Is traveling wave protection suitable for microgrids

Overview

The method combines wave impedance methods and Discrete Hilbert Transform for fast, accurate fault detection in microgrids. Abstract—Traveling Wave Protection based on the Internet of Things (TWP-IoT) is developed to enable ultra-resilient micro-grids. Why DHT?

Efficiency: Computationally lighter than wavelet-based methods. Compared with conventional methods, the presented approach provides enhanced sensitivity, higher selectivity, a. This chapter addresses the challenge of protecting microgrids using legacy ultra-high-speed traveling wave protection schemes, which are not suitable due to the microgrid's unique topology and operating conditions. To overcome this challenge, the chapter proposes a new protection scheme that offers.

Is traveling wave protection suitable for microgrids

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This paper presents an AI-enabled TWP approach to tackle the protection obstacles in IBR-dominated AC microgrids, such as low-fault currents and ultra-fast fault wave propagation.

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AI-enabled traveling wave protection for microgrids

AI-enabled traveling wave protection for microgrids D. A. Etingov, P. Zhang To be published in "ELECTRIC POWER SYSTEMS RESEARCH" September 2022

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IoT-Enabled Traveling Wave Microgrid Protection

Abstract: Traveling wave protection based on the Internet of Things (TWP-IoT) is developed to enable ultraresilient microgrids.

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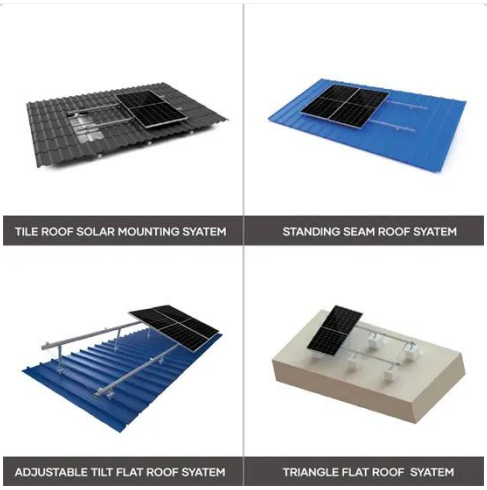

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AI-enabled traveling wave protection for microgrids

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