

BOILER TUBE FAILURE REPORT (C-2 FORM)

C2 FORM NO (C-2 FORM SHOULD BE SEND WITHIN 12HOURS OF SYNCHRONISATION)

1)	STATION: T007	2)	UNIT NO. U02	3)	LAST UNIT OUTAGE 04-07-2023
5)	UNIT SHUTDOWN FROM 06-09-2023 09:46:13	4)	LAST Unit O/H 01-12-2021		
6)	WATER FILLING CLEARANCE 07-09-2023 12:35:00	10)	OUTAGE HOURS 32 in Million Units (ONLY DUE TO BTF)		
7)	CLEARANCE FOR LIGHT-UP (AFTER REPAIR OF BTF) 07-09-2023 17:35:00	11)	GENERATION CAPACITY 500		
8)	UNIT SYNCHRONIZED AT 08-09-2023 00:44:00	12)	GENERATION LOSS 16 hrs:min:sec (ONLY DUE TO BTF)		
9)	ORDER NUMBER 100053610				
13)	CAUSE DETAILS 	14)	OBSERVATION PINHOLE PUNCTURE IN CORNER 2		
15)	BTF INSPECTED BY	BTF COMMITTEE HEAD	NO	MTP(Mtce planning)	NO
		CHEMISTRY	NO	OPERATION	NO
				FQA	NO
				O&E	NO

BOILER TUBE FAILURE LOCATION





16)	CORNER 2 RHS WW TUBE 5 & 6 36 ML				
	EQUIPMENT NUMBER T007U02BLR08510	EQUIPMENT DESCRIPTION	NTPL UNIT-2 WATER WALLS		
	LOCATION DETAILS T007-U02-BLR-SWS-BCS	LOCATION DESCRIPTION	NTPL UNIT-2 BOILER CIRCULATION SY		
	MATERIAL SA 210 GR C	TUBE NUMBER 0005	EQUIPMENT HEIGHT (MTS)	036	

DESCRIPTION OF BOILER FAILED TUBE

(CLEARLY IDENTIFYING TUBE NO, COIL NO,TUBE DIMENSION,TUBE MATERIAL AND X,Y,Z COORDINATES)

17)	Corner 2 RHS WW Tube 5 & 6 36 ML Pinhole puncture
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PHOTOGRAPHS

18)	FAILURE BEFORE START OF REPAIR WORK	REPAIRED LOCATION AFTER RESTORATION	PRIMARY FAILED TUBE	REPAIRED LOCATION AFTER RESTORAT
				

DETAILS OF REPAIR WORK (SPECIFY JOINT DETAILS, COIL NO/ TUBE NO AND RESTORATION WORK)

19)	Metallising the eroded tube of 5 & 6 of Corner 2 LHS WW
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DETAILS OF INSPECTION OF ADJACENT AND IDENTICAL LOCATIONS

20)	DPT inspection. No observable defects
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STATION OBSERVATION W.R.T CAUSE OF TUBE FAILURE:

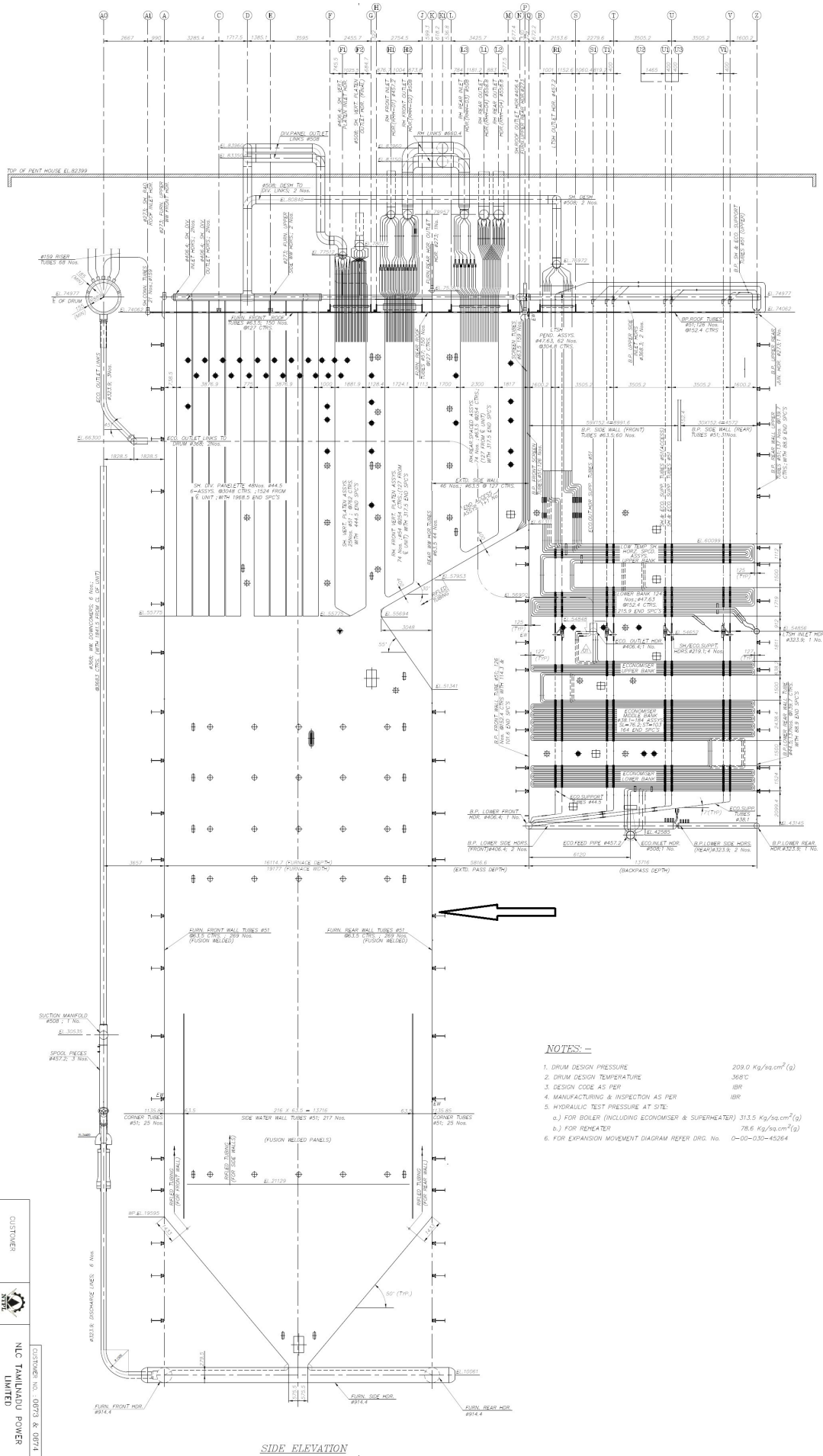
21)	Air based erosion of tubes through the windbox burner areas. Inspection of the areas during overhaul
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HISTORY OF WORK IN FAILED TUBE/COIL/LOCATION IN PAST FIVE YEARS

