



UNSW
SYDNEY

Fault Ride Through Testing Facility to Support Grid Stability

A facility to test the ability of non-synchronous power plants to maintain continuous uninterrupted operation when a power system is subjected to a voltage disturbance. This is a fundamental requirement to maintain system security and prevent wider frequency collapse.

Competitive advantage

- Full suite of low voltage ride-through (LVRT) and high voltage ride-through (HVRT) testing services
- Ability to simulate different depths of voltage dips and rises, ranging from 0% to 140% with a step of 1% of the rated voltage, lasting from 1000 ms to 3000 ms
- Ability to simulate different grid faults, including line to line (L-L), double line to ground (LL-G), and line to line to line (L-L-L)
- Test generating plants up to 8 MVA in grids and up to 40 kV system
- Compliance with the IEC6400-21

Impact

- Validate simulation model against onsite test in R2 test
- Demonstrate fault ride through performance on site
- Support grid stability and improve security of supply
- Full-scale field testing with no adverse impact on the network

Successful outcomes

- Successfully commissioned 30 LVRT tests on 10 different wind turbines

Our partners

- Goldwind
- DNV GL

More Information

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