

عنوان مقاله:

Control Scheme of Micro grid for Intentional Islanding Operation

محل انتشار:

پنجمین کنفرانس بین المللی مهندسی برق و کامپیوتر با تاکید بر دانش بومی (سال: 1396)

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خلاصه مقاله:

the cluster of multiple distributed generators (DGs) such as renewable energy sources that supply electrical energy are defined as micro grid. The DG is a voltage source inverter with an output low pass filter supplying the load. The connection of micro grid is in parallel with the main grid. When micro grid is isolated from the remainder of the utility system, it is said to be in intentional islanding mode. In this mode, DG inverter system operates in voltage control mode to provide constant voltage to the local load. During grid connected mode, the micro grid operates in constant current control mode to supply preset power to the main grid. An intentional islanding detection algorithm responsible for switching between current control and voltage control is developed using logical operations. The satisfactory performance of the micro grid with the proposed controllers and algorithms is analyzed by conducting simulation on dynamic model using MATLAB

کلمات کلیدی:

Distributed generation; Intentional islanding operation, Islanding detection; Micro grid; Electrochemical storage

لینک ثابت مقاله در پایگاه سیویلیکا:

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