TEST #4

Unit 2 - Turbine Tests

5/13/87 Wed. 1145-1330

860 MWg - VWO

IP14_005649

ELECTRICAL LOAD

INTERMOUNTAIN POWER PROJECT
UNIT #2 TURBINE 270T151

MEASUREMENT (CONTROL ROOM)

TEST POINT # 4 VWO
LOAD MWg 860
DATE 5/13/87
NAME CS Reece, IV

TIME HR/MIN/SEC	COUNTS A PHASE	COUNTS B PHASE	COUNTS C PHASE
11:30:00	0	0	0
11:45:	00 2518	15 2546	30 2557
12:00:00	5031	5012	4949
12:15:	00 7542	15 7559	30 7505
12:30:00	10056.5	10020	9895
12:45:	00 12564	15 12563	30 12448
13:00:00	15080	15028	14840
13:15:	00 17593	15 17573	30 17392
13:30:00	20110	20042	19789
13:45:00			

NOTE: TAKE PICTURES OF ELECTRICAL LOAD EVERY 15 MINUTES. RECORD VALUES FROM PICTURES TO THIS DATA SHEET.

Test #4

IP14_005651

INTERMOUNTAIN POWER PROJECT
UNIT #2 TURBINE 270T151

Test Point #
MW g
Date 5-13-87
Observer L LEWIS

CONDENSER HOT WELL LEVEL \ MEASUREMENT

TIME	C HOOD LEVEL	B HOOD LEVEL	A HOOD LEVEL
1130	13	12 3/8	
1145	12 15/16	12 1/4	
1200	12 13/16	12	
1215	12 13/16	12	
1230	12 1/2	11 7/8	
1245	12 1/2	11 7/8	
1300	12 3/8	11 3/4	
1315	12 1/2	11 3/4	
1330	12 1/4	11 5/8	

Go to 13:45 AC

NOTE: READ HOT WELL LEVELS LOCALLY OF EACH CONDENSER EVERY 15 MINUETES.

INTERMOUNTAIN POWER PROJECT
UNIT #2 TURBINE 270T151

Test Point #
MW g
Date 5-13-87
Observer B. Warner

DEARRATOR LEVEL

TIME	LEVEL LOW	LEVEL HIGH
1130	8.50	11.00
1145	8.50	10.50
1200	8.75	10.75
1215	8.50	10.00
1230	8.50	10.00
1245	8.25	9.75
1300	8.50	10.00
1315	8.25	10.00
1330	8.50	10.50
1345		

NOTE: READ DEARRATOR LEVEL LOCALLY EVERY 15 MINUTES.

INTERMOUNTAIN POWER PROJECT
UNIT #2 TURBINE 270T151

Test Point #_____
MW g _____
Date _____
Observer _____

STEAM PACKING EXH DRAIN FLOW

TIME	TIME INCREMENT
1120	3:01.97
	3:01.03
1330	2:56.50
	2:55.43

Start recording time at low mark.
Stop recording at upper mark.

Distance between upper and lower marks. _____ (in)

Diameter of barrel. _____ (in)

NOTE: One half hour prior to each test take 2 sets of readings, and 2 sets of readings after the test. Do not measure during the test.

EQUIPMENT: STOPWATCH/BARREL/SUMP PUMP/EXTENSION CORD.

IPP #2

Test Pt 4

STOP
1:41

1466125
0000000
0934192
73690
1441992
0000000
0919293
72514
1264940
0000000
0804638
63483
1088462
0000000
0698426
54451
0911590
0000000
0576330
45421
0735119
0000000
0462117
36392
0558072
0000000
0347894
27358
0381278
0000000
0233855
18317
0204158
0000000
0119527
09264

5/13/87 ($11^{30} - 13^{30}$ VWO (

BOILER FEED PUMP TURBINES

INDIKON

Time	BFPT 1A			BFPT 1B		
	Speed	Torque	HP	Speed	Torque	HP
11:32	5284	12,250	12,320	5342	12,890	13,120
11:47	5300	12,330	12,440	5366	13,020	13,300
12:01	5286	12,250	12,320	5352	12,960	13,200
12:17	5287	12,260	12,340	5349	12,940	13,120
12:34	5283	12,240	12,310	5345	12,910	13,140
12:47	5290	12,280	12,370	5355	12,960	13,220
13:03	5293	12,300	12,390	5357	12,980	13,240
13:16	5288	12,270	12,350	5348	12,950	13,210
13:33	5326	12,480	12,590	5367	13,050	13,320

5/13/87 Test 4 VWO 11^{30} - 13^{30}

Time	Atmos. Press, in Hg	Ambient Temp, F
11:34	25.43	73
12:35	25.42	72
13:34	25.405	73

LAB Flow Date 5/13/87 Test #4. VWO

Cond pump	Sample #2	1l/45.75 sec + 1l/15.49 sec
makeup to Condenser	Sample #1	1l/35.25 sec + 1l/40.28
DA	Sample #10	1l/1 min 12.94 sec + 1l/1 min 8.25 sec
CNDS AFT GLD COND DEA Influent	# 8/9	1l/1 min 25.25 sec
Drum	Sample # 12	1l/1 min 20.24 sec

Stroke rate on pumps hydrazine 21

ammonia 24

IP14_005658

COAL SAMPLES 5/13/87

TEST #4

12:00 2E

13:00 2F

BLR AUX TEST-3 05/13/87 11:36:5

TOTAL OIL	TOT COAL
02127297.	00323680.
GAL.	TONS
TOTAL IGNTR OIL	TOTAL COAL

1A1 AUX P	1A2 AUX P	1B1 AUX P	1B2 AUX P
00006086.	00004629.	00006859.	000046
MW/HR	MW/HR	MW/HR	MW/HR
1A1 AUX POWER	1A2 AUX POWER	1B1 AUX POWER	1B AUX PO

L/L SCN L/L < > L/L L/L GTD

IP14_005660

BLR AUX TEST-3 05/13/87 11:50:07

TOTAL OIL	TOT COAL
02127320.	00323751.
GAL.	TONS
TOTAL IGNTR OIL	TOTAL COAL

1A1 AUX P	1A2 AUX P	1B1 AUX P	1B2 AUX P
00006087.	00004631.	00006861.	00004640.
MW/HR	MW/HR	MW/HR	MW/HR
1A1 AUX POWER	1A2 AUX POWER	1B1 AUX POWER	1B2 AUX POWER

L/L SCN L/L < > L/L L/L GTD

IP14_005661

BLR AUX TEST-3 05/13/87 12:01:20

TOTAL OIL	TOT TOTAL
02127337.	00323813.
GAL.	TONS
TOTAL IGNTR OIL	TOTAL COAL

1A1 AUX P	1A2 AUX P	1B1 AUX P	1B2 AUX P
00006088.	00004631.	00006863.	00004641.
MW/HR	MW/HR	MW/HR	MW/HR
1A1 AUX POWER	1A2 AUX POWER	1B1 AUX POWER	1B2 AUX POWER

L/L SCN L/L < > L/L L/L GTD

IP14_005662

BLR AUX TEST-3 05/13/87 12:17:01

TOTAL OIL	TOTAL COAL
02127362.	00323898.
GAL.	TONS
TOTAL IGNTR OIL	TOTAL COAL

1A1 AUX P	1A2 AUX P	1B1 AUX P	1B2 AUX P
00006090.	00004633.	00006865.	00004643.
MW/HR	MW/HR	MW/HR	MW/HR
1A1 AUX POWER	1A2 AUX POWER	1B1 AUX POWER	1B2 AUX POWER

L/L SCN L/L < > L/L L/L GTD

IP14_005663

BLR AUX TEST-3 05/13/87 12:33:59

TOTAL OIL	TOT COAL
02127387.	00323989.
GAL.	TONS
TOTAL IGNTR OIL	TOTAL COAL

1A1 AUX P	1A2 AUX P	1B1 AUX P	1B2 AUX P
00006092.	00004634.	00006867.	00004644.
MW/HR	MW/HR	MW/HR	MW/HR
1A1 AUX POWER	1A2 AUX POWER	1B1 AUX POWER	1B2 AUX POWER

L/L SCN L/L < > L/L L/L GTD

IP14_005664

BLR AUX TEST-3 05/13/87 12:46:52

TOTAL OIL	TOT COAL
02127405.	00324059.
GAL.	TONS
TOTAL IGNTR OIL	TOTAL COAL

1A1 AUX P	1A2 AUX P	1B1 AUX P	1B2 AUX P
00006093.	00004635.	00006869.	00004645.
MW/HR	MW/HR	MW/HR	MW/HR
1A1 AUX POWER	1A2 AUX POWER	1B1 AUX POWER	1B2 AUX POWER

L/L SCN L/L < > L/L L/L GTD

BLR AUX TEST-3 05/13/87 13:03:25

TOTAL OIL	TOT COAL
02127426.	00324148.
GAL.	TONS
TOTAL IGNTR OIL	TOTAL COAL

1A1 AUX P	1A2 AUX P	1B1 AUX P	1B2 AUX P
00006095.	00004636.	00006871.	00004647.
MW/HR	MW/HR	MW/HR	MW/HR
1A1 AUX POWER	1A2 AUX POWER	1B1 AUX POWER	1B2 AUX POWER

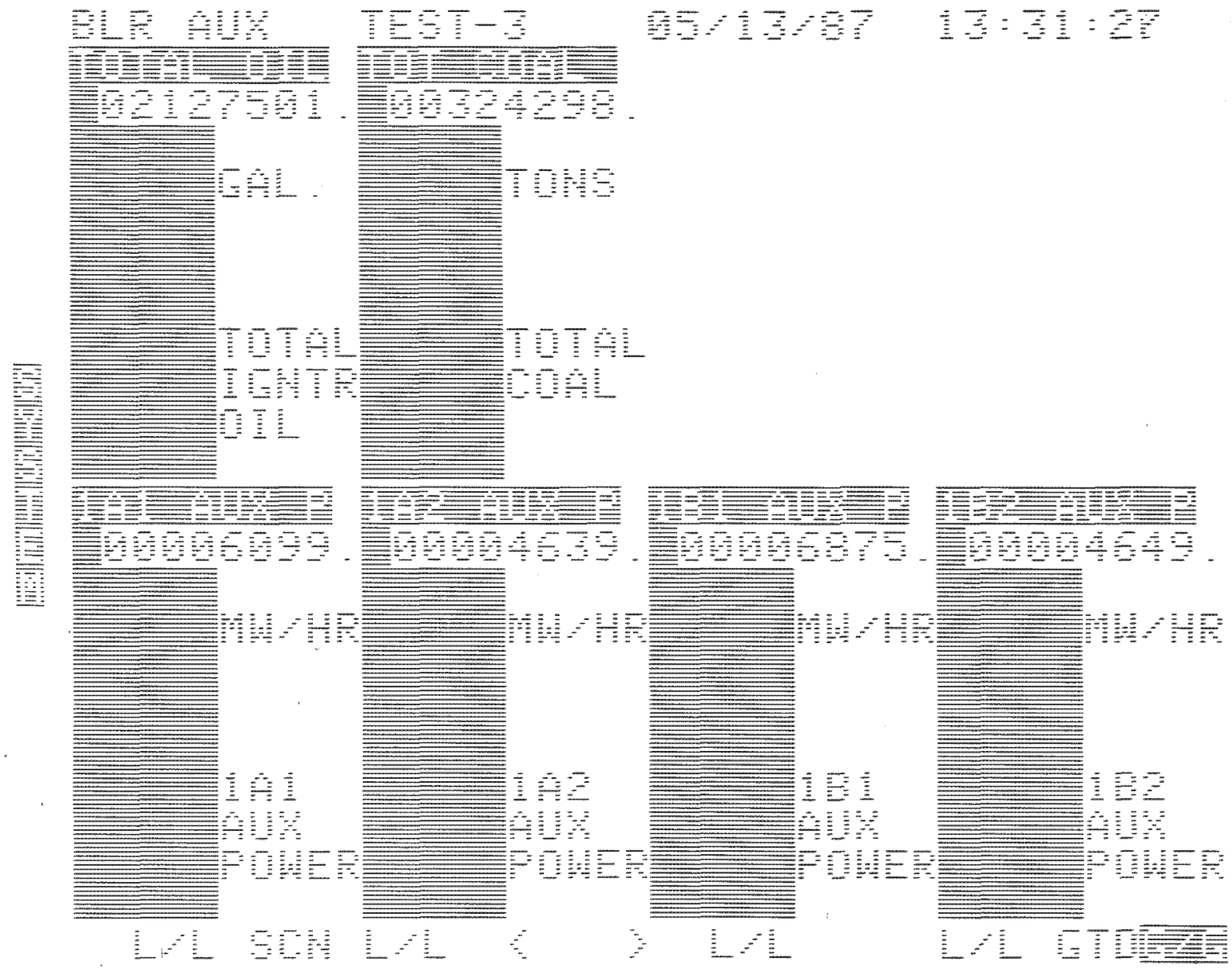
L/L SCN L/L < > L/L L/L GTD

BLR AUX TEST-3 05/13/87 13:15:19

TOTAL OIL	TOT COAL
02127441.	00324212.
GAL.	TONS
TOTAL IGNTR OIL	TOTAL COAL

1A1 AUX P	1A2 AUX P	1B1 AUX P	1B2 AUX P
00006097.	00004637.	00006873.	00004648.
MW/HR	MW/HR	MW/HR	MW/HR
1A1 AUX POWER	1A2 AUX POWER	1B1 AUX POWER	1B2 AUX POWER

L/L SCN L/L < > L/L L/L GTO


BLR AUX TEST-3 05/13/87 13:31:27
TOTAL OIL
02127501.
GAL.
TOTAL
IGNTR
OIL
TOT COAL
00324298.
TONS
TOTAL
COAL
1A1 AUX P
00006099.
MW/HR
1A1
AUX
POWER
1A2 AUX P
00004639.
MW/HR
1A2
AUX
POWER
1B1 AUX P
00006875.
MW/HR
1B1
AUX
POWER
1B2 AUX P
00004649.
MW/HR
1B2
AUX
POWER
L/L SCN L/L < > L/L L/L GTD

IP14_005668

UNDER SOFTWARE LOCK 05/13/87 13:33:55 F1-20

MEASUREMENT DISPLAY

AUX POWER FEED 1A1, 1A2, 1B1, 1B2

BLOCK	VALUE	DESCRIPTION	STATUS	ALARM
APEKK0001	9.6 MW	SWGR 1A1 MEGAWATT		
APEKK0002	13.2 MW	SWGR 1A2 MEGAWATT		
APEKK0003	10.2 MW	SWGR 1B1 MEGAWATT		
APEKK0004	16.2 MW	SWGR 1B2 MEGAWATT		
APEKV0005	[redacted] MW	AUX PWR USED	BYPASS	NO-IN
COAXI027A	862. MW	UNIT LOAD		
APEKV0007	817.1 MW	NET UNIT MEGAWATTS		
APEKK0001B	9.27 MW	SWGR 2A1 POWER (ANALOG)		
APEKK0002B	12.48 MW	SWGR 2A2 POWER (ANALOG)		
APEKK0003B	9.81 MW	SWGR 2B1 POWER (ANALOG)		
APEKK0004B	14.00 MW	SWGR 2B2 POWER (ANALOG)		
APEKK0005B	46.37 MW	TOTAL AUX POWER (ANALOG)		

FORWARD PAGING AUXFDR

IP14_005669

UNDER SOFTWARE LOCK 05/13/87 11:57:48 T1-28

MEASUREMENT DISPLAY

AUX POWER FEED 1A1, 1A2, 1B1, 1B2

BLOCK	VALUE	DESCRIPTION	STATUS	ALARM
APEKK0001	10.2 MW	SWGR 1A1 MEGAWATT		
APEKK0002	13.8 MW	SWGR 1A2 MEGAWATT		
APEKK0003	10.2 MW	SWGR 1B1 MEGAWATT		
APEKK0004	16.2 MW	SWGR 1B2 MEGAWATT		
APEKV0005	[redacted] MW	AUX PWR USED	BYPASS	NO-IN
COAXT027A	856. MW	UNIT LOAD		
APEKV0007	809.3 MW	NET UNIT MEGAWATTS		
APEKK0001B	9.35 MW	SWGR 2A1 POWER (ANALOG)		
APEKK0002B	12.92 MW	SWGR 2A2 POWER (ANALOG)		
APEKK0003B	9.64 MW	SWGR 2B1 POWER (ANALOG)		
APEKK0004B	15.38 MW	SWGR 2B2 POWER (ANALOG)		
APEKK0005B	47.36 MW	TOTAL AUX POWER (ANALOG)		

FORWARD PAGING AUXFDR

IP14_005670

UNDER SOFTWARE LOCK 05/13/87 12:06:29 F1-20

MEASUREMENT DISPLAY

AUX POWER FEED 1A1, 1A2, 1B1, 1B2

BLOCK	VALUE	DESCRIPTION	STATUS	ALARM
APEKK0001	10.2 MW	SWGR 1A1 MEGAWATT		
APEKK0002	13.8 MW	SWGR 1A2 MEGAWATT		
APEKK0003	10.2 MW	SWGR 1B1 MEGAWATT		
APEKK0004	16.2 MW	SWGR 1B2 MEGAWATT		
APEKV0005	[redacted] MW	AUX PWR USED	BYPASS	NO-IN
COAXI027A	859. MW	UNIT LOAD		
APEKV0007	811.5 MW	NET UNIT MEGAWATTS		
APEKK0001B	9.26 MW	SWGR 2A1 POWER (ANALOG)		
APEKK0002B	12.95 MW	SWGR 2A2 POWER (ANALOG)		
APEKK0003B	9.66 MW	SWGR 2B1 POWER (ANALOG)		
APEKK0004B	15.31 MW	SWGR 2B2 POWER (ANALOG)		
APEKK0005B	47.17 MW	TOTAL AUX POWER (ANALOG)		

FORWARD PAGING AUXFDR

IP14_005671

UNDER SOFTWARE LOCK 05/13/87 12:17:39 F1-20

MEASUREMENT DISPLAY

AUX POWER FEED 1A1, 1A2, 1B1, 1B2

BLOCK	VALUE	DESCRIPTION	STATUS	ALARM
APEKK0001	10.2 MW	SWGR 1A1 MEGAWATT		
APEKK0002	13.2 MW	SWGR 1A2 MEGAWATT		
APEKK0003	10.2 MW	SWGR 1B1 MEGAWATT		
APEKK0004	14.0 MW	SWGR 1B2 MEGAWATT		
APEKV0005	[illegible] MW	AUX PWR USED	BYPASS	NO-IN
COAXT027A	857. MW	UNIT LOAD		
APEKV0007	810.5 MW	NET UNIT MEGAWATTS		
APEKK0001B	9.18 MW	SWGR 2A1 POWER (ANALOG)		
APEKK0002B	12.82 MW	SWGR 2A2 POWER (ANALOG)		
APEKK0003B	9.72 MW	SWGR 2B1 POWER (ANALOG)		
APEKK0004B	15.20 MW	SWGR 2B2 POWER (ANALOG)		
APEKK0005B	47.88 MW	TOTAL AUX POWER (ANALOG)		

FORWARD PAGING AUXFDR

IP14_005672

UNDER SOFTWARE LOCK 05/13/07 12:36:38 F1-20

MEASUREMENT DISPLAY

AUX POWER FEED 1A1, 1A2, 1B1, 1B2

BLOCK	VALUE	DESCRIPTION	STATUS	ALARM
APEKK0001	10.2 MW	SWGR 1A1 MEGAWATT		
APEKK0002	13.8 MW	SWGR 1A2 MEGAWATT		
APEKK0003	10.8 MW	SWGR 1B1 MEGAWATT		
APEKK0004	16.2 MW	SWGR 1B2 MEGAWATT		
APEKV0005	[redacted] MW	AUX PWR USED	BYPASS	NO-IN
COAXI027A	856. MW	UNIT LOAD		
APEKV0007	889.5 MW	NET UNIT MEGAWATTS		
APEKK0001B	9.14 MW	SWGR 2A1 POWER (ANALOG)		
APEKK0002B	12.88 MW	SWGR 2A2 POWER (ANALOG)		
APEKK0003B	9.71 MW	SWGR 2B1 POWER (ANALOG)		
APEKK0004B	15.38 MW	SWGR 2B2 POWER (ANALOG)		
APEKK0005B	46.72 MW	TOTAL AUX POWER (ANALOG)		

FORWARD PAGING AUXFDR

IP14_005673

UNDER SOFTWARE LOCK 05/13/07 12:47:33 F1-20

MEASUREMENT DISPLAY

AUX POWER FEED 1A1, 1A2, 1B1, 1B2

BLOCK	VALUE	DESCRIPTION	STATUS	ALARM
APEKK0001	9.6 MW	SWGR 1A1 MEGAWATT		
APEKK0002	13.8 MW	SWGR 1A2 MEGAWATT		
APEKK0003	10.8 MW	SWGR 1B1 MEGAWATT		
APEKK0004	16.2 MW	SWGR 1B2 MEGAWATT		
APEKV0005	[redacted] MW	AUX PWR USED	BYPASS	NO-IN
COAXI027A	859. MW	UNIT LOAD		
APEKV0007	813.0 MW	NET UNIT MEGAWATTS		
APEKK0001B	9.85 MW	SWGR 2A1 POWER (ANALOG)		
APEKK0002B	12.93 MW	SWGR 2A2 POWER (ANALOG)		
APEKK0003B	9.96 MW	SWGR 2B1 POWER (ANALOG)		
APEKK0004B	15.31 MW	SWGR 2B2 POWER (ANALOG)		
APEKK0005B	47.25 MW	TOTAL AUX POWER (ANALOG)		

FORWARD PAGING AUXFDR

IP14_005674

UNDER SOFTWARE LOCK 05/13/87 13:05:19 F1-20

MEASUREMENT DISPLAY

AUX POWER FEED 1A1, 1A2, 1B1, 1B2

BLOCK	VALUE	DESCRIPTION	STATUS	ALARM
APEKK0001	9.6 MW	SWGR 1A1 MEGAWATT		
APEKK0002	13.8 MW	SWGR 1A2 MEGAWATT		
APEKK0003	10.2 MW	SWGR 1B1 MEGAWATT		
APEKK0004	16.2 MW	SWGR 1B2 MEGAWATT		
APEKV0005	[illegible] MW	AUX PWR USED	BYPASS	NO-IN
COAXT027A	858. MW	UNIT LOAD		
APEKV0007	812.5 MW	NET UNIT MEGAWATTS		
APEKK0001B	9.21 MW	SWGR 2A1 POWER (ANALOG)		
APEKK0002B	12.76 MW	SWGR 2A2 POWER (ANALOG)		
APEKK0003B	9.90 MW	SWGR 2B1 POWER (ANALOG)		
APEKK0004B	13.15 MW	SWGR 2B2 POWER (ANALOG)		
APEKK0005B	46.81 MW	TOTAL AUX POWER (ANALOG)		

FORWARD PAGING AUXFDR

IP14_005675

UNDER SOFTWARE LOCK 05/13/87 13:19:37 F1-20

MEASUREMENT DISPLAY

AUX POWER FEED 1A1, 1A2, 1B1, 1B2

BLOCK	VALUE	DESCRIPTION	STATUS	ALARM
APEKK0001	10.2 MW	SWGR 1A1 MEGAWATT		
APEKK0002	13.8 MW	SWGR 1A2 MEGAWATT		
APEKK0003	10.0 MW	SWGR 1B1 MEGAWATT		
APEKK0004	16.2 MW	SWGR 1B2 MEGAWATT		
APEKV0005	[illegible] MW	AUX PWR USED	BYPASS	WD-IN
COAXI027A	856. MW	UNIT LOAD		
APEKV0007	809.9 MW	NET UNIT MEGAWATTS		
APEKK0001B	9.34 MW	SWGR 2A1 POWER (ANALOG)		
APEKK0002B	12.70 MW	SWGR 2A2 POWER (ANALOG)		
APEKK0003B	9.97 MW	SWGR 2B1 POWER (ANALOG)		
APEKK0004B	15.09 MW	SWGR 2B2 POWER (ANALOG)		
APEKK0005B	47.09 MW	TOTAL AUX POWER (ANALOG)		

FORWARD PAGING AUXFDR

IP14_005676

UNDER SOFTWARE LOCK 05/13/87 11:57:04 F1-28

MEASUREMENT DISPLAY

UNIT 2 PERFORMANCE LOG

BLOCK	VALUE		DESCRIPTION	STATUS	ALARM
COAXI027A	857.	MW	UNIT LOAD		
APEKV0005	[redacted]	MW	AUX PWR USED	BYPASS	NO-IN
APEKK0005B	47.39	MW	TOTAL AUX POWER (ANALOG)		
COAXI023A	6134.	KPPH	STEAM FLOW (FW + SSF)		
COAXI015A	1001.	DEGF	THROTTLE TEMP		
SGGTE0004	1000.	DEGF	MAIN STEAM LINE T		
COAXI012A	2405.	PSIG	TURBINE THROTTLE PRESS		
SGGPT0001	2407.	PSIG	MAIN STEAM LINE PR		
SGJTE0013	1008.	DEGF	TURBINE N HOT REHEAT INLET T		
SGJTE0016	1009.	DEGF	TURBINE S HOT REHEAT INLET T		
SGJPT0006	515.	PSIG	TURBINE N HOT REHEAT INLET PR		
SGJPT0007	519.	PSIG	TURBINE S HOT REHEAT INLET PR		
COAXI021A	6134.	KPPH	FDW FLOW TO ECONOMIZER		
FWAFT0025	6100.	KPPH	BOILER FEEDWATER F		
COAXI001A	326.3	TPH	TOTAL FUEL FLOW		
COAXI080A	5.0	PCT	WEST FLUE GAS O2		
COAXI079A	5.2	PCT	EAST FLUE GAS O2		
COAXI083A	-.5	INWC	FURNACE PRESS		
SGAPT0171	-.8	INWC	SG EAST FLUE GAS PR		

