عنوان مقاله:

A Novel Technique for Fault Detection and Classification on Transmission Line Based Wavelet

محل انتشار:

نهمین کنفرانس تخصصی حفاظت و کنترل سیستم های قدرت (سال: 1393)

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خلاصه مقاله:

This paper proposed a novel technique based wavelet to detect and classify various faults on transmission line. In this algorithm, magnitudes of three phase current signals that send and receive via a Global Positioning System (GPS) satellite will be obtained and analyzed over a half cycle to define the details of alienation coefficients. These details of alienation coefficients of proposed scheme are compared with those of previous half cycle to compute alienation coefficients. This technique is able to differentiate between non-faulty transients such as capacitance loads, inductance loads and load switching, against fault transients. The increase in the sensitivity of protection scheme due to utilization of wavelet based detail decomposition has been established by case studies. The proposed algorithm is tested and verified for different locations and various types of faults on the real part of Iranian power system grid.

کلمات کلیدی:

Transmission Line protection; Faults Classification; Wavelet Transforms

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