



Engineering Staff College of India  
Autonomous Organ of The Institution of Engineers (India)

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

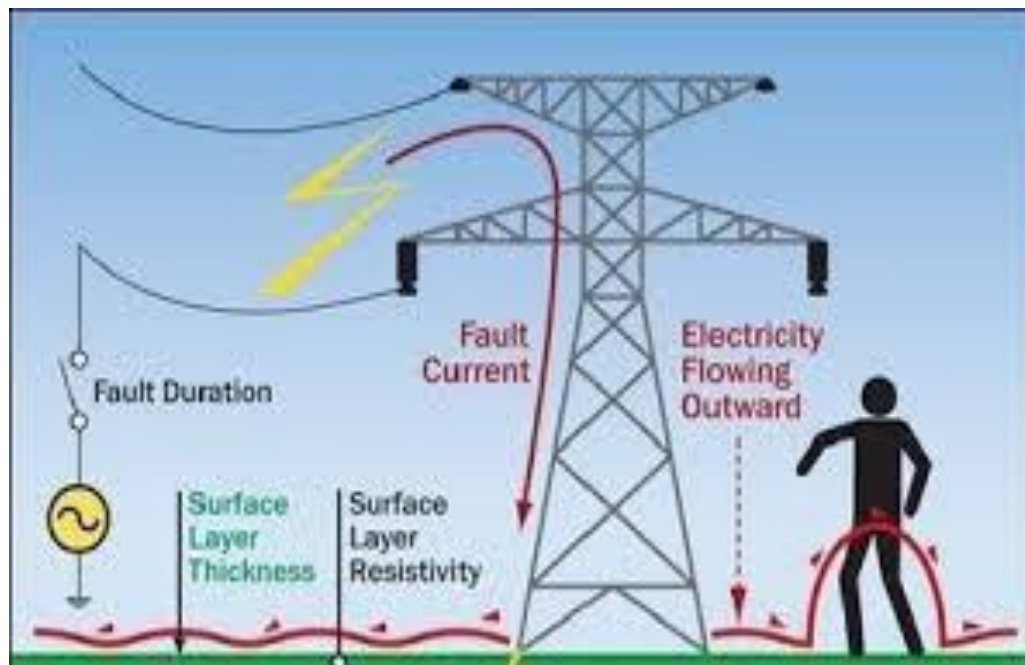


## POWER & ENERGY DIVISION

*Continuing Professional Development Programme on*

# Power System Grounding and System Stability

22 – 24 January, 2018



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

**Centre for Promotion of Professional Excellence**

## **INTRODUCTION**

It is pertinent to mention that earthing plays an important role in proper operation of generation, transmission and distribution systems. The functions of earthing in an electric power system is to maintain the potential of current carrying as well as non-current carrying parts of equipment, apparatus and appliances connected to the system, and ensure safety of equipment and personnel and correct operation of protective devices during earth faults.

Earthing also provides safety during lightning strikes on equipments or structures and on occurrence of induced voltage and current on electric equipments of an electric system. More over proper earthing system provides easy and shortest path to the flow of earth fault current without adversely affecting the continuity of service.

## **OBJECTIVE**

At the end of training an engineer can measure the soil resistivity, earth resistance, selection earth conductor and designing earth mat for HV substation. He can also calculate fault currents and also various methods of earthing of generator, transformer, transmission towers and motors.

## **COURSE COVERAGE**

- Introduction to Power System Earthing
- Soil Resistivity & Earth Resistance Measurements
  - a) Theoretical Considerations
  - b) Field Measurements and Interpretation
- Design Considerations for Substation Earthing
- Earthing of Generators / Transformers / Towers / Distribution
- Checks for Adequacy of Existing Earthing Systems for Safety
- CEA Regulations 2010 in Earthing
- Earthing Practices specific for Sensitive Electronic Equipments
- Protection from Lightning
- Case Studies

## **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**

Engineers working in Operation, Maintenance and Projects Wings of Power Utilities, Generation, Transmission, Distribution, Design of Substations, Research Personnel etc.

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

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

## **DATES**

**22 – 24 January, 2018**

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

## **Resource Person**

**H Jayakumar**

Retd. Jt. Director (CPRI)

## **COURSE FEE**

**Residential Fee** is Rs.15,000/- 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. 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 – 6630 4170 to 4177; 040-6630 4100, 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.