



Engineering Staff College of India

Autonomous Organ of The Institution of Engineers (India)

Old Bombay Road, Gachi Bowli, Hyderabad – 500 032. TS, India



POWER & ENERGY DIVISION



Continuing Professional Development Programme on Smart Grid, Smart Meter in Power Sector

24 – 27 October, 2017



(An ISO 9001:2008 Certified, AICTE & CEA Recognized Institution)

Centre for Promotion of Professional Excellence

INTRODUCTION

For a hundred years, there has been no change in the basic structure of the electric power. Experiences have shown that the hierarchical, centrally–controlled grid of the twentieth century is ill-suited to the needs of the twenty first century. To address the challenges of the existing power grid, the new concept of smart grid has emerged. The smart grid can be considered as a modern electric power grid infrastructure for enhanced efficiency and reliability through automated control, high power converters, modern communications infrastructure, sensing and metering technologies and modern energy management techniques based on the optimization of demand, energy and network availability and so on.

While current power systems are based on a solid information and communication infrastructure, the new smart grid needs a different and much more complex ones, as its dimension is much larger.

OBJECTIVE

By the end of this training, attendees will be able to:

- Understand what smart grid is and its benefits
- Advance your knowledge about smart grid concepts and technologies
- Learn about smart grid technology, business and operations of energy generation
- Learn about smart grid architecture and implementation
- Understand how advanced technologies should be integrated to enable a modern grid
- Understand how renewables can be integrated more seamlessly using smart grid technologies
- Learn about smart grid of the future

COURSE COVERAGE

- Basics on Smart grid and Architecture
- Smart Grids, Smart Meters and Performance Requirements
- Smart Grid & Communication Requirement
- Energy Storage and Electric Vehicles
- WAMS Logistics and Synchro Phasor Technology
- An overview of WAMS Applications
- Advanced Applications-DLR, Model Validation, EWS Etc
- Advanced Applications-State Estimation
- Disturbance Analysis with Synchro-phasor Data
- Project Applications

METHODOLOGY

The programme will be conducted in an interactive environment providing greater scope for discussions. Emphasis will be on a highly participative style of learning. The classrooms are provided with latest audio – visual teaching aids. The ambience in the campus and classrooms facilitate an effective learning by participants.

FACULTY

Apart from Core Internal Faculty, Consulting Firms, Government Organisations, Academic and Research Institutions etc. will share the sessions.

TARGET PARTICIPANTS

Smart Grid training is created for energy industry including utilities, government, environment and other stakeholders. Smart Grid training course is designed for engineers, managers, executives and other professionals who need to get a good understanding on what the smart grid is, how technologies would alter and modify the current grid, and what the smart grid of the future would look like.

PROGRAMME VENUE, DATES & TIMINGS

Engineering Staff College of India (ESCI) Campus, Old Bombay Road, Gachi Bowli, Hyderabad - 500032, Telangana, India.

DATES

24 – 27 October, 2017

TIMINGS

On the first day registration will commence at 0900 Hrs. On all other days the programme timings will be from 0945 to 1715 hrs with breaks in between for tea and lunch.

COURSE DIRECTOR

A Chandra Mohana Rao

Head I/c & Senior Faculty - Power & Energy Division, ESCI

COURSE FEE

Residential Fee is Rs.20,000/- (Residential) per participant. Fee includes Course Material, Course Kit, and Twin-sharing / Single AC accommodation as per availability, Breakfast, Lunch, Dinner, Tea / Coffee and Snacks.

DISCOUNTS

Non-Residential Fee: 10% discount on course fee is allowed for non-residential participants.

Group Discount: 10% discount for three or more participants if sponsored by the same organization.

(All discounts are applicable only if fee is received at ESCI a week before the commencement of the programme)

GST @18% (as applicable) is to be paid extra over and above the training fee. **ESCI's Provisional ID No. 36AAATT3439Q1ZV, PAN Card No. AAATT3439Q.**

The course fee is to be paid in favour of **“IE (I) – ENGINEERING STAFF COLLEGE OF INDIA”** in the form of demand draft payable at Hyderabad.

Alternatively the payment may be made by **Electronic Fund Transfer (EFT) to ESCI – SB A/c No. 10007111201** with The SBI, PBB Rajbhavan Road Branch, Khairatabad, Hyderabad – 500 004 by **NEFT / RTGS / IFSC Code No: SBIN 0004159 – MICR No: 500002075.** While using EFT method of payment, please

ensure to communicate us your company name, ESCI invoice reference and programme title.

Online registration is available on ESCI website. To register, manually please send your nominations (**10 days** prior to date of commencement of the programme) giving details of name, designation, contact address, email address, mobile number, telephone and fax number of the participant along with the details of mode of payment of fee, addressed to:

Head, Power & Energy Division

Engineering Staff College of India

Gachi Bowli, Hyderabad – 500 032

Phone 040–66304170 - 4177, Fax: 040 – 23000336, 66304103

Email:pe.esci@gmail.com / pe@escihyd.org; Website: www.escihyd.org

CERTIFICATE: A certificate of participation will be awarded to each participant on conclusion of the programme.

GENERAL INSTRUCTIONS

- ESCI encourages participants to present case studies from their respective organizations.
- For the convenience of the outstation participants ESCI will facilitate pickup and drop from Airport / Railway Station / Bus Stations, if travel plans are received at least 3 days in advance along with mobile number by fax or email. The charges shall be paid by the participants directly to the cab driver.
- ESCI provides complimentary accommodation to participants a day prior to the commencement and after the conclusion of the programme. (Check in at 12:00 hrs a day prior to the commencement & check out at 12:00 hrs a day after completion of the programme)
- Overstay charges of @ Rs.990/- per day / per head including hospitality (Bed Tea / Coffee to Dinner) will be charged.
- Well developed Information Centre and Internet facilities are available to the participants free of cost.