give more assurance of RoCoF stability.

2.5 Improvements relating to the connexion process

There are a small number of possible changes to the process aspects of G99 that are likely to be improvements. These include a clearer accommodation of installations where commissioning is in phases, and better clarity about the expected timings of the submission of paperwork for Type A power generating modules. It is probably sensible to consult on these improvements at a time when more stakeholders will have had a chance to engage with these aspects of G99 in detail.

3 Proposal

These issues should be progressed with some urgency – certainly in advance of time that manufacturers, developers etc need to take to be fully prepared for April 2019 RfG compliance. However given the attention that is now being given to considering the practical implementation challenges by stakeholders, with the exception of the fast track storage modification, it is probably worth waiting until the early Autumn to see if any similar issues arise, as it might be efficient to deal with some or all of these issues in a single modification.

The DCRP is asked to note and discuss this proposal and give assent in principle to the Panel Secretary initiating a DCRP WG in the Autumn to pick up these issues and any others that have emerged by then.