

VIRGINIA ELECTRIC AND POWER COMPANY

SURRY POWER STATION

MONTHLY OPERATING REPORT

REPORT NO. 85-11

APPROVED BY:

RT Saund  
STATION MANAGER

8602190038 851130  
PDR ADOCK 05000280  
R PDR

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OPERATING DATA REPORT

FEB 02 1984

DOCKET NO. 50-280  
DATE 12-03-85  
COMPLETED BY V. Jones  
TELEPHONE 357-3184

OPERATING STATUS

1. Unit Name: <u>Surv Unit 1</u>	Notes _____
2. Reporting Period: <u>11-01-11-30-85</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>820</u>	
7. Maximum Dependable Capacity (Net MWe): <u>781</u>	
8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons: <u>N/A</u>	

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>720.0</u>	<u>8016.0</u>	<u>113448.0</u>
12. Number of Hours Reactor Was Critical	<u>720.0</u>	<u>7191.4</u>	<u>71568.1</u>
13. Reactor Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>3774.5</u>
14. Hours Generator On-Line	<u>720.0</u>	<u>7085.4</u>	<u>70094.5</u>
15. Unit Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>3736.2</u>
16. Gross Thermal Energy Generated (MWH)	<u>1671198.6</u>	<u>16138807.3</u>	<u>162152984.4</u>
17. Gross Electrical Energy Generated (MWH)	<u>557230.0</u>	<u>5348710.0</u>	<u>52200673.0</u>
18. Net Electrical Energy Generated (MWH)	<u>529289.0</u>	<u>5075962.0</u>	<u>49491025.0*</u>
19. Unit Service Factor	<u>100.0%</u>	<u>88.4%</u>	<u>61.8%</u>
20. Unit Available Factor	<u>100.0%</u>	<u>88.4%</u>	<u>65.1%</u>
21. Unit Capacity Factor (Using MDC Net)	<u>94.1%</u>	<u>81.2%</u>	<u>56.5%*</u>
22. Unit Capacity Factor (Using DER Net)	<u>93.3%</u>	<u>80.4%</u>	<u>60.8%</u>
23. Unit Forced Rate	<u>0</u>	<u>2.2%</u>	<u>18.9%</u>
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):			

Snubber Inspection March 14, 1986 - 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

\* Changes made to correct errors in previous years.

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

OPERATING DATA REPORT

FEB 02 1984

DOCKET NO. 50-281  
DATE 12-03-85  
COMPLETED BY V. Jones  
TELEPHONE 357-3184

OPERATING STATUS

1. Unit Name:	Surry Unit #2	Notes
2. Reporting Period:	11-01-85 to 11-30-85	
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	720.0	8016.0	110328.0
12. Number of Hours Reactor Was Critical	575.9	5192.5	71198.7
13. Reactor Reserve Shutdown Hours	0	0	328.1
14. Hours Generator On-Line	570.0	5113.8	70021.4
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	1340324.0	11568514.2	163566919.5
17. Gross Electrical Energy Generated (MWH)	443105.0	3725555.0	53016029.0
18. Net Electrical Energy Generated (MWH)	421297.0	3529308.0	50243446.0 *
19. Unit Service Factor	79.2%	63.8%	63.5%
20. Unit Available Factor	7.2%	63.8%	63.5%
21. Unit Capacity Factor (Using MDC Net)	75.5%	56.8%	58.5% *
22. Unit Capacity Factor (Using DER Net)	4.3%	55.9%	61.6%
23. Unit Forced Rate	1.0%	.3%	13.6%
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):			

Snubber Inspection March 28, 1986 - 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

\* Changes made to correct previous years.

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



# UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH Nov., 85

DOCKET NO. 50-280  
 UNIT NAME Surry 1  
 DATE December 6, 1985  
 COMPLETED BY V. H. Jones  
 TELEPHONE (804) 357-3184

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report #	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause & Corrective Action to Prevent Recurrence
85-17	11-05-85	F	0.0	A	1				Unit was reduced to 79 % power, 630 MW's due to high polisher DP while 1F bed was removed from service. Polisher was re-generated and TRS.
85-18	11-21-85	S	0.0	A	1				Unit was reduced to 80 % power, 650 MW's to allow removal of 1-CN-DC-1A to repair tube leak. Heater is still 00C. Cannot get isolation to allow maintenance of heater.

<sup>1</sup>  
 F: Forced  
 S: Scheduled

<sup>2</sup>  
 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)

<sup>3</sup>  
 Method:  
 1-Manual  
 2-Manual Scram.  
 3-Automatic Scram.  
 4-Other (Explain)

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

<sup>5</sup>  
 Exhibit I - Same Source

# UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH Nov., 85

DOCKET NO. 50-281  
 UNIT NAME Surry 2  
 DATE December 6, 1985  
 COMPLETED BY V. H. Jones  
 TELEPHONE (804) 357-3184

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report #	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause & Corrective Action to Prevent Recurrence
85-11	10-19-85	S	144.1	B	1				Unit was shutdown for scheduled snummbur outage.
85-12	11-07-85	F	5.9	G	3	85-013			Rx trip caused by "B" S/G high level which was attributed to inexperience of operator on feed control and poor coordination of personnel. Personnel briefed on importance of coordination and using at least one experience operator on feel control.

<sup>1</sup>  
 F: Forced  
 S: Scheduled

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

<sup>3</sup>  
 Method:  
 1-Manual  
 2-Manual Scram.  
 3-Automatic Scram.  
 4-Other (Explain)

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

<sup>5</sup>  
 Exhibit I - Same Source

LOAD REDUCTIONS DUE TO ENVIRONMENTAL RESTRICTIONS

UNIT NO. 1

MONTH: November

<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. 2MONTH: November

<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						

VEPCO AVERAGE DAILY UNIT POWER LEVEL

SURRY POWER STATION

PROGRAM NOS12681 12/02/85 14.56.07

REPORTING MONTH - NOVEMBER 1985

DOCKET NO. 50-280

DOCKET NO. 50-281

DATE DECEMBER 2, 1985

COMPLETED BY V. JONES

UNIT ONE

AVERAGE DAILY POWER LEVEL  
-MWE-NET-

1	770.8
2	770.4
3	771.6
4	770.9
5	714.2
6	743.1
7	755.5
8	768.7
9	773.1
10	769.5
11	775.6
12	775.4
13	775.8
14	775.0
15	777.2
16	778.5
17	758.9
18	778.8
19	777.8
20	703.0
21	644.6
22	609.9
23	612.1
24	613.5
25	650.6
26	726.6
27	728.4
28	729.3
29	727.9
30	727.0

UNIT TWO

AVERAGE DAILY POWER LEVEL  
-MWE-NET-

0.0
0.0
0.0
0.0
0.0
0.0
258.1
717.1
763.7
768.5
765.1
772.3
771.4
769.9
769.0
774.1
771.8
770.9
770.3
767.7
765.6
769.8
764.5
766.2
769.8
770.2
766.0
760.1
604.7
614.4

SUMMARY OF OPERATING EXPERIENCE

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MONTH/YEAR Nov., 85

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

11-01-85	0000	This reporting period begins with the unit at 100 % power, 805 MW's.
11-05-85	1245	Commenced rampdown at 150 MW/hr. to allow removal of 1F polisher bed.
	1350	Holding power at 79 %, 630 MW's.
	1728	Commenced power increase at 3 %/hr.
11-06-85	0005	Holding power at 98 %, 785 MW's due to polishing bldg. high ΔP.
11-08-85	0942	Commenced power increase at 3 %/hr.
	1139	Unit at 100 % power, 810 MW's.
11-17-85	0013	Commenced ramp down at 150 MW/hr. to allow cleaning of polish bldg. strainers.
	0109	Holding power at 85 %, 700 MW's.
	0305	Commenced power increase at 3 %/hr.
	0735	Unit at 100 % power, 815 MW's.
11-20-85	0443	Commenced ramp down at 150 MW/hr. to allow removal of 1A polisher bed.
	0534	Holding power at 87 %, 720 MW's.
11-21-85	1050	Commenced ramp down at 150 MW's/hr. to allow removal on 1-CN-DC-1A from service.
	1125	Holding power at 80 %, 650 MW's.
11-25-85	1327	Commenced power increase at 3 %/hr.
	1948	Holding power at 95 %, 765 MW's.
11-30-85	2400	This reporting period ends with the unit at 95 % power, 765 MW's due to 1-CN-DC-1A being out of service.

