عنوان مقاله:

APPLICATION OF FLOWER POLLINATION ALGORITHM AND PARTICLE SWARM OPTIMIZATION FOR OPTIMAL PLACEMENT AND SIZING OF CAPACITORS IN DISTRIBUTION NETWORK

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خلاصه مقاله:

Flower pollination algorithm (FPA) is one of the most efficient population-based nature-inspired metaheuristic optimization algorithms based on the flower pollination process of flowering plants. In this paper, FPA is proposed for optimal placement and sizing of capacitors in distribution network. the proposed FPA is employed to deduce the locations of capacitors and their sizing from the elected buses. The proposed algorithm is tested on ٣٣-bus radial distribution network. The obtained results via the proposed algorithm are compared with PSO and other Algorithms to highlight the benefits of the proposed algorithm in reducing total cost and power losses. Moreover, the results are introduced to verify the effectiveness of the proposed algorithm to enhance the voltage profiles for distribution network.

کلمات کلیدی:

Flower Pollination Algorithm, Particle Swarm Optimization, Distribution network, Optimal capacitor placement and sizing, power losses

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