

UNIT TRIPPING REPORT

UNIT No: 1
TUTICORIN.

STATION: NTPL,

OUTAGE: NO. 19

REPORT NO: 19

- | | |
|---|--|
| 1.Date of tripping | : 05-05-2018 |
| 2.Time of tripping | : 10:32:55 Hrs |
| 3.Status before tripping | |
| a) Unit load | : 277 MW |
| b) Mills in service | : A, B, E, G & H |
| c) Oil guns in service | : NIL |
| d) Boiler feed pumps in service | : TDBFP |
| e) CEPs in service | : A&B |
| 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 | : MFT acted (Furnace Pr VLow) |
| 5.Similar occurrences in the | |
| Financial Year | : Nil |
| 6.Other relays/protection acted | : Boiler trip/ Turbine trip/
Generator trip |
| 7.Supporting documents attached | : SOE & Trend |
| 8.Any operation done prior to tripping | : Nil |
| 9.Analysis of tripping | : |
| ➤ Tripping of 0.4KV/1DG Section B Incomer (breaker no. 20) due to failure of B phase fuse of Bus VT and FUSE FAILURE RELAY (97) of that particular phase in the BUS PT cubicle. | |
| ➤ Failure to Auto-Close the Bus Coupler in the 0.4KV/1DG due to failure of service position contactor. | |

10.Root cause :

PA Fan-B LOP Changed over from B to A and LOP-A didn't develop sufficient lube oil pressure and Motor bearing NDE temperature went to very high > 105 oC which lead to fan tripping. Due to loss of primary air, mills got tripped and in sequence furnace pressure went to very low due to which MFT acted.

11.Remedial measures taken/to be taken:

The fuse failure relay was changed from spare and service position contactor problem was attended. The healthiness of the fuse failure relay has to be ensured during every shutdown. All C&S make service position contactor and springs charged contactors has to be changed and the ventilation system in 3.5ML and 12 ML and 27 ML has to be improved to prevent failure of equipment. The PA Fan 1B motor bearing DE and NDE temperature elements were checked at local, and were found that both were interchanged and was corrected. The PA Fan 1B motor bearing DE and NDE temperature trip values were changed from 105°C to 95°C as per recommendation from DGM/O&C. Unit 2 PA Fans bearing temperature elements will be checked during shutdown.

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

Light Up: 22:42 Hrs on 05/05/18

Sync'd : 03:49 Hrs on 06/05/18

13.Delay for light up : TG shaft came to rest after trip.

14.Recommendation / Action plan :

Sl.No.	Recommendations/Action plan	Responsibility	Time line
1	The healthiness of the fuse failure relay has to be ensured during every shutdown.	Operation Services	Immediate

2	All C&S make service position contactor and spring charged contactors healthiness has to be monitored every day and in case of failure it has to be replaced	Electrical OS & EM	Immediate
3	The ventilation system in 3.5ML and 12 ML and 27 ML switchgear has to be improved to prevent failure of equipment.	EMD	Immediately

15.Any specific learning / feedback :

Fuse Failure Relay and Service position/Spring charged contactors healthiness has to be monitored on a daily basis by Operation and discrepancies, if any, should be intimated to EM division. Awareness created for Operation executives regarding this through interaction.

CM / OS

CM/EEMG

DGM / C&I

DGM / ELECT

DGM / O&C

Copy submitted to CEO / NTPL