

# **Research on control strategy of isolated grid with wind-PV-diesel-storage power generation**

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## **Abstract**

This paper presents a study on the control strategy of wind/PV/diesel/storage hybrid off-grid system operation based on the characteristics of wind and solar energy source as well as the current status of the isolated grid in a certain island in China. The study covers grid stability and interaction between intermittent generation and the grid, and control strategies which isolated grid requires are proposed after the study. It is expected that this paper will provide helpful research and exploration for any potential problem and corresponding solutions in isolated grid operation without strong power supply.

**KEYWORDS:** isolated grid; wind power generation; photovoltaic; stability; control strategy;