SUMMARY OF OPERATING EXPERIENCE

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MONTH/YEAR NOV., 85

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

11-01-85	0000	This reporting period begins with the unit being cooled down to allow flushing of MOV-RH-2720B.
	0330	RCS < 350°F/450 psig.
	1120	RCS > 350°F/450 psig.
	2100	Commenced RCS cooldown from 540°F. MOV-RH-2720B still leaking past seat.
11-02-85	0205	RCS < 350°F/450 psig.
	1125	RCS < 200°F.
11-05-85	1415	RCS > 200°F.
	1858	RCS > 350°F/450 psig.
11-06-85	0417	RCS at HSD
	2033	Reactor critical.
11-07-85	0007	Generator on the line.
	0016	Reactor trip caused by high steam generator level in "B" S/G.
	0347	Reactor critical.
	0610	Generator on the line.
	0730	Holding power at 30 %, 180 MW's for chemistry.
	1216	Commenced power increase at 100 MW/hr.
11-08-85	1002	Holding power at 98 %, 795 MW's due to "C" loop ΔT protection channel reading 100 %.
11-09-85	0655	Unit at 100 % power, 810 MW's.
11-28-85	2112	Commenced rampdown at 150 MW's/hr. to allow removal of 2-FW-E-4A.
	2250	Holding power at 80 %, 650 MW's.
11-30-85	2400	This reporting period ends with the unit at 80 % power, 650 MW's.

None during this reporting period

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

DC 81-119C NUREG 0696 Short Term I&C Project Data Acquisition System Installation Unit 1

This design change installed a complete and independent Data Acquisition System (DAS). The DAS provides information to the Energy Response Facilities and the Control Room for improved emergency response per guidelines and recommendations established in NUREG-0696.

SUMMARY OF SAFETY ANALYSIS

The modification provides a separate source of plant status and information, therefore increasing overall plant safety.

DC 81-119D Short Term - I&C Project Data Acquisition System Installation Unit 2

This design change installed the remaining equipment of the Data Acquisition System and their power supplies. The Data Acquisition System provides information to the Emergency Response Facilities and the Control Room for improved emergency response.

SUMMARY OF SAFETY ANALYSIS

The modification provides a separate source of plant status and information therefore increasing overall plant safety.

DC 81-119H NUREG-0696 Short Term I&C Project DCP, ERF-I/O,  
TSC Computer Console Installation Unit 2

This design change installed the Data Communication Processor (DCP), Emergency Response Facilities I/O (ERF-I/O) processor, related computer/display hardware and peripherals, communications systems, DAS master receivers, and a computer console consisting of seven work stations.

SUMMARY OF SAFETY ANALYSIS

The modification provides a separate source of plant status and information, therefore increasing overall plant safety.



**FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL (continued)****DC 83-32 Class 1E Transmitter Replacement****Unit 2**

This design change removed existing safety related electronic transmitters and installed equivalent transmitters that have adequately demonstrated environmental qualification per the guidelines set forth by IEEE Std. 323-1974 and 10CFR50.49.

**SUMMARY OF SAFETY ANALYSIS**

The modification does not affect the performance of the systems being modified. Transmitters were replaced by environmentally qualified transmitters with equivalent functional characteristics. Power supplies were replaced with units required for proper performance of the replacement transmitters.

**DC 84-07 Auto Actuation of Reactor Trip Breaker Shunt Trip Attachment****Unit 2**

This design change replaced the reactor trip breaker shunt trip attachment with a component which is safety related QA Category I Class 1E. The reactor trip breaker shunt trip attachment will actuate automatically upon the receipt of a reactor trip signal.

**SUMMARY OF SAFETY ANALYSIS**

The modification provides a higher level of reliability of reactor trip breaker operation and the operation of the reactor protection system. It will ensure successful operation of the reactor trip system during transient and accident conditions.

**DC 84-29 RG 197 Flow Transmitter Replacement Modification****Unit 2**

This design change replaced makeup flow-in and letdown flow-out transmitters with transmitters qualified in accordance with IEEE Std. 323-1974 and 344-1975. The replacement transmitters were installed in the same locations and are seismically installed in accordance with manufacturer's instructions.

**SUMMARY OF SAFETY ANALYSIS**

The replacement flow transmitters are environmentally and seismically qualified to provide indication to the operator to monitor station operation. Replacement power supplies are qualified to their environment and are required to assure transmitter qualification.

**DC 84-63 Appendix "R" Emergency Radio Communication Upgrade****Unit 2**

This design change added an additional, reliable, emergency radio communications and pager system to meet the requirements to 10CFR50 Appendix R. The new system is located in separate fire zones from the existing system.

**SUMMARY OF SAFETY ANALYSIS**

This modification enhances the ability of the station to communicate during a fire emergency by the installation of a redundant means to communicate in accordance with the requirements of Appendix R.

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL (continued)DC 84-80 AUXILIARY FEEDWATER PUMP VALVE REPLACEMENTUNIT 2

This design change replaced existing auxiliary feedwater pump steam supply valves with valves that have greater seating force. The new valves are full port valves, eliminating a gasket system which was contributing to the valve failures. In addition, a high force piston actuator replaced the existing diaphragm actuator. Both seating surfaces, on the removable seating and the enlarged plug were hardfaced to reduce wear and prevent steam cutting.

SUMMARY OF SAFETY ANALYSIS

The modification is an enhancement over previous equipment due to improved availability of auxiliary feedwater pump.

TESTS AND EXPERIMENTS REQUIRING  
NRC APPROVAL

None During This Reporting Period

TESTS AND EXPERIMENTS THAT  
DID NOT REQUIRE NRC APPROVAL

None During This Reporting Period

OTHER CHANGES, TESTS AND EXPERIMENTS

None During This Reporting Period

VIRGINIA POWER  
SURRY POWER STATION  
CHEMISTRY REPORT

NOVEMBER    19 85

PRIMARY COOLANT ANALYSIS	UNIT NO. 1			UNIT NO. 2		
	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM	MINIMUM	AVERAGE
Gross Radioact., uCi/ml	1.88E+0	6.25E-1	1.15E+0	2.22E-1	1.07E-2	1.12E-1
Suspended Solids, ppm	0.00	0.00	0.00	0.00	0.00	0.00
Gross Tritium, uCi/ml	1.34E-1	2.95E-2	6.82E-2	7.34E-2	1.92E-2	5.02E-2
Iodine <sup>131</sup> , uCi/ml	4.80E-2	1.50E-2	2.07E-2	2.70E-2	≤6.01E-5	1.19E-4
I <sup>131</sup> /I <sup>131</sup>	0.49	0.19	0.30	0.32	0.07	0.13
Hydrogen, cc/kg	37.9	28.8	31.1	32.8	4.2(A)	21.5(A)
Lithium, ppm	0.81	0.68	0.75	2.07	1.03	1.37
Boron-10, ppm*	69.2	58.4	63.7	355.5	135.4	195.2
Oxygen, (D.O.), ppm	≤0.005	≤0.005	≤0.005	≤0.005	≤0.005	≤0.005
Chloride, ppm	≤0.01	≤0.01	≤0.01	0.14	≤0.01	≤0.02
pH @ 25°C	6.79	6.58	6.72	6.54	5.86	6.10

\* Boron-10 = Total Boron x 0.196

REMARKS: UNIT 1: Cat bed was not placed in service this month for LiOH removal. LiOH was not added this month. Started ramping unit down to 83% on 11-5-85 for condensate polishing problems. Unit back up to 100% 11-8-85. Ramped unit down to 80% on 11-20-85 for condensate polishing problems. Unit back up to 95% 11-26-85. Only reached 95% on 11-26-85 because of Feedwater heater problem. Unit still presently at 95% due to the Feedwater heater problems. UNIT 2: Cat bed was placed in service on the following dates for LiOH removal: 11-9, 11-10, 11-12, 11-14, 11-16, 11-20, 11-24-85. LiOH was added to the unit on the following dates: 11-5, 11-6, 11-7-85 for a total of 2983 gms. 11-1-85 unit still down from snubber inspection 11-7-85 unit ramped up to 30% from outage. 11-9-85 unit up to 100% power. 11-29-85 unit ramped down to 80% for Feedwater heater problems. Unit is presently at 80% for the same problems mentioned. (A) These values due to degassing for unit shutdown.



