

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

July 18, 1978

Mr. R. A. Hartfield, Acting Director
Office of Management Information and
Program Control
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Series No. 391
PO&M/OLB:daa
Docket Nos. 50-280
50-281
License Nos. DFR-32
DFR-37

Dear Mr. Hartfield:

Enclosed is the Monthly Operating Report for Surry Power Station Unit Nos.
1 and 2 for the month of June 1978.

Very truly yours,

C. M. Stallings
C. M. Stallings
Vice President - Power Supply
and Production Operations

Enclosures (3 copies)

cc: Dr. Ernst Volpenau, Director (10 copies) ✓
Office of Inspection and Enforcement

Mr. James P. O'Reilly, Director (1 copy)
Office of Inspection and Enforcement

REGULATORY DOCKET FILE COPY

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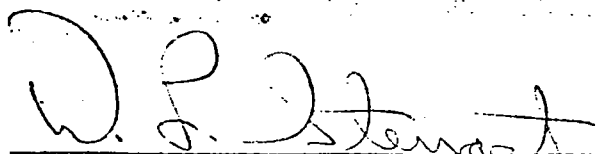
VIRGINIA ELECTRIC AND POWER COMPANY

SURRY POWER STATION

MONTHLY OPERATING REPORT

REPORT NO. 78-06

JUNE, 1978


Superintendent - Station Operations

APPROVED:


MANAGER

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OPERATING DATA REPORT

DOCKET NO. 50-280
 DATE 7-3-78
 COMPLETED BY O. J. Costello
 TELEPHONE 804-357-3184

OPERATING STATUS

1. Unit Name: Surry 1
2. Reporting Period: 0001 780601 - 2400 780630
3. Licensed Thermal Power (MWt): 2411
4. Nameplate Rating (Gross MWe): 847.5
5. Design Electrical Rating (Net MWe): 822
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

Notes

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

	This Month	Yr.-to-Date	Cumulative
11. Hours In Reporting Period	720	4343	48407
12. Number Of Hours Reactor Was Critical	0	2667	31983.9
13. Reactor Reserve Shutdown Hours	0	0	0
14. Hours Generator On-Line	0	2666.5	31231.7
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	0	6,486,752	71,627,748
17. Gross Electrical Energy Generated (MWH)	0	2,160,910	23,520,753
18. Net Electrical Energy Generated (MWH)	0	2,057,327	22,324,891
19. Unit Service Factor	0	61.4%	64.5%
20. Unit Availability Factor	0	61.4%	64.5%
21. Unit Capacity Factor (Using MDC Net)	0	61.1%	59.5%
22. Unit Capacity Factor (Using DER Net)	0	57.6%	56.1%
23. Unit Forced Outage Rate	0	0	16.8%
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): <u>None</u>			

25. If Shut Down At End Of Report Period, Estimated Date of Startup: 7/7/78

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 7-3-78
COMPLETED BY O. J. Costello
TELEPHONE 804-357-3184

OPERATING STATUS

1. Unit Name: Surry 2
2. Reporting Period: 0001 780601 - 2400 780630
3. Licensed Thermal Power (MWt): 2441
4. Nameplate Rating (Gross MWe): 847.5
5. Design Electrical Rating (Net MWe): 822
6. Maximum Dependable Capacity (Gross MWe): 811
7. Maximum Dependable Capacity (Net MWe): 775

Notes

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): N/A

10. Reasons For Restrictions, If Any: N/A

	This Month	Yr.-to-Date	Cumulative
11. Hours In Reporting Period	720	4343	45287
12. Number Of Hours Reactor Was Critical	718.7	3712.5	30125.3
13. Reactor Reserve Shutdown Hours	0	0	0
14. Hours Generator On-Line	713.9	3702.1	29631.0
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	1,735,045	9,003,011	68,713,245
17. Gross Electrical Energy Generated (MWH)	555,365	2,926,680	22,494,074
18. Net Electrical Energy Generated (MWH)	528,060	2,781,657	21,334,774
19. Unit Service Factor	99.2%	85.2%	65.4%
20. Unit Availability Factor	99.2%	85.2%	65.4%
21. Unit Capacity Factor (Using MDC Net)	94.6%	82.6%	60.8%
22. Unit Capacity Factor (Using DER Net)	89.2%	77.9%	57.3%
23. Unit Forced Outage Rate	.8%	3.5%	23.4%

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):

ECC Pump Modification, S/G Inspection 7-6-78

3 Weeks

25. If Shut Down At End Of Report Period, Estimated Date of Startup: N/A

26. Units In Test Status (Prior to Commercial Operation):

Forecast

Achieved

INITIAL CRITICALITY

INITIAL ELECTRICITY

COMMERCIAL OPERATION

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH June 1978

DOCKET NO. 50-280
 UNIT NAME Surry 1
 DATE 7-5-78
 COMPLETED BY G. Kane
 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
78-1	780601	S	720	C	1				Unit shutdown for the entire month. Turbine repairs in progress.

¹
 F: Forced
 S: Scheduled

²
 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)

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 2
 DATE 7-5-78
 COMPLETED BY O.J. Costello
 TELEPHONE 804-357-3184

REPORT MONTH JUNE, 1978

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
78-3	780624	F	6.1	A	3	N/A	N/A	N/A	(1) Solenoid failure on Main Feed Reg. valve. Trip on Lo S/G Level with W _S /W _F mismatch. Replaced solenoid.

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

(9/77)

LOAD REDUCTIONS DUE TO ENVIRONMENTAL RESTRICTIONS

UNIT NO. 1

MONTH: JUNE, 1978

<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					0	

LOAD REDUCTIONS DUE TO ENVIRONMENTAL RESTRICTIONS

UNIT NO. 2

MONTH: JUNE, 1978

<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					0	

DOCKET NO. 50-280

UNIT 1

DATE 7-3-78

COMPLETED BY O. J. Costello

AVERAGE DAILY UNIT POWER LEVEL

MONTH June 1978

DAY AVERAGE DAILY POWER LEVEL
(MWe-net)

1	<u>0</u>
2	<u>0</u>
3	<u>0</u>
4	<u>0</u>
5	<u>0</u>
6	<u>0</u>
7	<u>0</u>
8	<u>0</u>
9	<u>0</u>
10	<u>0</u>
11	<u>0</u>
12	<u>0</u>
13	<u>0</u>
14	<u>0</u>
15	<u>0</u>
16	<u>0</u>

DAY AVERAGE DAILY POWER LEVEL
(MWe-net)

17	<u>0</u>
18	<u>0</u>
19	<u>0</u>
20	<u>0</u>
21	<u>0</u>
22	<u>0</u>
23	<u>0</u>
24	<u>0</u>
25	<u>0</u>
26	<u>0</u>
27	<u>0</u>
28	<u>0</u>
29	<u>0</u>
30	<u>0</u>
31	<u>0</u>

DAILY UNIT POWER LEVEL FORM INSTRUCTIONS

On this form, list the average daily unit power level in MWe-net for each day in the reporting month. Compute to the nearest whole megawatt.

These figures will be used to plot a graph for each reporting month. Note that by using maximum dependable capacity for the net electrical rating of the unit, there may be occasions when the daily average power level exceeds the 100% line (or the restricted power level line). In such cases, the average daily unit power output sheet should be footnoted to explain the apparent anomaly.

DOCKET NO. 50-281

UNIT Unit 2

DATE 7-3-78

COMPLETED BY O. J. Costello

AVERAGE DAILY UNIT POWER LEVEL

MONTH June 1978

DAY	AVERAGE DAILY POWER LEVEL (MWe-net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-net)
1	<u>749.8</u>	17	<u>745.7</u>
2	<u>749.5</u>	18	<u>746.3</u>
3	<u>748.2</u>	19	<u>741.0</u>
4	<u>750.1</u>	20	<u>745.5</u>
5	<u>750.0</u>	21	<u>741.6</u>
6	<u>753.6</u>	22	<u>740.8</u>
7	<u>745.2</u>	23	<u>741.5</u>
8	<u>733.5</u>	24	<u>478.8</u>
9	<u>732.3</u>	25	<u>741.3</u>
10	<u>734.5</u>	26	<u>745.8</u>
11	<u>742.7</u>	27	<u>745.8</u>
12	<u>740.6</u>	28	<u>727.5</u>
13	<u>738.8</u>	29	<u>735.5</u>
14	<u>745.6</u>	30	<u>722.1</u>
15	<u>745.0</u>	31	<u> </u>
16	<u>743.8</u>		

DAILY UNIT POWER LEVEL FORM INSTRUCTIONS

On this form, list the average daily unit power level in MWe-net for each day in the reporting month. Compute to the nearest whole megawatt.

