\TRIP ANALYSIS REPORT

TRIP ANALYSIS REPORT /TAR-06/ UNIT 2 / 2016 **Dt. 27-04-16**

OCCURRENCE:

Load: **466 MW** at 12:08 hrs with 6 Mills in CMC mode and coal flow 207 T/hr. Boiler got tripped at **12:09** Hrs on 26.04.16 on "Drum level very high-MFT" and followed by Turbine trip.

OBSERVATIONS FROM SOE/ALARM PAGES:

12:07:28 Hrs :Feeder B stop command from Desk.(high Mill outlet temp)

12:07:30 Hrs : Feeder B off.

12:07:32 Hrs :Run back in action

12:07:34 Hrs : Feeder G and Mill G runback trip.

12:07:35 Hrs : Turbine follow mode

12:07:36 Hrs: IP mode pressure control.

12:07:40 Hrs: Mill F tripped

12:07:45 Hrs: Mill E tripped.

12:08:15 hrs: Boiler master manual from desk.

12:08:33 hrs: Drum level PID deviation low

12:08:24 Hrs: Drum Level very high.

12:09:35 Hrs: MFT protection CH-1and 2.

ANALYSIS:

Unit was in service at a load of 466 MW with 6 mills (A,B,C,D,E and G), coal flow 207 T/hr in CMC mode (Mill-A,D,E and G feeder in auto). It is reported that Mill B reject choke and red hotness in the reject box. Hence Mill F was started and feeder B speed was reduced. In the meantime, as Mill B outlet temperature raised to 120 deg C, Feeder B was stopped.

Stopping of Mill B feeder, initiated Mill runback and subsequently tripping of Top mills G,F and E. Total coal flow dropped from 207 T/hr to 97 T/hr with mills A,C and D in service(Mill D auto).

Drum level raised from -23 mm to very high level and MFT acted.

Boiler was lighted up at 12:42 hrs and the unit was synchronized at 16:05 hrs.

CONCLUSION:

CMC mode is in continuous operation on experimental basis from 23.04.16 and the performance is being monitored. On 26.4.16, Mill changeover was done in CMC mode as normal procedure. While stopping Mill-B feeder, runback was initiated sensing major equipment loss like one BFP, FD, PA. etc which resulted tripping of top 3 mills in service. Subsequently unit tripped on drum level very high.

RECOMMENDATIONS:

The faulty mill runback logic (tripping of one mill leading to trip the top 4 mill feeders to achieve the unit capability) is to be excluded from the circuit. It is implemented in both the units.

On tripping of one mill, unit capability is calculated based on the available mill (90 MW per mill) and coal flow will be regulated accordingly. CMC will change over to Turbine follow mode on initiation of Mill run back. In EHTC, IP control active will be in service. CMC can be switched on again after analyzing the present condition.

CM/ Mech CM/Ins DGM/ Comm DGM/ Elec

DGM/Operation