

Concept of Automation in Management of Electric Power Systems

Authors : Richard Joseph, Nerey Mvungi

Abstract : An electric power system includes a generating, a transmission, a distribution and consumers subsystems. An electrical power network in Tanzania keeps growing larger by the day and become more complex so that, most utilities have long wished for real-time monitoring and remote control of electrical power system elements such as substations, intelligent devices, power lines, capacitor banks, feeder switches, fault analyzers and other physical facilities. In this paper, the concept of automation of management of power systems from generation level to end user levels was determined by using Power System Simulator for Engineering (PSS/E) version 30.3.2.

Keywords : automation, distribution subsystem, generating subsystem, PSS/E, TANESCO, transmission subsystem

Conference Title : ICSMPQ 2014 : International Conference on Smart Grids and Power Quality

Conference Location : Bangkok, Thailand

Conference Dates : December 18-19, 2014