

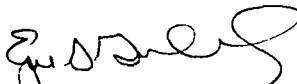
VIRGINIA ELECTRIC AND POWER COMPANY

SURRY POWER STATION

MONTHLY OPERATING REPORT

REPORT 88-08

APPROVED: _____



STATION MANAGER

8809200124 880831
PDR ADOCK 05000280
R PDC

DE24
1/1

<u>SECTION</u>	<u>PAGE</u>
Operating Data Report - Unit No. 1	1
Operating Data Report - Unit No. 2	3
Unit Shutdowns and Power Reductions - Unit No. 1	4
Unit Shutdowns and Power Reductions - Unit No. 2	5
Average Daily Unit Power Level - Unit No. 1	6
Average Daily Unit Power Level - Unit No. 2	7
Summary of Operating Experience - Unit No. 1	8
Summary of Operating Experience - Unit No. 2	9
Facility Changes Requiring NRC Approval	11
Facility Changes That Did Not Require NRC Approval	12
Procedure or Method of Operation Changes that Did Not Require NRC Approval	15
Procedure or Method of Operation that Did Require NRC Approval	16
Tests and Experiments Requiring NRC Approval	17
Tests and Experiments That Did Not Require NRC Approval	18
Chemistry Report	19
Fuel Handling - Unit No. 1	20
Fuel Handling - Unit No. 2	21
Description of Periodic Test Which Were Not Completed Within the Time Limits Specified in Technical Specifications	22

OPERATING DATA REPORT

DOCKET NO. 50-280
 DATE 09/08/88
 COMPLETED BY L. A. Warren
 TELEPHONE 804-357-3184

OPERATING STATUS

1. Unit Name: Surry Unit # 1
 2. Reporting Period: August 01 thru 31, 1988
 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): 820
 7. Maximum Dependable Capacity (Net MWe): 781
 8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons: _____

Notes

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

	This Month	Yr.-to-Date	Cumulative
11. Hours In Reporting Period	744.0	5855.0	137567.0
12. Number of Hours Reactor Was Critical	708.7	3437.0	88160.4
13. Reactor Reserve Shutdown Hours	0	0	3774.5
14. Hours Generator On-Line	688.0	3316.6	86287.8
15. Unit Reserve Shutdown Hours	0	0	3736.2
16. Gross Thermal Energy Generated (MWH)	1637979.2	7682198.9	200402420.3
17. Gross Electrical Energy Generated (MWH)	544765.0	2573560.0	64948733.0
18. Net Electrical Energy Generated (MWH)	516472.0	2442986.0	61598362.0
19. Unit Service Factor	92.5%	56.7%	62.7%
20. Unit Available Factor	92.5%	56.7%	65.4%
21. Unit Capacity Factor (Using MDC Net)	88.9%	53.4%	57.9%
22. Unit Capacity Factor (Using DER Net)	88.1%	53%	56.8%
23. Unit Forced Rate	7.5%	3.9%	17.2%
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): _____ _____			

25. If Shut Down At End Of Report Period Estimated Date of Startup: _____

26. Units In Test Status (Prior to Commercial Operation):	Forecast	Achieved
INITIAL CRITICALITY	_____	_____
INITIAL ELECTRICITY	_____	_____
COMMERCIAL OPERATION	_____	_____

CORRECTED COPY

09/08/88

PAGE 2

OPERATING DATA REPORT

DOCKET NO. 50-280
 DATE 8/3/88
 COMPLETED BY L. A. Warren
 TELEPHONE 804-357-3184

OPERATING STATUS

1. Unit Name: Surry Unit # 1
2. Reporting Period: July 01 thru 31, 1988
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): 820
7. Maximum Dependable Capacity (Net MWe): 781
8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons: _____

