Preventive Maintenance Checklist for Transformers

Transformer Maintenance Checklist

ForumElectrical.Com

Date:	
Substation Number:	
Transformer Number:	**Voltage Ratio:**

Serial No	Activities	Checks Executed			Remarks
		C	NC	N/A	
1	Receive LC from Substation Operation				
2	Check that location for any indications of oil leakage.				
3	Make sure the oil level in the conservator tank has reached up to the 3/4th-mark before proceeding				
4	Check the condition of the Breathers.				
5	Check the condition of the Silica Gel.				
6	Remove impurities from the body				
7	When open the terminal box, make sure the following is correct: a) The level of tightness of the terminal connection b) The condition of the bushings in the LV side of transformer c). Any indication that the transformer is overheating.				
8	Check any possibility of unplugged holes or missing bolts.				
9	Check the tightness of each				

	terminal box.				
10	Check the temperature settings for the oil and the windings.				
11	Check the oil for dielectric strength and break down voltage (the oil should be able to sustain 40 KV BDV for 1 minute with a spacing of 2.5 mm across the electrodes in oil testing kit).				
12	Verify that the earthing system is correct and unbroken.				
13	Check the support for the cables.				
14	Check the Insulation Resistance (IR) value a) Primary : P-E b) Secondary : P-E				
15	Perform simulations of all protective devices in the field to ensure that all protective devices withstand testing.				
16	Make sure that the following are checked and verified for the tap changer. a) The oil's inherent dielectric properties. b) The crucible's general state of cleanliness. c) Checking all moving and fixed contacts for signs of wear and tear. d) Proper alignment of the shaft. e) The motor trips both below the first tap and after the last tap. f) The tightness of the				

	clamps, bolt nuts, and other types of fasteners.				
17	After finishing the work, return LC to the Electrical Substation to turn on the transformer.				
18	Any other unexpected occurrences				

Overall Review:

Checked By	**Verified By**
Name	**Name**
Signature	**Signature**
Designation	**Designation**
Date	**Date**

C – complies NC- Not complies N/A – Not Applicable