

## **POWER SYSTEM FACTS CONTROLLERS PERFORMANCE AND ANALYSIS FOR DAMPING OSCILLATIONS**

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### **ABSTRACT**

In the recent past, the flexible ac transmission systems (FACTS) controllers plays vital role in power systems. In this paper, a novel non-linear switch for FACTS controlling manner for checking inter area fluctuations in the current systems is proposed. The FACTS regulating system have a series, shunt or blend of sequential shunt instruments that can be interfaced with the higher range of power system through dose buses. The adaptation of the system is used to improve FACTS efficiently damp low frequency inters area oscillations in the system. In this paper, we propose the system have controlling methodology that is based on concluding an equivalent lower affine non linear system for the networking from that the center machineries are separated based on active coherency. It is exhibited for if selected exact manner, proportions estimated from the machines subsystem is highly applicable inputs to the FACTS controllers to steady the power system. The accuracy and efficiency of the projected methodology on restraining inter area variations are real on the 68 bus system, 16 generator system of the countries such as England/New York network.

**KEYWORDS:** Dominant Machines, Phasor Measurement Unit, Flexible Ac Transmission Systems (FACTS)