Notes

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

	This Month	Yr.-to-Date	Cumulative
11. Hours In Reporting Period	<u>744.0</u>	<u>5111.0</u>	<u>136823.0</u>
12. Number of Hours Reactor Was Critical	<u>415.7</u>	<u>2728.3</u>	<u>87451.7</u>
13. Reactor Reserve Shutdown Hours	<u>0.0</u>	<u>0.0</u>	<u>3774.5</u>
14. Hours Generator On-Line	<u>331.0</u>	<u>2628.6</u>	<u>85599.8</u>
15. Unit Reserve Shutdown Hours	<u>0.0</u>	<u>0.0</u>	<u>3736.2</u>
16. Gross Thermal Energy Generated (MWH)	<u>721409.5</u>	<u>6044219.7</u>	<u>198764441.1</u>
17. Gross Electrical Energy Generated (MWH)	<u>234110.0</u>	<u>202879.5</u>	<u>64403968.0</u>
18. Net Electrical Energy Generated (MWH)	<u>221010.0</u>	<u>1926514.0</u>	<u>61081890.0</u>
19. Unit Service Factor	<u>44.5%</u>	<u>51.4%</u>	<u>62.6%</u>
20. Unit Available Factor	<u>44.5%</u>	<u>51.4%</u>	<u>65.3%</u>
21. Unit Capacity Factor (Using MDC Net)	<u>38.0%</u>	<u>48.3%</u>	<u>57.7%</u>
22. Unit Capacity Factor (Using DER Net)	<u>37.7%</u>	<u>47.8%</u>	<u>56.7%</u>
23. Unit Forced Rate	<u>0.0%</u>	<u>2.9%</u>	<u>17.2%</u>
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):	_____		

25. If Shut Down At End Of Report Period Estimated Date of Startup: _____

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

Forecast

Achieved

INITIAL CRITICALITY
 INITIAL ELECTRICITY
 COMMERCIAL OPERATION

(9/77)

OPERATING DATA REPORT

DOCKET NO. 50-281
 DATE 09/08/88
 COMPLETED BY L. A. Warren
 TELEPHONE 804-357-3184

OPERATING STATUS

1. Unit Name: Surry Unit # 2
 2. Reporting Period: August 01 thru 31, 1988
 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): 820
 7. Maximum Dependable Capacity (Net MWe): 781
 8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons: _____

Notes

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

	This Month	Yr.-to-Date	Cumulative
11. Hours In Reporting Period	744.0	5855.0	134447.0
12. Number of Hours Reactor Was Critical	744.0	4810.3	89476.3
13. Reactor Reserve Shutdown Hours	0	0	328.1
14. Hours Generator On-Line	744.0	4776.7	88075.0
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	1492661.9	11193381.0	206363743.7
17. Gross Electrical Energy Generated (MWH)	443590.0	3649135.0	67021959.0
18. Net Electrical Energy Generated (MWH)	414737.0	3464826.0	63541303.0
19. Unit Service Factor	100%	81.6%	65.5%
20. Unit Available Factor	100%	81.6%	65.5%
21. Unit Capacity Factor (Using MDC Net)	71.4%	75.8%	60.7%
22. Unit Capacity Factor (Using DER Net)	70.7%	75.1%	60%
23. Unit Forced Rate	0	18.4%	14.6%
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): <u>Refueling OUTage, 9/9/88, 68 days</u>			

25. If Shut Down At End Of Report Period Estimated Date of Startup: _____

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

Forecast

Achieved

INITIAL CRITICALITY
 INITIAL ELECTRICITY
 COMMERCIAL OPERATION

(9/77)

UNIT SHUTDOWNS AND POWER REDUCTIONS

PAGE 4

DOCKET NO. 50-280
 UNIT NAME Surry Unit # 1
 DATE 09/08/88
 COMPLETED BY L. A. Warren
 TELEPHONE 804-357-3184

REPORT MONTH AUGUST 1988

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
88-06	8/12/88	S	0.0	F	1				Unit reduced to 89% power 730MW to maintain condensate polishing ΔP less than 50 psid.
88-07	8/15/88	F	56	A	3				Unit reactor trip and safety injection due to a failed CLS relay during Instrument Department testing.
88-08	8/27/88	S	0.0	B	1				Unit reduced to 68% 560MW to permit repairs to main generator H ₂ cooling system.
88-09	8/29/88	F	0.0	A	1				Unit reduced to 78% 650MW to repair isolated phase bus duct grounding straps.

