EVENT ANALYSIS REPORT						
UNIT NO: 02	TPS: Khaperkh	eda TPS	Unit Capacity : 210 MW			
1. *HO Code :	Station Code : T003	Time - 01:40 Hrs	Date - 04/05/2017	1	from last sync. : 5 days	
2. Operating conditions at the time of Event:						
Load		Coal Cycles in service		Oil Support		
187 MW		Α,	A, B, C, D & E		Nil	
3. Nature of Event: TA set tripped due to Heavy Jerk in system.						
4. Name of First Up, Main Protections & Protection on which GCB tripped:						
Generator Master Trip (First Up), Turbine Tripped, MS Temperature High, PT Fuse Fail, Generator Class-A & C						
Protection Operated, Generator Over Frequency Relay Operated, Generator Class-B Protection Operated.						
5 A) Observations: Set was on load at 187 MW with five coal cycles in service. Heavy storming and lightening was noticed prior to tripping of the unit. Due to heavy jerk in system, set tripped on operation of Generator Class-A & C Master Trip Relay. No other protection relay flag found operated. Also, no relay operation alarm appeared in DAS event log. Hence, exact cause of operation of Class A & Class C Master trip relay could not be ascertained.						
5 B) Remedial Action/work done: (1) GRP panel checked.						
(2) Status of all GRP related alarms on DAS checked, found healthy.						
(3) AVR circuit checked, found ok.						
6. Root Cause Analysis: Heavy storming and lightening was noticed prior to tripping of the unit. Due to heavy jerk in system, set tripped on operation of Generator Class-A & C Master Trip Relay. GCB tripped. Subsequently, turbine tripped. Due to sudden load throw off, turbine speed rose up to 3250 rpm and 'Generator Over Frequency Relay' operated (Setting 53.2 Htz). Subsequently, Generator Class-B protection operated on over frequency.						
7. Preventive action suggested (Short Term) :						
8. Preventive action suggested (Long Term): All Generator Protection Relays operation will be checked in the coming overhaul of Unit-2 for healthiness.						
9. Similar event occurred last time :		Unit	No #2, 210 MW	Time :	Date:	
Event: No similar event found.						
Remedial Actions :						
9A. Implementation Status of Long Term/Short Term measures stated at Sr No 7 & 8:-						
10. Boiler lighted up			03:14 Hrs		Date - 04/05/2017	
11. T-A Set Synchronized		Time -	05:54 Hrs	Date - 04/05/2017		
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/Dv C E (Works)						