These figures will be used to plot a graph for each reporting month. Note that by using maximum dependable capacity for the net electrical rating of the unit, there may be occasions when the daily average power level exceeds the 100% line (or the restricted power level line). In such cases, the average daily unit power output sheet should be footnoted to explain the apparent anomaly.

SUMMARY OF OPERATING EXPERIENCE

JUNE, 1978

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 1

- June 1 - This report begins with the unit in a refueling outage with primary maintenance and major turbine maintenance underway.
- June 18 - Commenced filling reactor coolant system for fill and vent operation.
- June 21 - A "Bubble" was established in the pressurizer at 1100 as part of the normal plant recovery.
- June 24 - At 1240 an overvoltage condition was experienced on the "A" DC Bus from a failure in the battery charger voltage regulator.
- June 27 - At 1018 the cold rod drop portion of PT-7 was completed satisfactorily.
- June 30 - This report ends with the unit in a cold shutdown condition. Primary and secondary maintenance still underway.

UNIT 2

- June 1 - This report begins with the unit at 100% power.
- June 24 - At 0400 we had an automatic reactor trip from a Lo S/G Level with steam flow feed flow mismatch. The trip was caused by the failure of a solenoid on the main feed regulator valve. At 0516 the reactor was taken critical and at 1008 the turbine was synchronized to the system and a power increase begun. At 1556 the unit was returned to 100% power.
- June 28 - At 1700 the river temperature exceeded 85°F and as required by license modification a rampdown was begun. At 2000 the river temperature returned to <85°F and a rampup was begun from 80% power. The unit was returned to 100% at 2130.
- June 29 - At 1751 the river temperature exceeded 85°F and as required by license modification a rampdown was begun. At 1932 the river temperature returned to <85°F and a rampup was begun from 86% power. The unit was returned to 100% at 2045.
- June 30 - At 1647 the river temperature exceeded 85°F and as required by license modification a rampdown was begun. At 2012 the river temperature returned to <85°F and a rampup was begun from 78% power. The unit was returned to 100% at 2150. This report period ends with the unit at 100% power.

AMENDMENTS TO FACILITY LICENSE OR TECHNICAL SPECIFICATIONS

JUNE, 1978

There were none during this reporting period.

FACILITY CHANGES REQUIRING
NRC APPROVAL

There were none during this reporting period.

FACILITY CHANGES THAT
DID NOT REQUIRE NRC APPROVAL

JUNE, 1978

The following facility changes were implemented during the month of June. None of the changes constituted an unreviewed safety question per 10CFR50.59.

- | <u>Design Change</u> | <u>Unit</u> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| 1. <u>DC-78-01 - Replacement of Sample System Trip Valves</u> | 1 |
| <u>Description</u> - Operating parameters have disclosed that the initially installed valves (TV-SS-100A/B, 200A/B, 201A/B, 202A/B, 206A/B) were not effective and had a history of continual failure. New valves capable of operating within existing conditions have been installed. | |
| <u>Summary of Safety Evaluation</u> | |
| Since the replacement valves are virtually the same as those initially installed (except for having broader operating ranges) no accident analysis previously made has been altered less conservatively and the possibilities for different accidents or malfunctions have not been created. | |
| <u>Conclusion</u> | |
| The margin for safety as defined in Technical Specifications has not been reduced. | |
| 2. <u>DC-76-18 - Radiation Monitoring Annunciator System</u> | 1,2 |
| <u>Description</u> - This design change provides a separate annunciator for each radiation monitor, alert, and high alarm, rather than have just one alarm or alert for each unit. | |

Summary of Safety Evaluation

Since this system involves the visual display of the alarm monitors and does not adversely affect the System performance or the control levels, the accident or malfunction occurrences have increased neither in their consequences for those previously evaluated nor in the possibility of different types not addressed.

Conclusion

This design change has no adverse effect on station operations or on safety related equipment.

<u>Design Change</u>	<u>Unit</u>
----------------------	-------------

- | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| 3. <u>DC-77-41 - Recirculation Spray NPSH</u> | 1,2 |
| <u>Description</u> - In order to insure sufficient NPSH is maintained and sufficient RS flow is available to depressurize containment following LOCA flow limiting orifices were installed on the discharge of each outside RS pump. | |

Summary of Safety Evaluation

Neither the probability of occurrence or consequences of an accident or malfunction of equipment previously evaluated, is not increased, nor is the possibility of a different type malfunction or accident created.

Conclusion

The margin of safety has not been reduced and an unreviewed safety question does not exist.

- | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| 4. <u>DC-76-47 - Recirculation Spray System</u> | 1,2 |
| <u>Description</u> - This modification entails installation of drain lines at low points on recirculation spray piping and placing level switches to the drains on the shell side of the spray cooler. | |

Summary of Safety Evaluation

No portions of either the Technical Specifications or the FSAR are effected by this design change. The probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated is not increased and the possibility for a different type accident has not been created.

Conclusion

There are no safety implications associated with this change.

- | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| 5. <u>DC-77-43 - Dredge Disposal Area</u> | 1,2 |
| <u>Description</u> - This design change involves the creation of a spoils disposal area to contain the residue from the intake channel. This will assure cooling water flow to the station and also facilitate barge access to the site. | |

Summary of Safety Evaluation

Since removal of the spoils is not safety related, per se, the safety implications for the activity are non existant. However, ramifications surrounding the location of the disposal area required addressing the following questions.

Design Change

Unit

5. DC-77-43 - Dredge Disposal Area (continued)

1. What assurance is available that the spoil pile will not be sufficiently deep and close to the intake canal to cause closure of the intake canal through slope failure or erosion?
2. What assurance is available that the spoil pile will not undergo liquefaction and slide into the canal?
3. Will recharge effects in the dredge disposal area cause a groundwater level rise thus producing a hydrostatic pressure against the concrete liner of the intake canal?

Conclusion

Provisions have been incorporated into the design change procedure which will negate the consequences of the questioned effects.

6. DC-78-10C - Underground Fire Protection Piping System Modifications

1,2

Description - This modification included removal, re-location, and installation of underground fire protection piping in the vicinity of the new condensate polishing demineralizer building. A yard fire loop will be relocated and a new supply was provided to the warehouse.

Summary of Safety Evaluation

The yard fire piping system is installed in accordance with NFPA standards and class 1 earthquake criteria I.A.W. FSAR 9.10 and 15.2.1.

Conclusion

While the system is not Category I, per se, its design and operation have ramifications which reflect on overall site safety.

TESTS AND EXPERIMENTS REQUIRING
NRC APPROVAL

JUNE, 1978

There were none during this reporting period.

TESTS AND EXPERIMENTS THAT
DID NOT REQUIRE NRC APPROVAL

JUNE, 1978

There were none during this reporting period.

OTHER CHANGES, TESTS AND EXPERIMENTS

JUNE, 1978

There were none during this reporting period.

SURRY POWER STATION

CHEMISTRY REPORT

JUNE , 19 78

T.S.6.6.A.11

PRIMARY COOLANT ANALYSIS	UNIT NO. 1			UNIT NO. 2		
	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM	MINIMUM	AVERAGE
Gross Radioact., $\mu\text{Ci/ml}$	1.76E-1	1.31E-3	4.38E-2	3.25E-1	2.15E-3	1.54E-1
Suspended Solids, ppm	0.6	0.2	0.4	0.7	0.0	0.3
Gross Tritium, $\mu\text{Ci/ml}$	4.40E-2	9.49E-3	2.61E-2	1.54E-1	5.66E-2	1.12E-1
Iodine-131, $\mu\text{Ci/ml}$	*	*	*	6.02E-4	2.77E-4	4.13E-4
I-131/I-133	*	*	*	0.2097	0.0686	0.1109
Hydrogen, cc/kg **	24.7	24.7	24.7	37.6	22.9	31.3
Lithium, ppm	*	*	*	1.10	0.73	0.94
Boron-10, ppm +	490.8	428.3	458.8	85.1	60.4	76.0
Oxygen-16, ppm	3.6***	.000	1.16	.000	.000	.000
Chloride, ppm	0.08	0.05	0.05	0.06	0.05	0.05
pH @ 25°C	5.60	4.72	5.09	6.94	6.66	6.80

+ Boron-10 = Total Boron x 0.196

NON-RADIOACTIVE CHEMICAL
RELEASES, POUNDS
T.S. 4.13.A.8

Phosphate	<u>0.0</u>	Boron	<u>602</u>
Sulfate	<u>1946</u>	Chromate	<u>0.0</u>
50% NaOH	<u>2450</u>	Chlorine	<u>0.0</u>

Remarks: * Testing not performed due to unit shutdown

** Sampled once 6-29-78

*** Unit at cold shutdown

DESCRIPTION OF ALL INSTANCES WHERE
THERMAL DISCHARGE LIMITS WERE EXCEEDED

JUNE, 1978

On 06-24-78 at 0400 Unit 2 tripped resulting in a change in river temperature greater than 3°F/hr. This is allowable as per Technical Specifications 4.14.B.1. There were no reported instances of significant adverse environmental impact.

