

Simulation Study of a Fault at the Switch on the Operation of the Doubly Fed Induction Generator Based on the Wind Turbine

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Abstract : This work is devoted to an analysis of the operation of a doubly fed induction generator (DFIG) integrated with a wind system. The power transfer between the stator and the network is carried out by acting on the rotor via a bidirectional signal converter. The analysis is devoted to the study of a fault in the converter due to an interruption of the control of a semiconductor. Simulation results obtained by the MATLAB / Simulink software illustrate the quality of the power generated at the default.

Keywords : doubly fed induction generator (DFIG), wind power generation, back to back PWM converter, default switching

Conference Title : ICECSE 2014 : International Conference on Electrical, Computer and Systems Engineering

Conference Location : Istanbul, Türkiye

Conference Dates : June 19-20, 2014