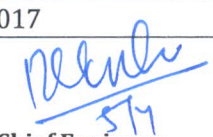


EVENT ANALYSIS REPORT

UNIT NO : 02					TPS : Khaperkheda TPS					Unit Capacity : 210 MW				
1. *HO Code :		Station Code : T003			Time -12:00 Hrs			Date - 16/03/2017			No. of days from last sync. : 14 days			
2. Operating conditions at the time of Event :-														
Load				Coal Cycles in service				Oil Support						
60 MW				A				NIL						
3. Nature of Event : T. A. set withdrawn due to boiler tube leakage at "Water Wall Burner Panel" zone.														
4. Name of First Up , Main Protections & Protection on which GCB tripped : Loss of all Fuel (First Up), Class-A Trip Relay 86A, 86A2, 86B & 86C Operated, Aux. Relay 68A - 68AX Operated.														
5 A) Observations : On dt.16/03/17 at 11:00 hrs, set was on load at 190 MW with five coal cycles in service (C-standby) & no oil support. DM make-up found increased. Furnace draft found varied to positive side (+87 mmwc). Coal cycles - F, E, D & B were withdrawn one by one for reducing load in order to withdraw the set. At 12:00 Hrs boiler tripped on 'Loss of all fuel' protection which resulted in unit tripping when the load was 60 MW and coal cycle - A in service. GCB opened on Reverse Power Protection.														
5 B) Remedial Action/work done : <u>Primary Failure</u> - Water wall burner panel (At corner no.1, above FF elevation) front side tube no.1 along with bend, found punctured. <u>Secondary failure</u> - (1) Water wall burner panel (At corner no.1, above FF elevn) front side tube no.2 along with bend, found eroded. (2) Water wall burner panel (At corner no.4, AA elevation) RHS straight tube no.2, found punctured. (3) Water wall burner panel (At corner no.4, AA elevation) RHS straight tube no.3, found eroded. <u>Work Carried Out</u> - (1) Replacement of Water wall burner panel at corner no.1, Tube no. 1 & 2 along with bend is carried out. (2) Replacement of Water wall burner panel at corner no.4, Tube no.2 & 3 is carried out. Total No. of HP welded Joints = 10 Nos. After completion of above maintenance work, Unit-2 was ready for light up from 21.00 hrs on dt.18-03-17. But, MSLDC, by email dtd. 18/03/17 issued Zero Schedule to Khaperkheda Unit-2 (VC-Rs. 2.9802), as per SLDC MOD stack for Mar-17 from its availability as and when declared by Mahagenco till further communication. In view of power scenario, MSLDC requested by email dtd. 22/03/17 to give schedule to Khaperkheda Unit-2 (VC-Rs. 2.9802), as per SLDC MOD stack for Mar-17 from 05:00 hrs of Dt. 23-03-2017.														
6. Root Cause Analysis : Secondary air erosion is the root cause of failure of front side tube no.1 of water wall burner panel at corner no.1 above FF elevation due to dummy plate of end air bucket found eroded & worn out.														
7. Preventive action suggested (Short Term) :														
8. Preventive action suggested (Long Term) : (1) End air bucket dummy plates of all the corners will be replaced during forthcoming overhaul of Unit-2. (2) Worn out coal compartment assemblies will be replaced during forthcoming overhaul of Unit-2. (3) All burner panel tubes at top & bottom of the panel including bends will be inspected for thickness measurement and replacement will be carried out for tubes & bends having thickness reduction more than 20%.														
9. Similar event occurred last time:				Unit No # 4 , 210 MW				Time:		Date :				
Event : No similar event found.														
Remedial Actions/work done :														
9A. Implementation Status of Long Term/Short Term measures stated at Sr. No. 7 & 8 :														
10. Boiler lighted up				Time - 03:00 Hrs				Date - 23/03/2017						
11. T-A Set Synchronized				Time - 09:51 Hrs				Date - 23/03/2017						
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)														