## VIRGINIA ELECTRIC AND POWER COMPANY

## SURRY POWER STATION

MONTHLY OPERATING REPORT

REPORT NO. 79-01

JANUARY, 1979

APPROVED:

MANAGER

7902200053+

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-1-KEY PERSONNEL CHANGES

### JANUARY, 1979

Due to a reorganization of the station, the following new key positions were established effective on the dates indicated and filled by the individuals listed:

Position	Effective Date	Incu	mbent
Station Manager	January 1, 1979	W. L.	Stewart
Superintendent-Operations	Janaury 1, 1979	J. L.	Wilson
Superintendent-Maintenance	January 1, 1979	R. F.	Saunders
Superintendent-Technical Services	January 1, 1979	T. A.	Peebles
Currentian Administration	January 16 1070	ът	Poldrin

Supervisor-Administrative Services

January 16, 1979

L. Baldwin к.

### CORRECTED REPORT 1 - 22 - 79

Surry Unit 1	
DATE October 3, 197	7
COMPLETED BY	
DOCKET NO. 50-280	

#### OPERATING STATUS

۱.	REPORTING PERIOD:	0001	770901	THROUGH	2400	770930	
	HOURS IN REPORTING PE	ERIOD:	720				

CURRENTLY AUTHORIZED POWER LEVEL (MWth) 2441 MAX. DEPENDABLE CAPACITY (MWe-NET) 115 2. N/A

3. LOWEST POWER LEVEL TO WHICH SPECIFICALLY RESTRICTED (IF ANY) (MWe-NET):\_

**REASONS FOR RESTRICTION (IF ANY):** 4.

		THIS REPORTING PERIOD	YR TO DATE	CUMULATIVE TO DATE
		718.8	5167.1	27,721.5
J. 6	REACTOR RESERVE SHUTDOWN HOURS		0	0
0. 7.	HOURS GENERATOR ON LINE	712.5	5072.8	26,972.8
8.	UNIT RESERVE SHUTDOWN HOURS	. 0	0	0
9.	GROSS THERMAL ENERGY GENERATED (MWH)	1,729,792	12,193,702	61,282,058
10.	GROSS ELECTRICAL ENERGY GENERATED (MWH)	565,955	4,009,580	20,087,943
11.	NET ELECTRICAL ENERGY GENERATED	537,539	3,812,369	19,056,134
12.	REACTOR AVAILABILITY FACTOR (1)	99.8%	78.9%	66.2%
13.	UNIT AVAILABILITY FACTOR (2)	99.0%	11.4/0	64.4%
14.	UNIT CAPACITY FACTOR (3)	96.3%	75.1%	
15.	UNIT FORCED OUTAGE RATE (4)	1.0%	2.4%	19.0%

SHUTDOWNS SCHEDULED TO BEGIN IN NEXT 6 MONTHS (STATE TYPE, DATE, AND DURATION OF EACH): S/G Inspection, Nov. 19, 1977 - 4 weeks 16.

N/A IF SHUT DOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP: 17.

18. UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERATION) REPORT THE FOLLOWING:

				DATE LAST	DATE
				FORECAST	ACHIEVED
			INITIAL CRITICALITY		
			INITIAL ELECTRICAL POWER GENERATION		
			COMMERCIAL OPERATION		
(1)	REACTOR AVAILABILITY FACTOR	=	HOURS REACTOR WAS CRITICAL HOURS IN REPORTING PERIOD		
(2)	UNIT AVAILABILITY FACTOR	ε	HOURS GENERATOR ON LINE HOURS IN REPORTING PERIOD		
(3)	UNIT CAPACITY FACTOR	Ŧ	NFT ELFCTRICAL POWER GENERATED MAX. DEPENDABLE CAPACITY (MWe-NET) X	HOURS IN REPO	RTING PERIOD
(4)	UNIT FORCED OUTAGE RATE	=	FORCED OUTAGE HOURS HOURS GENERATOR ON LINE + FORCED OUT.	AGE HOURS	100

