Abstract

Reactive power is the latent soul of power system. Capacitor is a well-known reactive power resource and used for reactive power compensation in mainly transmission and distribution system. This paper presents the optimal placement of capacitor (OCP) as to nullify the effects of inductive loading in radial distribution system. For optimization technique Genetic Algorithm (GA) is used which is implemented in ETAP 7.0.0 Power Station software. Results such as voltage support, power losses and annual benefits are analyzed. Computational results show compensation of reactive power which in turn results in voltage support, minimize power losses and increases annual benefits. The method is easier and time saving.

References

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