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 1 - Same Source

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-281
 UNIT NAME Surry Unit # 2
 DATE 09/08/88
 COMPLETED BY L. A. Warren
 TELEPHONE 804-357-3184

REPORT MONTH AUGUST 1988

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
88-12	8/06/88	S	0.0	B	1				Unit reduced to 73% 500MW to clean waterboxes and perform waterbox tube cleaning.
88-13	8/08/88	S	0.0	B	1				Unit reduced to 73% 515MW to repair waterbox tube leak.
88-14	8/17/88	S	0.0	B	1				Unit reduced to 69.5% 510MW to clean waterboxes.
88-15	8/18/88	S	0.0	B	1				Unit reduced to 75% 555MW to perform 2-PT-29.1 turbine valve freedom test.
88-16	8/20/88	S	0.0	B	1				Unit reduced to 71% 505MW to clean waterboxes.
88-17	8/26/88	S	0.0	B	1				Unit reduced to 71.5% 520MW to clean waterboxes.
88-18	8/31/88	S	0.0	B	1				Unit reduced to 62% 440MW to clean waterboxes.

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 1 - Same Source

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-280

UNIT Surry Unit # 1DATE 9/8/88COMPLETED BY L. A. WarrenTELEPHONE 804-357-3184MONTH AUGUST 1988DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

1	760
2	759
3	756
4	733
5	739
6	762
7	760
8	759
9	762
10	761
11	760
12	711
13	757
14	758
15	754
16	0

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

17	333
18	717
19	762
20	764
21	764
22	765
23	767
24	765
25	764
26	764
27	718
28	765
29	745
30	766
31	769

INSTRUCTIONS

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

(9/77)

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-281
 UNIT Surry Unit # 2
 DATE 9/8/88
 COMPLETED BY L. A. Warren
 TELEPHONE 804-357-3184

MONTH AUGUST 1988

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

1	625
2	621
3	620
4	616
5	611
6	511
7	592
8	560
9	512
10	577
11	571
12	567
13	567
14	566
15	569
16	570

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

17	552
18	563
19	530
20	538
21	521
22	530
23	533
24	567
25	547
26	533
27	544
28	529
29	528
30	514
31	496

INSTRUCTIONS

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

(9/77)

SUMMARY OF OPERATING EXPERIENCE**MONTH/YEAR AUGUST 1988**

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

08-01-88	0000	This reporting period begins with the unit at 100% 810 MW.
08-12-88	0505	Commenced power reduction at 150 MW/hr to maintain condensate polishing differential pressure less than 50 psid.
	0529	Holding power at 92% 735 MW.
	1530	Commenced power reduction at 150 MW/hr to maintain condensate polishing differential pressure.
	1600	Holding power at 89% 730 MW.
	2115	Commenced power increase at 150 MW/hr.
	2252	Unit at 100% 805 MW.
08-15-88	0927	Unit reactor trip and safety injection due to a failed CLS relay.
08-16-88	2049	Reactor Critical.
08-17-88	1733	Unit on line.
	2011	Holding power at 58% 810 MWs.
	2333	Commenced power increase at 5%/hr.
08-18-88	0500	Unit at 100% 805 MW.
08-27-88	0045	Commenced power reduction at 150 MW/hr to permit repairs to main generator H ₂ cooling system.
	0211	Holding power at 68% 560 MW.
	0500	Commenced power increase at 150 MW/hr.
	0643	Unit at 100% 805 MW.
08-29-88	1325	Commenced power reduction at 5%/min. to repair isolated phase bus duct grounding straps.
	1342	Holding power at 78% 650 MW.
	1506	Commenced power increase at 5%/hr.

SUMMARY OF OPERATING EXPERIENCE**MONTH/YEAR** AUGUST 1988

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 (cont'd)

08-29-88 1840 Unit at 100% 805 MW.
 08-31-88 2400 This reporting period ends with the unit at 100% 805 MW.

