عنوان مقاله:

A Novel Fuzzy and Artificial Neural Network Representation of Overcurrent Relay Characteristics

محل انتشار:

ماهنامه بین المللی مهندسی, دوره 16, شماره 7 (سال: 1382)

تعداد صفحات اصل مقاله: 14

نویسندگان:

M. Al-Dabbagh Hossein - *Electerical Engineering, Monash University*

G. Heidari - *Transmission and Distribution Department, Electric Power Research Institute*

H. Askarian Abyaneh - *Electerical Engineering, Amirkabir University of Technology*

H. K. Karegar - *Electerical Engineering, Amirkabir University of Technology*

خلاصه مقاله:

Accurate models of Overcurrent (OC) with inverse time relay characteristics play an important role for coordination of power system protection schemes. This paper proposes a new method for modeling OC relays curves. The model is based on fuzzy logic and artificial neural networks. The feed forward multilayer perceptron neural network is used to calculate operating times of OC relays for various Time Dial Settings (TDS) or Time Multiplier Settings (TMS). The new model is more accurate than traditional models. The model is validated by comparing the results obtained from the new method with linear and nonlinear Sachdev models as applied for various types of overcurrent relays.

کلمات کلیدی:

Power system, Protection Systems, Overcurrent Relay