JUNE, 1978

On June 15, 1978, six spare individual fuel rods were shipped back to Westinghouse Corporation. These rods were spare rods for use in the Demonstration 17 x 17 Fuel Assembly RD2 should they have been necessary.

[illegible]

PROCEDURE REVISIONS THAT CHANGED THE
OPERATING MODE DESCRIBED IN THE FSAR

JUNE, 1978

There were none during this reporting period.

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

JUNE, 1978

There were none during this reporting period.

INSERVICE INSPECTION

JUNE, 1978

There were no inservice inspections performed during this reporting period .

REPORTABLE OCCURRENCES PERTAINING TO
ANY OUTAGE OR POWER REDUCTIONS

JUNE, 1978

Unit #2 power reduction occurred on June 30, 1978 when river temperature exceeded 85°F and power reduction was required by the Order for Modification of License of January 10, 1978. The details of this power reduction, its causes and the corrective action are discussed in LER 78-024/03L-0 (050-0281).

UNIT 1-JUNE 1978

(MAINTENANCE OF SAFETY RELATED SYSTEMS DURING OUTAGE OR REDUCED POWER PERIODS)

RETSEVDT	SYS	COMP	MARKNO	SUMMARY	WKPERF	U	MR	TOTDWNM
06/01/78	CV	VALVE	TV-CV-150A	EXCESSIVE LEAKAGE	MACHINED DISC-INSTALLED NEW SEAT	1	804241146	388
06/01/78	BS	HATCH		CLEAN O RING SURFACE AND SEATING	CLEANED+GREASED	1	805190830	11
06/01/78	SI	PIPING	SI SHP-15	SPRING HANGER OFF SCALE ON LOW SIDE	ADJUSTED TO WITHIN SPECS	1	805201115	264
06/01/78	SW	PUMP	1-SW-P-10B	PACKING IS LEAKING BADLY	REPACKED THE PUMP	1	805270315	22
06/01/78	VS	DUCTING	MOV-VS-100B	REPAIR OR REPLACE EXP JOINT ON VS	REPLACED	1	805301235	4
06/01/78	VS	PIPING	MOV-VS-102	REMOVE-REINSTALL TAK PIECE AFTER PT	REMOVED/REINSTALLED TAIL PCECE	1	805301236	22
06/01/78	RC	VALVE	PCV-1455C	ONLY OPENS 75 / STROKE-STICKS	ADJUSTED STROKE	1	805311350	12
06/02/78	RC	VALVE	1-RC-51	PACKING LEAK	REPACKED VALVE	1	804221600	5
06/02/78	CV	VALVE	TV-CV-150D	EXCESSIVE LEAKAGE FOR 16.4	MACHINED DISC-INSTALLED NEW SEAT	1	804241147	877
06/02/78	CV	VALVE	TV-CV-150C	EXCESSIVE LEAKAGE FOR 16.4	MACHINED DISC-INSTALLED NEW SEAT	1	804241148	877
06/02/78	DA	VALVE	TV-DA-100A	EXCESSIVE LEAKAGE PT 16.4	FAILED BENCH TEST-NEW MR SUBMITTED	1	805180803	47
06/02/78	EE	VALVE		REPLACE NO.3 AIR RECIEVER RELIEF VLV	REPLACED VALVE	1	805311510	2
06/03/78	CR	CRANE	1-CR-1	INSTALL JIB CRANE TO REPAIR GEARING	MANUFACTURED AND INSTALLED	1	805080950	630
06/04/78	RC	VALVE	1-RC-45	PACKING LEAK B LOOP	ADJUSTED VALVE	1	10185400	46
06/04/78	FW	MOV	MOV-FW-151F	LEAKS BY SEAT	INSPECTED VALVE+REASSEMBLED	1	10185540	534
06/04/78	FW	MOV	MOV-FW-151E	LEAKS BY SEAT	CUT DISC-LAPPED SEAT	1	10185550	534
06/04/78	FW	MOV	MOV-FW-151D	LEAKS BY SEAT	INSPECTED+REASSEMBLED VALVE	1	10185560	554
06/04/78	FW	MOV	MOV-FW-151C	LEAKS BY SEAT	CUT DISC-LAPPED SEAT	1	10185570	573
06/04/78	FW	MOV	MOV-FW-151B	LEAKS BY SEAT	CUT DISC-LAPPED SEAT	1	10185580	534
06/04/78	FW	MOV	MOV-FW-150E	PACKING LEAK	REPACKED	1	804291538	763
06/04/78	FW	MOV	151E	INSPECT SEAT FOR CRACKS	INSPECTED SEAT	1	806010831	63
06/04/78	FW	MOV	151C	INSPECT SEAT FOR CRACKS	INSPECTED SEAT	1	806010833	63
06/05/78	CH	VALVE	MOV-1286A	LEAKS BY SEAT	VALVE REPLACED	1	804242200	996
06/05/78	CH	VALVE	HCV-1311	BODY TO BONNET LEAK+REPACK	REPLACED GASKETS+REPACKED	1	805110724	325
06/05/78	RC	PUMP	1-RC-P-1A	UNCOUPLE PUMP FOR ELECTRICAL WORK	UNCOUPLED+COUPLED	1	805111550	574
06/05/78	SI	MOV	MOV1869B	REPLACE VALVE	VALVE REPLACED	1	805160900	482
06/06/78	VP	VALVE	1-VP-12	INSPECT INTERNALS	INSPECTED VALVE INTERNALS	1	806021301	42
06/06/78	CH	VALVE	1-CH-309	INSPECT VALVE INTERNALS	INSPECTED VALVE INTERNALS	1	806021304	47
06/07/78	SS	VALVE	TV-SS-102A	WILL NOT SHUT	VOID	1	801150500	0
06/07/78	SS	VALVE	DC78-01	REPLACE TRIP VALVES-SEE LIST	REPLACED 8 VALVES	1	804120853	933
06/07/78	SI	MOV	MOV1869A	INSPECT SEAT AND DISC PT 16.4	VALVE INTERNALS SAT	1	805080816	12
06/07/78	BR	VALVE	1-BR-236	RUPTURED DIAPHRAGM	REPLACED DIAPHRAGM	1	806041345	52
06/08/78	RC	PUMP	1-RC-P-1B	INSPECT NO. 3. SEAL	REPLACED NO.3 SEAL	1	804191250	1077
06/08/78	RC	PUMP	1-RC-P-1C	INSPECT 3 SEALS+REPLACE NO. 3 SEAL	REPLACED NO.2+3 SEAL RINGS	1	804191251	1079
06/08/78	SI	PIPING	FE-1943	FLOW ORIFACE LEAKS PROFUSELY	REPLACED GASKETS	1	806020740	7
06/09/78	SI	MOV	MOV1860A	INSTALL BLANK FLANGES IN RS SUMP	REMOVED BLANKS+INSTALLED SCREENS	1	803100425	1128
06/09/78	SI	MOV	MOV1860B	INSTALL BLANK FLANGES IN RS SUMP	REMOVED BLANKS+INSTALLED SCREENS	1	803100426	1128
06/09/78	SI	INST	FT1943	LEAKAGE AT FLOW ORIFICE FLANGE	VOID	1	805250110	0
06/11/78	SI	VALVE	1-SI-229	BAD BODY TO BONNET LEAK	CLOSED BONNET+TORQUED NUTS	1	804250800	72
06/11/78	SI	VALVE	1-SI-91	REPLACE BODY TO BONNET FLEXITTALIC	RENEWED GASKET	1	805151404	72
06/11/78	SI	VALVE	1-SI-228	BODY TO BONNET LEAK	CLOSED BONNET+TORQUED NUTS	1	805200015	72
06/11/78	SI	MOV	MOV1860A	INSPECT SEAT AND DISC FOR PT 16.4	LAPPED DISC TO SEAT	1	805200750	504
06/11/78	SI	VALVE	1-SI-234	EXCESSIVE LEAKAGE PT 16.4	INSTALLED PLUG+REASSEMBLED VALVE	1	805211644	468
06/14/78	CH	VALVE	MOV-CH-1286C	VALVE LEAKS THROUGH	DISC FITTED TO SEAT+REASSEMBLED	1	804250401	1210
06/14/78	RC	PIPING	DC77-08	AIR LEAK AT REGULATOR BOTH BANKS	REPAIRED LEAKS	1	806071341	3
06/15/78	EE	CONT	AC2	WHEN OPERATING AC ON DIESEL WOULD	REPLACED AIR REGULATOR	1	804191530	27
06/15/78	RC	VALVE	PCV-1456	AIR VENTING CONTINUOUSLY	REPLACED SOLENOID	1	805311322	333
06-16-78	CS	VALVE	MOV-CS-101C+	OPEN + REMOVE DISK	LAPPED DISCS-TEST SAT	1	805281317	205

