Microgrid optimization scheduling objective function

Title: Microgrid optimization scheduling objective function
Generated on: 2026-04-06 23:17:19

In this study, we propose a multi-objective particle swarm algorithm-based optimal scheduling method for household microgrids. A household microgrid optimization model is ...

In order to improve the utilization rate of renewable energy and comprehensively enhance the economic efficiency and environmental friendliness of the microgrid, a multi - objective...

The current study considers two objective functions: the operation cost incurred by the MG system and the emission. A novel optimization algorithm can mitigate both of these entities.

Traditional microgrid scheduling approaches rely on predetermined policies and static rules, and their scheduling objectives tend to focus on ensuring supply reliability and minimizing costs.

In addressing the microgrid scheduling problem, a multi-objective function is constructed that incorporates operational cost, environmental cost, and multiple penalty terms.

As an important part of smart grid optimization, microgrid optimal scheduling is of great significance to reduce energy consumption and environmental pollution.

Presenting a multi-objective framework for the short-term scheduling of a microgrid (MG) incorporating a plug-in hybrid electric vehicle (PHEV), with cost and emissions ...

In this regard, a multi-objective optimization scheduling model for microgrids in grid-connected mode is proposed, which comprehensively considers the operational costs and environmental protection ...

Website: https://lesfablesdalexandra.fr