

VIRGINIA ELECTRIC AND POWER COMPANY

SURRY POWER STATION

MONTHLY OPERATING REPORT

REPORT NO. 84-12

APPROVED BY:

R. J. Sanders
STATION MANAGER

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PDR ADOCK 05000280
R PDR

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OPERATING DATA REPORT

DOCKET NO. 50-280
 DATE 1-08-85
 COMPLETED BY V. Jones
 TELEPHONE (804)357-3184

OPERATING STATUS

1. Unit Name: <u>Surry Unit 1</u> 2. Reporting Period: <u>12-01-84 to 12-31-84</u> 3. Licensed Thermal Power (Mwt): <u>2441</u> 4. Nameplate Rating (Gross MWe): <u>847.5</u> 5. Design Electrical Rating (Net MWe): <u>788</u> 6. Maximum Dependable Capacity (Gross MWe): <u>811</u> 7. Maximum Dependable Capacity (Net MWe): <u>775</u> 8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons: <u>N/A</u>	Notes	
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9. Power Level To Which Restricted, If Any (Net MWe): _____
 10. Reasons For Restrictions, If Any: _____

	This Month	Yr.-to-Date	Cumulative
11. Hours In Reporting Period	<u>744.0</u>	<u>8784.0</u>	<u>105432.0</u>
12. Number of Hours Reactor Was Critical	<u>120.4</u>	<u>5283.7</u>	<u>64376.6</u>
13. Reactor Reserve Shutdown Hours	<u>0</u>	<u>9.3</u>	<u>3774.5</u>
14. Hours Generator On-Line	<u>41.6</u>	<u>5141.9</u>	<u>63009.1</u>
15. Unit Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>3736.2</u>
16. Gross Thermal Energy Generated (MWH)	<u>46182.9</u>	<u>11087872.8</u>	<u>146014177.1</u>
17. Gross Electrical Energy Generated (MWH)	<u>8615.0</u>	<u>3532120.0</u>	<u>46851963.0</u>
18. Net Electrical Energy Generated (MWH)	<u>7098.0</u>	<u>3334108.0</u>	<u>44411844.0</u>
19. Unit Service Factor	<u>5.6%</u>	<u>58.5%</u>	<u>59.8%</u>
20. Unit Available Factor	<u>5.6%</u>	<u>58.5%</u>	<u>63.3%</u>
21. Unit Capacity Factor (Using MDC Net)	<u>1.2%</u>	<u>51.9%</u>	<u>57.3%</u>
22. Unit Capacity Factor (Using DER Net)	<u>1.2%</u>	<u>51.3%</u>	<u>56.4%</u>
23. Unit Forced Rate	<u>18.9%</u>	<u>4.1%</u>	<u>20.4%</u>
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): Maintenance/ Snubber 06-14-85 10 Days			

25. If Shut Down At End Of Report Period Estimated Date of Startup: _____
 26. Units In Test Status (Prior to Commercial Operation): Forecast Achieved

INITIAL CRITICALITY	_____	_____
INITIAL ELECTRICITY	_____	_____
COMMERCIAL OPERATION	_____	_____

OPERATING DATA REPORT

DOCKET NO. 50-281
 DATE 1-08-85
 COMPLETED BY V. Jones
 TELEPHONE (804)
357-3184

OPERATING STATUS

1. Unit Name: Surry Unit 2 Notes _____
 2. Reporting Period: 12-01-84 to 12-31-84
 3. Licensed Thermal Power (Mwt): 2441
 4. Nameplate Rating (Gross MWe): 847.5
 5. Design Electrical Rating (Net MWe): 788
 6. Maximum Dependable Capacity (Gross MWe): 811
 7. Maximum Dependable Capacity (Net MWe): 775
 8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons: N/A

9. Power Level To Which Restricted, If Any (Net MWe): _____
 10. Reasons For Restrictions, If Any: _____

	This Month	Yr.-to-Date	Cummulative
11. Hours In Reporting Period	<u>744.0</u>	<u>8784.0</u>	<u>102312.0</u>
12. Number of Hours Reactor Was Critical	<u>718.6</u>	<u>7435.3</u>	<u>66006.2</u>
13. Reactor Reserve Shutdown Hours	<u>.0</u>	<u>23.8</u>	<u>328.1</u>
14. Hours Generator On-Line	<u>689.5</u>	<u>7331.6</u>	<u>64907.6</u>
15. Unit Reserve Shutdown Hours	<u>.0</u>	<u>.0</u>	<u>.0</u>
16. Gross Thermal Energy Generated (MWH)	<u>1505903.2</u>	<u>17282532.4</u>	<u>151998405.3</u>
17. Gross Electrical Energy Generated (MWH)	<u>475890.0</u>	<u>5495615.0</u>	<u>49290474.0</u>
18. Net Electrical Energy Generated (MWH)	<u>451297.0</u>	<u>5209382.0</u>	<u>46716442.0</u>
19. Unit Service Factor	<u>92.7%</u>	<u>83.5%</u>	<u>63.4%</u>
20. Unit Available Factor	<u>92.7%</u>	<u>83.5%</u>	<u>63.4%</u>
21. Unit Capacity Factor (Using MDC Net)	<u>78.3%</u>	<u>76.5%</u>	<u>58.9%</u>
22. Unit Capacity Factor (Using DER Net)	<u>77.0%</u>	<u>75.3%</u>	<u>57.95%</u>
23. Unit Forced Rate	<u>7.3%</u>	<u>11.8%</u>	<u>14.5%</u>
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):			
<u>Refueling 03-22-85 78 days</u>			
<u>Snubber 01-18-85 10 days</u>			

25. If Shut Down At End Of Report Period Estimated Date of Startup: _____
 26. Units In Test Status (Prior to Commercial Operation): Forecast Achieved

INITIAL CRITICALITY _____
 INITIAL ELECTRICITY _____
 COMMERCIAL OPERATION _____

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH December, 1984

DOCKET NO. 50-280
 UNIT NAME Surry I
 DATE 01-07-85
 COMPLETED BY V. H. Jones
 TELEPHONE 804-357-3184

No.	Date	Type ¹	Duration (Hours)	Reason ²	Method of Shutting Down Reactor ³	Licensee Event Report #	System Code ⁴	Component Code ⁵	Cause & Corrective Action to Prevent Recurrence
84-09		S	692.7	A	3				Commenced refueling outage 09-26-84.
84-10	12-28-84	S	0.0	B	1				Rx shutdown for refueling logic testing.
84-11	12-31-84	F	9.7	H	3	84-026			Rx trip while performing logic testing caused by turbine trip signal, actual cause has not been determined.

¹ F: Forced
S: Scheduled

² Reason:
A-Equipment Failure (Explain)
B-Maintenance of Test
C-Refueling
D-Regulatory Restriction
E-Operator Training & License Examination
F-Administrative
G-Operational Error (Explain)
H-Other (Explain)

³ Method:
1-Manual
2-Manual Scram.
3-Automatic Scram.
4-Other (Explain)

⁴ Exhibit G - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-0161)

⁵ Exhibit I - Same Source

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UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-281
UNIT NAME Surry II
DATE 01-07-84
COMPLETED BY V. H. Jones
TELEPHONE 804-357-3184

REPORT MONTH December, 1984

No.	Date	Type ¹	Duration (Hours)	Reason ²	Method of Shutting Down Reactor ³	Licensee Event Report #	System Code ⁴	Component Code ⁵	Cause & Corrective Action to Prevent Recurrence
84-27	12-11-84	F	0.0	H	3				Rx trip caused by a turb. trip which was caused by low condenser vacuum. Had a rapid decrease in condenser vacuum while rolling turbine. In the future will insure a better vacuum when rolling turbine or be on the hoppers if vacuum cannot be improved until turbine is on the line.

¹ F: Forced
S: Scheduled

² Reason:
 A-Equipment Failure (Explain)
 B-Maintenance of Test
 C-Refueling
 D-Regulatory Restriction
 E-Operator Training & License Examination
 F-Administrative
 G-Operational Error (Explain)
 H-Other (Explain)

³ Method:
 1-Manual
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UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH December, 1984

DOCKET NO. 50-281
 UNIT NAME Surry II
 DATE 01-07-85
 COMPLETED BY V. H. Jones
 TELEPHONE 804-357-3184

No.	Date	Type ¹	Duration (Hours)	Reason ²	Method of Shutting Down Reactor ³	Licensee Event Report #	System Code ⁴	Component Code ⁵	Cause & Corrective Action to Prevent Recurrence
84-26	12-11-84	F	25.6	A	3	84-018 84-019			<p>Reactor trip caused by a pressurizer high level trip signal, with channel II level in trip. Received a spike on vital bus I, causing a 2/3 signal to trip reactor. The spike was caused by Inst. Tech. inadvertently grounding TIC-162 while working it hot.</p> <p>Memo has been issued to prevent working on hot circuits without supervisors approval.</p>

¹ F: Forced
S: Scheduled

² Reason:
 A-Equipment Failure (Explain)
 B-Maintenance of Test
 C-Refueling
 D-Regulatory Restriction
 E-Operator Training & License Examination
 F-Administrative
 G-Operational Error (Explain)
 H-Other (Explain)

³ Method:
 1-Manual
 2-Manual Scram.
 3-Automatic Scram.
 4-Other (Explain)

⁴ Exhibit G - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-0161)

⁵ Exhibit I - Same Source

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-281
 UNIT NAME Surry II
 DATE 01-07-85
 COMPLETED BY V. H. Jones
 TELEPHONE 804-357-3184

REPORT MONTH December, 1984

No.	Date	Type ¹	Duration (Hours)	Reason ²	Method of Shutting Down Reactor ³	Licensee Event Report #	System Code ⁴	Component Code ⁵	Cause & Corrective Action to Prevent Recurrence
84-28	12-16-84	F	15.2	A	3				Rx trip caused by S/G low level due to "B" main feed pump tripping. Unable to determine cause of pump tripping.
84-29	12-30-84	S	8.6	A	1				Took generator off the line to repair 2-SD-42.
84-30	12-31-84	F	5.1	G	3	84-020			Reactor trip caused by "B" S/G mismatch and low level during startup. No corrective action necessary.

¹
 F: Forced
 S: Scheduled

²
 Reason:
 A-Equipment Failure (Explain)
 B-Maintenance of Test
 C-Refueling
 D-Regulatory Restriction
 E-Operator Training & License Examination
 F-Administrative
 G-Operational Error (Explain)
 H-Other (Explain)

³
 Method:
 1-Manual
 2-Manual Scram.
 3-Automatic Scram.
 4-Other (Explain)

⁴
 Exhibit G - Instructions
 for Preparation of Data
 Entry Sheets for Licensee
 Event Report (LER) File (NUREG-
 0161)

⁵
 Exhibit I - Same Source

LOAD REDUCTIONS DUE TO ENVIRONMENTAL RESTRICTIONS

UNIT NO. 1

MONTH: December, 1984

<u>DATE</u>	<u>TIME</u>	<u>HOURS</u>	<u>LOAD, MW</u>	<u>REDUCTIONS, MW</u>	<u>MWH</u>	<u>REASON</u>
NONE DURING THIS REPORTING PERIOD.						
MONTHLY TOTAL						

LOAD REDUCTIONS DUE TO ENVIRONMENTAL RESTRICTIONSUNIT NO. IIMONTH: December, 1984

<u>DATE</u>	<u>TIME</u>	<u>HOURS</u>	<u>LOAD, MW</u>	<u>REDUCTIONS, MW</u>	<u>MWH</u>	<u>REASON</u>
NONE DURING THIS REPORTING PERIOD.						
MONTHLY TOTAL						

PROGRAM NJS12681 01/03/85 13.31.32

SURRY POWER STATION

REPORTING MONTH - DECEMBER 1984

BUCKET NO. 50-281
 DATE DEC.1.1984
 COMPLETED BY V. JONES

BUCKET NO. 51-283

UNIT I M O
 AVERAGE DAILY POWER LEVEL
 --MWE-NET--

UNIT D V F
 AVERAGE DAILY POWER LEVEL
 --MWE-NET--

DAY	UNIT I M O	UNIT D V F
1	760.4	3.0
2	761.5	0.0
3	759.3	0.0
4	757.5	0.0
5	757.3	0.0
6	752.4	0.0
7	751.6	0.0
8	750.9	0.0
9	753.3	0.0
10	752.1	0.0
11	347.2	0.0
12	209.2	0.0
13	720.6	0.0
14	743.9	0.0
15	746.0	0.0
16	405.4	0.0
17	209.8	0.0
18	686.2	0.0
19	621.5	0.0
20	636.5	0.0
21	634.0	0.0
22	632.0	0.0
23	629.1	0.0
24	617.3	0.0
25	621.9	0.0
26	620.3	0.0
27	621.7	0.0
28	613.6	0.0
29	543.9	12.8
30	106.3	137.8
31	231.5	145.1

SUMMARY OF OPERATING EXPERIENCEMONTH/YEAR December, 1984

Listed below in chronological sequence by unit is a summary of operating experiences for this month which required load reductions or resulted in significant non-load related incidents.

UNIT ONE

12-01-84	0000	This reporting period begins with the unit at CSD on RHR.
12-13-84	1850	Commenced RCS fill and vent.
12-15-84	0245	Completed RCS fill and vent.
	2130	Commenced draining RCS to realign 1-RC-P-1B.
12-16-84	1226	Commenced RCS fill and vent, determined that alignment for 1-RC-P-1B was not necessary.
12-17-84	0608	Completed RCS fill and vent.
12-18-84	0755	Declared an "Unusual Event" due to fire in #3 EDG room.
	0840	Secured from "Unusual Event".
	2127	Established bubble in the pressurizer.
12-20-84	1235	Completed cold rod drops.
12-22-84	1315	RCS > 200°F.
	1955	RCS > 350°F/450 psig.
12-23-84	1745	Set Main Steam safeties.
12-24-84	0310	Completed hot rod drops.
	2031	RCS at HSD.
12-26-84	0150	Rx critical.
	0905	Commenced low power physics testing.
12-28-84	0700	Completed physics testing.
	1219	Rx shutdown for logics testing.
12-29-84	0525	Rx critical.
	2041	Generator on the line, commenced 3%/hr. ramp.
	2144	Holding power at 19% (150 MW's) for chemistry.
12-30-84	1900	Commenced power increase at 3%/hr.
	2325	Holding power at 36% (290 MW's) for flux map.
12-31-84	1324	Rx trip while performing logic testing.
	1801	Rx critical.
	2308	Generator on the line, increasing power at 3%/hr.
	2400	This reporting period ends with the unit at 23% power (180 MW's) holding for chemistry.

SUMMARY OF OPERATING EXPERIENCEMONTH/YEAR December, 1984

Listed below in chronological sequence by unit is a summary of operating experiences for this month which required load reductions or resulted in significant non-load related incidents.

UNIT TWO

12-01-84	0000	This reporting period begins with the unit at 100% power (800 MW's).
12-11-84	1108	Rx trip caused by pressurizer high level signal.
	1943	Rx critical.
	2324	Rx trip caused by low condenser vacuum turbine trip.
12-12-84	0446	Rx critical.
	1243	Generator on the line. Commenced power increase at 150 MW/hr.
	1325	Holding at 29% power (230 MW's).
	1345	Commenced power increase at 150 MW/hr.
	1440	Holding at 55% power (440 MW's) while raising condensate temperature.
	1729	Commenced power increase at 50 MW/hr., monitoring 6th point heater levels.
	2230	Holding at 81% power (650 MW's). Investigating "B" S/G feed flow - steam flow mismatch.
12-13-84	0046	Commenced power increase at 50 MW/hr.
	0705	Unit at 100% (800 MW's).
12-16-84	1000	Commenced plant shutdown to repair steam leak on HP turbine.
	1520	Rx trip at 11% power (90 MW) caused by loss of "B" main feed pump.
12-17-84	0012	Rx critical.
	0630	Generator on the line, increasing power at 150 MW/hr.
	0653	Holding power at 28% (220 MW) for chemistry.
	1449	Commenced power increase at 150 MW/hr.
	2258	Holding power at 68% (540 MW) for calometric.
	2335	Commenced power increase at 50 MW/hr.
12-18-84	0215	Holding power at 94% power (755 MW's) due to low feed pump suction pressure.
	1635	Commenced power decrease to allow securing the third condensate pump at 150 MW/hr.
	2000	Stopped ramp at 85% power (680 MW's), until valve disc. in 2-SD-42 can be repaired.
12-19-84	0100	Commenced power decrease for load follow at 150 MW/hr.
	0123	Holding at 73% power (580 MW's)
	0430	Commenced power increase at 150 MW/hr.
	0517	Holding at 85% power (680 MW's).
12-23-84	2015	Reduced load to 83% power (660 MW's) to raise feed pump suction pressure.

UNIT TWO

12-29-84	0202	Commenced power decrease for load follow at 150 MW/hr.
	0232	Holding at 69% power (550 MW's).
	0528	Commenced power increase at 150 MW's/hr.
	0630	Holding at 63% power (600 MW's).
	2300	Commenced power decrease for load follow and plant shutdown to repair 2-SD-42 at 150 MW/hr.
12-30-84	0433	Holding power at 16% (130 MW's), problems on unit #1.
	1627	Commenced power decrease to take unit off the line.
	1701	Generator off the line.
12-31-84	0137	Generator on the line.
	0140	Rx trip caused by "B" S/G mismatch and low level.
	0414	Rx critical.
	0649	Unit on the line.
	0725	Holding power at 26% (210 MW's) for chemistry.
	1018	Commenced power increase at 150 MW/hr.
	1437	Holding power at 53% (420 MW's) due to 5A heater alarms.
	2400	This reporting period ends with the unit at 53% power (420 MW's) while starting up unit #1.

AMENDMENTS TO FACILITY LICENSE OR TECHNICAL SPECIFICATIONS

MONTH/YEAR December, 1984

NONE DURING THIS REPORTING PERIOD.

FACILITY CHANGES REQUIRING

NRC APPROVAL

MONTH/YEAR December, 1984

None during this reporting period.

