ABSTRACT

DPFC is proposed in the present work to improve voltage stability of fourteen bus system during line interruption. The voltage across the load decreases due to the interruption of the line. State space method is used to calculate Line currents and bus voltages. The ability of DPFC to bring voltage, real power and reactive power to normal level is presented in this paper. The simulation results for healthy system, line interrupted system without DPFC and with DPFC are presented. The results of comparative study are presented to show the improvement in power quality. The simulation studies indicate that the power flow with DPFC during line outage is almost equal to the power during healthy condition.