

عنوان مقاله:

Power Quality Improvement In Distribution Networks using A New FUZZY Controlled DSTATCOM

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خلاصه مقاله:

In this paper, a new fuzzy controller for a three-phase and three-wire distribution static compensator (DSTATCOM) is presented to improve power quality. A three-leg voltage source converter based DSTATCOM is used to control the harmonic currents for two nonlinear loads. In this control system, the gate pulses for IGBT switches are provided by a hysteresis controller, using samples of source voltages and currents. The derived reference currents, obtained by the direct method of reference current estimation with two PI and Fuzzy control models are simulated in a MATLAB/Simulink environment and each performance is analyzed. Comparisons show that the fuzzy controller performs better than a classic PI controller

کلمات کلیدی:

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