FACILITY CHANGES THAT
DID NOT REQUIRE NRC APPROVAL

<u>DC 82-35 Motor Operated Valve Rerate</u>	<u>UNIT</u>
<p>This design change rerated or replaced emergency motor-operated valve motors which were not capable of operating at 80 percent rated voltage. These MOV's were provided with new qualified motors, new motor actuator sets or torque switch limiter plates.</p> <p><u>Summary of Safety Analysis</u></p> <p>The operation of safety related equipment is not affected by this modification except to enhance the operation of equipment at reduced voltages.</p>	1
<p><u>DC 82-37 MCC Control Transformer Replacement</u></p> <p>The internal characteristics of the Emergency MCC Control Transformers were a limiting condition to the voltage available for contractor coil "pick-up" required to energize safety-related MOV's. The characteristic of the replaced low-VA rated transformers could have under certain low voltage scenarios, inhibited contactor coil pick-up of safety-related MOV's. This design change replaced certain units with higher VA transformers exhibiting more favorable characteristics. It will enhance the operation of safety related circuits at reduced voltage levels.</p> <p><u>Summary of Safety Analysis</u></p> <p>The operation of safety-related equipment is not affected by this modification except to enhance the operation of equipment at reduced voltages.</p>	1
<p><u>DC 82-41 RSST A & C 5KV Cable Modification</u></p> <p>This design change eliminated the possible overloaded conditions of the RSST feeders and transfer buses while maintaining existing load shedding to ensure adequate voltages under emergency conditions. It replaced 2000 MCM aluminum cable with overhead bus and 2000 MCM copper cable, and added cooling to the transfer bus switchgear.</p> <p><u>Summary of Safety Analysis</u></p> <p>Modification increases the overall safety and reliability of the station by upgrading the reserve station service system.</p>	1&2
<p><u>DC 83-05 Annunciator Addition</u></p> <p>A 32 point Rochester annunciator was installed in the Control Room for the Auxiliary Building Ventilation modification which had redundancy for future additions. This annunciator did not have the capacity for all future alarm drops that will be required by the station. This design change relocated and replaced the Auxiliary Building Ventilation Annunciator with a new 96 point annunciator. The 32 point annunciator was relocated and is being used for High Range Radiation Monitoring.</p> <p><u>Summary of Safety Analysis</u></p> <p>The annunciator addition does not constitute an "unreviewed safety question" as defined in 10CFR50.59. The modification only provides additional annunciator capacity to accommodate future alarm points.</p>	1&2

FACILITY CHANGES THAT
DID NOT REQUIRE NRC APPROVAL

DC 83-27 Ambient Temperature Monitoring System

UNIT

This design change installed an ambient temperature monitoring system to detect and alarm high ambient temperature conditions in the auxiliary building. The ambient temperature monitoring system provides remote alarm and monitoring capabilities in the Control Room. Emergency procedures will be implemented to immediately identify and isolate high energy lines upon indication of an ambient air temperature greater than 120°F. This operator action will limit the severity of a high energy line break in the auxiliary building.

1&2

Summary of Safety Analysis

The modification does not create an "unreviewed safety question" as defined in 10CFR50.59. Installation of the redundant Auxiliary Building Ambient Temperature Monitoring System will improve the operators awareness of a potential accident condition.

DC 83-35 Steam Generator Pressure and Remote Monitoring Panel Installation

This design change installed seismically qualified Steam Generator Pressure Transmitters with seismically supported tubing, valving, and conduit supports to provide Non-1E analog signals to a new Remote Monitoring Panel (RMP). Indication has been provided for 0-1400 psig pressure in Steam Generators 1A and 1B.

1

Summary of Safety Analysis

The modification enhances the availability of reactor parameter indication in the event of a fire.

DC 83-37 Appendix R Reactor Coolant Cold Leg RTD Cable To Remote Monitoring Panel (RMP)

Three new dual element RTD's were installed in RCS Loops A & B respectively. This design change wired out one element of each of these RTD's to temperature indicators located on the Remote Monitoring Panel (RMP). It is part of the overall Appendix R effort to include indication for additional reactor parameters in the Unit 1 Cable Tray Room, above the Control Room, at the RMP.

1

Summary of Safety Analysis

The modification enhances the availability of Reactor Parameter indication in the event of a fire.

DC 83-41 Environmental Qualification For Containment High-Range Radiation Monitoring System (CHRRMS)

This design change provides an environmentally qualified installation of CHRRMS in accordance with NUREG-0737, Appendix B. The conduit system was modified to provide a "sealed conduit system" between each high-range radiation detector and its electrical penetration. The installed "sealed system" meets the applicable environmental qualification criteria per IEEE 323-1974 and NUREG-0737.

1

FACILITY CHANGES THAT
DID NOT REQUIRE NRC APPROVAL

Summary of Safety AnalysisUNIT

The modification to reroute containment high radiation monitor cable in seismically supported sealed conduit involves no unreviewed safety question. It provides a qualified cable installation for the existing instrumentation system.

DC 84-07 Auto Actuation Of Reactor Trip Shunt Trip Attachment

This design change replaces the shunt trip attachment and installed electrical components and internal wiring to automatically actuate the shunt trip attachment upon receipt of a reactor trip signal. 1

Summary of Safety Analysis

The replacement of the reactor trip breakers shunt trip attachment and the automatic actuation of the shunt trip attachment modification, changes the operation and improves the reliability of the reactor trip breakers. It provides an automatic redundant trip function to the reactor trip system. The modification does not change the manual operation of the reactor trip breakers from the main control room.

DC 84-09 Class 1E RCS RTD Replacement

This design change removed 24 existing RTD's from service and replaced them with RTD's which have adequately demonstrated environmental qualification per the guidelines set forth by IEEE-323-1974 and 10CFR50.49. 1

Summary of Safety Analysis

The modification does not affect the performance of the reactor coolant system. The RTD's were replaced with environmentally qualified RTD's covering the same range and having the same characteristics.

DC 84-17 Moisture Separator Reheater Modifications

This design change retrofitted the MSR internals with new "state of the art" separators and tube bundles which should result in improved thermal performance of the power plant. 1

Summary of Safety Analysis

The modifications of the MSR's accomplished during plant shutdown are enhancements to non-safety related, and non-seismic power conversion equipment.

DC 84-47 MSR Vent and Drain System Modifications

The system that was modified is part of the Moisture Separator and HP Heater Drains and Vents System and Main Steam System in the turbine building. This design change improved a steam vent and drain system which will maintain a steam or a steam/liquid mixture at the exit of all U-tubes of the MSR's under all operating conditions. 1

Summary of Safety Analysis

Efficient condensate removal together with improvement in excess steam vent system is expected to provide better tube bundle performance. The system design conditions remain unchanged and the modifications fully comply with the original construction code.

FACILITY CHANGES THAT
DID NOT REQUIRE NRC APPROVAL

DC 84-49 Control Rod Guide Tube Refurbishment

UNIT

The Control Rod Guide Tubes (CRGT) were replaced with new guide tubes to alleviate the potential of loose parts entering the reactor coolant system due to the failure of the split pins and/or flexures. B&W has developed slightly modified split pin and flexure designs, which were used to replace the existing components. These modified pins and flexures have been designed for optimum resistance to stress corrosion cracking.

1

Summary of Safety Analysis

The modification implements a one-for-one replacement of the Surry Unit 1 Control Rod Guide Tubes and their associated support pins and flexure assemblies with equivalent or superior components. The new support pin and flexure assembly designs and materials are an enhancement over the existing pins and flexures due to their resistance to stress corrosion cracking.

DC 84-56 Appendix R Spurious Operations Of High/Low Pressure Boundary Valves

This design change added an isolation switch and conduits to certain valves in the high/low pressure boundary of the Reactor Coolant System. The new isolation switches provide a means to assure that the high/low pressure boundary valves are de-energized i.e., closed to mitigate the lost reactor coolant inventory for a fire in the main control room.

1

Summary of Safety Analysis

The modification requires a change to but does not modify the normal operation of safety related equipment, nor reduce the margin of safety of systems as defined in the Technical Specifications.

DC 84-58 Boric Acid Transfer Piping Replacement

This design change replaced affected portions of the 2" and under boric acid piping and associated heat tracing system. Stress corrosion cracking was discovered in the boric acid transfer system piping and was replaced as a short term fix to prevent unscheduled maintenance and outages. Piping was replaced on a one-for-one basis with the same material pipe class as the original design.

1

Summary of Safety Analysis

Operation of the Chemical And Volume Control System remains unchanged and no additional valves or instrumentation were added.

**TESTS AND EXPERIMENTS REQUIRING
NRC APPROVAL**

MONTH/YEAR December, 1984

NONE DURING THIS REPORTING PERIOD.

**TESTS AND EXPERIMENTS THAT
DID NOT REQUIRE NRC APPROVAL**

MONTH/YEAR December, 1984

NONE DURING THIS REPORTING PERIOD.

OTHER CHANGES, TESTS AND EXPERIMENTS

MONTH/YEAR December , 1984

NONE DURING THIS REPORTING PERIOD.

VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION
CHEMISTRY REPORT

DECEMBER 19 84

PRIMARY COOLANT ANALYSIS	UNIT NO. 1			UNIT NO. 2		
	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM	MINIMUM	AVERAGE
Gross Radioact., $\mu\text{Ci/ml}$	2.77E-1	1.90E-3	6.13E-2	1.97E-1	1.30E-2	9.04E-2
Suspended Solids, ppm	0.4	0.4	0.4	0.1	0.1	0.1
Gross Tritium, $\mu\text{Ci/ml}$	---	---	---	8.25E-2	4.53E-2	6.53E-2
Iodine ¹³¹ , $\mu\text{Ci/ml}$	1.25E-3	2.03E-5	5.23E-4	5.17E-4	4.30E-5	1.87E-4
I ¹³¹ /I ¹³³	---	---	---	0.32	0.07	0.14
Hydrogen, cc/kg	35.5	32.4	34.0	49.5	28.3	37.8
Lithium, ppm (A)	2.53	0.52	2.01	0.98	0.48	0.70
Boron-10, ppm*	446	196	327	75	32	46
Oxygen, (D.O.), ppm (B)	0.500	≤ 0.005	0.104	≤ 0.005	≤ 0.005	≤ 0.005
Chloride, ppm	≤ 0.02	≤ 0.02	≤ 0.02	≤ 0.02	≤ 0.02	≤ 0.02
pH @ 25°C	6.20	4.21	5.06	6.80	6.33	6.62

* Boron-10 = Total Boron x 0.196

NON-RADIOACTIVE CHEMICAL
RELEASES, POUNDS
T.S. 4.13.A.6

Phosphate	---	Boron	1.7
Sulfate	---	Chromate	0.0
50% NaOH	---	Chlorine	---

REMARKS: (A) Added the following amounts of Lithium Hydroxide to Unit One; 4000 grams on 12-18, 2500 grams on 12-19, 1500 grams on 12-20, 2500 grams on 12-21, 760 grams on 12-22, 580 grams on 12-23, 400 grams on 12-24, 1025 grams on 12-25, 740 grams on 12-26, 380 grams on 12-27, 700 grams on 12-28, 310 grams on 12-29, 245 grams on 12-30, 250 grams on 12-31. Added the following amount of Lithium Hydroxide to Unit Two; 375 grams on 12-11, 845 grams on 12-12, 160 grams on 12-13, 185 grams on 12-16, 324 grams on 12-17, 280 grams on 12-18, 466 grams on 12-30, 260 grams on 12-31. Cation bed placed in service for Lithium removal on Unit One on 12-30. Cation bed placed in service for Lithium removal on Unit Two on 12-4, 12-5, and 12-26. (B) Unit One ended refueling this month. (C) The levels of these chemicals should produce no adverse environmental effect.

DESCRIPTION OF ALL INSTANCES WHERE
THERMAL DISCHARGE LIMITS WERE EXCEEDED

MONTH/YEAR December, 1984

NONE DURING THIS REPORTING PERIOD.

FUEL HANDLING

UNIT # II
 MONTH/YEAR December, 1984

DATE SHIPPED/RECEIVED	NO. OF ASSEMBLIES PER SHIPMENT	ANSI NO. INITIAL ENRICHMENT	NEW OR SPENT FUEL SHIPPING CASK ACTIVITY LEV.
12-04-84	12	LMOE SH/3.6%	< 2.5 MR/hr
12-04-84	12	LMOE SP/3.6%	< 2.5 MR/hr
12-04-84	12	LMOE RV/3.6%	< 2.5 MR/hr
12-04-84	12	LMOE SI/3.6%	< 2.5 MR/hr
12-04-84	12	LMOE SC/3.6%	< 2.5 MR/hr
12-04-84	12	LMOE T6/3.6%	< 2.5 MR/hr
12-04-84	12	LMOE RY/3.6%	< 2.5 MR/hr
12-04-84	12	LMOE RK/3.6%	< 2.5 MR/hr
12-04-84	12	LMOE RM/3.6%	< 2.5 MR/hr
12-04-84	12	LMOE SX/3.6%	< 2.5 MR/hr
12-04-84	12	LMOE T8/3.6%	< 2.5 MR/hr
12-04-84	12	LMOE T7/3.6%	< 2.5 MR/hr
12-12-84	12	LMOE SW/3.6%	< 2.5 MR/hr
12-12-84	12	LMOE T1/3.6%	< 2.5 MP/hr
12-12-84	12	LMOE S9/3.6%	< 2.5 MR/hr
12-12-84	12	LMOE S7/3.6%	< 2.5 MR/hr
12-12-84	12	LMOE RT/3.6%	< 2.5 MR/hr
12-12-84	12	LMOE SE/3.6%	< 2.5 MR/hr
12-12-84	12	LMOE SK/3.6%	< 2.5 MR/hr
12-12-84	12	LMOE S5/3.6%	< 2.5 MR/hr
12-12-84	12	LMOE SD/3.6%	< 2.5 MR/hr
12-12-84	12	LMOE RJ/3.6%	< 2.5 MR/hr
12-12-84	12	LMOE RP/3.6%	< 2.5 MR/hr
12-12-84	12	LMOE RX/3.6%	< 2.5 MR/hr
12-19-84	12	LMOE S6/3.6%	< 2.5 MR/hr
12-19-84	12	LMOE SG/3.6%	< 2.5 MR/hr

PROCEDURE REVISIONS THAT CHANGED THE
OPERATING MODE DESCRIBED IN THE PSAR

MONTH/YEAR December, 1984

NONE DURING THIS REPORTING PERIOD.

DESCRIPTION OF PERIODIC TESTS WHICH WERE NOT
COMPLETED WITHIN THE TIME LIMITS
SPECIFIED IN TECHNICAL SPECIFICATIONS

MONTH/YEAR December, 1984

NONE DURING THIS REPORTING PERIOD.

MAINTENANCE OF SAFETY RELATED SYSTEMS DURING
OUTAGE OR REDUCED POWER PERIODS

UNIT NO. 1

MECHANICAL MAINTENANCE

DEPT	RETURNED TO SERVICE	MARK NUMBER	WO NUMBER	WO TITLE	HISTORY SUMMARY
RO3	12/03/84	01-FW -MDV -151D	009491	REPAIR LINEAR INDICATION IN valve body	GROUND INDICATION OUT OF BODY OF VALVE. MINIMUM WALL THICKNESS WAS NOT VIOLATED BY GRINDING. NDE PT AND REPORT SAT.
RO3	12/03/84	01-RH -TV -100A	007795	EXCESSIVE SEAT LEAKAGE AS PER PT-16.4	DISASSEMBLE VALVE INSPECT INTERNALS LAP SEAT AND PLUG AS NECESSARY 100X BLUEING
RO3	12/03/84	01-VS -MISC-NA	007220	REMOVE & INSTALL VENTILATION	REMOVED SECTION OF VENT DUCT AND STORED ON TOP OF PREZ CLB. BOLTS STORED IN PLASTIC BAG INSIDE AIR DUCT REPLACED SECTION OF AIR DUCT AND TIGHTEN ALL BOLTS
RO3	12/04/84	01-SS -TV -102B	009552	SS LYNE WELD IS CRACKED AND leaking on discharge	REPAIR WELD ON DISCHARGE SIDE OF VALVE
RO3	12/05/84	01-BD -PP -NA	008801	CUT PIPE ABOVE 1-BD-12 IN order to drain 'B' s/G tubesheet	CUT PIPE AND UNSTOPPED LINE. PREPARED PIPE FOR FIT UP FIT PIPE AND WELDED CLEANED UP FOR GC VISUAL AND NDE PT GC VISUAL AND NDE PT SAT
RO3	12/06/84	01-IA -PP -NA	009867	AIR LINE BETWEEN REGULATOR	REPLACED BROKEN PIECE WITH 1/4" NIPPLE. SHOP SPARE.
RO3	12/07/84	01-BD - -11	010208	ADJUST PACKING	ADJUSTED PACKING ON 1-BD-11
RO3	12/07/84	01-BD - -14	010207	ADJUST PACKING	ADJUSTED PACKING
RO3	12/07/84	01-BD - -4	010206	ADJUST PACKING	ADJUSTED PACKING
RO3	12/07/84	01-RH - -43	010204	1-RH-43 HAS NO HANDLE.	INSTALLED NEW HANDWHEEL
RO3	12/10/84	01-FW - -7	010327	VLV. HAS BAD PACKING LEAK WITH no pressure	REPACKED VALVE. VALVE NEEDS TO BE REPLACED ON NEXT OUTAGE OR NEXT CHANGE DUE TO STEAM CUT ON PACKING GLAND.
RO3	12/10/84	01-SI - -153	010307	VLV LEAKS BY SEAT AS FOUND DURING hydro	INSTALLED 3/4" PIPE CAP REPAIRED THREADS
RO3	12/12/84	01-CH -MDV -1289A	010482	VALVE BINDING CAUSING HIGH amps	LOOSENED PACKING GLAND N-5000 WAS PUT ON STEM TO LUBRICATE. VALVE WAS CYCLED BY OPS. TIGHTENED PACKING GLAND
RO3	12/13/84	01-BD -FE -102B	010209	FLOW ELEMENT HAS LEAK AT PIPE flange.	INSTALLED NEW GASKET AND CLAMP
RO3	12/14/84	01-CH -P -1C	010516	INVESTIGATE/REPAIR CASING LEAK	TIGHTENED BOLTS

VEPCO SAFETY RELATED DURING REDUCED POWER SORTED BY UNIT AND DEPARTMENT
 FROM 12/01/84 THRU 12/31/84
 UNIT 01 SURRY

DEPT	RETURNED TO SERVICE	MARK NUMBER	WO NUMBER	WO TITLE	HISTORY SUMMARY	
R03	12/01/84	01-RL -	-15	009818	REPLACE DIAPHRAM ON 3" CRINNEL	REPLACED BONNETT AND DIAPHRAGM DIAPHRAGM MANUFACTURE 03/12/83
R03	12/02/84	01-EG -	-6	005949	REPAIR OR REPLACE PACKING.	TIGHTENED PACKING NUT.
R03	12/03/84	01-CC -	-59	002775	CHECK VALVE LEAKS THRU	OPENED, VALVE, INSPECTED INTERNALS, CLOSED VALVE.
R03	12/03/84	01-CV -TV	-150C	007333	EXCESSIVE SEAT LEAKAGE AS PER	DISASSEMBLE VALVE AND INSPECT SEATS AND PLUG AS NECESSARY HAVE 100% BLUEING

