

عنوان مقاله:

Voltage Quality Improvement in Islanded Microgrids Supplying Nonlinear Loads

محل انتشار:

سومین کنفرانس بین المللی الکترونیک قدرت و سیستمهای درایو (سال: 1390)

تعداد صفحات اصل مقاله: 6

نویسندگان:

Mohammad T. Dehghani - *Department of Power Engineering, Saveh Branch, Islamic Azad University, Saveh, Iran*

Abolfazl Vahedi - *Center of Excellence for Power System Automation and Operation, Iran University of Science and Technology, Iran*

Mehdi Savaghebi - *Department of Electronics Engineering, Karaj Branch, Islamic Azad University, Karaj, Iran*

Josep M. Guerrero - *Department of Automatic Control and Industrial Informatics, Technical University of Catalonia, Spain*

خلاصه مقاله:

The aim of this paper is to improve voltage quality at the terminals of distributed generators (DGs) in an islanded microgrid. To achieve this goal, it is proposed to include separate voltage and current control loops for the fundamental and harmonics frequencies. This way, it is not necessary to consider additional controllers to provide voltage harmonic compensation. The proposed control system can be implemented in a very simple way. The control structure of every single DG unit consists of active and reactive power droop controllers and voltage and current control loops. Simulation results are provided in order to show the effectiveness of the proposed control approach.

کلمات کلیدی:

Distributed generator (DG), microgrid, voltage harmonics

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