UNIT TWO

08-01-88 0000 This reporting period begins with the unit at 89% 655 MW due to 3B feedwater heater being out of service.
 08-06-88 0500 Commenced power reduction at 150 MW/hr to permit cleaning waterboxes.
 0545 Holding power at 79.5% 580 MW.
 1100 Commenced power reduction at 3%/hr to support waterbox tube cleaning.
 1600 Holding power at 73% 500 MW.
 08-07-88 0445 Commenced power increase at 150 MW/hr.
 0513 Holding power at 90% 665 MW.
 08-08-88 0703 Commenced power reduction at 150 MW/hr to support waterbox maintenance.
 0703 Holding power at 79% 600 MW.
 08-09-88 0130 Commenced power reduction at 0.5%/hr to maintain condenser backpressure less than 5 psid.
 1600 Holding power at 73% 515 MW.
 1838 Commenced power increase at 3%/hr.
 2400 Holding power at 88% 640 MW.
 08-17-88 2101 Commenced power reduction at 150 MW/hr to clean waterboxes.
 2225 Holding power at 69.5% 510 MW.

SUMMARY OF OPERATING EXPERIENCE**MONTH/YEAR** AUGUST 1988

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

(Cont'd)

08-18-88	0500	Commenced power increase at 3%/hr.
	0800	Holding power at 85% 630 MW.
	2243	Commenced power reduction at 150 MW/hr to perform 2-PT-29.1.
	2313	Holding power at 75% 555 MW.
08-19-88	1247	Commenced power increase at 3%/hr.
	1600	Holding power at 84% 600 MW.
08-20-88	2232	Commenced power reduction at 150 MW/hr to clean waterboxes.
08-21-88	0000-2400	Varied unit power and load between 82% 600 MW to 71% 505 MW too support waterbox cleaning.
08-22-88	0521	Commenced power increase at 3%/hr from 71% 505 MW.
	0800	Holding power at 79% 590 MW.
08-26-88	1825	Commenced power reduction at 150 MW/hr to permit cleaning waterboxes.
	1903	Holding power at 71.5% 520 MW.
	2100	Commenced power increase at 3%/hr.
	2345	Holding power at 78.5% 590 MW.
08-31-88	1910	Commence power reduction at 150 MW/hr to clean waterboxes.
	2007	Holding power at 62% 440 MW.
	2252	Commenced power increase at 8%/hr.
08-31-88	2400	This reporting period ends with the unit at 70% 490 MW due to 3B feedwater being out of service, 'C' waterbox removed from service for cleaning and EOL coastdown in progress.

FACILITY CHANGES REQUIRING NRC APPROVAL

MONTH/YEAR AUGUST 1988

NONE DURING THIS PERIOD

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVALMONTH/YEAR AUGUST 1988

DC 84-69

PRESSURIZER SAFETY VALVE LOOP-SEAL INSULATION OVENS UNIT 1

This design change installed metal reflective thermal insulation boxes which will enclose the safety valves loop seal piping. This is to maintain the loop seal water temperature at approximately 400°F. This temperature will allow part of the water to flash to steam after passing through the safety valves. The reduced density of the watersteam mixture will cause reduced fluid transient loads for the piping and supports.

SUMMARY OF SAFETY ANALYSIS

The installation of the boxes will not affect the operation of the pressurizer or the safety valves. The boxes will reduce fluid transient loads to ensure the piping and supports are qualified for the design basis transients once the supports have been modified. The boxes do not affect any safety related system or component and does not impact any Technical Specification.

DC 86-15

LEVEL INSTRUMENTATION TO PREVENT LOSS OF SHUTDOWN
COOLING UNIT 1

This design change installed a permanent standpipe arrangement to replace the temporary polyhose arrangement installed during each outage. Local level indication, control room indication and a control room low level alarm are provided for reactor coolant level during outage periods.

SUMMARY OF SAFETY ANALYSIS

The system will be placed into service only during cold shutdown conditions. At all other times the system is isolated from other systems. The portion of the system up to and including the second isolation valve is designed to reactor coolant design pressure and temperature. This system does not affect safety related equipment or the operation of the safety related systems.

DC 87-32

WEED 9007 RTD REPLACEMENTUNIT 1

This modification replaced the eighteen (18) narrow range RTDs with RTDs which have adequately demonstrated environmental qualification as set forth by NUREG 0588 Category 1.

