Turkish Journal

of

Electrical Engineering & Computer Sciences

Keywords
Authors

elektrik@tubitak.gov.tr

Scientific Journals Home Page

Turkish Journal of Electrical Engineering & Computer Sciences

Optimal Location for Shunt Connected FACTS Devices in a Series Compensated Long Transmission Line

P. R. SHARMA, Ashok KUMAR and Narender KUMAR
Y.M.C.A. Institute of Engineering, Faridabad (Haryana) INDIA
e-mail: prsharma1966@yahoo.com

Abstract: Shunt FACTS devices are used for controlling transmission voltage, power flow, reducing reactive losses, and damping of power system oscillations for high power transfer levels. In this paper the optimal location of a shunt FACT device is investigated for an actual line model of a transmission line having series compensation at the center. Effect of change in degree of series compensation on the optimal location of the shunt FACTS device to get the highest possible benefit is studied. It is found that the optimal location of the shunt FACTS device varies with the change in the level of series compensation to get the maximum benefit in terms of power transfer capability and stability of the system.

Key Words: Maximum receiving end power, shunt FACTS, degree of series compensation, transmission angle, optimal location

---

Turk. J. Elec. Eng. & Comp. Sci., **15**, (2007), 321-328.
Full text: pdf
Other articles published in the same issue: Turk. J. Elec. Eng. & Comp. Sci.,vol.15,iss.3.