VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

April 14, 1989

W. R. CARTWRIGHT
VICE PRESIDENT
NUCLEAR

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

Serial No. 89-263
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 March 1989.

Very truly yours,

W. R. Cartwright

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
1/1

VIRGINIA ELECTRIC AND POWER COMPANY

SURRY POWER STATION

MONTHLY OPERATING REPORT

REPORT 89-03

APPROVED: David A Christian
STATION MANAGER

8904260172 890331
PDR ADOCK 05000280
R PNU

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OPERATING DATA REPORT

DOCKET NO. 50-280
DATE 04/04/89
COMPLETED BY L. A. Warren
TELEPHONE 804-357-3184 x355

OPERATING STATUS

1. Unit Name: Surry Unit 1
2. Reporting Period: March 01-31, 1989
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	2160.0	142656.0
12.	Number of Hours Reactor Was Critical	0	0	88478.6
13.	Reactor Reserve Shutdown Hours	0	0	3774.5
14.	Hours Generator On-Line	0	0	86605.4
15.	Unit Reserve Shutdown Hours	0	0	3736.2
16.	Gross Thermal Energy Generated (MWH)	0	0	201171267.0
17.	Gross Electrical Energy Generated (MWH)	0	0	65203673.0
18.	Net Electrical Energy Generated (MWH)	0	0	61840403.0
19.	Unit Service Factor	0	0	60.7%
20.	Unit Available Factor	0	0	63.3%
21.	Unit Capacity Factor (Using MDC Net)	0	0	56.3%
22.	Unit Capacity Factor (Using DER Net)	0	0	55%
23.	Unit Forced Rate	100%	100%	20.7%

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):
Forced Maintenance Outage on 09/14/88, scheduled on line date of May 15, 1989.

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

	Forecast	Achieved
INITIAL CRITICALITY		
INITIAL ELECTRICITY		
COMMERCIAL OPERATION		

OPERATING DATA REPORT

DOCKET NO. 50-281
DATE 04/04/89
COMPLETED BY L. A. Warren
TELEPHONE 804-357-3184 x355

OPERATING STATUS

1. Unit Name: Surry Unit 2
2. Reporting Period: March 01-31, 1989
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

Notes

8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons:

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	2160.0	139536.0
12.	Number of Hours Reactor Was Critical	0	0	89694.3
13.	Reactor Reserve Shutdown Hours	0	0	328.1
14.	Hours Generator On-Line	0	0	88293.0
15.	Unit Reserve Shutdown Hours	0	0	0
16.	Gross Thermal Energy Generated (MWH)	0	0	206740436.1
17.	Gross Electrical Energy Generated (MWH)	0	0	67136244.0
18.	Net Electrical Energy Generated (MWH)	0	0	63647378.0
19.	Unit Service Factor	0	0	63.3%
20.	Unit Available Factor	0	0	63.3%
21.	Unit Capacity Factor (Using MDC Net)	0	0	58.5%
22.	Unit Capacity Factor (Using DER Net)	0	0	57.9%
23.	Unit Forced Rate	0	0	15%

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):
Refueling Outage on 09/10/88, scheduled on line date of June 07, 1989.

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

	Forecast	Achieved
INITIAL CRITICALITY		
INITIAL ELECTRICITY		
COMMERCIAL OPERATION		

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-280
UNIT NAME Surry Unit 1
DATE 04/04/89
COMPLETED BY L. A. Warren
TELEPHONE 804-357-3184 x355

REPORT MONTH March 1989

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 RECURRENT
89-03	03/01/89	F	744.0	F	1				Unit shutdown due to emergency diesel generator operability concerns.

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

(9/77)

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-281
UNIT NAME Surry Unit 2
DATE 04/04/89
COMPLETED BY L. A. Warren
TELEPHONE 804-357-3184 x355

REPORT MONTH March 1989

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 RECURRENT
89-03	03/01/89	S	744.0	C	1,3				Unit shutdown for refueling outage, automatic reactor trip.