DESCRIPTION OF ALL INSTANCES WHERE  
THERMAL DISCHARGE LIMITS WERE EXCEEDED

None During This Reporting Period





PROCEDURE REVISIONS THAT CHANGED THE  
OPERATING MODE DESCRIBED IN THE FSAR

None During This Reporting Period

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

None During This Reporting Period



MAINTENANCE OF SAFETY RELATED SYSTEMS DURING  
OUTAGE OR REDUCED POWER PERIODS

UNIT NO. 1

November - 1985

The below listed codes denotes the following departments:

0228 or R03 - Mechanical

0229 or R04 - Electrical

0237 or T22 - Instruments

DEPT	RETURNED TO SERVICE	MARK NUMBER	WO NUMBER	WO TITLE	HISTORY SUMMARY
0228	11/21/85	01-BS -MISC-NA	024941	INSTALL SAFETY CHAIN AT TOP OF LADDER	INSTALLED SAFETY CHAIN AND HOOK ON LADDER
0228	11/21/85	01-CC - -658	026280	REPACK VALVE, NO ADJUSTMENT LEFT	REMOVED VALVE BONNET AND STEM, REMOVED ALL OLD PACKING, REPACKED NO BONNET GASKET IN STOCK. MADE NEW BONNET GASKET WITH 1/16" DURABLE AND INSTALLED BONNET
0228	11/21/85	01-CH - -24	026382	PACKING LEAK.	ADJUSTED GLAND NUTS 2 FLATS, COULD NOT CLEAN CRYSTALS OFF VALVE DUE TO LOCATION OF VALVE, NOTE NO VISIBLE LEAK FOUND PRIOR TO START OF JOB
0228	11/21/85	01-CH - -272	026364	PACKING LEAK.	WHILE TRYING TO STRAIGHTEN OUT COCKED PACKING GLAND LEFT GLAND STUD SNAPPED. GLAND STILL COCKED SLIGHTLY. NOT LEAKING AS OF NOW. HAD NO VISIBLE LEAK PRIOR TO BEGIN
0228	11/21/85	01-CH - -273	026383	PACKING LEAK.	CLEANED CRYSTALLS OFF PACKING GLAND AND BONNET AND ATTEMPTED TO STRAIGHTEN COCKED PACKING GLAND. NUTS BEGIN TO GET HARD TO TURN, STOPPED ADJUSTING GLAND. STILL COCKED SLIGHT
0228	11/21/85	01-CH -MOV -1286C	026363	PACKING LEAK.	CLEANED CRYSTALLS OFF PACKING GLAND AND BONNET AND FOUND GLAND FOLLOWER BOTTOMED OUT, NO ADJUSTMENT POSSIBLE. NEEDS REPACKED. NOTE NO VISIBLE LEAK FOUND PRIOR TO START OF JOB.
0228	11/21/85	01-CH -MOV -1287C	026374	PACKING LEAK.	CLEANED CRYSTALLS OFF PACKING GLAND AND BONNET. ADJUSTED GLAND NUTS 2 FLATS. NOTE: NO VISIBLE LEAK FOUND PRIOR TO START OF JOB
0228	11/21/85	01-SW -TCV -108A	026962	REMOVE INTERNALS	VALVE BONNET NUTS WERE ONLY HAND TIGHT. REMOVED BONNET NUTS AND REMOVED VALVE INTERNALS. INTERNALS WERE BROKE, CHIPPED AND BEAT ON LIKE SOMEONE HAD TRIED TO REMOVE THEM
0228	11/22/85	01-FW - -43	027074	REINJECT FURMANITE. 2 DINE	VOID COMPLETED ON WO 027083
0228	11/22/85	01-SW -P -1A	023098	1-SW-P-1A WOULD NOT START	NO PROBLEM FOUND 1-SW-P-1A OPERATED SAT WHEN TESTED 11/21/85 FROM THE CONTROL ROOM 11/22/85
0228	11/23/85	01-BD -TV -100F	027033	MANUFACTURE AND INSTALL TEMPORARY BARRIER	FOUND VALVE NOT BLOWING STEAM. WRAPPED HERCULITE AS PER HEALTH PHYSICS AROUND VALVE TO PREVENT STEAM FROM BLOWING ON CH-HCV-1186
0228	11/25/85	01-BS -MISC-NA	026786	PERMANENTLY MOUNT SIGN NEAR AIR INTAKE GRILLE	RECEIVED THREE SIGNS FROM PERCY DAVIS AND INSTALLED THEM IN AREAS DESIGNATED
0228	11/25/85	01-CH -MOV -1275A	027097	MOUNTING BOLTS ARE LOOSE	FOUND BOLTS SLIGHTLY LOOSE, TIGHTENED AS TIGHT AS MECHANIC CONSIDERED SAFE
0228	11/25/85	01-FC - -56	015772	VALVE CASING LEAK	REMOVED VALVE FROM SYSTEM. CLEANED FLANGE AREA REMOVED 3 RINGS OF PACKING AND ALL 4 SEALS. CLEANED VALVE INTERNALS, VALVE BALL, SEAT ARE IN GOOD CONDITION. INSTALLED NEW
0228	11/25/85	01-US -FL -3A	027069	BOLT FOR STRONG BACK FOR DOOR TO FILTER HOUSING BROKEN. WELD NEW BOLT TO DOOR	CUT OFF OLD STUD WELDED NEW STUD IN PLACE