SUMMARY OF SAFETY ANALYSIS

The replacement RTDs are essentially one for one replacements of an enhanced design and will not affect any of the operations or ability of equipment important to safety to perform their safety functions.

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVALMONTH/YEAR AUGUST 1988AC S2-88-0615 ADMINISTRATIVE CONTROL

08/04/88

This change provides administrative control while closing MOV-SW-205B or MOV-SW-205D in order to accomplish maintenance on the associated valve.

Since the valves (MOV-SW-205B and 205D) will remain operable and will be manually opened prior to auto or manual start of the recirculation spray (RS) pumps, the change will not affect the operation of the RS system. Therefore, no unreviewed safety question is created.

AC S2-88-0805 ADMINISTRATIVE CONTROL

08/05/88

This change maintained recirculation spray (RS) heat exchangers service water discharge valves 2-SW-MOV-205B & D closed under administrative control to prevent service water ingress to the recirculation spray heat exchangers from the discharge tunnel to prevent biofouling of the RS heat exchangers.

Since the valves (MOV-SW-205B and 205D) will remain operable and will be manually opened prior to auto or manual start of the RS pumps, the change will not affect the operation of the RS system. Therefore, no unreviewed safety question is created.

FS 88-40 FSAR CHANGE REQUEST

08/09/88

Design Change 77-09 modified the usable volume of Unit 1 and Unit 2 RWSTs. The modification affected LCOs for safety injection and containment spray systems.

The 10 CFR 50.59 review resulted in no unreviewed safety question since DC 77-09 did not alter the basic design function of the affected systems.

TM S2-88-60 TEMPORARY MODIFICATION

08-19-88

This modification allowed the lead from terminal board 58C-2 to 2AST1 to be lifted and prevent the mechanical anti-motoring trip from operating.

Removal of the mechanical anti-motoring trip will not have an adverse effect on the turbine overspeed or loss of electrical load analysis. Therefore, there is no unreviewed safety question.

TM S1-88-132 TEMPORARY MODIFICATION

08/20/88

A jumper was installed from the sample connection of the VCT gas space to the sample connection of the gas stripper surge tank at the sample sink.

Venting the VCT via the sampling system will not increase the probability of an accident nor increase the consequences of an accident. Protection to the system is provided by relief valves in the system. Hose and fittings are rated in excess of operating pressures for the systems. Therefore, no unreviewed safety question is created.

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVALMONTH/YEAR AUGUST 1988

- AC S1-88-810 ADMINISTRATIVE CONTROL 08/20/88
AC S2-88-810
- While the charging pump component cooling (CC) pump's drain valve is open to feed and bleed the system to increase chromate concentration, an operator will be stationed at the drain valve to close it immediately should the head tank level drop $\leq 30\%$.
- Feeding and bleeding the charging pump CC system by opening the charging pump CC pump's drain valve will not affect the operability of the charging system. It will enhance corrosion control by the addition of chromates. Therefore, this administrative control does not constitute an unreviewed safety question.
- AC S1-88-0820 ADMINISTRATIVE CONTROL 08/20/88
- This change maintained recirculation spray (RS) heat exchanger (HX) service water (SW) discharge valve (1-SW-MOV-105A) closed under administrative control to prevent SW ingress into the RS HX from the discharge tunnel to prevent biofouling of the RS HX.
- Since valve 1-SW-MOV-105A will remain operable (as per EWR 88-326) and will be opened prior to auto or manual start of the RS pumps, the change will not affect the operation of the RS system. Therefore, no unreviewed safety question is created.
- AC S1-88-0821 ADMINISTRATIVE CONTROL 08/21/88
- This change allowed manual control over the 'C' RSST tap changer with constant communication with the control room due to failure in the automatic control.
- Manual control of the 'C' reserve station service transformer tap changer is required due to a failure in the automatic system. Manual control ensure voltages on the emergency buses will remain in spec and will reduce the chance of loss of offsite power to 1H and 2J emergency buses. Manual operation will maintain voltages within the intent of GDC 17.
- AC S1-88-0823 ADMINISTRATIVE CONTROL 08/23/88
- The dike at the emergency switchgear room was temporarily removed and a flood watch was placed at the door and at the turbine building pit areas. The dike was reinstalled in the event of a flood.
- The removal of this dike will not adversely affect any safety related equipment or create an unreviewed safety question.