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)

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(9/77)

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-280
UNIT Surry Unit 1
DATE 04/04/89
COMPLETED BY L. A. Warren
TELEPHONE 804-357-3184 x355

MONTH March 1989

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	0	17	0
2	0	18	0
3	0	19	0
4	0	20	0
5	0	21	0
6	0	22	0
7	0	23	0
8	0	24	0
9	0	25	0
10	0	26	0
11	0	27	0
12	0	28	0
13	0	29	0
14	0	30	0
15	0	31	0
16	0		

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 04/04/89
COMPLETED BY L. A. Warren
TELEPHONE 804-357-3184 x355

MONTH March 1989

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	0	17	0
2	0	18	0
3	0	19	0
4	0	20	0
5	0	21	0
6	0	22	0
7	0	23	0
8	0	24	0
9	0	25	0
10	0	26	0
11	0	27	0
12	0	28	0
13	0	29	0
14	0	30	0
15	0	31	0
16	0		

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 MARCH 1989

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

03/01/89	0000	This reporting period begins with the unit at CSD.
03/17/89	2144	Loss of RHR cooling commenced due to valve mispositioning of component cooling valve by operations personnel.
03/18/89	0912	RHR cooling restored - event duration was eleven hours and twenty-eight minutes.
	1302	A four hour report was made to NRC for the loss of RHR cooling.
03/31/89	1120	Notified the State Water Control Board of significant oil leak from our underground fuel oil tank.
	1234	Notified the NRC of the significant oil leak from the underground fuel oil tank due to notification to the other offsite agencies.
	2400	This reporting period ends with the unit at CSD.

UNIT TWO

03/01/89	0000	This reporting period begins with the unit at CSD.
03/31/89	2400	This reporting period ends with the unit at CSD.

FACILITY CHANGES REQUIRING NRC APPROVAL

MONTH/YEAR MARCH 1989

NONE DURING THIS PERIOD

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR MARCH 1989

UFSAR-88-31 **CHANGE NOTIFICATION** **03/02/89**

Page 9.4-33 of the UFSAR is incorrect and should be changed.

No unreviewed safety question is involved, administrative correction to UFSAR only.

1-TOP-2080
1-TOP-2081
1-TOP-2082
1-TOP-2083

TEMPORARY OPERATING PROCEDURES **03/03/89**

The spent fuel pool cleanup ion exchanger is full of spent resin and cannot be changed out until the new spent resin transfer system is operational. The temporary modification is to allow use of temporary ion exchangers for spent fuel pool water cleanup.

The probability of leakage of water from the spent fuel pool is increased but the design of the system prevents lowering water level below the technical specification limit for refueling and leakage is analyzed in the UFSAR. Consequences of leakage would be loss of spent fuel pool cooling until water level is restored. Testing has shown several hours before loss of cooling becomes a problem and this temporary modification would not inhibit restoration of fuel pool level. Operation of the system will be in accordance with the approved procedures; abnormal procedures are in effect for loss of level.

2-TOP-2076 **TEMPORARY OPERATING PROCEDURE DEVIATION** **03/03/89**
03/09/89

This deviation is to ensure availability of equipment for remotely monitoring the reactor coolant system level inventory and annunciating loss of inventory. In addition, precautions were added to help prevent PRT pressurization by not venting the unit two accumulators and requiring monitoring PRT pressure if venting the unit one accumulators.

No changes are made to the plant systems/components by this change. The change procedurally enhances the reactor coolant system inventory control and helps to ensure shutdown cooling. No increase in accident probability, consequences or results.

TM-S1-89-046 **TEMPORARY MODIFICATION** **03/06/89**

Temporary modification to wire open the exhaust damper for 1-VS-F-1A.

This change does not constitute an unreviewed safety question in that the containment air recirculation system is not required to function during design basis events.

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR MARCH 1989

SCAFFOLDING REQUEST **03/09/89**

This request erected temporary scaffolding located in the mechanical equipment room #3 to work insulation on west wall.

Installation of this temporary scaffolding was reviewed for effect on accident analyses and equipment operability/function. Conclusion is that assumptions, bases and probabilities of accident analyses and equipment malfunctions are not affected.