Date	C2 Form Number	Tube No	Height	Material	Cause
		0005	036	SA 210 GR C	

Submitted by PRADEEP SRIKANTH A	Submitted on 19-09-2023	Designation
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ELEVATION DRAWING



NOTES:-

1. DRUM DESIGN PRESSURE 209.0 Kg/sq.cm² (g)
2. DRUM DESIGN TEMPERATURE 385°C
3. DESIGN CODE AS PER IBR
4. MANUFACTURING & INSPECTION AS PER
5. HYDRAULIC TEST PRESSURE AT SITE:
 - a.) FOR BOILER (INCLUDING ECONOMISER & SUPERHEATER) 313.5 Kg/sq.cm² (g)
 - b.) FOR REHEATER 78.6 Kg/sq.cm² (g)
6. FOR EXPANSION MOVEMENT DIAGRAM REFER DRG. No. 0-00-030-45264

ITEM	QTY	UNIT	DESCRIPTION
1	1	NO.	DRUM
2	1	NO.	REHEATER
3	1	NO.	ECONOMISER
4	1	NO.	SUPERHEATER
5	1	NO.	STEAM GENERATOR
6	1	NO.	WATER TREATMENT UNIT
7	1	NO.	CONDENSER
8	1	NO.	EXHAUST FAN
9	1	NO.	EXHAUST MOTOR
10	1	NO.	EXHAUST PIPING
11	1	NO.	EXHAUST VALVE
12	1	NO.	EXHAUST FLANGE
13	1	NO.	EXHAUST GASKET
14	1	NO.	EXHAUST BOLT
15	1	NO.	EXHAUST NUT
16	1	NO.	EXHAUST WASHER
17	1	NO.	EXHAUST LOCKWASHER
18	1	NO.	EXHAUST RIVET
19	1	NO.	EXHAUST RIVET NUT
20	1	NO.	EXHAUST RIVET WASHER
21	1	NO.	EXHAUST RIVET LOCKWASHER
22	1	NO.	EXHAUST RIVET BUSH
23	1	NO.	EXHAUST RIVET BUSH NUT
24	1	NO.	EXHAUST RIVET BUSH WASHER
25	1	NO.	EXHAUST RIVET BUSH LOCKWASHER
26	1	NO.	EXHAUST RIVET BUSH BUSH
27	1	NO.	EXHAUST RIVET BUSH BUSH NUT
28	1	NO.	EXHAUST RIVET BUSH BUSH WASHER
29	1	NO.	EXHAUST RIVET BUSH BUSH LOCKWASHER
30	1	NO.	EXHAUST RIVET BUSH BUSH BUSH

CUSTOMER		NLC TAMILNADU POWER LIMITED	
CONSULTANT		TETRA TECH	
PACKAGE NO. 1A - BOILER PLANT PACKAGE (S&T)		MECON LIMITED	
22000 HP POWER PLANT AT TETTERCHUR		NLC TAMILNADU POWER LIMITED	
BHAIRAV HEAVY ELECTRICALS LIMITED		TETRA TECH	
BHAIRAV HEAVY ELECTRICALS LIMITED		MECON LIMITED	
GENERAL ARRANGEMENT OF POWERHOUSE PLANT		NLC TAMILNADU POWER LIMITED	
0-00-027-45265		TETRA TECH	
02		MECON LIMITED	