## Study on the Impact of Default Converter on the Quality of Energy Produced by DFIG Based Wind Turbine

Authors: N. Zerzouri, N. Benalia, N. Bensiali

**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 energy, PWM inverter, modeling

Conference Title: ICECECE 2014: International Conference on Electrical, Computer, Electronics and Communication

Engineering

Conference Location: Paris, France Conference Dates: September 22-23, 2014