Microgrid Fault Optimization

In this paper, an intelligent method for fault detection and classification for a microgrid (MG) was proposed.

The evaluation metrics encompass the accuracy of sub-microgrid fault localization, fault line localization, and fault type identification. The study aims to validate the superior performance of ...

fault being introduced as a sudden increase in load demand at a specified time. Three optimization techniques - Genetic Algorithm (GA), Simulated Annealing (SA), and Particle Swarm ...

Abstract: Conventional methods for high-impedance faults, low fault current levels, and communication delays could not properly identify the fault identification and location of an AC Microgrid. Fault ...

- Networked microgrid operation and control is supported by fault-tolerant optimization. In networked microgrids, the microgrid failure or dys. onnectivity from the network is obvious and must be rectified ...

A stochastic tri-layer optimization framework for day-ahead scheduling of microgrids using cooperative game theory approach in the presence of electric vehicles.

This paper introduces a comprehensive framework for fault detection and control in DC microgrids (DCMGs) integrating diverse energy sources.

Coupling of microgrids/DERs with a disturbed main grid can lead to catastrophic mutual impacts.

By optimizing these features and applying them to machine learning models, the approach overcomes the limitations of conventional fault detection methods. The results show a significant...

A microgrid fault diagnosis method based on whale algorithm optimizing extreme learning machine (ELM) is proposed. Firstly, the three-phase fault voltage is analyzed by wavelet packet ...

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