

To improve the reliability and sensitivity of multi-level relay protection in distribution networks with distributed power sources, this study designs an adaptive setting strategy optimization method.

Focusing on directional overcurrent relays, the study examines optimization-based methods for tuning key relay parameters, which include the pickup current and the time multiplier setting, to minimize the ...

We demonstrated the advantages of using new differential-logic and multi-parameter relay protection algorithms, as well as the methods for relay protection tripping parameters calculation.

Assessment of practical applicability and efficiency of relay protection devices based on fuzzy logic by comparing their operation with conventional protection methods, considering different ...

Relay protection is essential in an electrical network to detect and isolate faulty components, preventing system-wide failures. Traditionally, relay protection systems have been ...

The implementation of digital normative and technical documents (DNTD) in the electric power industry, especially in the field of relay protection (RP), signifi

The approach involves replacement of traditional types of relay protection (current protection, distance protection, and other automatic) with decision-making systems adapted to a ...

One of the promising ways to develop protection and control systems is the development of fundamentally new algorithms for recognizing emergency modes. They work in accordance with the...

To address these shortcomings, this paper proposes a new approach based on the XGBoost algorithm, which is expected to solve the integration and coordination problems of relay protection systems in ...

In this research project, Artificial Intelligence (AI) algorithms applied to the relay protection of high and low-voltage distribution networks are investigated.

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