FORWARD PAGING DESK1

IP14_005677

UNDER SOFTWARE LOCK 05/13/87 11:57:18 F1-28

MEASUREMENT DISPLAY

UNIT 2 PERFORMANCE LOG

BLOCK	VALUE		DESCRIPTION	STATUS	ALARM
HRAPT0112	1.2	INHGA	HP COND 1A SHELL PR		
HRAPT0113	.4	INHGA	IP COND 1B SHELL PR		
COAXI110A	2.8	INHGA	CONDENSER ABSOLUTE PRESSURE		
SGBTE0927	320.	DEGF	SEC AH 1A GAS OUT T		
SGBTE0929	310.	DEGF	SEC AH 1B GAS OUT T		
SAAKK0007	.461	LB/MB	STACK NOX CONVERTED		
SAAKK0002	585.	PPM	SCRUB INLET SO2		
SAAKK0004	20.9	PPM	STACK SO2		
HRCTE0377	88.	DEGF	IP COND 1B INLET T		
HRCTE0378	88.	DEGF	IP COND 1B INLET T		
HRCTE0379	89.	DEGF	LP COND 1C EAST INLET T		
HRCTE0380	88.	DEGF	LP COND 1C WEST INLET T		
HRCTE0389	122.	DEGF	IP COND 1B OUTLET T WEST		
HRCTE0394	119.	DEGF	IP COND 1B OUTLET T EAST		
HRCTE0397	120.	DEGF	HP COND 1A WEST OUTLET T		
HRCTE0401	121.	DEGF	HP COND 1A EAST OUTLET T		
COAXI078A	95.6	PCT	TOTAL AIR FLOW		

FORWARD PAGING DESK2

IP14_005678

UNDER SOFTWARE LOCK 05/13/87 12:05:35 F1-28

MEASUREMENT DISPLAY

UNIT 2 PERFORMANCE LOG

BLOCK	VALUE		DESCRIPTION	STATUS	ALARM
COAXI027A	858.	MW	UNIT LOAD		
APEKY0005	[redacted]	MW	AUX PWR USED	BYPASS	NO-IN
APEKK0005B	47.32	MW	TOTAL AUX POWER (ANALOG)		
COAXI023A	6136.	KPPH	STEAM FLOW (FW + SSF)		
COAXI015A	1001.	DEGF	THROTTLE TEMP		
SGGTF0004	1001.	DEGF	MAIN STEAM LINE T		
COAXI012A	2409.	PSIG	TURBINE THROTTLE PRESS		
SGGPT0001	2408.	PSIG	MAIN STEAM LINE PR		
SGJTE0013	1008.	DEGF	TURBINE N HOT REHEAT INLET T		
SGJTE0016	1009.	DEGF	TURBINE S HOT REHEAT INLET T		
SGJPT0006	518.	PSIG	TURBINE N HOT REHEAT INLET PR		
SGJPT0007	519.	PSIG	TURBINE S HOT REHEAT INLET PR		
COAXI021A	6136.	KPPH	FDW FLOW TO ECONOMIZER		
FWAFT0025	6085.	KPPH	BOILER FEEDWATER F		
COAXI001A	326.2	TPH	TOTAL FUEL FLOW		
COAXI080A	4.9	PCT	WEST FLUE GAS O2		
COAXI079A	5.1	PCT	EAST FLUE GAS O2		
COAXI083A	-.6	INWC	FURNACE PRESS		
SGAPT0171	-.8	INWC	SG EAST FLUE GAS PR		

FORWARD PAGING DESK1

IP14_0005679

UNDER SOFTWARE LOCK 05/13/07 12:05:56 F1-20

MEASUREMENT DISPLAY

UNIT 2 PERFORMANCE LOG

BLOCK	VALUE		DESCRIPTION	STATUS	ALARM
HRAPT0112	1.2	INHGA	HP COND 1A SHELL PR		
HRAPT0113	.4	INHGA	IP COND 1B SHELL PR		
COAXI110A	2.0	INHGA	CONDENSER ABSOLUTE PRESSURE		
SGBTE0927	[illegible]	DEGF	SEC AH 1A GAS OUT T		HI-WRN
SGBTE0929	389.	DEGF	SEC AH 1B GAS OUT T		
SAAKK0007	.455	LB/MB	STACK NOX CONVERTED		
SAAKK0002	585.	PPM	SCRUB INLET SO2		
SAAKK0004	19.9	PPM	STACK SO2		
HRCTE0377	88.	DEGF	IP COND 1B INLET T		
HRCTE0378	88.	DEGF	IP COND 1B INLET T		
HRCTE0379	89.	DEGF	LP COND 1C EAST INLET T		
HRCTE0380	88.	DEGF	LP COND 1C WEST INLET T		
HRCTE0389	122.	DEGF	IP COND 1B OUTLET T WEST		
HRCTE0394	119.	DEGF	IP COND 1B OUTLET T EAST		
HRCTE0397	120.	DEGF	HP COND 1A WEST OUTLET T		
HRCTE0401	121.	DEGF	HP COND 1A EAST OUTLET T		
COAXI078A	94.8	PCT	TOTAL AIR FLOW		

FORWARD PAGING DESK2

IP14_005680

UNDER SOFTWARE LOCK 05/13/87 12:18:01 F1-20

MEASUREMENT DISPLAY

UNIT 2 PERFORMANCE LOG

BLOCK	VALUE		DESCRIPTION	STATUS	ALARM
COAXI027A	858.	MW	UNIT LOAD		
APEKV0005	[redacted]	MW	AUX PWR USED	BYPASS	NO-IN
APEKK0005B	47.31	MW	TOTAL AUX POWER (ANALOG)		
COAXI023A	6143.	KPPH	STEAM FLOW (FW + SSP)		
COAXI015A	1002.	DEGF	THROTTLE TEMP		
SGGTE0004	1002.	DEGF	MAIN STEAM LINE T		
COAXI012A	2408.	PSIG	TURBINE THROTTLE PRESS		
SGGPT0001	2408.	PSIG	MAIN STEAM LINE PR		
SGJTE0013	1007.	DEGF	TURBINE N HOT REHEAT INLET T		
SGJTE0016	1008.	DEGF	TURBINE S HOT REHEAT INLET T		
SGJPT0006	516.	PSIG	TURBINE N HOT REHEAT INLET PR		
SGJPT0007	519.	PSIG	TURBINE S HOT REHEAT INLET PR		
COAXI021A	6143.	KPPH	FDW FLOW TO ECONOMIZER		
FWAFT0025	6090.	KPPH	BOILER FEEDWATER F		
COAXI001A	324.5	TPH	TOTAL FUEL FLOW		
COAXI080A	5.2	PCT	WEST FLUE GAS O2		
COAXI079A	4.7	PCT	EAST FLUE GAS O2		
COAXI083A	-.6	INWC	FURNACE PRESS		
SGAPT0171	-.5	INWC	SG EAST FLUE GAS PR		

FORWARD PAGING DESK1

IP14_005681

UNDER SOFTWARE LOCK 05/13/87 12:35:21 F1-20

MEASUREMENT DISPLAY

UNIT 2 PERFORMANCE LOG

BLOCK	VALUE		DESCRIPTION	STATUS	ALARM
COAXI027A	856.	MW	UNIT LOAD		
APEKY0005	[redacted]	MW	AUX PWR USED	BYPASS	NO-IN
APEKK0005D	47.07	MW	TOTAL AUX POWER (ANALOG)		
COAXI023A	6132.	KPPH	STEAM FLOW (FW + SSP)		
COAXI015A	1004.	DEGF	THROTTLE TEMP		
SGGTE0004	1003.	DEGF	MAIN STEAM LINE T		
COAXI012A	2403.	PSIG	TURBINE THROTTLE PRESS		
SGGPT0001	2404.	PSIG	MAIN STEAM LINE PR		
SGJTE0013	1008.	DEGF	TURBINE N HOT REHEAT INLET T		
SGJTE0016	1009.	DEGF	TURBINE S HOT REHEAT INLET T		
SGJPT0006	516.	PSIG	TURBINE N HOT REHEAT INLET PR		
SGJPT0007	519.	PSIG	TURBINE S HOT REHEAT INLET PR		
COAXI021A	6132.	KPPH	FDW FLOW TO ECONOMIZER		
FWAFT0025	6077.	KPPH	BOILER FEEDWATER F		
COAXI001A	324.2	TPH	TOTAL FUEL FLOW		
COAXI080A	5.0	PCT	WEST FLUE GAS O2		
COAXI079A	4.8	PCT	EAST FLUE GAS O2		
COAXI083A	-.6	INWC	FURNACE PRESS		
SGAPT0171	-.7	INWC	SG EAST FLUE GAS PR		

BACKWARD PAGING DESK1

IP14_005682

UNDER SOFTWARE LOCK 05/13/87 12:35:06 F1-20

MEASUREMENT DISPLAY

UNIT 2 PERFORMANCE LOG

BLOCK	VALUE		DESCRIPTION	STATUS	ALARM
HRAPT0112	1.2	INHGA	HP COND 1A SHELL PR		
HRAPT0113	.4	INHGA	IP COND 1B SHELL PR		
COAXI110A	2.8	INHGA	CONDENSER ABSOLUTE PRESSURE		
SGBTE0927	[illegible]	DEGF	SEC AH 1A GAS OUT T		HI-WRN
SGBTE0929	311.	DEGF	SEC AH 1B GAS OUT T		
SAAKX0007	.458	LB/MB	STACK NOX CONVERTED		
SAAKX0002	585.	PPM	SCRUB INLET SO2		
SAAKX0004	18.9	PPM	STACK SO2		
HRCTE0377	89.	DEGF	IP COND 1B INLET T		
HRCTE0378	88.	DEGF	IP COND 1B INLET T		
HRCTE0379	89.	DEGF	LP COND 1C EAST INLET T		
HRCTE0380	89.	DEGF	LP COND 1C WEST INLET T		
HRCTE0399	122.	DEGF	IP COND 1B OUTLET T WEST		
HRCTE0394	119.	DEGF	IP COND 1B OUTLET T EAST		
HRCTE0397	120.	DEGF	HP COND 1A WEST OUTLET T		
HRCTE0401	121.	DEGF	HP COND 1A EAST OUTLET T		
COAXI078A	95.1	PCT	TOTAL AIR FLOW		

FORWARD PAGING DESK2

IP14_005683

UNDER SOFTWARE LOCK 05/13/87 12:48:12 F1-28

MEASUREMENT DISPLAY

UNIT 2 PERFORMANCE LOG

BLOCK	VALUE		DESCRIPTION	STATUS	ALARM
COAXT027A	858.	MW	UNIT LOAD		
APEKY0005	[redacted]	MW	AUX PWR USED	BYPASS	NO-IN
APEKK0005D	46.96	MW	TOTAL AUX POWER (ANALOG)		
COAXT023A	6139.	KPPH	STEAM FLOW (FW + SSF)		
COAXT015A	1001.	DEGF	THROTTLE TEMP		
SGGTE0004	1001.	DEGF	MAIN STEAM LINE T		
COAXT012A	2407.	PSIG	TURBINE THROTTLE PRESS		
SGGPT0001	2406.	PSIG	MAIN STEAM LINE PR		
SGJTE0013	1008.	DEGF	TURBINE N HOT REHEAT INLET T		
SGJTE0016	1009.	DEGF	TURBINE S HOT REHEAT INLET T		
SGJPT0006	516.	PSIG	TURBINE N HOT REHEAT INLET PR		
SGJPT0007	519.	PSIG	TURBINE S HOT REHEAT INLET PR		
COAXT021A	6139.	KPPH	FDW FLOW TO ECONOMIZER		
FWAFT0025	6119.	KPPH	BOILER FEEDWATER F		
COAXT001A	323.4	TPH	TOTAL FUEL FLOW		
COAXT000A	5.0	PCT	WEST FLUE GAS O2		
COAXT079A	4.6	PCT	EAST FLUE GAS O2		
COAXT003A	-.2	INWC	FURNACE PRESS		
SGAPT0171	-.4	INWC	SG EAST FLUE GAS PR		

BACKWARD PAGING DESK1

IP14_005684

UNDER SOFTWARE LOCK 05/13/87 12:47:56 F1-20

MEASUREMENT DISPLAY

UNIT 2 PERFORMANCE LOG

BLOCK	VALUE		DESCRIPTION	STATUS	ALARM
WRAPT0112	1.2	INHGA	HP COND 1A SHELL PR		
WRAPT0113	.5	INHGA	IP COND 1B SHELL PR		
COAXI110A	2.8	INHGA	CONDENSER ABSOLUTE PRESSURE		
SGBTE0927	[illegible]	DEGF	SEC AH 1A GAS OUT T		HI-WRN
SGBTE0929	312.	DEGF	SEC AH 1B GAS OUT T		
SAAKK0007	.447	LB/MB	STACK NOX CONVERTED		
SAAKK0002	511.	PPM	SCRUB INLET SO2		
SAAKK0004	19.9	PPM	STACK SO2		
WRCTE0377	89.	DEGF	IP COND 1B INLET T		
WRCTE0378	88.	DEGF	IP COND 1B INLET T		
WRCTE0379	89.	DEGF	LP COND 1C EAST INLET T		
WRCTE0380	88.	DEGF	LP COND 1C WEST INLET T		
WRCTE0389	122.	DEGF	IP COND 1B OUTLET T WEST		
WRCTE0394	119.	DEGF	IP COND 1B OUTLET T EAST		
WRCTE0397	120.	DEGF	HP COND 1A WEST OUTLET T		
WRCTE0401	121.	DEGF	HP COND 1A EAST OUTLET T		
COAXI078A	94.4	PCT	TOTAL AIR FLOW		

BACKWARD PAGING DESK2

IP14_005685

UNDER SOFTWARE LOCK 05/13/87 13:04:42 F1-20

MEASUREMENT DISPLAY

UNIT 2 PERFORMANCE LOG

BLOCK	VALUE		DESCRIPTION	STATUS	ALARM
COAXI027A	859.	MW	UNIT LOAD		
APEKV0005	[redacted]	MW	AUX PWR USED	BYPASS	NO-IN
APEKX0005D	47.09	MW	TOTAL AUX POWER (ANALOG)		
COAXI023A	6158.	KPPH	STEAM FLOW (FW + SSF)		
COAXI015A	1004.	DEGF	THROTTLE TEMP		
SGGTE0004	1004.	DEGF	MAIN STEAM LINE T		
COAXI012A	2411.	PSIG	TURBINE THROTTLE PRESS		
SGGPT0001	2408.	PSIG	MAIN STEAM LINE PR		
SGJTE0013	1009.	DEGF	TURBINE N HOT REHEAT INLET T		
SGJTE0016	1010.	DEGF	TURBINE S HOT REHEAT INLET T		
SGJPT0006	516.	PSIG	TURBINE N HOT REHEAT INLET PR		
SGJPT0007	519.	PSIG	TURBINE S HOT REHEAT INLET PR		
COAXI021A	6148.	KPPH	FDW FLOW TO ECONOMIZER		
FWAFT0025	6111.	KPPH	BOILER FEEDWATER F		
COAXI001A	322.0	TPH	TOTAL FUEL FLOW		
COAXI080A	5.0	PCT	WEST FLUE GAS O2		
COAXI079A	4.5	PCT	EAST FLUE GAS O2		
COAXI083A	-.6	INWC	FURNACE PRESS		
SGAPT0171	-.8	INWC	SG EAST FLUE GAS PR		

FORWARD PAGING DESK1

IP14_005686

UNDER SOFTWARE LOCK 05/13/87 13:04:58 F1-20

MEASUREMENT DISPLAY

UNIT 2 PERFORMANCE LOG

BLOCK	VALUE		DESCRIPTION	STATUS	ALARM
HRAPT0112	1.2	INHGA	HP COND 1A SHELL PR		
HRAPT0113	.5	INHGA	IP COND 1B SHELL PR		
COAXI110A	2.8	INHGA	CONDENSER ABSOLUTE PRESSURE		
SGBTE0927	[illegible]	DEGF	SEC AH 1A GAS OUT T		HI-WRN
SGBTE0929	312.	DEGF	SEC AH 1B GAS OUT T		
SAAKK0007	.447	LB/MB	STACK NOX CONVERTED		
SAAKK0002	509.	PPM	SCRUB INLET SO2		
SAAKK0004	21.9	PPM	STACK SO2		
HRCTE0377	89.	DEGF	IP COND 1B INLET T		
HRCTE0378	89.	DEGF	IP COND 1B INLET T		
HRCTE0379	89.	DEGF	LP COND 1C EAST INLET T		
HRCTE0380	89.	DEGF	LP COND 1C WEST INLET T		
HRCTE0389	122.	DEGF	IP COND 1B OUTLET T WEST		
HRCTE0394	119.	DEGF	IP COND 1B OUTLET T EAST		
HRCTE0397	120.	DEGF	HP COND 1A WEST OUTLET T		
HRCTE0401	121.	DEGF	HP COND 1A EAST OUTLET T		
COAXI078A	94.5	PCT	TOTAL AIR FLOW		

FORWARD PAGING BACK

IP14_005687

UNDER SOFTWARE LOCK 05/13/87 [redacted]

MEASUREMENT DISPLAY

UNIT 2 PERFORMANCE LOG

BLOCK	VALUE		DESCRIPTION	STATUS	ALARM
COAXI027A	856.	MW	UNIT LOAD		
APEKY0005	[redacted]	MW	AUX PWR USED	BYPASS	NO-IN
APEKK0005B	47.45	MW	TOTAL AUX POWER (ANALOG)		
COAXI023A	6053.	KPPH	STEAM FLOW (FW + SSF)		
COAXI015A	1005.	DEGF	THROTTLE TEMP		
SGGTE0004	1005.	DEGF	MAIN STEAM LINE T		
COAXI012A	2400.	PSIG	TURBINE THROTTLE PRESS		
SGGPT0001	2401.	PSIG	MAIN STEAM LINE PR		
SGJTE0013	1010.	DEGF	TURBINE N HOT REHEAT INLET T		
SGJTE0016	1011.	DEGF	TURBINE S HOT REHEAT INLET T		
SGJPT0006	516.	PSIG	TURBINE N HOT REHEAT INLET PR		
SGJPT0007	519.	PSIG	TURBINE S HOT REHEAT INLET PR		
COAXI021A	6053.	KPPH	FDW FLOW TO ECONOMIZER		
FWAFT0025	5989.	KPPH	BOILER FEEDWATER F		
COAXI001A	322.8	TPH	TOTAL FUEL FLOW		
COAXI080A	5.0	PCT	WEST FLUE GAS O2		
COAXI079A	4.9	PCT	EAST FLUE GAS O2		
COAXI083A	-.5	INWC	FURNACE PRESS		
SGAPT0171	-.6	INWC	SG EAST FLUE GAS PR		

FORWARD PAGING DESK1

IP14_005688

UNDER SOFTWARE LOCK 05/13/87 13:19:16 F1-20

MEASUREMENT DISPLAY

UNIT 2 PERFORMANCE LOG

BLOCK	VALUE		DESCRIPTION	STATUS	ALARM
HRAPT0112	1.2	INHGA	HP COND 1A SHELL PR		
HRAPT0113	.5	INHGA	IP COND 1B SHELL PR		
COAXI110A	2.8	INHGA	CONDENSER ABSOLUTE PRESSURE		
SGBTE0927	[illegible]	DEGF	SEC AH 1A GAS OUT T		HI-WRN
SGBTE0929	313.	DEGF	SEC AH 1B GAS OUT T		
SAAKK0007	.447	LB/MB	STACK NOX CONVERTED		
SAAKK0002	589.	PPM	SCRUB INLET SO2		
SAAKK0004	21.9	PPM	STACK SO2		
HRCTE0377	89.	DEGF	IP COND 1B INLET T		
HRCTE0378	89.	DEGF	IP COND 1B INLET T		
HRCTE0379	89.	DEGF	LP COND 1C EAST INLET T		
HRCTE0380	89.	DEGF	LP COND 1C WEST INLET T		
HRCTE0389	122.	DEGF	IP COND 1B OUTLET T WEST		
HRCTE0394	119.	DEGF	IP COND 1B OUTLET T EAST		
HRCTE0397	120.	DEGF	HP COND 1A WEST OUTLET T		
HRCTE0401	121.	DEGF	HP COND 1A EAST OUTLET T		
COAXI078A	93.9	PCT	TOTAL AIR FLOW		

FORWARD PAGING DESK2

IP14_005689

UNDER SOFTWARE LOCK 05/13/87 13:34:18 F1-20

MEASUREMENT DISPLAY

UNIT 2 PERFORMANCE LOG

BLOCK	VALUE		DESCRIPTION	STATUS	ALARM
COAXI027A	861.	MW	UNIT LOAD		
APEKV0005	[redacted]	MW	AUX PWR USED	BYPASS	NO-IN
APEKK0005B	.00	MW	TOTAL AUX POWER (ANALOG)		
COAXI023A	6225.	KPPH	STEAM FLOW (FW + SSF)		
COAXI015A	977.	DEGF	THROTTLE TEMP		
SGGTE0004	978.	DEGF	MAIN STEAM LINE T		
COAXI012A	2422.	PSIG	TURBINE THROTTLE PRESS		
SGGPT0001	2421.	PSIG	MAIN STEAM LINE PR		
SGJTE0013	997.	DEGF	TURBINE N HOT REHEAT INLET T		
SGJTE0016	998.	DEGF	TURBINE S HOT REHEAT INLET T		
SGJPT0006	524.	PSIG	TURBINE N HOT REHEAT INLET PR		
SGJPT0007	527.	PSIG	TURBINE S HOT REHEAT INLET PR		
COAXI021A	6225.	KPPH	FDW FLOW TO ECONOMIZER		
FWAFT0025	6170.	KPPH	BOILER FEEDWATER F		
COAXI001A	328.9	TPH	TOTAL FUEL FLOW		
COAXI080A	4.9	PCT	WEST FLUE GAS O2		
COAXI079A	4.5	PCT	EAST FLUE GAS O2		
COAXTAR3A	-.6	INWC	FURNACE PRESS		
SGAPT0171	-.6	INWC	SG EAST FLUE GAS PR		

FORWARD PAGING DESK1

IP14_005690

UNDER SOFTWARE LOCK 05/13/87 13:34:41 F1-20

MEASUREMENT DISPLAY

UNIT 2 PERFORMANCE LOG

BLOCK	VALUE		DESCRIPTION	STATUS	ALARM
HRAPT0112	1.3	INHGA	HP COND 1A SHELL PR		
HRAPT0113	.5	INHGA	IP COND 1B SHELL PR		
COAXI110A	2.9	INHGA	CONDENSER ABSOLUTE PRESSURE		
SGBTE0927	[illegible]	DEGF	SEC AH 1A GAS OUT T		HI-WRN
SGBTE0929	313.	DEGF	SEC AH 1B GAS OUT T		
SAAKK0007	.435	LB/MB	STACK NOX CONVERTED		
SAAKK0002	514.	PPM	SCRUB INLET SO2		
SAAKK0004	19.9	PPM	STACK SO2		
HRCTE0377	88.	DEGF	IP COND 1B INLET T		
HRCTE0378	88.	DEGF	IP COND 1B INLET T		
HRCTE0379	89.	DEGF	LP COND 1C EAST INLET T		
HRCTE0380	88.	DEGF	LP COND 1C WEST INLET T		
HRCTE0389	122.	DEGF	IP COND 1B OUTLET T WEST		
HRCTE0394	119.	DEGF	IP COND 1B OUTLET T EAST		
HRCTE0397	120.	DEGF	HP COND 1A WEST OUTLET T		
HRCTE0401	121.	DEGF	HP COND 1A EAST OUTLET T		
COAXI078A	92.0	PCT	TOTAL AIR FLOW		

FORWARD PAGING DESK2

IP14_005691

TURBINE TESTS Unit#2

5/13/87
- Wed 2nd test
NISSEN

TEST #4
VWO/860MWg

Requested to go to 860MWg
+ 2405 psig (TAC 5 psi low)
to drive VWO

~~1145-1345~~

TEST TIME: ~~1130-1330~~ 1145-1330

Beginning: Due to CRH Drain coming open
End: Feeder 2c trip

Extended Bid 1-hr til 1430
to deisolate

Turbine Manual VWO
Boiler Follow

⊗ Feeder 2C @ 1325
small press excursion
24 psi excursion
ABORT test

Drain Valve on Htr #2 came open

Logs Trend Log Backup 1130-1330
Standard 1130-1330
Average 1145:1330

IP14_005692

5B- Waterwalls @ 820
had to deisolate 5B system
warmup headers etc.

