

PDEOZE PowerContainer

Smart Park Wind Power Generation System



Overview

What is a smart micro-grid system with wind/PV/battery?

A 6kW smart micro-grid system with wind /PV/battery has been designed, the control strategy of combining master-slave control and hierarchical control has been adopted.

What is a smart micro-grid system?

The smart micro- grid system is connected via an AC bus with distributed power supply, wind and solar power generators. It offers wider range of connections, higher efficiency of energy transmission, easier expansion of independent power generation units and flexible selection of operation modes.

What is a power purchase Park?

The PIESs in the cluster that can satisfy their own power demand with new energy units and have surplus GE are defined as power sales parks (surplus-type parks); the PIESs with no surplus GE are defined as power purchase parks (shortage-type parks).

How a wind inverter is regulated?

The wind inverter and photovoltaic inverter are tracked and regulated for maximum power capture so that the wind and solar resources can be fully utilized. The variations of AC bus voltage, AC input current on grid side, and internal AC output current during grid connection are shown in figure 6.

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