DEPT	RETURNED TO SERVICE	MARK NUMBER	WO NUMBER	WO TITLE	HISTORY SUMMARY
0229	11/21/85	01-CC -P -1C	026890	IDENTIFY 4160 CABLE	SPARE MOTOR LEADS WERE HANGING DOWN FROM CABLE TRAY. CABLE WAS ROLLED BACK ON TRAY AND MADE STABLE
0229	11/21/85	01-CC -P -1C	026891	CONDUIT UNHOOKED TO RTD	FLEX WAS DISCONNECTED FROM MOTOR HEATER BOX, REPLACED FLEX TO THE MOTOR HEATER BOX, NO LEADS IN FLEX
0229	11/21/85	01-CH -HTT -2A3	026870	CK 8 READS 121 DEG. REPAIR AS	VOID NO REQUIRED
0229	11/21/85	01-CH -P -2B	026357	PM - AUTO SCHEDULE	VOID COMPLETED ON WO 026839
0229	11/21/85	01-RP -RP -B-6	027026	IRPI DRIFTED LOW > 12 STEPS FR	VOID COMPLETED ON WO 026316
0229	11/21/85	01-SW -MOV -104D	026876	BREAKER THERMALED WHEN ATTEMPT- ING TO OPEN	CHANGED SOLDER POTS BRIDGED 38 .1R T1-T2 T2-T3 38.R T1-T3 38R MEGGERED 6MEGOHMS TO GROUND ON T2 LEAD. FLA .95 OPEN AMPS CLOSE .90 T2 1.0 AMPS OPEN /CLOSE 1.1 T3 .90 OPEN/CLOSE
0229	11/21/85	01-WT -P -B	026910	B WELL PUMP CYCLES ON AND OFF	BRIDGE READING T1-T2-.79 T1-T3-.80 T2-T3-.81 AMP T.29.5 MEGGED 300 MR T2-29.5 X1 TO GROUND T3 28.9 RUN 11/19/85 NO PROBLEM FOUND. HEAT ER 1046 LOW AMPS READ 33.6-35.5 IS
0229	11/22/85	01-MS -PCV -102A	027015	REMOVE/REPLACE LIMIT SWITCH	CYCLED VALVE SEVERAL TIMES NO PROBLEM. VOID NO WKPERFORMED. ADJUSTED LIMITS AS PER OPS-SATS
0229	11/25/85	01-BS -MISC-NA	025134	INSTALL GROUND CABLE FOR CRANE	MADE UP 100' GROUND CABLE AND INSTALLED
0229	11/25/85	01-CC -TV -109B	026699	VLV WOULD NOT CLOSE	VALVE WAS CYCLED SAT ON 11/18/85
0229	11/25/85	01-SW -P -1A	026320	BATTERIES SPECIFIC GRAVITY OFF SCALE/REPLACE BATTERIES	4608282 STOCK NUMBER REPLACED BATTERIES AS PER WO
0237	11/25/85	01-DA -LI -110A	026707	LI-DA-110A DOES NOT INDICATE LEVEL DROP	TRANSMITTER FOR LI-DA-110A IS LOCAT ED IN THE RECIRC SPRAY SUMP/N NOT CONTAINMENT SUMP
0237	11/25/85	01-RM -RMS -131-1	026664	LOW SAMPLE FLOW THROUGH MONITOR	TROUBLESHOT FLOW VALVE AND ELEMENT, ADJUSTED VALVE LIMIT SWITCHES, REPOSITION VALVE STEM TO VALVE DRIVE MOTOR. EXAMINED VALVE LINE UP FOR FLOW, FOUND FILTER ISOLATED
0237	11/25/85	01-RM -SV -111	027010	REPAIR/REPLACE GM TUBE	REPLACED GM TUBE. PERFORMED CAL 045. CK SAT.
0237	11/25/85	01-RP -ANN -NA	025868	RDI BANK D LO & EXTRA LO LIMIT	FOUND PA CONVERTER FOR BANK D READI NG ZERO STEPS, MANUALLY PULSE THE P TO A CONVERTER UP TO THE SAME INDICATION AS THE STEP COUNTERS FOR BANK D ALARM RESET.
0237	11/25/85	01-VG -RI -131-1	026704	INVESTIGATE AND REPAIR CAUSE FOR LAMP BLINKING ON AND OFF	CHECKED RECORDER CHARTS ON RM-131-1 FOR MCI/CC AND RATE RELEASE. RECORDS SHOW A 72 HOUR PERIOD OF CONTINUOUS ACTIVITY. THE RATE ACKNOWLEDGE ALARM IS SET TO SHOW A RAPID

DEPT	RETURNED TO SERVICE	MARK NUMBER	WO NUMBER	WO TITLE	HISTORY SUMMARY
0237	11/29/85	01-CC -P -1A	027036	REMOVE/INSTALL THERMOCOUPLES	REMOVED 01-CC-P-1A OUTBOARD T/C 11/26/85, INSTALLED T/C CHECKED COMPUTER POINT, OF SAT.

NO OF REPORT

MAINTENANCE OF SAFETY RELATED SYSTEMS DURING  
OUTAGE OR REDUCED POWER PERIODS

UNIT NO. 2

November - 1985

The below listed codes denotes the following departments:

0228 or R03 - Mechanical

0229 or R04 - Electrical

0237 or T22 - Instruments



DEPT	RETURNED TO SERVICE	MARK NUMBER	WO NUMBER	WO TITLE	HISTORY SUMMARY
0228	11/01/85	02-CH -E -2	020127	REMOVE BOLTS FOR NDE INSPECTION	CHANGE STUD'S ONE THRU 36 ONE AT A TIME
0228	11/01/85	02-CW -MOV -200A	025624	MANUAL LEVER WILL NOT DISENGAGE	DISASSEMBLED ONLY TO TRIP PIN, FOUND IT BROKEN OFF, REPLACE GEAR AND TR IF PIN. TESTED SATISFACTOR.
0228	11/01/85	02-FW -FCV -2488	025139	PACKING LEAK	REMOVE OLD PACKING PUT IN NEW PACKING 9 RINGS
0228	11/01/85	02-MS - -158	005252	REFURBISH SEATING SURFACES	VOID COMPLETED ON WO 019830
0228	11/01/85	02-MS -TV -201A	020180	REPACK VALVE PER TYPE A,B,AND	VOID COMPLETED ON WO 020208
0228	11/01/85	02-MS -TV -201B	021980	HOLE IN 90DEG ELBOW HAS BEEN	REPLACE 3/4" ELBOW WITH NEW (COPPER)
0228	11/01/85	02-RC - -138	026104	2-RC-138 FLANGE HAS 7 DROPPED MINUTE LEAK	TIGHTENED FLANGE
0228	11/01/85	02-RC - -50	026108	SMALL BORIC ACID LEAK	ADJUSTED PACKING
0228	11/01/85	02-RC -E -1A	019207	REMOVE ALL INSULATION FROM ALL	VOID PERFORMED BY SERVICE REQUEST
0228	11/01/85	02-RC -E -1C	019205	REMOVE INSULATION FROM ALL	VOID PERFORMED BY SERVICE REQUEST
0228	11/01/85	02-RH -MOV -2700	020538	LEAK AROUND STUFFING BOX FOR PACKING	ADJUSTED PACKING GLAND NUTS 1 1/2 TURNS NUTS WERE NOT TIGHT AT BEGINNING
0228	11/01/85	02-SI -MOV -2867C	017810	VALVE LEAKS BY, WILL NOT CLOSE	VOID COMPLETED ON WO 018316
0228	11/01/85	02-SW -EJ -204D	026028	EXPANSION JOINT PROTECTIVE COVER WAS NOT REINSTALLED	INSTALLED COVER
0228	11/03/85	02-RH -MOV -2720B	026183	PM - ON DEMAND	VOID NOT REQUIRED AT THIS TIME TO BE WORKED NEXT OUTAGE
0228	11/04/85	02-DA -TV -200B	025759	INVEST/REPAIR AS REQ.	VOID NO PROBLEM FOUND
0228	11/04/85	02-RC - -105	026105	20 DROP PER MIN PACKING LOOP	ADJUSTED PACKING GLAND AS TIGHT AS IT WOULD GO GLAND IS BOTTOMED OUT-LEAK APPEARED TO STOP
0228	11/04/85	02-RC - -77	026165	ADJUST PACKING	ADJUSTED PACKING ABOUT 1/2 FLAT ON EACH NUT UNABLE TO GET ANYMORE ON NUTS. NOT ABLE TO STOP LEAK
0228	11/04/85	02-RC -E -2	025987	MANWAY LEAKING TRY TO TIGHTEN	TORQUED TO 1800 FT. LBS. DIDN'T STOP LEAK REPLACE FLEXATILIC GASKET PROCEDURE MMF-C-RC-099 REPLACED 11 BOLTS SN 22900450
0228	11/04/85	02-RC -MOV -2592	025668	PACKING LEAK OF 14 SPM TO PDIT UNACCEPTABLE	REMOVED OL PACKING - 4 RINGS IN UPPER SET, 5 RINGS IN MIDDLE SET AND 6 RINGS IN LOWER SET; ALL PACKING WAS REMOVED.
0228	11/04/85	02-SS -TV -201A	020695	VALVE WILL NOT STAY OPEN	ADJUSTED MICRO-SWITCHES ON VALVE. VALVE CYCLE AND LIGHTS INDICATION SAT.
0228	11/04/85	02-VS -F -60B	025886	DAMPER DOESN'T OPERATE	RAN B FAN DAMPER DID NOT OPERATE. SLENOID THAT PROVIDES AIR TO DAMPER ACTUATOR WAS CONNECTED ACTUATOR TO MAIN AIR SUPPLY AND ACTUATOR WOULD NOT OPERATE ACTUATOR WAS LEAKING
0228	11/05/85	02-BG - -MISC	026264	HATCH WILL NOT SEAL	REMOVE O-RINGS AND REPLACED O-RINGS FOR HATCH GROVES AND INSTALLED AND LUBRICATED WITH O-RING LUBE



