

## **IMPROVEMENT OF LOAD POWER FACTOR USING FACTS CONTROLLERS**

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### **Abstract**

In General power factor correction improvement can be done by using static capacitors/condensers or by synchronous condensers belt, in the newness FACTS controllers, the powerful power electronics devices can be implemented to obtain better quality of power factor correction [10].

This paper presents the comparison of static capacitor group of power factor correction and FACTS-Controllers (i.e. UPFC) approach of power factor improvement. The simulation results of both the approach are obtained and compared. FACTS-Controller method is the best suited one for the transmission & distribution system. A model of FACTS – UPFC is obtained for transmission system using PI controllers in MATLAB (SIMULINK) [9].

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**Keywords:** static capacitors, FACTS-Controllers, Transmission & Distribution systems, power factor, synchronous condensers.