

Investigation On The Effect Of Shunt Capacitor And Shunt Filter On Harmonic In Distribution System

Abstract

Nowadays nonlinear loads are widely used in many consumer equipment and power systems. The main problem in using of nonlinear loads is harmonic distortion. This paper will discuss the effect of application of shunt capacitor banks and shunt filter banks to reduce harmonic distortion in the power system, which will result in the increasing of the system efficiency .With installed of shunt capacitor banks and shunt filter banks, the voltage and harmonic distortion at each bus will be improved. This research was used MiPOWER software. The results will be shown in Total Harmonic Distortion (THD), Telephone Influence Factor (TIF) and voltages at each bus in the system.

Author Keywords

Bus voltage; Harmonic distortion; Shunt capacitor; Shunt filter