DEPT	RETURNED TO SERVICE	MARK NUMBER	WO NUMBER	WO TITLE	HISTORY SUMMARY	
R03	12/15/84	01-FW -	-61	010345	BODY TO BONNET LEAK	LAPPED SEATING SURFACE, BLUE CHECKED VALVE 100% ONE SIDE, 90% OTHER TORQUED BOLTS TO 167 FT/LBS. REPAIR WELDED STEAM CUT IN GASKET AREA.
R03	12/17/84	01-BD -TV	-100A	010714	VALVE HAS PACKING LEAK	ADJUSTED PACKING.
R03	12/17/84	01-CC -	-177	010424	CHECK VALVE LEAKS BY	DISASSEMBLED VALVE & INSPECTED INTERNALS. HAD ENGINEER LOOK AT VALVE. VALVE INTERNALS IN SAT CONDITION.
R03	12/17/84	01-CH -P	-2A	010683	REPAIR MOTOR SHAFT	MACHINED BEARING SURFACE. MADE SLEEVE AND INSTALLED OVER BEARING SURFACE THEN MACHINED SLEEVE TO FIT BEARING.
R03	12/17/84	01-FW -	-42	010713	VALVE LEAKS BY	INSTALLED PIPE CAP, CHECKED HANDLE OPERATION.
R03	12/17/84	01-SI -LT	-1920	010668	WELD LEAK ON 1/4" LINE APPROX- ily 3" from transmitter	GROUND PINHOLE OUT, WELDED AREA TO MEET ORIGINAL WELD SPEC.
R03	12/18/84	01-CH -LCV	-1460B	010727	PACKING LEAK, ADJUSTMENT LEFT.	ADJUSTED PACKING
R03	12/18/84	01-CH -P	-2A	010654	UNCOUPLE/RECOUPLE FOR ELEC'S	UNCOUPLE PUMP, ALIGN & COUPLED PUMP TO MOTOR, GREASED COUPLING.
R03	12/20/84	01-RC -MOV	-1590	010725	REINSTALL HANDWHEEL ON MOV	REINSTALLED HANDWHEEL
R03	12/20/84	01-RC -P	-1B	010178	SPOOL PIECE, 2" SS X 25" FOR B, RCP	FABRICATED SPOOL PIECE FOR B, RCP.
R03	12/20/84	01-RH -MOV	-1700	007802	REPACK VALVE, MMP-C-G-156	REMOVED PACKING. REPACKED VALVE IAW PROCEDURE MMP-C-G-156. INSTALLED 3 RINGS OF PACKING, DROPPED LANTERN RING, INSTALLED 8 RINGS OF PACKING ON LANTERN RING, TIGHTENED NUTS.
R03	12/20/84	01-RH -MOV	-1700	010795	INVESTIGATE LOOSE SHAFT CLAMP,	REMOVED LOOSE SHAFT CLAMP
R03	12/20/84	01-SI -	-340	010767	PACKING LEAK - ADJUST	ADJUSTED PACKING
R03	12/23/84	01-RC -PCV	-1456	010692	SPRING SET ADJUSTMENT TO TIGHT	ADJUSTED SPRING SET ON PCV OPENS @ 52 PSIG AS PER INST. TECH'S. VALVE WAS CHECKED AND FALL IN THE ACCEPTANCE CRITERIA.
R03	12/23/84	01-SW -P	-10B	010685	PUMP DRAWING LOCKED ROTOR AMPS	PUMP LOCKED UP FOUND BRG SEIZED, REPLACED WITH SHOP SPARE.
R03	12/26/84	01-RC -P	-1A	010820	INSTALL BALANCE WEIGHTS AS PER Westinghouse	INSTALLED BALANCE WEIGHTS 1 BOLT =549.4G 2 BOLT =450.0 G 3 BOLT =561.6G THIS RESULTED IN ~2 MIL VIBRATION SAT
R03	12/26/84	01-RC -P	-1B	010670	PUMP AND MOTOR ARE OUT OF alignment	INSTALLED BALANCE WEIGHTS 7 BOLT=640G 8 BOLT=428G 9 BOLT=687G 10 BOLT=722G 11BOLT=640G.THIS RESULTED IN A 3 MIL VIBRATION SAT
R03	12/26/84	01-RC -P	-1C	010818	INSTALL BALANCE WEIGHTS AS PER Westinghouse	INSTALLED 420 GRAMS OF WEIGHT TO BOLT NO7. INSTALLED BALANCE WEIGHTS 8 BOLT=574G 9 BOLT=546.4G 10 BOLT=131.3G 11 BOLT=551G THIS RESULTED ~ 4 MIL VIBS SAT
R03	12/26/84	01-RS -	-29	010817	NIPPLE IS LOOSE BETWEEN PUMP	TIGHTENED NIPPLE

DEPT	RETURNED TO SERVICE	MARK NUMBER	WO NUMBER	WO TITLE	HISTORY SUMMARY
R03	12/03/84	01-FW -MOV -151B	001876	OPEN INSPECT AND REPAIR AS necessary.	OPENED VALVE INSPECTED INTERNALS CLEANED PLUG AND SEAT,BLUED TO 100% CONTACT,REINSTALLED BODY TO BONNET
R03	12/03/84	01-FW -MOV -151D	001877	OPEN INSPECT AND REPAIR AS necessary.	DISASSEMBLE VALVE AND INSPECTED INTERNALS LAP SEAT AND PLUG AS NECESSARY
R03	12/03/84	01-FW -MOV -151F	001878	OPEN INSPECT AND REPAIR AS necessary	DISASSEMBLE BODY TO BONNET INSPECTE D INTERNALS,CLEANED PLUG AND SEAT BLUE TO 100% CONTACT REASSEMBLE BODY TO BONNET REPACKED
R03	12/03/84	01-RC -MISC- NA	007272	REMOVE & INSTALL SIEMIC	REMOVED SIEMIC RESTRAINTS AND STORED 10/8/84. REINSTALLED SIEMIC RESTRAINTS 11/30/84.
R03	12/03/84	01-RC -MISC-1	003246	REMOVE AND INSTALL REACTOR	INSTALLED NEW O-RINGS ON STAND REMOVED OLD O-RINGS.INSTALLED NEW O -RINGS WITH QC.PO # FOR CAT 1 TAG S Y 11594 DATE RECIEVED 10-29-84 ISSUED 11-16-84 PART #4606058
R03	12/03/84	01-RC -MISC-1	003249	REMOVE AND INSTALL REACTOR	REMOVED RX HEAD AND STORED IH BASEMENT 10-15-84 REINSTALLED RX HEAD ON 11-23-84
R03	12/03/84	01-RC -MISC-1	003250	INSTALL AND REMOVE HEAD LIFT- ing rig.	INSTALLED HEAD LIFT RIG 10-14-84 STORED HEAD LIFT RIG 11-23-84
R03	12/03/84	01-RC -MISC-1	003253	REMOVE AND INSTALL RX HEAD	DETENSION STUDS 10/11/84. REMOVED STUDS TO STORAGE AREA 10/12. COMPLE TED STUD CLEANING ON 11-13-84. COM- PLETED STUD INSTALLATION ON 11/25. COMPLETED TENSION ON 11/27/84.
R03	12/03/84	01-RC -MISC-1	003255	INSTALL AND REMOVE REACTOR	INSTALLED CAVITY SEAL RING. REMOVED CAVITY SEAL RING 11/27/84.
R03	12/03/84	01-RC -MISC-1	003256	REMOVE AND INSTALL RV HEAD	HEAD INSULATION REMOVED AND STORE 10-9-84. INSULATION RE-INSTALLED AND BOLTED DOWN
R03	12/03/84	01-RC -MISC-1	003258	REMOVE AND INSTALL CONDSEALS	REMOVED CONDSEALS 10/9/84, REINSTALLED CONDSEALS 11/29/84.
R03	12/03/84	01-RC -MISC-1	003265	REMOVE AND INSTALL CRDM DUCT- ing.	REMOVED OCTUPUS 10/7/84. REMOVED ELBOWS, INSTALLED BLANKS 10/8/84.
R03	12/03/84	01-RC -MISC-1	007964	CLEAN RX HEAD STUDS	CLEANED AND INSPECTED RX HEAD STUDS WORK DONE AS PER MMPC-P-RC-038.
R03	12/03/84	01-RS -E -1D	009252	1" DRAIN LINE ON BOTTOM OF HX	FOUND NOTHING WRONG WITH DRAIN LINE ON BOTTOM OF HEAT EXCHANGER. ALSO HAD OPS LOOK AT LINE AND THEY COULD NOT FIND ANYTHING WRONG.
R03	12/03/84	01-SW -P -10A	009672	PUMP LOUD AND NOISY, REPAIR,RE each as necessary.	REMOVED OLD PUMP INSTALLED NEW PUMP 11/19/84 M. ORLANDO TEST ROTATION SAT.SET IMPELLER CLEA- RENCE @.020"
R03	12/03/84	01-VS -F -3B	009807	FAN IS RUBBING AGAINST enclosure	ADJUSTED CLEARANCE ON FAN & TIGHTEN ED SET SCREWS.
R03	12/04/84	01-RC -LI -461	005685	PERFORM REFUELING LOOP	FOUND TRANSMITTER OUT OF TOLERANCE, ADJUSTED TO SPEC. PT SENT TO ENGINEERING.

DEPT	RETURNED TO SERVICE	MARK NUMBER	WO NUMBER	WO TITLE	HISTORY SUMMARY
R03	12/04/84	01-RC -PCV -1455B	004383	LEAKS BY	DISASSEMBLE VALVE AND INSPECT INTERNALS PUT NEW PLUG AND STEM AND NEW GASKET
R03	12/04/84	01-RC -SV -1551A	002027	INDICATION SHOWS VALVE MAY BE leaking.	DISASSEMBLED VALVE REPLACED DISC LAPPED NOZZLE REPLACED GASKETS PERFORMED PT 12.2
R03	12/04/84	01-RC -SV -1551A	003259	REMOVE VALVE TEST I.A.W. PT-12	PERFORMED PT12.2 VALVE FAILED OVERHAULED PASSED PT 12.2 SET RINGS NR-18 GR-250
R03	12/04/84	01-RC -SV -1551C	003257	REMOVE VALVE TEST IAW PT-12 AN PMS RC-Y-M/R1 and re-install	NR-18 GR-200 SETTINGS VERIFIED BY QC AND ENGINEERING. MMP-C-G-001 NOT REQUIRED AS PER RC-U-M/R1 STEP 4 AS FOUND 2425 PSIG AS LEFT 2500 PSIG LEAK RATE 6 BUBBLES PER MIN
R03	12/04/84	01-SI -FI -1962	004346	FLOW INDICATED WITH NO SI	PERFORMED REFUELING CAL ON TRANSMITTER AND INDICATOR COMPLETED SAT
R03	12/05/84	01-CC -RV -112C	008944	VALVE LIFTS EARLY. PERFORM PT 12.2	PERFORMED PT 12.2 AS FOUND PRESS 120 PSI RE-SET TO 144 PSI
R03	12/05/84	01-GW -RV -102B	007612	TEST BY PT 12.2	RESET PRESSURE FROM 170 PSI TO 150 PSI
R03	12/05/84	01-MS - -113	007548	VALVE STEM TWISTED OFF. VALVE	CUT OLD VALVE AND SECTION OF PIPE OUT OF SYSTEM. CLEANED PIPE FOR FIT OF NEW VALVE. INSTALLED NEW VALVE AND SECTION OF PIPING. CLEANED ALL WELDS FOR QC VISUAL AND NDE PT /SAT
R03	12/05/84	01-MS - -152	005400	VALVE LEAKS BY	CUT VALVE OUT OF SYSTEM. CLEANED PIPE FOR FIT UP OF NEW VALVE. INSTALLED NEW VALVE AND SECTION OF PIPING. CLEANED FOR NDE PT AND QC VISUAL NDE PT AND QC VISUAL SAT
R03	12/05/84	01-RC -E -1A	003236	REMOVE AND INSTALL IAW MMP-C-RC-012.1 for 'J'tube replacement.	REMOVED MANWAYS STORED BEHIND A-SG BOLTS BAGGED MARKED A-SG AND STORED IN AUX TOOL ROOM 10/08/84 BOLT SECONDARY MANWAYS REINSTALLED 10/21/84
R03	12/05/84	01-RC -E -1A	003240	SLUDGE LANCE IAW MMP-C-RC-047(REMOVED HANDHOLE COVERS #2+#5 ALL BOLTS LABELED AT JOB SITE. HANDHOLE COVERS REINSTALLED 11/11/84
R03	12/06/84	01-BD - -1	009244	REPLACE ROCKWELL EDWARDS VALVE	REPLACE VALVE WITH NEW AS PER EWR 82-79
R03	12/06/84	01-BD - -11	009246	REPLACE ROCKWELL EDWARDS VALVE	REPLACE VALVE WITH NEW. ALSO REPLACE 2' OF PIPE SCH 80
R03	12/06/84	01-BD - -14	009242	REPLACE ROCKWELL EDWARDS VALVE	REPLACE VALVE AS PER EWR 82-79A
R03	12/06/84	01-BD - -21	001026	VALVE LEAKING BY SEAT	REPLACE VALVE AS PER EWR-82-99A
R03	12/06/84	01-BD - -24	002895	REPLACE VALVE	REPLACE VALVE WITH NEW CONVAL 2 1/2 ALSO REPLACE 2' OF 2 1/2" SCH 80 PIPE
R03	12/06/84	01-BD - -4	009240	REPLACE ROCKWELL EDWARDS VALVE	REPLACE VALVE WITH NEW CONVAL 2 1/2 ALSO REPLACE 18" OF 2 1/2" PIPE SCH80 WITH NEW

DEPT	RETURNED TO SERVICE	MARK NUMBER	WO NUMBER	WO TITLE	HISTORY SUMMARY
R03	12/06/84	01-IA -	-1455C 008901	THE AIR LINE RUN TO PCV-1455C	TIGHTENED FITTING AND SNOOPED FOR ADDITIONAL LEAKS.
R03	12/06/84	01-RC -MISC-1	003263	REMOVE AND INSTALL RX HEAD	REMOVED RX HEAD SHIELD BLOCKS 10-5-84 REINSTALLED MISSILE SHIELD BLOCKS 12-5-84 PROCEDURE WITH WO# 38010032 65
R03	12/06/84	01-SI -P -1A	009865	UNCOUPLE MOTOR FROM PUMP AND recouple after motor repairs.	UNCOUPLE PUMP FOR ELECTRICIANS RECOUPLED PUMP SET LIFT .250 REMOVED TOOLS FROM JOB SITE
R03	12/06/84	01-VS -PP -NA	001397	REPAIR ELBOW ON C LOOP SHROUD	NO PROBLEMS FOUND,EVIDENCE THAT A REPAIR HAD BEEN MADE PREVIOUSLY WAS NOTED
R03	12/07/84	01-BD -	-21 010158	PACKING LEAK AS FOUND DURING	ADJUST PACKING ON 1-BD-21
R03	12/07/84	01-BD -	-24 010160	hydro. PACKING LEAK AS FOUND DURING	ADJUSTED PACKING 1-BD-24
R03	12/07/84	01-FW -MOV -151F	010301	hydro. PACKING LEAK, UPSTREAM AND	EVENED OUT PACKING GLAND AND ADJUST ED PACKING GLAND 4 FLATS ON GLAND NUTS CYCLED VALVE TO ENSURE FREE MOVEMENT
R03	12/07/84	01-FW -P -3A	010303	INBOARD PACKING LEAK, ADJUST.	ADJUSTED INBOARD PACKING GLAND 1 FLAT ON GLAND NUTS
R03	12/07/84	01-FW -P -3A	010304	OUTBOARD PACKING LEAK, ADJUST.	ADJUSTED OUTBOARD PACKING GLAND 1 FLAT ON GLAND NUTS
R03	12/07/84	01-RC -P -1A	003278	REMOVE GRATING ABOVE CUBICLE & move seal housing to operate deck	REMOVED DECK GRATING 10/03/84 INSTALLED GRATING 12/6/84
R03	12/10/84	01-CV -TV -150A	007315	TV-150A HAS EXCESSIVE SEAT	DISASSEMBLE VALVE AND INSPECT INTERNALS AND REPAIR AS NECESSARY TO GET 100% BLUEING
R03	12/10/84	01-CV -TV -150B	007317	TV-150B HAS EXCESSIVE SEAT	DISASSEMBLE VALVE AND INSPECT INTERNALS REPAIR AS NECESSARY TO GET 100% BLUEING
R03	12/10/84	01-FW -	-58 002385	VALVE LEAKS BY	DISASSEMBLE VALVE AND INSPECT INTERNALS LAP SEAT AND DISC GAT 100% BLUEING REMOVED 2 PIN RETAINING PLUGS,INSTALLED PINRETAINING PLUGS AND WELDED
R03	12/10/84	01-RC -	-31 010309	VLV HAS PACKING LEAK VERY LITT-	ADJUSTED PACKING
R03	12/10/84	01-SI -	-340 010348	le PACKING LEAK BAD.	ADJUSTED PACKING,LEAK STOPPED
R03	12/10/84	01-SI -MOV -1869A	010308	VLV HAS BODY TO BONNET LEAK.	TIGHTEN BODY TO BONNET
R03	12/10/84	01-SW -PP -N/A	007810	THREADED PIPE FITTING CORROD-E	REAMED AND TAPPED HOLE TO 1 1/4 NPT INSTALLED BUSHING AND VALVE.

DEPT	RETURNED TO SERVICE	MARK NUMBER	WO NUMBER	WO TITLE	HISTORY SUMMARY
R03	12/11/84	01-CC -	-157	010032 HANDWHEEL BROKEN	REPLACED WITH NEW HANDWHEEL
R03	12/11/84	01-CH -	-335	010028 HANDWHEEL MISSING, REPLACE.	REPLACED WITH NEW HANDWHEEL
R03	12/11/84	01-MS -	-158	003391 VALVE LEAKS THRU AND WON'T shut all the way.	REMOVE VALVE FROM SYSTEM DID VISUAL INSPECTION OF GATE AND SEAT, MACHINED AND LAPPED GATE, REPACKED VALVE ACCORDING TO PROCEDURE
R03	12/11/84	01-SI -MOV	-1869A	010336 VALVE STEM LEAKOFF LINE NOT connected	CONNECTED PACKING GLAND LEAK OFF LINE
R03	12/12/84	01-BS -DR	-NA	010462 INSPECT AND REPAIR U1 PERSONNEL valve as necessary	GREASED O RINGS ON BOTH DOORS TIGHTENED ALL POSSIBLE BOLTS INSTALLED 7 NUTS ON PRESSURE VALVE INSTALLED ALLEN HEAD CAP SCREW IN ACTUATION CLEANED SURFACES ON DOORS
R03	12/12/84	01-CH -FCV	-1160	010328 VLV HAS EXCESSIVE LEAKAGE AFTER	ADJUSTED STROKE
R03	12/12/84	01-CH -MOV	-1275A	010313 VALVE BINDING HARD TO OPERATE repair as per PT-164	LOOSENED PACKING N-5000 WAS USED TO LUBRICATE THE STEM. CYCLED VALVE TIGHTENED PACKING GLAND
R03	12/12/84	01-DG -TV	-108B	007456 VLV. HAS EXCESSIVE SEAT LEAKAGE	LAP DR MACHINE PLUG AND SEAT AS NECESSARY. REPACK VALVE
R03	12/12/84	01-EG -FL	-3	010228 DUPLEX FILTER LEAKS ON FUEL	12-8-84 ADJUSTED TENSION ON FILTER BOLTS STILL LEAKS. CHANGED OIL PAPER GASKETS
R03	12/12/84	01-FP -DR	-21	008578 REPAIR DOOR SEALS	VOID: THIS WORK ORDER IS A DUPLICATE OF WORK ORDER #3801009770.
R03	12/12/84	01-RC -HSS	-116	010463 MACHINE 11/16" DIAMETER	MAKE TWO PINS 11/16" DIAMETER X 3" LONG AND DRILL 1/8" COTTER PIN HOLES
R03	12/12/84	01-RC -HSS	-151	010470 MANUFACTURE RING AS PER example	REPAIRED SNUBBER RING NEW NOT NECESSARY
R03	12/12/84	01-SW -MOV	-104A	003301 REMOVE VALVE TO PERFORM CLEAN- liness inspection.	REMOVED VALVE PUT BLANK ON PIPE TESTED VALVE PER PROCEDURE, ADJUSTED OUT LEAKS AND CLEANED VALVE. TESTED AT 45 PSI HAD 0 LEAKS CHECKED LUB LOOKED GOOD, REINSTALLED VALVE
R03	12/12/84	01-SW -MOV	-104B	003295 REMOVE VALVE TO PERFORM CLEAN- liness inspection IAW- MMP-C-SW-111.	REMOVED VALVE FROM LINE, BLANKED FLANGE. TESTED AT 45 PSI HAD SOME LEAKS CLEANED VALVE SEAT AND DISC ADJUSTED OUT LEAKS TESTED AT 45 PSI HAD 0 LEAKS REINSTALLED
R03	12/12/84	01-SW -MOV	-104C	003290 REMOVE VALVE TO PERFORM CLEAN- liness inspection IAW MMP-C-SW-117	REMOVED VALVE FROM SYSTEM, BLANKED FLANGE TESTED AT 45 PSI, HAD SOME LEAKS. CLEANED VALVE SEATS AND DISC ADJUSTED OUT LEAKS TESTED AT 45PSI HAD 0 LEAKS REINSTALLED VALVE
R03	12/12/84	01-SW -MOV	-104D	003286 REMOVE VALVE TO PERFORM CLEAN- liness inspection IAW MMP-C-SW-117	REMOVED VALVE FROM LINE, BLANKED FLANGE. TESTED VALVE AT 45PSI, HAD SOME LEAKS CLEANED VALVE SEAT AND DISC. ADJUSTED OUT LEAKS . TESTED AT 45PSI HAD 0 LEAKS REINSTALLED