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0228	11/05/85	02-BB -DR -HATCH	026298	INVEST/REPAIR INNER HATCH HYDRAULIC PUMP	REMOVED EXISTING HYDRAULIC CYLINDER AND INSTALLED NEW ONE. NEW HYDRAULIC CYLINDER COMES AS A COMPLETE UNIT FROM MANUFACTURER. OIL IS ALSO PUT IN BY THEM. THE ONLY WORK IS TO MOUNT
0228	11/05/85	02-CH -E -2	024926	PERHARE BOLTING (CUT) FOR NON PEGERATIVE HEAT EXCHANGER (2-CH-E) HAVE QC VERIFY	CUT 36 STUDS TO 14 3/4" LONG AND CHAMFER ENDS BY QC WITNESS
0228	11/06/85	02-CH -HCV -2310	021969	BODY TO BONNET LEAK, PLUME 2 TO 3 FT.	REMOVED BONNET FOUND GASKETS BAD AND 4 DEGRADATED STUDS. REMOVED STUDS 1 WRUNG OFF. DRILLED AND TAPPED HOLE. REPLACED STUDS. REASSEMBLED VALVE USING NEW GASKETS. REPACKED VALVE
0228	11/06/85	02-FW - -74	025678	INSPECT VLV INTERNALS IN LEIU OF PT 15.3	REMOVED VALVE COVER FOR WELDERS AND ENG AFTER ENG LOOKED AT VALVE AND WELDERS WELDED DIAPHRAGM BACK IN MECH. INSTALLED COVER BACK ON VALVE AND TO BODY BOLTS TO 600 FTLB
0228	11/06/85	02-RC -PCV -2456	024450	VALVE LEAKS BY SEAT	DISASSEMBLED VALVE INSPECT VALVE. REPLACED STEM AND GAGE REASSEMBLED VALVE AND INSTALLED
0228	11/06/85	02-RH -MOV -2720B	026129	VALVE LEAKS BY, CLEAR SEAT BLOCKAGE	DISASSEMBLE VALVE LAP SEAT AND DISC AS NECESSARY HAVE 100% BLUE
0228	11/07/85	02-MS - -208	026314	PACKING LEAK ON TRAP DRAIN ISOLATION VALVE	ADJUSTED PACKING NO LEAKAGE
0228	11/07/85	02-RC - -11	026107	VLV HAS SMALL PACKING LEAK	ADJUSTED PACKING
0228	11/07/85	02-RC -HCV -2557C	026102	SMALL BORIC ACID LEAK AROUND BOLTS	VOID FLANGE TO BE WORKED UNDER WO 021262
0228	11/07/85	02-RH -P -1A	021092	SEALS LEAK	VOID SEALS TO BE WORKED IN CONJECTION WITH WO #025756 11/7/85
0228	11/07/85	02-RS -MOV -255B	023948	CLUTCH BOX LEAKING	TIGHTEN TOP BOLTS AND WIPE UP EXCESS GREASE
0229	11/01/85	02-BD -TV -200D	025966	TRIP VLV WILL NOT OPEN	FOUND RELAY AFP3-4B RELAY BAD. INST ALL NEW RELAY TESTED SAT
0229	11/01/85	02-CH -HCV -2200A	025657	DISCONN/RECONN LIMITS FOR MECH	REMOVED AND REINSTALLED LIMITS FOR MECHS/NO LIMIT ADJUSTMENT WAS NECESSARY
0229	11/01/85	02-CH -HCV -2200B	025659	DISCONNECT/RECONNECT LIMITS FOR MECH.	REMOVED LIMIT SWITCH PLATE AND ADJUSTED LIMITS TO OPS SATISFACTION
0229	11/01/85	02-CH -HCV -2200B	025996	GROUND OCCURS ON DC BUS WHEN H-CV-200B is opened	DISCONNECTED PLUG 5 ON PENETRATION 13E; READ WIRES FOR HCV-2200B; ALL WIRES READ SAT EXCEPT FOR M WHICH WAS GROUNDING
0229	11/01/85	02-CH -HCV -2200C	025658	DISCONNECT RECONNECT LIMITS FOR MECH.	REMOVED AND REINSTALLED LIMITS FOR HCV-CH-2200C
0229	11/01/85	02-CH -MOV -2270A	026110	PM - ON DEMAND	CLEANED SWITCH, INSUL TEST T1-T2-38.81 T2-T3 38.73 100MR T1-T3-38.76 AND INSPECTED 11/1/85
0229	11/01/85	02-CH -P -1A	025865	AUX OIL PUMP CYCLES ON AND OFF	VOID WILL DO WHAT EWR 84-48 SAYS
0229	11/01/85	02-EP -BKR -24J9	026070	CHARGING SPRINGS WILL NOT CHARGE	FOUND THE MOTOR CRANK AXIS AND RAWL CARRIER WAS OUT OF SEQUENCE. ROTATED MOTOR CRANKRAWL CARRIER. COMPLETED ALL NECESSARY STEPS OF PROCEDURE

