# Stabilization of a DC-Link of Microgrids feeding a Inverter-BLDC motor drive using a PI-Fuzzy

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Description

The stabilization of the DC-link supplying 3phase inverter which drives Brushless DC motor based on Fuzzy-PI controller in the microgrid is presented. This work is included the study of a mathematical model for each inverter and motor. In addition, the stabilization analysis of motor driver based on Fuzzy-PI controller. The purposed controller is validated by simulation in MATLABSimulink for a motor driver under speed and voltage source variations. The simulation results prove that the controller makes the motor speed matching with its reference speed as well as constant and stable of DC-link voltage.