



# 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* **High Voltage Testing of Power Equipments**

08 – 11 January, 2019



(An ISO 9001:2015 Certified, AICTE & CEA Recognized Institution)

**Centre for Promotion of Professional Excellence**

## **INTRODUCTION**

In modern times, high voltages are used for a wide variety of applications covering the power system and research laboratories. Such applications have become essential to sustain modern civilization. For transmission of large bulk of power over long distances, high voltages are indispensable. For achieving reliability and economy, knowledge of the causes of deterioration is essential and testing of equipment proves the standards followed and maintained throughout the life cycle.

In recent times the expansion of power system has been very rapid leading to complex systems with associated problems. Use of modern technology and sophisticated equipment added its own dimension to the specialized nature of the work.

The Testing and Commissioning engineers in different power utilities are following different procedures, whose performance lies to a major extent the performance of the power utilities themselves. The field engineers are generally bogged with commercial activities and this necessitated the specialized group to take care of "HV Testing and Commissioning".

There was need to conduct a training programme for the benefit of all power engineers so that they can gear up to take up works of this nature without any difference. Accordingly, ESCI brought out the "**High Voltage Testing of Power Equipments**" Training Programme.

## **OBJECTIVE**

When all manufacturing process have been completed and also maintenance activities are completed, tests are performed on equipment to ensure the following objectives are met:

- To prove that the equipment meets the design standards at site
- To check the quality requirements have been met and that performance is within the tolerances guaranteed.
- Qualified and skilled engineers are available for improving the performance of equipment and reduce outages.

## **COURSE COVERAGE**

- DC Resistance and PI
- Tan Delta Testing
- Partial Discharges
- Liquid Insulation Testing
- Impulse and Switching Surges Especially Transformers
- Impulse Current Testing
- The Above Tests Applied on:
  - Power Transformers/ Bushings and Insulators/ Surge Arresters/ Cables/ Generators/CBs
- 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 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**

Engineers from Power Utilities, Substations, Contractors, Manufacturing Industries and Consultancy Firms. Faculty from Engineering Colleges and Research scholars also suitable.

### **PROGRAMME VENUE, DATES & TIMINGS**

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

### **DATES**

**08 – 11 January, 2019**

### **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 & Sr. Faculty - Power & Energy Division, ESCI

### **RESOURCE PERSON**

**S Rangarajan**

Former DGM/BHEL

### **COURSE FEE**

**Residential Fee** is Rs.20,000/- (Residential) 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. 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. 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 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.