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					RE CHECKED SAT
0229	11/01/85	02-FW -MOV -251A	025950	INSPECT AND INSTALL T-DRAIN IF REQUIRED	REPLACED OLD PLUGS WITH 2 BREATHER PLUGS IN MTR.
0229	11/01/85	02-FW -MOV -251B	025949	INSPECT AND INSTALL T-DRAIN IF REQUIRED	REPLACED OLD PLUGS WITH 2 BREATHER PLUGS IN MTR
0229	11/01/85	02-FW -MOV -251C	025948	INSPECT AND INSTALL T-DRAIN IF REQUIRED	REPLACE OLD PLUGS IWTH 2 BREATHER P LUGS IN MTR.
0229	11/01/85	02-FW -MOV -251E	025946	INSPECT AND INSTALL T-DRAIN IF REQUIRED	REPLACED OL PLUGS WITH 2 BREATHER P LUGS IN MTR.
0229	11/01/85	02-NS -SOV -202B	008651	INOPERABLE ELECTRICIAN TO INVESTIGATE	VOID COMPLETED ON WO 020543
0229	11/01/85	02-NS -MOV -201A	020402	CHECK TORQUE SWITCH SETTINGS IAW EMP-C-MOV-143	VOID COMPLETED ON EWR-85-224A
0229	11/01/85	02-NS -MOV -201B	020401	CHECK TORQUE SWITCH SETTINGS IAW EMP-C-MOV-143	VOID COMPLETED ON EWR-85-224A
0229	11/01/85	02-RC -MOV -2535	020364	CHECK TORQUE SWITCH SETTINGS IAW EMP-C-MOV-143	VOID COMPLETED ON WO 024079
0229	11/01/85	02-RC -MOV -2586	020363	CHECK TORQUE SWITCH SETTINGS IAW EMP-C-MOV-143	VOID COMPLETED ON WO 024082
0229	11/01/85	02-RC -MOV -2595	020756	MOTOR DOESN'T OPERATE, APPEARS	VOID COMPLETED ON WO 020992
0229	11/02/85	02-RH -MOV -2720B	026186	PERFORM MOVATS TESTING	ASSIST MOVATS WITH TESTING MOV. COM PLETED PROCEDURE EMP-C-MOV-151
0229	11/03/85	02-CH -MOV -2270B	025098	RESET TORQUE SWITCH IAW EWR 85-224A	RESET TORQUE SWITCH/MADE MCC MODIFI CTION/CYCLED VALVE SAT. 11-04-85
0229	11/04/85	02-BS -IR -HATCH	025789	SWITCH SPRUNG STAYS IN MID POSITION	LIMITS OUT OF ADJUSTMENT AND TEST S OLNEOID AND OPERATE AND CLOSING OF PEN
0229	11/04/85	02-CH -MOV -2270B	026112	PM - ON DEMAND	INSPECTED CHANGED TORQUE SWITCH SETTING AS PER 85-261 11/3/85 PERFORMED PMS/CYCLED VALVE SAT 11/4/85
0229	11/04/85	02-CH -MOV -2275C	026176	PM - ON DEMAND	REPLACED OL CHANGED TORQUE SWITCH SETTING. INSP 11/4/85 PERFORMED PMS/CYCLED VALVE SAT 11/04/85
0229	11/04/85	02-CH -MOV -2289B	025916	ELECTRICALLY DISCONNECT	DISCONNECTED MOTOR LIMITS AND TORQU E SWITCH.
0229	11/04/85	02-CW -MOV -200A	025104	RESET TORQUE SWITCH IAW EWR 85-224A	REPLACED OVERLOADS AND RESET TORQUE SWITCH/ADJUSTED LIMITS/CYCLED SAT
0229	11/04/85	02-DA -TV -200A	024429	ADJUST OR REPAIR VALVE INDICA-TION LIMITS	DISCONNECTED SOV AND INDICATING LIG HTS ASSEMBLY NEED 7/16 NUT DRIVER A ND SMALL 6 IN ADJUSTABLE WHEN HOOKI NG BACKUP
0229	11/04/85	02-EPL-BKR -24H11	024355	REPLACE BREAKER	THE BRK WE TOOK OUT OF THE CUB. WAS TESTED AND IT CHECKED SAT.
0229	11/04/85	02-EPL-BKR -24H16	024354	TEST BREAKER FOR PROPER SET-POINTS	BREAKER WAS RACK IN TO FULL CONN. P OSITION AND CHECKED SAT.
0229	11/04/85	02-FW -MOV -251D	025947	INSPECT AND INSTALL T-DRAIN IF REQUIRED	REPLACED OLD PLUGS WITH (2) BREATHE R PLUGS IN MTR
0229	11/04/85	02-FW -MOV -251F	025945	INSPECT AND INSTALL T-DRAIN IF REQUIRED	REPLACED OLD PLUGS WITH 2 BREATHER PLUG IN MTR
0229	11/04/85	02-RC -MOV -2535	025876	RESET TORQUE SWITCH	CHECKED TORQUE SWITCH SETTING AS PE

DEPT	RETURNED TO SERVICE	MARK NUMBER	WO NUMBER	WO TITLE	HISTORY SUMMARY
					R EMP-C-MOV-063, SETTINGS CORRECT, VALVE CYCLED SAT
0229	11/04/85	02-RC -PCV -2456	025304	REMOVE LIMITS FOR MECH.	REMOVED LIMIT SWITCHES FROM VALVE, REMOUNTED LIMIT SWITCHES AND CYCLED VALVE FOR LIGHT INDICATIONS - TESTED SAT RETURNED TO SERVICE
0229	11/04/85	02-SI -MOV -2863A	025903	MOTOR SEAL LEAKING	MOTOR WAS CLEANED AND PROPERLY MARKED, NO ACTUAL SEAL FOUND LEAKING
0229	11/04/85	02-SI -MOV -2869A	025108	RESET TORQUE SWITCH IAW EWR 85-224	SET TORQUE SWITCH AT 2 OPEN AND 2 CLOSE, CYCLED VALVE ELECTRICALLY VALVE OPERATED SAT
0229	11/04/85	02-SW -P -10A	025545	DISCONNECT/RECONNECT FOR MECH. REPAIRS TO PUMP	DISCONNECT MOTOR 10-21-85, RECONNECTED MOTOR LEADS - BRIDGED/MEGGERED, CH 10-24-85, LEAK CHECK OK.
0229	11/05/85	02-RI -ANN -A-A-8	025163	ALARM WILL NOT RESET.	REPLACED CARD ALARM STILL IN, VERIFIED CHANNEL OPERATION AND ACCURACY, OP, SAT, RESET ALARM OF SAT
0229	11/05/85	02-SI -MOV -2842	025111	RESET TORQUE SWITCH IAW EWR 85-224A	CHANGE TORQUE SWITCH SETTING INSTALLED NEW OVERLOADS AND MAKE WIRING CHANGE, NEW TORQUE SWITCH SETTINGS 2.5 AND 2.5, CH CAT # 1035 THERMAL OVERLOAD HEATERS P08SY14381
0229	11/05/85	02-SW -MOV -206A	025121	RESET TORQUE SWITCH IAW EWR 85-224A	RESET TORQUE SWITCH TO OPEN 2 1/4 CLOSE 2 1/4, REPLACED HEATER COILS TO 1031H
0229	11/06/85	02-CH -MOV -2275C	025101	RESET TORQUE SWITCH IAW EWR 85-224A	89.5 FILLED OUT, CHANGED OIL AS PER 85-261 CHANGED TORQUE SW SET 11/3/85 VALVE CYCLED SAT 11/3/85 OVERLOADS (2) 4607304
0229	11/06/85	02-EP -BKR -24H2	026069	CHARGING SPRINGS WILL NOT CHARGE	FOUND THE MOTOR CRANK AXIS AND RAWL CARRIER WAS OUT OF SEQUENCE, ROTATED MOTOR CRANK RAWL CARRIER.
0229	11/06/85	02-EFH-BKR -NA	025836	INSPECT THE 480V BREAKER	REPLACED BREAKER AND BRIDGED AND MEGGERED, AMP READINGS AND PROCEDURE COMPLETE 10/25/85 BREAKER (1) FB3040 0211717
0229	11/06/85	02-RC -MOV -2536	024080	VERIFY/MODIFY MCC CONTROL CIRCUITRY PER EWR 85-018	CHANGED WIRING ON MOV-2536 10/20/85 RESET TORQUE SWITCH TO 2.5 OPEN 2.5 CLOSE, 10/21/85 MOVAT TEST COMPLETE O/L CHANGE COMPLETE OVERLOADS (2) 1024 (4607296)
0229	11/06/85	02-SW -MOV -202B	025113	RESET TORQUE SWITCH IAW EWR 85-224A	CHANGE TORQUE SWITCH SETTING 10/22/85, CHANGED THERMAL OVERLOAD HEATERS 10/22/85 NEW TORQUE SWITCH SETTING 4 AND 4, CYCLED MOV ELECTRICALLY VALVE OPERATED SAT, 10/22/85 EWR-
0229	11/06/85	02-SW -MOV -204C	025116	RESET TORQUE SWITCH IAW EWR 85-224A	RESET TORQUE SWITCH SETTING TO 1.5 10/21/85, VALVE WILL NOT CYCLE, RESET TORQUE SWITCH TO ORIGINAL SWITCH TO ORIGINAL SETTING 10/24/85 OPEN 2.5 CLOSE 2.0, COMPLETED ALL
0229	11/06/85	02-SW -MOV -205C	025119	RESET TORQUE SWITCH IAW EWR 85-224A	COMPLETED ON EWR-85-018 P2 TO STEP 5.9, COMPLETED EMP-C-MOV-063 TO STEP 6.0 COMPLETED EMP-C-MCC-152 TO STEP 6.0 10/24/85, COMPLETED ALL PROCEDURES 10/25/85, AMPS EXCEED