DEPT	RETURNED TO SERVICE	MARK NUMBER	WO NUMBER	WO TITLE	HISTORY SUMMARY
R03	12/12/84	01-SW -MOV -105B	003294	REMOVE VALVE TO PERFORM CLEAN- liness inspection.	REMOVED VALVE FROM LINE. BLANKED LINE. TESTED VALVE AT 45PSI HAD SOME LEAKS. CLEANED UP VALVE, SEAT AND DISC ADJUSTED OUT LEAKS TESTED VALVE AT 45 PSI 0 LEAKAGE REINSTALLED
R03	12/12/84	01-SW -MOV -105C	003293	REMOVE VALVE TO PERFORM CLEAN- liness inspection IAW MMP-C-SW-117.	REMOVED VALVE FROM LINE BLANKED LINE. TESTED VALVE AT 45 PSI HAD SOME LEAKS CLEANED VALVE AND DISC/S EAT. ADJUSTED OUT LEAKS TESTED AT 45 PSI HAD 0 LEAKS REINSTALLED
R03	12/12/84	01-SW -MOV -105D	003304	REMOVE VALVE TO PERFORM CLEAN- liness inspection IAW MMP-C-SW-117.	REMOVED VALVE FROM LINE. BLANKED FLANGE. TESTED VALVE AND HAD SOME LEAKS. CLEANED VALVE AND VALVE SEAT & DISC. ADJUSTED OUT LEAKS. TESTED AT 45PSI 0 LEAKAGE REINSTALLED VALVE
R03	12/13/84	01-MS - -5	009515	VALVE STEM BROKE.	REPLACED BONNET AND INSTALLED NEW GASKET
R03	12/13/84	01-RS -RD -111A	010261	REMOVE, INSPECT, DETERMINE ORI- fice	INSTALLED NEW GASKET'S AND ORIFICE
R03	12/14/84	01-BS -SH -NA	010045	EWR ES 82-79B MODIFICATION	FABRICATED HANGER AS PER EWR ES 82-79B.
R03	12/14/84	01-CH - -303	010489	VALVE HAS EXCESSIVE PACKING	ADJUSTED PACKING
R03	12/14/84	01-CH -P -1C	010560	FABRICATE & INSTALL VENT RIG	FABRICATED VENT RIG FOR 1-CH-P-1C.
R03	12/14/84	01-MS - -107	005402	VALVE LEAKS BY	CUT OLD VLV OUT OF SYSTEM & CLEANED POPE FOR FIT UP OF NEW VLV. FITTED NEW VALVE & WELDED. CLEANED UP FOR Q.C. VISUAL AND NDE PT., SAT. REPLACED ONE U-BOLT, INSTALLED FLEX
R03	12/14/84	01-MS -TV -101C	002897	BODY TO BONNET LEAK	ISI REMOVED INSULATION, WELD 3/4 LINES OFF STUFFING BOX AFTER JOB COMPLETE.
R03	12/14/84	01-RC -DET -NA	003261	RETRACT AND INSERT FLUX WIRE	10/14/84 RETRACTED FLUX THIMBLES TO 22'.6" AS PER MMP-C-RC-028
R03	12/14/84	01-SHP -HSS -2B	006116	REMOVE & REINSTALL SNUBBER.	REMOVED SNUBBER IAW MMP-C-HSS-130, 11/17/84. MARKED SNUBBER IAW MMP-C-HSS-171 PER W.D.#005973. FUNCTIONAL TEST PERFORMED BY WYLE, 11/22/84, ACCEPTED. REINSTALLED SNUBBER 11/26
R03	12/14/84	01-SHP -HSS -59B	009587	REMOVE FUNCTIONAL TEST	REMOVED SNUBBER IAW MMP-C-HSS-130 MARKED IAW MMP-C-HSS-171. W0005973 FUNCTIONAL TEST BY WYLE 11-25-84 ACCEPTED. REINSTALLED SNUBBER IN ACCORDANCE WITH MMP-C-HSS-130 11-26-84
R03	12/14/84	01-SI - -336	007966	TACK WELD VALVE STEM IN THE open position	TACK WELD BLOCK TO HANDWHEEL SO VLV WON'T OPERATE.
R03	12/14/84	01-SI - -337	007967	TACK WELD VALVE STEM IN THE open position after SI completed	TACK WELD BLOCK TO HANDWHEEL SO VLV CANNOT BE OPERATED.
R03	12/14/84	01-SI - -338	007968	TACK WELD VALVE STEM IN THE open position	TACK WELD BLOCK ON VALVE SO HAND- WHEEL CAN'T BE OPERATED.
R03	12/14/84	01-SI - -339	007969	TACK WELD VALVE STEM IN THE open position	TACK WELD BLOCK ON VALVE HANDWHEEL SO VALVE CANNOT BE OPERATED.

DEPT	RETURNED TO SERVICE	MARK NUMBER	WO NUMBER	WO TITLE	HISTORY SUMMARY
R03	12/14/84	01-SI - -340	007970	TACK WELD VALVE STEM IN THE open position	TACK WELD BLOCK ON HANDWHEEL OF VLV SO VALVE COULDN'T BE OPERATED.
R03	12/14/84	01-SI - -341	007971	TACK WELD VALVE STEM IN THE open position	TACK WELD BLOCKS ON VALVE HANDWHEEL SO VALVE CANNOT BE OPERATED.
R03	12/14/84	01-SI -LT -1920	010181	"A" S.I. ACC. L.T. LOWER LEVEL	REPLACED ELBOW AND VALVE AS PER EWR 84-386.
R03	12/14/84	01-SW -E -1A	010042	GASKET LEAKED DURING HYDRO	TIGHTENED ALL FITTINGS AND CONNECTIONS. TIGHTENED COOLER FLANGE. RETESTED COOLER, COOLER PASSED WITH NO LEAKS.
R03	12/14/84	01-WFF-HSS -13	009643	REMOVE, FUNCTIONAL TEST,	REMOVED SNUBBER IAW MMP-C-HSS-130 MARKED IAW MMP-C-HSS-171 WO 005973 FUNCTIONAL TEST PERFORMED BY WYLE 11-25-84 ACCEPTED. REINSTALLED SNUBBER IAW MMP-C-HSS-130
R03	12/15/84	01-EPD-MG -1	010613	MEASURE GENERATOR AND MOTOR	MACHINED (2) TWO NEW COUPLING HALVES FOR ELECTRICIANS WITH .001 INTERFERENCE FIT.
R03	12/15/84	01-SW -MOV -103A	003302	REMOVE VALVE TO PERFORM CLEAN- liness inspection IAW MMP-C-SW-117	REMOVED VALVE AND TESTED AS PER PROCEDURE MMP-C-G-103. HAD SOME LEAKS USED SQC GAUGE 1249. CLEANED UP VLV SEAT & DISC & ADJUSTED OUT LEAKS. VALVE HAD NO LEAKS.
R03	12/15/84	01-SW -MOV -103A	009086	REPLACE ALL 1 1/4 INCH BOLTS	REPLACED BOLTS IN VALVE WITH CAT I BOLTING.
R03	12/15/84	01-SW -MOV -103B	001285	REPLACE ALL 1 1/4 STUDS AND nuts on valve flange	REPLACED BOLTING & NUTS ON VALVE WITH CAT I NUTS & BOLTS.
R03	12/15/84	01-SW -MOV -103B	003305	REMOVE VALVE TO PERFORM CLEAN- liness inspection IAW MMP-C-SW-117	REMOVED VLV & TESTED AS PER MMP-C-G-103 VLV. VLV HAD SOME LEAKS BETWEEN DISK & SEAT. TESTED VLV W/ SQC GAUGE 1249. CLEANED UP VLV AND ADJUSTED OUT LEAKS-TESTED W/NO LEAK
R03	12/15/84	01-SW -MOV -103C	001251	REPLACE ALL 1 1/4 IN. BOLTS and studs	REPLACED NUTS & BOLTS WITH CAT I NUTS & BOLTS.
R03	12/15/84	01-SW -MOV -103C	003292	REMOVE VALVE	REMOVED VALVE & TESTED AS PER MMP-C-G-103 & SQC GAUGE 1249. VLV HAD SOME LEAKS. CLEANED UP VLV SEAT & DISK & TESTED VLV & ADJUSTED OUT LEAKS W/SQC GAUGE 1249. NO LEAKS.
R03	12/15/84	01-SW -MOV -103D	001250	REPLACE ALL 1 1/4 IN BOLTS	REPLACED BOLTS AND NUTS ON VALVE WITH CAT I NUTS AND BOLTS.
R03	12/15/84	01-SW -MOV -103D	003291	REMOVE VALVE TO PERFORM CLEAN- liness inspection	REMOVED VALVE & TESTED AS PER MMP-C-G-103. VLV HAD SOME LEAKS. CLEANED UP VLV SEAT & DISK & ADJUSTED OUT LEAKS THEN TESTED VLV PER MMP-C-G-103 & W/SQC GAUGE 1249. NO LEAKS.
R03	12/17/84	01-CH -F -1A	010079	WATER IN OIL - CHANGE	CHANGED OIL

DEPT	RETURNED TO SERVICE	MARK NUMBER	WO NUMBER	WO TITLE	HISTORY SUMMARY
R03	12/17/84	01-RC -E -1C	003209	SLUDGE LANCE IAW MMP-C-RC-047	10/25 REMOVED 2 & 5 HANDHOLE COVERS & DIA. & WRAPPER PLUGS, CUT 1 BOLT OFF OF #5 H.H., REINSTALLED COVERS & BOLTS HANDTIED ALL PARTS IN BAGS & LABELED ONSITE. REPAIRED HOLE.
R03	12/17/84	01-RC -E -1C	003213	REMOVE AND INSTALL SEC. MANWAY	REMOVED A & B MANWAYS AND STORED BEHIND SG WALL 10/11/84. REINSTALLED MANWAYS AND TORQUED. 10/21/84.
R03	12/17/84	01-RC -P -1B	010177	MOD. C.C. LINE ON B, RCP. TO fit Nort	MOD CC LINE TO FIT NORTH ANNA MOTOR AS NEEDED.
R03	12/17/84	01-RM -RMS -108	010400	HIGH ALARM COMES IN BEFORE	PERFORMED ALARM CARD, CALIBRATION ACCORDING TO CAL-044, OPS SAT.
R03	12/17/84	01-SI -RV -1859	001217	DURING RELIEF SETTING TEST VAL- ve	NOTE* OK WITH OPS, VERIFY PRT DE-PRESSUREIZED PRIOR TO WORK. PRT O PRESSURE AS PER MIKE SMALL. VLV TESTED SAT PT 12.2
R03	12/17/84	01-SS -HCV -101B	010624	MODIFY LIMIT SWITCH ACTUATOR	MODIFIED BRACKETS AS PER H. F. HADUCK.
R03	12/20/84	01-CC -P -1C	010487	CLEAN PAINT OFF OF OIL GLASS	CLEANED PAINT OFF OF ALL OIL SITE GLASSES ON 1-CC-P-1C COMPONENT COOLING PUMP PS 25H10
R03	12/20/84	01-CH -MOV -1350	008165	INSPECT & REPAIR AS NECESSARY	REPACKED AND REASSEMBLED VALVE
R03	12/20/84	01-CH -P -1A	010431	WATER IN OIL, REMOVE OIL HYDRO	REPLACED OIL COOLER
R03	12/20/84	01-MS - -101C	002485	C MAIN STEAM NRV LEAKS BY SEAT	OVERHAULED VALVE
R03	12/20/84	01-MS -NRV -101B	001099	PULL AND INSPECT B NRV + REPAC k.	OVERHAULED VALVE. REPLACED BONNET 1840007 RETAINER GASKET 0200790 STEM 0200785 DISK 0200787 REPACKED WITH GARLOCK 5/8" 3625542
R03	12/20/84	01-MS -NRV -101C	001409	SEAL RING FURNISHED RETURN TO original.	DISASSEMBLE VALVE REPLACED STEM 0200785 RING 0200789 RETAINER GASKET 0200790
R03	12/20/84	01-MS -PCV -102A	010449	AIR LINE LEAK AT SWAGELOCK	TIGHTENED SWAGELOK FITTING
R03	12/20/84	01-RC - -127	010735	PZR LOWER LEVEL ISOLATION TAP	ADJUSTED PACKING
R03	12/20/84	01-RC - -9	010736	INSTALL BLANK FLANGE & NEW	INSTALLED BLANK FLANGE
R03	12/20/84	01-RS -E -1A	003273	CLEAN RECIRC SPRAY HEAT exchanger	REMOVE UPPER SHELL HEAD. GROUND OUT UPPER DIAPHRAGM REMOVED ELBOW. CLEAN TUBES IN HEAT EXCHANGER. CLEAN BOTTOM OF HEAT EXCHANGER. INSTALLED ELBOW WELDED DIAPHRAGM BACK INSTALL HEAD
R03	12/20/84	01-RS -E -1B	003276	CLEAN RECIRC SPRAY HEAT exchanger	GROUND OFF DIAPHRAGM AND REWELDED DIAPHRAGM AFTER CLEANING REMOVED ELBOW AND CLEANED OUT HEAT EXCHANGE R PUT UPPER SHELL HEAD ON AND

DEPT	RETURNED TO SERVICE	MARK NUMBER	WO NUMBER	WO TITLE	HISTORY SUMMARY
					TORQUED TO 105 FT LBS
R03	12/20/84	01-RS -E -1C	003277	CLEAN RECIRC SPRAY HEAT exchanger	REMOVED UPPER SHELL HEAD.GROUND OUT UPPER DIAPHRAGM.REMOVED ELBOW.CLEAN ED TUBES AND TUBE SHEET.CLEANED BOT TOM OF HEAT EXCHANGER.INSTALLED ELB OW WELDED DIAPHRAGM PUT ON HEAD TO
R03	12/20/84	01-RS -E -1D	003272	CLEAN RECIRC SPRAY HEAT exchanger	REMOVED UPPER SHELL HEAD GROUND OUT UPPER DIAPHRAGM REMOVED ELBOW CLEANED TUBES AND TUBE SHEET.PUT EL BOW BACK ON WELDED DIAPHRAGM ON. PUT SHELL HEAD BACK ON TORQUED
R03	12/20/84	01-RS -P -2A	009310	PUMP SEALS LEAKS 60CC/HR. WITH pump running.	REMOVED SPOOL PIECE REPLACED MECHANICAL SEAL REPLACED SPOOL PIECE
R03	12/20/84	01-RS -P -2A	010476	SHAFT HAS APPARENTLY DROPPED	DISASSEMBLED SEAL OVAL SEAL WITH NE W PARTS ASSEMBLED TESTED SAT
R03	12/20/84	01-SI -P -1A	009728	MECHANICAL SEAL LEAKS,	REMOVED COUPLING SPOOLPIECE MECHANICAL SEAL ASS'Y AS PER PROCEDURE 050 0 11/24/84.CLEANED INSPECTED ALL PA RTS ASSEMBLED MECHANICAL SEAL ALIGN ED AND COUPLED MOTOR AND PUMP
R03	12/20/84	01-SS -HCV -102B	001794	REMOVE VALVE AND REPLACE WITH qualified valve.	REPLACED OLD VALVE WITH NEW AS PER EWR 80-07
R03	12/20/84	01-SW -PCV -100C	008265	VALVE HAS PACKING LEAK	ADJUSTED PACKING - PCV NOT LEAK VISUALLY.
R03	12/21/84	01-CH -FL -1	010123	INSTALL BORIC ACID FILTER	INSTALL NEW FILTER ASSEMBLY AND TORQUE DOWN VESSEL COVER
R03	12/21/84	01-CH -P -2B	010480	SOUNDS NOISY IN SLOW SPEED	OVERHUL PUMP REPLACED INTERNALS ASSEMBLED TAGGED SHOP SPARE
R03	12/21/84	01-DA - -64	008884	LINE PLUGGED, COULD NOT BLOW	UNPLUGGED BLOCKED LINE
R03	12/21/84	01-RC -HSS -164	008969	REMOVE FUNCTIONAL TEST	REMOVED SNUBBER IAW MMP-C-HSS-130 MARKED IAW MMP-C-HSS-171 WO 005973 SNUBBER FUNCTIONAL TEST PERFORMED BY WYLE 12/03/84 ACCEPTED.REINSTALL ED SNUBBER IAW MMP-C-HSS-130 12/04
R03	12/21/84	01-SHP-HSS -51A	009582	REMOVE FUNCTIONAL TEST	REMOVED SNUBBER IAW MMP-C-HSS-130 MARKED IAW MMP-C-HSS-171 WO 005973 SNUBBER FUNCTIONAL TEST BY WYLE 11-25-84.REJECTED SNUBBER WOULD NOT STROKE.INSTALLED NEW 12-09-84
R03	12/21/84	01-SHP-HSS -51B	006067	REMOVE & REINSTALL SNUBBER	REMOVED SNUBBER IAW MMP-C-HSS-130 MARKED IAW MMP-C-HSS-171 WO 005073 FUNCTIONAL TEST PERFORMED BY WYLE 11-11-84.REJECTED SNUBBER COULD NOT BE STROKED.INSTALLED NEW 12-06-84
R03	12/21/84	01-SHP-HSS -53A	009585	REMOVE FUNCTIONAL TEST	REMOVED SNUBBER IAW MMP-C-HSS-130 MARKED IAW MMP-C-HSS-130 WO 005973 SNUBBER FUNCTIONAL TEST PERFORMED BY WYLE REJECTED.SNUBBER WOULD NOT COMPRESS.REINSTALLED TEDTED NEW
R03	12/23/84	01-CH -P -2A	006343	PUMP WILL NOT PUMP	REMOVED PUMP FROM SYSTEM. REINSTALLED SHOP SPARE PUMP WITH NEW CASING GASKET.
R03	12/23/84	01-SI -MOV -1890C	006824	VALVE HAS EXCESSIVE SEAT LEAK- age.	DISASSEMBLED VALVE AND INSPECTED