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<b>,</b>	-2a	- 1 🔴 1
	OPERATING DNDA REPORT	
	DOCKET NO. DATE COMPLETED BY TELEPHONE	50-220 05 FEB 79 0.J. COSTELLO 204-357-3184
	OPERATING STATUS	
1. 2. 34. 5. 7. 9.	UNIT NAME REPORTING PERIOD LICENSED THERMAL POWER (MWT) NAMEPLATE RATING (GROSS MWE) DESIGN ELECTRICAL RATING (NET MWE) MAXIMUM DEPENDABLE CAPACITY (GROSS MWE) MAXIMUM DEPENDABLE CAPACITY (NET MWE) IF CHANGES OCCUR IN CAPACITY RATINGS ,ITEMS 3 THROUGH 7) SINCE LAST REPORT, GIVE REASONS	SURRY UNIT 1 179 2441 947.5 NOTES 822 911 775 N/A
ġ.	POWER LEVEL TO WHICH RESTRICTED, IF ANY	N/A
10.	(NET MWE) REASONS FOR RESTRICTIONS, IF ANY	N/A
	·	THIS MONTH YR-TO-DATE CUMULATIVE
11. 12. 13. 15. 17. 19. 20. 21. 24.	HOURS IN REPORTING PERIOD NUMBER OF HOURS REACTOR WAS CRITICAL REACTOR RESERVE SHUTDOWN HOURS HOURS GENERATOR ON-LINE UNIT RESERVE SHUTDOWN HOURS GROSS THERMAL ENERGY GENERATED (MWH) GROSS ELECTRICAL ENERGY GENERATED (MWH) NET ELECTRICAL ENERGY GENERATED (MWH) UNIT SERVICE FACTOR UNIT AVAILABILITY FACTOR UNIT CAPACITY FACTOR (USING MDC NET) UNIT CAPACITY FACTOR (USING DER NET) UNIT FORCED OUTAGE RATE SHUTDOWNS SCHEDULED OVER NEXT & MONTHS (TYPE.DATE.AND DURATION OF EACH)	744.0 744.0 53569.0 704.1 704.1 36404.0 0.0 0.0 0.0 702.7 702.7 35561.6 0.0 0.0 0.0 1701725.0 1701725.0 82057679.0 546305.0 546305.0 26853888.0 519513.0 519513.0 25490232.0 94.4 0/0 94.4 0/0 66.4 0/0 94.4 0/0 94.4 0/0 66.4 0/0 94.4 0/0 94.4 0/0 66.4 0/0 89.9 0/0 89.9 0/0 61.4 0/0 89.9 0/0 89.9 0/0 61.4 0/0 5.6 0/0 5.6 0/0 16.1 0/0 S/G INSPECTION - 6/2/79 - 3 WEEK
25. 26.	IF SHUT DOWN AT END OF REPORT PERIOD, ESTIMATE DATE OF STARTUP UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERATION)	N/A FCRECAST ACHIEVED

INITIAL CRITICALITY INITIAL ELECTRICITY COMMERCIAL OPERATION

-3-	CORRECTED REPORT
	UNIT Surry Unit 1
	DATE January 31, 1978
	COMPLETED BY O. W. Akins
	DOCKET NO. 50-280

OPERATING STATUS

1.	REPORTING PERIOD:	THROUGH 2400 771231	
	HOURS IN REPORTING PERIOD: 744		
2	CURRENTLY AUTHORIZED POWER LEVEL (MWth)	2441 MAX DEPENDABLE CAPACITY (MWG-NET)	775

N/A 3. LOWEST POWER LEVEL TO WHICH SPECIFICALLY RESTRICTED (IF ANY) (MWe-NET): \_\_\_\_\_

REASONS FOR RESTRICTION (IF ANY): 4.

