

عنوان مقاله:

Fish School Search Algorithm for Solving Optimal Reactive Power Dispatch Problem

محل انتشار:

فصلنامه بین المللی مهندسی مکترونیک، برق و کامپیوتر، دوره 3، شماره 9 (سال: 1392)

تعداد صفحات اصل مقاله: 23

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خلاصه مقاله:

This paper presents an algorithm for solving the multi-objective reactive power dispatch problem in a power system. Modal analysis of the system is used for static voltage stability assessment. Loss minimization and maximization of voltage stability margin are taken as the objectives. Generator terminal voltages, reactive power generation of the capacitor banks and tap changing transformer setting are taken as the optimization variables. This paper presents fish school search a novel method of swarm intelligence for solving above problem. Fish school search Algorithm, which was inspired by the natural schooling behaviours of fish, a powerful stochastic optimization technique has been utilised to solve the reactive power optimization problem.

کلمات کلیدی:

Modal analysis, optimal reactive power, Transmission loss, fish school search, Optimization

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