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(MAINTENANCE OF SAFETY RELATED SYSTEMS DURING OUTAGE OR REDUCED POWER PERIODS)

RETSERVD	SYS	COMP	MARKNO	SUMMARY	WKPERF	U	MR	TOTDWN	TM
06/15/78	VS	PIPING	MOV-VS-100D	REPAIR EXPANSION JOINT	REPLACED EXPANSION JOINT	1	806141132	3	
06/16/78	RC	SG	1-RC-E-1A	REMOVE/REINSTALL PRIM MANWAYS	R+R PRIMARY MANWAYS	1	804201205	1253	
06/16/78	VS	FAN	1-VS-F-1A	BAD VIBRATION	ADJUSTED PITCH TO BLADS	1	805101156	588	
06/16/78	CS	VALVE	MOV-CS-101C+	OPEN+REMOVE DISK	LAPPED DISCS-TEST SAT	1	805281317	205	
06/16/78	CS	MOV	MOV-CS-101D	REMOVE AND INSPECT VALVE	VOID	1	805281600	0	
06/16/78	RS	MOV	MOV-RS-156A	OPEN-INSPECT INTERNALS+REINSTALL	VALVE PASSED PT 16.4	1	806021302	325	
06/16/78	CV	VALVE	TV-CV-150A	OPEN INSPECT INTERNALS	INSPECTED INTERNALS SAT	1	806021305	276	
06/16/78	CV	VALVE	TV-CV-150B	OPEN INSPECT INTERNALS	LAPPED DISC TO SEAT	1	806021306	276	
06/16/78	CV	VALVE	TV-CV-150C	OPEN INSPECT INTERNALS	INSPECTED VALVE INTERNALS	1	806021307	293	
06/16/78	CV	VALVE	TV-CV-150D	OPEN INSPECT INTERNALS	INSPECTED VALVE INTERNALS	1	806021308	276	
06/16/78	CV	VALVE	TV-CV-150D	RETEST VALVE FOR 16.4	LAPPED DISC TO SEAT	1	806051040	260	
06/16/78	CV	VALVE	TV-CV-150D	RETEST VALVE FOR 16.4	LAPPED DISC TO SEAT	1	806051041	260	
06/16/78	FW	MOV	MOV-FW-151F	DISCONNECT-RECONNECT FOR MECHS	VOID	1	806131543	0	
06/17/78	CH	VALVE	1-CH-323	INSTALL BLANK FLANGES FOR PT16.4	INSTALLED+REMOVED BLANKS	1	804250635	1114	
06/17/78	CH	VALVE	1-CH-349	EXCESSIVE LEAKAGE ON PT 16.4	INSTALLED+REMOVED BLANKS	1	805021130	5	
06/17/78	CH	VALVE	1-CH-323	EXCESSIVE LEAKAGE ON PT 16.4	INSTALLED+REMOVED BLANKS	1	805021131	5	
06/19/78	DA	VALVE	TV-DA-100B	EXCESSIVE LEAKAGE PT 16.4	REPLACED SEAT PACKING+GASKET	1	805180802	648	
06/19/78	VS	FAN	A	HIGH VIBRATION CONT RECTRC FAN	VOID	1	805230804	0	
06/19/78	FC	FILTER	1-FC-FL-1B	CHANGE OUT FILTER	VOID	1	805260801	0	
06/19/78	DA	VALVE	TV-DA-100A	LEAK TEST FOR PT16.4	REBUILT VALVE	1	806020154	416	
06/20/78	CH	VALVE	PV-1103	VALVE LEAKS THROUGH	VOID	1	804222320	0	
06/21/78	VS	MOV	MOV-VS-100D	REPACK	REPACKED VALVE	1	806121916	192	
06/21/78	VS	MOV	MOV-VS-101	REPACK	REPACKED VALVE	1	806121917	5	
06/22/78	RC	SG	1-RC-E-1C	INSTALL/REMOVE PRIM MANWAY	REMOVED+INSTALLED MANWAYS TWICE	1	804201207	1387	
06/22/78	CH	MOV	MOV-1287C	CANNOT OPEN VALVE MANUALLY	VOID	1	805300801	0	
06/23/78	DG	VALVE	TV-GD-108B	EXCESSIVE LEAKAGE ON PT 16.4	VOID	1	805220835	0	
06/23/78	VS	MOV	MOV-VS-100C	REPACK	REPACKED VALVE	1	806121918	240	
06/23/78	CH	VALVE	RV-1203	LEAKING TO ATMOSPHERE THRU HOLE IN T	REPAIRED LEAK	1	806210330	27	
06/24/78	RS	PIPING	1-RS-17	INSTALL+REMOVE FLGNS FOR PT 16.4	R+R BLANK FLANGE	1	802171100	1483	
06/24/78	RS	HX	1-RC-E-1C	INSTALL BLANKS ON RS INLET+OUTLETS	R+R BLANKS	1	802171103	1488	
06/24/78	MS	MOV	MOV MS-102	WATER IN GEAR BOX-INSPECT	REPLACED BEARING+CLEANED BOX	1	806012141	456	
06/24/78	CH	PUMP	1-CH-P*2A	BLOWN PUMP SEAL	REBUILT PUMP	1	806181529	180	
06/24/78	BS	HATCH		CONT EQUIP HATCH INSTALLED COCKED	REPLACED O RINGS+CLOSED HATCH	1	806182004	144	
06/24/78	SI	MOV	MOV1890C	REPACK-PACKING LEAKED ON PT16.4	REPACKED VALVE	1	806201531	9	
06/24/78	SI	MOV	MOV1862A	LEAKS THRU	DISMANTLED CLEANED ADJUSTED REASSEMB	1	806210945	37	
06/24/78	BS	HATCH		OUTER ESCAPE MANWAY LEAK	CLEANED DOOR AREA+O RING AREA	1	806242100	3	
06/25/78	RS	PUMP	1-RS-P-2A	REMOVE PUMP FOR SHAFT REPAIR	SHAFT REPAIRED	1	805151536	960	
06/25/78	RC	PIPING	TV-1519A	FITTING BROKEN OF AIR LINE TO 1519A	REPLACED BAD NIPPLE+UNION	1	806161351	7	
06/26/78	BS	VALVE		OUTER ESCAPE HATCH EQUILIZING VALVE	CLEANED VALVE+REASSEMBLED	1	806251200	14	
06/27/78	CH	MOV	MOV-1267A	BODY TO BONNET LEAK	INSPECTED-NO LEAK	1	805151515	8	
06/27/78	SI	MOV	MOV1860A	REPLACE CORRODED PIPE PLUG	REPLACED PLUG	1	806120743	*****	
06/27/78	SI	MOV	MOV1862B	LEAKS THRU	REPAIRED GASKET	1	806210850	85	
06/27/78	CV	PUMP	2-CV-P-1A	REPAIR OR REPLACE VAC PMP	INSTALLED REBUILT PUMP	1	806231745	1	
06/27/78	CV	PUMP	1-CV-P-1A	REMOVE UNIT 1 A VACUUM PMP	REMOVED+REPLACED PUMP	1	806260100	24	
06/27/78	HSS	SNUBBER	HSS-SHP-1B	SNUBBER OUT OF ALIGNMENT	REALIGNED SNUBBER	1	806260911	4	
06/27/78	RC	CONT	PCV	HI PRESS BOTTLE REG LEAKING	TIGHTENED FITTING	1	806261345	2	
06/27/78	SJ	VALVE	1-SJ-48	VALVE-NO LOCAL POSITION INDICATOR	MANUFACTURED+INSTALLED INDICATOR	1	806270815	1	

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(MAINTENANCE OF SAFETY RELATED SYSTEMS DURING OUTAGE OR REDUCED POWER PERIODS)