		THIS REPORTING PERIOD	YR TO DATE	CUMULATIVE TO DATE
5. 6. 7. 8.	HOURS REACTOR WAS CRITICAL.	<u>592.2</u> 0 <u>589.4</u> 0	6762.5 0 6665.2 0	$     \frac{29,316.9}{0}     \frac{0}{28,565.2}     0 $
9.	GROSS THERMAL ENERGY GENERATED (MWH)	1,418,378	16,052,640	65,140,996
10.	GROSS ELECTRICAL ENERGY GENERATED (MWH)	469,850	5,281,480	21,359,843
11.	NET ELECTRICAL ENERGY GENERATED (MWH)	447,962	5,023,799	20,267,564
12. 13. 14.	REACTOR AVAILABILITY FACTOR (1) UNIT AVAILABILITY FACTOR (2) UNIT CAPACITY FACTOR (3)	<u>79.6%</u> <u>79.2%</u> <u>77.7%</u> .3%	$     77.2\% \\     76.1\% \\     74.0\% \\     1.9\% $	<u>66.5%</u> <u>64.8%</u> <u>59.3%</u> 18.1%

SHUTDOWNS SCHEDULED TO BEGIN IN NEXT 6 MONTHS (STATE TYPE, DATE, AND DURATION OF EACH): Refueling S/G Inspection, April 1978, 4 weeks 16. N/A

17. IF SHUT DOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP: \_

UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERATION) REPORT THE FOLLOWING: 18.

				DATE LAST FORECAST	DATE ACHIEVED
			INITIAL CRITICALITY		
	,		INITIAL ELECTRICAL POWER GENERATION	<u></u>	
			COMMERCIAL OPERATION		<u></u>
(1)	REACTOR AVAILABILITY FACTOR	=	HOURS REACTOR WAS CRITICAL HOURS IN REPORTING PERIOD		
(2)	UNIT AVAILABILITY FACTOR	=	HOURS GENERATOR ON LINE HOURS IN REPORTING PERIOD	-	
(3)	UNIT CAPACITY FACTOR	=	NFT ELECTRICAL POWER GENERATED MAX. DEPENDABLE CAPACITY (MWe-NET) X	HOURS IN REPO	RTING PERIOD
(4)	UNIT FORCED OUTAGE RATE	2	FORCED OUTAGE HOURS HOURS GENERATOR ON LINE + FORCED OUT.	AGE HOURS	100

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•	OPERATING D <u>A</u> TA REPORT	
ś	DOCKET NO.	50-281
	DATE	05 FEB 79
	COMPLETED BY	O.J. COSTELLO
	OPERATING STATUS	504-357-3184
î.	UNIT NAME	SURRY UNTT 2
2.	REPORTING PERIOD	179
З.	LICENSED THERMAL POWER (MWT)	2441
뱍.	NAMEPLATE RATING (GROSS MWE)	247.5 NOTES
5.	DESIGN ELECTRICAL RATING (NET MWE)	922
5.	MAXIMUM DEPENDABLE CAPACITY (GROSS MWE)	<u>911</u>
/. 0	MAXIMUM DEPENDADLE CAPACITY (NET MWE)	
5.	IT CHANGED DOCOM IN CAPACITI NATINGD TTTENS 3 THPOHON 7) STNCE INCT	
	REPORT GIVE REASONS	-
ĝ.	POWER LEVEL TO WHICH RESTRICTED, IF ANY	N/A
	(NET MWE)	·
10.	PEASONS FOR RESTRICTIONS, IF ANY	N/A
		WITC MONTH VD_DO DAME CHURTANTIC
		IEIS MONIE IN-10-DAIE COMULATIVE
11.	HOURS IN REPORTING PERIOD	744.0 744.0 50448.0
12.	NUMBER OF HOURS REACTOR WAS CRITICAL	744.0 744.0 34424.5
13.	REACTOR RESERVE SHUTDOWN HOURS	0.0 0.0 0.0
14.	HOURS GENERATOR ON-LINE	744.0 744.0 33921.3
15.	UNIT RESERVE SHUTDOWN HOURS	
15.	GRUSS INSRMAL ENERGI GENERATED (NWH) CROSS FIFCHPICAI ENERCY OPERDAMED (NUU)	500085 0 500085 0 25014604 0
10	NET FIFCTRICAL ENERGY CENERATED (MNH)	
19.	UNIT SERVICE FACTOR	$100.0 \circ / \circ 100.0 \circ / \circ 67.2 \circ / \circ$
20.	UNIT AVAILABILITY FACTOR	100.0 °/° 100.0 °/° E7.2 °/°
21.	UNIT CAPACITY FACTOR (USING MDC NET)	97.2 0/0 97.2 0/0 62.6 0/0
22.	UNIT CAPACITY FACTOR (USING DER NET)	91.6 •/• 91.6 •/• 59.0 •/•
23.	UNIT FORCED OUTAGE RATE	0.0 0.0 21.1 •/•
24.	SHUTDOWNS SCHEDULED OVER NEXT & MONTHS	STEAM GENERATOR REPLACEMENT
	(TYPE, DATE, AND DURATION OF EACH)	6 MONTHS 2/4/79
		· · · ·
25	TR SHUT DOUN AT FND OF PEPOPT DEPTOD	NORE
~ <b>~</b> .	ESTIMATE DATE OF STARTUP	
26.	UNITS IN TEST STATUS	FORECAST ACHTEVED
	(PRIOR TO COMMERCIAL OPERATION)	
	INITIAL CRITICALITY	ν.
	INTIAL ELECTRICITY	
	COMMERCIAL OPERATION	
		-

