


EVENT ANALYSIS REPORT				
UNIT NO : 04	TPS : Khaperkheda TPS		Unit Capacity : 210 MW	
1. *HO Code :	Station Code : T003	Time - 13:49 Hrs	Date - 25/08/2016	No. of days from last sync. : 2 days
2. Operating conditions at the time of Event :-				
Load		Coal Cycles in service	Oil Support	
90 MW		B & D	NIL	
3. Nature of Event : TA set forced withdrawn (hand tripped) due to boiler tube leakage at economizer zone.				
4. Name of First Up , Main Protections & Protection on which GCB tripped : Hand Tripped (First Up), Turbine Tripped, Generator Class-A Protection , MFT Acted, Generator Low Forward Power Protection.				
5 A) Observations : - On dt. 25/08/16 at 13:00 hrs, set was on load at 197 MW with five coal cycles in service ( C - S/by ) and no oil support. Flue gas temperature at economizer outlet found dropped considerably. DM make up was found increased. The furnace draft found unstable and drum level also found dropping from -6 mm to -157mm. Tube leakage sound was observed near LRSB-80. Tube leakage was also confirmed from Boiler Maintenance section. In order to withdraw the set for attending boiler tube leakage, coal mills were withdrawn one by one. Finally, set was withdrawn at 13:49 Hrs. when load was 90 MW with coal cycle- B & D in service.				
5 B) Remedial Action/work done : - <u>Primary Failure</u> - Economizer upper bank coil no. 117, tube No.3 found punctured. <u>Secondary failure</u> - Economizer upper bank coil no.119 tube no.3 found eroded. Economizer upper bank coil no.117 & 119 attended by welding hemispherical spool at economizer intermediate and economizer inlet header. (No. of HP weld joints = 04Nos.)				
6. Root Cause Analysis: - Economizer upper bank coil no. 117 tube no.3 failed due to localized flue gas erosion.				
7. Preventive action suggested (Short Term) :- 1) Dummied coil No.117 & 119 will be normalized during forthcoming AOH of Unit-4. 2) Replacement of eroded & dummied coils will be carried out during forthcoming AOH of Unit-4.				
8. Preventive action suggested (Long Term) :-				
9. Similar event occurred last time:-		Unit No # 4 , 210 MW	Time : 11:21 Hrs	Date: 07/06/2016
<p>Event : TA Set withdrawn to attend Boiler Tube Leakage at Economizer Zone.</p> <p>Remedial Actions : <u>Primary Failure</u> - Economizer upper bank coil no. 126, tube No.3 found punctured.  <u>Secondary failure</u> - Economizer upper bank coil no. 124 &amp; 125 tube no. 3 found punctured. Economizer upper bank coil no. 114 tube no. 6 found pin hole punctured.  <u>Work done</u> - No. of HP joints welded 08 Nos.  Economizer upper bank coil no. 124, 125, 126 &amp; 114 attended by welding hemispherical spool pieces at economizer inlet header and economizer intermediate header.</p>				
9A. Implementation Status of Long Term/Short Term measures stated at Sr No 7 & 8 :- The above corrective action will be implemented in July-2017 by BM-I section.				
10. Boiler lighted up		Time - 09:37Hrs	Date - 26/08/2016	
11. T-A Set Synchronized		Time - 13:58 Hrs	Date - 26/08/2016	
12. Remark :- Boiler outlet valve, MS-301 made operative by attending its earthed cable.				
 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)				