~~Swapping out pulverizers~~
~~taking upper o/s~~

→ Sprays in big time - SH / RH

Took out Pulv 1D
↑ O_2 / + 5A-WB Dampers / Bias Dampers - manual
to get Mstm / HRH temps · Bias + Pulv x 1E

Htr #2 normal drawing
Flash Tank back I/S

7 Pulv I/S
2D R4 o/s Bias 52%
feeder speeds 64%

All CT Fans 24 / 3 CW P's

3 polishers I/S
2 CP's

IP14_005693

CONTROL ROOM INFO

	@1222	@ 1320
	861	861
	VWO	VWO
	2405	2402
	2383	2380
	1905	1901
	556	555
	1002	10005
	0/0	
	1013/1010	1015/1012
	0	
MWnet	470	47.1
BP	2.26/2.35/1.64	2.26/2.35/1.62
PF	.982	
MVARS	165	
Press	62.7	
Gland Stm press	4.2 psig	
Steam Flow	6221	6206
	6109	6139
HW	41	40
DFA	102	102

SWINGS

Throttle Press
min 2399 / max 2415

Throttle Temp
min 998 max 1002

HRM
min 1008 max 1013

SSH (pyrosonics) 1003° F
Bra's RH 60 / PSH 100
O_2% 4.9 / 5.0

PA Duct 37"
SA Duct 34"

NOTES:

Filled H_2 Generator between tests

5GJ - MBV-18 CRH Drain
popped open 3min

LP Htr 2
Turb Side Drain Valve popped open ~ 30secs
2TEC ACY-6 /5Y

BBFP 2B filled + came into service
between tests

IP14_005696

New Operating Crew:

Brain Gasser WO
Keith Magnum CO
Richard Schmidt S.S
- Ken Lebben AS

TURBINE TEST

FIELD TEST NOTES

Nissen
5/13/87
Wed morning

TEST #3

→ 2nd Valve Point
Crack point of 3rd valve

<INFO>

Cracking point 77 mils + 50 mils (Best Valve Pt)
Control Valve set @ 127 mils
Feedback Voltage 96855

TURBINE MANUAL

BOILER Follow - controlling press

TAC indicating 5psi low
vs GE test mstr → 2406 psi throttle

4:30-630 635 last scan GE

TEST Time → ~~3:45-6:00~~

Delayed due to cycle isolation
↑ FGR flow
LP Htr 2/3 trips 4 - save
Return to service
GE Restart @ 430 Computer crash
630-700 Desolated critical I/II's
700-730 Load ramp to 850 MWg

PROBLEM:

LP Htr #2 Normal Makeup
- Alternate Drain <Had to open up>
High-High trip reset

LP Htr #3 Back into normal service
- Alternate Drains
High-High Alarm/trip reset
- Took LP Htr #4 into Alternate to Save
- Resetting Htr trips

→ Send LP Htr #2 Alternate Drains
Normal Makeup Isolated valves wide open
Change cycle Isolation
Punch insulation hole / No TW
Flash Tank o/s (No flow)

⇒ Bill Morgan - Look into
→ level Control Htr #3
→ FGR Flow higher than normal

FGR - leakage Unit #2 problems?
check into

⊗ Scrubber Module trip high outlet temp quench
switched out modules ↑FGR Flow

Have to account for LPHtr #2
to Alternate Drains
in cycle heat balance
(Bypassing flash tank)
- Taking local readings Normal drains / Alternate drains

Isolating H_2 fill on Unit #2 leakage? small
low press (but hold steady)
Do not want to effect test / fill between

Data Collection:

Electrical Load
A phase drifting?
@ 2:55 0 @ 3:40 63 counts

GE ran inter check yesterday - checked OK

Ran out of video copier paper @ ~530
Garry C. Lab measurements

CONTROL ROOM INFO - Status

	@ 3:50	@ 515	@ 605
Load	590 MWg	593	590
Throttle	2410 cycling +/- 15psi	2413	2398
Chest	2394	2397	2381
1st	1230	1232	1224
RH	371	373	371
Loadset	(610 MW)	611	611
	— Load Limiting		
CV	62%	62	62
CV'S	71%/62%/4%/0		
Aux Pwr	38.0		
Mstm	1005	1008	1005
Sprays prim/sec	Reads 10? / 0		
HRH	995/996	1001/1002	1003/1004
Sprays	0		
FGSI BP A B C psia	1.95/2.02/1.22	1.95/2.02/1.20	1.93/2.00/1.19
Fox 1A	121 122 1.9 96		
GEN PF	0.985 lagging		
MVAR	100		
Press TPC/Local	56.3/57 Low		56.1
purity Locally	95%	95	

Turb Lube Oil 117°

FW BP

CY DP / DP 0 / 75

Bias Dampers RH 100% / PSH 15% Had to pinch down to make RH temp

		Feeder Rate	PA Flow	Temp	Bias		O/S Bias
PulV	2H	68	87	155	80	2D	60%
	2C	68	85	151	80	2G	40%
	2E	67	87	152	80	2B	35%
	2A	66	87	152	80		
	2F	65	86	150	77		

Excess Air E/W 4.5 / 4.0

Drum Level +1 / -1 / -1 1/2

PA Duct 36 1/2"

SA Duct 0.9, -1.1

BBFP 2A 2.1

2C 2.05

BFP 1A 1.95

1B 2.30

HW level 42

DA level 103

Throttle Flow KPPH 3985

FFW Flow 3971

IP14_005702

TEST SETUP:

Vacuum Pumps 1A / 1B / 1C / 1D I/S

1D common to 1A + 1B

Air Extraction A 32+ B 32+ C 18 D 32+

→ High air In-leakage

BBFP 2B took O/S to change strainer
hold off putting I/S till after test (filling)

Steam Seal TDV to Htr 1A

Fwd Htrs:

LP Htr 2 Drains thru Alternates

Flash Tank bypassed No Level

Gland Stm 29 psig

Stator Clg Wtr Pump 1A I/S

Pulverizers (5) $2H_{3R}$ / $2C_{2R}$ / $2E_{4F}$ / $2A_{3F}$ / $2F_{2F}$

Closed SH + RH Desuperheater - Block Valves

4 ID Fans

2 FD Fans - low 2 PA Fans - low

2 BBFPs (2B O/S)

2 CPs (2C O/S)

CRH Header Drain Valve
2SGJ HBV-18 closed
BY-17 - Isolated

Cond Control Valves (1.)
2FWC-ACV-1

Polishers 3 I/s
Bypass Closed

APH O/S

1 CCCW Pump I/S (1B O/S)

All CT Fans F/S
CCW 81 HCW 107/102
3CWP's

SB - O/S
Before test { 4AH-seq1 / 2K-seq1 / 3K-seq1 / 1R-seq1 majority except noise

NOTE:

Higher than design BP due to:
1) High Air In-leakage to Cond
(called in Vacuum Busters - identifying leakage point)
2) CT efficiency low

Nothing else we can do
(will be working on air-leakage points)
all CT Fans F/S

⊗ BBFP Inj Seal Water
Sump Pump
cycling on + off

→ Need to investigate holding steady load - constant Reading

turbine meter flow measurement
→ cycling actual reading
→ Probably due to low flow
1-BBFP O/S + low load

Throttle Pressure

Cycling (Boiler follow to Max)

min 2398 / max 2408 ΔP: 20

very little todo to hold stabler pressure

Throttle Temp

Creeping Up - Pulling Out O_2 to lower

min 1005 / max 1012

HRM min 995/996 max 1004/1004

UO Gene Thorton
CO Scott Fulmer

OPI Lenard Wright

Tony Martinez
Rich Campbell

Operators (4) dedicated

Paul Sparrhow
Chuck Reece

Garry Christensen
Aaron
Leon Lewis
Bernel Warner

Paul Albert
Walt Kellyhouse
Paul Behrman

GE

NAPWP-PDIC Amordo

Test #4 VWO 5/13/87

BSMT - West End Cond 1C - LP HTR 2 HI Level DR TO CND 1C

Time	temp		
10:22	167		
11:06	170		
11:29	169		
11:47	166	CRH to 1A Cond	
12:08	166	12:17	235
12:24	166	12:21	244
12:51	164	12:53	215
13:21	160	13:18	201

UNDER SOFTWARE LOCK 05/13/87 11:56:14 F1-20

MEASUREMENT DISPLAY

HP STM DRAIN TEMPS

BLOCK	VALUE	DESCRIPTION	STATUS	ALARM
SGGTE1154	628. DEGF	MAIN STEAM DR TO BLOWDOWN TK T		
SGFTE0418	138. DEGF	MN ST LINE DRN TO BLWDN TANK T		
SGGTE1153	325. DEGF	MAIN STEAM DR TO BLOWDOWN TK T		
SGFTE0417	89. DEGF	BFPT DRAIN TO BLOWDOWN TANK T		
SGGTE0419	77. DEGF	MN ST LINE WRMG DSUPHTR 1 IN T		
SGGTE0000	124. DEGF	MN-ST-LINE WRMG DSUPHTR 1 OUT T		
SGJTE1205	432. DEGF	COLD RH DR DSUPHTR INLET TEMP		
SGJTE1206	166. DEGF	COLD RH DR DSUPHTR INLET TEMP		
SGJTE1157	412. DEGF	SG S HOT RH OUT TO DR DSUPHTR		
SGJTE1158	399. DEGF	SG N HOT RH OUT TO DR DSUPHTR		
SGJTE0997	121. DEGF	HOT RH DR DSUPHTR 3 T		

BACKWARD PAGING DRN1

IP14_005709

UNDER SOFTWARE LOCK 05/13/87 11:55:56 F1-20

MEASUREMENT DISPLAY

HP/IP EXTR STM DRN HDR TEMPS

BLOCK	VALUE	DESCRIPTION	STATUS	ALARM
TECTE1015	292. DEGF	HP HTRS 8A & 8B TURB DRAIN T		
TECTE1016	134. DEGF	HP HTR 8A EXTRACTION DRAIN T		
TECTE1017	192. DEGF	HP HTR 8B EXTRACTION DRAIN T		
TECTE1018	148. DEGF	HP HTRS 6A & 6B TURB DRAIN T		
TECTE1019	119. DEGF	HP HTR 6A EXTRACTION DRAIN T		
TECTE1020	229. DEGF	HP HTR 6B EXTRACTION DRAIN T		
TECTE1021	121. DEGF	BFPT 1B EXTRACTION DRAIN T		
TECTE1022	122. DEGF	BFPT 1A EXTRACTION DRAIN T		
TECTE1023	123. DEGF	DEA HTR 5 TURB EXTR DRAIN T		
TECTE1024	128. DEGF	BFPT 1A & 1B TURB EXTR DRAIN T		
TECTE1025	123. DEGF	DEA HTR 5 TURB EXTR DRAIN T		
TECTE1026	123. DEGF	DEA HTR 5 TURB EXTR DRAIN T		
TECTE0959	130. DEGF	HP COND TO DSUPHTR LINE T		
TECTE1045	157. DEGF	BFPT 1A EXTR DR T		
TECTE1046	188. DEGF	BFPT 1B EXTR DR T		

FORWARD PAGING DRN2

IP14_005710

UNDER SOFTWARE LOCK 05/13/87 11:56:37 F1-20

MEASUREMENT DISPLAY

LP 1A/1B/1C EXTR STM DRN HDR TEMPS

BLOCK	VALUE	DESCRIPTION	STATUS	ALARM
TECTE1027	93. DEGF	LP HTR 2 EXTRACTION DRAIN T		
TECTE1028	96. DEGF	LP HTR 2 EXTRACTION DRAIN T		
TECTE1029	122. DEGF	LP HTR 3 EXTRACTION DRAIN T		
TECTE1030	102. DEGF	LP HTR 3 EXTRACTION DRAIN T		
TECTE1031	94. DEGF	LP HTR 4 EXTRACTION DRAIN T		
TECTE1032	78. DEGF	LP HTR 4 EXTRACTION DRAIN T		
TECTE1033	121. DEGF	LP HTR 2 EXTRACTION DRAIN T		
TECTE1034	121. DEGF	LP HTR 2 EXTRACTION DRAIN T		
TECTE1035	138. DEGF	LP HTR 3 EXTRACTION DRAIN T		
TECTE1036	118. DEGF	LP HTR 3 EXTRACTION DRAIN T		
TECTE1037	93. DEGF	LP HTR 4 EXTRACTION DRAIN T		
TECTE1038	93. DEGF	LP HTR 4 EXTRACTION DRAIN T		
TECTE1039	102. DEGF	LP HTR 2 EXTR DRAIN T		
TECTE1040	110. DEGF	LP HTR 2 EXTR DRAIN T		
TECTE1041	107. DEGF	LP HTR 3 EXTR DRAIN T		
TECTE1042	74. DEGF	LP HTR 3 EXTR DRAIN T		
TECTE1043	94. DEGF	LP HTR 4 EXTR DRAIN T		
TECTE1044	89. DEGF	LP HTR 4 EXTR DRAIN T		

FORWARD PAGING DRN3

IP14_005711

UNDER SOFTWARE LOCK 05/13/87 12:04:43 F1-20

MEASUREMENT DISPLAY

HP STM DRAIN TEMPS

BLOCK	VALUE		DESCRIPTION	STATUS	ALARM
SGGTE1154	628.	DEGF	MAIN STEAM DR TO BLOWDOWN TK T		
SGFTE8416	139.	DEGF	MN ST LINE DRN TO BLOWDOWN TANK T		
SGGTE1153	322.	DEGF	MAIN STEAM DR TO BLOWDOWN TK T		
SGFTE8417	89.	DEGF	BFPT DRAIN TO BLOWDOWN TANK T		
SGGTE8419	77.	DEGF	MN ST LINE WRMG DSUPHTR 1 IN T		
SGGTE8888	124.	DEGF	MN ST LINE WRMG DSUPHTR 1 OUT T		
SGJTE1205	432.	DEGF	COLD RH DR DSUPHTR INLET TEMP		
SGJTE1206	162.	DEGF	COLD RH DR DSUPHTR INLET TEMP		
SGJTE1157	412.	DEGF	SG S HOT RH OUT TO DR DSUPHTR		
SGJTE1158	399.	DEGF	SG N HOT RH OUT TO DR DSUPHTR		
SGJTE8997	121.	DEGF	HOT RH DR DSUPHTR 3 T		

FORWARD PAGING DRN1

IP14_005712

UNDER SOFTWARE LOCK 05/13/87 12:04:57 F1-20

MEASUREMENT DISPLAY

HP/IP EXTR STM DRN HDR TEMPS

BLOCK	VALUE	DESCRIPTION	STATUS	ALARM
TECTE1015	283. DEGF	HP HTRS 8A & 8B TURB DRAIN T		
TECTE1016	134. DEGF	HP HTR 8A EXTRACTION DRAIN T		
TECTE1017	192. DEGF	HP HTR 8B EXTRACTION DRAIN T		
TECTE1018	141. DEGF	HP HTRS 6A & 6B TURB DRAIN T		
TECTE1019	119. DEGF	HP HTR 6A EXTRACTION DRAIN T		
TECTE1020	220. DEGF	HP HTR 6B EXTRACTION DRAIN T		
TECTE1021	121. DEGF	BFPT 1B EXTRACTION DRAIN T		
TECTE1022	122. DEGF	BFPT 1A EXTRACTION DRAIN T		
TECTE1023	123. DEGF	DEA HTR 5 TURB EXTR DRAIN T		
TECTE1024	119. DEGF	BFPT 1A & 1B TURB EXTR DRAIN T		
TECTE1025	123. DEGF	DEA HTR 5 TURB EXTR DRAIN T		
TECTE1026	123. DEGF	DEA HTR 5 TURB EXTR DRAIN T		
TECTE0959	130. DEGF	HP COND TO DSUPHTR LINE T		
TECTE1045	157. DEGF	BFPT 1A EXTR DR T		
TECTE1046	189. DEGF	BFPT 1B EXTR DR T		

FORWARD PAGING DRN2

IP14_005713

UNDER SOFTWARE LOCK 05/13/87 12:05:13 F1-28

MEASUREMENT DISPLAY

LP 1A/1B/1C EXTR STM DRN HDR TEMPS

BLOCK	VALUE	DESCRIPTION	STATUS	ALARM
TECTE1027	93. DEGF	LP HTR 2 EXTRACTION DRAIN T		
TECTE1028	96. DEGF	LP HTR 2 EXTRACTION DRAIN T		
TECTE1029	122. DEGF	LP HTR 3 EXTRACTION DRAIN T		
TECTE1030	102. DEGF	LP HTR 3 EXTRACTION DRAIN T		
TECTE1031	93. DEGF	LP HTR 4 EXTRACTION DRAIN T		
TECTE1032	70. DEGF	LP HTR 4 EXTRACTION DRAIN T		
TECTE1033	121. DEGF	LP HTR 2 EXTRACTION DRAIN T		
TECTE1034	121. DEGF	LP HTR 2 EXTRACTION DRAIN T		
TECTE1035	137. DEGF	LP HTR 3 EXTRACTION DRAIN T		
TECTE1036	118. DEGF	LP HTR 3 EXTRACTION DRAIN T		
ECTE1037	93. DEGF	LP HTR 4 EXTRACTION DRAIN T		
CTE1038	92. DEGF	LP HTR 4 EXTRACTION DRAIN T		
TE1039	101. DEGF	LP HTR 2 EXTR DRAIN T		
E1040	109. DEGF	LP HTR 2 EXTR DRAIN T		
1041	108. DEGF	LP HTR 3 EXTR DRAIN T		
042	74. DEGF	LP HTR 3 EXTR DRAIN T		
043	94. DEGF	LP HTR 4 EXTR DRAIN T		
44	88. DEGF	LP HTR 4 EXTR DRAIN T		

FORWARD PAGING DRN3

IP14_005714

UNDER SOFTWARE LOCK 05/13/87 12:10:47 F1-20

MEASUREMENT DISPLAY

HP STM DRAIN TEMPS

BLOCK	VALUE	DESCRIPTION	STATUS	ALARM
SGGTE1154	630. DEGF	MAIN STEAM DR TO BLOWDOWN TK T		
SGFTE0418	140. DEGF	MN ST LINE DRN TO BLWDN TANK T		
SGGTE1153	316. DEGF	MAIN STEAM DR TO BLOWDOWN TK T		
SGFTE0417	89. DEGF	BFPT DRAIN TO BLOWDOWN TANK T		
SGGTE0419	78. DEGF	MN ST LINE WRMG DSUPHTR 1 IN T		
SGGTE0000	125. DEGF	MN ST LINE WRMG DSUPHTR 1 OUT T		
SGJTE1285	432. DEGF	COLD RH DR DSUPHTR INLET TEMP		
SGJTE1286	155. DEGF	COLD RH DR DSUPHTR INLET TEMP		
SGJTE1157	412. DEGF	SG S HOT RH OUT TO DR DSUPHTR		
SGJTE1158	399. DEGF	SG N HOT RH OUT TO DR DSUPHTR		
SGJTE0997	122. DEGF	HOT RH DR DSUPHTR 3 T		

FORWARD PAGING DRN1

IP14_005715

UNDER SOFTWARE LOCK 05/13/87 12:19:07 PT-20

MEASUREMENT DISPLAY

HP/IP EXTR STM DRN HDR TEMPS

BLOCK	VALUE	DESCRIPTION	STATUS	ALARM
TECTE1015	270. DEGF	HP HTRS 8A & 8B TURB DRAIN T		
TECTE1016	136. DEGF	HP HTR 8A EXTRACTION DRAIN T		
TECTE1017	192. DEGF	HP HTR 8B EXTRACTION DRAIN T		
TECTE1018	142. DEGF	HP HTRS 6A & 6B TURB DRAIN T		
TECTE1019	119. DEGF	HP HTR 6A EXTRACTION DRAIN T		
TECTE1020	285. DEGF	HP HTR 6B EXTRACTION DRAIN T		
TECTE1021	121. DEGF	BFPT 1B EXTRACTION DRAIN T		
TECTE1022	122. DEGF	BFPT 1A EXTRACTION DRAIN T		
TECTE1023	123. DEGF	DEA HTR 5 TURB EXTR DRAIN T		
TECTE1024	118. DEGF	BFPT-1A & 1B TURB-EXTR-DRAIN T		
TECTE1025	123. DEGF	DEA HTR 5 TURB EXTR DRAIN T		
TECTE1026	123. DEGF	DEA HTR 5 TURB EXTR DRAIN T		
TECTE0959	129. DEGF	HP COND TO DSUPHTR LINE T		
TECTE1045	157. DEGF	BFPT 1A EXTR DR T		
TECTE1046	189. DEGF	BFPT 1B EXTR DR T		

FORWARD PAGING DRN2

IP14_005716

UNDER SOFTWARE LOCK 05/13/87 12:19:23 P1-20

MEASUREMENT DISPLAY

LP 1A/1B/1C EXTR STM DRN HDR TEMPS

BLOCK	VALUE	DESCRIPTION	STATUS	ALARM
TECTE1027	93. DEGF	LP HTR 2 EXTRACTION DRAIN T		
TECTE1028	96. DEGF	LP HTR 2 EXTRACTION DRAIN T		
TECTE1029	121. DEGF	LP HTR 3 EXTRACTION DRAIN T		
TECTE1030	101. DEGF	LP HTR 3 EXTRACTION DRAIN T		
TECTE1031	93. DEGF	LP HTR 4 EXTRACTION DRAIN T		
TECTE1032	70. DEGF	LP HTR 4 EXTRACTION DRAIN T		
TECTE1033	121. DEGF	LP HTR 2 EXTRACTION DRAIN T		
TECTE1034	128. DEGF	LP HTR 2 EXTRACTION DRAIN T		
TECTE1035	134. DEGF	LP HTR 3 EXTRACTION DRAIN T		
TECTE1036	116. DEGF	LP HTR 3 EXTRACTION DRAIN T		
TECTE1037	92. DEGF	LP HTR 4 EXTRACTION DRAIN T		
TECTE1038	92. DEGF	LP HTR 4 EXTRACTION DRAIN T		
TECTE1039	101. DEGF	LP HTR 2 EXTR DRAIN T		
TECTE1040	108. DEGF	LP HTR 2 EXTR DRAIN T		
TECTE1041	110. DEGF	LP HTR 3 EXTR DRAIN T		
TECTE1042	75. DEGF	LP HTR 3 EXTR DRAIN T		
TECTE1043	93. DEGF	LP HTR 4 EXTR DRAIN T		
TECTE1044	88. DEGF	LP HTR 4 EXTR DRAIN T		

FORWARD PAGING DRN3

IP14_005717

UNDER SOFTWARE LOCK 05/13/87 12:35:43 F1-20

MEASUREMENT DISPLAY

HP STM DRAIN TEMPS

BLOCK	VALUE		DESCRIPTION	STATUS	ALARM
SGGTE1154	631.	DEGF	MAIN STEAM DR TO BLOWDOWN TK T		
SGFTE0418	140.	DEGF	MN ST LINE DRN TO BLWDN TANK T		
SGGTE1153	311.	DEGF	MAIN STEAM DR TO BLOWDOWN TK T		
SGFTE0417	89.	DEGF	BFPT DRAIN TO BLOWDOWN TANK T		
SGGTE0419	78.	DEGF	MN ST LINE WRMG DSUPHTR 1 IN T		
SGGTE0008	125.	DEGF	MN ST LINE WRMG DSUPHTR 1 OUT T		
SGJTE1205	432.	DEGF	COLD RH DR DSUPHTR INLET TEMP		
SGJTE1206	150.	DEGF	COLD RH DR DSUPHTR INLET TEMP		
SGJTE1157	412.	DEGF	SG S HOT RH OUT TO DR DSUPHTR		
SGJTE1158	399.	DEGF	SG N HOT RH OUT TO DR DSUPHTR		
SGJTE0997	122.	DEGF	HOT RH DR DSUPHTR 3 T		

FORWARD PAGING DRN1

IP14_005718

UNDER SOFTWARE LOCK 05/13/87 12:35:59 F1-20

MEASUREMENT DISPLAY

HP/IP EXTR STM DRN HDR TEMPS

BLOCK	VALUE	DESCRIPTION	STATUS	ALARM
TECTE1015	257. DEGF	HP HTRS 8A & 8B TURB DRAIN T		
TECTE1016	138. DEGF	HP HTR 8A EXTRACTION DRAIN T		
TECTE1017	191. DEGF	HP HTR 8B EXTRACTION DRAIN T		
TECTE1018	143. DEGF	HP HTRS 6A & 6B TURB DRAIN T		
TECTE1019	119. DEGF	HP HTR 6A EXTRACTION DRAIN T		
TECTE1020	192. DEGF	HP HTR 6B EXTRACTION DRAIN T		
TECTE1021	121. DEGF	BFPT 1B EXTRACTION DRAIN T		
TECTE1022	122. DEGF	BFPT 1A EXTRACTION DRAIN T		
TECTE1023	123. DEGF	DEA HTR 5 TURB EXTR DRAIN T		
TECTE1024	118. DEGF	BFPT 1A & 1B TURB EXTR DRAIN T		
TECTE1025	123. DEGF	DEA HTR 5 TURB EXTR DRAIN T		
TECTE1026	124. DEGF	DEA HTR 5 TURB EXTR DRAIN T		
TECTE0959	127. DEGF	HP COND TO DSUPHTR LINE T		
TECTE1045	158. DEGF	BFPT 1A EXTR DR T		
TECTE1046	198. DEGF	BFPT 1B EXTR DR T		

FORWARD PAGING DRN2

IP14_005719

UNDER SOFTWARE LOCK 05/13/87 12:36:12 F1-20

MEASUREMENT DISPLAY

LP 1A/1B/1C EXTR STM DRN HDR TEMPS

BLOCK	VALUE	DESCRIPTION	STATUS	ALARM
TECTE1027	93. DEGF	LP HTR 2 EXTRACTION DRAIN T		
TECTE1028	95. DEGF	LP HTR 2 EXTRACTION DRAIN T		
TECTE1029	119. DEGF	LP HTR 3 EXTRACTION DRAIN T		
TECTE1030	99. DEGF	LP HTR 3 EXTRACTION DRAIN T		
TECTE1031	93. DEGF	LP HTR 4 EXTRACTION DRAIN T		
TECTE1032	78. DEGF	LP HTR 4 EXTRACTION DRAIN T		
TECTE1033	121. DEGF	LP HTR 2 EXTRACTION DRAIN T		
TECTE1034	129. DEGF	LP HTR 2 EXTRACTION DRAIN T		
TECTE1035	132. DEGF	LP HTR 3 EXTRACTION DRAIN T		
TECTE1036	114. DEGF	LP HTR 3 EXTRACTION DRAIN T		
TECTE1037	92. DEGF	LP HTR 4 EXTRACTION DRAIN T		
TECTE1038	92. DEGF	LP HTR 4 EXTRACTION DRAIN T		
TECTE1039	101. DEGF	LP HTR 2 EXTR DRAIN T		
TECTE1040	108. DEGF	LP HTR 2 EXTR DRAIN T		
TECTE1041	111. DEGF	LP HTR 3 EXTR DRAIN T		
TECTE1042	75. DEGF	LP HTR 3 EXTR DRAIN T		
TECTE1043	92. DEGF	LP HTR 4 EXTR DRAIN T		
TECTE1044	88. DEGF	LP HTR 4 EXTR DRAIN T		

