



**PMMNMTT
Scheme**



*A FIVE Day Workshop
on*

Effective Teaching and Learning of techniques for Monitoring, Protection and Control of Microgrids

18th- 22nd March 2020

Call for Registration and Participation

Coordinators

Dr. Chandrasekhar Yammani

Dr. Altaf Q H Badar

Dr. P. Srinivasan

Prof. M. Sailaja Kumari

(Member, Core Committee-TLC)

Organized by

Department of Electrical Engineering

in association with

Teaching-Learning Centre

National Institute of Technology

Warangal – 506 004

Telangana state, India



Background:

Development of Electrical Smart Grid involves numerous technologies, devices, and systems that will be deployed throughout the electric system to make the grid 'Smart'. Microgrids are essentially smaller versions of the larger electric grid and are designed to serve localized electric loads. Developments in Smart Grid Technologies have gained momentum in recent years. It brings various issues starting from Wide-Area monitoring, Control, Protection, Communication and Security for effective and reliable operation of the electrical power networks.

Objectives of the programme:

- To enable the participants to learn and conceptualize Smart grid and Microgrid technologies.
- To enhance the learning capabilities of the participants in Communication, Wide Area Measurement, Protection and Storage Technologies.
- To empower the participants with the latest knowledge on monitoring, protection and control techniques of microgrids.
- To enable the participants to learn new methods in teaching the subject, 'Techniques for Monitoring, Protection, and Control of Microgrids'.
- To enable the participants to learn new methods and practice and implement in Learning and Teaching.

Resource Persons:

Eminent faculty of the Electrical Engineering department and Faculty from IITs, other NITs & Industry who have the expertise in these areas will be delivering lectures as core faculty for the workshop.

Registration is open to:

- Faculty members working in Engineering Institutions.
- Research Scholars at senior level aspiring for faculty positions

Topics of the Programme:

- ✓ Microgrid Modeling and Control issues
- ✓ Phasor Measurement Unit (PMU) and Wide-Area Monitoring in Microgrid.
- ✓ Advanced Protection and Controls for hybrid AC-DC and DC microgrids.
- ✓ Coordinated protection and control in Smart-Microgrids.
- ✓ Artificial Intelligence and Big-Data in Smart Microgrid.
- ✓ Closed loop control of Drives used in Microgrid.
- ✓ Electric Vehicles and Charging Stations in Smart Grids.
- ✓ Learning Microgrid Monitoring, Protection and Control Techniques through hands on experience.
- ✓ Learning concepts of Microgrid through group activities.

How to Apply:

Eligible candidates may apply by submitting the scanned copy of the filled-in registration form (attached with this mail/ brochure) by Email to: chandrayammani@nitw.ac.in on or before 11th March 2020.

Selection and Intimation:

As the programme is conducted in a workshop mode with hands-on sessions, the number of participants in the workshop is limited to **40 (Forty)**. The selection will be on first-cum-first served basis among eligible applicants. The selected applicants will be informed about his/her selection through Email on or before **12th March 2020**.

Payment of Registration Fee:

After receiving the information about selection, the applicant has to send the required registration fees as per the details shown in Table on or before **16th March 2020**. The mode of payment of registration fee is given under the heading "Bank Details"

Confirmation of Participation:

On receipt of the proof of payment of registration fee in the form of scanned copy (Proof of remittance) with online payment transaction number, the applicants will be sent the confirmation of their participation through Email immediately.

Registration fee:

Category of Participants	Amount (With working lunch) *No accommodation will be provided
Faculty	Rs.600
Students and Research Scholars	Rs.300

Note: Registration fee for Faculty and Students of SC/ST category is **half** of the amounts mentioned above as applicable.

Bank Details:

Registration fee may be sent through On-line / NEFT to the Bank Account given below. Local participants may also pay the registration fee in cash to the Coordinator in the Department of Electrical Engineering.

Account Name	DIRECTOR RESEARCH NIT WARANGAL
Account Number	62266262236
Bank	State Bank of India
Branch	NIT Warangal Campus
Branch Code	20149
IFSC code	SBIN0020149

About Warangal:

Warangal is the second largest city of the new state of Telangana. It is situated at a distance of 140 km from the state capital Hyderabad (Nearest Airport). It is well connected by Rail (Kazipet Junction is two km away and Warangal Station is 12 km away) and by Road (NH 202). Warangal is renowned for its rich historical and cultural heritage. It was the seat of erstwhile Kakatiya dynasty. It is a seat of tourist attractions with a number of historical monuments like Thousand Pillars Temple, Warangal Fort, Bhadrakali Temple, Ramappa Temple and Lakanavaram Lake located in a radius of 30 kms.

Brief profile of the Department of Electrical Engineering:

The Department of Electrical Engineering was established as one of the major departments of NITW (RECW), in the year 1959. The Department is actively engaged in teaching and research in diverse fields of Electrical Engineering. It offers B.Tech in Electrical & Electronics Engineering, M.Tech program in Power Electronics & Drives, Power Systems and Smart Electric Grid (From AY 2010-21) and Ph.D program. Broad areas of expertise of the department include Design and development of Smart Grid/ Microgrid systems, Control and integration of Renewable Energy Sources, State Estimation and Real Time Control of Power Systems, AI Applications in Power Systems, Power System Deregulation, Power System Transients, Power Quality, Application of Power Electronics to Power Quality Improvement and Industrial Drives, DSP controlled Drives, Simulation of Power Electronic Converters and Drives Systems and Control of Special Machines. The Department has strong Industry interaction and is involved in various Research & Consultancy projects in coordination with industry, Governments of India, Telangana & Andhra Pradesh. The department has an MOU with Central Power Research Institute (CPRI) and PGCIL to carry out collaborative projects.

About NIT Warangal:

NIT Warangal, formerly known as Regional Engineering College was established in 1959. Over the years it has developed into a premier institute of higher learning and is ranked among the top technical education institutions in India. There are 14 Departments offering eight undergraduate and 31 post-graduate programmes besides doctoral programmes. About 5000 students across the country and about 500 international students study on the campus. It is a fully residential campus sprawling over 250 acres with excellent infrastructure in the form of state of the art Library, Seminar halls, Guest houses and Laboratories.

Teaching-Learning Centre of NIT Warangal:

The Teaching-Learning Centre (TLC) is established at NIT Warangal with grants from the MHRD, GOI under the scheme, 'Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching' (PMMMNTT). Many senior and young faculty members across various departments of the Institute are associated with this center as members of the Core-Team.

One of the important objectives of the TLC center is to conduct training programs for Aspiring, Newly Inducted and In-Service faculty in Science and Engineering disciplines. Other activities of the TLC include preparation of e-learning materials, offering courses on-line, curriculum development, carrying out research in pedagogy and integrating ICT into teaching-learning process.

For any queries regarding this workshop, please contact the Coordinators.

Dr. Chandrasekhar Yammani,
Assistant Professor,
Department of Electrical Engineering,
National Institute of Technology, Warangal
TELANGANA-506004
Email: chandrayammani@gmail.com,
chandrayammani@nitw.ac.in
Ph.No.: +91-870-2462245, 8332969290

Prof. A. Ramachandraiah
Coordinator, Teaching Learning Centre (TLC)
NIT Warangal, Warangal -506004,
Telangana State, India.
Phone: 0870-2462686(O)
Mobile: 8332969704
Email: mtlc.nitw@nitw.ac.in

