

No. CE(Dist)/D-III/- Maint Tran of cap less than 1000 KVA /

Date: 27 JUL 2016

Circular No 23650

To,
All Chief Engineers (O &M) Zone,
MSEDCL.

Sub: - Maintenance schedule for Transformers of capacities less than 1000 KVA.

Ref: 1. No. DR / Tr. Oil / 37358 dt.31-10-67
2. Office Note No./1154 dt.01/06/2016

It is very essential to carry out Inspection and Maintenance of Distribution Transformers to avoid the failure of distribution transformer and thereby causing consumer unrest.

As per approval from competent authority to office note under ref.2, following guidelines are useful to carryout Inspection & Maintenance with uniformity in the field as per recommended maintenance schedule for Transformers of Capacities less than 1000 KVA & update information in ERP System.

Sr.No.	Inspection Frequency	Items to be inspected	Action required
1	Monthly	a. Oil level	If low, top up with tested oil. Examine Transformer for oil leakages. Attend leakages
		b. All Connections	Check phase, neutral & earth connections. Tighten if loose
		c. Cleaning of Transformer, Tank, Bushing etc.	Clean the Transformer, Tank and Bushing. If cracks observed on Bushing, replace it. In outdoor locations where dust is excessive i.e. road side transformer and its Bushings will have to be wiped clean frequently
		d. Replenishing Breathers.	Check that air passages are clear. Check oil level in oil seal. Check colour of active agents. If Silica gel found pink, replace it. The old silica gel can be reactivated for reuse
		e. Oil temperature (Wherever the thermometers provided.)	Check whether the temp. is within allowable limits. If high, remedial action will have to be taken immediately. For this purpose, shut down the transformer and investigate for reason
		f. Fuses	Check whether fuse unit in distribution box & feeder pillar are intact. If broken replace immediately. Check whether proper sizes of rewirable fuses, proper Amp. Rating of HRC fuses and proper Amp. D.O. Link have been provided

2	Quarterly	a. Load.	Measure the load (Amps) in peak hours of the feeders & record .If unbalance then take remedial action to balance it. If found overloaded & new transformer, divert load or augment transformer
		b. Voltage.	Measure the voltage of the LT side of distribution transformer and far ends of feeders and record. Take corrective action
		c. Checking of L.A's & their tightness	Check connections ,Tighten if loose
3	Half Yearly	a. Earth Resistance.	Measure earth resistance and record. Take suitable action if earth resistance is high
		b. I.R. Value of Lightning Arrestor& Transformer	Measure the Insulation resistance of Lightning Arrestors & record. If low, change the arrestor immediately. Measure the IR values of transformer. If low take corrective action
4	Yearly	a. Oil Testing.	Check for dielectric strength. Take suitable action to restore quality of oil. This should be done before and after rainy season.
		b. A.B. Switch.	Greasing and checking the alignment and operations of A.B. Switch
5	Two Yearly	Sampling and Testing of acidity of oil.	Take out samples of oil and test for dielectric strength as well as acidity.
6	Three Yearly.	Filtering of oil	Once in 3 years or whenever the dielectric strength of oil proves unsatisfactory or when the sample taken shows presence of solid matter or incipient sludge.
7	Five Yearly	Overhaul of Transformer	Overhauling of transformer as preventive maintenance.

All field officers are requested to carry out all the above periodic maintenance activity with immediate effects and feed the same information into ERP PM & MM Module. Also in case of failed transformer the necessary entries through ERP PM & MM module should be taken for tracking the transformer movement.

Strictly follow the instructions as above. The above shall be enforced with immediate effect.

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Chief Engineer (Distribution)

Copy s. w. r to:

- The Chairman and Managing Director, MSEDCL
- The Director (Operations)/ The Director (Projects), MSEDCL
- The Executive Director (Dist-I,II,III,IV), MSEDCL

Copy s. w. c to:

Chief General Manager(T&S), MSEDCL, Nashik

Copy to:

- The OSD to Hon CMD, MSEDCL, Corporate office, Mumbai.
- All Superintending Engineers, O & M Circles, MSEDCL
- All Executive Engineer, O & M Divisions, MSEDCL