

Sarvajanik Education Society  
**Sarvajanik College of Engineering and Technology**



**SUTEX Faculty of Electrical Engineering**

**Organized**

**Two-Day National Workshop**

**On**

**“Power System Analysis using MiPower™”**

Dates: 8-9<sup>th</sup> September, 2017

Time: 09:00 A.M. to 05:00 P.M.

Venue: Seminar Hall, 1<sup>st</sup> Floor, Department of Electronics and Communication, SCET, Surat

Coordinator: Dr. Shabbir S. Bohra, Prof. Naman B. Bhatt

Participants: 59 participants (Utility Company, faculty members and students) from various engineering colleges across South Gujarat participated in the Workshop

Summary:

SUTEX Faculty of Electrical Engineering of Sarvajanik College of Engineering & Technology organized Two-Day National Workshop on “Power System Analysis using MiPower™” from 8-9<sup>th</sup> September, 2017. The prime objective of this workshop is to enhance the knowledge of the participants in the Power System Analysis through modern simulation techniques. It is an opportunity and platform for the academicians, researchers and committed engineers to actively learn solve problem and interact with the experts dealing with recent advances in power systems. The lecture and lab sessions of the workshop were conducted by eminent speakers from Power Research & Development Consultant Pvt. Ltd (PRDC), Bangalore.

Dr. Shekhar Kelapure started the session on “Power flow analysis and power transfer capability”. He signifies the study of Power flow and also made participant to learn the calculation of power flow with an example. He discussed Indian Power System, he explained transmission line (132kV and above): Installed capacity: 330 GW and Peak Demand. During the workshop, he introduced MiPower™ software. Explain how to use the software, and different tools of the software like Power flow, Short circuit, Stability analysis, replay coordination etc. being used to determine the power system analysis. Then he described how to design a problem of power system in MiPower™ software, all the participants designed the same problem and completed the simulation. Dr. Shekhar Kelapure talk about A load dispatch center (or more appropriately, an Energy Management Centre) which enables a system operator and supporting engineers to monitor a power system in real time and includes facilities to capture the current operating state of the system and instruct a

generating plant or any other controllable system components so that a system operates with good quality and security. He also explained about different state of power system. Contingency Analysis is one of the important tools for power system security assessment. He explains Contingency analysis tools in MiPower<sup>TM</sup> Software. He explained about Smart grid which is a form of electricity network utilizing information technology and the network allows two way communications between suppliers and consumers in order to save energy, reduce costs and increase reliability and transparency. Smart Grid is focusing on the integration of new and renewable energy resources fin to the grid.

I am sincerely thankful to respected principal madam, Dr. Vaishali Mungurwadi for permitting us to organize Workshop. I also thank Prof. (Dr.) Shabbir S. Bohra, HOD, Department of Electrical Engineering for providing support during the organization of the Workshop. Last but not the least, I thank all my staff members, lab assistants and attendants for their support and help during the Workshop.

### **Glimpses of the Workshop:**