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UNIT SHUTDOWNS AND POWER REPUCTIONS

REPORT MONTH JANUARY 1979

DOCKETNO	50-280 *
UNITNAME	SURRY 1
DATE	FEB. 2, 1979
COMPLETED BY	S. STEVENŠ
TELECHONE	(804) 357-3184

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2-28-77

Nu.	Date	Typel	Duration (Hours)	בטחצהביצא	Method of Shutting Down Reactor <sup>3</sup>	Licensec Event Report #	System Code <sup>4</sup>	Corriponent · Code <sup>S</sup>	Cause & Corrective Action to Prevent Recurrence
79-1	1-1-79	F	41.3	D	1	78-047/03L-0			Continuation of shutdown began 12-8-78 for primary to secondary leakage on "C" S/G exceeding 0.3 GPM limitation.
	•								Inspected steam generators and plugged leaking tubes.
							•• • •		
					•				
	•	•					•		
1 F: Fo S: Sel	rced reduled	Rease A-Eq B-Ma C-Re D-Re E-Op F-Ad G-Op	m: ulpment Fal Intenance of fueling gulatory Re erator Train ministrative erational Er her (Explain	Hure (E) ř Test strictior (ing & L ror (Ex) ()	xplain) 1 Icenso Exa plain)	3 minution	Method I-Mant 2-Mant 3-Auto 4-Othe	i: ial ial Scram. imatic Scram. r (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

REPORT MONTH JANUARY 1979

DOCKETNO	50-281
UNIT NAME	SURRY 2
DATE	FEB. 2, 1979
COMPLETED BY	S. STEVENS
TELEI HONE	(804) 357-31.84

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No.	Date	Type <sup>1</sup>	Duration (Hours)	Lusson -	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report #	System Cude <sup>4</sup>	Content Codeک Code	Cause & Corrective Action to Prevent Recurrence
					NONE D	JRING THIS REPO	TING P	ERIOD.	
I F: Fo S: Sel	inced the duled	Reas A-Eq B-Ma C-Re D-Re E-Op F-Ad G-Op H-Ot	on: ulpment Fa intenance o fueling gulatory Re erator Train ministrative wrational fi her (Explain	llure (E; 7 Test striction ling & L ror (Ex) 1)	l xplain) 1 icense Exa plain)	I 3 mination	Metho I-Manu 2-Manu 3-Auto 4-Othe	d: ual ual Scram. matic Scram. r (Explain)	4 Exhibit G - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG- 0161) 5 Exhibit I - Same Source

## LOAD REDUCTIONS DUE TO ENVIRONMENTAL RESTRICTIONS

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## UNIT NO.1

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**1**. )

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MONTH: JANUARY, 1979

DATE	TIME	HOURS	LOAD, MW.	REDUCTIONS, MW	<u>MWH</u>	REASON
						•
-			NONE DURING	THIS REPORTING PER	IOD.	
·						
				. <del>.</del> .		
					5.	
			MON	THLY TOTAL	0	

# LOAD REDUCTIONS DUE TO ENVIRONMENTAL RESTRICTIONS

# UNIT NO.2

MONTH: JANUARY, 1979

DATE	TIME	HOURS	LOAD, MW.	REDUCTIONS, MW	MWH	REASON
			÷		· · ·	
						÷ ``
			NONE I	URING THIS REPORT	NG PERIOD	•
				· · · · ·		
				•		
		-				
				-		
					•••	
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	-			•		
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<i>P</i>						-
			•			
· · · · · · · · · · · · · · · · · · ·	ļ		ļ			-
			MON	THLY TOTAL	0.	