DEPT	RETURNED TO SERVICE	MARK NUMBER	WO NUMBER	WO TITLE	HISTORY SUMMARY
0229	11/07/85	02-RS -DR -HATCH	026299	DISCONNECT/RECONNECT AS REQUIRED BY MECH. MAINT.	DISCONNECTED MOTOR, RELUGGED LEADS TEMP CONNECTED DUE TO PLUG WOULDN'T COME OUT, REMOVED PLUG, RECONNECTED LEADS, TEST SAT
0229	11/07/85	02-CH -HCV -2310	021096	VALVE WILL NOT FULLY OPEN	VOID VALVE TO BE REPLACED UNDER 025956
0229	11/07/85	02-CH -MOV -2267B	025094	RESET TORQUE SWITCH IAW-EWR 85-224A	SET TORQUE SWITCH AT 2.5 OPEN AND 2.5 CLOSED 10/24/85 INSTALLED IN HIGH POSITION. CYCLED VALVE, CHECKED FOR LIGHT INDICATION EVERYTHING SAT AS PER EMP-C-MCC-152
0229	11/07/85	02-CH -MOV -2269A	025095	RESET TORQUE SWITCH IAW EWR 85-224A	RESET TORQUE SWITCH SETTINGS TO 2.0 OPEN AND 2.0 CLOSE. RELANDED RED X2 LEAD TO THE "B" POSITION BY PROCEDURE CYCLED VALVE FOR LOAD CHECK LIGHT INDICATION WAS CORRECT
0229	11/07/85	02-CH -MOV -2286A	025102	RESET TORQUE SWITCH IAW EWR 85-224A	TORQUE SWITCH SET 2 OPEN 2 CLOSE OVERLOAD HEATERS CHANGED AN X2 MOVE D 10/23/85 VALVE CYCLED SAT 10/24/85 WORK PERFORMED IN ACCORDANCE WITH THE LISTED EWR'S
0229	11/07/85	02-CH -MOV -2286B	025222	REPLACE OVERLOADS AS PER EWR 85-251	TORQUE SWITCH SET AT 2 OPEN 2 CLOSE 10/23/85. OVERLOAD HEATERS CHANGED AND X2 MOVED 10/23/85. VALVE CYCLED SAT 10/24/85 OVERLOAD HEATERS (2) 1033 4607302
0229	11/07/85	02-CW -MOV -200A	025626	DISCONNECT AND REMOVE MOTOR	DISCONNECTED MOTOR LEADS AND REMOVE D MOTOR FROM VALVE, 10/20/85, SUBMITTED WO TO CHECK CAUSE OF HIGH AMPS #299237 RECONNECT MOTOR AND BRIDGE AND MEGGERED. CHECKED SAT CYCLED
0229	11/07/85	02-RC -MOV -2586	024082	VERIFY/MODIFY MCC CONTROL CIRCUITRY PER EWR 85-018	CHECKED TORQUE SWITCH ALREADY SET AT 2 1/8 OPEN AND CLOSE. NO READJUSTMENT WAS NEEDED. REPLACED GASKET. SUBMITTED WO TO MECHS ON HANDWHEEL COMPLETED X2 LEAD HOOK-UP AND INSTA
0229	11/07/85	02-RC -MOV -2587	024083	VERIFY/MODIFY MCC CONTROL CIRCUITRY PER EWR 85-018	REPLACED OVERLOAD HEATERS AS PER EWR 85-261 RESET TORQUE SWITCH TO NEW SETTING AS PER EMP-C-MOV-63 MADE INDICATING LIGHT MODIFICATIONS AS PER EWR 85 018
0229	11/07/85	02-RH -MOV -2720B	026118	VALVE LEAKS BY,	DISCONNECTED AND NOTIFIED MECH DEPT 11/2/85 RECONNECTED RH-MOV-2720B 11/4/85 RESET TORQUE SWITCH OPEN 1 3/4 AND CLOSED 1 3/4. T1 T2-2.805 T2-3-2.833 T1 T3-2.852 MEGGER
0229	11/07/85	02-RI -MISC-HA	025892	EWR 85-563 RELOCATE REVERSE power indication	INSTALLED AND PERFORMED EWR 85-563 SATISFACTORY. WIRE USED: SIS 600V # 14 AWG PO#SY07644 PART/STOCK # SL-57275- IEEE- 383-74. LUGS USED 20-14 8-10 STUD PO#15922 PART/STOCK
0229	11/07/85	02-RS -MOV -255B	025137	ASSIST MOVATS IN TESTING VALVE	PERFORMED EMP-C-MOV-152 COMPLETED THRU 5.9. REPLACED OVERLOADS HEATER S AND TESTED VALVE WITH MOVATS 2-HEATERS 1036 4607305
0229	11/07/85	02-SW -MOV -202A	025112	RESET TORQUE SWITCH IAW EWR 85-224A	COMPLETED PROCEDURE EMP-C-MCC-152 REPLACEMENT OF VOL'S IN MCC-2H1-131 COMPLETED PRO # EMP-C-MOV-063



DEPT	RETURNED TO SERVICE	MARK NUMBER	WO NUMBER	WO TITLE	HISTORY SUMMARY
					TORQUE SWITCH ADJUSTMENT RESET TORQUE 4 OPEN 4 CLOSE COMPLETED PRO
0229	11/07/85	02-SW -MOV -204A	025114	RESET TORQUE SWITCH IAW EWR 85-224A	COMPLETED PRO EWR 85-018-P2 CHANGED X2 WIRING FOR INDICATION LIGHT MODIFICATION, COMPLETED PROCEDURE EMP-C-MCC-152 CHANGED TOL'S FOR EWR 85-261 HEATER OVERLOAD PROTECTI
0229	11/07/85	02-SW -HJV -204B	025115	RESET TORQUE SWITCH IAW EWR 85-224A	RESET TORQUE SWITCH SETTING TO 1.5 REPLACED THERMAL OVERLOADS AND MADE MCC MODIFICATIONS AND CYCLED VALVE SAT OVERLOADS (2) 1024 4607296
0237	11/05/85	02-NI -RI -31	026027	OPERATION IS ERRATIC-HI @ S/D ALARM SPIKES IN	PERFORMED PT 1.1 AND CHECKED N-31 F OR AN ERRATIC READING. ALL INDICATI ONS ARE NORMAL. OPS SAT.
0237	11/06/85	02-NI -MISC-N-42	026008	CONTROL POWER FUSE BLOWS WHEN CHECKING P-10 BISTABLE	REPLACED P-10 BISTABLE CAUSING CONT ROL POWER FUSE TO BLOW WHEN P-10 BI STABLE SETPOINT IS TRIPPED, USED AP Plicable SUCTION OF PROCEDURES.
0237	11/06/85	02-RC -T/C -B-10	023904	CONSTANTLY ALARMING LOW,	RAN SENSOR CAL CHECKS GOOD. T/C WAS CHECKED WHEN THE INCORE T/C REPAIR CREW WAS WORKING AND FOUND NOTHING PHYSICALLY WRONG WITH B-10 NO PROBLEM FOUND
0237	11/07/85	02-RC -LI -459A	026068	READS 4% LOWER THAN OTHER	ADJUSTED INDICATORS LI-459A+LI-460 LOOP OP SAT. PT SENT TO ENGINEERING
0237	11/07/85	02-RC -TE -2421C	021246	REPLACE RTD	CHECKED RTD ELEMENT AND INSULATION RESISTANCE. ELECTRICAINS INSTALLED THE RTD OP CHECK SAT
0237	11/07/85	02-RC -TE -2431	025069	C LOOP CONTROL RTD SPIKING, TA VE DECREASING	CHECKED RTD ELEMENT AND INSULATION RESISTANCE. ELECTRICAINS INSTALLED THE RTD'S OP CHECKED SAT
0237	11/07/85	02-RC -TE -411C	022107	RTD FAILED OPEN; REPLACE RTD	CHECKED RTD ELEMENT AND INSULATION RESISTANCE. ELECTRICAINS INSTALLED THE RTD, OP CHECK SAT
0237	11/07/85	02-RC -TE -431B	024472	RTD FAILED, REPLACE RTD	CHECKED ELEMENT AND INSULATION RESISTANCE. ELECTRICAINS INSTALLED THE RTD. OP CHECK SAT.
0237	11/07/85	02-RC -TE -432D	024470	RTD FAILED, REPLACE RTD	CHECKED RTD ELEMENT AND INSULATION RESISTANCE. ELECTRICAINS INSTALLED THE RTD. OP CHECKED SAT

