

Objectives of the Course

The competitive environment offers a good range of benefits for the customers as well as the private entities. This leads to the development of restructured electricity supply systems. With the restructuring of electricity markets and large scale integration of renewable generation, there arises a challenge for system operators and planners to maintain reliable and secure grid operations. Further, certain power regulations and electricity acts are established to maintain coordinated operations between different stakeholders to trade and use energy economically, and thus encourage conducive competition in electricity markets while protecting consumer interest and reliable electricity supply. This workshop will elucidate the emerging trends in restructured electricity markets and their pertinent dimensions.

Although distributed resources like storages, rooftop solar, electric vehicles are being increasingly deployed in distribution networks, still offer several different characteristics, benefits and challenges. This would urge the power system engineers to explore the impacts of distributed resources under large-scale renewable grid integration on the system operations. Further, renewable generation due to associated variability and uncertainty require appropriate forecasting and uncertainty characterization techniques for accurate generation dispatch decisions. Also, integration of high renewables at the grid and distribution side create network congestion issues. Thus, the inclusion of these areas in this workshop may provide a path for future research in the power system. Further, the workshop will serve as a forum for participants, to exchange information and experience with eminent personalities in the area of the electrical power system, to get acquainted with the current trends in the power system.

Course Contents

- ❖ Power Trading and Economics
- ❖ Power Regulations and Electricity Acts
- ❖ Operation of Deregulated Power System
- ❖ Power System Expansion Planning
- ❖ Risk Management and Uncertainty Characterization
- ❖ Congestion Management
- ❖ Renewable/Distributed Generation Integration
- ❖ Low Inertia Systems
- ❖ Large Scale EV/ Storage Integration
- ❖ Renewable and Load Forecasting
- ❖ Network Pricing

Resource Persons

The course content will be delivered from a pool of experts on the subject from IITs/NITs, industries and other institutes of reputation.

Target Audience

Undergraduate and postgraduate students, Research scholars, Faculty members and delegates from industry.

Important Dates

Last date for Registration	12/March/2021
Intimation of Confirmation	13/March/2021
Course Duration	14 th to 18 th March 2021

Communication

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Registration Process

The interested candidate should register by paying the eligible course fee and filling the google form at following link.

[Click Here for Registration](#)

Registration Fees (Inclusive of 18% GST)

The registration fee should be paid using digital mode to the following account. The payment receipt will be required to upload during the online registration.

Persons from Industries	Rs. 2360/-
Faculty of Academic Institutes	Rs. 590/-
Students / Research Scholars	Rs. 236/-

All the participants who attend the course will be awarded e-certificate of participation.

Bank Details

Bank Name: State Bank of India (SBI)
Account Name: The Registrar, MNIT Jaipur (TEQIP Phase-III)
Current Account No: 36875887782
IFSC Code: SBIN0015921
Branch: MNIT Campus, Jaipur.



About MNIT Jaipur

Malaviya National Institute of Technology Jaipur is one of the premier NITs, with the status of "Institute of National Importance" by MHRD. It was established in 1963, with campus spread over 325 acres of lush green area in the central location of Jaipur city. The institute offers undergraduate and postgraduate courses (B.Tech, M.Tech./ MBA/ M.Sc. & Ph.D.) to about 5000 students, in leading fields of engineering, technology, architecture, management & sciences. Through the internationally renowned faculty, laboratories with state-of-the-art equipment's and excellent infrastructure, the institute is actively engaged in research, consultancy and developmental activities, besides imparting regular teaching.

Electrical Engineering Department

It is one of the oldest departments of the institute, offering a fine blend of experience and innovation in teaching. Presently it is offering an undergraduate programme in Electrical Engineering and three postgraduate programmes in Power System Engineering, Power Electronics and Drives and Power System Management (PSM). PSM is one of its kind program established in 2018 for capacity building in areas of regulatory, markets, and managerial issues of evolving power sector. Presently the program has 50 registered students. The department provides a life-long learning experience, through its state of art laboratories, a vast pool of courses, and industry orientation. Having strong collaborative framework with reputed universities in India and abroad, the department offers ample opportunities for individual growth.

Centre for Energy and Environment

Centre for Energy and Environment (CEE) was established in 2012 to enable sustainable and cost effective innovations and develop facilities for multidisciplinary research in the areas of renewable energy and environment. It is a leading research centre of renewable energy systems in northwest India. Currently, with ongoing projects worth over INR 5 crores from multiple national and international funding agencies, it has collaborations across the world, including US, UK,

Germany, Austria and the like, providing ample international engagements.

Power Management Research Group

Power Management Research Group is a leading research group of India, working on all facets of evolving power system challenges, from technical, business, regulatory and policy perspectives. The research group is led by an active team of senior and experienced researchers. Supported by an enthusiastic team of PhD and MTech scholars working in varied fields of research in Power Systems Management, the team is equally supported by researchers from collaborating institutes and industry. This group is prominent faculty of M.Tech. (Power System Management) which evolves towards the development of smart management skills for Power System Engineers on all facets of evolving power system challenges, from technical, business, regulatory and policy perspectives. This group has organized several short term courses, seminars and expert lectures in the field of deregulated power systems, electricity markets, smart grid, artificial intelligence applications and data analytics. The organization of IEEE 8th International Conference of Power Systems (ICPS) goes to its credit. With a number of national and international research projects and collaborations with UK and US universities, this group has engaged with planners, policy makers, industry professionals, academicians and scholars, to provide wide variety of solutions to fulfil the society and industry needs.

Patron

Prof. Uday Kumar Yarangatti
Director, MNIT Jaipur

Convener

Prof. Rajive Tiwari Dr. Vivekanand Vivekanand
Head of Department, EED Head of Department, CEE

Course Coordinators

Dr. Prerna Jain Dr. Rohit Bhakar
Associate Professor, EED Associate Professor, EED

Dr. Satish Sharma Dr. Parul Mathuria
Assistant Professor, EED Assistant Professor, CEE

Malaviya National Institute of Technology Jaipur

Announces

TEQIP-III Sponsored Five Days
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On

“Restructured Electricity Supply
System: Operation and Planning”

during

14th – 18th March, 2021



Organized by:

Power Management Research Group
Department of Electrical Engineering and
Centre for Energy and Environment
Malaviya National Institute of Technology
Jaipur, Rajasthan-302017, India
www.mnit.ac.in