

ABSTRACT

The study of power system is of a greater importance in knowing the amount of power generated and consumed, together with means of transmitting the energy to consumer. Also one gets equipped with planning and running a system efficiently to satisfy customers. Tanzania power system is taken as a case study. The system is managed by utility company TANESCO, which is to meet all challenges to cater for deficiency of power.

TANESCO desires to satisfy and meet the user's demand, together with giving self-options on how to increase efficiency of the system. In Tanzania water is a dominant source of power and diesel for small amount. So we have hydroelectric and thermal diesel power plants.

But the desire of TANESCO is not achieved due to the deficiency of hydroelectric power which lead the power to cut-off. The causes of such insufficient are due to the drought, human activities which involves cutting downs of trees near the sources of hydroelectric power. Due to the above mentioned unavoidable causes there is a need to use additional power sources like solar power or generator by the using of AUTOMATIC CHANGE OVER SWITCH. This project report discusses methods of designing developing and installing of suitable AUTOMATIC CHANGE OVER SWITCH, which can be used solve the absence of power and make the small scale businessmen to at profit side.