Abstract

Relieving the power system from the effects of heavy losses and higher voltage magnitude deviations is very important to improve the voltage profile at the load buses. In this paper, multiple FACTS devices with the view to minimize load voltage magnitude deviations and network losses using particle swarm optimization have been presented. The strategy uses multiple static VAR compensators and offers optimal locations for placement of the devices and parameters. Test results on IEEE 30 bus system with and without FACTS device reveals the superiority of the algorithm and operation of SVC in power system.

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Loss Minimization and Voltage Profile Improvement Incorporating Multiple SVC using PSO Algorithm

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Index Terms

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