EVENT ANALYSIS REPORT				
UNIT NO : 03	**TPS : Khaperkheda TPS**		**Unit Capacity : 210 MW**	
1. *HO Code :	**Station Code : T003**	**Time – 20:30Hrs**	**Date - 11/11/2016**	**No. of Days from last sync. : 19 days**

2. Operating conditions at the time of Event :-

Load	Coal Cycles in service	Oil Support
110MW	A, B&D	Nil

3. Nature of Event: T.A. Set forced withdrawn due to generator transformer Y-phase HV bushing problem.

4. Name of First Up , Main Protections & Protection on which GCB tripped :
Hand Tripped **(First Up)**,MFT Operated, Turbine Tripped, Turbine Trip Gear Operated.

5A)Observations: Since last one month generator transformer Y-phase clamp temperature was observed increasing up to 180^{0}C. The clamp was checked on dt.10.11.16 & tightened on-line by the Mahatransco Hot Line Group but still the temperature was found not dropping. Finally, it was decided to withdraw set for attending the hot spot. On dt. 11/11/16 at 20:00 hrs, set was on load at 158 MW with four coal cycles in service(C&E–U/P) and no oil support. Coal mill - F was withdrawn at 20.25 hrs to reduce the load in order to withdraw set for PG clamp work. Finally, set was hand tripped at 20:30 Hrs. when the load was 110 MW with coal cycle–A, B& D in service.GCB opened on Reverse Power Protection.

5B) Remedial Action/work done: Both high voltage and low voltage side connections of generator transformer removed. HV winding resistance of the transformer measured and found ok. Clamps removed, necessary checking & cleaning carried out and then the clamps refitted after testing of transformer. High voltage and low voltage side connections normalized. Subsequently, Y-phase clamp temperature found maintaining around 90-100^{0}C.

6. Root Cause Analysis: Y-phase jumper of HV side is short as compared to R & B phase, which is putting additional load on the clamp and thereby caused increase in the clamp junction temperature.

7. Preventive action suggested (Short Term): Thermography of HV side connections is being taken on regular basis. Due to short length, Y-phase jumper of HV side (220KV) will be replaced by GCR staff.

8. Preventive action suggested (Long Term) :

9. Similar event occurred last time:-	**U-3,210 MW**	**Time-Hrs**	**Date:**

Event: No similar event found.
Remedial Action/work done:

9A. Implementation Status of Long Term/Short Term measures stated at Sr. No 7&8 :

10. Boiler lighted up	**Time – 3:50Hrs**	**Date-12/11/2016**
11. T-A Set Synchronized	**Time –07:16Hrs**	**Date-12/11/2016**

12. Remark: -

12/12
Chief Engineer

13. Recommendations of Works Section:

1. Procurement/Replacement Plan:

2. Operational Error:

3. Delay in Maintenance:

4. Delay in bringing back the Unit:

5. Training of Staff:

6. Whether remedial action is completed satisfactory & point is closed:

C E/Dy C E (Works)