DEPT	RETURNED TO SERVICE	MARK NUMBER	WC NUMBER	WO TITLE	HISTORY SUMMARY
					INTERNALS. LAPPED DISC AND SEATS AS NECESSARY. HAD 100X BLUEING.
R03	12/23/84	01-SW -F -10B	002796	LO -F PLACING PUMP IN ALERT RANGE.	REPLACED WITH SHOP SPARE. VERIFIED ROTATION AND COUPLED PUMP 12/15/84.
R03	12/25/84	01-RC -HCV -1556B	002019	VALVE LEAKS BY	CLEANED ON INSPECTED INTERNALS OF VALVE.
R03	12/25/84	01-RC -HCV -1556C	002020	VALVE LEAKS BY	DISASSEMBLED VALVE & INSPECTED INTERNALS LAP SEAT AND PLUG AS NECESSARY TO GET 100X BLUEING.
R03	12/25/84	01-SI - -241	008730	UNBOLT AND REMOVE BONNET AS per 2-PT-18.11.	DISASSEMBLED VALVE AND INSPECTED INTERNALS. INSTALLED NEW GASKET AND NDE STUDS AFTER OPS INSPECTION.
R03	12/25/84	01-SI - -242	008732	UNBOLT & REMOVE BONNET AS PER 2-PT-18.11	DISASSEMBLED VALVE & INSPECTED NEW INTERNALS. INSTALLED NEW GASKET AND NDE STUDS AFTER OPS INSPECTION.
R03	12/25/84	01-SI - -243	008731	UNBOLT & REMOVE BONNET AS PER 2-PT-18.11	DISASSEMBLED VALVE & INSPECTED INTERNALS. INSTALLED NEW GASKET & HAD NDE CHECK STUDS. HAD OPS INSPECT VALVE.
R03	12/25/84	01-SS -HCV -101B	001792	REMOVE VALVE AND REPLACE	REPLACED OLD VALVE WITH NEW. DISASSEMBLED VALVE SO WELDER CAN PURGE LINE.
R03	12/26/84	01-CH -FCV -1122	010865	FCV-1122 HAS EXCESSIVE GLAND	GLAND FOLLOWER WAS ALL THE WAY UP SHOWING ADJUSTMENT HAD NOT BEEN PERFORMED REMOVED 2 RINGS LOOKED NEW REPLACED WITH 2 RINGS ADJUSTED FOLLOWER
R03	12/26/84	01-FP -FNG -NA	006816	REVERSE SPECTACLE FLANGE	REVERSE SPECTACLE FLANGE TO BLANK POSITION THEN RETURNED TO NORMAL POSITION ON COMPLETION OF PT 16.4
R03	12/26/84	01-RC - -6	010942	PACKING LEAK	ADJUSTED PACKING
R03	12/26/84	01-RC - -69	010940	PACKING LEAK	TIGHTENED PACKING.
R03	12/26/84	01-RC - -77	010938	PACKING LEAK	ADJUSTED PACKING.
R03	12/26/84	01-RC - -84	010944	PACKING LEAK	TIGHTENED PACKING
R03	12/26/84	01-RC -HCV -1556B	010943	PACKING LEAK	TIGHTENED FITTINGS
R03	12/26/84	01-RC -RTD -MISC	010945	STEAM AT MECH JOINT	TIGHTENED FITTINGS
R03	12/26/84	01-RC -SV -1551A	010939	FLANGE LEAK	TIGHTENED FLANGE BOLTS.
R03	12/26/84	01-SI - -198	010498	VALVE HAS PACKING LEAK, ADJUST	TOOK EACH NUT UP 4 FLATS
R03	12/26/84	01-US -P -1A	002220	REPLACE PUMP CASING SEE	REPLACED PUMP
R03	12/27/84	01-CC -P -1C	010475	INBOARD SEAL LEAK	DISASSEMBLED INBOARD SEAL & REPLACED WITH NEW SEAL AND REPLACED SLEEVE BEARING.
R03	12/27/84	01-CH -P -2A	010892	SHEARED COUPLING REPAIR \ REPL ace as necessary.	REPLACED GRID ON COUPLING AND BOLTS
R03	12/27/84	01-CH -P -2B	010922	WILL NOT DEVELOP SUFFICIENT	ADJ. IMPELLER CLEAR TO .018"
R03	12/27/84	01-MS -TV -101C	010921	VALVE WILL NOT CYCLE	ELECTRICALLY CHECKED OPERATION OF SOV OPERATION WAS SAT BUT NO AIR IS REACHING THE SOV DUE A CHECK VALVE THAT IS STICKING UP STREAM FROM

DEPT	RETURNED TO SERVICE	MARK NUMBER	WO NUMBER	WO TITLE	HISTORY SUMMARY	
R03	12/28/84	01-MS -	-196	010999	PACKING LEAK-SOME ADJUSTMENT	ADJUSTED PACKING
R03	12/28/84	01-RC -	-11	011069	ADJUST PACKING (~60 DPM LEAK)	ADJUSTED PACKING
R03	12/28/84	01-RC -MOV	-1585	011065	HAS HIGH LEAKOFF TEMP.,	PACKING WAS NOT LEAKING AT TIME OF INSPECTION 12/26/84 ADJUSTED PACKING 12/27/84
R03	12/28/84	01-RC -MOV	-1586	011066	MOV HAS HI LEAKOFF TEMP.,	FOUND NO LEAK AS PER OPERATIONS 12/26/84 ADJUSTED PACKING 12/27/84
R03	12/28/84	01-RC -MOV	-1592	011067	PACKING LEAK	ADJUSTED PACKING
R03	12/29/84	01-CH -P	-2A	011103	ADJUST IMPELLER CLEARANCE	ADJUSTED IMPELLAR CLEARANCE

DEPT	RETURNED TO SERVICE	MARK NUMBER	WD NUMBER	WD TITLE	HISTORY SUMMARY
					THE SOV AIR TUBING HAS BEEN SWEATED
R03	12/27/84	01-RC -E -1A	003241	REMOVE AND INSTALL COLD LEG	MANWAYS REMOVED 10/20, DIAPHRAGMS REMOVED 10/24, DIAPHRAGMS & GASKETS REINSTALLED 11/5/84. HOT LEG MANWAY INSTALLED 12/7/84 AND TORQUED. COLD LEG MANWAY INSTALLED 12/7 & TORQUED
R03	12/27/84	01-RC -PCV -1455C	010917	ADJUST SPRING PRESSURE TO LIMIT leaking valve.	ADJUSTED SPRING
R03	12/27/84	01-RC -PCV -1456	010916	ADJUST SPRING PRESSURE TO LIMIT leaking valve.	ADJUSTED SPRING
R03	12/27/84	01-SI -MOV -1862C	010756	VALVE WILL NOT OPEN, ONLY GET	ADJUSTED LIMITS 12-20-84
R03	12/27/84	01-SI -MOV -1869A	006821	VALVE HAS EXCESSIVE SEAL LEAK-	CUT OLD VALVE OUT OF SYSTEM, WELD PREPED PIPE & VALVE ENDS. NDE PT WELD PREPS, NDE PT SAT. FITTED VLV & WELDED ROOT. NDE PT ON ROOT SAT. COMPLETED WELDING & CLEANED FOR VIS
R03	12/27/84	01-SI -MOV -1890B	006822	VALVE SEAT HAS EXCESSIVE LEAK- age.	DISASSEMBLED VALVE AND INSPECTED INTERNALS LAP SEAT & DIE AS NECESSARY. REPLACED MOST OF THE STUDS.
R03	12/27/84	01-SS -SOV -102B	010946	BONNET LEAK	TIGHTENED BONNET.
R03	12/28/84	01-CH -MOV -1381	010501	VALVE HAS PACKING LEAK, ADJUST	ADJUSTED PACKING.
R03	12/28/84	01-CH -P -2B	001597	REPLACE PUMP	REBUILT PUMP WD 3801010480 ALIGNED AND COUPLED 12/22/84
R03	12/28/84	01-RC -MOV -1587	011063	A LOOP BYPASS MOV HAS HI LEAK- off temperature.	FOUND NO LEAK AS PER OPERATIONS 12/26/84 ADJUSTED PACKING 12/27/84
R03	12/28/84	01-RC -MOV -1595	011068	HI LEAKOFF T (>200 DEG)	ADJUSTED PACKING
R03	12/28/84	01-RC -P -1C	011064	FLANGE LEAK BETWEEN PUMP	FLANGE DOES NOT APPEAR TO BE LEAKING THERE IS APPROXIMATELY 5 TO 7 GPM COMING OUT OF THE LEAKOFF HOLES ON THE HOUSING RING
R03	12/28/84	01-RS -P -1A	010878	UNCOUPLE/RECOUPLE	VOID:NOT REQUIRED, PROBLEM IN BREAKER.
R03	12/30/84	01-CC -P -1B	004999	1-CC-P-1B VENT VALVE NEEDS pipe cap.	INSTALLED PIPE CAP
R03	12/31/84	01-MS -SOV -101C	011121	BREAK AIR LINE TO TRIP VALVE	CUT INTO AIR LINE REPLACED 1-MS-SOV-101C. INSTALLED COUPLING IN LINE AT POINT OF CUT

MAINTENANCE OF SAFETY RELATED SYSTEMS DURING
OUTAGE OR REDUCED POWER PERIODS

UNIT NO. 2

MECHANICAL MAINTENANCE

DEPT	RETURNED TO SERVICE	MARK NUMBER	WO NUMBER	WO TITLE	HISTORY SUMMARY
R03	12/12/84	02-CH - -302	009773	VALVE HAS 100 DROPS/MIN LEAK	ADJUSTED PACKING
R03	12/12/84	02-FW -FDV -2488	008176	FIN HOLE LEAK ON BONNET	PIN AS NECESSARY TO STOP LEAK
R03	12/12/84	02-FW -FDV -2488	010025	VALVE HAS PACKING LEAK.	ADJUSTED PACKING
R03	12/26/84	02-CH -F -1A	010257	INSTALL VENT RIG	MOVE VENT RIG FROM GATE 16 TO GATE 15 AND INSTALL ON 2-CH-F-1A
R03	12/31/84	02-EE -EIG -2	011052	REMOVE PIPE PLUG FROM DRAIN	REMOVED PIPE PLUG FROM TURBOCHARGER CASING.

MAINTENANCE OF SAFETY RELATED SYSTEMS DURING
OUTAGE OR REDUCED POWER PERIODS

UNIT NO. 1

ELECTRICAL MAINTENANCE

DEPT	RETURNED TO SERVICE	MARK NUMBER	WO NUMBER	WO TITLE	HISTORY SUMMARY
R04	12/03/84	01-FW -MOV -151B	004484	DISCONNECT & RECONNECT MOV FOR valve maintenance.	DISCONNECTED MOV 10/24/84. VALVE RECONNECTED 10/26/84, BUT HAVE NOT CYCLED. CYCLED MOV-FW-151B. OK.
R04	12/03/84	01-FW -MOV -151D	004483	DISCONNECT & RECONNECT MOV FOR valve maintenance.	MOV DISCONNECTED COVER HAS 3 BOLTS MISSING 10/24/84. RECONNECTED MOV-CH 11/24/84. CYCLED MOV-FW-151-D. SAT.
R04	12/03/84	01-FW -MOV -151F	004485	DISCONNECT & RECONNECT MOV FOR valve maintenance.	MOV DISCONNECTED 10/24/84. VALVE RECONNECTED 10/26/84, BUT HAVE NOT CYCLED. CYCLED MOV-FW-151F, OK.
R04	12/03/84	01-RH -P -1A	010103	ADD OIL TO MOTOR	ADDED 1 QT OF OIL TO UPPER AND LOWER OIL POT 1-RH-P-1A. 12/2/84.
R04	12/03/84	01-SI -HCV -1852B	008547	ELECT DISCONNECT/RECONNECT	REMOVED SWITCHES & AIR LINE FROM SOV. MOUNTED LIMIT SW. ON SOV, DID NOT CYCLE. MECHANICS TAG ON AIR FOR REGULATOR. VALV CYCLED SAT 12/2/84. NO ELECT. DISCON. WAS REQUIRED.
R04	12/03/84	01-SI -HCV -1852C	008548	ELEC DISCONNECT/RECONNECT	REMOVED SWITCHES & AIR LINE FROM SOV. MOUNTED LIMIT SWITCH ON SOV. DID NOT CYCLE. MECHANIC TAG ON AIR FOR REGULATOR. VALVE CYCLED SAT 12/2/84. NO ELECT. DISCON. REQUIRED
R04	12/03/84	01-VG -TV -109A	009784	TV-VG-109A SOV IS NOT OPERATING	VALVE CYCLED SAT AS PER OPS (DAVID REED) 12/2/84 NO WORK PERFORMED 12/2/84
R04	12/05/84	01-CH -TK -1A	010130	TIC 1107 & TIC 1162 ARE PEGGED	BREAKER WAS IN OFF POSITION TURN BREAKER ON AND CHECK AMPS 9.1 AMPS
R04	12/05/84	01-CV -TV -150C	008425	ELECT DISCONNECT/RECONNECT TO allow maintenance on valve for PT-16.4	GOT INFORMATION OFF THE SOV AS THIS SOV IS TO BE REPLACED 10/25/84 STOCK# 0760423 NO ELECTRICAL DISCONNECTION NEEDED
R04	12/05/84	01-EE -B -1B	009796	BATTERY CHARGER B TROUBLE	ADJUSTED BATTERY CHARGER VOLTAGE AND CLEARED TROUBLE ALARM
R04	12/05/84	01-SW -MOV -104A	003289	ELECT. DISCONNECT & RECONNECT	DISCONNECTED MOTOR LEADS AND LIMITS WITCHES/RECONNECTED MOTOR LEADS AND LIMIT SWLTHCHES
R04	12/06/84	01-CH -MOV -1289A	010306	VALVE WILL NOT CYCLE ELECTRIC - ITY.	CYCLED VALVE AND FOUND IT TO BE WORKING PROPERLY
R04	12/06/84	01-DG -TV -108B	009742	DISCONNECT/RECONNECT VALVE	MECHANICALLY REMOVED SOLENOID & LIMIT SWITCH 11/24/84. MECHANICALLY INSTALLED SOLENOID & LIMIT SWITCHES ON 1-PG-TV-108B. CYCLED VALVE SEVERAL TIMES, SAT.
R04	12/06/84	01-EE -EDG -3	010211	SPEED SENSING LINE CIRCUIT #1	REPLACED SPEED SENSING MAY UNIT IN #3 EDG 12-5-84 MADE MINOR ADJUSTMENT ON CKT
R04	12/06/84	01-EPH-BKR -15H9	004105	REPLACE PIN AND SPRING	REPLACED SPRING AND INSTALLED NEW COTTER PINSERIAL # 44251-E2-3D3/69 SPRING:4604936 COTTER PIN:4604937
R04	12/06/84	01-FW -P -4A	008078	MOTOR GROUNDED/REPAIR OR replace as necessary.	BRIDE AND MEGGENED MTR FOUND L-3 FEEDER LEAD GROUNDED AT PECKER HEAD COULD NOT GET GROUND CLEAR REPAIRED CABLE AT MCC

DEPT	RETURNED TO SERVICE	MARK NUMBER	WO NUMBER	WO TITLE	HISTORY SUMMARY
R04	12/06/84	01-IA -TV -101A	008429	ELECT DISCONNECT/RECONNECT	DISCONNECTED ELECTRICALLY/RECONNECTED ELECTRICALLY
R04	12/06/84	01-IA -TV -101B	008428	ELECT DISCONNECT/RECONNECT	DISCONNECTED SOLENOID & LIMIT SWITCHES FROM MOUNTING BRACKET, TIED BACK BOTH SOLENOID & LIMIT SWITCH OUT OF THE WAY. VALVE CYCLES OK WITH PROPER LGTS.
R04	12/06/84	01-RC -HCV -1556B	002054	DISCONNECT AND RECONNECT VALVE	REMOVED LIMIT SWITCHES/RECONNECTED LIMIT SWITCHES/TESTED, TESTED SATISFACTORY
R04	12/06/84	01-RC -HCV -1556C	002053	DISCONNECT AND RECONNECT VALVE	REMOVED LIMIT SWITCHES. NO ELECTRICAL DISCONNECTED REQUIRED. FIXED IT REPLACED LIMITS & SOV. VALVE TESTED SAT. NO ELECT. DISCONNECTION REQUIRED.
R04	12/06/84	01-SI -MOV -1869A	007378	DISCONNECT/RECONNECT MOV FOR valve maintenance.	DISCONNECTED MOTOR LEADS & CONTROL LEADS. MOV IS NOT MARKED & FLEX AROUND MOTOR LEADS IS BROKEN. NEED A PIECE 3' LONG 3/4" FLEX. RECONNECTED MOV 12/5/84.
R04	12/06/84	01-SI -MOV -1890B	007375	DISCONNECT/RECONNECT MOV FOR valve maintenance.	DISCONNECTED MOTOR ELECTRICALLY; REMOVED MOTOR; RECONNECTED MOTOR; CYCLED MOTOR CYCLED SATISFACTORY
R04	12/06/84	01-SW -MOV -104C	003299	ELECT. DISCONNECT & RECONNECT valve.	DISCONNECTED MOTOR LEADS AND LIMIT SWITCHES/RELUGGED LEADS/RECONNECTED MOTOR LEADS AND LIMIT SWITCHES
R04	12/06/84	01-SW -MOV -104D	003288	ELECT. DISCONNECT & RECONNECT valve.	DISCONNECTED MOTOR/RELUGGED LEADS/RECONNECTED MOTOR
R04	12/06/84	01-SW -MOV -105B	003300	ELECT. DISCONNECT & RECONNECT valve.	DISCONNECTED LIMIT SWITCHES AND MOTOR R LEADS/RELUGGED LEADS/RECONNECTED MOTOR
R04	12/06/84	01-SW -MOV -105D	003285	ELECT. DISCONNECT & RECONNECT valve.	DISCONNECTED MOTOR/RECONNECTED MOTOR R
R04	12/08/84	01-BD -TV -100C	010338	OPEN INDICATION FOR TV-BD-100C is not operating.	VOID TO BE COMPLETED ON WO 38010174
R04	12/10/84	01-BD -TV -100C	010174	TV-BD-100C WILL NOT INDICATE	REARRANGED WIRE LEADS THAT WERE BINDING SWITCH
R04	12/10/84	01-CV -TV -150A	008423	ELECTRICALLY DISCONNECT/RECONNECT to allow maintenance on valve for PT-16.4	LEFT LIMIT SW ON BRACKET REMOVED BRACKET FROM 1-CV-TV-150A. AIR LINE TO REG FROM SOLENOID IS PINCHED. NEEDS REPLACED. INSTALLED LS BRACKETS. REPLACED SOV ON BRACKET
R04	12/10/84	01-CV -TV -150B	008426	ELECT DISCONNECT/RECONNECT TO allow maintenance on valve for PT-16.4	LEFT LIMIT SW ON BRACKET AND REMOVED BRACKET FROM 1-CV-TV-150B REPLACED LIMIT SW BRACKET AND CONNECTED AIR LINES TO SOV AND TO TV ADJUSTED LIMITS ON TV
R04	12/10/84	01-EPL-BKR -1J1	010148	BREAKER HANDLE WILL NOT ENGAGE	ADJUSTED HANDLE FOR PROPER ALIGNMENT WITH BREAKER 12-9-84
R04	12/10/84	01-SW -MOV -104A	007189	PERFORM PMS SW-MOV-E/C1	PERFORMED PMS TO STEP 19. PMS COMPLETED 12/6/84.

