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Low Voltage Ride through Capability Techniques for DFIG-Based Wind Turbines

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Abstract : Due to the drastic increase of the wind turbines installed capacity; the grid codes are increasing the restrictions aiming to treat the wind turbines like other conventional sources sooner. In this paper, an intensive review has been presented for different techniques used to add low voltage ride through capability to Doubly Fed Induction Generator (DFIG) wind turbine. A system model with 1.5 MW DFIG wind turbine is constructed and simulated using MATLAB/SIMULINK to explore the effectiveness of the reviewed techniques.

Keywords : DFIG, grid side converters, low voltage ride through, wind turbine
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