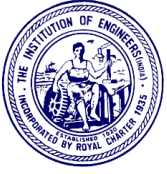




# Engineering Staff College of India

Autonomous Organ of The Institution of Engineers (India)

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



## POWER & ENERGY DIVISION

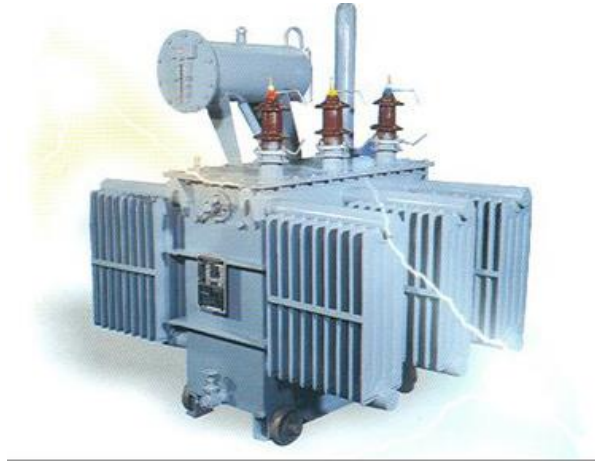
*Classroom Continuing Professional Development Programme on*

### **Distribution Transformers - O&M achieving**

### **Zero Breakdown**

### **16 - 19 April, 2024**

### **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 high rate of failure of transformers in electric utilities may perhaps be described as one of the tragedies of the power sector in developing countries like India. Failure of these simple, static, silent and efficient pieces of electrical equipment in such large numbers cause great loss to the electric utilities both in terms of money and reputation.

A large number of manufacturing units have come up in the country without adequate design and testing capabilities. Maintenance practices followed in the organizations also need improvement.

Severe and unhealthy competition among manufacturers, coupled with the anxiety of the Power Utilities to hold the price line had led to lowering of quality in design and manufacture. In advanced countries the price line remains at reasonable level and quality is very good because of the continuous improvements made in design, materials and manufacturing techniques.

The rapid expansion of power systems both in urban and rural areas coupled with the quality of transformers has been imposing a great burden on the operation and maintenance wings of power utilities.

Operation of the transformer as per the standard parameters and maintenance of the transformer as per the scheduled timings and proceedings will give the transformer its full life leading to zero breakdown.

## OBJECTIVE

Today there is an urgent need for concerted efforts on the part of users, especially the Power utilities and Transformer Manufacturers and also those connected with standardization and quality control for furtherance of technology and improvement of the quality and reliability of transformers.

It is in this context that ESCI considered it befitting to conduct a course on **“Distribution Transformers – O&M achieving Zero Breakdown”** with a view to providing a forum for exchange of information and sharing of experiences & expertise among those involved in design, manufacturing, installation, operation and maintenance of and Distribution Transformers. Such interaction should pave the way for speedy introduction of cost effective and resource efficient technologies, which will help to reduce the rate of failure of Distribution Transformers and reduction of energy losses leading to zero breakdown

## COURSE COVERAGE

- Concept of Zero Breakdown
- DTRs – Design Considerations
- Technological Developments in Transformers
- Operation of Distribution Transformers- Load Balancing among among Phases in lines
- Transformer Oil – Characteristics
- Salient features of Solid and Liquid insulation
- Testing and Maintenance – DTRs
- Analysis of Failure of Transformers through Case Studies
- Quality in Manufacturing of Distribution Transformers
- Earthing Practices in Transformers
- Condition Monitoring of DTRs
- Field Visits

## **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, Domain Experts from various Power Utilities shall share their experience, besides, eminent engineers and specialists from manufacturing industries, R&D institutes, Consulting Firms and Academia.

## **TARGET PARTICIPANTS**

Senior officers of Power Utilities / Corporations / State Govt. Organisations, Power Distribution Companies / Academic Institutions, Construction Companies etc.

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

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

## **DATES**

**16 – 19 April, 2024**

## **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.

## **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 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, (Food will be charged extra).
- Well developed Information Centre and Internet facilities are available to the participants free of cost.