عنوان مقاله:

A Hybrid Evolutionary Method for Dynamic Network Reconfiguration considering Time of use service

محل انتشار:

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خلاصه مقاله:

The distribution feeder reconfiguration represents a major process of operation in the distribution system utilized to enhance grid performance. Given disparities in the electricity price as well as smart networks' load pattern, the distribution system's operational problems are much more time-dependent and more complex than before. For this purpose, the dynamic distribution feeder reconfiguration with diverse objectives such as energy not supplied, energy loss and operational cost is formulated in this research. Time of use service as one of the demand response programs is suggested to change customers' consumption patterns. Given the innate intricacy of this issue, a hybrid swarm intelligence-based algorithm, Hybrid Particle Swarm Optimization and Shuffled Frog Leaping algorithm is presented to address the problem of dynamic distribution feeder reconfiguration considering distributed generation units. In this paper, the proposed algorithm is tested on the IEEE ۹۵ node test system and its advantages compared to other .evolutionary algorithms are discussed

کلمات کلیدی:

Distribution feeder reconfiguration (DFR), particle swarm optimization (PSO), Energy not supplied (ENS), Shuffled (frog leaping (SFL