

# **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

Gas Insulated Substations - Design features, Construction, Testing, Operation and Maintenance with Latest Techniques

10 - 13 October, 2023

at ESCI, Hyderabad





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

**Centre for Promotion of Professional Excellence** 

# INTRODUCTION

With growing urbanization and expansion of cities, there is a rapid and concentrated load growth in cities especially in the crowded commercial centers with high raise buildings. Paucity of space is the main constraint to construct conventional substations. On the contrary, Gas Insulated Substations are the ideal option.as they need very less space compared to conventional substations. To cater these urban loads even the basements of the buildings can be planned to build new GIS substations, With the development of SF6 Gas insulated Switchgear, we are now able to build compact Substations and the concerned engineers should have and complete exposure of the O&M of GIS. Substation for reliable Power Supply.

## OBJECTIVE

The objective of the programme is to provide an insight on selection of GIS switch gear and familiarize the participants with the various intricacies related to equipments, construction, operation, maintenance and safety aspects of the GIS Substations.

# COURSE COVERAGE

- Introduction to GIS (Gas Insulated Substation) and GIS Concepts
- Design Features and Components of GIS
- Installation and Commissioning activities of GIS and Case Studies
- Evaluation of Standards, Type Testing and Site Testing Methods
- Operation and Maintenance of GIS
- Condition Monitoring of GIS with Latest Techniques
- Very fast Transient over Voltage Phenomena (VFTO) in GIS
- SF6 Gas Insulated Switchgear
- Gas Handling Procedures, Earthing aspects in GIS and Safety Issues.
- Visit of 400/220/132 kv GIS Substation

## 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 Organizations, Manufacturing, Academic and Research Institutions etc. will share the sessions.

## TARGET PARTICIPANTS

Power Engineers and Managers from Power Utilities both Private and Public, Generation and Transmission Corporations, Organizations connected with Planning, Research and Development and all Distribution Companies.

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

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

## DATES

#### 10 – 13 October, 2023

#### 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. ESCI's 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.