## UNIT TRIPPING REPORT

UNIT No: 2

STATION: NTPL, TUTICORIN.

**OUTAGE NO: 92** 

REPORT NO: 92

1.Date of tripping

: 07-10-2024

2. Time of tripping

: 16:40Hrs

3. Status before tripping

a) Unit load

: 326 MW

b) Mills in service

: B, C, D, E & H

c) Oil guns in service

: NIL

d) Boiler feed pumps in service

: TDBFP 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

: Turbine Tripped on low forward power

5. Other relays/protection acted

: NIL

6. Supporting documents attached

: S.O.E & Trends

7. Any operation done prior to tripping: HPCF pump trial.

8. Analysis of tripping

Unit was running at 326 MW in CMC. HPCF pump-1 was running and HPCF pump-2 started @16:30 hrs and the same was stopped @16:40 hrs, resulted in turbine trip and Oil guns taken and Boiler saved.

## 9. Root cause

On 24.08.2024 U2- HPCF PUMP got tripped and even on immediate start of stand by pump, the control fluid pressure didn't develop which resulted in unit 2 trip. To avoid such trips it was recommended to check the readiness of Standby HPCF pump periodically. On 07.10.2024 the standby HPCF pump-2 was started,on first start pressure was not developed, due to Foaming/air lock, So pump (HPCF-2) was stopped & started again, This time the pump developed pressure but, while stopping the HPCF PUMP 2 ,main turbine stop valves got closed and turbine tripped on low forward power. Accumulators of control fluid system is in isolated condition due to foaming issue since 2022, so the system is not capable to withstand the sudden change in pressure, which is the root cause of Turbine trip.

- 10. Remedial measures taken/to be taken:
  - Accumulators of HPCF pump to be made through after solving the foaming issue.
  - ii. HPCF Pump regular checking may be avoided until accumulators are made through.
- 11. Time/Date of boiler light up and sync:

Light Up:

: Boiler in service

Sync'd:

: 18:28 Hrs on 07/10/2024

12. Delay for Synchronization

: Hot Spot in GT 2Y SAB bushing was

attended.

- 13. Recommendation / Action plan : HPCF Accumulators to be made available for handling sudden surge/trip of equipments.
- 14. Any specific learning / feedback
  - Healthiness of HPCF motor is to be checked, only during trips/shutdowns i. till Foaming issue is resolved.

DCE/EEMG

DCE / C&I

ACM /OS

Copy submitted to CEO / NTPL

Copy submitted to GM/O&M

Copy submitted to GM/OPN & TM