Smart Microgrid Optimization and Dispatching

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Abstract: This paper presents an improved deep reinforcement learning (DRL) algorithm for solving the optimal dispatch of microgrids under uncertaintes.

Therefore, this paper focuses on the economic and environmental issues of different types of energy scheduling in microgrids, integrates the results of PV power generation prediction, ...

The simulated and physical microgrid characteristics are described and the hourly dispatch results for generation, storage and load devices are presented, standing out as a reliable ...

Recent research has focused on various optimization techniques to address the challenges in microgrid dispatch. These methods aim to enhance economic efficiency, environmental ...

Abstract: This work tackles the scheduling challenge of microgrids for smart homes, aiming to optimize energy management with both renewable and non-renewable sources.

Cooperative microgrids considered the next generation of smart energy trading technology.

In order to maximize the utilization of renewable energy, enhance its utilization efficiency, and reduce the carbon emission of power supply, this paper first proposes a real-time collaborative ...

diction-dependent dispatch methods can face challenges when renewables and prices predictions are unreliabl in microgrid. Instead, this paper proposes a novel prediction-free two-stage coordinated ...

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