



Two Days Training Programme on

“Operation, Maintenance, Protection and CBM of Power Transformer”

2-3 Dec 2019 at Kolkata

Objective:

- To understand the various parts and critical elements of Power Transformer.
- To understand the operation and application of Power Transformer.
- To understand the maintenance, troubleshooting & Protection of Transformer
- To understand do’s & don’ts of Power Transformer
- Everything about transformer

Day	Topic	Subtopic
Day 1	SR	Contents
		Principle of Working and Operation
	1.1	Power/Distribution Transformer Construction & purpose details
	1.2	Function of all parts of Power Transformer
	1.3	Measuring Devices; Vector groups & Connections (Star & Delta)
	1.4	2/3 winding Transformer; Name Plate reading & connections
		Operations (Do`s and Don`ts)
	2.1	% Impedance; Efficiency; Losses; Regulation
	2.2	Transformer Testing: Oil; Silica; Winding; Heating; Cooling etc.
	2.3	Transformer Installation, commissioning: Do`s and Don`ts
	2.4	Parallel operation & Load sharing, Tap Changer
		Maintenance (Fault Detection & maint. Practices)
	3.1	Various Fault Detection & regular testing of Transformer
	3.2	Maintenance, Data keeping,
	3.3	IR, PI, Dielectric absorption, High Pot, Tan delta, DC winding
3.4	resistance, s/c , TTR, Magnetic Balance Tests.	
3.5	Harmonics; Voltage Fluctuation control and Effects	
Day 2		Faults & Protection
	4.1	Scheduled and unscheduled Maintenance of Transformer.



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4.2	Faults in Transformer; Faults while making Connections
4.3	Protection of Transformer & Relay Setting
4.4	Protection of Transformer: Over Load, Over current, S/C,
4.5	Earthing failure, Differential Protection, REF, BR CB & relays.
Failure Analysis	
5.1	Failure Analysis: FMEA and other
5.2	Thermography; Conditioning Monitoring & Life improvement techniques
5.3	NDT; RLA; Many case studies.
5.4	Post Test, Assessment and Feedback
5.5	Certification

Outcome of Program: One should be able to know about Operation, Maintenance, Protection and condition monitoring of transformer. Best Maintenance Practices.

Target Group: JE/SE/GET/Executive/AM

Certification: Every successful participant will be awarded a course completion certificate.

Delivery Methodology (Strategy):

- Introduction and Objective Setting
- Pre and Post Test,
- Knowledge Presentations,
- Assignments & Exercise,
- Case Studies, Discussion and Interaction
- Feedback and Assessment
- Delivery 9:30 AM to 17:30 PM

Registration:

Dates of the program: 2-3 Dec 2019@Kolkata, WB.

Participation fees: INR 20000/- per delegate (Excluding GST@18%; Training program includes training material hard copies, Tea, Lunch & snack, excluding lodging and Boarding)

Payment: ECS/NEFT/DD in favor of “Centre for Industrial Solutions and Advanced Training” Payable at Nagpur, Maharashtra, India. Account No: 0509102000003353

Web: www.cisat.co.in; Email: vikas@cisat.co.in; Contact: +91- 7709012815 (Branches: Thane/Pune/Nagpur/Bhilai/Vapi/Wardha)

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9293; State Code 27; PAN No: ABBPW5589J)

Venue: To be informed @Kolkata, WB.

For Registration please do contact to,

We prefer on line Registration through our web www.cisat.co.in.

Vikas +91-8669546332; 7709012815; vikas@cisat.co.in; cisat.nagpur@gmail.com; or
rupali@cisat.co.in.

Contact for any In-house Training Program at your plant or location.

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