

Detection of high-impedance faults in direct current microgrid lines presents a challenge for most conventional protection schemes because the magnitude of the fault current is similar to ...

DC microgrids protection is also challenging in a unique way, specifically in fault discrimination between faults in DC distribution lines and PV array faults. Both faults have the ...

Electrical faults in DC microgrids can lead to severe disruptions, equipment damage, and even pose safety risks 2. Therefore, the development of advanced fault detection mechanisms is...

The Fault in the system/grid and schemes that need to be addressed in modern power system involving DC Microgrid are studied. This study analyses and presents a comprehensive review of the DC ...

It provides an account of research in areas related to fault management of DC microgrids, including fault detection, location, identification, isolation, and reconstruction. In each area, a comprehensive review ...

To solve this problem, this paper develops an adversarial-based deep transfer learning model that can detect and classify short-circuit faults in DC microgrids without using historical fault data.

To address actuator faults, we design a fault estimation filter whose parameters are determined through a tractable optimization problem to achieve fault estimation, decoupling from power line faults, and ...

This critical study provides valuable information for researchers and professionals aiming to refine fault detection and isolation methods and improve the efficiency of DC microgrid systems.

Layout of DC microgrid with possible fault types and locations. This paper presents an extensive fault analysis for DC microgrids based on accurate representation of DC microgrid...

These faults are analyzed to determine rates-of-rise (di/dt) and peak current values for a DC bus architecture. Fault currents were compared between a simulation model and experimental ...

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