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0228	11/21/85	02-BD -	-180	026549 DRAIN VALVE LEAKS BY BLOWING STEAM	FOUND VALVE WITH 2' BLOW LENGTH FURMANITED VALVE AND KILLED LINE STOPPED LEAK. REPAIR TO ORIGINAL ON WO #298629
0228	11/21/85	02-CH -P	-1C	016671 INBOARD BEARING HOUSING HAS OIL LEAK	PULLED BEARING HOUSING PULLED UPPER BEARING HALF AND INSPECTED. BEARING HAS SLIGHT WEAR. MADE NEW GASKET. PUT BEARING HALF BACK ON. PUT GASKE ON PUT COVER ON AND SLIDE SPACERS
0228	11/21/85	02-CH -P	-1C	024568 WATER IN OIL, INVESTIGATE FOR HEAT EXCHANGER LEAKS	PUMP OUT OIL FROM GREASE TO WASTE OIL DRUM WITH TEEL PUMP. REMOVE OLD COOLER AND INSTALLED NEW COOLER. NEW COOLER WAS HYDROED IN SHOP USING 25 PSI AIR ON THE SHELL SIDE
0228	11/21/85	02-FW -FCV	-2488	026755 VALVE HAS A BODY TO BONNET LEAK 360 DEG. AROUND VALVE	PEEN BODY TO BONNET LEAK.
0228	11/21/85	02-RC -HSS	-NA	026979 INSPECT AND FILL TO 100% S/G	FILLED 2-RC-HSS-171 1/2 GAL 2-RC-HSS-167 1 GAL
0228	11/22/85	02-CH -MOV	-1275C	026377 PACKING LEAK.	ADJUSTED PACKING GLAND FOLLOWER TO STOP LEAK
0228	11/22/85	02-CH -P	-1C	025060 AUX OIL PUMP VERY NOISY,	REMOVED PUMP AND FITTINGS FROM SYST EM. COVERED ALL OPEN LINES. REPLACE D ALL BOLTS IN BOLT HOLES ON FOUNDATION. PUMP STILL IN CH PUMP CUB. INSTALLED NEW AUX OIL PUMP. DRILL
0228	11/23/85	02-SHP-HSS	-14B	027107 SNUBBER IS BLOCKED	REMOVED SNUBBER RESERVOIR TO ALLOW SNUBBER FREE TRAVEL AS INSTRU CTED BY R. BLOUNT AS PER TELCOM 0830 HRS OPERABILITY TEST VERIFIED BY L BLACK (QC) CONTACTED WHEELER
0228	11/25/85	02-CW -MOV	-206D	026869 MOV-CLUTCH EXTENTION ROD, BENT AND CATCHING. REPLACED	FOUND EXT ROD BADLY BENT, CLEVIS ON BOTTOM BROKEN. ROD WOULD NOT MOVE THROUGH GUIDES. MADE NEW ROD AND CLEVIS AND INSTALLED SAME
0228	11/25/85	02-SW -MOV	-204D	025844 HANDWHEEL FALLS OFF	REINSTALLED SNAP RING TO HOLD HANDWHEEL ON SNAP RING IN GOOD CONDITION
0229	11/21/85	02-CH -MOV	-2115C	023937 MISSING DRAIN PLUG IN OPENING	VOID NOT REQUIRED NO PLUGS/COVERS MISSING
0229	11/23/85	02-CH -MOV	-2287C	026256 PM - ON DEMAND	COMPLETED PROCEDURE CH-MOV-E/R1
0229	11/23/85	02-CH -P	-1C	025728 ELECTRICALLY DISCONNECT/RECONNECT AUX OIL PUMP FOR MECH.	MARKED AND DISCONNECTED MOTOR WIRED UP MOTOR FOR HIGH VOLTAGE BRIDGE AND MEGGERED MTR. WINDING ONLY T1-2=51.3 T1-3=51.2 T2-3=51.2 SGC636. LOAD CHECK 11/19/85 T1.6
0237	11/21/85	02-EC -RCIR-NA		026272 UNIT 2 RECORDER PEN STICKS PERIODICALLY	CHECKED RECORDER OPERATION. NO PROBLEM FOUND
0237	11/23/85	02-LM -PT	-200C	026332 18 MONTH CALS	PERFORMED 18 MONTH CALIBRATION NO ADJUSTMENTS MADE. CHECKED SAT PT SENT TO ENGINEERING.
0237	11/25/85	02-CV -PT	-201A	026829 18 MONTH CAL.	CALIBRATED TRANSMITTER MADE MINOR ADJUSTMENTS. CALIBRATED LOW LEVELS. MADE MINOR ADJUSTMENTS CALIBRATED SUMMATOR. MADE MINOR ADJUSTMENTS CALIBRATED INDICATOR MADE MINOR.



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0237	11/25/85	02-IC -DETR-A	024684	INVESTIGATE & REPAIR PROBLEM	FREED UP TRANSFER DEVICE AND FILLED WITH OIL, EXERCISED SEVERAL TIMES OF SAT
0237	11/25/85	02-IC -T/C -NA	024731	ASSIST WESTINGHOUSE WITH REPAIR/REPLACEMENT OF ENCORE T/C CONNECTORS	LABELED THERMOCOUPLE FOR (W) PERSONNEL TO REPAIR. THEY CHECKED THERMOCOUPLES AND REPAIRED THEM. WE TOOK READINGS ON COMPUTER FOUND THEM TO BE GOOD, TAPE AND RTV APPLICATION. 9
0237	11/25/85	02-LM -PT -200A	026330	18 MONTH CALS	PERFORMED 18 MONTH CALIBRATION. MADE MINOR ADJUSTMENTS ON LM-PT-200A CHECKED SAT, PT SENT TO ENGINEERING
0237	11/25/85	02-LM -PT -200B	026331	18 MONTH CALS	PERFORMED 18 MONTH CALIBRATION MADE MINOR ADJUSTMENTS ON LM-PT-200B CHECKED SAT PT SENT TO ENGINEERING
0237	11/25/85	02-LM -PT -200D	026333	18 MONTH CALS	PERFORM 18 MONTH CALIBRATION. NO ADJUSTMENT MADE. CHECKED SAT. PT SENT TO ENGINEERING.

VIRGINIA ELECTRIC AND POWER COMPANY  
RICHMOND, VIRGINIA 23261

W. L. STEWART  
VICE PRESIDENT  
NUCLEAR OPERATIONS

December 13, 1985

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

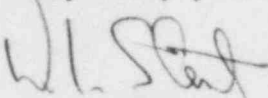
Serial No. 85-859  
NO/ETS:acm  
Docket Nos. 50-280  
50-281  
License Nos. DPR-32  
DPR-37

Dear Mr. Beebe:

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 November, 1985.

Very truly yours,

  
W. L. Stewart

Enclosure (3 copies)

cc: Mr. James M. Taylor, Director (12 copies)  
Office of Inspection and Enforcement

Dr. J. Nelson Grace (1 copy)  
Regional Administrator  
Region II

Mr. Donald J. Burke (1 copy)  
NRC Resident Inspector  
Surry Power Station