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DOCKET NO 50-290 UNIT SURRY I DATE 2-1-79 COMPLETED BY O J COSTELLO

AVERAGE DAILY UNIT PONER LEVEL

MONTE:

JANUARY 1978

DAY	AVERAGE DAILY POWER LEVEL (MWE-NET)	DAY	AVERAGE DAILY POWER LEVE (MWE-NET)
1	0.0	17	749.3
2	90.7	19	745.3
3	733.2	19	743.8
24	735.5	20	738.6
5	735.4	21	745.7
6	738.4	22	744.9
7	737.4	23	744.8
8	735.9	24	746.5
ġ	736.1	25	745.4
10	735.6	26	744.7
11	736.4	27	743.2
12	737.6	28	744.6
13	749.8	29	742.7
14	746.3	30	742.8
15	745.4	31	743.2
16	745.5		

### 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. THESE FIGURES WILL BE USED TO PLOT A GRAPH FOR EACH REPORT-ING 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 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

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DECKET NO 50-281 UNIT SURRY II DATE 2-1-78 COMPLETED BY O J COSTELLO

AVERAGE DAILY UNIT POWER LEVEL

<u>MONTH</u>:

JANUARY 1978

	AVERAGE DAILY POWER LEVEL		AVERAGE	DAILY POWER	LEVE
DAY	(MWE-NET)	DAY	· ·	(MWE-NET)	•
1	751.3	17		760.0	
2	748.3	18		<b>7</b> 51.2	
З	755.6	19		760.3	
. 4	763.5	20		761.5	
5	762.8	21		760.5	
6	762.1	22		751.3	
7	762.0	23		760.3	
. 8	761.6	24		758.5	
9	761.0	25	• • •	747.5	
10	762.6	26		742.6	
11	763.2	27	••	737.1	
12	761.8	29		725.4	
13	760.4	29	• •	715.2	
14	761.2	30		710.7	
15	760.4	31	• •	724.3	
16	761.2		•		

### 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. THESE FIGURES WILL BE USED TO PLOT A GRAPH FOR EACH REPORT-ING 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 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

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### MARY OF OPERATING EXPERIENCE

### JANUARY, 1979

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
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- January 1 This reporting period began with the unit at cold shutdown condition for steam generator tube leak repairs.
- January 2 Unit temperature/pressure exceeded 350°F/450 PSIG at 0310. The reactor was taken critical at 1556 and the main generator was placed on the line at 1716. The unit reached 50% power at 1830 and power was maintained at 50% until 2225 to allow calibration of reactor coolant loop flow transmitters. Increasing power to 100% began at 2225.
- January 3 At 0245 reactor power was held at 99% due to high steam flow alarms.
- January 12 The high steam flow alarms were rescaled in accordance with setpoint change SP-79-02. The unit was at 100% power at 1848.
- January 20 Reactor power was reduced to 98% at 0030 to accomplish Special Test ST-6 and power was returned to 100% at 0745.
- January 24 A temporary 75 KVA 230 KV/34.5 KV transformer has been installed in place of the No. 1 Autotie transformer to supply the No. 5 34.5 KV bus. The transformer was placed in service at 1445.

January 31 - This reporting period ends with the unit at 100% power.

UNIT 2

January 1 - This reporting period begins with the unit at 100% power.

January 10 - Unit 2 containment inner door of personnel air lock was damaged. Outer door was closed and properly sealed. Use of the personnel airlock is prohibited until after unit is shutdown.

January 20 - Pressurizer pressure channel 455 was placed in trip mode at 1223 due to instrument drift.

January 25 - At approximately 0001 commenced coastdown phase at end-of-life by reducing power as necessary to maintain Tave.

January 26 - Unit at 98% power in coastdown phase at EDL.

January 28 - Unit at 97% in coastdown phase at E.O.L.

January 29 - Unit at 96% in coastdown phase at E.O.L.

January 30 - Unit at 94% in coastdown phase at E.O.L.