DEPT	RETURNED TO SERVICE	MARK NUMBER	WO NUMBER	WO TITLE	HISTORY SUMMARY
R04	12/10/84	01-SW -MOV -104B	007191	PERFORM PMS SW-MOV-E/C1	PERFORMED PMS TO STEP '19'
R04	12/10/84	01-SW -MOV -104C	007192	PERFORM PMS SW-MOV-E/C1	PERFORMED PMS TO STEP 19.
R04	12/10/84	01-SW -MOV -104D	007193	PERFORM PMS SW-MOV-E/C1	PMS ON SW-104D
R04	12/10/84	01-SW -MOV -105B	007196	PERFORM PMS SW-MOV-E/C1	PMS MOV CHECKED GASKETS & GREASE ONLY. NEEDS LOAD CHECK & CYCLED FOR VERIFICATION OF LGTS.
R04	12/10/84	01-SW -MOV -105C	007197	PERFORM PMS SW-MOV-E/C1	PMS CHECKED GASKETS & GREASE ONLY. NEED LOAD CHECK & CYCLED FOR LGT VERIFICATION.
R04	12/10/84	01-SW -MOV -105D	007198	PERFORM PMS SW-MOV-E/C1	PMS MOV-SW-105D.
R04	12/11/84	01-CH -FCV -1160	010329	DISCONNECT/RECONNECT FOR MECH.	REMOVED & INSTALLED INSTRUMENTATION CHECK VALVE STROKE WITH IMP-C-G-34
R04	12/11/84	01-CS -MOV -103A	007098	PERFORM PMS CS-MOV-E/R1	PERFORMED PMS CS-MOV-E-R1, COMPLETED 12/10/84. PERFORMED TEMP-C-MOV-129, COMPLETED 12/10/84.
R04	12/11/84	01-CS -MOV -103B	007099	PERFORM PMS CS-MOV-E/R1	PERFORMED PMS CS-MOV-E/R1 COMPLETED 12/10/84. PERFORMED TEMP-C-MOV-129, COMPLETED 12/10/84.
R04	12/11/84	01-CS -MOV -103C	007100	PERFORM PMS CS-MOV-E/R1	PERFORMED PMS CS-MOV-E/R1, COMPLETED ON 12/10/84. PERFORMED TEMP-C-MOV-129, COMPLETED ON 12/10/84.
R04	12/11/84	01-CS -MOV -103D	007105	PERFORM PMS CS-MOV-E/R1	PERFORMED PMS CS-MOV-E/R1 COMPLETE 12-10-84 PERFORMED TEMP-C-MOV-129 COMPLETED 12-10-84
R04	12/11/84	01-EE -ES -15H5	009423	REPLACE 43X SWITCH 24LSR ON cubicle 15H5.	SWITCH REMOVED & GIVEN TO JOE DEMARCO TO BE SENT OUT FOR REPAIRS 11/21/84. REPLACED AUXILIARY SHUT-DOWN PANEL SWITCH TO 1-CH-P-1A, 12/10/84.
R04	12/11/84	01-EPH-BKR -15H10	007449	EMP-P-RT-22 PROTECTIVE RELAY maintenance for cubicle.	MEGGERED, RELAYS TESTED, FUSED CIRCUIT, OPERATIONAL CHECKED OK.
R04	12/11/84	01-EPH-BKR -15H10	007495	EMP-P-RT-18 PROTECTIVE RELAY maintenance for cubicle.	MEGGERED, RELAYS TESTED, FUSES CHARGED, OPERATIONAL CHECK OK.
R04	12/11/84	01-EPH-BKR -15H5	007452	EMP-P-RT-25 PROTECTIVE RELAY maintenance for cubicle.	MEGGERED, RELAYS TESTED, FUSES CHANGED, OPERATIONAL TESTED OK.
R04	12/11/84	01-EPH-BKR -15H6	007489	EMP-P-RT-31 PROTECTIVE RELAY maintenance for cubicle.	MEGGERED, RELAY TESTED, CHARGED FUSES, OPERATIONAL TEST.
R04	12/11/84	01-EPH-BKR -15H7	007498	EMP-P-RT-21 PROTECTIVE RELAY maintenance for cubicle.	MEGGERED, RELAYS TESTED, FUSES CHANGED, OPERATIONAL CHECKED.
R04	12/11/84	01-EPH-BKR -15J2	007490	EMP-P-RT-32 PROTECTIVE RELAY maintenance for cubicle.	MEGGERED, RELAY TESTED, FUSES CHANGED, OPERATIONAL TESTED.
R04	12/11/84	01-EPH-BKR -15J3	007444	EMP-P-RT-35 PROTECTIVE RELAY maintenance for cubicle.	MEGGERED, RELAYS TESTED, OPERATIONAL CHECKED, CHANGED FUSES.
R04	12/11/84	01-EPH-BKR -15J5	007453	EMP-P-RT-26 PROTECTIVE RELAY maintenance for cubicle.	MEGGERED, RELAYS TESTED. FUSES CHANGED, OPERATIONAL TESTED OK.

DEPT	RETURNED TO SERVICE	MARK NUMBER	WO NUMBER	WO TITLE	HISTORY SUMMARY
R04	12/11/84	01-EPH-REL -1JUV	007438	EMP-P-RT-52 PROTECTIVE RELAY maintenance for cubicle.	RELAYS TESTED, FUSES CHANGED, OPERATIONAL TESTED.
R04	12/11/84	01-EPH-REL -85EG2	007447	EMP-F-RT-38 PROTECTIVE RELAY maintenance for cubicle.	MEGGERED, RELAYS TESTED, OPERATIONAL CHECKED, FUSES CHANGED.
R04	12/11/84	01-MS -SOV -102B	010189	REPAIR WIRE CONNECTION ON terminals.	REPAIRED WIRE CONNECTION ON TERMINAL 13 ON ROTOR SW.12-10-84 1-MS-SOV-102B
R04	12/11/84	01-RS -MOV -156B	007219	PERFORM PMS RS-MOV-E/R1	PERFORMED PMS RS-MOV-E/R1 SAT AND CYCLED SAT 12-10-84
R04	12/12/84	01-CH -FFT -1113	009910	REPAIR DAMAGED WIRES	REPAIRED DAMAGED CABLES AND INSTALLED NEW FLEX FOR FT 1113 COMPLETE 12-11-84
R04	12/12/84	01-CH -LCV -1115B	007069	PERFORM PMS CH-MOV-E/R1	COMPLETED PROCEDURE CH-MOV-E/R1 AND TEMP-C-MOV-12912-11-84
R04	12/12/84	01-CH -LCV -1115C	007070	PERFORM PMS CH-MOV-E/R1	COMPLETED PROCEDURE CH-MOV-E/R1 AND TEMP-C-MOV-129
R04	12/12/84	01-CH -LCV -1115E	007071	PERFORM PMS CH-MOV-E/R1	COMPLETED PROCEDURE CH-MOV-E/R1 AND TEMP-C-MOV-129 12-11-84
R04	12/12/84	01-CH -MOV -1115B	010395	MOTOR DOES NOT DISENGAGE WHEN valve closes.	CYCLED VALVE OPEN-CLOSED MOTOR AND DRIVE GEARS LIMITED NO UNUSUAL LOUD NOISE OR VIBRATION
R04	12/12/84	01-CH -MOV -1275A	007871	ELECT DISCONNECT/RECONNECT	DISCONNECTED MOV ON 10-15-84 RECONNECTED LIMITS AND MOTOR LEADS AND ADJUSTED LIMITS CYCLED VALVE SAT
R04	12/12/84	01-CH -MOV -1289A	010226	DO NOT GET FULL CLOSED INDICATION in control room.	CYCLED MOV-CH-1289A FOUR TIMES FLA 2.7 ACTUAL 3.4 VALVE NEEDS NO ADJUSTMENTS ELECTRICALLY 12-12-84 MECHANICAL ADJUSTMENTS ON PACKING WERE MADE BY MECHS 12-12-84
R04	12/12/84	01-CS -MOV -100A	007090	PERFORM PMS CS-MOV-E/R1	COMPLETED PMS ALL BUT AMP CHECKS 10-20-84 CYCLED VALVE SAT 12-11-84
R04	12/12/84	01-CS -MOV -100B	007091	PERFORM PMS CS-MOV-E/R1	COMPLETED PMS ALL BUT AMP CHECKS 10-20-84 CYCLED VALVE SAT 12-11-84
R04	12/12/84	01-CS -MOV -102A	007096	PERFORM PMS CS-MOV-E/R1	COMPLETED PMS ALL BUT AMP CHECKS 10-20-84 CYCLED VALVE SAT 12-11-84
R04	12/12/84	01-CS -MOV -102B	007097	PERFORM PMS CS-MOV-E/R1	COMPLETED PMS ALL BUT AMP CHECKS 10-20-84 CYCLED VALVE SAT 12-11-84
R04	12/12/84	01-EE -EDG -3	010444	REMOVE WIRE FROM LOUVERS AND reconnect actuators.	REMOVED WIRE FROM LOUVERS AND RECONNECTED ACTUATORS 12-11-84
R04	12/12/84	01-SI -MOV -1885A	007225	PERFORM PMS SI-MOV-E/R1	PERFORM PMS BRIDGE AND MEGGERED NEEDS A LOAD CHECK AND LST VERIFICATIONS CYCLED VALVE SAT 12-11-84
R04	12/12/84	01-SI -MOV -1885B	007226	PERFORM PMS SI-MOV-E/R1	PMS BRIDGE AND MEGGERED SAT NEEDS LOAD CHECK AND LST VERIFICATION 10-23-84 CYCLED VALVE SAT 12-11-84
R04	12/12/84	01-CH -MOV -1115D	007072	PERFORM PMS CH-MOV-E/R1	COMPLETED PROCEDURE CH-MOV-E/R1 AND TEMP-C-MOV-129 12-11-84
R04	12/12/84	01-VS -E -4A	011222	REPAIR LEADS TO CHILLER BR 11-11-151	1H1-151 - BO ON HIGHSIDE OF BREAKER BURNED IN TOO, BO TERMINAL DAMAGED, REMOVED BREAKER FEEDING 1-VS-E-4C (2H1-151) AND INSTALLED 1H1-151. RETURNED 1-VS-E-4A TO SERVICE.

DEPT	RETURNED TO SERVICE	MARK NUMBER	WO NUMBER	WO TITLE	HISTORY SUMMARY
R04	12/12/84	01-SI -MOV -1825D	007230	PERFORM PMS SI-MOV-E/R1	PMS BRIDGE AND MEGGERED SAT NEEDS LOAD CHECK AND LGT VERIFICATI ON 10-23-84 CYCLED VALVE SAT 12-11-84
R04	12/12/84	01-SI -MOV -1890A	007232	PERFORM PMS SI-MOV-E/R1	PMS BRIDGE AND MEGGERED SAT.NEEDS LOAD CHECK AND LGT VERIFICATION 10-23-84 CYCLED VALVE SAT 12-11-84
R04	12/12/84	01-SW -MOV -103A	003306	ELECT. DISCONNECT + RECONNECT motor.	DISCONNECTED MOTOR ELECTRICALLY DISCONTINUED PROCEDURE AT STEP 5.7 AS DWIELS CONST REPLACED MOTOR OPERATOR ON DC 82-35
R04	12/12/84	01-SW -MOV -103B	003303	ELECT. DISCONNECT & RECONNECT motor.	DISCONNECTED MOTOR ELECTRICALLY DISCONTINUED PROCEDURE AT STEP 5.7 AS DANIELS CONST IS REPLACING MOTOR OPERATOR ON DC 82-35
R04	12/12/84	01-SW -MOV -103C	003278	ELECT. DISCONNECT & RECONNECT motor.	DISCONNECTED MOTOR ELECTRICALLY 10-28-84 DISCONTINUED PROCEDURE AT STEP 5.7 AS DANIELS CONST IS REPLAC ING MOTOR OPERATOR ON DC 82-35 11-26-84
R04	12/12/84	01-SW -MOV -103D	003297	ELECT. DISCONNECT & RECONNECT motor.	DISCONNECTED MOTOR ELECTRICALLY 12-22-84 DISCONTINUED PROCEDURE AT STEP 5.7 AS DANIELS CONST REPLACED MOTOR OPERATOR ON DC 82-35
R04	12/13/84	01-BD -TV -100C	010556	SET LIMIT SWITCH	ADJUSTED TV-BD-100C, CYCLED SEVERAL TIMES. NO OTHER PROBLEMS FOUND.
R04	12/13/84	01-FW -MOV -151A	007118	PERFORM PMS FW-MOV-E/R1	CYCLE VALVE CHECK LIGHTS INDICATION AND AMPS
R04	12/13/84	01-FW -MOV -151B	007119	PERFORM PMS FW-MOV-E/R1	PERFORMED PMS SAT 11-30-84
R04	12/13/84	01-FW -MOV -151D	007121	PERFORM PMS FW-MOV-E/R1	PERFORMED PMS ON MOV-FW-151D 11-30-84
R04	12/13/84	01-FW -MOV -151F	007123	PERFORM PMS FW-MOV-E/R1	REMOVE MEGGER MOTOR AND TAKE LOAD C CHECK WHEN CYCLED VALVE 11-30-84
R04	12/13/84	01-VP -TV -102A	010413	VALVE WILL NOT INDICATE, FULLY	ADJUSTED LIMITS ON SV-TV-102A. CYCLED VALVE SEVERAL TIMES. VLV CYCLED SAT. COMPLETED 12-12/84. COMPLETED EMP-C-SOV-38.
R04	12/14/84	01-CH -HCV -1307	010302	SOLENOID NEEDS TO BE MOUNTED	RE MOUNTED SOV WITH 1/4" U-BOLT
R04	12/14/84	01-RF -BKR -A1	009646	MANUFACTURE LATCHING PIN ON	MANUFACTURED PART AS ATTACHED DRAWING.
R04	12/14/84	01-SI -M -1A	009726	ELECTRICALLY DISCONNECT/RECON-nect motor.	DISCONNECTED 1-SI-P-1A 11/22/84. RECONNECTED 12/4/84. NEED 4 SHEET METAL SCREWS AND OIL. ADDED OIL AND HAD ROTATION CHECK CORRECT.
R04	12/14/84	01-VS -F -58A	010370	PLACE 1-VS-F-58A POWER SUPPLY	PLACED 1-VS-F-58A ON ALTERNATE SUPPLY 12/8/84.
R04	12/16/84	01-CH -M -2A	010623	MOTOR RUNS IN WRONG DIRECTION	REVERSED MOTOR LEAD (SLOW) AT CONTROLLER. 12/14/84.

DEPT	RETURNED TO SERVICE	MARK NUMBER	WO NUMBER	WO TITLE	HISTORY SUMMARY
R04	12/16/84	01-RC -MOV -1590	009135	MOVE CONDUIT THAT INTERFERES with snubber removal.	REMOVED CONDUIT & DISCONNECTED MOV FOR MECHANICS 11/6/84. RECONNECTED VALVE, REPLACED CONDUIT. 12/12/84. COMPLETED PROCEDURE 12/14/84, VALVE SATISFACTORY.
R04	12/16/84	01-RC -MOV -1591	001088	REPLACE MOTOR TO-	DISCONNECTED MOV & REPLACED PINION KEY. RECONNECTED MOV 10/25/84. COMPLETED PROCEDURE 12/14/84. VALVE SAT.
R04	12/16/84	01-SS -HCV -101B	002100	REMOVE AND REPLACE SWITCHES FOR valve replacement.	DISCONNECTED SOV AIR LINE & CUT OFF AIR FROM HCV. PULLED LIMIT SWITCH AWAY FROM HCV. REPLACED & ADJUSTED LIMIT SWITCHES, TESTED OK. 12/16/84
R04	12/16/84	01-SS -HCV -102B	002102	REMOVE AND REPLACE SWITCHES FOR valve replacement.	DISCONNECTED AIR LINE FROM SOV & CUT AIR OFF. REMOVED LIMIT SWITCH INSTALLED LIMITS ON 102B & ADJUSTED LIMITS BUT DID NOT TEST OR CHECK LGT VERIFICATION. TESTED OK 12/16.
R04	12/17/84	01-BD -TV -100C	010702	NO INDICATION IN THE OPEN	REPLACED SNAPLOCK SWITCH AND CYCLED VALVE SAT 12/17/84.
R04	12/17/84	01-CP -MOV -100	007089	PERFORM PMS CP-MOV-E/C1	PERFORMED PMS - CP-MOV-E/C1
R04	12/17/84	01-CW -MOV -106A	007110	PERFORM PMS CW-MOV-E/C1	PERFORMED PMS ON 1-CW-MOV-106A, 10/7/84. VALVE CYCLED SAT 12/12/84.
R04	12/17/84	01-RC -PCV -1456	010698	REPAIR LOWER LIMIT SWITCH	REPLACED LIMIT SWITCH WITH NEW ONE ON 1-RC-PCV-1456. 12/17/84. CYCLED VALVE SEVERAL TIMES, CONTROL ROOM CYCLED SAT.
R04	12/17/84	01-SI -MOV -1890B	007233	PERFORM PMS SI-MOV-E/R1	PMS BRIDGE & MEGGER SAT. NEEDS LOAD CHECK AND LGT VERIFICATION 10/23/84 VALVE CYCLED SAT 12/16/84.
R04	12/17/84	01-SW -MOV -101B	007184	PERFORM PMS SW-MOV-E/C1	PMS PERFORMED
R04	12/17/84	01-SW -P -10B	010616	ELECT DISCONNECT/RECONNECT motor.	DISCONNECTED LEADS 12/14/84. ONE SCREW & NUT NEEDED FOR LEADS 10X24 1/2" LONG. RECONNECTED MOTOR 1-SW-P -10B 12/14/84. BRIDGED & MEGGERED. LOAD CHECKED. 12/15/84.
R04	12/17/84	01-VS -P -1C	009004	DISCONNECT/RECONNECT MOTOR	DISCONNECTED MOTOR LEADS 11/4/84, RECONNECTED MOTOR LEADS, REPAIRED FLEX, BRIDGED & MEGGERED MOTOR 11/9/84. RAN MOTOR & TOOK AMP READINGS.
R04	12/19/84	01-BS -DR -NA	010320	ROLL-UP DOOR WILL NOT CLOSE.	RESET BKR. MOTOR OPERATES BUT SPROCKET WHICH POWERS THE DOOR HAS JUMPED OFF. SUBMITTED W.O. TO MECHS TO CHECK DOOR TRACKS.
R04	12/19/84	01-CH -M -2A	010658	INSPECT AND REPAIR MOTOR	DISASSEMBLED MOTOR 12/15/84. RECONNECTED & TEST RAN ALSO CHECKED ON

