A New Voltage Sag Simulator Topology for Testing Wind Turbines

In this paper, a new semiconductor-based topology for a testing system of wind turbines is proposed, such that precise, fast and cost effective voltage reduction in accordance with standards of voltage sag test could be implemented. This device can be used as a tool to test the low voltage ride-through (LVRT) capability of wind turbines connected to the power grid. High voltage ride-through (HVRT) and asymmetrical voltage sag test capability are the other advantages of this system. The presented test system is simulated for doubly fed induction generator (DFIG) wind turbine testing and the results are demonstrated.

component; Vvoltage sag; wind turbine test; grid codes; low voltage ride-through

https://www.civilica.com/Paper-CBCONF01-CBCONF01_1026.html