



Centre for Industrial Solutions and Advanced Training

TRAINING PROGRAM ON SUBSTATION ENGINEERING, HV/MV TESTING OF ELECTRICAL EQUIPMENT'S, COMMISSIONING, OPERATION, MAINTENANCE & CBM (765KV/400KV/220/132/66KV)

23-26 March 2026 at Nagpur, Maharashtra, India





4/5 Days Training Program on

TRAINING PROGRAM ON SUBSTATION ENGINEERING, HV/MV TESTING OF ELECTRICAL EQUIPMENT'S, COMMISSIONING, OPERATION, MAINTENANCE & CBM (765KV/400KV/220/132/66KV)

Applicable International standards (IEC, IEEE, IS) & specifications only for Electrical Engineers **23-26 March 2026 at Nagpur.**

Who should attend:

Electrical practicing Engineer/ Manager / Substation Supervisor, Application Engineer, Design Engineer, Maintenance Engineer.

Prerequisite: Basic knowledge of Electrical Engineering and substation.

Objective:

- To understand all related to Electrical Equipment' s Operation, Maintenance, Testing and CBM.
- Understand the details of Protection of Power system.
- Relay protection setting and understanding.

Expected Course Content & Delivery Schedule:

Day	Sr no	Contents
1	1	Introduction to substation & Overview
	2	Design Criteria understanding and Consideration for 765/400/220 KV substation
	3	Parameter Calculation regarding substation.
	4	Selection of Equipment' s.
	5	Position, Layout and SLD of substation.
	6	Sectional Views, Clearances, BUS arrangement and Applicable standards
	7	AIS & GIS Substation- Introduction
	8	Earth Mat design concepts.
2	1	Transformer and Switchgear: O&M, CBM
	2	Introduction to switchgear- Design & Selection (CT, PT, CVT, Isolator)
	3	Reactor, LA, Insulation Coordination
	4	Battery and Battery Charger
	5	Control room requirement



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(Technical- Electrical/Mechanical/Automation/Chemical, Behavioral & Soft Skill, Safety, Business Excellence, Safety & Energy Audit)

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	6	Bay Control room concepts
	7	DG sets
3	1	Site Testing, Pre commissioning Testing of SS equipment' s
	2	Commissioning of Substation
	3	Overview of Protection (Line, transformer, LBB, Reactor & BUS)
	4	Control and Relay panels, Relay setting & coordination
	5	SCADA for substation
	6	Communication (Data, OPGW)
	7	Multiplexer/PLCC
	8	Q&A, Case studies
4	1	Hand ON for possible Electrical Equipments
	2	Testing of Electrical Equipments on Transformer
	3	Relay testing
	4	HV Testing, Tan delta Testing
	5	Few More..
	8	Valedictory

5. 5th Day is to made available as per requirement to cover some additional topics.

Delivery Methodology:

- Introduction and Objective Setting
- Pre and Post Test,
- Knowledge Presentations,
- Assignments & Exercise,
- Case Study,
- Feedback and Assessment

About CISAT:

Centre For Industrial Solution and Advanced Training is an ISO 9001:2015 certified Training and other Industrial services Provider Company across globe managed by professionals with rich Industry and professional training experience. Company involves in professional trainings and been providing training on various topics of Industry interest through various experts associated. More details are available on www.cisat.co.in.



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Ø Complete HR/Training Services (Technical/Behaviour/Quality/Business Excellence/Leadership Development).

Ø Software Development & Complete HR Automation System (HrAutoSoft).

Ø Technical Due Diligence, Feasibility & Advisory Services for plant.

Ø All Safety and Environmental study services and Energy Audit.

Ø Arc Flash Hazard & Power Protection Study (Relay setting and Coordination).

Ø Vibration Analysis and related Services.

Ø Control Panel Design and Supply, Automation Projects (Supply and project implementation).

Ø Specialized Product Supply- Incinerator for waste treatment.

Registration Details:

Dates of the program: (4/5 Days). **Timing:** Till 10:00 AM to 5:00 PM.

Non-residential Participation Fees: INR 40000/delegate (plus GST@18%; Training program includes training material, Tea, Lunch & snack)

Venue: KEC International Training Centre, Butibori, Nagpur.

Payment: ECS/NEFT/DD in favor of “Centre for Industrial Solutions and Advanced Training”. Account No: 9220 200 3610 6986 Bank: Axis Bank, Katol Road, Friends Colony, Nagpur-440013, MS, India; IFSC Code: UTIB0002911; MICR Code 440211015, GSTN: 27ABBPW5589J1ZV. PAN No: ABBPW5589J SAC Code 99-9293; State Code 27.

Experts: Shri. S. Sardey, Vikas Wadnerkar, Shri A Patil- Everyone will do appreciate the delivery and knowledge, both experts have. Having more than 25+ Yrs Industrial work experience, worked on actual system, In depth Knowledge, Explains each and all concepts and products. Hands On will add a value in knowledge and experience.

With Best Regards and Thanks,

Mrs. Rupali

Director Business Development

Centre For Industrial Solutions and Advanced Training (An ISO 9001:2015 Certified)

“A Complete HR Solution (Outsourcing) under One roof”

(HR Services, Behaviour Analysis/Training- Technical- Electrical/Mechanical/Automation/Chemical, Behavioral, Soft Skill, Safety, Out Bound, Business Excellence, Safety Audit, Energy Audit, Skill Gap Analysis/Automation Solution/Sales & Service; PLC/Drives, Productivity and Time and Motion Study, Improvement Projects, TPM, 5S and Six Sigma Implementation, Technicians Training)



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Note:

- ❖ Training shall be conducted only if minimum 8 participants are there. Hence confirmation can be provided before 10 days of training dates only if nominations are confirmed.

