


EVENT ANALYSIS REPORT				
UNIT NO : 01	TPS : Khaperkheda TPS		Unit Capacity : 210 MW	
1. *HO Code :	Station Code : T003	Time - 22:26 Hrs	Date - 03/09/2015	No. of days from last sync. : 17 days
2. Operating conditions at the time of Event :-				
Load		Coal Cycles in service		Oil Support
38 MW		Nil		Nil
3. Nature of Event: T.A. Set withdrawn due to boiler tube leakage at economizer side.				
4. Name of First Up , Main Protections & Protection on which GCB tripped : Flame Failure Trip. (First Up) : Turbine Tripped, Generator Reverse Power Relay Operated, Generator Protection Operated.				
5A) Observations : At 21:42 hrs, Set was running with five coal mills in service. Suddenly, furnace draft found rising to +35 mmwc and drum level found decreasing. DM make up also found increased to 135 T/hr. To control these parameters, coal mill D, E & C withdrawn one by one. After ensuring boiler tube leakage, remaining coal mills, i.e., C/M-B & A and oil support was started withdrawing. Set tripped on "Flame Failure Trip" while withdrawing the set due to boiler tube leakage.				
5 B) Remedial Action/work done : Economiser upper bank Coil No.105, 106 & 108 plugged by providing hemispherical spool at economiser intermediate and at Economizer inlet header. (Total Number of Joints = 6 Nos)				
6. Root Cause Analysis : Concentrated flue gas erosion might be the root cause of failure of Tube No.3 of economizer upper bank coil No.106, as thin lip burst was observed. (1) Primary failure : Tube No.3 of economiser upper bank coil No.106 found bent & fish mouth opening punctured. (2) Secondary failure : (i) Tube No.3 & 4 of economiser upper bank coil No.105 found eroded. (ii) Tube No.3 & 4 of economiser upper bank coil No.108 found eroded. (iii) Tube No.2 of economiser upper bank coil No.109 found deep groove marked.				
7. Preventive action suggested (Short Term) : During forth coming AOH of Unit No.1 - (1) Dummied economiser coil No. 105, 106 & 108 will be normalized. (2) Erosion profile mapping of economiser coils will be carried out. (3) Cold air velocity test (CAVT) will be carried out.				
8. Preventive action suggested (Long Term) :-				
9. Similar event occurred last time:-	Unit No # 1, 210 MW	Time :	Date :	
Event : - No such event found.				
9A. Implementation Status of Long Term/Short Term measures stated at Sr No 7 & 8 :-				
10. Boiler lighted up	Time - 14:25 Hrs	Date- 08/09/2015		
11. T-A Set Synchronized	Time - 19:30 Hrs	Date- 08/09/2015		
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)				