FORWARD PAGING DRN3

IP14_005720

UNDER SOFTWARE LOCK 05/13/87 12:48:44 F1-20

MEASUREMENT DISPLAY

HP STM DRAIN TEMPS

BLOCK	VALUE		DESCRIPTION	STATUS	ALARM
SGGTE1154	630.	DEGF	MAIN STEAM DR TO BLOWDOWN TK T		
SGFTE0418	142.	DEGF	MN ST LINE DRN TO BLWDN TANK T		
SGGTE1153	388.	DEGF	MAIN STEAM DR TO BLOWDOWN TK T		
SGFTE0417	89.	DEGF	BFPT DRAIN TO BLOWDOWN TANK T		
SGGTE0419	78.	DEGF	MN ST LINE WRMG DSUPHTR 1 IN T		
SGGTE0888	125.	DEGF	MN ST LINE WRMG DSUPHTR 1 OUT T		
SGJTE1285	432.	DEGF	COLD RH DR DSUPHTR INLET TEMP		
SGJTE1286	145.	DEGF	COLD RH DR DSUPHTR INLET TEMP		
SGJTE1157	412.	DEGF	SG S HOT RH OUT TO DR DSUPHTR		
SGJTE1158	399.	DEGF	SG N HOT RH OUT TO DR DSUPHTR		
SGJTE0997	122.	DEGF	HOT RH DR DSUPHTR 3 T		

FORWARD PAGING DRN1

IP14_005721

UNDER SOFTWARE LOCK 05/13/87 12:48:58 P1-28

MEASUREMENT DISPLAY

HP/IP EXTR STM DRN HDR TEMPS

BLOCK	VALUE		DESCRIPTION	STATUS	ALARM
TECTE1015	247.	DEGF	HP HTRS 8A & 8B TURB DRAIN T		
TECTE1016	139.	DEGF	HP HTR 8A EXTRACTION DRAIN T		
TECTE1017	191.	DEGF	HP HTR 8B EXTRACTION DRAIN T		
TECTE1018	144.	DEGF	HP HTRS 6A & 6B TURB DRAIN T		
TECTE1019	119.	DEGF	HP HTR 6A EXTRACTION DRAIN T		
TECTE1020	184.	DEGF	HP HTR 6B EXTRACTION DRAIN T		
TECTE1021	121.	DEGF	BFPT 1B EXTRACTION DRAIN T		
TECTE1022	122.	DEGF	BFPT 1A EXTRACTION DRAIN T		
TECTE1023	123.	DEGF	DEA HTR 5 TURB EXTR DRAIN T		
TECTE1024	118.	DEGF	BFPT 1A & 1B TURB EXTR DRAIN T		
TECTE1025	123.	DEGF	DEA HTR 5 TURB EXTR DRAIN T		
TECTE1026	124.	DEGF	DEA HTR 5 TURB EXTR DRAIN T		
TECTE0959	127.	DEGF	HP COND TO DSUPHTR LINE T		
TECTE1045	158.	DEGF	BFPT 1A EXTR DR T		
TECTE1046	190.	DEGF	BFPT 1B EXTR DR T		

FORWARD PAGING DRN2

IP14_005722

UNDER SOFTWARE LOCK 05/13/87 13:04:18 F1-20

MEASUREMENT DISPLAY

HP STM DRAIN TEMPS

BLOCK	VALUE	DESCRIPTION	STATUS	ALARM
SGGTE1154	631. DEGF	MAIN STEAM DR TO BLOWDOWN TK T		
SGFTE0418	142. DEGF	MN ST LINE DRN TO BLWDN TANK T		
SGGTE1153	303. DEGF	MAIN STEAM DR TO BLOWDOWN TK T		
SGFTE0417	89. DEGF	BFPT DRAIN TO BLOWDOWN TANK T		
SGGTE0419	78. DEGF	MN ST LINE WRMG DSUPHTR 1 IN T		
SGGTE0008	125. DEGF	MN ST LINE WRMG DSUPHTR 1 OUT T		
SGJTE1205	432. DEGF	COLD RH DR DSUPHTR INLET TEMP		
SGJTE1206	140. DEGF	COLD RH DR DSUPHTR INLET TEMP		
SGJTE1157	412. DEGF	SG S HOT RH OUT TO DR DSUPHTR		
SGJTE1158	399. DEGF	SG N HOT RH OUT TO DR DSUPHTR		
SGJTE0997	122. DEGF	HOT RH DR DSUPHTR 3 T		

BACKWARD PAGING DRN1

IP14_005723

UNDER SOFTWARE LOCK 05/13/87 13:04:02 P1-20

MEASUREMENT DISPLAY

HP/IP EXTR STM DRN HDR TEMPS

BLOCK	VALUE	DESCRIPTION	STATUS	ALARM
TECTE1015	237. DEGF	HP HTRS 8A & 8B TURB DRAIN T		
TECTE1016	140. DEGF	HP HTR 8A EXTRACTION DRAIN T		
TECTE1017	191. DEGF	HP HTR 8B EXTRACTION DRAIN T		
TECTE1018	145. DEGF	HP HTRS 6A & 6B TURB DRAIN T		
TECTE1019	119. DEGF	HP HTR 6A EXTRACTION DRAIN T		
TECTE1020	174. DEGF	HP HTR 6B EXTRACTION DRAIN T		
TECTE1021	121. DEGF	BFPT 1B EXTRACTION DRAIN T		
TECTE1022	122. DEGF	BFPT 1A EXTRACTION DRAIN T		
TECTE1023	123. DEGF	DEA HTR 5 TURB EXTR DRAIN T		
TECTE1024	118. DEGF	BFPT 1A & 1B TURB EXTR DRAIN T		
TECTE1025	123. DEGF	DEA HTR 5 TURB EXTR DRAIN T		
TECTE1026	124. DEGF	DEA HTR 5 TURB EXTR DRAIN T		
TECTE8959	127. DEGF	HP COND TO DSUPHTR LINE T		
TECTE1045	159. DEGF	BFPT 1A EXTR DR T		
TECTE1046	191. DEGF	BFPT 1B EXTR DR T		

BACKWARD PAGING DRN2

IP14_005724

UNDER SOFTWARE LOCK 05/13/87 13:03:39 F1-28

MEASUREMENT DISPLAY

LP 1A/1B/1C EXTR STM DRN HDR TEMPS

BLOCK	VALUE	DESCRIPTION	STATUS	ALARM
TECTE1027	93. DEGF	LP HTR 2 EXTRACTION DRAIN T		
TECTE1028	95. DEGF	LP HTR 2 EXTRACTION DRAIN T		
TECTE1029	116. DEGF	LP HTR 3 EXTRACTION DRAIN T		
TECTE1030	97. DEGF	LP HTR 3 EXTRACTION DRAIN T		
TECTE1031	93. DEGF	LP HTR 4 EXTRACTION DRAIN T		
TECTE1032	71. DEGF	LP HTR 4 EXTRACTION DRAIN T		
TECTE1033	128. DEGF	LP HTR 2 EXTRACTION DRAIN T		
TECTE1034	126. DEGF	LP HTR 2 EXTRACTION DRAIN T		
TECTE1035	128. DEGF	LP HTR 3 EXTRACTION DRAIN T		
TECTE1036	112. DEGF	LP HTR 3 EXTRACTION DRAIN T		
TECTE1037	92. DEGF	LP HTR 4 EXTRACTION DRAIN T		
TECTE1038	91. DEGF	LP HTR 4 EXTRACTION DRAIN T		
TECTE1039	103. DEGF	LP HTR 2 EXTR DRAIN T		
TECTE1040	107. DEGF	LP HTR 2 EXTR DRAIN T		
TECTE1041	111. DEGF	LP HTR 3 EXTR DRAIN T		
TECTE1042	74. DEGF	LP HTR 3 EXTR DRAIN T		
TECTE1043	91. DEGF	LP HTR 4 EXTR DRAIN T		
TECTE1044	88. DEGF	LP HTR 4 EXTR DRAIN T		

FORWARD PAGING DRN3

IP14_005725

UNDER SOFTWARE LOCK 05/13/87 13:17:59 F1-28

MEASUREMENT DISPLAY

HP STM DRAIN TEMPS

BLOCK	VALUE	DESCRIPTION	STATUS	ALARM
SGGTE1154	631. DEGF	MAIN STEAM DR TO BLOWDOWN TK T		
SGFTE0418	143. DEGF	MN ST LINE DRN TO BLWDN TANK T		
SGGTE1153	299. DEGF	MAIN STEAM DR TO BLOWDOWN TK T		
SGFTE0417	89. DEGF	BFPT DRAIN TO BLOWDOWN TANK T		
SGGTE0419	78. DEGF	MN ST LINE WRMG DSUPHTR 1 IN T		
SGGTE0008	125. DEGF	MN ST LINE WRMG DSUPHTR 1 OUT T		
SGJTE1205	432. DEGF	COLD RH DR DSUPHTR INLET TEMP		
SGJTE1206	137. DEGF	COLD RH DR DSUPHTR INLET TEMP		
SGJTE1157	411. DEGF	SG S HOT RH OUT TO DR DSUPHTR		
SGJTE1158	399. DEGF	SG N HOT RH OUT TO DR DSUPHTR		
SGJTE0997	122. DEGF	HOT RH DR DSUPHTR 3 T		

FORWARD PAGING DRN1

IP14_005726

UNDER SOFTWARE LOCK 05/13/87 13:18:18 F1-20

MEASUREMENT DISPLAY

HP/IP EXTR STM DRN HDR TEMPS

BLOCK	VALUE	DESCRIPTION	STATUS	ALARM
TECTE1015	228. DEGF	HP HTRS 8A & 8B TURB DRAIN T		
TECTE1016	140. DEGF	HP HTR 8A EXTRACTION DRAIN T		
TECTE1017	191. DEGF	HP HTR 8B EXTRACTION DRAIN T		
TECTE1018	146. DEGF	HP HTRS 6A & 6B TURB DRAIN T		
TECTE1019	119. DEGF	HP HTR 6A EXTRACTION DRAIN T		
TECTE1020	166. DEGF	HP HTR 6B EXTRACTION DRAIN T		
TECTE1021	121. DEGF	BFPT 1B EXTRACTION DRAIN T		
TECTE1022	122. DEGF	BFPT 1A EXTRACTION DRAIN T		
TECTE1023	123. DEGF	DEA HTR 5 TURB EXTR DRAIN T		
TECTE1024	117. DEGF	BFPT 1A & 1B TURB EXTR DRAIN T		
TECTE1025	123. DEGF	DEA HTR 5 TURB EXTR DRAIN T		
TECTE1026	124. DEGF	DEA HTR 5 TURB EXTR DRAIN T		
TECTE0959	127. DEGF	HP COND TO DSUPHTR LINE T		
TECTE1045	159. DEGF	BFPT 1A EXTR DR T		
TECTE1046	191. DEGF	BFPT 1B EXTR DR T		

FORWARD PAGING DRN?

IP14_005727

UNDER SOFTWARE LOCK 05/13/87 13:18:35 F1-20

MEASUREMENT DISPLAY

LP 1A/1B/1C EXTR STM DRN HDR TEMPS

BLOCK	VALUE	DESCRIPTION	STATUS	ALARM
TECTE1027	94. DEGF	LP HTR 2 EXTRACTION DRAIN T		
TECTE1028	95. DEGF	LP HTR 2 EXTRACTION DRAIN T		
TECTE1029	115. DEGF	LP HTR 3 EXTRACTION DRAIN T		
TECTE1030	95. DEGF	LP HTR 3 EXTRACTION DRAIN T		
TECTE1031	93. DEGF	LP HTR 4 EXTRACTION DRAIN T		
TECTE1032	71. DEGF	LP HTR 4 EXTRACTION DRAIN T		
TECTE1033	120. DEGF	LP HTR 2 EXTRACTION DRAIN T		
TECTE1034	126. DEGF	LP HTR 2 EXTRACTION DRAIN T		
TECTE1035	126. DEGF	LP HTR 3 EXTRACTION DRAIN T		
TECTE1036	111. DEGF	LP HTR 3 EXTRACTION DRAIN T		
TECTE1037	91. DEGF	LP HTR 4 EXTRACTION DRAIN T		
TECTE1038	91. DEGF	LP HTR 4 EXTRACTION DRAIN T		
TECTE1039	103. DEGF	LP HTR 2 EXTR DRAIN T		
TECTE1040	107. DEGF	LP HTR 2 EXTR DRAIN T		
TECTE1041	110. DEGF	LP HTR 3 EXTR DRAIN T		
TECTE1042	73. DEGF	LP HTR 3 EXTR DRAIN T		
TECTE1043	91. DEGF	LP HTR 4 EXTR DRAIN T		
TECTE1044	87. DEGF	LP HTR 4 EXTR DRAIN T		

WA FORWARD PAGING DRN3

IP14_005728

UNDER SOFTWARE LOCK 05/13/87 13:35:01 F1-28

MEASUREMENT DISPLAY

HP STM DRAIN TEMPS

BLOCK	VALUE		DESCRIPTION	STATUS	ALARM
SGGTE1154	629.	DEGF	MAIN STEAM DR TO BLOWDOWN TK T		
SGFTE0418	145.	DEGF	MN ST LINE DRN TO BLWDN TANK T		
SGGTE1153	294.	DEGF	MAIN STEAM DR TO BLOWDOWN TK T		
SGFTE0417	89.	DEGF	BFPT DRAIN TO BLOWDOWN TANK T		
SGGTE0419	78.	DEGF	MN ST LINE WRMG DSUPHTR 1 IN T		
SGGTE0888	125.	DEGF	MN ST LINE WRMG DSUPHTR 1 OUT T		
SGJTE1285	433.	DEGF	COLD RH DR DSUPHTR INLET TEMP		
SGJTE1286	134.	DEGF	COLD RH DR DSUPHTR INLET TEMP		
SGJTE1157	413.	DEGF	SG S HOT RH OUT TO DR DSUPHTR		
SGJTE1158	401.	DEGF	SG N HOT RH OUT TO DR DSUPHTR		
SGJTE0997	122.	DEGF	HOT RH DR DSUPHTR 3 T		

FORWARD PAGING DRM1

UNDER SOFTWARE LOCK 05/13/87 13:35:16 F1-28

MEASUREMENT DISPLAY

HP/IP EXTR STM DRN HDR TEMPS

BLOCK	VALUE	DESCRIPTION	STATUS	ALARM
TECTE1015	219. DEGF	HP HTRS 8A & 8B TURB DRAIN T		
TECTE1016	140. DEGF	HP HTR 8A EXTRACTION DRAIN T		
TECTE1017	191. DEGF	HP HTR 8B EXTRACTION DRAIN T		
TECTE1018	147. DEGF	HP HTRS 6A & 6B TURB DRAIN T		
TECTE1019	119. DEGF	HP HTR 6A EXTRACTION DRAIN T		
TECTE1020	159. DEGF	HP HTR 6B EXTRACTION DRAIN T		
TECTE1021	121. DEGF	BFPT 1B EXTRACTION DRAIN T		
TECTE1022	123. DEGF	BFPT 1A EXTRACTION DRAIN T		
TECTE1023	124. DEGF	DEA HTR 5 TURB EXTR DRAIN T		
TECTE1024	118. DEGF	BFPT 1A & 1B TURB EXTR DRAIN T		
TECTE1025	124. DEGF	DEA HTR 5 TURB EXTR DRAIN T		
TECTE1026	123. DEGF	DEA HTR 5 TURB EXTR DRAIN T		
TECTE0959	126. DEGF	HP COND TO DSUPHTR LINE T		
TECTE1045	159. DEGF	BFPT 1A EXTR DR T		
TECTE1046	191. DEGF	BFPT 1B EXTR DR T		

FORWARD PAGING DRN2

IP14_005730

UNDER SOFTWARE LOCK 05/13/87 13:35:38 F1-28

MEASUREMENT DISPLAY

LP 1A/1B/1C EXTR STM DRN HDR TEMPS

BLOCK	VALUE	DESCRIPTION	STATUS	ALARM
TECTE1027	104. DEGF	LP HTR 2 EXTRACTION DRAIN T		
TECTE1028	112. DEGF	LP HTR 2 EXTRACTION DRAIN T		
TECTE1029	108. DEGF	LP HTR 3 EXTRACTION DRAIN T		
TECTE1030	94. DEGF	LP HTR 3 EXTRACTION DRAIN T		
TECTE1031	93. DEGF	LP HTR 4 EXTRACTION DRAIN T		
TECTE1032	71. DEGF	LP HTR 4 EXTRACTION DRAIN T		
TECTE1033	128. DEGF	LP HTR 2 EXTRACTION DRAIN T		
TECTE1034	125. DEGF	LP HTR 2 EXTRACTION DRAIN T		
TECTE1035	124. DEGF	LP HTR 3 EXTRACTION DRAIN T		
TECTE1036	109. DEGF	LP HTR 3 EXTRACTION DRAIN T		
TECTE1037	91. DEGF	LP HTR 4 EXTRACTION DRAIN T		
TECTE1038	91. DEGF	LP HTR 4 EXTRACTION DRAIN T		
TECTE1039	104. DEGF	LP HTR 2 EXTR DRAIN T		
TECTE1040	106. DEGF	LP HTR 2 EXTR DRAIN T		
TECTE1041	109 DEGF	LP HTR 3 EXTR DRAIN T		
TECTE1042	72. DEGF	LP HTR 3 EXTR DRAIN T		
TECTE1043	98. DEGF	LP HTR 4 EXTR DRAIN T		
TECTE1044	87. DEGF	LP HTR 4 EXTR DRAIN T		

FORWARD PAGING DRN3

IP14_005731

Test #4 5/13/87 VWO

IPP # 1

ISOLATION - CHECK LIST

Boiler Roof

6 MS Relief VALVES
1 Vent from Main Steam
4 HRH Relief valves
8 CRH Relief valves
6 Aux Stm Relief valves
1 HTR Relief valve header
1 DA Vent
5 Boiler Vent to Roof
2 Drum Vents to the Roof
8 Drum Relief valves

Blowdown Tank Vent (north side)

IPP # 1

ISOLATION - CHECK LIST

18th Floor - Top of Boiler

Vent from each Reheat line
Steam leakage near relief valves

_____ T Boiler Drum to Aux Steam (South) (Valve 1 & MBV 2)
_____ T Trap open
_____ T Superheat Steam to Aux Stm - (18th & 17th floor) (west)
_____ T Superheat Steam to Air Heater Soot Blowers (139, MBV 140)
_____ T Superheat Steam to Boiler Soot Blowers (141, MBV 142)
_____ T MS to Reheater Bypass (ACV 134, MUV 133)

_____ T Superheat Steam to Boiler Soot Blowers (143, MBV144) - east
_____ T Combustion gas Reheat Soot Blowers (17, MBV-24) - east

Continuous Blowdown (MBV-4) - east
Chemical feed to drum
Drain from site glass to Blowdown header

Drain from drum pressure tap - west
2- Drains from site glass to Blowdown header

IPP #1
ISOLATION - Check LIST

13th - 17th Floors

17th Superheat Steam to Scrubber Soot blowing
(44, ACV 45, 46, 47, ACV 48, 49)

16th Feedwater to Scrubber soot blower desuperheater
(142, 137, 139 TT 246)

15th Pegging Steam to the DA
___ Aux Stm HDR Press
Boiler drains (west side) 37, 39, 41, 43, 45, 47, 49, 51
Boiler drains (east side) 53

14th DA startup Vents to ATM
___ # of ORIFICED Vents Open
AIR Preheat Return to DA VALVE 140
HP HTR Vent to DA
TRAP FROM AUX STM HDR

13th 3 - RECIRC'S FROM BOOSTER PUMPS
3 - RECIRC'S FROM BFP'S - also check relief valve (3) to floor
Aux Stm to DA Storage TK BV6, BV133
DA Level
MID - Roof : Relief valves from CRH to Aux Stm, Aux Steam to Steam Seals, Aux Stm to Plant Heating, Steam Seals

IPP #1

ISOLATION - Check LIST

8th - 12th floors

575 T 12th MS to Reheat Steam Bypass
(MBV 135, 125)

T downstream 195 / T upstream 29 / 11th 4" Drain from DA to Bsmt sump (valve #23)
CRH pressure taps

~~10th~~
10th Sample from Final Feedwater
Phosphate feed to Feedwater
Feedwater drain to economizer inlet drain header
Boiler drains (west side) 28, 30, 33, 35
Boiler drains (east side) 55, 57

9th CRH to Aux Steam HDR - DV&TT
Relief valve from final feedwater - before flow section
Aux Steam for plant heating - Status

8th TC station @ FFW
Trap from CRH to Aux Stm
FFW Ruska

IPP # 1

ISOLATION - CHECK LIST

4th - 7th Floors

7th RHT Spray VALVE STATION - ISOLATE
TB BLDG Roof Vents

6th 2 Relief valves from final feedwater to sump near HTR 8
HTR 8A & 8B Vents and Drains to sump
HTR 8A & 8B Vents to DA

5th Chem. CLEANING CONNECTION TO AUX. STM.
CONDENSATE FOR Aux. Stm. Desuperheating
CONDENSATE TO AND FROM BOILER Lighters
HTR 7A & 7B Vents and drains to sump
HTR 7A & 7B Vents to DA
HTR 4 Vents and drains to Sump/Relief valves
HTR 4 Vents to Condenser - startup vent top of HTR
HTR 3 Condensate Bypass MBV 17
HTR 4 Condensate Bypass MBV 18
Steam to Air HTR Soot Blowers
Aux steam to oil heater

4th Boiler drains (west side) MBV-29, 31, 34, MBV-36, 38
40, MBV-42, MBV-44, MBV-46, 48, MBV-50, MBV-52

BOILER drains (east side) 54, MBV-56, MBV-58
Continuous Blowdown 5
Soot Blowing (Boiler) drain to condenser - MBV-
2 - Traps from Aux Stm HDR (east side)

IPP # 1

ISOLATION Check LIST

TB DECK

MS to BFPT(A) MBV-9
Drain to sump / Vents
Seal Injection pressure ____
Seal Return temp. ____

MS to BFPT(B) MBV-10
Drain to sump / Vents
Seal Injection pressure ____
Seal Return Temp. ____

Feedwater Bypass around HTR's 6, 7, & 8
HTR 6A & 6B Vents and drains to sump
HTR 6A & 6B Vent to the DA
HTR 3 Vents to sump / Relief valve to sump
HTR 3 Vents to condenser - start up vent top of HTR

IP warming valve
Ventelator valve

Hood Sprays
Hood Spray press Reading

Computer Trailer

Control Room

IPP #1

Isolation Check List

Boiler - 3 floor to Bsmt

2ND FLOOR - SOUTH
Boiler Drains [62,61], [65, MBV66], [63,64], [67,68]

2ND FLOOR - WEST
Traps (2) from Aux Steam to Blowdown Tank

2ND FLOOR - EAST
BOILER DRAINS 170,69

2ND FLOOR - (NORTH - EAST)
Air HTR soot Blowing drain to Condenser MBV-35

Bsmt

DA Drain to Air Preheat
Valve 24 - 1 floor above FGR pumps
valves 113, 114, 119, 122, 123 - Bsmt

APH Return to DA and Condenser.
ACV 134, 130, 131

Combustion gas Reheat to Condensate after HTR 2
150, 435 tell tale 436
~~Ett~~ FGR pump Recirc 110, 113, 114, 117
Pump leakage

2ND FLOOR West
Boiler drains.

IPP #1

Isolation Check List

Scrubber Bldg.

- Soot Blower Condensate drain return to the Miscellaneous Drains receiver tank - Behind FGR Control Room valve # 127 & 125

IPP # 1

ISOLATION Check LIST

MEZZ

4- Overflow lines from VAC. Pump Separator tank to Misc drain tank
2- Relief valves from Feedwater to HTR 6A & 6B

HTR 2 Vents and drains to sump, Relief valve to sump
HTR 2 Vents to Condenser - startup vent top of HTR shell
HTR 2 Condensate Bypass MBV-16
Boot Strap from Condensate to Feedwater DV & TT
Relief valve from BFP(B') to sump.
EXTR LINE Drain from LP steam to BFPT "B"
Warm-up drain from Feedwater to Condenser
Relief valve from BFP(A) to sump
Aux Steam to BFPT DV & TT
CRH to Steam Seals
Aux Steam to Steam Seals
TDV to Condenser

MS to Steam Seal 10, MBV-2, MBV-3
Steam Seal header Relief valves
HPLO steam to Steam Seal header.
2500 # Ruska

MS drains to Blowdown tank MBV-11/12/13/14
MS drains to Condenser MBV 55/56/25/26
4 Control valve ~~before~~ before seat drains
4 Stop valve before seat drains
Main Steam Bypass to Condenser DV & TT
Condensate for desuperheating ACV 59, ACV89, ACV86
Drains from Rotor cooling line to CRH line
CIV drain to Condenser
CIV drain to sump - mezz near condensate for HRH drains dropper
mezz near BFPT A exhaust to Condenser

IPP # 1

ISOLATION - Check List

Mezz - Cont.

Normal make-up to Condenser (DV & TT) 31, 30 telltale 148
Condensate for desuperheating the steam to the SPE

* Condenser DWG - TB END
* CONDENSER DWG - South side
HTR # 1A, 1B, 1C Vent & drain to sump
Start up Vent to the Condenser

HTR #1 & DC Condensate Bypass

* CONDENSER DWG - GEN END
DA Drain to the Condenser 85, 86, 26, 27
HTR # 4 Hi Level dump to the Condenser
Boiler Bypass to Condenser 136, 138, 169, 170
Condensate to and from lighters for Boiler

* Condenser DWG - North side
3-Vacuum Breakers - Find out how to check for make-up leaking into the Condenser.
BFPT "B" Drains to the Condenser
BFPT "A" Drains to the Condenser.

