

Lab Name : Power Systems

Room No: 230

EE Department (NBA Accredited)

A D Patel Institute of Technology

New Vidyanagar

Lab in-charge name : Dr. K.J. Chudasma and Prof. D. N. Tailor

www.adit.ac.in

Lab Area: 228.87 Sq.m

Lab Introduction:

In this lab, Power Systems related subject covers mainly basics of power system which includes study of different conventional and nonconventional power generation, distribution systems, electrical and mechanical design of transmission line. In this subject the students study the practical's on study of different power stations, transmission, distribution Systems and voltage distribution on string of insulators. Also they study the characteristics of Fuses and MCBs.

In this lab, students also perform practical based on performance of short and medium transmission line characteristics, relay characteristics and CT characteristics. Also students are given knowledge of MATLAB software programming and simulations for transmission line and faults.

In this lab the practical based on different type of protections like parallel feeder, radial feeder, generator differential, reverse power and transformer differential protection is carried out. All kind of relays are available in the laboratory like electromechanical, static and latest numerical relays. Also distance relay and CFB and ZFB test facility available under this laboratory. Students also gets knowledge of microprocessor- based relays and different types of switchgear. Department has all types of relay from electromechanical to latest microprocessor-based relays

Major Instruments available in lab:

Digital and Numerical relays, Static Relays, Electromechanical Relays, 3 Phase Distribution Transformers, DSO, MSO, 3-phase Synchronizing panel, 3 phase Generator..etc

Lab Photograph:



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