Tracking of Power Quality Indicators during Wind Farm Islanding Experiment

The application of the two-stage Newton Type Algorithm for the tracking of the power quality indicators (in accordance with IEEE Standard 1459-2000) is presented in the paper. To estimate their spectra and fundamental frequency, the current and voltage signals are first processed and then the power quality indicators calculated. The algorithm considers frequency as an unknown parameter and estimates it whilst determining the input signal spectrum; this ensures the algorithm is insensitive to frequency changes. The proposed algorithm was evaluated using signals acquired during a wind farm islanding experiment in Denmark.

General information
State: Published
Organisations: Electric Power Engineering, Department of Electrical Engineering, Centre for Electric Technology
Contributors: Terzija, V., Crossley, P., Stanojevic, V., Pedersen, K. O. H., Østergaard, J.
Publication date: 2007

Host publication information
Source: orbit
Source-ID: 204846
Research output: Research › Article in proceedings – Annual report year: 2007