

UNIT TRIPPING REPORT

UNIT No: 1
TUTICORIN.

STATION: NTPL,

OUTAGE: NO. 34

REPORT NO: 34

1. Date of tripping : 13-10-2018
2. Time of tripping : 02:57:05
3. Status before tripping : 475 MW
 - a) Unit load : B, C, D, E, F & H
 - b) Mills in service : Nil
 - c) Oil guns in service : TDBFP A & B
 - d) Boiler feed pumps in service : 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 Emergency PB acted
5. Similar occurrences in the Financial Year : Nil
6. Other relays/protection acted : Turbine trip / Generator trip
7. Supporting documents attached : S.O.E & Trend
8. Any operation done prior to tripping : Nil
9. Analysis of tripping :

ASLD 4,7,8 & 10 picked up @ 02:15 hrs and heavy sound observed at 57 ML of Boiler. Difference of about 100 t/hr was observed between FW and MS flows. Boiler was hand tripped @ 02:57 hrs on 13.10.2018.

10. Root cause :

Pin hole puncture of a w/w tube at an erection weld joint @ 24 ML Boiler Front resulted in fish mouth opening @ 56 ML on the same tube due to starvation. Also 90° bend cracks were there @ 10.5 ML RHS man hole, inside seal box.

11. Remedial measures taken/to be taken:

Boiler Tube Leaks were attended and unit was lighted up.

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

Light Up: 16:32 Hrs on 14.10.2018

Sync'd : 20:28 Hrs on 14.10.2018

13. Delay for light up : No delay.

14. Recommendation / Action plan :

Sl.No.	Recommendations/Action plan	Responsibility	Time line
1	Erection defects in tubes can be eliminated only as and when they occur.	BMD	As encountered

15. Any specific learning / feedback :

Erection defects resulting in boiler tube failures may crop up at a later stage, which can be eliminated only over a period of time depending on the frequency of their occurrence.



CM / OS



CM/EEMG



DGM / C&I



DGM / ELECT



DGM / O&C

Copy submitted to GM/O&M

Copy submitted to CEO / NTPL

Event Summary

(filtered)

13:45:21

02Nov18

9

Start Time: Saturday 13/ Oct /2018 02:56

End Time: Saturday 13/ Oct /2018 02:58

357

2998RPM

493MW

Time	Description	Event Text
13/Oct/18 02:56:39		OpCmd1 Old= 13.00 New= 13.00 1B05CRE13_p By 161.12
13/Oct/18 02:56:43		OpCmd1 Old= 1.00 New= 13.00 1B06CRE15_p By 161.12
13/Oct/18 02:57:05.329	EMERGENCY TRIP	Digital_State Old=FALSE New=OPERATING 1MFT1_p
13/Oct/18 02:57:05.426	EMERGENCY PB PRESSED	Digital_State Old=FALSE New=PRESSED 1MFT2_p
13/Oct/18 02:57:05.426	EMERGENCY TRIP PB CH 2	Digital_State Old=FALSE New=PRESSED 1MFT2_p
13/Oct/18 02:57:05.446	MFT CH 2	Digital_State Old=FALSE New=TRUE 1MFT2_p
13/Oct/18 02:57:05.595	MFT CH 3	Digital_State Old=FALSE New=TRUE 1MFT3_p
13/Oct/18 02:57:05.627	EMERGENCY PB PRESSED	Digital_State Old=FALSE New=PRESSED 1MFT1_p
13/Oct/18 02:57:05.627	EMERGENCY TRIP PB CH 1	Digital_State Old=FALSE New=PRESSED 1MFT1_p
13/Oct/18 02:57:05.647	MFT CH 1	Digital_State Old=FALSE New=TRUE 1MFT1_p
13/Oct/18 02:57:05.855	MFT-CH-2 TP2	Digital_State Old=FALSE New=OPTD 1TP2_s
13/Oct/18 02:57:06.041	HO TRIP COMMAND	Digital_State Old=FALSE New=TRUE 1OILAB_p
13/Oct/18 02:57:06.167	NO BOILER TRIP CMD	Digital_State Old=TRUE New=FALSE 1UNIT_p
13/Oct/18 02:57:06.167	BOTH EMERGENCY PB PRE...	Digital_State Old=FALSE New=TRUE 1UNIT_p
13/Oct/18 02:57:06.177	MFT1	Digital_State Old=FALSE New=- 1UNIT_p
13/Oct/18 02:57:06.177	MFT2	Digital_State Old=FALSE New=- 1UNIT_p
13/Oct/18 02:57:06.177	MFT3	Digital_State Old=FALSE New=TRUE 1UNIT_p
13/Oct/18 02:57:06.543	FEEDER C PROTECTION CLO...	Digital_State Old=FALSE New=TRUE 1COALCD_s
13/Oct/18 02:57:06.543	PULV C TRIP	Digital_State Old=FALSE New=MFT 1COALCD_s
13/Oct/18 02:57:06.553	PULV D TRIP	Digital_State Old=FALSE New=MFT 1COALCD_s
13/Oct/18 02:57:06.563	ELEV D FEEDER TRIP	Digital_State Old=FALSE New=TRIP 1COALCD_s

