UNIT TRIPPING REPORT

UNIT No: 2

STATION: NTPL, TUTICORIN.

OUTAGE NO: 85

REPORT NO: 85

1.Date of tripping : 25-04-2024

2.Time of tripping : 06:44Hrs

3.Status before tripping

a) Unit load : 500MW

b) Mills in service : A, B, C, D, F &G

c) Oil guns in service : Nil

d) Boiler feed pumps in service : TDBFP A &B

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 : Boiler tripped on drum level high

5.Other relays/protection acted : Turbine & Generator tripped on MFT.

6.Supporting documents attached : S.O.E & Trends

7.Any operation done prior to tripping : Nil

8.Analysis of tripping :

Unit was running at 498 MW in CMC. At 6:33:26 hrs Drum level controller and CMC came to Manual mode. 6:44:00 hrs Drum level hi alarm came. 6:44:26 hrs unit tripped on MFT from Drum level hi.

9. Root cause :

TDBFP response was not in sync due to high Feed water flow requirement (Recirculation valve passing in BFP-B-150TPH, CBD opening 10%). Drum level was varying from 5:01 hrs (+60 to -51mm). The drum level variation got increased from 6:15 hrs (+131 to -140mm). Due to deviation in speed ref and actual Drum level controller came in manual mode at 6:33 hrs. Alarm came at 6:33 hrs for Feed controller manual mode and CMC manual mode.

After the feed pumps came to manual mode, the Feed water flow was constantly higher, the drum level was raising. at 6:44 hrs Drum level high alarm (+150mm) came. Unit tripped on 6:44:26 hrs due to drum level hi (+250mm).

10. Remedial measures taken/to be taken:

RC valve is to be monitored for passing and ensure drum level is under control.

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

Light Up: : 07:22 Hrs on 25/04/2024

Sync'd: : 09:16 Hrs on 25/04/2024

12. Delay for light up : nil

13. Recommendation / Action plan :

i) BFP RC valve passing is to be attended during next opportunity.

ii) BFP response to be monitored by board engineers.

14. Any specific learning / feedback :

i) Board engineers are advised to monitor critical parameter continuously.

M. Raaf
EE/EEMG

D. Le
EE / OS

S.M.f.
DCE / C&I

BVdB
ACM /OS

O/L
CM/OS

Copy submitted to CEO / NTPL

Copy submitted to GM/O&M