


# **EVENT ANALYSIS REPORT**

<b>UNIT NO : 04</b>					<b>TPS : Khaperkheda TPS</b>		<b>Unit Capacity : 210 MW</b>	
<b>1. *HO Code :</b>		<b>Station Code :</b> T003	<b>Time -</b> 11:21 Hrs	<b>Date -</b> 07/06/2016	<b>No. of days from last sync. :</b> 22 days			
<b>2. Operating conditions at the time of Event :-</b>								
<b>Load</b>			<b>Coal Cycles in service</b>			<b>Oil Support</b>		
70 MW			C & D			NIL		
<b>3. Nature of Event :</b> TA set tripped (hand tripped) due to boiler tube leakage at economizer zone.								
<b>4. Name of First Up , Main Protections &amp; Protection on which GCB tripped :</b> Hand Tripped (First Up), Flame Failure, MFT, Turbine Tripped, Gen Class - 'A'.								
<b>5 A) Observations :-</b> On dt. 07/06/2016 at 11:00 hrs, set was on load at 170 MW with five coal cycles in service ( F - S/by ) and no oil support. DM make up was found increased to 81 TPH. The drum level was fluctuating & also the flue gas temperature at economizer outlet found dropped considerably. These conditions confirmed boiler tube leakage at economizer zone. In order to withdraw the set for attending boiler tube leakage, coal mills were withdrawn one by one. Finally, set was withdrawn at 11.21 hrs when load was 70 MW with C/M-C & D in service.								
<b>5 B) Remedial Action/work done :-</b> <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 & 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 & 114 attended by welding hemispherical spool pieces at economizer inlet header and economizer intermediate header.								
<b>6. Root Cause Analysis:-</b> Localized and concentrated flue gas erosion of tube no.3 of economizer upper bank coil no.126								
<b>7. Preventive action suggested (Short Term) :-</b> 1) Dummied coil no. 124, 125, 126 & 114 will be normalized during forthcoming AOH of Unit no. 4. 2) Replacement of eroded & dummied coils will be carried out during forthcoming AOH of Unit no. 4.								
<b>8. Preventive action suggested (Long Term) :-</b>								
<b>9. Similar event occurred last time:-</b>			<b>Unit No # 4 , 210 MW</b>		<b>Time : 01:02 Hrs</b>		<b>Date: 15/05/2016</b>	
<b>Event :</b> TA set tripped (hand tripped) due to boiler tube leakage at economizer zone. <b>Remedial Actions :</b> <u>Primary Failure</u> - Economizer upper bank coil no. 99, tube No.3 found fish mouth opening punctured and coil No. 113, tube No.8 found pin hole punctured. Economizer coil No. 99 & 113 plugged by providing hemispherical spools at economizer intermediate & inlet header. (Total Joints - 04 Nos) <u>Secondary failure</u> - There is no secondary failure observed.								
<b>9A. Implementation Status of Long Term/Short Term measures stated at Sr No 7 &amp; 8 :-</b> The above corrective action will be implemented in August-16 by BM-I section.								
<b>10. Boiler lighted up</b>			<b>Time - 17:25 Hrs</b>			<b>Date - 08/06/2016</b>		
<b>11. T-A Set Synchronized</b>			<b>Time - 21:33 Hrs</b>			<b>Date - 08/06/2016</b>		
<b>12. Remark :-</b>								
 <b>Chief Engineer</b>								
<b>13. Recommendations of Works Section:</b>								
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)								