UNIT TRIPPING REPORT

UNIT No:1 STATION: NTPL, TUTICORIN.

OUTAGE: NO. 58

REPORT NO: 58

1.Date of tripping	: 03-06-2021
2.Time of tripping	: 09:19:45 HRS
3.Status before tripping	
a) Unit load	: 270 / 220 MW
b) Mills in service	: B, C, D, F & G
c) Oil guns in service	: CD (3 Guns)
d) Boiler feed pumps in service	: A & B
e) CEPs in service	: B & C
f) ID fans in service	: A & B
g) FD fans in service	: A & B
h) PA fans in service	: A & B
i) CWP in service	: A & B
4.First Up protection acted	: PA Header pr low (All mills trip)
5.Similar occurrences in the Financial Year	: Nil
Other relays/protection acted	: Turbine trip on MST low Generator trip on Class-B
6.Supporting documents attached	: SOE & Trend
7.Any operation done prior to tripping	: OB taken into service
8.Analysis of tripping	:

At 08:35 hrs PA header pressure Hi alarm came, with PAF-1A motor current at 230 A and PAF-1B 68 A. Both PCD commands were at 0% as the set point is 800 mm and header pressure was maintaining at 1350mm. As problem was identified in PAF-1A PCD, it was decided to stop PA 1A, CD elevation oil burners were cut in to avoid boiler tripping and Mill 1G stopped @09:10 hrs. Before attempting to Stop PA 1A, all Mills suddenly tripped on PA Header pressure low due to hunting in PA header pressure @09:15 hrs. PA1A stopped and PA 1B loaded and PA header pressure was normalised and Mill 1C taken into service along with EF and AB elevation

oil burners. MS temperature could not be maintained as coal fire was minimum and load was higher. Unit got tripped on low MST at 09:19 hrs.

9.Root cause :

PAF-1A HAD link failure resulted in opening of its PCD to full. This caused high PA header pressure and so demand went down to 0%. Due to variation in PA 1A blade Pitch, header pressure fluctuations happened which lead to mills tripping, which was unavoidable in this particular case.

10.Remedial measures taken/to be taken:

HAD components quality and system healthiness to be ensured by BMD during unit overhauls.

11.Time/Date of boiler light up and sync :

Light Up: : Boiler was in service

Sync'd : : 03-06-2021 10:31 hrs

12.Delay for light up : Rolling parameters

13.Recommendation / Action plan :

Sl.No.	Recommendations/Action plan	Responsibility	Time line
1)	HAD components quality and system healthiness to be ensured.	BM2	Opportunity

14.Any specific learning / feedback :

HAD components quality and system healthiness to be ensured. Mill tripping was unavoidable in this case but Boiler was saved by cutting in of OBs before attempting to stop PAF1A.

DGM/OS 08/06/21 DGM/EEMG ADGM/C&I 8/6/2021 DGM/ELECT 10/6/21

GM / C&I and Opn 11.06.21

Copy submitted to CEO / NTPL

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