



Centre for Industrial Solutions and Advanced Training

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

6-9 July 2026 at Nagpur, Maharashtra, India





**4 Days Training Program on
HV/MV TESTING OF ELECTRICAL (SUBSTATION) EQUIPMENT'S,
COMMISSIONING, OPERATION, MAINTENANCE & CBM
(765KV/400KV/220/132/66KV)
during 6-9 July 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 Substation Electrical Equipment's Testing, Operation, Maintenance and CBM.
- Understand the details of Protection of Power system.
- Equipment Rating, Selection and Testing.

Focused Aim:

- ⊙ Electrical equipment testing (S/S) & operations.
- ⊙ Control wiring connections and scheme testing.
- ⊙ Meters Testing & Relay Calibration methods.
- ⊙ Rating and selection of substation equipment's.
- ⊙ Equipment's identification in SS.
- ⊙ Pre and post commissioning testing of Electrical Equipment's.
- ⊙ Numerical and other relay testing.
- ⊙ Substation Power Protection System.
- ⊙ Issue of Power Quality to be discussed.



Course Contents & Delivery Schedule:

<p style="text-align: center;">Design of SS</p> <ul style="list-style-type: none">• Introduction to substation & Overview for 765/400/220 KV substation• Parameters related to SS• Selection of substation Equipments- CT/PT/LA/CB/CP/Isolator• Position, Layout and SLD Sectional Views, Clearances, BUS arrangement and Applicable standards AIS & GIS Substation.• Earth Mat design concepts.• Introduction to switchgear- Rating & Selection.• Testing and commissioning activities, O&M- Overview Discussion; Q&A; Review of Days take away	<p style="text-align: center;">Transformer</p> <ul style="list-style-type: none">• Transformer: Testing and Commissioning• Transformer, CB, CT & PT, Name Plate reading & connections• Function of all parts of Power Transformer: Overview• Measuring Devices; Vector groups & Connections (Star & Delta)• % Impedance; Efficiency; Acceptance & Commissioning Test• Overview of Basics of Protection (Line, transformer, LBB, Reactor)• Discussion, Q&A
<p style="text-align: center;">Hands ON</p> <ul style="list-style-type: none">• Testing of Transformer• Testing on Relay.• IR Test• Earth Test• Substation Visit to Understand all.	<p style="text-align: center;">SS Equipments</p> <ul style="list-style-type: none">• Testing: Site & Pre commissioning Testing of SS equipment's• Commissioning of Substation; Procedure and discussion; Wiring connections etc• Reactor, LA, Control room requirement; Emergency Power-DG Sets• Bay Control room concepts• Control and Relay panels, Battery and Battery Charger• Communication, Multiplexer/PLCC• CBM, Case studies.

5th Day (10th July) shall be 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



Centre For Industrial Solutions and Advanced Training

AN ISO 9001:2015 CERTIFIED

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

“A complete Training Solution Under One roof”

Registration Details:

Dates of the program: 6-9 July 2026 (4 Days). **Timing:** Till 10:00 AM to 5:30 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. Sanjay Kashikar, 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)

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 and payment done.