



# Engineering Staff College of India

Autonomous Organ of The Institution of Engineers (India)

Old Bombay Road, Gachi Bowli, Hyderabad – 500032. TS, India



## POWER & ENERGY DIVISION

*Classroom Continuing Professional Development Programme on*

## Smart Grid & Smart Metering Technologies & Applications

**05 – 08 December, 2023**

at ESCI, Hyderabad



(An IMS Certified (ISO 9001:2015 QMS, ISO 14000:2015 Env'tl. Mgmt., ISO 45001:2018 (OH&SM), ISO 50001:2018 EnM), AICTE & CEA Recognized Institution)

**Centre for Promotion of Professional Excellence**

## **INTRODUCTION**

The present Electrical Power System has expanded from time to time. Electronic / Intelligent components, Automation in the form of SCADA, IT for Metering, Billing & Collections, Remote meter reading were introduced to improve operational easiness, better performance etc as well as to manage the growing consumer base. However, the power sector is unable to meet the growing demand. The SMART GRID is expected to help in better management of power system operations with the participation of all stakeholders.

The Smart Grid aims to modernize the conventional grid, which is aging, unreliable and silent to all forms of disturbances. The Smart Grid concept offers several advantages viz., (I) Self-healing and adaptive. (II) Distributed Generation (III) Interactive with consumers (IV) Optimized to make best use of resources and equipment (V) “predictive rather than reactive” in functioning.

## **OBJECTIVE**

The objective of this course is to provide deep insight in to the concept of Smart Grids and Smart Meters. Modernizing today’s grid to smart grid, gain the advantages of Smart Meters and to provide quality, reliable power supply to consumers of all categories.

## **COURSE COVERAGE**

- Present Power Generation Scenario In India
- Introduction & basics of Smart Grids and its Architecture.
- Smart Meters – Key Components & their functions, Data exchange, Role of AMI in reducing AT&C losses
- Performance Requirement and Reliability of Smart Meters
- Benefits of AMI Systems – Operational, Financial, Customer, Security & Service Level Agreements Over view
- Latest Trends and Recent Developments in Smart Meters & Smart Grids, Technologies – Issues & Challenges.
- AMI & MDMS
- DLMS and Inter-Operability Standards
- Smart Grids & Smart Meters Communication
- Cyber Security
- Field Visit

## **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 in effective learning by participants.

## **FACULTY**

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

## **TARGET PARTICIPANTS**

Power Engineers and Managers from Power Utilities both Private and Public, Organizations connected with Transmission and Distribution.

## **PROGRAMME VENUE**

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

## **DATES**

05 – 08 December, 2023

## **TIMINGS**

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

## **ACCOMMODATION**

Participants will be accommodated in our Executive Hostel located within ESCI Campus. The accommodation will be on twin sharing basis.

## **COURSE DIRECTOR**

Er. Vidya Sagar Ubba, FIE  
Head & Sr. Faculty - Power & Energy Division, ESCI  
(Mob: 8179559990)

## **COURSE FEE**

**Residential Fee** is Rs.22,000/- per participant. Residential 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.  
**GST 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 – Current A/c No. 33705165550** with The SBI, Manikonda Branch, Gachi

Bowli, Hyderabad – 500 032 by **NEFT / RTGS / IFSC Code No: SBIN0011076 – MICR No: 500002107**. 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: 040–6630 4170 to 4176 ; 040-6630 4173 / 4176, 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 INFORMATION**

- 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 following day 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 Food (Bed Tea / Coffee to Dinner) will be charged extra as per actuals.
- Well developed Information Centre and Internet facilities are available to the participants at no cost.