

Abstract:

The power flow in power system can be controlled in an effective method by using FACTS devices through transmission lines. Distributed FACTS represent a new way to overcome these drawbacks. They are cost-effective, light weighted, higher performance and minimization of environmental impact. They are placed in a distribution method and in selected lines in the network according to line flow stability indices based on load flow calculations. In this paper, distributed static series compensator (DSSC) is used in order to attain the required power flow control by modifying the line reactance. They are installed directly on the present H.V transmission lines and as a result does not require H.V insulation. The load flow analysis has been carried using mat lab and the simulation for the purpose of stability by using Power World Simulator software. The results show an enhancement in stability performances of the system over the conventional controllers.