


EVENT ANALYSIS REPORT				
UNIT NO : 01	TPS : Khaperkheda TPS		Unit Capacity : 210 MW	
1. *HO Code :	Station Code : T003	Time - 03:23 Hrs	Date - 05/09/2016	No. of days from last sync. : 9 days
2. Operating conditions at the time of Event :-				
Load		Coal Cycles in service		Oil Support
81 MW		A & B		Nil
3. Nature of Event : Set withdrawn due to intense fire coming out from wind box at CD-2 elevation.				
4. Name of First Up , Main Protections & Protection on which GCB tripped : Hand Tripped (First Up), Generator Protection Operated, Manual Turbine Trip, Turbine Trip Gear Operated, Generator Reverse Power Relay.				
5A) Observations: In 'C' Shift on dt. 04/09/2016 intense fire flame was found coming out from burner transition panel and water wall panel at CD-2 corner. The set was on load with five coal cycles (C - S/by) in service. Coal cycle-1B was withdrawn at 22:15 hrs and taken back in service at 24:00 hrs after checking for fire. Coal pipes C2 & B2, both were dummied but still the fire was persisting. Subsequently, coal cycle-1C taken in service at 2:28 hrs on dt.05/09/2016. At 03:00 hrs on dt.05/09/2016 the set was sharing 140 MW load with five coal cycles (C/M-1E -S/by) in service. To withdraw the set, load was reduced gradually by withdrawing coal cycles one by one. Finally, set hand tripped at 03:23 hrs. on dt.05/09/2016 when load was 81MW with coal cycle A & B in service.				
5 B) Remedial Action/work done: All burnt cables at cable trench near CD-2 elevation jointing was done. Total 25 Nos. control cable jointing carried out. Also, burnt air regulator, solenoid, BTPC seals, scanner cables, igniter transformer & its cables replaced with new ones. C2 coal compartment assembly replaced. CD-2 oil gun assembly also replaced with new one.				
6. Root Cause Analysis : Clinker accumulation at coal burner tip and coal nozzle casting of coal compartment C2 assembly due to reclaimed coal led to the fire incidence.				
7.Preventive action suggested (Short Term) : (1) Proper control will be exercised on coal having high silica content to avoid slag deposition. (2) Furnace mapping will be done more frequently, preferably once in a fortnight.				
8. Preventive action suggested (Long Term) : Eyelid openings at side panel of coal nozzle compartment assemblies will be provided to measure furnace temperature near burner panel.				
9A. Similar event occurred last time:	Unit No # 1, 210 MW	Time :	Date :	
Event: - No similar event found.				
9B. Implementation Status of Long Term/Short Term measures stated at Sr No 7 & 8 :-				
10. Boiler lighted up	Time - 16:30 Hrs	Date- 09/09/2016		
11. T-A Set Synchronized	Time - 20:56 Hrs	Date- 09/09/2016		
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)				

## **“Incidence Report of Unit-1 Outage” on dtd. 05.09.2016**

210 MW Khaperkheda Unit-1 withdraw at 03.23 hrs. on dt. 05.09.16 as high intense flame was coming out from transition panel and water wall panel at CD-2 of corner no. 2 of boiler.

After detail inspection by BM-I is as below.

- 1) Erection sky climber for corner no. 2 burner inspection.
- 2) Replacement of C2 coal burner.
- 3) Checking of B2 & D2 coal burner assembly.
- 4) Replacement of side inner panels of BC2, C2 & CD2.
- 5) Replacement of CD2 oil gun and oil bucket.
- 6) Fabrication of compartment plates of C2, CD2 & BC2.
- 7) Alignment of burner tilt mechanism.
- 8) Hydraulic test taken at 150 Kg./cm<sup>2</sup>.
- 9) Replacement of oil gun, scanner & igniter guide pipes.

Above work is completed at 16.00 hrs. on 09.09.16 and Unit-1 boiler lighted up process is in process.

**-Sd-**  
**Chief Engineer**  
**MSPGCL, TPS Khaperkheda**