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UNIT 2

January 31 - This reporting period ended with the unit at 96% after replacing deborating demineralizer resin and placing demineralizer in service to remove remaining boron. This action allowed subsequent increase in power of approximately 2%. AMENDMENTS TO

### JANUARY, 1979

The Nuclear Regulatory Commission has issued an amendment No. 46 December 29, 1978, which modifies Surry Unit No. 1 operating license. The amendment results from the NRC Staff's review of the Steam Generator Inspection Program. Of significance, the conditions limit the operation of Surry Unit No. 1 and has the following provisions:

> Unit No. 1 shall be brought to the cold shutdown condition in order to perform an inspection of the steam generators within six months of equivalent operation from December 29, 1978.

Nuclear Regulatory Commission (NRC) approval shall be obtained before resuming power operation following this inspection.

Equivalent operation is defined as operation with the reactor coolant at or above 350°F.

- 2. Reactor coolant leakage from the reactor coolant system (RCS) to the secondary system (SS) through the steam generator tubes shall be limited to 0.3 gpm per steam generator, as described in the NRC Safety Evaluation of May 6, 1977. With any steam generator tube leakage greater than this limit the reactor shall be brought to the cold shutdown condition within 24 hours. NRC approval shall be obtained before resuming reactor operation.
- 3. Reactor operation shall be terminated if RCS to SS leakage which is attributable to 2 or more steam generator tubes. which occurs during a 20 day period. NRC approval shall be obtained before resuming reactor operation.
- 4. The concentration of radioiodine in the reactor coolant shall be limited to 1 μCi/gram during normal operation and to 10 μCi/gram during power transients as defined in Appendix A-1 to the Technical Specifications of the license. Appendix A-1 was issued with the May 6, 1977 Order and shall remain in effect for six equivalent months from December 29, 1978.

The Nuclear Regulatory Commission has issued amendment Nos. 47 and 46 to the Operating License for the Surry Power Station Unit Nos. 1 and 2, respectively January 19, 1979. The amendment results from the NRC Staff's review of the Steam Generator Repair Program. Of significance, the conditions have the following provisions:

- 1. The Surry Power Station Steam Generator Repair Program for Unit Nos. 1 and 2 is approved.
- 2. During the steam generator repair program the following conditions shall be met:
  - (a) All fuel shall be removed from the reactor pressure vessel and stored in the spent fuel pool.

- (b) The temporary containment and ventilation systems shall be operating for all cutting and grinding operations involving components with removable radioactive contamination >2200 DPM per 100 cm<sup>2</sup>.
- (c) The health physics program and procedures which have been established for the steam generator repair program shall be implemented.
- (d) Progress reports shall be provided at 60 day intervals from the start of the repair program and due 30 days after close of the interval with a final report provided within 60 days after completion of the repair. These reports will include:
  - (i) A summary of the occupational exposure expended to date using the format and detail of Table 5.3-1 of the report entitled "Steam Generator Repair Program".
  - (ii) An evaluation of the effectiveness of dose reduction techniques as specified in Chapter 6 of the report entitled "Steam Generator Repair Programs" in reducing occupational exposures.
  - (iii) An estimate of radioactivity released in both liquid and gaseous effluents.
  - (iv) An estimate of the solid radioactive waste generated during the repair effort including volume and radioactive content.
- 3. Sixty days prior to fuel loading, the program for preoperational testing and startup shall be submitted for NRC review.

### -14-FACILITY CHANGES REQUIRING NRC APPROVAL

### JANUARY, 1979

None during this reporting period.

### FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

### JANUARY, 1979

### -15-TESTS AND EXPERIMENTS REQUIRING NRC APPROVAL

JANUARY, 1979

None during this reporting period.

