


EVENT ANALYSIS REPORT				
UNIT NO : 02	TPS : Khaperkheda TPS		Unit Capacity : 210 MW	
1. *HO Code :	Station Code : T003	Time - 15:31 Hrs	Date - 07/08/2017	No. of days from last sync. : 0 days
2. Operating conditions at the time of Event :				
Load		Coal Cycles in service	Oil Support	
110 MW		A, B, C, D & F	AB-2 guns LDO	
3. Nature of Event : TA set tripped on Generator Over Voltage Protection.				
4. Name of First Up , Main Protections & Protection on which GCB tripped : Auto Channel Pulse Fail (First Up), Generator Over voltage, Thyristor block TY-3 Fault, AVR Auto Change Over Fail.				
5 A) Observations : On dt.07/08/2017 set was on load at 110 MW with five coal cycles in service and oil support at AB elevation. Generator voltage was rising slowly. Generator voltage increased upto 17.91 KV and set tripped on generator over voltage protection.				
5 B) Remedial Action/work done : 1) One of the Tire fans in AVR regulation panel was having abnormal sound. THE Vibration caused by the fan was disturbing the auto manual pulse balance. The Tie fan was replaced. 2) UN1001 card (Gate control unit) of both Auto and manual channel replaced. 3) UN2004 Card (Pulse coupling stage and power pack unit) of both auto and manual channel cleaned. 4) Manual channel motorised pot commutator brushes replaced. Also auto channel motorised pot commutator brushes cleaned. 5) UN2010 card (control amplifier) replaced. Current signals coming to control amplifier bypassed by soldering behind the cards. (IR compensation) 6) UN 0053 card (Pulse Supervision) replaced.				
6. Root Cause Analysis : Due to problem in AVR generator voltage increased upto 17.91 KV and set tripped on generator over voltage protection.				
7. Preventive action suggested (Short Term) :				
8. Preventive action suggested (Long Term) :				
^9. Similar event occurred last time :		Unit No #2, 210 MW	Time : 18:51 Hrs	Date : 20/01/2014
Event : Set tripped on Generator Protection.				
Remedial Actions : TIC: 1. Defective thyristor along with fuses replaced 2. AVR Auto channel power supply and firing circuit checked by using test supply. Test results are OK 3. All protection circuit at GRP end checked and found normal. Clearance given for light up @ 23:30 Hrs and unit synchronised on Auto @ 03:22 Hrs.				
9A. Implementation Status of Long Term/Short Term measures stated at Sr No 7 & 8:-				
10. Boiler lighted up	Time - 16:30 Hrs		Date - 07/08/2017	
11. T-A Set Synchronized	Time - 21:15 Hrs		Date - 07/08/2017	
12. Remark :				
 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)				