

VOLTAGE STABILITY PROBLEM IN POWER SYSTEM:  
ANALYSING PV AND QV CURVES

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## ABSTRACTS

Power utilities are facing a challenge due to increasing load demands because of rapidly industries growth over a years. One of the problems that have been identified is voltage instability in power system. Voltage stability is the ability of the system to maintain the voltage magnitude under normal condition and also under heavy stressed condition. One of the causes of voltage instability is that the power system did not have the ability to meet reactive power demand. This will lead to a voltage collapse and power interruption in the system. In this project, different types of reactive power compensation methods such as shunt capacitor, STATCOM and SVC will be compared in terms of voltage stability and power losses reduction in power system. For the case study, modified IEEE 9 bus system will be used to do the comparison. Various performance measures are compared under different loading parameter for the modified IEEE 9 bus system. Important issues relation to reactive power compensation namely sizing and allocation are addressed.

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