RETSEVDT	SYS	COMP	MARKNO	SUMMARY	WKPERF	U	MR	TOTDNTM
06/27/78	RC	VALVE	PCV-1455A	BODY TO BONNET LEAK DEVELOPING	TIGHTENED CLOSURE BOLTS	1	806270820	2
06/28/78	MS	NRV	MS-NRV-101B	REPAIR VALVE	VALVE DISASSEMBLED CHECK REASSEMBLED	1	806090920	430
06/28/78	FW	VALVE	FCV-1478	RESET VALVE STROKE TO 2 3/8IN.	RESET STROKE	1	806230801	15
06/28/78	FW	VALVE	FCV-1498	RESET VALVE STROKE TO 2 3/8IN	RESET STROKE	1	806230802	15
06/28/78	FW	VALVE	FCV-1488	RESET VALVE STROKE TO 2 3/8IN.	RESET STROKE	1	806230803	15
06/29/78	FW	MOV	MOV-FW-151A	LEAKS BY SEAT	REPLACED SEAT	1	10185590	1137
06/29/78	RC	SG	1-RC-E-1B	REMOVE/REINSTALL PRIM MANWAYS	REMOVED+INSTALLED MANWAYS	1	804201206	1370
06/29/78	FW	MOV	151B	INSPECT SEAT FOR CRACKS	CHECK VALVE FOR SEATING	1	806010832	355
06/29/78	FW	MOV	MOV-FW-151D	REPAIR OR REPLACE CRACKED SEATS	REPLACE SEAT RING	1	806041005	365
06/29/78	FW	MOV	MOV-FW-151F	REPAIR OR REPLACE CRACKED SEAT	REPLACED SEAT RING	1	806041006	240
06/29/78	VS	MOV	MOV-VS-101	CLEAN RUST ON DISC-CLEAN SEAT	CLEANED SEAT+DISC	1	806121919	5
06/29/78	VS	MOV	MOV-VS-100D+	REINSTALL BLIND TEST FLANGE+ADJUSTE M	R+R BLIND TEST FLANGE	1	806260802	35
06/30/78	HSS	SNUBBER	1-RH-HSS-19	MOUNTED ON SIDE-OIL LEVEL BELOW SUPP	RELOCATED PROPERLY	1	805251310	8
06/30/78	HSS	SNUBBER	1-RH-HSS-20	MOUNTED ON SIDE	RELOCATED PROPERLY	1	805251311	8
06/30/78	HSS	SNUBBER	1-BD-HSS-3	NO FLUID ABOVE SUPPLY LINE	INSTALLED REBUILT SNUBBER	1	805251316	8
06/30/78	SW	PIPING	1-SW-E-1A	CHARCING PMP CC SUBSYSTEM INNERSEAL H	REPLACED TUBE BUNDLE	1	805260500	689
06/30/78	CH	VALVE	PCV1186	REPACK	TIGHTENED PACKING GLAND	1	806161355	21
06/30/78	HSS	SNUBBER	1-SI-HSS-23	NO EP SEAL MATERIAL	REBUILT SNUBBER AS PER CONTROLLING PR	1	806260810	87
06/30/78	HSS	SNUBBER	1-WFPD-HSS-1	RELOCATE SNUBBER PLATE	RELOCAED SUBBER SUPPORT	1	806260910	12
06/30/78	CH	VALVE	LCV-1460A	BODY-BONNET GASKET LEAK	TIGHTENED CLOSURE STUDS	1	806300530	3
06/30/78	CD	HX	1-CD-E-1B	INSTALL BLANK FLANGE IN INLET LINE	INSTALLED BLANK	1	806300830	1
06/30/78	IC	THIMBLE	DB	LEAKING FROM LOWER SWAGLOCK AT SEAL	TIGHTENED FITTING	1	806301500	3

DEPT TOTAL

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LIST=HIGH

UNIT 2-JUNE, 1978

(MAINTENANCE OF SAFETY RELATED SYSTEMS DURING OUTAGE OR REDUCED POWER PERIODS)

IN	PERMIT	SYS	CO	IF	MARKNO	DESC	W&PERF	U	HR	TOTALS
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NONE DURING THIS REPORTING PERIOD.

UNIT 1-JUNE 1978

(MAINTENANCE OF SAFETY RELATED SYSTEMS DURING OUTAGE OR REDUCED POWER PERIODS)

RETSERVD	SYS	COMP	MARKNO	SUMMARY	WKPERF	U	MR	TOTDWTM
06/02/78	FW	MOV	MOV-FW-151F	CLEAN+INSPECT	CLEANED INSPECTED+TESTED	1	805011122	720
06/02/78	FW	MOV	MOV-FW-151D	CLEAN+INSPECT	CLEANED INSPECTED+TESTED	1	805011124	720
06/02/78	CS	MOV	MOV-CS-100A	CLEAN+INSPECT	CLEANED+INSPECTED	1	805040823	277
06/02/78	MS	MOV	MS-102	CLEAN+INSPECT	CLEANED INSP REPL BRNGS+TESTED	1	805091027	120
06/02/78	VS	MOV	MOV-VS-100D	ADJUST LIMIT SWITCHES AS NECESSARY	ADJUSTED LIMITS	1	806010812	24
06/02/78	VS	MOV	MOV-VS-101	ADJUST AS NECESSARY+LIMIT SWITCHES	ADJUSTED LIMITS	1	806010813	25
06/02/78	RC	CONT	PCV-1499C	LIMIT SWITCHES NEED RESET	SET LIMIT SWITCHES	1	806011830	14
06/05/78	PE	PENETRAT	BJ	INSPECT O RING ON OUTER FLANGE-LEAKS	TORQUED FLANGE BOLTS+TESTED	1	805110729	480
06/05/78	PE	PENETRAT	E3	INSPECT FLANGE O RING LEAKS	TORQUED FLANGE BOLTS+TESTED	1	805110730	480
06/05/78	SW	MOV	MOV-SW-105D	CLEAN INSPECT+TEST	CLEANED INSPECTED+TESTED	1	805281801	61
06/05/78	SW	MOV	MOV-SW-105A	CLEAN INSPECT+TEST	CLEANED INSPECTED+TESTED	1	805281803	61
06/05/78	SW	MOV	MOV-SW-105C	CLEAN INSPECT+TEST	CLEANED INSPECTED+TESTED	1	805281805	61
06/05/78	SW	MOV	MOV-SW-105B	CLEAN INSPECT+TEST	CLEANED INSPECTED+TESTED	1	805281806	61
06/05/78	SW	MOV	MOV-SW-104D	CLEAN INSPECT+TEST	CLEANED INSPECTED+TESTED	1	805281807	52
06/05/78	SW	MOV	MOV-SW-104C	CLEAN INSPECT+TEST	CLEANED INSPECTED+TESTED	1	805281810	52
06/05/78	SW	MOV	MOV-SW-104B	CLEAN INSPECT+TEST	CLEANED INSPECTED+TESTED	1	805281813	52
06/05/78	SW	MOV	MOV-SW-104A	CLEAN INSPECT+TEST	CLEANED IN-SPECTED+TESTED	1	805281816	52
06/05/78	CH	HT	PNL8-CK4	LO ALARM	CHECKED SAT	1	806020320	66
06/05/78	CH	HT	PN08-CKT8	LO ALARM	CHECKED SAT	1	806020321	66
06/05/78	FW	MOV	MOV-FW-151F	TORQUE SWITCH BAD	REPLACE TORQUE SWITCH	1	806022200	58
06/07/78	SW	MOV	MOV-SW-106A	CLEAN INSPECT+TEST(ALLEYWAY)	CLEANED INSPECTED+TESTED	1	805281835	125
06/07/78	BS	HATCH		ALARM SWITCH OUT OF ADJUSTMENT	TIGHTED LIM SWITCH+ADJUSTED	1	806041526	25
06/07/78	CH	VALVE	HCV-1311	INDICATES INTERMEDIATE WHEN SHUT	REPAIRED SNAP LOCK SWITCH	1	806051203	19
06/09/78	RC	MOV	MOV-RC-1536	WILL NOT CLOSE	REPLACED TORQUE SWITCH	1	806051557	48
06/10/78	SS	VALVE	DC78-01	REPLACE TRIP VALVES-SEE LIST	DISCONNECTED+CONNECTED+TESTED	1	804120852	274
06/10/78	CH	MOV	1869B	DISC RECON+TEST	RECONNECTED MOV AND TESTED	1	804250700	1124
06/10/78	RC	VALVE	1556B/1456	REMOVE SOV1556B INSTALL IN SOV1456	SWAPPED SOV FROM 1556B TO 1456	1	806081120	27
06/10/78	SI	MOV	MOV-1869A	CHECK AND SET LIMITS	SET LIMITS+TORQUE SW	1	806091320	5
06/12/78	IA	DRYER	1-JA-D-2	INSPECT FOR PROPER OPERATION DURING	REPLACED LAMPS+TESTED DRYER	1	806071342	77
06/14/78	CH	MOV	MOV-1287C	CLEAN+INSPECT	INSPECTED CLEANED+ADJUSTED	1	805040837	852
06/14/78	SI	MOV	1860A	CLEAN+INSPECT	CLEANED INSPECTED REPLACED BEARING	1	805091013	416
06/15/78	VS	MOV	MOV-VS-100C	SET CLOSED LIMIT SWITCH FOR PT16.4	SET LIMIT	1	806121545	13
06/15/78	SD	VALVE	TV-SV-102	ADJUST LIMIT SWITCHES	ADJUST LIMIT SWITCHES+TEST	1	806142201	3
06/16/78	RC	MOV	MOV1535	WILL NOT OPEN FULLY-INVESTIGATE	CHECKED CONTACTS+TORQUE SWITCH TESTE	1	804211426	816
06/16/78	RC	MOV	MOV-1535	CLEAN+INSPECT	CLEANED INSPECTED+TESTED	1	805011116	816
06/16/78	FW	MOV	MOV-FW-151C	DISCONNECT-RECONNECT FOR MECHS	VOID	1	806131540	0
06/16/78	FW	MOV	MOV-FW-151E	DISCONNECT-RECONNECT FOR MECHS	DISCON+RECONNECTED SET LIMITS	1	806131542	55
06/16/78	CS	MOV	MOV-CS-101A	SET LIMITS	SET LIMITS	1	806141715	39
06/16/78	CS	MOV	MOV-CS-101B	SET LIMITS	SET LIMITS	1	806141716	39
06/20/78	CH	MOV	MOV-1286B	CLEAN+INSPECT	CLEANED+INSPECTED	1	805040833	974
06/20/78	CH	MOV	MOV-1287A	CLEAN+INSPECT	DISCONNECTED RECONNECTED SET LIMITS	1	805040835	1080
06/20/78	DA	VALVE	TV-DA-100A	SET LIMIT SWITCHES	SET LIMITS TESTED	1	806161532	4
06/20/78	DA	VALVE	TV-DA-100B	SET LIMIT SWITCHES	SET LIMITS TESTED	1	806161533	4
06/24/78	CLS	CONT	1A	1A HYDROGEN RECOMBINER WOULD NOT MEE	CALIBRATED METER	1	806152100	191
06/24/78	RJS	ALARM	C-H-4	PORV LO AIR PRESS ALARM IN	AIR SUPPLY VALVE CLOSED	1	806200415	24
06/24/78	DG	VALVE	TV-DG-108A	SET LIMIT SWITCHES	ADJUSTED ACTUATORY CAM FOR RED LIGHT	1	806221011	34
06/24/78	SI	MOV	MOV-RS-156B	SET LIMITS+TORQUE SWITCHES	SET LIMIT+TORQUE SW TEST SAT	1	806231225	26