DEPT	RETURNED TO SERVICE	MARK NUMBER	WO NUMBER	WO TITLE	HISTORY SUMMARY
					ROTATION ON BOTH SPEEDS 12/17/84. REPLACED BEARINGS IN MTR 12/15/84. TEST RAN COUPLED SAT 12/18/84.
R04	12/19/84	01-EPH-BKR -15J4	004125	REPLACE PIN AND SPRING	REPLACED COTTER AND SPRING 12-18-84 SPRING 4604936 COTTER PIN 4604937 MFG DATE 4/69 SERIAL NUMBER 44251-F 2-1-4B
R04	12/20/84	01-RS -M -2A	009492	ELECTRICALLY DISCONNECT AND reconnect for pump maintenance.	DISCONNECTED MOTOR AND ASSOCIATED ELEC HOOK-UPS 11-17-84 NEED CLEAN LEAD WITH SOLVENT BEFORE RECONNECTING. RECONNECTED MOTOR AND GROUND HEATERS VIB LIFT 12-4-84
R04	12/20/84	01-SW -MOV -103D	010848	PERFORM TEMP-C-MOV-129 AND cycle valve.	PERFORMED EMP-C-MOV-129 COMPLETED 12-20-84
R04	12/27/84	01-BD -TV -100C	010926	VALVE WILL NOT INDICATE OPEN	FOUND SNAP SWITCH BOUND ADJUSTED EVERYTHING WORKS SAT AFTER CYCLED 12/22/84
R04	12/27/84	01-CH -LCV -1460A	010615	VALVE WILL NOT REMAIN OPEN	REPLACED SOLENOID VALVE. 43 SWITCH IN CNRM MADE-UP IN AUTO POSITION. SWITCH IS JUMPED AT THIS TIME 12/16. PROBLEM FOUND TO BE A WIRE. REPAIRED BY DANIELS. CHECKED SAT.
R04	12/27/84	01-CH -MOV -1115B	010572	VALVE FAILED TO DEPRATE.	CHANGED CONTACT SWITCH ON MCC STARTER.
R04	12/27/84	01-EE -EDG -3	010701	THE GENERATOR SPEED CONTROL governor motor is inoperative.	REPLACED GOVERNOR CONTROL MTR. WINDING OPEN IN MOTOR LOWER CIRCUIT ON OLB MTR. OPERATED GOVERNOR CONTROL IN RAISE & LOWER LOCALLY. MTR OPERATED SAT.
R04	12/27/84	01-EPH-BKR -15H4	007497	EMP-P-RT-20 PROTECTIVE RELAY maintenance for cubicle.	MEGGERED, RELAYS TESTED, FUSES CHANGED, OPERATIONAL TESTED. MATERIALS USED OT-30 SHANNUT FUSE: QTY 4 PO# SY09547
R04	12/27/84	01-EPH-BKR -15H5	010350	OPERATIONAL CHECK 43X ON 15H5	CHECKED OUT 43X PER ESK-59
R04	12/27/84	01-EPH-BKR -15J4	007454	EMP-P-RT-30 PROTECTIVE RELAY	MEGGERED, RELAY TEST, CHANGED FUSES, OPERATIONAL CHECKED. MATERIALS USED SHANNUT OT 30 AMP QUANTITY 4 PO# SY-09247 STOCK # 0325248
R04	12/27/84	01-RS -MOV -156A	007215	PERFORM PMS RS-MOV-E/R1	COMPLETED PMS 12-22-84 CYCLED VALVE SAT 12/22/84
R04	12/27/84	01-SI -MOV -1842	008549	ELEC DISCONNECT/RECONNECT motor.	MOV DISCONNECTED. MOV NEEDS TO BE MARKED. ELECTRICALLY RECONNECTED MOTOR LEADS 12/11/84. RECONNECTED LIMIT SWITCH LEADS 12/16/84. PERFORMED PROCEDURE EMP-C-MOV-11 & 129
R04	12/27/84	01-SI -MOV -1862B	007171	PERFORM PMS SI-MOV-E/R1	PERFORMED PMS AND CYCLED VALVE SAT 12/22/84
R04	12/27/84	01-SI -MOV -1863A	007172	PERFORM PMS SI-MOV-E/R1	COMPLETED PMS CYCLED VALVE SAT 12/22/84
R04	12/27/84	01-SW -MOV -103A	010845	PERFORM TEMP-C-MOV-129	PERFORMED EMP-C-MOV-129 COMPLETED 12-20-84

DEPT	RETURNED TO SERVICE	MARK NUMBER	WO NUMBER	WO TITLE	HISTORY SUMMARY
R04	12/02/84	01-CC -F -2A	010098	TAG OUT, DETERMINATE, REPAIR	MEGGER MTR AND CABLE REPLACE FLEX I INSTALL NEW CABLE C CONDULET SPLICE CABLES IN C MAKE UP MTR LEADS
R04	12/03/84	01-RS -DR -NA	010102	CLOSE PUSHBUTTON INSIDE CONT.	CHECKED ALL PUSH BUTTONS ON PERSON- NEL HATCH, FOUND NO PROBLEM WITH SWITCHES. 12/2/84.
R04	12/03/84	01-CV -TV -150D	008424	ELECT. DISCONNECT/RECONNECT TO allow maintenance valve.	LEFT LIMIT SWITCH ON BRACKET & RE- MOVED BRACKET FRO 1-CV-TV-150D. INSTALLED BRACKET & LIMIT SW. ON TV-150D (10/24) AIR LINE TO REGULA- TOR & SOLENOID NEED TO BE REPLACED
R04	12/27/84	01-CH -MOV -1381	010538	VALVE WILL NOT SHUT COMPLETELY	INSTALLED NEW TORQUE SWITCH 12/23/ 84.
R04	12/27/84	01-VS -ADD -105B	010852	DAMPER FAILS TO CLOSE WHEN given the proper signal	DAMPER CYCLED, OPERATED FINE.
R04	12/27/84	01-SW -MOV -103B	010846	PERFORM TEMP-C-MOV-129 AND cycle valve.	PERFORMED EMP-C-MOV-129 COMPLETED 12-20-84
R04	12/27/84	01-SW -MOV -103C	010847	PERFORM TEMP-C-MOV-129 AND cycle valve.	PERFORMED EMP-C-MOV-129 COMPLETED 12-20-84

MAINTENANCE OF SAFETY RELATED SYSTEMS DURING
OUTAGE OR REDUCED POWER PERIODS

UNIT NO. 2

ELECTRICAL MAINTENANCE

MONTH/YEAR December, 1984

NONE DURING THIS REPORTING PERIOD.

MAINTENANCE OF SAFETY RELATED SYSTEMS DURING
OUTAGE OR REDUCED POWER PERIODS

UNIT NO. 1

INSTRUMENT MAINTENANCE

VERCO SAFETY RELATED DURING REDUCED POWER SORTED BY UNIT AND DEPARTMENT
 FROM 12/01/84 THRU 12/31/84
 UNIT 01 SURRY

DEPT	RETURNED TO SERVICE	MARK NUMBER	WO NUMBER	WO TITLE	HISTORY SUMMARY
T22	12/02/84	01-NI -DET -43	003201	CALIBRATE N-43	FOUND LOWER SECTION DEVIATION ALARM SATISFACTORY DURING REFUELING CALIBRATION CAL050
T22	12/02/84	01-SI -FI -1963	004345	INDICATES FLOW WITH NO SI pumps running.	REFUELING CALIBRATION SHOWED NO PROBLEM WITH TRANSMITTER
T22	12/02/84	01-SI -FI -962	006305	PERFORM REFUELING LOOP	PERFORMED REFUELING CAL ON TRANSMITTER AND INDICATOR COMPLETED SAT

DEPT	RETURNED TO SERVICE	MARK NUMBER	WO NUMBER	WO TITLE	HISTORY SUMMARY
T22	12/02/84	01-VG -RM -131-2	010105	FAILURE LIGHT ON. DO NOT KNOW source of failure.	FIND EXPECTED CHECK SOURCE RESPONSE VALVE TO BE INCORRECT HIGH. ENTERED CORRECT SETPOINT AND PERFORMED CHECK SOURCE ACTIVATION SATISFACTORY
T22	12/03/84	01-CH -FCV -1122	008467	AIR LINE FROM CONTROLLER TO operating diaphragm is broken.	INSTALLED NEW FITTING B-4-RA-2 REDUCING ADAPTER.
T22	12/04/84	01-CH -LI -112	005734	PERFORM REFUELING LOOP	PERFORMED REFUELING CALIBRATION ON LOOP. CHECKED SAT NO ADJUSTMENT REQUIRED PT SENT TO ENGINEERING
T22	12/04/84	01-RC -RTD -432C	007919	CHECK RTD, VERIFY INSTALLATION	CHECKED CONTINUITY OF RTD AND INSULATION CHECKS
T22	12/04/84	01-GW -RI -130-2	009332	LIGHT CHECK DOES NOT WORK	RESET PROCESSOR RETURNED TO SERVICE AFTER REPLACING CONTROL BOARD
T22	12/04/84	01-LM -PT -101A	008817	REPLACE DEFECTIVE TRANSMITTER.	REMOVED REMARKED TRANSMITTER PERFORMED LOOP CALIBRATION ADJUSTED RECORDER AND TRANSMITTER OPERATION CHECKED SAT
T22	12/04/84	01-RC -LI -459	005688	PERFORM REFUELING LOOP	TRANSMITTER OUTPUT WITHIN TOLERANCE BUT OUTPUT WAS ADJUSTED TO BRING OUTPUT CLOSER TO DESIRED VALUES. LM-1-459 WAS READING OUT OF SPECS A DJUSTED LC-1-459E UNSTABLE REPLACED
T22	12/04/84	01-RC -LI -478	005773	PERFORM REFUELING LOOP	PERFORMED REFUELING CALIBRATION ADJUSTED LM-1-478, LC-1-478B OUTPUT #2 OF LC-1-478D, LM-1-478A AND FM-478C COMPLETED REFUELING CALIBRATION
T22	12/04/84	01-RC -LI -488	005774	PERFORM REFUELING LOOP	PERFORMED REFUELING CALIBRATION ADJUSTED LC-1-488D AND FM-1-486C COMPLETED REFUELING CALIBRATION
T22	12/04/84	01-RC -LI -498	005775	PERFORM REFUELING LOOP	PERFORMED REFUELING CALIBRATION, ADJUSTED LC-1-498B & FM-1-496C.
T22	12/04/84	01-RC -RTD -411D	007922	CHECK RTD VERIFY INSTALLATION	CHECKED CONTINUITY OF RTD AND INSULATION CHECK
T22	12/04/84	01-RC -RTD -412C	007930	CHECK RTD VERIFY INSTALLATION	CHECKED CONTINUITY OF RTD AND INSULATION CHECK
T22	12/04/84	01-RC -RTD -421D	007933	CHECK RTD VERIFY INSTALLATION	CHECKED CONTINUITY OF RTD AND INSULATION CHECKS
T22	12/04/84	01-RC -RTD -422C	007929	CHECK RTD, VERIFY INSTALLATION	CHECKED CONTINUITY OF RTD AND INSULATION CHECKS
T22	12/04/84	01-RC -RTD -431D	007925	CHECK RTD, VERIFY INSTALLATION	CHECKED CONTINUITY OF RTD AND INSULATION CHECKS
T22	12/04/84	01-RC -TI -412	008291	PERFORM CALIBRATION ON OVER-	MADE ADJUSTMENTS ON TH-1-412L, TH-1-412H, TH-412G, NH-1-412B AND TH-1-412B IN ACCORDANCE WITH PROCEDURE TO BRING OUTPUTS WITHING DESIRED LIMITS. REPLACED TH-1-412B.
T22	12/04/84	01-RC -TI -422	008278	PERFORM CALIBRATION ON OVER-power circuitry.	TH-1-422B OPSP ISOLATOR AND TC-1-422B OPSP COMPARTOR REQUIRED MINOR ADJUSTMENTS
T22	12/04/84	01-RC -TI -432	008279	PERFORM CALIBRATION ON OVER-power circuitry.	PERFORMED REFUELING CAL 1-PT-2.1B THE FOLLOWING MODULES REQUIRED MINOR ADJUSTMENTS TH-1-432D, TC-1-432D, TH-1-432H, NH-1-432C, TH-1-432G, TC-1-432B, TH-1-432C

DEPT	RETURNED TO SERVICE	MARK NUMBER	WO NUMBER	WO TITLE	HISTORY SUMMARY
T22	12/04/84	01-RM -MON -131-2	009267	UNABLE TO GET CORRECT SETPOINT	CHECKED SETPOINTS ALL SATISFACTORY HEAVY WEAR ON KEYBOARDS AND IMPROPER KEYSTROKE TIMING CAN CAUSE INCORRECT SETPOINT READINGS
T22	12/04/84	01-RS -PT -156A	008815	REPLACE DEFECTIVE TRANSMITTER.	REWORKED TRANSMITTER TO CORRECT DEFECTIVE SEALANT, PERFORMED LOOP CALIBRATION ADJUSTED TRANSMITTER TO WITHIN SPECS
T22	12/04/84	01-RS -PT -156B	008816	REPLACE DEFECTIVE TRANSMITTER.	REWORKED TRANSMITTER TO REPAIR DEFECTIVE SEALANT PERFORMED LOOP CALIBRATION ADJUSTED TRANSMITTER TO WITHIN SPECS
T22	12/04/84	01-SI -FI -961	006304	PERFORM REFUELING LOOP	PERFORMED REFUELING CAL ON XMTR AND INDICATOR COMPLETED SAT
T22	12/04/84	01-SI -FI -963	006306	PERFORM REFUELING LOOP	MINOR ZERO ADJUSTMENT ON TRANSMITTE R
T22	12/04/84	01-SW -FI -100A	009015	FLOW METER ALWAYS READS '0'	REPLACED FLOW INDICATOR
T22	12/04/84	01-VG -RM -131-2	010187	RAD MONITOR INOPERABLE	MICRO PROCESSOR FOUND HUNG-UP RESET MICROPROCESSOR AND REENTERED SETPOINT VALUES, OPERATIONAL CHECK SATISFACTO RY
T22	12/04/84	01-VG -RMS -131-2	006190	RETURN MONITO TO SERVICE - EQU	RESET MONITOR EQUIPMENT FAILURES NO OTHER PROBLEMS PRESENT
T22	12/06/84	01-IA -PIPE-NA	007881	REPAIR CONNECTION AT VENT SOV	TIGHTENED FITTINGS AND SNOOPED FOR ADDITIONAL LEAKS.
T22	12/06/84	01-IA -PP -NA	010095	AIR LINE BETWEEN SOV AND HCV-C	REPAIRED AIR LINE
T22	12/06/84	01-RC -PI -455	005663	PERFORM REFUELING LOOP	PERFORMED REFUELING LOOP CALIBRA TION. ADJUSTED LEAD/LAG PH-1-455A, AND COMPARATOR PC-1-455B. FOUND SCREWS IN TRANSMITTER TERMINAL SIDE BADLY DETERIORATED, REPLACED/RETEST
T22	12/06/84	01-RC -REG -NA	007884	ADJUST BOTH REGULATORS	ADJUSTED BOTH REGULATORS TO 85 PSIG
T22	12/06/84	01-RC -RTD -410	007913	CHECK RTD, VERIFY INSTALLATION	CHECKED CONTUNITY OF RTD AND INSULATION CHECKED
T22	12/06/84	01-RC -RTD -412B	007917	CHECK RTD VERIFY INSTALLATION	CHECKED CONTINUITY OF RTD AND INSUL ATION CHECKS
T22	12/06/84	01-RC -RTD -412D	007910	CHECK RTD, VERIFY INSTALLATION	CHECKED CONTINUITY OF RTD AND INSULATION CHECKED
T22	12/06/84	01-RC -RTD -413	007912	CHECK RTD, VERIFY INSTALLATION	CHECKED CONTINUITY OF RTD AND INSUL ATION CHECKED.
T22	12/06/84	01-RC -RTD -420	007915	CHECK RTD, VERIFY INSTALLATION	CHECKED CONTINUITY OF RTD & INSULA TION CHECKED.
T22	12/06/84	01-RC -RTD -423	007914	CHECK RTD, VERIFY INSTALLATION	CHECKED CONTINUITY OF RTD & INSULA TION CHECKS.
T22	12/06/84	01-RC -RTD -430	007918	CHECK RTD, VERIFY INSTALLATION	CHECKED INSULATION & ELEMENT RESIST ANCE. CALIBRATED LOW LEVEL AMP TO NEW VALVES.

DEPT	RETURNED TO SERVICE	MARK NUMBER	WO NUMBER	WO TITLE	HISTORY SUMMARY
T22	12/06/84	01-RC -RTD -432B	007924	CHECK RTD, VERIFY INSTALLATION	CHECKED CONTINUITY OF RTD AND INSULATION CHECKED
T22	12/06/84	01-RC -RTD -432D	007923	CHECK RTD, VERIFY INSTALLATION	CHECKED CONTINUITY OF RTD AND INSULATION CHECKS
T22	12/06/84	01-RC -RTD -433	007916	CHECK RTD, VERIFY INSTALLATION	CHECKED INSULATION & ELEMENT RESISTANCE, CALIBRATED LOW LEVEL AMP TO NEW VALVES.
T22	12/06/84	01-RM -RMS -131-2	010286	EQUIPMENT FAILURE LIGHT IS ON	OPERATING POWER LOSS TO MONITOR CAUSED INITIALIZATION OF MICROPROCESSOR. CLEARED FAILURE CODES AND ENTERED CORRECT SETPOINTS. OPERATIONAL CHECK SATISFACTORY.
T22	12/06/84	01-RS -FI -106A	006444	0 FLOW WITH FLOW PATH LINED UP	REMOVED PITOT TUBES INSPECTED CHECKED ORIENTATION AND REINSTALLED
T22	12/06/84	01-SI -FT -945	008819	REPLACE DEFECTIVE TRANSMITTER.	REMOVED AND REWORKED TRANSMITTER PERFORMED LOOP CAL-371 OPERATION CHECKED SAT
T22	12/06/84	01-SM -PNL -1	008081	CHART DRIVE DOES NOT WORK	REPAIRED CHART DRIVE. SEPERATED TWO WIRES THAT SHORTED.
T22	12/07/84	01-CH -FCV -1113A	007902	REMOVE & REINSTALL INSTRUMENTATION for construction.	REPLACED AIR SET REGULATOR TO E/P 67FR 0-35 VALVE CHECKED OUT OP SAT
T22	12/07/84	01-RC -LI -460	005687	PERFORM REFUELING LOOP	FOUND TRANSMITTER OUT OF TOLERANCE, ADJUSTED TO SPEC. FOUND ISOLATOR LM-1-460 OUT OF TOLERANCE, ADJUSTED TO SPEC. PT SENT TO ENGINEERING.
T22	12/07/84	01-RC -MON -1	006237	PERFORM REFUELING CALIBRATION	PERFORMED PT 2.32 FOUND LPD 3 OUT OF TOLLEERANCE PERFORMED IMP-C-RC-8 2 TO BRING LPD 3 INTO SPEC, ALL OTHER MODULES CHECKED SAT, REPLACED LINE DRIVER ON REACTOR VESSEL TOP
T22	12/07/84	01-RC -PI -449	005859	PERFORM REFUELING LOOP	PERFORMED REFUELING CALIBRATION, NO ADJUSTMENTS NECESSARY.
T22	12/07/84	01-RC -PI -456	005662	PERFORM REFUELING LOOP	FOUND XSMITTER OUTPUT OUT OF TOLERANCE. ADJUSTED TRANSMITTER TO MEET SPEC & SUBMITTED A STATION DEVIATION. TERMINAL SCREWS BADLY CORRODED INSIDE TRANSMITTER, REPLACED.
T22	12/07/84	01-RC -RTD -411B	007921	CHECK RTD VERIFY INSTALLATION	PERFORMED CONTINUITY OF RTD AND INSULATION CHECKS
T22	12/07/84	01-RC -RTD -411C	007911	CHECK RTD, VERIFY INSTALLATION	CHECKED CONTINUITY OF RTD AND INSULATION CHECKS
T22	12/07/84	01-RC -RTD -421B:	007927	CHECK RTD, VERIFY INSTALLATION	CHECKED CONTINUITY OF RTD AND INSULATION CHECKS
T22	12/07/84	01-RC -RTD -421C	007931	CHECK RTD, VERIFY INSTALLATION	CHECKED CONTINUITY OF RTD AND INSULATION CHECKS.
T22	12/07/84	01-RC -RTD -431B	007921	CHECK RTD, VERIFY INSTALLATION	CHECKED CONTINUITY OF RTD AND INSULATION CHECKS.
T22	12/07/84	01-RC -RTD -431C	007920	CHECT RTD, VERIFY INSTALLATION	CHECKED CONTINUITY OF RTD AND INSULATION CHECKS
T22	12/07/84	01-RC -TI -408	005778	PERFORM REFUELING LOOP	COMPLETED REFUELING CALIBRATION ON THE TAVE ROD CONTROL SYSTEM. CHECKED SAT.

