

Title:Voltage Stability Enhancement in IEEE 57 bus Test system using STATCOM

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Abstract:

Voltage stability is an important concept in the field of interconnected power systems. Increase of loads tends to decrease in voltage profile of the corresponding bus. The voltage in all the buses should be kept within acceptable limits in order to avoid voltage collapse. This project determines the voltage in all the buses of IEEE 57 bus test system. The weakest bus will be identified and STATCOM will be installed in the bus to improve its voltage profile. The system will be simulated using Open IPSL in OpenModelica, with and without STATCOM and the results will be discussed.