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(MAINTENANCE OF SAFETY RELATED SYSTEMS DURING OUTAGE OR REDUCED POWER PERIODS)

RETSERVD	SYS	COMP	MARKNO	SUMMARY	WKPERF	U	MR	TOTDWN	TM
06/27/78	FW	MOV	MOV-FW-151A	CLEAN+INSPECT	CLEANED + INSPECTED	1	805011127	576	
06/27/78	FW	MOV	MOV-FW-151A	DISCONNECT-RECONNECT FOR MECHS	RECONNECT+TESTED SAT	1	806131538	163	
06/27/78	FP	CONT		HAZ AREA 11 THERMOSWITCH IN INOPERAT	REPLACED THERMOSWITCH TEST SAT	1	806221125	96	
06/27/78	FP	CONT	HAZ-5	SR RELAY BAD	REPLACED SR RELAY	1	806251016	1	
06/27/78	CV	VALVE	TV-CV-150B	WIRES UNPROTECTED-LIQUIDTITE FITTING	RECONNECTED LIQUILITE	1	806251354	7	
06/28/78	CH	MOV	MOV-1275B	CLEAN+INSPECT	SET LIMITS	1	805040830	1188	

DEPT TOTAL

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UNIT 2-JUNE, 1978

(MAINTENANCE OF SAFETY RELATED SYSTEMS DURING OUTAGE OR REDUCED POWER PERIODS)

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(MAINTENANCE OF SAFETY RELATED SYSTEMS DURING OUTAGE OR REDUCED POWER PERIODS)

RETSERVD	SYS	COMP	MARKNO	SUMMARY	WKPERF	U	MR	TOTDWN
06/05/78	RM	MONITOR	RM-159-160	FILTER ADVANCE BROKE NO AUTO OR MAN	FREED+ADJUSTED CAPSTAN	1	806020443	66
06/15/78	CH	VALVE	FCV-1113B	VALVE NOT OPENING ON AUTO MAKEUP	PROBLEM CANNOT BE REPRODUCED	1	806031535	236
06/15/78	RH	CONT	HCV-1758	VALVE DOES NOT RESPOND WHEN POT IS	CLEANED LINES NOW CHECKS SAT	1	806120520	73
06/21/78	EE	COMPRESS	AIR COMP NO.	COMPRESSOR THERMALS OUT	INSTALLED NEW PRESSURE SWITCH	1	806181118	216
06/24/78	RC	VALVE	PCV1455A	CHECK CONTROL	REPLACED GUAGES-CHECKED OPERATION-OK	1	806211546	54
06/24/78	RC	VALVE	PCV1455B	CHECK CONTROL	REPLACED GUAGES-CHECKED OPERATION-OK	1	806211547	54

DEPT TOTAL								699

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DEPT=TEST

UNIT 2-JUNE, 1978

(MAINTENANCE OF SAFETY RELATED SYSTEMS DURING OUTAGE OR REDUCED POWER PERIODS)

WST	LEVEL	SYS	COMP	MARKNO	DESC	WKPCKE	U	IN	TOTDATE
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NONE DURING THIS REPORTING PERIOD.

HEALTH PHYSICS

JUNE, 1978

There was no single release of radioactivity or radiation exposure specifically associated with an outage that accounted for more than 10% of the allowable annual values in 10CFR20.

