

## عنوان مقاله:

Voltage Harmonic Compensation of a Microgrid Operating in Islanded and Grid-Connected Modes

## محل انتشار:

نوزدهمین کنفرانس مهندسی برق ایران (سال: 1390)

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## خلاصه مقاله:

In this paper, a method for voltage harmonic compensation in a microgrid operating in islanded and gridconnected modes is presented. Harmonic compensation is done through proper control of distributed generators (DGs) interface converters. In order to achieve proper sharing of the compensation effort among the DGs, a power named Harmonic Distortion Power (HDP) is defined. In the proposed method, the active and reactive power control loops are considered to control the powers injected by the DGs. Also, a virtual impedance loop and voltage and current proportional-resonant controllers are included. Simulation results show the effectiveness of the proposed method for compensation of voltage harmonics to an acceptable level

## کلمات کلیدی:

Distributed Generation (DG), Microgrid (MG), voltage harmonic compensation, gridconnected, islanded

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/154113>