MFT	APRDS	MILL A	MILL B	MILL C	TDBFP A	TDBFP B	EHTC	CMC	1HFB03AF001_XF02
FLAME INTENSITY	SADC	MILL D	MILL E	MILL F	TP INPIITS	LUB OIL	HPBP	VACCU	FEEDER C PROTECTION CLOSE
BOILER CONTROL	CLCS	MILL G	MILL H	WALL.B	TURB. PROTN	PCAL	LPBP	PW SYS	"EventSummary\EventSummarySOE.MN"



MAIN	LAST
SG	TG
BOP	ELEC
GEN	TDBFP

Select Point	Track Point
PR DEV	2.15
H2 PR	3.40
FUR PRS	-9.32
TOT COAL	253.9
TOT AIR	1722.8
SA FLOW	1105.0
O2	3.36
PA HDR	815.6
DRUM PR	187.6
MS PRESS	169.0
HRH PR	43.30
MS TEMP	534.8
HRH TEMP	565.4
SH SPRAY	19.4
COND PR	0.1594
HWL LVL	8.5249
DEA LVL	166.4
DRUM LVL	21.5
MS FLOW	1452.1
FW FLOW	1450.5
COND FLW	1326.7
IA PRESS	7.1528
MOT LVL	-133.5
CF LVL	-146.8

SILENCE	TAG	Print	HW Cond
ACK	SOE	AlmSum	7.5
RESET	ALARM	TRND	6.0

Event Summary

(filtered)

13:47:06

02Nov18

9

Start Time: Saturday 13/ Oct /2018 02:56

End Time: Saturday 13/ Oct /2018 02:58

357

2995RPM

492MW

UNIT 1

Time	Description	Event Text
13/Oct/18 02:57:06.663	PULV HTRIP	Digital_State Old=FALSE New=MFT 1COALGH_p
13/Oct/18 02:57:06.667	MASTER FUEL TRIP	Digital_State Old=FALSE New=TRUE 1UNIT_p
13/Oct/18 02:57:06.667	MFT	Digital_State Old=FALSE New=TRUE 1UNIT_p
13/Oct/18 02:57:06.669	GEN ELECTRICAL PROT - 1	Digital_State Old=FALSE New=OPTD 1TP1_s
13/Oct/18 02:57:06.700	TTS CH-1	Digital_State Old=FALSE New=operated 1TP1_s
13/Oct/18 02:57:06.735	COLD COIL MONITOR	Digital_State Old=FALSE New=FAULTY 1TP2_s
13/Oct/18 02:57:06.742	RTS1	Digital_State Old=FALSE New=IS ON 1ATT_p
13/Oct/18 02:57:06.743	PULV A TRIP	Digital_State Old=FALSE New=MFT 1COALAB_p
13/Oct/18 02:57:06.763	PULV B TRIP	Digital_State Old=FALSE New=MFT 1COALAB_p
13/Oct/18 02:57:06.773	ELEV B FEEDER TRIP	Digital_State Old=FALSE New=TRIP 1COALAB_p
13/Oct/18 02:57:06.815	COLD COIL MONITOR	Digital_State Old=FALSE New=FALSE 1TP2_s
13/Oct/18 02:57:06.841	COLD COIL MONITOR	Digital_State Old=FALSE New=FAULTY 1TP2_s
13/Oct/18 02:57:06.846	FDR-C OFF	Digital_State Old=N.TRUE New=TRUE 1B06CRE15_p
13/Oct/18 02:57:06.846	FEEDER C	Digital_State Old=FALSE New=LS FB OFF 1COALCD_s
13/Oct/18 02:57:06.866	FEEDER B	Digital_State Old=FALSE New=LS FB OFF 1COALAB_p
13/Oct/18 02:57:06.873	COLD COIL MONITOR	Digital_State Old=FALSE New=FALSE 1TP2_s
13/Oct/18 02:57:06.873	FEEDER D	Digital_State Old=FALSE New=LS FB OFF 1COALCD_s
13/Oct/18 02:57:06.889	TP1 MFT PROT TP CH-1	Digital_State Old=N.OPTD New=OPTD 1TP1_s
13/Oct/18 02:57:06.898	FEEDER B	Digital_State Old=LS FB ON New=FALSE 1COALAB_p
13/Oct/18 02:57:06.900	MAIN TRIP VLV-2	Digital_State Old=FALSE New=TRIPPED 1ATT_p
13/Oct/18 02:57:06.901	MAIN TRIP VLV-1	Digital_State Old=FALSE New=TRIPPED 1ATT_p