11/

IPP #1

ISOLATION Check List

BSMT

TB meter Bypass 1½" TB meter
TB meter Bypass 2" TB meter
Booster pumps drain to sump
Drain to sump from the seal return tank under the BSMT floor - also any tank leaks

Make-up from Feedwater to Aux Boiler
- also valve unit #2
valve @ Aux boiler

Standby pump drain to sump
Relief on Suction to standby pump
HP HTR drain pump drains to sump

Make-up to Condensate Polishers
Drains to Sump from Polishers
Condensate pump leak to sump
Make-up to Condensate pump Seals DV & TT
Cycle make-up to drain cooler line to the Condenser
Valve 129 (above drain Cooler) Valve 66 (above walkway)
Drain Cooler vents and drains
Condensate Recirc ACV 25
Condensate to Storage Tank 19, 20, 23, 24
Air Preheat Return to the Condenser 137, 139, 141
* CONDENSER DWG - GEN END
HTR #3 Hi Level drain to Condenser
HTR #2 Hi Level drain to the Condenser
HTR #1 & #2 Hi Level drain to the Condenser
Generation Bldg Heating Return to Condenser
H_2 Pressure _____
H_2 Purity _____

SUMPS

IP14_005742

IPP #1

ISOLATION - Check List

Bsmt - Cont.

* CONDENSER DWG - South side
  - Hotwell Level
  - Emergency Make-up (OV & TT) 33, 34 TT 175

Misc Drain tank to Sump
Trap from Aux Steam HDR
HRH drain to Condenser
CRH drain to Condenser
TDV drain to Condenser
MS line Bypass to Condenser

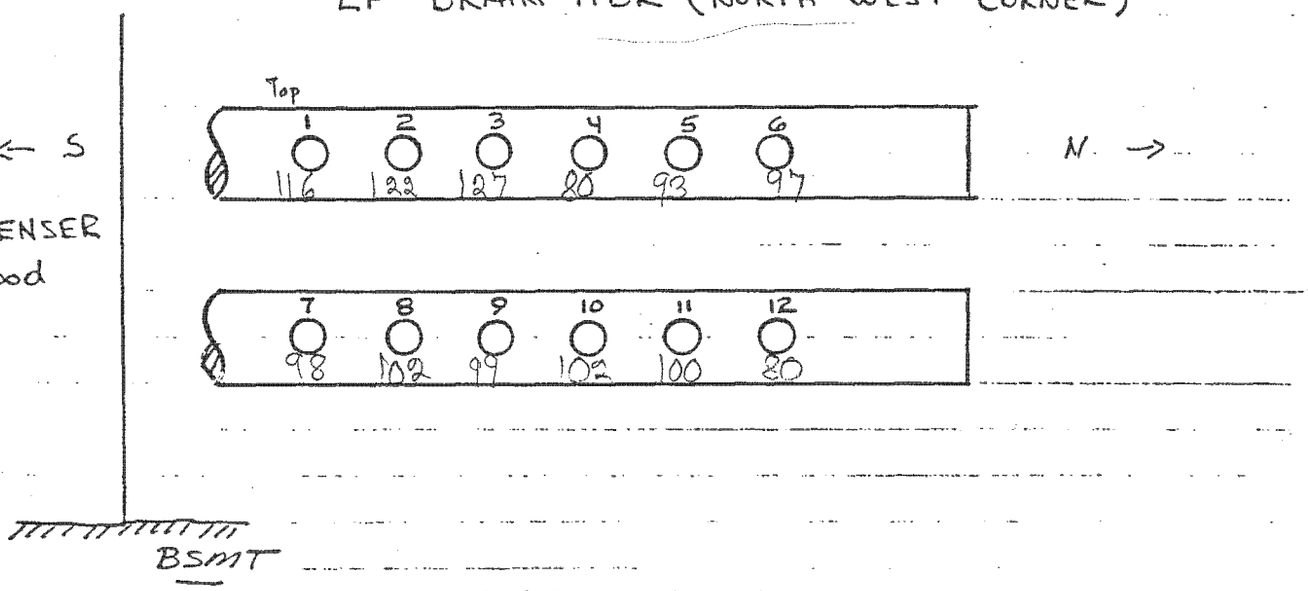
* Condenser DWG - TB END
  - HTR 6A & 6B Hi level dumps to Condenser
  - HTR 7A & 7B Hi level dumps to Condenser
  - HTR 8A & 8B Hi level dumps to Condenser
  - SV & CV above seat drains
  - Equalizer Valve
  - Stm lead drains
  - CIV drains
* HP Drain Header
  SPE DRAIN FLOW
* Condenser DWG - North side
* { LP drain Header to A hood
  { 2 LP drain Headers to Condenser under C hood

Samples

Chem. Feed

Sumps

LP DRAIN HDR (NORTH-WEST CORNER)

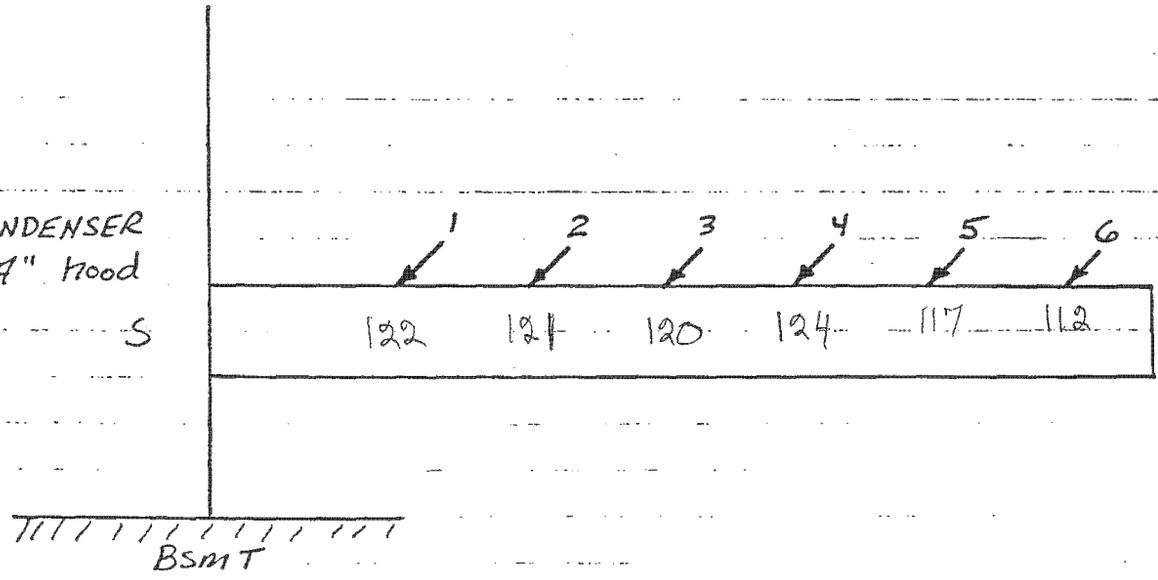


ELEVATION VIEW
(LOOKING WEST)

1)	EXTR	TO	HTR 2	from	hood "C"	-	Drain	after	non-return	valve
2)	"	"	"	"	"	"	" - "	before	"	"	"
3)	"	"	HTR 3	"	"	"	- "	after	"	"	"
4)	"	"	"	"	"	"	" - "	before	"	"	"
5)	"	"	HTR 4	"	"	"	- "	after	"	"	"
6)	"	"	"	"	"	"	" - "	before	"	"	"
7)	"	"	HTR 2	"	hood "B"		- "	after	"	"	"
8)	"	"	"	"	"	"	" - "	before	"	"	"
9)	"	"	HTR 3	"	"	"	- "	after	"	"	"
10)	"	"	"	"	"	"	" - "	before	"	"	"
11)	"	"	HTR 4	"	"	"	- "	after	"	"	"
12)	"	"	"	"	"	"	" - "	before	"	"	"

* ALSO CHECK TRAPS AND DRAIN TO SUMP

LP DRAIN HDR (NORTH-EAST CORNER)

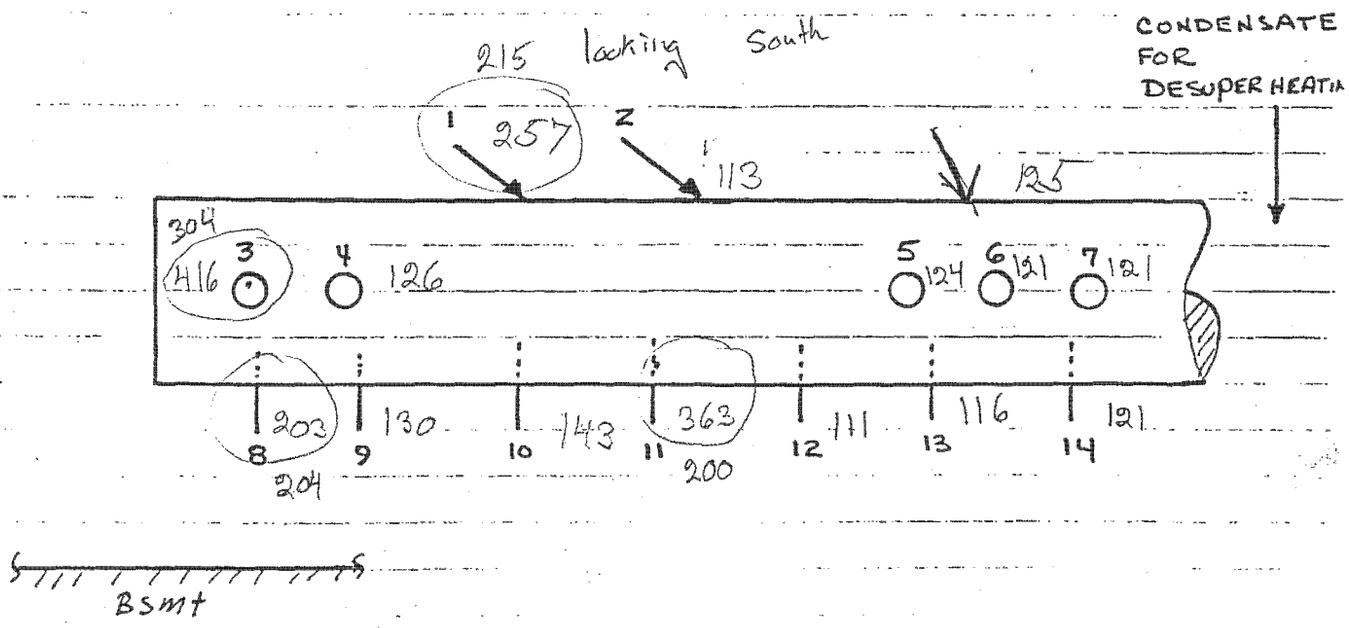


ELEVATION VIEW
(LOOKING WEST)

1) EXTR TO HTR #2 FROM "A" hood - Drain after non-return valve
2) " " " " " " " " before " " "
3) " " HTR #3 " " " " after " " "
4) " " " " " " " " before " " "
5) " " HTR #4 " " " " after " " "
6) " " " " " " " " before " " "

* ALSO CHECK TRAPS AND DRAINS TO SUMP

HP DRAIN HDR
(EAST SIDE - BSMT LEVEL)



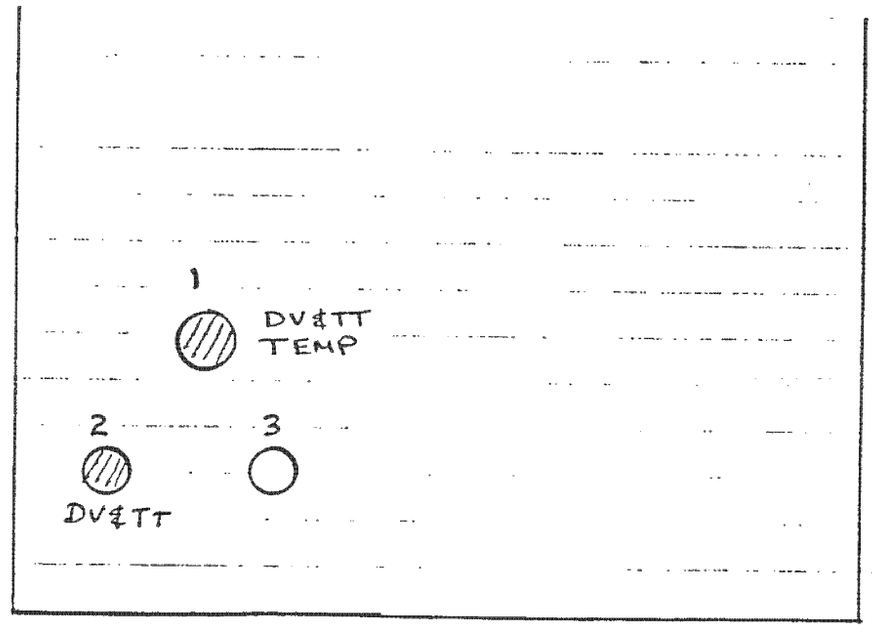
ELEVATION VIEW
(LOOKING SOUTH)

1)	Drain from	APH soot blowers						
2)	Drain from	boiler soot blowers						
3)	Drain from	4th stg	Extr	to		HTR 8A & 8B	(before seat)	
4)	"	"	"	"	"	"	HTR 8A	(after seat)
5)	"	"	14 stg	"	"		BFPT 1B	(after MBV-9)
6)	"	"	"	"	"	"	DA	(after seat)
7)	"	"	"	"	"	"	"	" "
8)	"	"	4th stg	"	"		HTR 8B	" "
9)	"	"	11th stg	"	"		HTR 6A & 6B	(before seat)
10)	"	"	"	"	"	"	HTR 6A	(after seat)
11)	"	"	"	"	"	"	HTR 6B	" "
12)	"	"	14 stg	"	"		BFPT 1A	(after BV-9)
13)	"	"	"	"	"	"	BFPT 1A & 1B	
14)	"	"	"	"	"	"	DA	(before seat)

* ALSO CHECK TRAPS AND DRAINS TO SUMP

IP14_005746

CONDENSER CONNECTIONS MEZZ - TB END



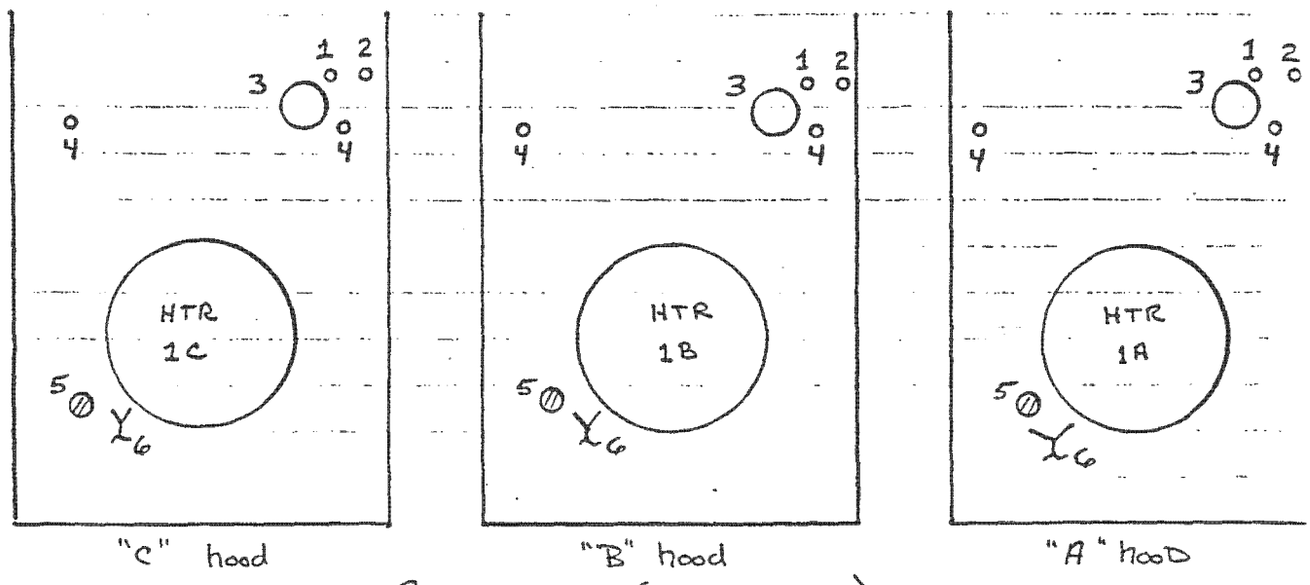
CONDENSER (MEZZ LEVEL)
(TB-END)

1) MS Bypass to Condenser and MS drains to Bypass line - check temp before desuperheater

2) Normal Hotwell make-up

3) Drain from Misc drain tank

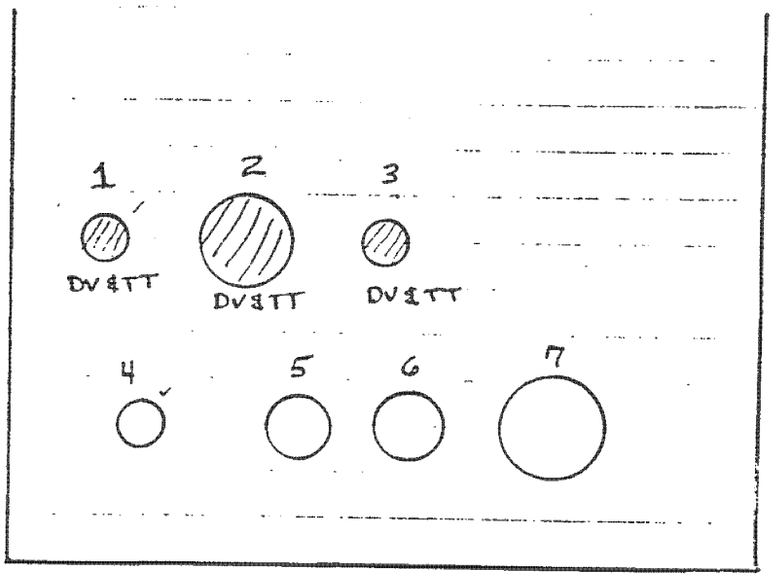
CONDENSER CONNECTIONS MEZZ - SOUTH



CONDENSER (MEZZ LEVEL)
(SOUTH SIDE)

1) TE
2) Pressure Tap
3) LP Steam Seals to SPE
4) Waste water & oil from turbine
5) HTR # 1 Vent to condenser
6) HTR # 1 drains to sump.

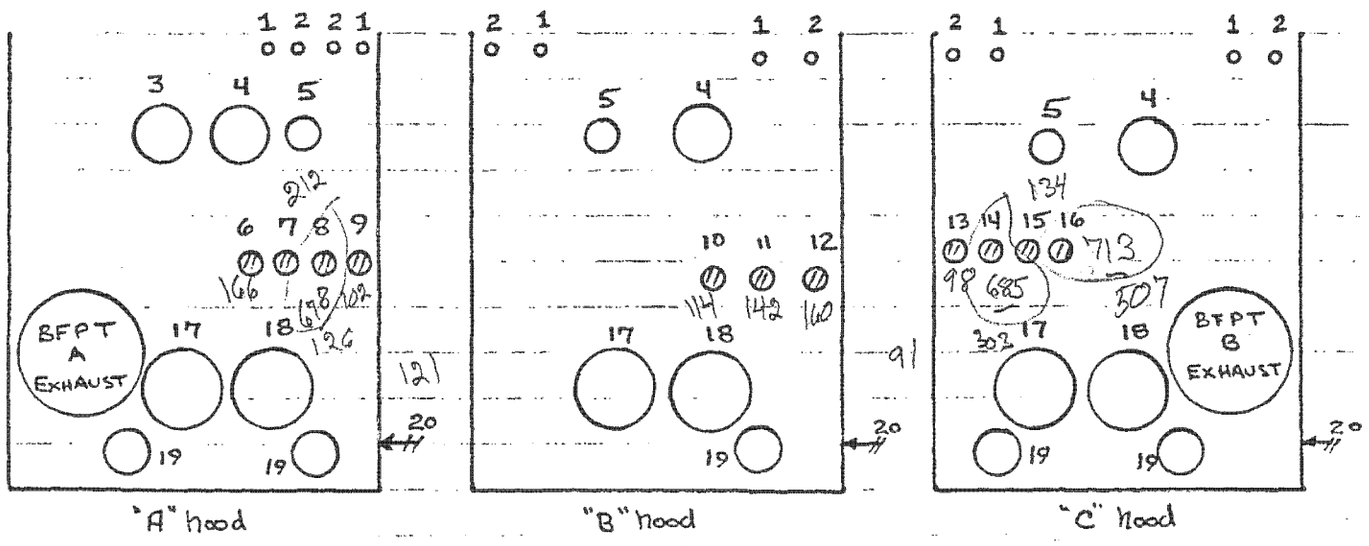
CONDENSER CONNECTIONS MEZZ – GEN. END



Condenser (Mezz Level)
(GEN END)

1) DA drain to Condenser DV&TT BV26, BV27
   DA drain to Condenser DV&TT BV85, BV86
   Condensate return from lighters BV 375
2) Bypass from boiler to Condenser BV 136, ACV 137, BV 138, BV 169, BV 170
3) HTR 4 Hi level drain to Condenser BV 9, BV 17
4) Booster pump and standby pump seal return
5) Condensate pump startup recirc valve to Condenser
6) Condensate recirc to Condenser
7) Drain Cooler drain to Condenser

CONDENSER CONNECTIONS MEZZ - NORTH SIDE



CONDENSER (MEZZ LEVEL)
(NORTH SIDE)

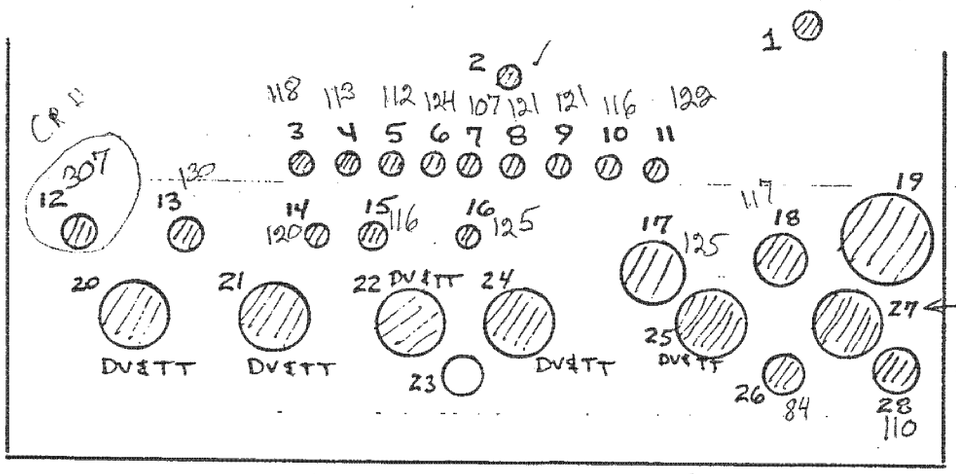
1) TE
2) Pressure Tap
3) TDV to HTR 1A
4) EXTR TO HTR #4
5) SSH to LP Seals
6) BFPT "A" HP STOP VALVE DRAIN
7) BFPT "A" LP STOP VALVE BELOW SEAT DRAIN
8) BFPT "A" HP STOP VALVE DRAIN
9) BFPT "A" FIRST Stage Drain
10) HTR #4 Vent to Condenser
11) HTR #3 Vent to Condenser
12) HTR #2 Vent to Condenser
13) BFPT "B" FIRST STAGE DRAIN
14) BFPT "B" HP STOP VALVE DRAIN
15) BFPT "B" LP STOP VALVE below SEAT DRAIN
16) BFPT "B" HP STOP VALVE DRAIN
17) EXTR TO HTR #2

CONT.
(18) EXTR TO HTR #3
(19) TO VACUUM PUMPS
(20) VAC. Breaker - Check for MAKE-UP LEAKAGE TO CONDENSER

IP14_005750

CONDENSER CONNECTIONS

Bsmt - TB END



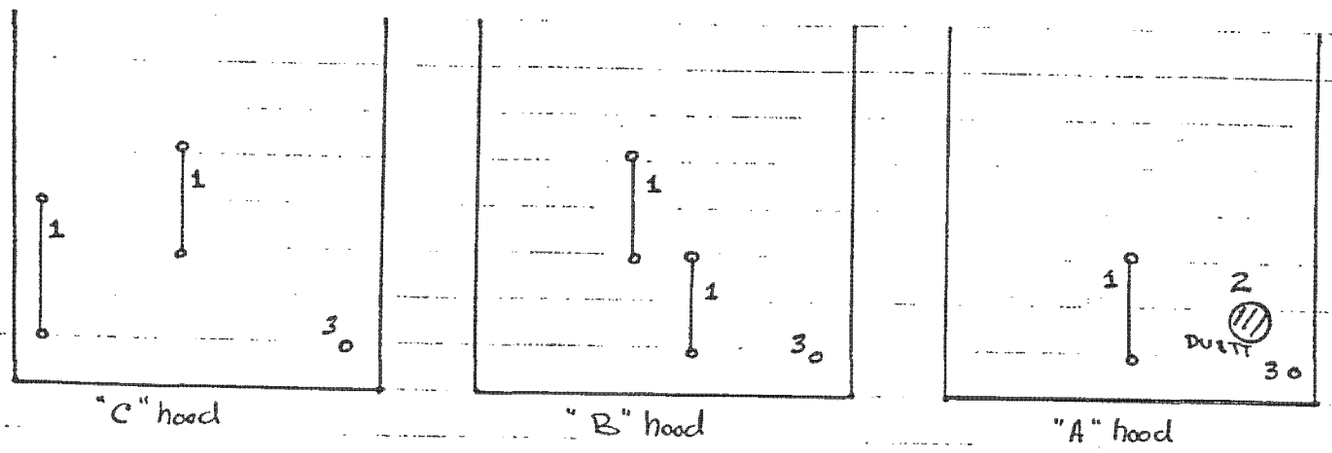
CONDENSER - Bsmt
(TB END)