FACILITY: Curry Power Station

REPORT OF RADIOACTIVE EFFLUENTS

PAGE 2

DOCKET: 50-280 and 50-281YEAR: 1977

CORRECTED 6-28-78

I. LIQUID RELEASES (CON'T)

	UNITS	MONTHS						TOTAL	± Error
		JAN.	FEB.	MARCH	APRIL	MAY	JUNE		
7. Isotopes Released μ MPC Ci/ml	Curies								
Ce-141 9×10^{-3}		*	*	*	*	*	*		
Ce-144 1×10^{-3}		1.45E-3	2.91E-5	*	*	*	*	1.48E-3	1.26E-4
Xe-133 3×10^{-6}		9.73E-2	2.28E+0	5.89E-1	1.41E+0	4.95E+0	4.80E+0	1.41E+1	1.20E+0
Xe-135 3×10^{-6}		5.78E-2	2.95E-1	1.03E-1	7.68E-2	3.83E-2	8.05E-2	6.51E-1	5.53E-2
Ar-41 3×10^{-6}		3.80E-3	6.22E-4	4.10E-2	*	1.25E-4	*	4.55E-2	3.87E-3
Sr-89 3×10^{-6}		3.88E-5	7.47E-5	6.05E-5	1.12E-5	2.61E-4	6.26E-5	5.09E-4	4.82E-5
Sr-90 3×10^{-7}		3.37E-6	6.50E-6	5.25E-6	1.40E-5	3.27E-5	7.82E-6	6.96E-5	5.92E-6
C-14 8×10^{-4}		8.70E-6	1.68E-5	1.36E-5	5.21E-5	1.22E-4	2.92E-5	2.42E-4	2.06E-5
8. Percent of 10CFR20	Percent	2.16E+0	2.75E+0	4.02E+0	1.38E+0	8.83E-1	1.47E+0		
II. AIRBORNE RELEASES									
1. Total Noble Gases	Curies	4.25E+2	1.08E+3	6.74E+2	3.07E+3	7.98E+2	1.46E+3	7.52E+3	6.39E+2
2. Total Halogens	Curies	1.63E-1	1.69E-1	5.16E-2	7.84E-2	1.56E-2	1.87E-3	4.79E-1	4.07E-2
3. Total Particulate Gross Radioactivity (By)	Curies	7.69E-5	1.28E-4	8.14E-6	1.92E-5	1.34E-5	1.67E-5	2.62E-4	2.23E-5
4. Total Tritium	Curies	3.57E+1	2.19E+1	2.61E+1	2.23E+1	3.66E+0	1.28E+2	2.38E+2	2.02E+1
5. Total Particulate Gross Alpha Radioactivity	Curies	3.45E-7	5.01E-7	3.84E-7	4.56E-7	5.53E-6	2.49E-6	9.71E-6	8.25E-7
6. Maximum Noble Gas Release Rate	μ Cl/sec	1.25E+2	7.25E+3	2.95E+2	1.33E+3	1.33E+3	6.89E+2		
7. Percent of Applicable Limit for Technical Specifications									
(a) Noble Gases	Percent	3.90E-1	9.05E-1	6.79E-1	2.09E+0	@ 5.25E-1	1.02E+0		
(b) Halogens	Percent	3.77E-1	2.97E-1	2.11E-1	2.54E-1	3.61E-2	4.32E-4		
(c) Particulates	Percent	8.90E-3	1.02E-2	8.76E-2	4.14E-4	2.26E-3	1.86E-3		
8. Isotopes Released:	Curies								
(a) Particulates									
Cs-134		5.64E-4	4.89E-4	8.36E-5	2.06E-5	4.80E-5	1.50E-4	1.36E-3	1.16E-4
Cs-135		*	7.26E-6	*	*	*	*	7.26E-6	6.17E-7
Cs-137		1.81E-5	2.01E-5	2.43E-4	2.77E-6	*1.47E-6	6.75E-8	2.85E-4	2.42E-5
Cs-138		1.91E-2	3.15E-2	4.48E-1	5.21E-3	4.79E-3	2.25E-2	5.31E-1	4.51E-2
Co-58		9.87E-5	1.93E-4	4.06E-3	4.23E-6	3.80E-5	3.06E-6	4.40E-3	3.74E-4
Co-60		1.04E-4	9.93E-5	3.43E-3	8.09E-6	3.52E-5	2.32E-6	3.68E-3	3.13E-4
Mn-54		8.91E-6	1.21E-5	*	*	*	5.15E-6	2.62E-5	2.22E-6
Fe-59		*	*	*	*	*	*		
Rb-88		3.80E-3	6.07E-3	2.64E-2	1.42E-3	3.81E-3	1.02E-2	5.17E-2	4.39E-3

REPORT OF RADIOACTIVE EFFLUENTS

PAGE 1

Facility: Surry Power StationDOCKET: 50-280 and 50-281YEAR: 1978

I. LIQUID RELEASES

	UNITS	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	TOTAL	+ ERROR
1. Gross Radioactivity (BY)									
(a) Total Release	Curies	6.12E-1	5.14E-2	4.70E-2	1.63E-1	8.38E-2	1.97E-1	1.15E+0	9.81E-2
(b) Avg. Concentration Released	µCi/ml	2.34E-9	2.41E-10	2.17E-10	6.86E-10	4.96E-10	1.15E-9		
(c) Maximum Concentration Released	µCi/ml	5.14E-9	3.47E-10	2.71E-10	5.67E-10	4.92E-10	4.29E-9		
2. Tritium									
(a) Total Released	Curies	9.27E+1	2.35E+1	1.11E+2	8.13E+1	2.71E+1	2.37E+1	3.59E+2	3.05E+1
(b) Avg. Concentration Released	µCi/ml	3.54E-7	1.10E-7	5.12E-7	3.43E-7	1.61E-7	1.39E-7		
3. Dissolved Noble Gases									
(a) Total Release	Curies	2.38E-1	1.18E+0	3.67E-1	9.97E-1	1.06E-1	3.20E-2	2.92E+0	2.48E-1
(b) Avg. Concentration Released	µCi/ml	9.08E-10	5.55E-9	1.69E-9	4.21E-9	6.25E-10	1.87E-10		
4. Gross Alpha Radioactivity									
(a) Total Released	Curies	1.16E-5	3.70E-7	1.86E-6	1.92E-5	1.62E-5	4.41E-6	5.36E-5	4.56E-6
(b) Avg. Concentration Released	µCi/ml	4.43E-14	1.74E-15	8.58E-15	8.10E-14	9.60E-14	2.58E-14		
5. Vol. of Liquid to Disch. Canal	Liters	3.37E+7	7.17E+7	3.39E+7	2.83E+7	5.01E+7	4.90E+7	2.67E+8	9.33E+6
6. Vol. of Dilution Water	Liters	2.62E+11	2.13E+11	2.17E+11	2.37E+11	1.69E+11	1.71E+11	1.27E+12	4.44E+10
7. Isotopes Released MPC µCi/ml	Curies								
I-131 3×10^{-7}		1.42E-2	8.96E-3	1.02E-2	2.08E-2	4.52E-3	1.20E-4	5.88E-2	5.00E-3
I-132 8×10^{-6}		1.71E-4	8.96E-4	4.20E-2	5.49E-4	1.88E-4	8.75E-6	4.38E-2	3.72E-3
I-133 1×10^{-6}		3.72E-4	6.06E-4	4.39E-2	5.07E-3	*	*	4.99E-2	4.25E-3
I-134 2×10^{-5}		5.15E-4	5.33E-4	4.20E-2	*	*	*	4.30E-2	3.66E-3
I-135 4×10^{-5}		1.38E-4	6.70E-4	5.19E-2	5.16E-4	*	*	5.32E-2	4.52E-3
Cs-134 9×10^{-6}		1.73E-2	2.22E-2	1.76E-2	1.14E-2	8.47E-3	2.04E-2	9.74E-2	8.28E-3
Cs-136 6×10^{-5}		*	1.35E-3	9.27E-5	*	*	*	1.44E-3	1.23E-4
Cs-137 2×10^{-5}		3.39E-2	4.65E-2	3.82E-2	2.14E-2	2.90E-2	4.44E-2	2.13E-1	1.81E-2
Cs-138		2.22E-4	*	1.86E-2	*	*	*	1.88E-2	1.60E-3
Co-57 4×10^{-4}		1.54E-4	1.56E-4	1.64E-3	1.33E-4	7.60E-4	4.04E-4	3.25E-3	2.76E-4
Co-58 9×10^{-5}		1.14E-1	2.54E-2	1.03E-1	1.40E-1	3.00E-1	1.75E-1	8.57E-1	7.29E-2
Co-60 3×10^{-5}		1.03E-1	6.06E-2	8.13E-2	9.19E-2	2.33E-1	1.00E-1	6.70E-1	5.69E-2
Mn-54 1×10^{-4}		6.94E-3	2.43E-3	5.21E-3	9.51E-3	2.69E-2	1.01E-2	6.11E-2	5.19E-3
Na-24 3×10^{-5}		1.59E-2	2.54E-2	5.51E-1	4.70E-4	9.47E-5	1.02E-3	5.94E-1	5.05E-2
Cr-51 2×10^{-3}		3.60E-2	6.16E-3	3.32E-2	3.97E-2	1.99E-1	6.24E-2	3.76E-1	3.20E-2
Fe-59 5×10^{-5}		9.09E-4	1.51E-4	1.06E-4	*	7.51E-4	4.69E-4	2.39E-3	2.03E-4
Nb-95 1×10^{-4}		3.51E-3	8.34E-4	3.01E-3	3.33E-3	1.42E-2	7.24E-3	3.21E-2	2.73E-3
Ba-La-140 2×10^{-5}		1.81E-3	7.83E-4	9.25E-5	*	2.48E-5	*	2.71E-3	2.30E-4
Rb-88		*	1.36E-3	2.10E-3	*	*	*	3.46E-3	2.94E-4