MFT	APRDS	MILL A	MILL B	MILL C	TDBFP A	TDBFP B	EHTC	CMC	1HFC04EB150_YD00
FLAME INTENSITY	SADC	MILL D	MILL E	MILL F	TP INDIITS	LUB OIL	HPBP	VACCUM	ELEV D FEEDER TRIP
BOILER CONTROL	CLCS	MILL G	MILL H	WALL.B	TURB. PROTN	PCAL	LPBP	PW SYS	"EventSummary\EventSummarySOE.MN"

MAIN	LAST
SG	TG
BOP	ELEC
GEN	TDBFP

Select Point	Track Point
PR DEV	1.35
H2 PR	3.40
FUR PRS	-8.00
TOT COAL	254.7
TOT AIR	1721.5
SA FLOW	1103.5
O2	3.34
PA HDR	819.6
DRUM PR	186.8
MS PRESS	168.1
HRH PR	43.18
MS TEMP	535.6
HRH TEMP	564.3
SH SPRAY	20.4
COND PR	0.1589
HWL LVL	2.8595
DEA LVL	170.4
DRUM LVL	16.6
MS FLOW	1448.2
FW FLOW	1454.1
COND FLW	1344.3
IA PRESS	7.2026
MOT LVL	-133.5
CF LVL	-146.8