1) Orificed drain from TDV to HTR
2) Drain from Feedwater to HTR #6
3) Drain RHT Bowl to condenser
4) Control valve drain to condenser
5) " " " " "
6) " " " " "
7-10) Stop valve drain to condenser
11) Drain from RHT Bowl
12) CRH low point drains - check before desuperheating
13) HRH low point drains - check before desuperheating
14) Low point drain from MS Bypass to condenser
15) Control valve drain to condenser
16) Main Steam lead drain to condenser
17) TDV to condenser
18) Equalizer valve
19) HP extn line drain header
20, 21) HTR 6A & 6B Hi level dumps — 20) HTR 6A ; 21) HTR 6B
22, 24) HTR 8A & 8B Hi level dumps — 22) HTR 8A ; 24) HTR 8B
23) Drain from Misc Drain Tank
25, 27) HTR 7A & 7B Hi level dump — 25) HTR 7B ; 27) HTR 7A
26) SSH low point drain
28) Drain from LP extn steam to BFPT "A"

IP14_005751

CONDENSER CONNECTIONS

BSMT - SOUTH SIDE



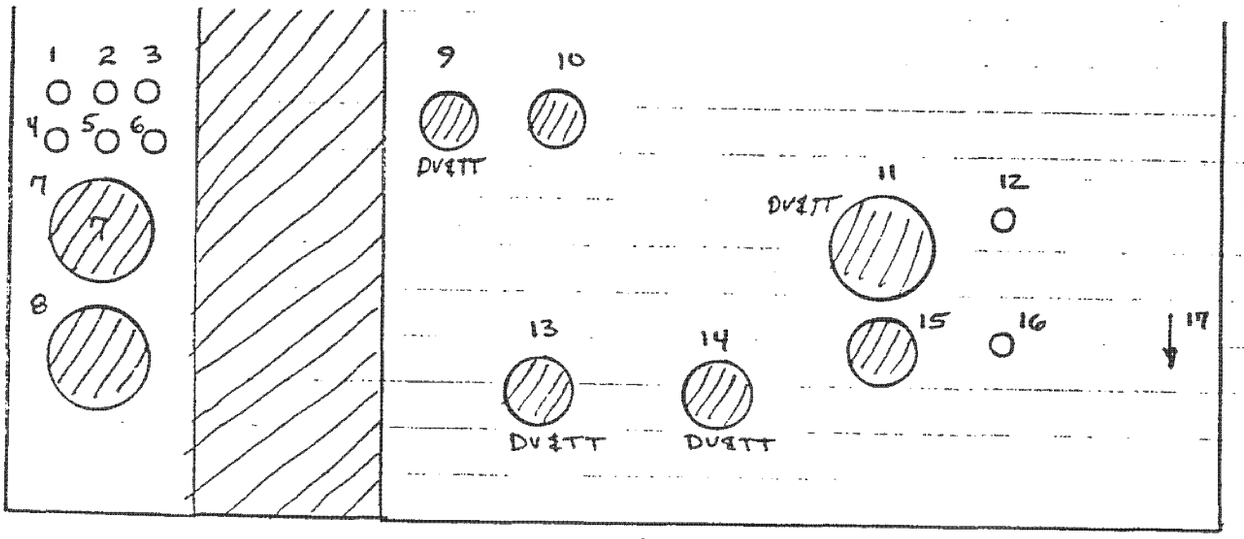
CONDENSER - BSMT
SOUTH SIDE

1) SITE GLASS OR LEVEL INDICATOR
2) EMERGENCY MAKE-UP TO HOTWELL
3) TE

IP14_005752

CONDENSER CONNECTIONS

BSMT - GEN END

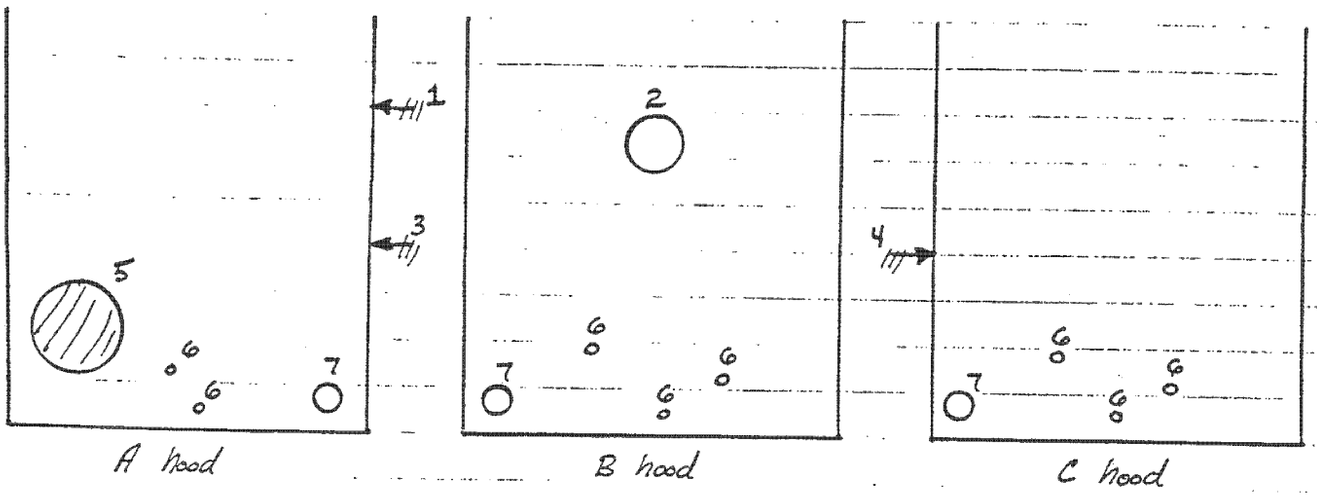


CONDENSER BSMT
GEN END

1,2,3) Condensate pump suction vents
4,5,6) Condensate pump disch vents
7) LP HTR EXTR LINE HDR
8) LP HTR EXTR LINE HDR
9) APH Return to Condenser
10) Extr line drain from LP steam to BFPT "B"
11) Flash tank Hi level drain to the Condenser
12) Vent to Condenser from the drain cooler drain line to Condenser
13) HTR #3 Hi level drain to Condenser
14) HTR #2 Hi level drain to condenser
15) Generation Bldg Heating return to condenser
16) Sample from drain cooler drain line to condenser
17) Local sample from drain cooler.

CONDENSER CONNECTIONS

BSMT - NORTH SIDE



Condenser Bsmt
North Side

1) SSH Low point drain - check MEZZ Level
2) To VACUUM Pumps
3) BFPT "1A" LP STOP VALVE above seat drain - check Mezz level
4) BFPT "1B" LP " " " " " " " "
5) LP extraction line drain header
6) Hotwell sample
7) Hotwell drain.

MEZZANINE TC'S

LP HTR & DR To Flash TK 1

162
166

MS WARM LINE

89

MS DRAIN WARM LINE - 1MSDSH

102

MS DRAIN WARM LINE - 1MSDSH

114

BOOSTER BFP DISC TO MAIN + STBY BF

122

MS DRAINS TO BLOWDOWN TANK

187
178

103

ST. SEAL EXTRACTIONS UP 1/2 LEVEL

211
210

332
329

549
333

441
368

198
192

DOWN ON MEZZANINE TDV TO CONDENSER

TEST # 3,4 DATE 5/13/87

MASTER COPY

TURBINE PERFORMANCE TESTING - CRITICAL VALVES

I - HIGHEST PRIORITY, IMMEDIATELY AFTER TRIP
II - RETURN TO SERVICE AFTER PRIOR. #1
} RESTORE BETWEEN TESTS
III - " " " " END OF DAY OR TRIP

PRIORITY I VALVES (PAGE 1 OF 2)

P&ID	VALVE #	DESCRIPTION	LOCATION	VLV POSITION CLOSE INIT.	OPEN O INITIAL	CLOSE C INITIAL	OPEN O INITIAL
M2076	2TED-BV-0019	HP HTR 8A ALT. HLVL DUMP	GF - EAST OF COND	O DA	DA	KS	DS
"	" 0020	" 8A NO HANDWHEEL	"				
"	" 0027	" 7A "	"	O DA	DA	KS	DS
"	" 0028	" 7A "	"	O DA	DA	KS	DS
"	" 0035	" 6A "	"	O DA	DA	KS	DS
"	" 0036	" 6A "	"	O DA	DA	KS	DS
"	" 0021	" 8B "	"	O DA	DA	KS	DS
"	" 0022	" 8B "	"	O DA	DA	KS	DS
"	" 0029	" 7B "	"	O DA	DA	KS	DS
"	" 0030	" 7B "	"	O DA	DA	KS	DS
"	" 0037	" 6B "	"	O DA	DA	KS	DS
"	" 0038	" 6B "	"	O DA	DA	KS	DS
M2020	2HRA-BV-0019	COND. NORMAL DRAWOFF	GF SW CORNER OF COND	C JB	JB	JB	JB
"	-0020	"	"	C JB	JB	JB	JB
M2077	2TEE-BV-0011	LP HTR 3 ALT. HLVL DUMP	GF - WEST OF COND	O JB	JB	JB	JB
"	" 0019	" 3 "	"	O JB	JB	JB	JB
" at low load	" 0013 at high load 0015	" 2 NORMAL "	"	O JB	JB	JB	JB
"	" 0020 0021	" 2 " "	"	O JB	JB	JB	JB
"	" 0015	FLASH TANK "	GF - SW OF COND	O JB	JB	JB	JB
"	" 0022	" "	"	O JB	JB	JB	JB

IP14_005756

TEST # 3.4 DATE 5/13/87

PRIORITY I VALVES (PAGE 2 of 2)

P&ID	VALVE #	DESCRIPTION	LOCATION	VLV POSITION / CLOSE INITIALS	OPEN O INITIALS	CLOSE C INITIALS	OPEN O INITIAL
M2077	2TEE-BV-0009	LP HTR 4 ALT HLVL DUMP	MEZZ WEST OF COND	O / FT	FT	FT	FT
"	" 0017	"	"	O / FT	FT	FT	FT
M2037	2FWC-BV-0026	DA RECIRC. to COND.	"	O / FT	FT	FT	FT
"	" 0027	" TURB.	"	O / FT	FT	FT	FT
"	2FWC-MBV-90	"	"	O / FT	FT	FT	FT
M2020	2HRA-BV-0030	COND. NORMAL MU	MEZZ SW CORNER OF COND.	O / Gene	BG	BG	BG
"	" 0031	ULO FILL HOTWELL	"	O / Gene	BG	BG	BG
M2080A	2TEC-BV-0010	MN. STM. to TURBINE SEAL	MEZZ NE OF MN. STM HDR	O / FT	FT	FT	FT
M2069	2SGG-MBV-9	HP STM. to BFPT 1A	3rd NE BFPT 1A	O / MP	MP	MP	MP
"	" -10	" 1B	3rd SW OF BFPT 1B	O / MP	MP	MP	MP
M2008	2PSA-BV-0021	DA PEGGING STEAM	15th N of E ELEVATOR	O / MP	N/A	C N/A	MP
"	" 0022	"	"	O / MP	N/A	C N/A	MP
~~M2035A~~	~~2FWA-BV-37~~	~~BFPT 1A RECIRC~~	~~15th~~				
M2075	2TEC-BV-0073	HP HTRS 8A & 8B EXTRACT.	GF E OF LUBE OIL CONT.	O / DA	DA	KS	DS
"	" 0079	HP HTR 8A "	"	O / DA	DA	KS	DS
M2035C	2FWA-BV-0388	HP STOP VLV 1B1 STEM LEAK OFF	MEZZ NW OF COND	O / FT	FT	FT	FT
" TURB.	" 0390	" Seat DRAIN	"	O / FT	FT	FT	FT
"	" 0389	" 1A1 " "	MEZZ N OF COND	O / FT	FT	FT	FT
M2075	2TEC-BV-0075	HP HTRS 8A & 8B Extract	GF E OF LUBE OIL CENT	O / DA	DA	KS	DS
"	" 0081	HP HTR 8A	"	O / DA	DA	KS	DS
"	2TEC-BV-0105	HP HTR 6B		O / DA	DA	KS	DS

IP14_005757

TEST # 3.4 DATE 5/3/87

PRIORITY II VALVES (PAGE 1 OF 3)

P&ID	VALVE #	DESCRIPTION	LOCATION	VLV POSITION / CLOSE INITIALS	OPEN O INITIALS	CLOSE C INITIALS	OPEN O INITIAL
M2054A	2SAC-BV-0017	SAMPLE 1 MU to COND.	GF Chem LAB	LAB			
"	" 0030	"	"				
"	" 0019	SAMPLE 3 DEMIN. 1A OUTLET	"				
"	" 0032	"	"				
"	" 0020	SAMPLE 4 DEMIN. 1B OUTLET	"				
"	" 0033	"	"				
"	" 0021	SAMPLE 5 DEMIN. 1C OUTLET	"				
"	" 0034	"	"				
"	" 0022	SAMPLE 6 DEMIN 1D OUTLET	"				
"	" 0035	"	"				
"	" 0023	SAMPLE 7 COND. POL. OUTLET	"				
"	" 0036	"	"				
"	" 0001	SAMPLE 8 COND. AFTER GLAND COND.	"				
"	" 0002	SAMPLE 9 DA INLET	"				
"	" 0024	"	"				
"	" 0037	"	"				
"	" 0026	SAMPLE 11 ECON. INLET	"				
"	" 0039	"	"				
"	" 0003	SAMPLE 13 SAT. STEAM	"				
"	" 0004	SAMPLE 14 MN. STEAM	"				
"	" 0028	"	"				
"	" 0041	"	"				
M2075	2TEC-BV-0065	LP HTR 4 LP TURBIN SECT. 1C	NW CORNER COND GF CEILING	O DA	DA	KS	DS
M2071	2SGJ-BV-0056	COLD RH STM TRP 1 INLET	GF 204-B	O DA	DA	KS	DS
"	" 0057	" OUTLET	"	O DA	DA	KS	DS
M2069	2SGG-BV-0015	MN. STM. SAMPLE 14	TOP OF MEZZ MN STM	O DA	DA	KS	DS
"	" 0016	"	"	O DA	DA	KS	DS

LAB

IP14_005758

TEST # 3,4 DATE 5-13-87

PRIORITY II VALVES (PAGE 2 OF 3)

P&ID	VALVE #	DESCRIPTION	LOCATION	KEY POSITION / CLOSE INITIALS	OPEN O INITIALS	CLOSE C INITIALS	OPEN O INITIALS
M2021	2HRB-BV-0109	SEPARATOR 1D Mu	MEZZ. CONDENSER VAC. PMPS	O JB	JB	JB	JB
"	" 0110	" 1C "	"	O JB	JB	JB	JB
"	" 0111	" 1B "	"	O JB	JB	JB	JB
"	" 0112	" 1A "	"	O JB	JB	JB	JB
M2079	2TGA-BV-0005	HOOD SPRAY SUPPLY	3rd by GE Trailer	O JB	JB	JB	JB
M2078B	2TEF-BV-0163	LP HTR 3 CONTINUOUS vent to COND	3rd LP HTR 3	O JB	JB	JB	JB
M2078A	2TEF-BV-0077	HP HTR 6A CONTINUOUS vent to DEA	3rd HP HTR 6A	O JB	JB	JB	JB
"	" 0080	" 6B "	3rd HP HTR 6B	O JB	JB	JB	JB
"	" 0076	" 7A "	5th HP HTR 7A	O FT	FT	FT	FT
"	" 0079	" 7B "	5th HP HTR 7B	O FT	FT	FT	FT
M2078B	TURB " 0162	LP HTR 4 " to COND	5th LP HTR 4	O FT	FT	FT	FT
M2078A	" 0075	HP HTR 8A " to DEA	6th HP HTR 8A	O FT	FT	FT	FT
"	" 0078	" 8B "	6th HP HTR 8B	O FT	FT	FT	FT
M2035B	2FWA-BV-0202	Boiler Feed Sample 11 DNO	10th S OF MCC 2B09	O FT	FT	FT	FT
"	" 0203	"	"	O FT	FT	FT	FT
M2078A	2TEF-BV-0003	DEA CONTINUOUS VNT TO ATMOS.	14th top OF DEA	O FT	MP	MP	MP
"	" 0007	"	"	O FT	MP	MP	MP
"	" 0011	"	"	O FT	MP	MP	MP
M20 M2063B	2SGA-BV-0172	STM. GEN. SAMPLE 13	17th S	O MP	MP	MP	MP
"	" 0003	CONTINUOUS BLOWDOWN	18th E END OF DRUM	O MP	MP	MP	MP
"	" MBV-4	"	"	O MP	N/A	C N/A	MP
"	" MBV-2	STM SUPPLY to AUX STM	18th S OF DRUM	C MP	N/A	C N/A	MP
"	" BV-0001	"	"	O MP	N/A	C N/A	MP
M2008	2PSA-MBV-17	CRH SUPPLY to AUX STM	9th Behind E ELEVATOR	O FT	N/A	C N/A	FT
"	" BV-12	TURB.	"	C FT	N/A	C N/A	FT
"	" BV-14	"	"	O FT	N/A	C N/A	FT
"	" BV-58	2ND SUPERHEAT to AUX STM	17th W. SIDE	O MP	N/A	C N/A	MP
M2063A	2SGA-BV-0010	MN STM to AUX STM	"	O MP	N/A	C N/A	MP
[illegible]	[illegible]	[illegible]	[illegible]	O [illegible]	N/A	C/N/A	DS

IP14_005759

TEST # 34 DATE 3/13/87

PRIORITY II VALVES (PAGE 3 of 3)

P&ID	VALVE #	DESCRIPTION	LOCATION	VALVE POSITION / CLOSE INITIAL	OPEN O INITIAL	CLOSE C INITIAL	OPEN O INITIAL
2FWB M2036							
"	B-1 B-2 B-3 B-4	FLOW METER 1 BBFP open first	GF-W OF BBFP 2A	C JB C JB O JB O JB	JB JB	JB JB	
"	B-5 B-6 B-7 B-8	FLOW METER 2 BBFP open first	GF ABOVE BFPT LUBE OIL CENT.	C JB C JB O JB O JB	JB JB	JB JB	

TEST #_____ DATE_____

P&ID	VALVE #	DESCRIPTION		LOCATION	PRIORITY	CLOSED C INITIAL	OPE C INIT
M2075	2TEC-BV-0027	LP HTR 2	LP TURB. SECTION 1B	GF - NW	III	DA	D
"	" 0031	"		CORNER	III	DA	D
"	" 0035	LP HTR 3		OF	III	DA	D
"	" 0039	"		COND. -	III	DA	D
"	" 0043	LP HTR 4		Bottom	III	DA	D
"	" 0047	"		Row	III	JB	JI
"	" 0003	LP HTR 2	LP TURB. SECTION 1A	GF - NE	III	DA	D
"	" 0007	"		CORNER	III	DA	D
"	" 0011	LP HTR 3		OF	III	DA	D
"	" 0015	"		COND.	III	DA	D
"	" 0019	LP HTR 4			III	JB	JI
"	" 0023	"			III	JB	JI
"	" 0051	LP HTR 2	LP TURB. SECTION 1C	GF- NW	III	JB	JI
"	" 0055	"		CORNER	III	JB	JI
"	" 0059	LP HTR 3		OF	III	JB	JI
"	" 0063	"		COND.	III	JB	JI
"	" 0067	LP HTR 4		TOP	III	JB	JI
"	" 0071	"		Row	III	JB	JI
M2038 B	2FWD-BV-0121	COND. POLISH REGEN PMP TURB.		GF	III	FT	FT
"	" 0125	"		"	III	FT	FT
M2008	2PSA-BV-0082	AUX. STM. TRAP 5		"	III	FT	FT
M2080A	2TGC-BV-0058	AUX. STM. to COND. RH		MEZZ. TOP OF VLV DECK	III	FT	FT
M2069	2SGG-BV-0058	MN. STM. WARMING LINE		MEZZ. NE OF MCC 2A02	III	FT	FT
M2068	2SGF-BV-0065	DOWNCOMER DRN. BLOWDOWN		MEZZ. S. SIDE BOILER	III	FT	FT
"	" 0055	LWR. CONVECTION PASS HDR		10th east	III	mP	m
"	" 0057	"		"	III	mP	m
"	" 0035	"		10th west	III	mP	m
"	" 0028	"		"	III	mP	m

TEST # 3,4 DATE 5/13/87

P&ID	VALVE #	DESCRIPTION	LOCATION	PRIORITY	CLOSE C INITIAL	OPEN O INITIAL
M2068	2SGF-BV-0041	SECOND. SPRHTR OUT HDR.	15th - West	III	c mp	mp
"	" 0043	" " INTERMED HDR	"	III	c mp	mp
"	" 0045	" " " "	"	III	c mp	mp
"	" 0049	" " PLATEN "	"	III	c mp	mp
"	" 0051	ROOF INLET HDR	"	III	c mp	mp
M2008	2PSA-BV-0026	TURBINE Seals via STM	MEZZ 203-D	III	c FT	FT

TEST #3/4

PRID Checkoff List

PRIDS	NON-CRITICAL COMPLETE	CRITICAL COMPL	OPEN CRITICAL COMPLETE	OPEN NON-CRITICAL COMPLETE
9 PSA - M2008	RDG	N/A		
2 PSA - M2008	RDG			
2CCD - M2013A	RDG	N/A		
2HRA - M2020	RDG			
2HRB - M2021	N/A			
2 FWA - M2035A	RDG			
2FWA - M2035B	RDG			
2 FWA - M2035C	RDG * ABS 3			
2 FWC - M2037	RDG			
2FWD - M2038A	RDG			
2 FWD - M2038B	N/A			
2 SAC - M2054 A	RDG			
2SCA - M2056A	RDG			
2SGA - M2063A	RDG			
2 SGA - M2063 B	RDG			
2 SGC - M2065	RDG	N/A		
2SGF - M2068	RDG			
2 SGG - M2069	RDG			
2 SGI - M2070	RDG	N/A		
2 SGJ - M2071	RDG			
2 TEA - M2073	RDG			
2TEC - M2075	RDG			
2TED - M2076	RDG			
2TEE - M2077	RDG			
2FWF - M2040	RDG			
2TEF - M2078A	RDG			
2TEF - M2078B	RDG			
2TGA - M2079	N/A			
2 TGC - M2080A	RDG			
2 TGC - M2080B	RDG	N/A		
2FWB - M2036	N/A			

M2008 2PSA-BV-7, 8 ok

M2020 2HRA-BV-33, 34, 23, 24, ~~71, 179~~ ok

M2035A ~~2FWA-BV-298~~, ACV-15, BV-188 ✓

M2063A 2SGA-MBV-142, BV-141, MBV-140, BV-139 ✓

Non-critical valves to be restored after test 3 & 4 on 5/13/87

ASME TURBINE PERFORMANCE TESTING UNIT #2 Test # 3/4

Cycle Isolation Check off Sheets

Before Test-Isolation: Start _____ End _____ Name _____

After Test-Isolation: Start _____ End _____ Date: _____

SYSTEM: AUX. STEAM P&ID# 9PSA-M2008

Valve #	Description	Location	Class	Position Normal	Position Test	Position - Before Test As Found	As left	Initials	Position - After Test As Found	As Left	Initials	Comments
BV-16	Make-up from U2 D.A.	Bsmt. near BBFP 2C	N		C	C	C	DS				
BV-20	Make-up from U1/U2 D.A	Aux. Boiler	N		C	C	C	DS				
BV-22	Make-up from U1/U2 D.A	Aux Boiler	N	C	C	C	C	DS				
BV-18	Make-up from U1 D.A	Unit 1 Bsmt BBFP 2C	N		C	C	C	DS				

IP14_005765

ASME TURBINE PERFORMANCE TESTING UNIT #2 Test # 3/4

Cycle Isolation Check off Sheets

Before Test-Isolation: Start _____ End _____ Name _____

After Test-Isolation: Start _____ End _____ Date: _____

SYSTEM: AUX. STEAM P+ID # 2PSA-M2008 / 2TEA-M2073

Valve #	Description	Location	Class	Position Normal	Position Test	Position - Before Test As Found	As left	Initials	Position - After Test As Found	As Left	Initials	Comments
BV-21	DA-Pegging Stm	15th floor - North of east elevator	CRI	O	C							
BV-22	DA-Pegging Stm	"	CRI	O	C							
(BV-118)	" - tell tale valve	"	N	C	C		C	Dl				
MBV-17	CRH Supply to AuxStm	9th floor behind east elevator	CRII	O	C							
(BV-36/37)	tell tale valves	"	N	C	C		C	Dl				
BV-12	CRH Supply to AuxStm	"	CRIII	O	C							
BV-14	CRH Supply " "	"	CRIII	O	C							
BV-15	CRH Supply " "	"	N	C	C		C	Dl				
BV-133	AuxStm to DA Tank	13th floor behind West elev - on DA tank	N	O	C		C	Dl				
BV-6	" " " "	"	N	O	C		C	Dl				
(BV-134)	tell tale valve	"	N	C	C		C	Dl				
BV-7	CNDS to AuxStm DSH	5th floor by east elevator	N	O	C	O	C	Km	C	O	AN	
BV-8	" " " " "	"	N	O	C	O	C	Km	C	O	AN	
BV-9	" " " " "	"	N		C		C	Dl				
BV-19	AuxStm to BFPT	Mezz Floor NE corner	N	O	C		C	Dl				
BV-18	" " " "	" "	N	O	C		C	Dl				
(BV-39/40)	tell tale	" "	N	C	C		C	Dl				
EA(M2073) BV-118	AuxStm to BFPT	Mezz Floor NE corner	N	O	C		C	Dl				
BV-82	STEAM TRAP #5	BSMT. NE CORNER OF TURB PEDISTAL	CRIII	O	C							
BV-83	"	"	N	C	C		C	Dl				
BV-58	Aux. Steam from 2nd extraction	17th West side of Boiler	CRII	O	C							
BV-76	Aux Steam supply to steam seals	MEZZ NE CORNER TURBINE	CRIII	O	C							