I. LIQUID RELEASES (CON'T)

	UNITS	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	TOTAL	Error
7. Isotopes Released μ MPC Cl/ml	Curies								
Ce-141 9×10^{-5}		*	2.37E-4	1.97E-5	*	1.53E-4	*	4.10E-4	3.48E-5
Ce-144 1×10^{-5}		*	*	*	*	5.36E-4	*	5.36E-4	4.56E-5
Xe-133 3×10^{-6}		2.01E-1	1.00E-1	3.08E-1	9.49E-1	2.28E-2	9.10E-3	1.59E+0	1.35E-1
Xe-135 3×10^{-6}		3.62E-2	2.05E-2	3.24E-2	2.91E-2	1.66E-3	1.90E-2	1.39E-1	1.18E-2
Ar-41 3×10^{-6}		3.81E-5	9.31E-6	*	*	3.59E-4	2.86E-4	6.92E-4	5.89E-5
Sr-89 3×10^{-6}		1.06E-4	2.59E-5	1.28E-4		----			
Sr-90 3×10^{-7}		1.82E-4	4.44E-5	2.20E-4		----			
C-14 8×10^{-6}		1.99E-3	4.85E-4	2.40E-3		----			
8. Percent of 10CFR20	Percent	5.19E-2	3.71E-2	1.10E-1	1.72E-1	2.22E-2	1.16E-2		
II. AIRBORNE RELEASES									
1. Total Noble Gases	Curies	9.47E+1	4.80E+2	1.95E+2	1.24E+3	9.61E+1	3.61E+2	2.47E+3	2.10E+2
2. Total Halogens	Curies	1.23E-4	2.90E-5	1.36E-4	5.34E-3	5.37E-2	2.84E-4	5.96E-2	5.07E-3
3. Total Particulate Gross Radioactivity (By)	Curies	1.93E-5	1.47E-6	1.61E-5	7.13E-5	1.29E-4	1.03E-4	3.40E-4	2.89E-5
4. Total Tritium	Curies	4.46E+0	4.33E+0	1.23E+2	6.79E+0	3.64E+0	3.85E+0	1.46E+2	1.24E+1
5. Total Particulate Gross Alpha Radioactivity	Curies	1.04E-6	7.69E-7	5.62E-7	1.57E-6	1.11E-5	1.84E-6	1.69E-5	1.43E-6
6. Maximum Noble Gas Release Rate	μ Cl/sec	6.37E+2	9.40E+2	1.50E+3	1.44E+4	6.51E+2	6.53E+3		
7. Percent of Applicable Limit for Technical Specifications									
(a) Noble Gases	Percent	5.90E-2	3.46E-1	1.27E-1	8.21E-1	5.98E-2	2.32E-1		
(b) Halogens	Percent	8.29E-5	3.38E-4	1.51E-3	5.65E-2	6.05E-1	3.29E-3		
(c) Particulates	Percent	1.19E-3	2.30E-4	3.01E-4	9.96E-4	1.68E-3	1.02E-3		
8. Isotopes Released:	Curies								
(a) Particulates									
Cs-134		2.04E-5	9.54E-7	7.20E-9	*	2.27E-6	1.33E-8	2.36E-5	2.01E-6
Cs-135		*	*	*	*	*	*	---	---
Cs-137		1.53E-8	1.42E-6	2.14E-6	1.37E-6	7.41E-6	1.03E-5	1.27E-5	1.93E-6
Cs-138		*	2.17E-3	3.26E-3	*	*	5.13E-6	5.44E-3	4.62E-4
Co-58		3.05E-5	2.60E-6	1.33E-5	7.97E-5	4.72E-5	5.24E-5	2.26E-4	1.92E-5
Co-60		5.21E-5	1.36E-5	1.14E-5	4.87E-6	9.05E-5	2.55E-5	1.98E-4	1.68E-5
Mn-54		3.34E-6	5.75E-9	*	*	2.49E-6	*	5.84E-6	4.96E-7
Fe-59		*	*	*	*	*	*	---	---
Rb-88		8.11E-5	1.27E-5	1.57E-4	*	*	*	2.51E-4	2.13E-5

FACILITY: Curry Power Station

REPORT OF RADIOACTIVE EFFLUENTS

YEAR: 8

PAGE 3

DOCKET: 50-280 and 50-281

II. AIRBORNE RELEASES (CON'T)

	UNITS	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	TOTAL	+ ERROR
9. Isotopes Released (con't)	Curies								
(b) Halogens									
I-131		7.39E-6	2.72E-5	1.34E-4	4.88E-3	5.40E-2	2.84E-4	5.93E-2	5.04E-3
I-132		1.04E-6	*	*	2.93E-4	2.64E-7	*	2.94E-4	2.50E-5
I-133		2.75E-6	1.81E-6	1.34E-7	1.68E-4	9.06E-9	*	1.73E-4	1.47E-5
I-134		*	*	*	*	*	*	---	---
I-135		*	*	1.78E-7	*	*	*	1.78E-7	1.51E-8
(c) Gases									
Xe-133		9.43E+1	4.67E+2	1.90E+2	1.20E+3	7.02E+1	3.61E+2	2.38E+3	2.03E+2
Xe-133m		*	4.76E-1	7.38E-1	1.18E+1	7.30E-2	*	1.31E+1	1.11E+0
Xe-135		3.94E-1	1.13E+1	2.46E+0	2.16E+1	6.06E-3	5.22E-3	3.58E+1	3.04E+0
Kr-85m		2.41E-4	4.27E-3	3.42E-2	*	*	3.15E-4	3.90E-2	3.32E-3
Kr-85		*	7.07E-1	*	*	2.59E+1	*	2.66E+1	2.26E+0
Kr-87		*	*	3.95E-2	*	*	*	3.95E-2	3.36E-3
Kr-88		*	5.42E-3	6.67E-2	*	*	*	7.21E-2	6.13E-3
Ar-41		*	9.87E-3	6.40E-1	*	*	4.45E-3	6.54E-1	5.56E-2
III. SOLID RADIOACTIVE WASTE DISPOSAL									
1. (a) Total Amount Solid Waste Packaged	FT ³	.6.00E+1	7.76E+2	7.21E+2	2.12E+3	3.89E+3	2.67E+3	1.02E+4	
(b) Estimated Total Activity	Curies	1.63E+0	1.12E+1	9.20E+1	1.32E+2	6.55E+1	3.97E+0	3.06E+2	
(c) Date of Shipment and Disposition		Barnwell, S.C.	Barnwell, S.C.	Barnwell, S.C.	Barnwell, S.C.	Barnwell, S.C.	Barnwell, S.C.		

01-23-78

2-2-78

3-1-78

04-10-78

05-02-78

6-1-78

2-21-78

3-10-78

04-12-78

05-03-78

6-6-78

2-22-78

3-10-78

04-26-78

05-05-78

6-9-78

3-31-78

04-27-78

05-10-78

6-12-78

05-11-78

6-12-78

05-16-78

6-22-78

05-17-78

6-29-78

05-18-78

05-19-78

05-24-78

05-25-78

* SENSITIVITY DATA

1. Minimum Detectable Activity

- a. Gross Alpha; $5.27\text{E}-9$ $\mu\text{Ci/ml}$
- b. Tritium; $4.0\text{E}-6$ $\mu\text{Ci/ml}$
- c. Strontium-89; less than $3.0\text{E}+1$ pCi per total filter composite.
- d. Strontium-90; less than $2.0\text{E}+0$ pCi per total filter composite.
- e. CO_2 -14; less than $7.0\text{E}-10$ $\mu\text{Ci/ml}$.
- f. Strontium-89; less than $9.0\text{E}-9$ $\mu\text{Ci/ml}$.
- g. Strontium-90; less than $8.0\text{E}-10$ $\mu\text{Ci/ml}$.

2. Multichannel Analyzer - GeLi

a. Liquid and/or Radiogases - 100cc

Ba-La-140	$2.0\text{E}-7$
I-131	$5.1\text{E}-8$
Xe-133	$5.4\text{E}-8$
Xe-135	$2.9\text{E}-8$
Cs-137	$9.2\text{E}-8$
Cs-134	$7.2\text{E}-8$
Co-60	$1.5\text{E}-7$
Co-58	$9.8\text{E}-8$
Cr-51	$3.8\text{E}-7$
Mn-54	$1.0\text{E}-7$
Fe-59	$2.4\text{E}-7$
Ar-41	$1.6\text{E}-7$
I-134	$1.1\text{E}-7$
I-132	$1.0\text{E}-7$
Na-24	$1.7\text{E}-7$
I-133	$6.9\text{E}-8$
I-135	$4.5\text{E}-7$
Kr-85	$1.36\text{E}-5$
Kr-88	$5.5\text{E}-8$
Kr-87	$5.3\text{E}-8$
Kr-85m	$2.3\text{E}-7$
Xe-138	$4.7\text{E}-9$
Xe-135m	$5.8\text{E}-8$
Xe-133m	$1.7\text{E}-7$
Rb-88	$8.5\text{E}-7$

b. Radioiodines

I-131	$2.3\text{E}-6$
I-133	$3.1\text{E}-6$
I-132	$4.7\text{E}-6$
I-134	$4.8\text{E}-6$
I-135	$2.0\text{E}-5$

PROCEDURE VIOLATIONS REVIEWED BY STATION NUCLEAR
SAFETY AND OPERATING COMMITTEE AFTER TIME LIMIT
SPECIFIED IN TECHNICAL SPECIFICATIONS

JUNE, 1978

There were none during this reporting period.