

### عنوان مقاله:

A novel control method in Grid Interconnection of DG Based on Pulse Adaptive VSI in order to Harmonic Compensation and Power Quality Improvement

### محل انتشار:

بيستُ و هشتمين كنفرانس بين المللي برق (سال: 1392)

تعداد صفحات اصل مقاله: 8

## نویسندگان:

S.M.T Bathaee - Electrical and Computer Engineering Dept. K.N.Toosi University of Technology Tehran, Iran

R. Galandary Tazekandi - Electrical and Computer Engineering Dept. K.N. Toosi University of Technology Tehran, Iran

#### خلاصه مقاله:

Distributed Generation Resources are being increasingly connected in distribution systems utilizing power electronic converters. Having attended to this onsideration, a new PWM scheme, suitable for being used in DG interface is proposed at this paper. Using proposed pulse adaptation method in conventional voltage-control-based method of DG, harmonics in network is compensated without adding to the complication of the main power control level, because this method, unlike the conventional harmonic compensation methods, applies pulse shaping process in PWM level of the system to do harmonic depression service, than in main control loops. The result of this method compared with two other different type control methods such as Unit Vector Template and Repetitive control based on discrete Fourier transform. All results achieved in MATLAB/Simulink

## کلمات کلیدی:

Pulse Adaptive VSI, Unit Vector Template, Repetitive control, Active Power Filter, DG, Power Quality, Harmonic compensations

# لینک ثابت مقاله در پایگاه سیویلیکا:

https://civilica.com/doc/249749