IP14_005766

ASME TURBINE PERFORMANCE TESTING UNIT #2 Test # 3/4

Cycle Isolation Check off Sheets

Before Test-Isolation: Start _____ End _____

After Test-Isolation: Start _____ End _____

Name _____

Date: _____

SYSTEM: COMBUSTION GAS REHEAT P&ID# M2013A

Valve #	Description	Location	Class	Position Normal	Position Test	Position - Before Test As Found	As left	Initials	Position - After Test As Found	As Left	Initials	Comments
BV-44	Soottblowing Supply to CGR	18th floor eastside	N	O	C		C	R				
BV-47	" " "	" " "	N	O	C		C	R				
BV-137	Sprays from BFP	16th floor eastside	N	O	C		C	R				
BV-139	" " "		N	O	C		C	R				
BV-142	" " "		N	O	C		C	R				
BV-110	CGR pump Recirc	Basement by CGR pumps	N	O	C		C	R				
BV-113	" " "	"	N	O	C		C	R				
BV-114	" " "	"	N	O	C		C	R				
BV-117	" " "	"	N	O	C		C	R				
BV-150	Return to CNDS	2nd floor above pumps	N	O	C		C	R				
BV-435	" " "	Basement @ pumps 12' up	N	O	C		C	R				
BV-436	- telltale	"	N	O	C		C	R				
BV-125	SBCND Return	North AQCS Control Room	N	O	C		C	R				- SBCNDS Return Pump
BV-127	" " "	"	N	O	C		C	R				OFF

IP14_005767

ASME TURBINE PERFORMANCE TESTING UNIT #2 Test # 3/4

Cycle Isolation Check off Sheets

Before Test-Isolation: Start _____ End _____

After Test-Isolation: Start _____ End _____

Name _____

Date: _____

SYSTEM: CONDENSING P&ID# 2HRA-M2020/2SCA-M2056A

Valve #	Description	Location	Class	Position Normal	Position Test	Position Before Test As Found	Position Before Test As left	Position Before Test Initials	Position After Test As Found	Position After Test As Left	Position After Test Initials	Comments
BV-30	Condensate Normal	Mezz, SE corner condenser	CRI	O	C							
BV-31	make-up	"	CRI	O	C							
BV-19	Condensate Normal DRAW OFF	BSMT. SW CORNER CONDENSER	CRI	O	C							
BV-20	"	"	CRI	O	C							
BV-33	Condensate EMERG. MAKE-UP	BSMT. SE CORNER CONDENSER	N	O	C	O	C	SF		O	BG	
BV-34	"	"	N	O	C	O	C	SF		O	BG	
BV-23	COND. EMERG. DRAW-OFF	BSMT SW CORNER CONDENSER	N	O	C	O	C	KC		O	BG	
BV-24	"	"	N	O	C	O	C	KC		O	BG	
(BV-148)	TELL TAIL	LOCAL	N	C	C	C	C	KC				
(BV-175)	"	"	N	C	C	C	C	KC				
(BV-176)	"	"	N	C	C	C	C	KC				
(BV-177)	"	"	N	C	C	C	C	KC				
ACV-25	COND. RECIRC.	BSMT. SW CORNER CONDENSER	N	C	C	C	C	SF				MAY HAVE TO CLOSE BV-28
BV-29	" BYPASS	"	N	C	C	C	C	KC				
BV-71	COND. MISC. SERVICE PUMP OUTLET	BSMT. "1C" COND. PUMP ABOVE HEAD	N	O	C	O	C	SF				
BV-179	"	"	N	O	C	O	C	SF				
(BV-178)	TELL TAIL	"	N	C	C	C	C	KC				
BV-90	HOT WELL DRAINS	N. OF CONENSER BSMT.	N	C	C	C	C	KC				
BV-91	"	"	N	C	C	C	C	KC				
BV-89	"	"	N	C	C	C	C	KC				
BV-92	HYDRAZINE FEED	"	N	C	C	C	C	KC				
BV-112	COND. LEAK DETECTION 1C	Basement - N. End to 1C Cond	N	O	C	C	C	KC				OPEN after TEST
BV-113	"		N	O	C	C	C	KC				"
BV-114	"		N	O	C	C	C	KC				

IP14_005768

TURBINE PERFORMANCE TESTING UNIT "2 Test # 3/4

Cycle Isolation Check off Sheets

Name _____

Before Test-Isolation: Start _____ End _____

After Test-Isolation: Start _____ End _____

Date: _____

SYSTEM: CONDENSING P&ID# 2HRA-M2020 / 2SCA-M2056A (CONT.)

Valve #	Description	Location	Class	Position Normal	Position Test	Position - Before Test As Found	As left	Initials	Position - After Test As Found	As Left	Initials	Comments
BV-115	COND. LEAK DETECTION 1B	N. SIDE COND. 1B COND.	N	O	C	C	C	KC				OPENS after test
BV-116	"	"	N	O	C	C	C	KC				"
BV-117	"	"	N	O	C	C	C	KC				"
BV-118	COND. LEAK DETECTION 1A	N. SIDE COND. 1A COND.	N	O	C	C	C	KC				"
BV-119	"	"	N	O	C	C	C	KC				"
		"										
	P&ID 2SAC-M2056A											
BV-529	GEN. BLDG. SP. COND DRAIN to UNIT 2	BASEMENT W. END TO 1C COND	N		C	C	C	KC				

IP14_005769

ASME TURBINE PERFORMANCE TESTING UNIT #2 Test # 3/4

Cycle Isolation Check off Sheets

Before Test-Isolation: Start _____ End _____

After Test-Isolation: Start _____ End _____

Name _____

Date: _____

SYSTEM: CONDENSER AIR EXTRACTION P&ID # 2HRB-M2021

Valve #	Description	Location	Class	Position Normal	Position Test	Position - Before Test As Found	As left	Initials	Position - After Test As Found	As Left	Initials	Comments
BV-109	SEPARATOR MAKE-UP	MEZZ. CONDEN. VAC PUMPS	CR II	O	C							WATCH SEPAR.
BV-110	"	"	CR II	O	C							TANK LEVEL
BV-111	"	"	CR II	O	C							
BV-112	"	"	CR II	O	C							

IP14_005770

ASME TURBINE PERFORMANCE TESTING UNIT #2 Test #3/4

Cycle Isolation Check off Sheets

Name _____

Date: _____

Before Test-Isolation: Start _____ End _____

After Test-Isolation: Start _____ End _____

Seal St. Att. W/ BV-25

SYSTEM: BOILER FEED P&ID # 2FWA-M2035A

Misc. Drain receiver drain BV.

Valve #	Description	Location	Class	Position Normal	Position Test	Position - Before Test As Found	As left	Initials	Position - After Test As Found	As Left	Initials	Comments
BV-298	Bootstrap	MEZZ NEAR HTR. 2 (207-F)	N	C	C	O	C	MH	C	C	KDG	
BV-299	"	"	N	C	C	C	C	MH				
BV-108)	TELL TAIL	"	N	C	C	C	C	MH				
BV-188	WARM-UP LINE	MEZZ UNDER 1A BFPT (203E)	N	O	C	O	C	MH	C	O	BJ	
MBV-189	"	"	N	C	C	C	C	MH				
BV-365/107	TELL TAIL	"	N	C	C	C	C	MH				
ACV-14	BBFP RECIRC.	13th W. END D.A (202G)	N	C	C	C	C	MH				
ACV-15	"	"	N	C	C	O	C	MH	C	C	BJ	
ACV-16	"	"	N	C	C	C	C					
ACV-17	BFP RECIRC	13th E. END DA (207G)	N	C	C	C	C					
ACV-18	"	"	N	C	C	C	C					
ACV-19	"	"	N	C	C	C	C					
BV-37	"	"	CRI	O	C							

IP14_005771

ASME TURBINE PERFORMANCE TESTING UNIT #2 Test # 3/14

Cycle Isolation Check off Sheets

Before Test-Isolation: Start _____ End _____ Name _____

After Test-Isolation: Start _____ End _____ Date: _____

SYSTEM: BOILER FEED P&ID# 2 FWA-M2035B

Valve #	Description	Location	Class	Position Normal	Position Test	Position - Before Test As Found	As left	Initials	Position - After Test As Found	As Left	Initials	Comments
MBV-44	HP HEATERS BYPASS	TURBINE DECK E. of HP HTR. 6 (202H)	N	C	C	C	C	SV				
SGA-131	ECONOMIZER INLET HDR. DRAIN	11th Floor ECONOMIZER INLET	N	C	C		C	DG				
SGA-132	"	"	N	C	C		C	DG				
BV-202	SAMPLE 11	10th S. of mec 2809	CRII	O	C							
BV-203	"	"	CRII	O	C							

IP14_005772

ASME TURBINE PERFORMANCE TESTING UNIT #2 Test # 3 3/4

Cycle Isolation Check off Sheets

Before Test-Isolation: Start _____ End _____ Name _____

After Test-Isolation: Start _____ End _____ Date: _____

SYSTEM: BOILER FEED P&ID # 2 FWA-M2035C

Valve #	Description	Location	Class	Position Normal	Position Test	Position - Before Test As Found	As left	Initials	Position - After Test As Found	As Left	Initials	Comments
1BV-303	ABOVE SEAT DRAIN HP STOP VALVE (BFPT 1A)	1A BFPT N. SIDE TURB DECK	N	C	C	C	C	Ku				check in control ROOM
1BV-305	BELOW SEAT DRAIN HP STOP VALVE	"	N	C	C	C	C					↓
1BV-307	ABOVE SEAT DRAIN LP STOP VALVE	" S. SIDE	N	C	C	C	C					
1BV-309	BELOW SEAT DRAIN LP STOP VALVE	"	N	C	C	C	C					
1BV-311	1st STAGE DRAIN	MEZZ - NE CORNER TURB. PEDISTAL - UP	N	C	C	C	C					
1BV-304	ABOVE SEAT DRAIN HP STOP VALVE	1B BFPT S. SIDE	N	C	C	C	C					
1BV-306	BELOW SEAT DRAIN HP STOP VALVE	"	N	C	C							
1BV-308	ABOVE SEAT DRAIN LP STOP VALVE	" N. SIDE	N	C	C	C	C	Ku				
1BV-310	BELOW SEAT DRAIN LP STOP VALVE	"	N	C	C	C	C	Ku				
1BV-312	1ST STAGE DRAIN	MEZZ NW CORNER TURB PEDISTAL - UP	N	C	C	C	C	Ku				
BV-0388	HP STOP VLV 1B1 STEM LEAKOFF	MEZZ. NW OF COND	CRI	O	C							
BV-0390	" SEAT DRN	"	CRI	O	C							
BV-0389	" 1A1 "	MEZZ N OF COND	CRI	O	C							

IP14_005773

ASME TURBINE PERFORMANCE TESTING UNIT #2 Test # 3-4

Cycle Isolation Check off Sheets

Before Test-Isolation: Start _____ End _____ Name _____

After Test-Isolation: Start _____ End _____ Date: _____

SYSTEM: BOILER FEED PUMP INJECTION P&ID # 2FWB-M2036

Valve #	Description	Location	Class	Position Normal	Position Test	Position - Before Test As Found	As left	Initials	Position - After Test As Found	As Left	Initials	Comments
B-1	FM-1 BYPASS	BSMT. E.of 2A BBFP	CR II	O	C							Valve-in Flow Meter carefully
B-2	"	"	CR II	O	C							
B-3	Flow Meter 1	"	CR II	C	O							
B-4	"	"	CR II	C	O							
B-5	FM-2 BYPASS	BSMT. BFPT LUBE OIL centrifuge, ceiling	CR II	O	C							
B-6	"		CR II	O	C							
B-7	Flow Meter 2	"	CR II	C	O							
B-8	"	"	CR II	C	O							

IP14_005774

ASME TURBINE PERFORMANCE TESTING UNIT #2 Test # 3-4

Cycle Isolation Check off Sheets

Before Test-Isolation: Start _____ End _____ Name _____

After Test-Isolation: Start _____ End _____ Date: _____

SYSTEM: CONDENSATE P&ID# 2FWC-M2037

Valve #	Description	Location	Class	Position Normal	Position Test	Position - Before Test As Found	As left	Initials	Position - After Test As Found	As Left	Initials	Comments
BV-26	DA Recirc to Cond	Mezz - West Side C Condenser	CRI	O	C							
BV-27	" " " "	"	CRI	O	C							
MBV-90	" " " "	"	CRI	C	C							
BV-85	" " " "	"	N	O	C	C	C	MH				
BV-86	" " " "	"	N	O	C	C	C	MH				
BV-105)	-tell tale	"	N	C	C	C	C	MH				
BV-110	-tell tale	"	N	C	C	C	C	MH				
BV-24	APH CNDS Supply	Mezz above CGR pumps	N	O	C	C	C	MH				
BV-23	DA tank Belly Drn	11th floor	N	C	C	C	C	MH				
1BV-9	CNDS Bypass Htr 1	Mezz floor SW turb-next to stairs	N	C	C	C	C	MH				
1BV-16	CNDS Bypass Htr 2	Mezz floor SW of manelev	N	C	C	C	C	MH				
1BV-17	CNDS Bypass Htr 3	5th floor SW Boiler	N	C	C	C	C	MH				
1BV-18	CNDS Bypass Htr 4	" "	N	C	C	C	C	MH				

IP14_005775

ASME TURBINE PERFORMANCE TESTING UNIT #2 Test #3-4

Cycle Isolation Check off Sheets

Before Test-Isolation: Start _____ End _____ Name _____

After Test-Isolation: Start _____ End _____ Date: _____

SYSTEM: CONDENSATE POLISHERS P+ID #2FWD-MJ038A/38B

Valve #	Description	Location	Class	Position Normal	Position Test	Position - Before Test As Found	As left	Initials	Position - After Test As Found	As Left	Initials	Comments
BV-121 (38B)	MU to Regen Pumps	1st floor Next to CNDS MU Bster Pump	CR III	O	C							Regen Pumps - of
BV-125	" " " "	"	CR III	O	C							make sure pumps
MBV-76 (38A)	CNDS DEMIN 2A DRN	1st floor East of Demin	N	C	C	C	C	KC				don't start
MBV-77	" " 2B "	"	N	C	C	C	C	KC				
MBV-78	" " 2C "	"	N	C	C	C	C	KC				
MBV-79	" " 2D "	"	N	C	C	C	C	KC				Regen pumps are
MBV-72	DM 2A Resin Xfer Valve	"	N	C	C	C	C	KC				in stop position
MBV-73	" 2B " " "	"	N	C	C	C	C	KC				there is no "pull-to-lock"
MBV-74	" 2C " " "	"	N	C	C	C	C	KC				
MBV-75	" 2D " " "	"	N	C	C	C	C	KC				

IP14_005776

HOME TURBINE PERFORMANCE TESTING UNIT #2 Test # 5-4

Cycle Isolation Check off Sheets

Name _____

Date: _____

Before Test-Isolation: Start _____ End _____

After Test-Isolation: Start _____ End _____

SYSTEM: STEAM CYCLE SAMPLING & ANALSIS P&ID # 2SAC-M2054A (1 of 2)

Valve #	Description	Location	Class	Position Normal	Position Test	Position - Before Test As Found	As left	Initials	Position - After Test As Found	As Left	Initials	Comments
BV-17	LAB SAMPLE #1 MU to Cond	Water Lab Panel Behind	CRII	O	C	O	C	RA	C	O	RA	
BV-5	" BD		N		C	C	C	MH	C	C	RA	
BV-30	" Needle Valve		CRII	O	C	O	C	RA	C	O	RA	
BV-6	LAB SAMPLE #2 CP Disc BD		N		C	C	C	MH	O	O	RA	Sample #2 - OPEN
BV-19	LAB SAMPLE #3 Demin 1A Output		CRII	O	C	O	C	RA	C	O	RA	
BV-7	" BD		N		C	C	C	MH	C	C	RA	
BV-32	" Needle Valve		CRII	O	C	O	C	RA	C	O	RA	
BV-20	LAB SAMPLE #4 Demin 1B Outlet		CRII	O	C	O	C	RA	C	O	RA	
BV-8	" BD		N		C	C	C	MH	C	C	RA	
BV-33	" Needle Valve		CRII	O	C	O	C	RA	C	O	RA	
BV-21	LAB SAMPLE #5 Demin 1C Outlet		CRII	O	C	O	C	RA	C	O	RA	
BV-9	" BD		N		C	C	C	MH	C	C	RA	
BV-34	" Needle Valve		CRII	O	C	O	C	RA	C	O	RA	
BV-22	LAB SAMPLE #6 Demin 1D Out		CRII	O	C	O	C	RA	C	O	RA	
BV-10	" BD		N		C	C	C	MH	C	C	RA	
BV-35	" Needle Valve		CRII	O	C	O	C	RA	C	C	RA	
BV-23	LAB SAMPLE #7 Cnds Polishing Out		CRII	O	C	O	C	RA	C	O	RA	
BV-11	" BD		N		C	C	C	MH	C	C	RA	
BV-36	" Needle Valve		CRII	O	C	O	C	RA	C	O	RA	
BV-1	LAB SAMPLE #8 Cnds after Gland Cond		CRII	O	C	O	C	RA	C	O	RA	
BV-12	" BD		N		C	C	C	MH	C	C	RA	
BV-24	"		CRII	O	C	O	C	RA	C	O	RA	
BV-37	" Needle Valve		CRII	O	C		C	RH	C	O	RA	

IP14_005777

[illegible] TURBINE PERFORMANCE TESTING UNIT #2 Test # 3-4

Cycle 7 Isolation Check off Sheets

Before Test-Isolation: Start _____ End _____ Name _____

After Test-Isolation: Start _____ End _____ Date: _____

SYSTEM: STM CYCLE SAMPLING + ANALYSIS P+ID # 2SAC-M2054A (2 of 2)

Valve #	Description	Location	Class	Position Normal	Position Test	Position - Before Test As Found	Position - Before Test As left	Position - Before Test Initials	Position - After Test As Found	Position - After Test As Left	Position - After Test Initials	Comments
BV-2	LAB SAMPLE 9 DA Inlet	WATER LAB - Behind Panel	CR II	O	C	C	C	RA	C	C	[illegible]	
BV-13	LAB SAMPLE 10 DA Outlet BD		N		C	C	C	MH	C	C	[illegible]	Sample #10 - OPE
BV-26	LAB SAMPLE 11 ECON INLET		CR II	O	C	O	C	RA	C	Tag Closed C	[illegible]	Sample #11 - close root valves
BV-14	" BD		N		C	C	C	MH	C	Tag Closed C	[illegible]	
BV-39	" Needle Valve		CR II	O	C	O	C	RA	C	C	[illegible]	
BV-15	LAB SAMPLE 12 Drum BD		N	O	C	C	C	MH	C	C	[illegible]	Sample #12 - OPEN
BV-3	LAB SAMPLE 13 Sat Stm		CR II	O	C	C	C	RA	C	C	[illegible]	Sample #13 - close root valves
BV-4	LAB SAMPLE 14 Main Stm		CR II	O	C	C	C	RA	C	C	[illegible]	Sample #14 - close root valves
BV-16	" BD		N		C	C	C	MH	C	C	[illegible]	
BV-26	"		CR II	O	C	C	C	RA	C	C	[illegible]	
BV-41	"		CR II	O	C	C	C	RA	C	C	[illegible]	
											[illegible]	
BV-107	Sample Recovery Pump Suction		N	O	C	C	C	MH	C	C	[illegible]	
BV-110	Discharge		N	O	C	C	C	MH	C	C	[illegible]	

IP14_005778

ASME TURBINE PERFORMANCE TESTING UNIT #2 Test # 3-4

Cycle Isolation Check off Sheets

Before Test-Isolation: Start _____ End _____ Name _____

After Test-Isolation: Start _____ End _____ Date: _____

SYSTEM: STEAM GENERATOR P&ID# 2SGA-M2063A

Valve #	Description	Location	Class	Position Normal	Position Test	Position - Before Test As Found	As left	Initials	Position - After Test As Found	As Left	Initials	Comments
MBV-142	BLR SB STM SUPPLY	18th floor East End - Middle Blr	N	C	C	O	C	[illegible]	C	O	BJ	
BV-141	" " " "	" "	N	O	C	O	C	[illegible]	C	O	BJ	
MBV-144	BLR SB Stm SUPPLY	"	N	C	C	C	C	[illegible]	C	C	BJG	
BV-143	" " " "	"	N	O	C		C	[illegible]	C	C	BJG	
MBV-24	CGR SB STM SUPPLY	"	N	C	C	C	C	[illegible]				
BV-17	" " " "	"	N	O	C	C	C	[illegible]				
MBV-140	RAH SB STM SUPPLY	18th floor West Side	N	C	C	O	C	[illegible]	C	C	BJ	
BV-139	" " " "	"	N	O	C	O	C	[illegible]	C	O	BJ	
MBV-194	STM SUPPLY AUX HDR	17th floor West Side	N	C	C	C	C	[illegible]				
BV-10	" " " "	"	CRII	O	C							
ACV-134	SH BYPASS TO RH	18th floor West Side	N	C	C	C	C	[illegible]				
MUV-133	" " " "	"	N	C	C	C	C	[illegible]				
MBV-135	" " " "	12th floor N West Side	N	C	C	C	C	[illegible]				
BV-125	" " " "	"	N	O	C		C	DG				
BV-136	SH BYPASS to COND	Mezz floor West Cond IC	N	O	C		C	DG				
BV-138	"	"	N	O	C		C	DG				
BV-169	"	"	N	O	C		C	DG				
BV-170	"	"	N	O	C		C	DG				
BV-195	STM TRAP 2	16th west	CRII	O	C							

IP14_005779

ASME TURBINE PERFORMANCE TESTING UNIT #2 Test # 3-4

Cycle Isolation Check off Sheets

Before Test-Isolation: Start _____ End _____ Name _____

After Test-Isolation: Start _____ End _____ Date: _____

SYSTEM: STEAM GENERATOR P+ID # 2SGA-M2063B

Valve #	Description	Location	Class	Position Normal	Position Test	Position - Before Test As Found	As left	Initials	Position - After Test As Found	As Left	Initials	Comments
BV-3	CONTINUOUS BLOW DOWN	18th E. END DRUM	CR II	O	C							
MBV-4	"	18th E. END DRUM	CR II	O	C							
BV-1	AUX STEAM SUPPLY	18th S. DRUM MIDDLE	CR II	O	C							
MBV-2	"	"	CR II	C	C							
BV-18	DRAIN TO BLOWDOWN HEADER FROM LG-2	18th W. END BOILER DRUM	N	C	C	C	C	Km				
BV-19	"	"	N	C	C	C	C					
BV-208	"	"	N	C	C	C	C					
BV-25	DRAIN TO BLOWDOWN HEADER FROM LG-3	"	N	C	C	C	C					
BV-26	"	"	N	C	C	C	C					
BV-209	"	"	N	C	C	C	C					
BV-31	DRAIN TO BLOWDOWN HEADER FROM PS-5	"	N	C	C	C	C					
BV-32	"	"	N	C	C	C	C					
BV-11	DRAIN TO BLOWDOWN FROM LG-1	18th E. END BOILER DRUM	N	C	C	C	C					
BV-12	"	"	N	C	C	C	C					
BV-207	"	"	N	C	C	C	C					
BV-172	SAMPLE 13	18 S. SIDE DRUM	CR II	O	C							

IP14_005780

ASME TURBINE PERFORMANCE TESTING UNIT #2 Test # 3-4

Cycle Isolation Check off Sheets

Before Test-Isolation: Start _____ End _____ Name _____

After Test-Isolation: Start _____ End _____ Date: _____

SYSTEM: AIR PREHEAT P&ID # 25GC-M2065

Valve #	Description	Location	Class	Position Normal	Position Test	Position - Before Test As Found	As left	Initials	Position - After Test As Found	As Left	Initials	Comments
BV-113	DA WATER SUPPLY	Basement @ APH Pumps	N	O	C	C	C	DS				
BV-114	" " "	"	N	O	C	C	C	DS				
BV-119	" " "	"	N	O	C	C	C	DS				
BV-122	APH Recirc to Pump	"	N	O	C	C	C	DS				
BV-123	" " "	"	N	O	C	C	C	DS				
BV-130	APH EMGCY RTN COND	"	N	O	C	C	C	DS				
BV-131	" " " "	"	N	O	C	C	C	DS				
BV-140	APH RTN to DA	13½ floor - east	N	O	C	C	C	DS				
BV-141	APH RTN to COND	Basement West Side	N	O	C	C	C	DS				
BV-137	" " "	"	N	O	C	C	C	DS				
BV-139	" " "	"	N	O	C	C	C	DS				

IP14_005781

ASME TURBINE PERFORMANCE TESTING UNIT #2 Test #3-4

Cycle Isolation Check off Sheets

Before Test-Isolation: Start _____ End _____ Name _____

After Test-Isolation: Start _____ End _____ Date: _____

SYSTEM: BOILER VENTS AND DRAINS P&ID # 2SGF-M2068

Valve #	Description	Location	Class	Position Normal	Position Test	Position - Before Test As Found	As left	Initials	Position - After Test As Found	As Left	Initials	Comments
BV-28	LWR CONVECTION PASS HEADER DRAIN	10th WEST SIDE	CR~~III~~	O	C	C	C	KM				
BV-35	"	"	CR~~III~~	O	C	C	C					
BV-41	SECONDARY SUPERHEAT OUTLET HEADER DRAIN	15th WEST SIDE	CR~~III~~	O	C	C	C					
BV-43	SECONDARY SUPERHEAT INTERM. INLET HEADER	"	CR~~III~~	O	C	C	C					
BV-45	"	"	CR~~III~~	O	C	C	C					
BV-49	SECONDARY SUPERHEAT PLATEN OUTLET DRAIN	"	CR~~III~~	O	C	C	C					
BV-51	ROOF INLET HEAD. DRAIN	"	CR~~III~~	O	C	C	C					
BV-55	LWR. CONVEC. PASS HEADER DRAIN	10th EAST SIDE	CR~~III~~	O	C	C	C					
BV-57	"	"	CR~~III~~	O	C	C	C					
BV-65	DOWN COMER DRAIN BLOW DOWN	2nd S. SIDE BOILER	CR~~III~~	O	C							
BV-30	ECONOMIZER INLET HEADER DRAIN	10th WEST SIDE	N	C	C	C	C	KM				
BV-33	REHEATER INLET HEADER DRAIN	" "	N	C	C	C	C					
MBV-29	LOWER CONVECTION PASS HDR. DRN.	4th floor	N	C	C	C	C					
BV-31	ECONOMIZER INLET HDR. DRAIN	" "	N	C	C	C	C					
BV-34	REHEATER INLET HDR. DRAIN	" "	N	C	C	C	C					
MBV-36	LOWER CONVECTION PASS HDR. DRN	" "	N	C	C	C	C					
BV-38	REHEATER OUTLET HDR. DRAIN	" "	N	C	C	C	C					
BV-40	"	" "	N	C	C	C	C					
MBV-42	SECONDARY SUPERHEAT OUTLET HDR DRN	" "	N	C	C	C	C					
MBV-44	SECONDARY SPRHTR INTERMED INLET DRN	" "	N	C	C	C	C					
MBV-46	"	" "	N	C	C	C	C					
BV-48	ECONOMIZER DISCH. HDR. DRN	" "	N	C	C	C	C					
MBV-50	SECONDARY SPRHTR PLATEN INLET HDR DRN		N	C	C	C	C					
MBV-52	ROOF INLET HDR.		N	C	C	C	C					

IP14_005782

ASME TURBINE PERFORMANCE TESTING UNIT #2 Test # 3-4

Cycle Isolation Check off Sheets

Before Test-Isolation: Start _____ End _____ Name _____

After Test-Isolation: Start _____ End _____ Date: _____

SYSTEM: BOILER VENTS & DRAINS P+ID# 2 SGF-M2068 (CONT.)