PROCEDURE OR METHOD OF OPERATION
THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR AUGUST 1988

1-TOP-2027

TEMPORARY OPERATING PROCEDURE

08/01/88

This change provided a means for flushing the primary drains transfer tanks (PDTT) discharge lines to the primary drains tanks (PDT) and to inspect PDTT pumps discharge check valves to clear/identify blockage in PDTT discharge lines.

An unreviewed safety question does not exist because the probability and consequences of a liquid waste release are unaffected. All liquid waste released from the check valves will be contained and directed to floor drains and the containment sump. Flush water will also be directed to the PDT and will be contained. Any uncontrolled release will be stopped by closing 1-DG-74. This valve can also be immediately shut if containment isolation is necessary.

JUSTIFICATION FOR CONTINUED OPERATION

08/11/88

This Justification for Continued Operation documents plant operation with three out of four Radiation Monitoring Pumps operable on Service Water Discharge Lines from Recirculation Spray Heat Exchangers (RSHX).

The reviewed condition does not affect the function of the RS system. Significant increases in exposure or releases will not occur because a backup radiation monitor exists and under the postulated failure of the RSHX, the heat exchanger can be isolated without reducing the required heat removal via the RS system. Therefore, an unreviewed safety question does not exist.

PROCEDURE OR METHOD OF OPERATION
THAT DID REQUIRE NRC APPROVAL

MONTH/YEAR AUGUST 1988

NONE DURING THIS PERIOD

TESTS AND EXPERIMENTS REQUIRING NRC APPROVAL

MONTH/YEAR AUGUST 1988

NONE DURING THIS PERIOD

TESTS AND EXPERIMENTS THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR AUGUST 1988

NONE DURING THIS PERIOD

**VIRGINIA POWER
SURREY POWER STATION
CHEMISTRY REPORT**

PAGE 19

AUGUST

19 88

PRIMARY COOLANT ANALYSIS	UNIT NO. 1			UNIT NO. 2		
	MAX.	MIN.	AVG.	MAX.	MIN.	AVG.
Gross Radioact., $\mu\text{Ci/ml}$	8.88E-1	1.18E-1	6.87E-1	2.00E-1	9.17E-2	1.55E-1
Suspended Solids, ppm	0.0	0.0	0.0	0.0	0.0	0.0
Gross Tritium, $\mu\text{Ci/ml}$	2.23E-1	1.51E-1	1.93E-1	6.47E-2	3.78E-2	5.29E-2
Iodine ¹³¹ , $\mu\text{Ci/ml}$	3.73E-3	4.57E-4	2.54E-3	2.04E-4	6.23E-5	1.30E-4
I ¹³¹ / I ¹³¹	0.16	0.09	0.12	0.15	0.05	0.09
Hydrogen, cc/kg	31.9	25.5	27.8	31.0	26.1	29.0
Lithium, ppm	2.35	2.06	2.21	0.47	0.29	0.37
Boron-10, ppm*	267.0	184.0	202.9	0.764	≤ 0.196	0.439
Oxygen, (DO), ppm	≤ 0.005	≤ 0.005	≤ 0.005	≤ 0.005	≤ 0.005	≤ 0.005
Chloride, ppm	0.010	0.003	0.007	≤ 0.010	≤ 0.001	≤ 0.002
pH @ 25 degree Celsius	6.50	6.27	6.41	8.68	7.44	8.11

* Boron-10 = Total Boron X 0.196

REMARKS:

UNIT 1: Started month at 100%. Ramped down to 96% on 8-4 because of condensate polishing differential pressure and were back to 100% on 8-6. On 8-12, 0500 started to ramp down to 90% again due to condensate polishing differential pressure but were back to 100% by 2252. On 8-15 at 0927, a reactor trip occurred and the unit stayed in hot shutdown until the reactor was critical on 8-16 at 2049. The unit was at 100% on 8-18 at 0500. On 8-27, started at 0025 to ramp down to 68% to repair a hydrogen cooler and was back to 100% by 0643. On 8-29, started at 1300 to ramp down to 79% due to fire in main generator leads and was back to 100% by 1855 and ended the month at 100%. Lithium was added 8-8 at 2010, 180g; 8-12 at 1025, 420g; 8-15 at 1830, 480g; 8-18 at 0515, 502g; 8-19 at 1300, 389g; 8-27 at 1100, 400g; for a total of 2371 grams of LiOH.

