

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

Power System Protection - Principles, Protection Relays and Fault Analysis

10 – 13 September, 2024 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 Recognized Institution)

INTRODUCTION

Protection devices play vibrant role for safe operation of the power systems under all operating conditions, isolating faulty device from healthy network.

Power system protection and control technologies have come a long way since the days of Electro-mechanical and static relay systems to the current state-of-the-art micro-processor-based relaying units. With the development of regional grids and inter-regional ties, paving the way for ultimately establishing a national grid. Considerable attention needs to be given to the coordinated protection of power systems through pragmatic control schemes. Line protection, Bus protection and Equipment protection comprise of vital issues in ensuring the reliability of system operation. Generator and Motor protections are equally important for power generating units.

Utilities are facing increasing demands for power system availability and reliability. Digital substations open the doors for efficient construction, operation, maintenance and refurbishment of substations.

OBJECTIVE

The objective is to disseminate knowledge on state-of-the-art technologies for protection of power plants, transmission lines, selection and advantages of numerical relays for different applications, by experts working in this field.

COURSE COVERAGE

- Fundamentals of Relays, Instrument Transformers CT, PT &CVT and their Coordination
- Fault Analysis and Earthing of Substations :
 - Basic & Adavanced Transformer Protection
 - Distance Protection for Transmission Lines
- Protection Control of Modern Power Systems
- Carrier Aided Scheme Options Single shot High speed Auto re-closure
- ❖ Bus Bar Protection, Local Bus Bar Back-up (LBB), Protection
- Generator and Motor Protection
- Integrated wide area / regional Protection & Control
- Best Practices in Power System Protections
- Latest Techniques in Power System Protections
- 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, Domain Experts from various segments of Power sector/ Process industries. will share their experience, besides, faculty from Consulting Firms, Government Organisations, Manufacturing, Academic and Research Institutions etc.

TARGET PARTICIPANTS

Engineers and Specialists / Planners from Power Utilities including Hydro Power Generation, Manufacturing Industries, Academia, Consultancy organizations, R&D Institutions and other Experienced Professionals in Protective Relaying.

PROGRAMME VENUE

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

DATES

10 - 13 September, 2024

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 favor 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 participants shall pay the charges 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.