Multi-objective optimization scheduling of microgrids

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

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

In order to solve the model, an NSGA-II based ICS algorithm combining fast non-dominated sorting genetic algorithm and adaptive cuckoo algorithm is proposed. The feasibility of the algorithm is ...

This study introduces a novel multi-objective optimization framework for microgrids, integrating hybrid renewable energy sources (PV, WT, FC, MT, DG) and ESS to minimize costs, ...

To achieve this, an Improved Hybrid Aquila Optimizer and African Vultures Optimization (IHAOAVO) algorithm is introduced to optimize microgrid scheduling. This approach integrates the ...

To solve these problems, a multi-objective optimization model was established based on the economy and the environmental protection of a microgrid including EVs.

This paper proposes a microgrid optimization management method based on the improved Sand Cat Swarm Optimization (ISCSO) algorithm to enhance the economy, stability, and ...

This paper develops a multi-objective optimization scheduling model for microgrids in grid-connected mode, focusing on operational costs and environmental protection costs, and employs an improved ...

ABSTRACT This paper proposes a novel grid-friendly multi-objective approach to optimize energy management in an integrated source-grid-load-storage microgrid (MG).

Web: https://artetmiss.us