UNIT 2: Started the month at 89% and coasting to refueling. On 8-6 at 0545, ramped back to 73% to clean waterboxes and returned to 90% on 8-7 at 0840. On 8-8, ramped down to 72% to clean waterboxes and returned to 88% on 8-10 at 0035. On 8-18, ramped down to 73% to perform PT-29.1 and clean waterboxes and returned to 84% on 8-19. On 8-21 at 2204, ramped down to 71% to clean waterboxes and returned to 79% on 8-22 and end of month at 76%. The B Debocator was in service from 8-7 at 2015 to 8-9 at 0035; from 8-26 at 2255 to 8-27 at 0925. Lithium was added 8-11 at 1330, 180g; 8-22 at 1250, 145g; 8-25 at 1115, 225g; 8-27 at 1100, 178g; for a total of 728 grams of LiOH.

UNIT 2

FUEL HANDLING

DATE August 1988

NEW OR SPENT FUEL SHIPMENT #	DATE SHIPPED OR RECEIVED	NUMBER OF ASSEMBLIES PER SHIPMENT	ASSEMBLY #	ANSI #	INITIAL ENRICHMENT	NEW OR SPENT FUEL SHIPPING CASK ACTIVITY LEVEL
CV/21 500-11-008	08/26/88	N/A	P24	---	3.11	N/A
CV/21 500-11-008	08/26/88	N/A	P05	---	3.11	N/A
CV/21 500-11-008	08/26/88	N/A	P09	---	3.11	N/A
CV/21 500-11-008	08/26/88	N/A	P23	---	3.11	N/A
CV/21 500-11-008	08/26/88	N/A	P04	---	3.11	N/A
CV/21 500-11-008	08/26/88	N/A	P07	---	3.11	N/A
CV/21 500-11-008	08/26/88	N/A	P02	---	3.11	N/A
CV/21 500-11-008	08/26/88	N/A	P06	---	3.11	N/A
CV/21 500-11-008	08/26/88	N/A	P14	---	3.11	N/A
CV/21 500-11-008	08/26/88	N/A	P17	---	3.11	N/A
CV/21 500-11-008	08/26/88	N/A	P01	---	3.11	N/A
CV/21 500-11-008	08/26/88	N/A	P03	---	3.11	N/A
CV/21 500-11-008	08/26/88	N/A	P27	---	3.11	N/A
CV/21 500-11-008	08/26/88	N/A	P10	---	3.11	N/A
CV/21 500-11-008	08/26/88	N/A	P28	---	3.11	N/A
CV/21 500-11-008	08/26/88	N/A	P08	---	3.11	N/A
CV/21 500-11-008	08/26/88	N/A	P12	---	3.11	N/A
CV/21 500-11-008	08/26/88	N/A	P22	---	3.11	N/A
CV/21 500-11-008	08/26/88	N/A	P29	---	3.11	N/A

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

MONTH/YEAR AUGUST 1988

NONE DURING THIS PERIOD

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

September 14, 1988

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D. C. 20555

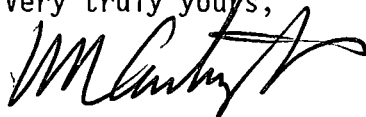
Serial No. 88-627
NO/RPC:vlh
Docket Nos. 50-280
50-281
License Nos. DPR-32
DPR-37

Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION UNITS 1 AND 2
MONTHLY OPERATING REPORT

Enclosed is the Monthly Operating Report for Surry Power Station Units 1 and 2 for the month of August 1988.

Very truly yours,



W. R. Cartwright
Vice President - Nuclear

Enclosure

cc: U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, N. W.
Suite 2900
Atlanta, Georgia 30323

Mr. W. E. Holland
NRC Senior Resident Inspector
Surry Power Station

IE24
11