



# A TWO-DAY FACULTY DEVELOPMENT PROGRAMME

ON

## SMART GRID TECHNOLOGIES

16- 17 February 2018

*Coordinators*

*Dr. Seethalekshmi K.*

*Dr. Arunima Verma*

*ORGANIZED BY*

*Department of Electrical Engineering,  
Institute of Engineering & Technology,*

*Lucknow*

*Under World Bank Project TEQIP III*

### **Background**

Smart grid concept facilitates a two-way communication between source and the consumer end. It is defined as an electricity network that uses information and communication technology to gather information and act intelligently in an automated manner to improve efficiency, reliability, economics, and sustainability of generation, transmission and distribution of electricity. The major characteristics of the smart grid is its self-healing property, optimization of assets, resist attack, quality power and accommodation of all generation resources and inclusion of consumers. A special emphasis is shown in all the countries to promote smart grid for better control and coordination of the grid and in integrating various renewable sources to grid.

### **Objectives of the Programme**

Smart Grid will act as a backbone infrastructure to enable new business models like smart city, electric vehicles, smart communities apart from more resilient and efficient energy system and tariff structures. The programme envisages to provide the basic understanding of the smart grid concepts along with an exposure to the application developments in the field of power system to address the specific needs of a smart grid. In general, the programme will address the following issues:

- Introduction to smart grid and micro grid technologies
- Basic building blocks of the smart grid
- Importance and recent challenges in smart grid technologies
- Wide area measurement, protection and storage technologies
- Self-healing applications of smart grid
- Challenges and Opportunities in Smart Grid Technologies in India

### **Brief profile of the Department of Electrical Engineering, IET Lucknow**

The Department of Electrical Engineering was established as one of the major departments of Institute of Engineering & Technology (IET) in the year 1984. The Department is actively engaged in teaching and research in diverse fields of Electrical Engineering. It offers BTech in Electrical Engineering, MTech program in Power Electric Drives & Control and Ph.D. program. Broad areas of expertise of the department include AI based Design and control of drives, Control and integration of Renewable Energy Sources, Wide Area Measurement and Protection and Power System Deregulation. The Department is involved in various research projects.

## About World Bank Project TEQIP-III

The third phase of the project, TEQIP-III is a four-year Central Sector Scheme (CSS) of MHRD, Govt. of India, started in the year 2017 and will end in 2021. TEQIP-III is fully integrated with the 12th Five-year Plan objectives for Technical Education as a key component for improving the quality of Engineering Education in existing institutions with a special consideration for Low Income States and Special Category States and support to strengthen few affiliated technical universities to improve their policy, academic and management practices.

### Registration is open to

- Faculty members working with academic institutions
- Research scholars pursuing their research in the field of power and control

### How to Apply:

Interested may apply by submitting the scanned copy of the filled-in registration form attached with this mail/ brochure) by e-mail to: [fdpee2018@gmail.com](mailto:fdpee2018@gmail.com) on or before 14th February 2018.

### Accommodation:

Accommodation for outstation participants can be arranged in hostel/ guest house on

payment basis. Request to be put up in advance.

Patron

Prof. H. K. Paliwal, Director, IET

Convenor

Prof. Bharti Dwivedi, EED

Prof. Kuldeep Sahay, Head EED

Organizing Committee

Dr. Satyendra Singh, In charge Finance

Dr. Pushkar Tripathi, Logistics Support

Dr. Nitin A. Srivastava, Logistics Support

Dr Sachin Singh, In charge Publication

## **A TWO-DAY FDP ON SMART GRID TECHNOLOGIES**

**16- 17 February 2018**

**Organized by**

**Department of Electrical Engineering, IET**

**Lucknow**

**in association with World Bank Project  
TEQIP III**

### **REGISTRATION FORM**

Name :

Date of Birth :

Gender :

Qualification :

Designation :

Organization :

Teaching Experience (Years)

Address for Correspondence:

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Mobile(s):

Email(s)

Accommodation (Put a  $\sqrt$  Mark): Required  
Not Required

Declaration by the Applicant

If selected, I agree to abide by the rules and regulations of the FDP shall attend all the sessions.

Date: Applicant's Signature

Recommended and Forwarded

Signature of the Head of the Department/  
Institution  
Office Seal