DEPT	RETURNED TO SERVICE	MARK NUMBER	WO NUMBER	WO TITLE	HISTORY SUMMARY
T22	12/07/84	01-RM -RI -1270	009334	CANNOT PERFORM LIGHT CHECK	FOUND LIGHT BULB IN FAIL LIGHT BURNED OUT, REPLACED SAME.
T22	12/10/84	01-DG -LT -107	006610	REFUELING CALIBRATION	ADJUSTED SPAN AND ZERO OF TRANSMITTER. COMPLETED REFUELING CALIBRATION
T22	12/10/84	01-LM -PT -101B	008818	REPLACE DEFECTIVE TRANSMITTER.	REMOVED AND REMORKED TRANSMITTER PERFORMED LOOP CALIBRATION OPERATION CHECKED SAT
T22	12/12/84	01-BR -FT -113A	007254	REPLACE TRANSMITTER KEYSWITCH	REPLACED SWITCH 12-3-84 TEST SAT REPLACED FLEX 12-3-84
T22	12/13/84	01-FW -FI -1-497	009044	ERRATIC INDICATION	WORK NOT NECESSARY LOOKED AT XMTTR V ₁ VOLTAGE AND MULTIPLIER/DIVIDER OUTPUT VOLTAGE AND BOTH WERE STEADY AND READING CLOSE TO CHANNEL 4
T22	12/13/84	01-GW -RM -102	010425	HIGH ALARM SETPOINT	OPERATOR DETERMINED NO PROBLEM, CHECKED SETPOINTS FOUND NO PROBLEM
T22	12/13/84	01-IC - -2	003131	FOUR THIMBLE ISOLATION VALVES	WORK WAS DONE BY WESTINGHOUSE AS THIS DIVICE BELONGS TO THEM ALONG WITH ALL TUBING AND VALVES
T22	12/13/84	01-IC -MISC-2	001977	DETECTOR STICKING	WORK WAS DONE BY WESTINGHOUSE
T22	12/13/84	01-RC -PCV -1455B	009159	REMOVE/REPLACE INSTRUMENTATION	REMOVED INSTRUMENTATION. REPLACED INSTRUMENTATION STROKED VALVE SAT
T22	12/13/84	01-RC -RTD -422B	007932	CHECK RTD VERIFY INSTALLATION	CHECKED CONTINUITY ON RTD AND INSULATION CHECK
T22	12/13/84	01-RC -RTD -422D	007928	CHECK RTD, VERIFY INSTALLATION	CHECKED CONTINUITY ON RTD AND INSULATION CHECKS
T22	12/13/84	01-RC -TE -1471	009281	PZR RELIEF TANK TEMP INDICATOR	CALIBRATED LOOP AND FOUND LOW LEVEL AMP READING HIGH AND INDICATOR READING LOW. ADJUSTED BOTH AND INDICATOR READS 5 DEGREES F HIGHER
T22	12/13/84	01-RM -RI -124	010037	POWER LITE MALFUNCTIONING	REPLACED BURNED OUT LIGHT BULB
T22	12/13/84	01-SI -FI -1943	010387	DOES NOT INDICATE FLOW	TRANSMITTER TUBED UP BACKWARDS, PROBLEM WILL BE RESOLVED BY CONSTRUCTION.
T22	12/13/84	01-SI -FI -961	010416	SHOWING 100GPM FLOW; CHARGING	VENTED TRANSMITTER AND INDICATION READS ZERO.
T22	12/13/84	01-SI -FI -962	010417	SHOWING 150 GPM. FLOW CHARGING	VENTED TRANSMITTER & INDICATION READS ZERO.

DEPT	RETURNED TO SERVICE	MARK NUMBER	WO NUMBER	WO TITLE	HISTORY SUMMARY
T22	12/13/84	01-SI -FI -963	010418	SHOWING 170 GPM FLOW CHARGING	VENTED TRANSMITTER & INDICATION READING ZERO.
T22	12/13/84	01-SW -PCV -100C	006975	CHECK INSTRUMENTATION AND VLV	CHECKED POSITIONER AND STROKED VALVE SAT
T22	12/13/84	01-SW -RM -120	010426	HIGH ALARM SETPOINT READING	ADJUSTED SETPOINT TO AGREE WITH SETPOINT TAG
T22	12/13/84	01-SW -TI -106C	010192	INDICATOR FAILED LOW DR POWER	FOUND LEADS ON RTD REVERSED. PUT LEADS BACK ON THEIR PROPER TERMINALS. CHECKED SAT.
T22	12/14/84	01-CH -FT -1113	010259	OLD XMTR BURNT-UP NEEDS TO BE replaced.	REMOVED OLD FLOW TRANSMITTER FROM SYSTEM. CUT FLANGES & SECTION OF PIPING OUT OF SYS. FOR FIT UP OF NEW FLANGES. CLEANED OLD PIPING, FABRICATED & INSTALLED 2 NEW FLANGS
T22	12/14/84	01-RI -RMS -159/	010627	FILTER FAULT	REPLACED FILTER PAPER, REPAIRED BROKEN FILTER FAULT SWITCH.
T22	12/17/84	01-CC -TV -109A	009420	INSPECT/REPAIR INSTRUMENTATION	HAD OPS CYCLE VALVE SEVERAL TIMES, SAT. NO PROBLEM FOUND.
T22	12/17/84	01-CH -LI -1-106	010131	CHANNEL DEVIATES FROM SISTER channel by 10% calibrate or repair.	ADJUSTED TRANSMITTER ZERO & SPAN. PERFORMED APPLICABLE SECTION OF PT 2.15, CHECKED SAT. PT SENT TO ENGINEERING.
T22	12/17/84	01-CH -TIC -109	005801	PERFORM REFUELING LOOP	CALIBRATED T/C PER PT 2.23. MADE NO ADJUSTMENTS. CHECKED SAT. PT SENT TO ENGINEERING.
T22	12/17/84	01-CH -TIC -162	005799	PERFORM REFUELING LOOP	REPLACED TEMP PROBE WITH SHOP SPARE CALIBRATED T/C PER PT 2.23. MADE ADJUSTMENTS AS NECESSARY. CHECKED SAT.
T22	12/17/84	01-CH -TK -107	005798	PERFORM REFUELING LOOP	CALIBRATED TIC PER PT 2.23, MADE ADJUSTED AS NECESSARY. CHECKED SAT. REPLACED TEMP PROBE BEFORE CALIBRATION. PT SENT TO ENGINEERING.
T22	12/17/84	01-IC -PF -NA	007279	DISCONNECT SEAL TABLE TO ALLOW retraction of thimbles.	DISCONNECTED SEAL TABLE, DISCONNECTED LINES TO 10 PATH BOXES, MOVED MOVEABLE ASSEMBLY BACK OUT OF WAY & LOCKED IT DOWN BACK AGAINST 5 PATH BOX PLATFORM. CHECKED OUT IN CORE SYS
T22	12/17/84	01-HS -FI -100	009045	STEAM DRIVEN FEED PUMP STEAM	PERFORMED 18 MONTH CAL. ADJUSTED TRANSMITTER ZERO & SPAN AS REQUIRED CHECKED SAT
T22	12/17/84	01-HS -LI -494	010414	READS > 5X FROM OTHER CHANNELS	FILLED REFERENCE LEG & LEVEL RETURNED TO NORMAL
T22	12/17/84	01-RC -LI -459A	005817	PERFORM REFUELING LOOP	FOUND TRANSMITTER FAILED HIGH, REPLACED TRANSMITTER AND CALIBRATED
T22	12/17/84	01-RC -MON -100A	006242	PERFORM REFUELING LOOP CALIBRATION.	PERFORMED LOOP CALIBRATION & FUNCTIONAL CHECK. ADJUSTED UNDERVOLTAGE FAULT SETPOINT ON LUMIGRAPH. REPLACED HARDLINE CABLE.
T22	12/17/84	01-SI -FI -1963	010353	CALIBRATE INDICATOR	VENTED TRANSMITTER TO GET AIR OUT OF SYSTEM.
T22	12/17/84	01-SW -FI -105A	006464	Investigate flow cell.	REMOVED PITOT VENTURE TUBES, FOUND FLAIN PITOT TUBES OBTAINED NEW CAL CURVE FROM MANUFACTURER & NEW NUMBERS AS PER EWR 84-385. INSTALLED NEW TRANSMITTERS WITH LOWER RANGES.

DEPT	RETURNED TO SERVICE	MARK NUMBER	WO NUMBER	WO TITLE	HISTORY SUMMARY
T22	12/13/84	01-SI -FI -963	010418	SHOWING 170 GPM FLOW CHARGING	VENTED TRANSMITTER & INDICATION READING ZERO.
T22	12/13/84	01-SW -PCV -100C	006975	CHECK INSTRUMENTATION AND VLV	CHECKED POSITIONER AND STROKED VALVE SAT
T22	12/13/84	01-SW -RM -120	010426	HIGH ALARM SETPOINT READING	ADJUSTED SETPOINT TO AGREE WITH SETPOINT TAG
T22	12/13/84	01-SW -TI -106C	010192	INDICATOR FAILED LOW DR POWER	FOUND LEADS ON RTD REVERSED. PUT LEADS BACK ON THEIR PROPER TERMINALS. CHECKED SAT.
T22	12/14/84	01-CH -FT -1113	010259	OLD XMTR BURNT-UP NEEDS TO BE replaced.	REMOVED OLD FLOW TRANSMITTER FROM SYSTEM. CUT FLANGES & SECTION OF PIPING OUT OF SYS. FOR FIT UP OF NEW FLANGES. CLEANED OLD PIPING, FABRICATED & INSTALLED 2 NEW FLANGS
T22	12/14/84	01-RI -RMS -159/	010627	FILTER FAULT	REPLACED FILTER PAPER, REPAIRED BROKEN FILTER FAULT SWITCH.
T22	12/17/84	01-CC -TV -109A	009420	INSPECT/REPAIR INSTRUMENTATION	HAD OPS CYCLE VALVE SEVERAL TIMES, SAT. NO PROBLEM FOUND.
T22	12/17/84	01-CH -LI -1-106	010131	CHANNEL DEVIATES FROM SISTER channel by 10% calibrate or repair.	ADJUSTED TRANSMITTER ZERO & SPAN. PERFORMED APPLICABLE SECTION OF PT 2.15, CHECKED SAT. PT SENT TO ENGINEERING.
T22	12/17/84	01-CH -TIC -109	005801	PERFORM REFUELING LOOP	CALIBRATED T/C PER PT 2.23. MADE NO ADJUSTMENTS. CHECKED SAT. PT SENT TO ENGINEERING.
T22	12/17/84	01-CH -TIC -162	005799	PERFORM REFUELING LOOP	REPLACED TEMP PROBE WITH SHOP SPARE CALIBRATED T/C PER PT 2.23. MADE ADJUSTMENTS AS NECESSARY. CHECKED SAT.
T22	12/17/84	01-CH -TK -107	005798	PERFORM REFUELING LOOP	CALIBRATED TIC PER PT 2.23, MADE ADJUSTED AS NECESSARY. CHECKED SAT. REPLACED TEMP PROBE BEFORE CALIBRATION. PT SENT TO ENGINEERING.
T22	12/17/84	01-IC -PP -NA	007279	DISCONNECT SEAL TABLE TO ALLOW retraction of thimbles.	DISCONNECTED SEAL TABLE, DISCONNECTED LINES TO 10 PATH BOXES, MOVED MOVEABLE ASSEMBLY BACK OUT OF WAY & LOCKED IT DOWN BACK AGAINST 5 PATH BOX PLATFORM. CHECKED OUT IN CORE SYS
T22	12/17/84	01-MS -FI -100	009045	STEAM DRIVEN FEED PUMP STEAM	PERFORMED 18 MONTH CAL. ADJUSTED TRANSMITTER ZERO & SPAN AS REQUIRED CHECKED SAT
T22	12/17/84	01-MS -LI -494	010414	READS) 5X FROM OTHER CHANNELS	FILLED REFERENCE LEG & LEVEL RETURNED TO NORMAL
T22	12/17/84	01-RC -LI -459A	005817	PERFORM REFUELING LOOP	FOUND TRANSMITTER FAILED HIGH, REPLACED TRANSMITTER AND CALIBRATED
T22	12/17/84	01-RC -MON -100A	006242	PERFORM REFUELING LOOP CALIBRATION.	PERFORMED LOOP CALIBRATION & FUNCTIONAL CHECK. ADJUSTED UNDERVOLTAGE FAULT SETPOINT ON LUMIGRAPH. REPLACED HARDLINE CABLE.
T22	12/17/84	01-SI -FI -1963	010353	CALIBRATE INDICATOR	VENTED TRANSMITTER TO GET AIR OUT OF SYSTEM.
T22	12/17/84	01-SW -FI -105A	006464	Investigate flow cell.	REMOVED PITOT VENTURE TUBES, FOUND FLAIN PITOT TUBES OBTAINED NEW CAL CURVE FROM MANUFACTURER & NEW NUMBERS AS PER EWR 84-385. INSTALLED NEW TRANSMITTERS WITH LOWER RANGES.

DEPT	RETURNED TO SERVICE	MARK NUMBER	WO NUMBER	WO TITLE	HISTORY SUMMARY
T22	12/17/84	01-SW -FI -105B	006463	0 FLOW INDICATED WITH FULL flow through each H _x .	PULLED PITOT TUBE & FOUND DIFFERENT TYPE FROM ORIGINAL DATA. OBTAINED NEW DATA FROM MANUFACTURER & OBTAINED NEW CAL DATA AS PER EWR 84-385. INSTALL NEW LOWER RANGE TRANSMITTER
T22	12/17/84	01-VG -RI -131-1	010230	Investigate indicator readings.	SPIKES THAT OPERATION IS TALKING ABOUT SHOW UP ON RECORDER AND ARE FOR REAL. NO PROBLEM WITH MONITOR.
T22	12/17/84	01-VG -RM -131-2	008464	UNABLE TO GET CORRECT SET-points.	RESET MONITOR & RESTORED SETPOINTS TO NORMAL.
T22	12/18/84	01-CH -LI -1-161	007355	> 10% DEVIATION BETWEEN 'A' past level indicators.	ADJUSTED TRANSMITTER ZERO AND PERFORMED APPLICABLE SECTION OF PT2.15 CHECKED SAT.
T22	12/18/84	01-IC -MISC-SEAL	010657	REPAIR LEAKS	CHECKED FOR LEAKS, NOTED APPROX 45 OUT OF 50 THIMBLES LEAKING AT SEAL TABLE CONNECTION WHERE MECHANICS MAKE THEIR HOOKUP. INFORMED MECHANICS & TURNED PROBLEM OVER TO THEM
T22	12/18/84	01-RC -PCV -1455B	010648	AIR LEAK ON REGULATOR	REPLACED GAUGE AND LEAKY REGULATOR
T22	12/20/84	01-CH -P -1A	010043	THE AUX OIL PUMP DISCHARGE	REPLACED GAUGE WITH NEW 0-60PSI GAUGE #1411047
T22	12/20/84	01-IC -MISC-E	010117	REFUELING CHECK	PERFORMED IMP 81 TO CHECKED OPERABILITY TO DRIVE E. CHECK SAT.
T22	12/20/84	01-RM -DET -126	010723	"MONITOR FAIL" LIGHT ON	REPLACED INPUT/OUTPUT CHIPS U-1 & U-2 MONITOR CHECKED SAT, FAIL LIGHT CLEARED.
T22	12/20/84	01-VS -SOV -101A	010688	RE-ROUTE AIR TUBING TO SOV	HOOKED UP SOV BY USING FLEX TUBING (SS)
T22	12/27/84	01-RPI-IND -D4	010850	ROD D-4 IRPI HAS AN OPEN secondary winding.	REPAIRED PLUG ON REACTOR HEAD. CHECKED PINS AND REALIGNED PLUGS. SAT. 12/20/84.
T22	12/29/84	01-RC -LT -459	011167	TRANSMITTER READS OFF FROM others, by .8%.	FOUND LEAKS ON L-459A TRANSMITTER. WE COULD NOT FIX THE LEAKS, ISOLATED L-459A & FILLED THE REFERENCE LEG ON L-459. TRANSMITTER VOLTAGES FOR L-459:460 & 461 WITHIN 1%.

MAINTENANCE OF SAFETY RELATED SYSTEMS DURING
OUTAGE OR REDUCED POWER PERIODS

UNIT NO. 2

INSTRUMENT MAINTENANCE

VEP20 SAFETY RELATED DURING REDUCED POWER SORTED BY UNIT AND DEPARTMENT
 FROM 12/15/84 THRU 12/18/84
 UNIT 02 SURRY

DEPT	RETURNED TO SERVICE	MARK NUMBER	WO NUMBER	WO TITLE	HISTORY SUMMARY
T22	12/17/84	02-RC -LI -TR "A"	009764	HALFUNCTION ALARM IN ON TRAIN	AFTER REBALANCING ISOLATOR, MALFUNCTIONING ALARM CLEARED.
T22	12/17/84	02-RM -RS -250	010014	RE-INK RECORDER.	REPLACED INK PADS, OF SAT.
T22	12/17/84	02-RPI-MISC-F4	010293	BYSTABLE CHATTERS WHEN TRIPPING.	REPLACED BISTABLE, CHECKED USING PT 5.2. OF SAT. PT SENT TO ENGINEERING.
T22	12/18/84	02-RM -RMS -059	010679	PARTICULATE ACTIVITY INCREASING.	FOUND FILTER PAPER ADVANCE MECHANISM BOUND UP. FREED MECHANISM, REPLACED PAPER, RETURNED TO SERVICE
T22	12/25/84	02-RPI-ROD -K2	010861	INOPERABLE CONTROL ROD	PERFORMED REMOTE POSITION CALIBRATION ON INDICATOR K-2 FOUND TOP END 15 STEPS HIGH CALIBRATED SAME
T22	12/27/84	02-SSF-RI -N/A	010826	A S/G CHANNEL I LEVEL MATRIX	T-178 & 1-179 INSTALLED REALY BF 48 F1 EMP-C-RT-24.

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

W. L. STEWART
VICE PRESIDENT
NUCLEAR OPERATIONS

January 15, 1985

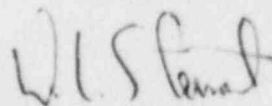
Mr. Maurice R. Beebe
Office of Resource Management
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Serial No. 85-020
NO/JDH/lms
Docket Nos. 50-280
50-281
License Nos. DPR-32
DPR-37

VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION UNIT NOS. 1 AND 2
MONTHLY OPERATING REPORT

Enclosed is the Monthly Operating Report for Surry Power Station Unit Nos. 1 and 2 for the month of December, 1984.

Very truly yours,



W. L. Stewart

Enclosure (3 copies)

cc: Mr. R. C. DeYoung, Director (12 copies)
Office of Inspection and Enforcement

Mr. James P. O'Reilly (1 copy)
Regional Administrator
Region II

Mr. D. J. Burke
NRC Resident Inspector
Surry Power Station

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