### TEST AND EXPERIMENTS THAT DID NOT REQUIRE NRC APPROVAL

JANUARY, 1979

JANUARY, 1979

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· SURRY POWER STATION

CHEMISTRY REPORT

JANUARY, 1979

T.S.6.6.A.11

PRIMARY COOLANT		UNIT NO	. 1	UNIT NO. 2			
ANALISIS	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM	MINIMUM	AVERAGE	
Gross Radioact., µCi/ml	5.14E-1	1.46E-2	3.18E-1	1.74E-1	4.78E-2	9.93E-2	
Suspended Solids, ppm	0.3	0.1	0.2	0.4	0-0	0.2	
Gross Tritium, µCi/ml	1.76E-1	1.05E-2	9.91E-2	1.02E-1	7.54E-2	8.46E-2	
Iodine-131, µCi/ml	2.00E-2	3.21E-3	8.51E-3	6.12E-4	3.03E-4	4.20E-4	
I-131/I-133	0.7673	0.1669	0.3873	0.1548	0.0508	0.0934	
Hydrogen, cc/kg	35.6	1.1	22.7	37.9	27.1	32.1	
Lithium, ppm	2.77	0.54	2.10	0.31	0.10	0.20	
Boron-10, ppm +	254	99	128	10	0.0	4	
Oxygen-16, ppm	7.700 (1)	0.000	0.355	0.000	0.000	0.000	
Chloride, ppm	0.05	0.05	0.05	0.05	0.05	0.05	
рН @ 25°С	7.38	6.12	7.13	8.84	6.98	7.68	

+ Boron-10 = Total Boron x 0.196

		NON-	RELEASES, I T.S. 4.13	POUNDS 3.A.8			· · ·
	Phosphate	0.0		Boron	259	_	
	Sulfate	1,112		Chromate	0.0	 	
	50% NaOH	1,400		Chlorine	0.0	 	
Remarks: (	1) Unit #1	Shutdown.		·		 	
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### DERIPTION OF ALL INSTANCES WHERE THERMAL DISCHARGE LIMITS WERE EXCEEDED

### JANUARY, 1979

Due to impairment of the circulating water system on the following days the thermal discharge limits were exceeded as noted.

January	З,	1979	*	Exceeded	17.5	°F.	$\Delta \mathbf{T}$	acros	s stat	ion.
January	4,	1979	*	Exceeded	15°F	Δт	ac	ross	static	on.
January	28,	1979	*	Exceeded	15°F	ЪΤ	ac	ross	static	m.

\* Indicates dates when station  $\Delta T$  was <15°F across the station for sometime during the day.

These  $\Delta T$  excursions were allowable under T.S. 4.14.B.2. There were no reported instances of significant adverse environmental impact.

On January 25, 1979, the temperature change at the station discharge exceeded 3°F per hour due to severe temperature transient of James River at both intake and discharge and was reported in accordance with T.S. 4.14.B.1. -19--

### JANUARY, 1979

Two shipments of new fuel for the upcoming refueling on Unit 2 were received. One shipment containing 12 fuel assemblies arrived January 22, 1979, and another shipment containing 4 fuel assemblies arrived January 29, 1979.

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•• T	UNIT	<u>NO. 1</u>	and a sum of the sum o
	FUEL	HANDLING	<b>,</b>
, , , , , , , , , , , , , , , , , , , ,	JANU	ARY, 1979	
DATE SHIPPED/RECEIVED	NO OF ASSEMBLIES PER SHIPMENT	ANSI NO. INITIAL ENRICHMENT	NEW OR SPENT FUEL SHIPPING CASK ACTIVITY LEVEI
			•.
	None during thi	s reporting period.	
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DATE SHIPPED/RECEIVED	NO OF ASSEMBLIES PER SHIPMENT	ANSI NO. INITIAL ENRICHMENT	NEW OR SPENT FUEL SHIPPING CASK ACTIVITY LEVEL		
1-22-79	12	LM06FV/3.4	2.5 mrem/hr.		
·		LM06F8/3.4	2.5 mrem/hr.		
	· · · · · · · · · · · · · · · · · · ·	LM06FW/3.4	2.5 mrem/hr.		
~ <del>~</del>		LM06EX/3.4	2.5 mrem/hr.		
	-	LM06ES/3.4	2.5 mrem/hr.		
		LMO6FC/3.4	2.5 mrem/hr.		
		LM06F7/3.4	2.5 mrem/hr.		
		LM06F0/3.4	2.5 mrem/hr.		
		LN06FU/3.4	2.5 mrem/hr.		
· · ·		LM06F5/3.4	2.5 mrem/hr.		
		LM06F9/3.4	2.5 mrem/hr.		
······		LM06F4/3.4	2.5 mrem/hr.		
	· · ·				
1-29-79	4	LM06EN/3.4	2.5 mrem/hr.		
		LM06ER/3.4	2.5 mrem/hr.		
· · · · · · · · · · · · · · · · · · ·		LM06FA/3.4	2.5 mrem/hr.		
· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	LM06FD/3.4	2.5 mrem/hr.		
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### -22-PREEDURE REVISIONS THAT CHANGED TY OF ATING MODE DESCRIBED IN THE FSAM

