Microgrid Optimal Scheduling Algorithm

This paper presents an AI-driven day-ahead optimal scheduling approach for a grid-connected AC microgrid with a solar panel and a battery energy storage system.

To achieve efficient and stable microgrid operation, this paper proposes a microgrid cluster optimal scheduling strategy based on an Improved Particle Swarm Optimization (IPSO) algorithm.

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 ...

To address these issues, this paper presents a microgrid scheduling strategy based on the Non--Dominated Sorting Dung Beetle Optimization Algorithm (NSDBO).

As global attention on renewable and clean energy grows, the research and implementation of microgrids become paramount. This paper delves into the methodology of ...

In this paper, we propose to improve the global search capability of the DBO algorithm using a spiral position update strategy, adaptive weight factor, levy flight strategy, and t-distribution ...

To address the shortcomings of the traditional honey badger algorithm in complex microgrid optimization and scheduling problems, such as slow convergence and susceptibility to ...

To this end, this paper proposes an intelligent scheduling framework based on reinforcement learning and data-driven optimization to improve the adaptability of microgrids to ...

Abstract Integrating the Distributed Energy Resources (DERs) into the modern power system requires intelligent scheduling algorithms for stability, reliability and cost effectiveness. This ...

A multi-strategy Improved Multi-Objective Particle Swarm Algorithm (IMOPSO) method for microgrid operation optimization is proposed for the coordinated optimization problem of microgrid ...

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