Microgrid master-slave structure

Abstract--In this paper a design of a master-slave microgrid consisting of grid-supporting current source inverters and a synchronous generator is proposed. The inverters are following the frequency of the ...

This study proposes a simple mixeddroop-v/fcontrol strategy for ...

In this article, we introduce a one-master-many-slave game optimization model between distribution network operators and multi-microgrids ...

This paper will show the structure and function of the communication system in a micro grid with master-slaver strategy.

A control system for a microgrid model has been developed. The model consists of a generating unit (PV-array), a storage unit (battery), a distribution system and loads, as well as the power electronic ...

To balance the production power and loads in a smart island with a stable voltage/frequency, a hybrid backstepping sliding mode controller (BSMC) with disturbance observer (DO) is suggested to control ...

When microgrid works at the proposed quasi-master-slave control frame, PVs can achieve MPPT and voltage/frequency regulation simultaneously without control scheme transforming.

Nowadays there is an increasing interest on dc microgrid for its higher energy efficiency and higher reliability as compared to the ac system. This paper addres.

This section demonstrates the suggested master-slave control schemes for both master and slave inverters. The detailed control loops for both inverters are portrayed in the subsequent ...

Compared with peer-to-peer control, master-slave control has a simple structure and is easily applied to the microgrid on a large scale. However, the traditional master-slave control ...

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