## JANUARY, 1979

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

-23-

# JANUARY, 1979

## JANUARY, 1979

## JANUARY, 1979

### None during this reporting period.

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### <u>Maintenance of Safety Related Systems During</u> <u>Outage or Reduced Power Periods</u>

-26-

UNIT #1

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Mechanical Maintenance

DEPT=MECH

UNIT1-

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

RÉTSERVDT	SYS	COMP	MARKNO	SUMMARY	WKPERF	U	MR	TOTDWNTM
01/01/79 01/02/79 01/02/79 01/02/79	RC VS BS BS	SG CHILLER HATCH HATCH	1 RC-E-1A 1 VS E 1B	REMOVE/INSTALL PRIM MANWAYS FAN BELTS SLIPPING ESCAPE MANWAY ORINGS VALVE LEAK THRU	INSTALLED MANWAYS CHECKED SAT REPLACED ORINGS REPAIRED VALVE	1 1 1 1	812111243 807010800 812311700 812311701	434 7 43 43
DEPT TOTAL	,							527

-27-

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## Maintenance of Safety Related Systems During Outage or Reduced Power Periods

<u>بن</u> .

-28-

# UNIT #2

## Mechanical Maintenance

(



-29-Mechanical Maintenance

## UNIT 2

There was none during this reporting period.

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## Maintenance of Safety Related Systems During Outage or Reduced Power Periods

-30-..

## UNIT #1

## Electrical Maintenance

1 FEB 79 + 2:09 FM PAGE 1

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DETT=ELEC

UNIT1-

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

RETSERVDT	SYS	COMP	MARKNO	SUMMARY		WKPERF	U	MR	TOTDWNTM
01/02/74 01/02/74 01/02/79	RS RC RC	PMPN MTR FUMP FUMP	1 -RS P-1B 1 KC P-1B 1 -RC-P-1A	DISCONN/RECONN PMP MTR F BALANCE FUMP+MOTOR BALANCE PUMP+MOTOR	OR MECII	DISC+REC BALANCE UNIT BALANCED MOTOR+FUMP	1 1 1	812121100 901011500 901011601	774 24 23  821

## Maintenance of Safety Related Systems During Outage or Reduced Power Periods

# <u>UNIT #2</u>

## Electrical Maintenance

# UNIT 2

There was none during this reporting period.

# Maintenance of Safety Related Systems During Outage or Reduced Power Periods

· **-** ··

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34-

## UNIT #1

Instrument Maintenance

## UNIT 1

There was none during this reporting period.

# Maintenance of Safety Related Systems During Outzge or Reduced Power Periods

- 36-

UNIT #2

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Instrument Maintenance

# Instrument Maintenance

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## UNIT 2

There was none during this reporting period.

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### JANUARY, 1979

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

There were no individuals who received single radiation exposure specifically associated with Unit #1 outage, which accounted for more than 10% of the allowable annual values in 10CFR20.101.

PROCEDUR DEVIATIONS REVIEWED BY STATION EAR SAFETY AND OPERATING COMMITTEE AFTER TIME LIMITS SPECIFIED IN TECHNICAL SPECIFICATIONS

### JANUARY, 1979

Number	Unit			
PT-17.2	2			

2

Title

### Deviation

Containment Inside Recirculation Spray Pumps

Step 5.3-Change to "This reading should be 110 amps. Step. 6.1-Change to .... The ammeter reading should be 110 amps + 10 amps for 2-RS-P-1A..." Step 3.3-Did not dewater pumps.

This procedure was completed and the deviation initiated January 4, 1979. The procedure deviation was reviewed by the Station Nuclear Safety and Operating Committee January 25, 1979.