UNIT TRIPPING REPORT

UNIT No: 2 STATION: NTPL,

TUTICORIN.

OUTAGE: NO. 26

REPORT NO: 26

1.Date of tripping : 24-08-2018

2.Time of tripping : 13:27:56 Hrs

3.Status before tripping

a) Unit load : 271 MW

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

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 : Turbine Trip (Cond Pr High)

5.Similar occurrences in the Financial Year : Nil

6.Other relays/protection acted : Turbine trip/Generator trip/ Boiler trip (RH Protection)

7.Supporting documents attached : SOE

8.Any operation done prior to tripping : CWPH 220V DC Source LC

9.Analysis of tripping :

- After testing Battery Bank-I, Incomer-I for the CWPH DCDB was being taken into service, when both its Incomers got tripped on earth fault leading to PLC DC supply failure. While normalizing PLC supply, protections acted and all the three running CWPs (1A, 2A and 2B) got tripped.
- CWP-1B didn't trip since its protection didn't act while normalizing.

10.Root cause :

Resuming the PLC power supply has resulted in the tripping of running CWPs. In Unit #2, condenser vacuum dropped due to failure of circulating water flow, leading to Turbine trip at 0.3 bar. At 0.6 bar HP & LP Bypass valves got trip closed on condenser BP protection. Hence Boiler got tripped on RH protection.

11.Remedial measures taken/to be taken:

Incomer –II earth fault relay was replaced by MRT, suspecting faulty. Now system is normalized with Incomers I & II taken independently. Further fault tracing and DCDB checking were suspended due to time constraints. In future, when such PLC supply failures occur, trip logics, both at breaker end and PLC has to be bypassed prior to normalizing the supply.

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

Light Up: 14:06 Hrs on 24/08/18

Sync'd : 15:30 Hrs on 24/08/18

13.Delay for light up : No delay.

14.Recommendation / Action plan :

Sl.No.	Recommendations/Action plan	Responsibility	Time line
1	In future, when PLC DC supply testings' are carried out, trip logics, both at breaker end and PLC has to be bypassed prior to normalizing the supply.	EM	Immediate
2	Healthiness and logics of PLC supply are to be ensured and testings' carried out during shut down periods, thus avoiding the risk of trippings.	EM	Immediate

15.Any specific learning / feedback :

Whenever testings are carried out on supply sources to PLC, all necessary precautions are to be taken by EM and C&I divisions to avoid any unforeseen tripping of related equipments. Maintenance activities has to be conveyed to unit control board, so that operation personal can stay alert and prepared for any emergencies arising out of the LC related activity.

DGM / O&C

Copy submitted to GM/O&M

Copy submitted to CEO / NTPL