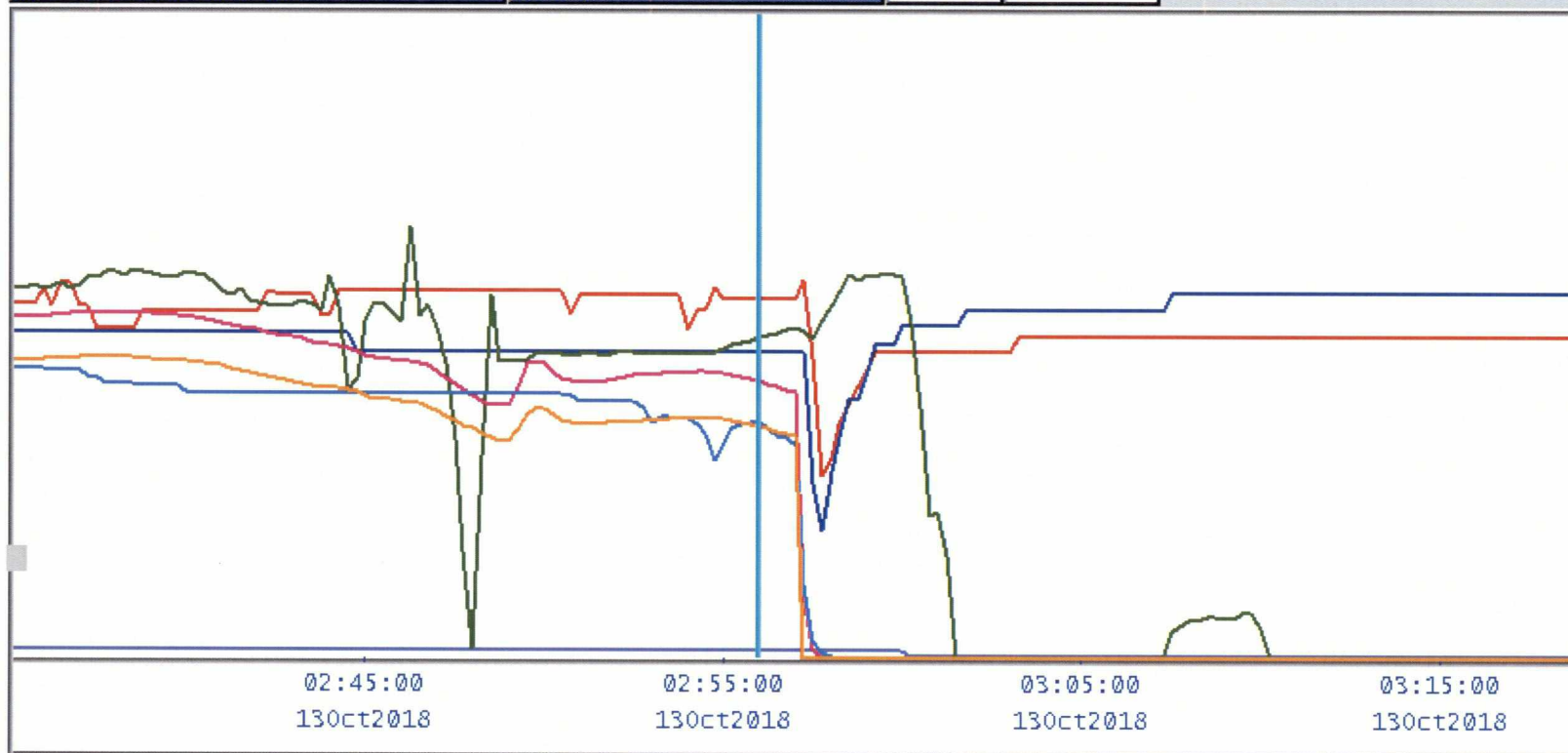
SILENCE	TAG	Print	HW Cond
ACK	SOE	AlmSum	7.2
RESET	ALARM	TRND	5.9

Name	Comments	Computer	Network Location
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The Internet

Dynamic 8 Point Trend

1ASLDS13_XQ01.Out.Sample ASLD_13 0.4982 dB



13:51:38
02Nov18

2995RPM

487MW



MAIN	LAST
SG	TG
BOP	ELEC
GEN	TDBFP

Select Point	Track Point
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PR DEV	-1.64
H2 PR	3.40
FUR PRS	-7.78
TOT COAL	257.3
TOT AIR	1733.7
SA FLOW	1115.8
O2	3.40
PA HDR	815.6
DRUM PR	183.9
MS PRESS	165.2
HRH PR	42.70
MS TEMP	536.6
HRH TEMP	561.3
SH SPRAY	19.6
COND PR	0.1595
HWL LVL	-7.956
DEA LVL	182.9
DRUM LVL	18.0
MS FLOW	1434.7
FW FLOW	1437.2
COND FLW	1334.0
IA PRESS	7.0239
MOT LVL	-133.4
CF LVL	-146.8

130ct2018 02:56:00

ACTUAL LOAD	217.3609
MS FLOW ACT	691.6691
ASLD_04	19.1257
ASLD_07	22.4621

TOTAL COAL FLOW	146.8705
TOTAL FW FLOW	798.3357
ASLD_07	22.4621
ASLD_13	0.4982

MFT	APRDS	MILL A	MILL B	MILL C	TDBFP A	TDBFP B	EHTC	CMC
FLAME INTENSITY	SADC	MILL D	MILL E	MILL F	TP INDIITS	LUB OIL	HPBP	VACCUM
BOILER CONTROL	CLCS	MILL G	MILL H	WALL.B	TURB. PROTN	PCAL	LPBP	PW SYS

1LOAD_ACTUAL_MV3

ACTUAL LOAD

trends\DT8Pt.mn dp1= ,dp2= ,dp3= ,dp4= ,dp5=

SILENCE

TAG

Print

HW Cond

ACK

SOE

AlmSum

7.2

RESET

ALARM

TRND

5.9