

Emergency and Restoration Code

Upcoming GB Code Modifications



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Compliance Testing

GC0108

GC0108 incorporated E&R Black Start Testing requirements into the Grid Code for Generators.

- This changed the need to test black start capability from *no more than once every two years* to *at least every three years*.

Grid Code Modification – Compliance Testing (expecting to raise at March GCRP)

Will incorporate:

- Black start capability testing requirements into the Grid Code for Interconnectors (Article 46 of E&R) into OC5
- System Defence capability testing requirements into the Grid Code for DSR Providers (Article 45 of E&R) into DRSC

Black Start Compliance Testing

Interconnectors

Each restoration service provider which is an HVDC system delivering a black start service shall execute a black start capability test, **at least every three years**, following the methodology below:

- The HVDC system shall demonstrate its technical capability to energise the busbar of the remote AC substation to which it is connected,
- The test shall be carried out while the HVDC system starts from shut down;
- The test shall be deemed passed, provided that the following conditions are cumulatively fulfilled:
 - (i) the HVDC system has demonstrated being able to energise the busbar of the remote AC-substation to which it is connected;
 - (ii) the HVDC system operates from a stable operating point at agreed capacity

This will be new to the Grid Code and we propose it should be incorporated into OC5.

System Defence Compliance Testing

DSR Providers

Each defence service provider delivering demand response will execute a demand modification test

- After two consecutive unsuccessful responses in real operation; or
- At least every year

Following the methodology laid down in DRSC.11.5.1

- This is the same process used to prove compliance when providing demand response active power control, reactive power control and transmission constraint management balancing services

Testing frequency in relation to System Defence Providers to be added to the Grid Code – we propose it's included in the DRSC.

System Defence Plan Modification

Will incorporate aspects of the System Defence Plan that puts requirements on customers and stakeholders that need to be implemented by 18th December 2019.

(Aiming to raise this modification at March GCDF)

- Requirement on storage providers to switch from import to export (or trip) at low frequencies before demand trips on LF
- Upon request from the NGENSO any SGU (not already providing a balancing service) shall make available all its active power, conforming to its technical constraints

The following will not be raised in March 2019 as they do not need to be implemented until 2022:

- Specified SGUs, DNOs, and restoration service providers making critical tools and facilities available for at least 24 hours following loss of primary power supply
- LFDD requirements
- Resilience of substations

Restoration Plan

Aiming to raise a modification at April GCRP

We will present at April JESG and GCDF with further details



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