

Contribution of STATCOM To Improving The Behavior Of High Voltage AC Networks

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Abstract –This work proposes the application of a STATCOM for reactive energy compensation; its dynamic behavior will be verified by simulations under the MATLAB/SIMULINK environment. The circulation of reactive energy in an electrical network causes voltage drops between two ends, therefore the active power transported decreases, and to deal with this problem several classic solutions have been adopted. The STATCOM "static synchronous compensator" is a type of FACTS placed as a shunt, which can remedy the problem of the circulation of reactive energy, and the regulation of the voltage.

Keywords – STATCOM, reactive energy, FACTS, voltage drops