Valve #	Description	Location	Class	Position Normal	Position Test	Position - Before Test As Found	Position - Before Test As Left	Position - Before Test Initials	Position - After Test As Found	Position - After Test As Left	Position - After Test Initials	Comments
BV-54	EAST ECONOMIZER DISCH HDR. DRN.	4th FLOOR	N	C	C	C	C	[illegible]				
MBV-56	LOWER CONVECTION PASS HDR. DRAIN	"	N	C	C	C	C					
MBV-58	"	"	N	C	C	C	C					
MBV-66	DOWNCOMER DRAIN MANIFOLD DRAIN	2ND S. BOILER	N	C	C	C	C					
BV-59	WEST END DOWNCOMER DRAIN	"	N	C	C	C	C					
BV-60	"	"	N	C	C	C	C					
BV-61	WEST SHELL DOWNCOMER DRAIN	"	N	C	C	C	C					
BV-62	"	"	N	C	C	C	C					
BV-63	CENTER SHELL DOWNCOMER DRAIN	"	N	C	C	C	C					
BV-64	"	"	N	C	C	C	C					
BV-67	EAST SHELL DOWNCOMER DRAIN	"	N	C	C	C	C					
BV-68	"	"	N	C	C	C	C					
BV-69	EAST END DOWNCOMER DRAIN	"	N	C	C	C	C					
BV-70	"	"	N	C	C	C	C					
BV-37	REHEATER OUTLET HDR	15th WEST	N	C	C	C	C	KM				
BV-39	" " "	"	N	C	C	C	C					
BV-47	ECONOMIZER DISCH. LINE	"	N	C	C	C	C					
BV-53	"	"	N	C	C	C	C					

IP14_005783

ASME TURBINE PERFORMANCE TESTING UNIT #2 Test # 3-4

Cycle Isolation Check off Sheets

Before Test-Isolation: Start _____ End _____ Name _____

After Test-Isolation: Start _____ End _____ Date: _____

SYSTEM: MAIN STEAM P&ID # 25GG-M2069

Valve #	Description	Location	Class	Position Normal	Position Test	Position - Before Test As Found	As left	Initials	Position - After Test As Found	As Left	Initials	Comments
1BV-9	HP STM to BFPT 1A	Turb Deck NE Corner on BFPT1A	CRI	O	C							
1BV-10	HP STM to BFPT 1B	Turb Deck SW on BFPT1B	CRI	O	C							
BV-23	MBV-9 Bypass	Turb Deck BFPT1A NE	N	C	C	C	C	KM				
BV-24	MBV-10 Bypass	Turb Deck BFPT 1B SW	N	C	C	C	C	KM				
BV-58	MStm WARMING LINE	Mezz Deck East of MCC 2A03	CRIII	O	C							
MCV-18	" " "	"	N	C	C	C	C	KM				
1BV-17	" " "	"	N	C	C	C	C					
1BV-11	BFPT HPSTM DRN to BD Tank	Mezz Floor Under MStm Line NE	N	C	C	C	C					
1BV-12	" "	"	N	C	C	C	C					
1BV-55	" "	"	N	C	C	C	C					
1BV-56	" "	"	N	C	C	C	C					
1BV-13	MStm DRN to BD Tank	"	N	C	C	C	C					
1BV-14	" " "	"	N	C	C	C	C					
1BV-25	" " "	"	N	C	C	C	C					
MBV-26	" " "	"	N	C	C	C	C					
1BV-21	MStm Vent to Atm	14th floor middle	N	C	C	C	C					
BV 15	SAMPLE 14	MEZZ E. END	CRII	O	C							
BV 16	"	MEZZ E END	CRII	O	C							

IP14_005784

ASME TURBINE PERFORMANCE TESTING UNIT #2 Test # 3-4

Cycle Isolation Check off Sheets

Before Test-Isolation: Start _____ End _____ Name _____

After Test-Isolation: Start _____ End _____ Date: _____

SYSTEM: SOOT BLOWING P+ID# 2SGI-M2070

Valve #	Description	Location	Class	Position Normal	Position Test	Position - Before Test As Found	As left	Initials	Position - After Test As Found	As Left	Initials	Comments
ACV-26	SECONDARY SUPERHTR. PLATEN OUTLET HDR.	18th WEST SIDE BOILER	N		C	C	C	SJ	X			DISABLE SOOT
ACV-25	"	18th EAST SIDE BOILER	N		C				X			BLOWING SYST.
ACV-3	SECONDARY SUPERHTR. OUTLET HDR.	18th WEST SIDE BOILER	N		C				X			AT CONTROL
ACV-4	"	"	N		C				X			PANEL
MBV-35	HP EXTRACTION DRAIN HDR.	4th S.E. Side BOILER	N		C				X			
MBV-178	"	1st floor N.E SIDE OF BOILER (M201)	N		C				X			

IP14_005785

ASME TURBINE PERFORMANCE TESTING UNIT #2 Test # 3-4

Cycle Isolation Check off Sheets

Before Test-Isolation: Start _____ End _____ Name _____

After Test-Isolation: Start _____ End _____ Date: _____

SYSTEM: REHEAT SYSTEM P+ID# 2SGJ-M2071

Valve #	Description	Location	Class	Position Normal	Position Test	Position - Before Test As Found	As left	Initials	Position - After Test As Found	As Left	Initials	Comments
BV-56	Steam TRAP 1 INLET ISOL. VLV.	GF 204-B	CR II	O	C							
BV-57	STEAM TRAP 1 OUTLET ISOL VLV.	"	CR II	O	C							
MBV-16	HOT Reheat DRAIN to DESPRHTR 3	GF - 204-C	N	C	C	C	C	3z				
MBV-14	"	"	N	C	C	C	C					
MBV-18	COLD REHEAT DRN TO DESPRHTR 2	GF - 204-B	N	C	C	C	C					
ACV-58	ATTEMPERATOR SPRAY WATER From BFPT's	7th FLOOR EAST ELEV.	N	C	C	C	C					
ABV-66	"	"	N	C	C	C	C					
ACV-59	"	"	N	C	C	C	C					
ABV-67	"	"	N	C	C	C	C					

IP14_005786

ASME TURBINE PERFORMANCE TESTING UNIT #2 Test # 3-4

Cycle Isolation Check off Sheets

Before Test-Isolation: Start _____ End _____ Name _____

After Test-Isolation: Start _____ End _____ Date: _____

SYSTEM: EXTRACTION TRAPS & DRAINS P&ID # 2TEC-M2075

CRITICAL VALVES (1/4)

Valve #	Description	Location	Class	Position Normal	Position Test	Position - Before Test As Found	As left	Initials	Position - After Test As Found	As Left	Initials	Comments
BV-27	LP HTR 2	BSMT. N.W. CORNER OF CONDENSER ON BOTTOM ROW	CR III	O	C							
BV-31	LP HTR 2		CR III	O	C							
BV-35	LP HTR 3 (LP TURB SECTION 1B)		CR III	O	C							
BV-39	LP HTR 3		CR III	O	C							
BV-43	LP HTR 4		CR III	O	C							
BV-47	LP HTR 4		CR III	O	C							
BV-3	LP HTR 2	BSMT N.E CORNER OF CONDENSER	CR III	O	C							
BV-7	LP HTR 2		CR III	O	C							
BV-11	LP HTR 3 (LP TURB SECTION 1A)		CR III	O	C							
BV-15	LP HTR 3		CR III	O	C							
BV-19	LP HTR 4		CR III	O	C							
BV-23	LP HTR 4		CR III	O	C							
BV-51	LP HTR 2	BSMT. N.W. CORNER OF CONDENSER TOP ROW	CR III	O	C							
BV-55	LP HTR 2 (LP TURB. SECTION 1C)		CR III	O	C							
BV-59	LP HTR 3		CR III	O	C							
BV-63	LP HTR 3		CR III	O	C							
BV-67	LP HTR 4		CR III	O	C							
BV-71	LP HTR 4		CR III	O	C							
BV-65	LT. HTR 4	BSMT. N.W CORNER CONDENSER CEILING	CR III	O	C							
BV-73	HP HTR's 8A & 8B	GF - Foot of LUBE OIL CENT	CR I	O	C							
BV-79	HP HTR 8A	"	CR I	O	C							
BV-75	HP HTR's 8A & 8B	"	CR I	O	C							
BV-81	HP HTR 8A	"	CR I	O	C							
BV-105	HP HTR 6B	"	CR I	O	C							

IP14_005787

HOME TURBINE PERFORMANCE TESTING UNIT #2 Test # 3-4

Cycle Isolation Check off Sheets

Name _____

Before Test-Isolation: Start _____ End _____

After Test-Isolation: Start _____ End _____ Date: _____

SYSTEM: EXTRACTION TRAPS & DRAINS P&ID # 2TEC-M2075

CRITICAL VALVES (Cont.) 2/4

Valve #	Description	Location	Class	Position Normal	Position Test	Position - Before Test As Found	As left	Initials	Position - After Test As Found	As Left	Initials	Comments

IP14_005788

TURBINE PERFORMANCE TESTING UNIT #2 Test # 3-4

Cycle 3 Isolation Check off Sheets

Name _____

Before Test-Isolation: Start _____ End _____

After Test-Isolation: Start _____ End _____

Date: _____

SYSTEM: EXTRACTION TRAPS & DRAINS P&ID # 2TEC-M2075 pg 3 of 4

NON-CRITICAL VALVES

Valve #	Description	Location	Class	Position Normal	Position Test	Position - Before Test As Found	As left	Initials	Position - After Test As Found	As Left	Initials	Comments
TEC-ACV-74	HP HTRS 8A & 8B EXTRACTION DRAIN	GF BY 40 CONT.	N	C	C	C	C	[illegible]				
ACV-80	HP HTR 8A EXTRACTION DRAIN	"	N	C	C							
ACV-86	HP HTR 8B EXTRACTION DRN.	"	N	C	C							
ACV-92	HP HTRS 6A & 6B EXTRCT. DRN.	"	N	C	C							
ACV-98	HP HTR 6A EXTRCT. DRN.	"	N	C	C							
ACV-104	HP HTR 6B EXTRCT. DRN.	"	N	C	C							
ACV-140	BFPT 1B EXTRCT DRN.	"	N	C	C							
ACV-134	BFPT 1A EXTRCT. DRN.	"	N	C	C							
ACV-128	DEA HTR 5 EXTRCT. DRN.	"	N	C	C							
ACV-122	BFPT 1A & 1B EXTRCT DRN.	"	N	C	C							
ACV-116	DEA HTR 5 EXTRCT. DRN.	"	N	C	C							
ACV-110	"	"	N	C	C							
ACV-26	LP HTR 2 EXTRCT DRN	GF NWEST OF LP COND	N	C	C							
ACV-30	"	"	N	C	C							
ACV-34	LP HTR 3 EXTRCT DRN	"	N	C	C							
ACV-38	"	"	N	C	C							
ACV-42	LP HTR 4 EXTRCT DRN	"	N	C	C							
ACV-46	"	"	N	C	C							
ACV-50	LP HTR 2 EXTRACTION DRN	"	N	C	C							
ACV-54	"	"	N	C	C							
ACV-58	LP HTR 3 EXTRACTION DRN	"	N	C	C							
ACV-62	"	"	N	C	C							
ACV-66	LP HTR 4 EXTRACTION DRN	"	N	C	C							
ACV-70	"	"	N	C	C							

TMI TURBINE PERFORMANCE TESTING UNIT #2 Test # 3-4

Cycle Isolation Check off Sheets

Name _____

Before Test-Isolation: Start _____ End _____

After Test-Isolation: Start _____ End _____ Date: _____

SYSTEM: EXTRACTION TRAPS & DRAINS P&ID # 2TEC-M2075 pg. 4 of 4

Valve #	Description	Location	Class	Position Normal	Position Test	Position - Before Test As Found	As left	Initials	Position - After Test As Found	As Left	Initials	Comments
ACV-2	LP HTR 2 EXTRACTION DRN	WEST OF GF 40 CENT.	N	C	C	C	C	SY				
ACV-6	"	"	N	C	C							
ACV-10	LP HTR 3 EXTRACTION DRN	"	N	C	C							
ACV-14	"	"	N	C	C							
ACV-18	LP HTR 4 EXTRACTION DRN	"	N	C	C							
ACV-22	"	"	N	C	C							
ACV-146	BFPT 1C to LP COND	2ND	N	C	C							
ACV-152	BFPT 1A to HP COND	"	N	C	C							
BV-163	MISC. DRAINS RECV. TANK DRN	GF MISC. DRAINS RECVR.	N	C	C	C	C	MH				

IP14_005790

ASME TURBINE PERFORMANCE TESTING UNIT #2 Test # 3-4

Cycle Isolation Check off Sheets

Before Test-Isolation: Start _____ End _____

After Test-Isolation: Start _____ End _____

Name _____

Date: _____

SYSTEM: HIGH PRESSURE HEATER DRAINS P&ID # 2TED-M2076

Valve #	Description	Location	Class	Position Normal	Position Test	Position - Before Test As Found	Position - Before Test As Left	Position - Before Test Initials	Position - After Test As Found	Position - After Test As Left	Position - After Test Initials	Comments
BV-20	HTR 8A ALTN (HI LEVEL) DUMP	Ground Floor East Side Cond 1A	CRI	O	C							
BV-19	"	"	CRI	O	C							
BV-22	HTR 8B ALTN (HI LEVEL) DUMP	"	CRI	O	C							
BV-21	"	"	CRI	O	C							
BV-28	HTR 7A ALTN (HI LEVEL) DUMP	"	CRI	O	C							
BV-27	"	"	CRI	O	C							
BV-30	HTR 7B ALTN (HI LEVEL) DUMP	"	CRI	O	C							
BV-29	"	"	CRI	O	C							
BV-36	HTR 6A ALTN (HI LEVEL) DUMP	"	CRI	O	C							
BV-35	"	"	CRI	O	C							
BV-38	HTR 6B ALTN (HI LEVEL) DUMP	"	CRI	O	C							
BV-37	"	"	CRI	O	C							
ACV-13	HP Htr Drains Pump 1A Recirc	3rd Floor Near HP Htr 6A	N	C	C	C	C	[illegible]				
ACV-14	" 1B	" 6B	N	C	C	C	C	[illegible]				

IP14_005791

ASME TURBINE PERFORMANCE TESTING UNIT #2 Test # 3-4

Cycle Isolation Check off Sheets

Before Test-Isolation: Start _____ End _____

After Test-Isolation: Start _____ End _____

Name _____

Date: _____

SYSTEM: LOW PRESSURE HEATER DRAINS P&ID# 2TEE-M2077 / 2FWF-M2040

Valve #	Description	Location	Class	Position Normal	Position Test	Position - Before Test As Found	As left	Initials	Position - After Test As Found	As Left	Initials	Comments
BV-17	Htr 4 ALTN (HI LEVEL) DUMP	Mezz floor West side Cond IC	CRI	O	C							
BV-9	"	"	CRI	O	C							
BV-19	Htr 3 ALTN (HI LEVEL) DUMP	Ground floor West side Cond IC	CRI	O	C							
BV-11	"	"	CRI	O	C							
BV-21	Htr 2 ALTN (HI LEVEL) DUMP	"	CRI	O	C							at Low Load must leave alternate drain open & close BV-12, so the normal drain
BV-13	"	"	CRI	O	C							
BV-22	FLASH TANK ALTN (HI LEVEL) DUMP	Ground floor SW Corner Cond IC	CRI	O	C							
BV-15	"	"	CRI	O	C							
BV-129	Cycle MU to LP DRNS	Ground floor @ DRN COOLER	N	C	C	C	C	DS				
FWF (M2040) BV-66	Cycle MU to LP DRNS	Ground floor Overhead So. of DRNCLR	N	O	C	C	C	DS				

IP14_005792

ASME TURBINE PERFORMANCE TESTING UNIT #2 Test #3-4.

Cycle Isolation Check off Sheets

Before Test-Isolation: Start _____ End _____ Name _____

After Test-Isolation: Start _____ End _____ Date: _____

SYSTEM: HEATER VENTS & MISCELLANEOUS DRAINS P&ID# 2TEF-M2078A page 1 of 2

Valve #	Description	Location	Class	Position Normal	Position Test	Position - Before Test As Found	As left	Initials	Position - After Test As Found	As Left	Initials	Comments
BV-3	DEA HTR 5 CONTINUOUS VENT to ATM	14th	CR II	O	C							
BV-7	"	"	CR II	O	C							
BV-11	"	"	CR II	O	C							
BV-75	CONTINUOUS VENT HP HTR 8A TO DEA 5	6th	CR II	O	C							
BV-76	HP HTR 7A CONTINUOUS VENT TO DEA HTR 5	5th	CR II	O	C							
BV-77	HP HTR 6A CONTINUOUS VENT TO DEA HTR 5	3rd	CR II	O	C							
BV-80	"	"	CR II	O	C							
BV-79	HP HTR 7A "	5th	CR II	O	C							
BV-78	HP HTR 8A	6th	CR II	O	C							
BV-85	HP HTR 6A S/U VENT TO DEA HTR 5	3rd	N	C	C	C	C	KU				
BV-86	"	"	N	C	C	C	C					
BV-91	HP HTR 6B S/U VENT TO DEA HTR 5	"	N	C	C	C	C					
BV-92	"	"	N	C	C	C	C					
BV-83	HP HTR 7A S/U VENT TO DEA HTR 5	5th	N	C	C	C	C					
BV-84	"	"	N	C	C	C	C					
BV-89	HP HTR 7B S/U VENT TO DEA HTR 5	"	N	C	C	C	C					
BV-90	"	"	N	C	C	C	C					
BV-81	HP HTR 8A S/U VENT TO DEA HTR 5	6th	N	C	C	C	C					
BV-82	"	"	N	C	C	C	C					
BV-87	HP HTR 8B S/U VENT TO DEA HTR 5	"	N	C	C	C	C					
BV-88	"	"	N	C	C	C	C					
BV-2	DEA HTR 5 Bypass CONTINUOUS VENT TO ATMOS	14th	N	C	C	C	C					
BV-4	"	"	N	C	C	C	C					
BV-6	"	"	N	C	C	C	C					

IP14_005793

ASME TURBINE PERFORMANCE TESTING UNIT #2 Test # 3-4

Cycle Isolation Check off Sheets

Before Test-Isolation: Start _____ End _____ Name _____

After Test-Isolation: Start _____ End _____ Date: _____

SYSTEM: HEATER VENTS & MISCELLANEOUS DRAINS P&ID# 2TEF-M2078A page 2 of 2

Valve #	Description	Location	Class	Position Normal	Position Test	Position - Before Test As Found	As left	Initials	Position - After Test As Found	As Left	Initials	Comments
BV-8	DEA HTR 5 Bypass CONTINUOUS VNT TO ATMS	14th	N	C	C	C	C	Cg				
BV-10	"	"	N	C	C	C	C					
BV-12	"	"	N	C	C	C	C					
BV-14	"	"	N	C	C	C	C					

IP14_005794

ASME TURBINE PERFORMANCE TESTING UNIT #2 Test # 3-4

Cycle Isolation Check off Sheets

Before Test-Isolation: Start _____ End _____

After Test-Isolation: Start _____ End _____

Name _____

Date: _____

SYSTEM: HEATER VENTS & MISCELLANEOUS DRAINS P&ID # 2 TEF-M2078B

Valve #	Description	Location	Class	Position Normal	Position Test	Position - Before Test As Found	As left	Initials	Position - After Test As Found	As Left	Initials	Comments
BV-162	LP HTR 4 CONT. VENT	5th	CRII	O	C							
BV-163	LP HTR 3 CONT VENT	3RO	CRII	O	C							
BV-170	LP HTR 3 S/u VENT TO COND	"	N	C	C	C	C	MH				
BV-171	LP HTR 2 S/u VENT TO COND	MezZ	N	C	C	C	C					
BV-174	LP HTR 1A S/u VENT TO COND	"	N	C	C	C	C					
BV-173	LP HTR 1B S/u VENT	"	N	C	C	C	C					
BV-172	LP HTR 1C S/u VENT	"	N	C	C	C	C					
BV-168	DRAIN COOLER 1 VENT TO COND	GF	N	C	C	C	C					
BV-169	LP HTR 4 S/u VENT	5th	N	C	C	C	C					

IP14_005795

ASME TURBINE PERFORMANCE TESTING UNIT #2 Test # 3-4

Cycle Isolation Check off Sheets

Before Test-Isolation: Start _____ End _____ Name _____

After Test-Isolation: Start _____ End _____ Date: _____

SYSTEM: TURBINE P+ID # 2TGA-M2079

Valve #	Description	Location	Class	Position Normal	Position Test	Position - Before Test As Found	As left	Initials	Position - After Test As Found	As Left	Initials	Comments
2TGA-BV-5	SPRAY SUPPLY VLV FROM CONDENSING	3rd BY GE TRAILER	CRII	O	C							

IP14_005796

TURBINE PERFORMANCE TESTING UNIT "2 Test # 3-4

Cycle Isolation Check off Sheets

Name _____

Before Test-Isolation: Start _____ End _____

After Test-Isolation: Start _____ End _____ Date: _____

SYSTEM: TURBINE SEALS & DRAINS P&ID# 2TGC-M2080A

Valve #	Description	Location	Class	Position Normal	Position Test	Position - Before Test As Found	As left	Initials	Position - After Test As Found	As Left	Initials	Comments
BV-58	aux. STEAM TO COLD REHEAT	MEZZ. top of VALVE DECK	CRII	O	C							
BV-10	MAIN STEAM TO TURBINE Seals & DRNS	MEZZ. MN STEAM	CRI	O	C							
MBV-16	aux. STEAM TO COLD REHEAT	MEZZ top of VALVE DECK	N	C	C	C	C	[illegible]				
ACV-5	aux. STEAM TO STEAM SEAL HDR	"	N	C	C	C	C					
MBV-6	"	"	N	C	C	C	C					
ACV-17	HP TURBINE LEAKOFF TO STEAM SEAL HDR	"	N	O	C	C	C					
ACV-1	MAIN STEAM TO STEAM SEAL HDR	"	N	O	C	C	C					
MBV-2	"	"	N	O	C	C	C					
MBV-3	"	"	N	O	C	C	C					
BV-25	COND TO STEAM SEAL DSPRHTR 1	MEZZ - STEAM PACKING EXHAUSTER	N	C	C	C	C	MH				

IP14_005797

ASME TURBINE PERFORMANCE TESTING UNIT #2 Test # 3-4

Cycle Isolation Check off Sheets

Before Test-Isolation: Start _____ End _____

After Test-Isolation: Start _____ End _____

Name _____

Date: _____

SYSTEM: TURBINE SEALS & DRAINS P&ID # 2TGC-M2080B

Valve #	Description	Location	Class	Position Normal	Position Test	Position - Before Test As Found	As left	Initials	Position - After Test As Found	As Left	Initials	Comments
MBV-31	COMBINED REHEAT VALVE 1A3 AFTER SEAT DRN	MEZZ	N	O	C	C	C	SY				
MBV-32	COMB. REHEAT VLV 1B3 AFTER SEAT DRN	"	N	O	C							
MBV-33	MN. STM. STOP VLV. 1A1 Before SEAT DRN	"	N	O	C							
MBV-37	TURB. CNTRL VLV 1A2 Before Seat DRN	"	N	O	C							
MBV-34	MN. STM STOP VLV 1B1 BSD	"	N	O	C							
MBV-38	TURB CNTRL VLV 1B2 BSD	"	N	O	C							
MBV-35	MN. STEAM STOP VLV. 1C1 BSD	"	N	O	C							
MBV-39	TURB CNTRL VLV. 1C2 BSD	"	N	O	C							
MBV-36	MN. STEAM STOP VLV. 1D1 BSD	"	N	O	C							
MBV-40	TURB. CONTROL VLV. 1D2 BSD	"	N	O	C							
MBV-49	DRAIN HDR CONTROL VLV	GF	N	O	C							

IP14_005798