JUSTIFICATION FOR CONTINUED OPERATION (JCO) **03/13/89**

This JCO for the emergency service water system provides various restrictions and operator actions to be performed prior to completion of various modifications.

An unreviewed safety question does not exist since the JCO provides the necessary restrictions and required operator actions to assure adequate service water inventory is maintained to keep both units in the cold shutdown condition in the event of a loss of offsite power.

S2-89-20 **TEMPORARY REMOVAL OF HVAC DUCT ELBOW** **03/19/89**

Removal of an elbow will allow increased air flow into Unit 2 relay room and will provide increased cooling.

Increased airflow will enhance the cooling in the room.

SCAFFOLDING REQUEST **03/19/89**

This request erected temporary scaffolding located in the #1 emergency diesel generator room to work 1-HS-297, HS supply to 1-HS-UH-FA.

Installation of this temporary scaffolding was reviewed for effect on accident analyses and equipment operability/function. Conclusion is that assumptions, bases and probabilities of accident analyses and equipment malfunctions are not affected.

SCAFFOLDING REQUEST **03/19/89**

This request erected temporary scaffolding located in auxiliary building 47' elevation to work 1-VS-FL-3A outlet damper, 1-VS-DMP-61A.

Installation of this temporary scaffolding was reviewed for effect on accident analyses and equipment operability/function. Conclusion is that assumptions, bases and probabilities of accident analyses and equipment malfunctions are not affected.

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR MARCH 1989

1-TOP-3007 TEMPORARY OPERATING PROCEDURE 3/25/89

Temporary procedure to open the loop bypass motor operated valves to prevent a reactor coolant system adverse condition during reduced inventory conditions pursuant to Generic Letter 88-17.

This procedure prevents a reactor coolant system adverse condition by providing a hot leg to cold leg flow path. This procedure has no negative impacts.

TM-S1-89-62 TEMPORARY MODIFICATION 3/29/89

Temporary modification to remove auto stop signal to containment sump pumps.

No safety analyses, accident or malfunction described in UFSAR is affected.

PROCEDURE OR METHOD OF OPERATION CHANGES REQUIRING NRC APPROVAL

MONTH/YEAR MARCH 1989

NONE DURING THIS PERIOD

PROCEDURE OR METHOD OF OPERATION CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR MARCH 1989

NONE DURING THIS PERIOD

TESTS AND EXPERIMENTS REQUIRING NRC APPROVAL

MONTH/YEAR MARCH 1989

NONE DURING THIS PERIOD

TESTS AND EXPERIMENTS THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR MARCH 1989

NONE DURING THIS PERIOD

VIRGINIA POWER

SURRY POWER STATION

CHEMISTRY REPORT

MARCH 19 89

PRIMARY COOLANT ANALYSIS	UNIT NO. 1			UNIT NO. 2		
	MAX.	MIN.	AVG.	MAX.	MIN.	AVG.
Gross Radioact., µCi/ml	1.23E-3	2.54E-4	5.22E-4	6.89E-2	9.21E-4	1.33E-2
Suspended Solids, ppm	0.0	0.0	0.0	0.0	0.0	0.0
Gross Tritium, µCi/ml	-	-	-	-	-	-
Iodine^{131}, µCi/ml	-	-	-	-	-	-
I^{131} / I^{133}	-	-	-	-	-	-
Hydrogen, cc/kg	-	-	-	-	-	-
Lithium, ppm	0.72	0.59	0.67	0.15	0.11	0.13
Boron-10, ppm*	420.224	409.444	416.241	435.707	425.908	430.502
Oxygen, (DO), ppm	1.000	0.005	0.089	3.000	0.600	1.980
Chloride, ppm	0.011	0.006	0.009	0.024	0.004	0.008
pH @ 25 degree Celsius	5.29	5.04	5.18	5.00	4.70	4.81

*** Boron-10 = Total Boron X 0.196**

UNIT ONE: At cold shutdown for the entire month with RHR and B mixed bed in service. Excess letdown in service on 3/16 at 0030 with no flow through the mixed bed. Letdown back in service on 3/17 at 1830 through the end of the month.

UNIT TWO: At cold shutdown for the entire month. RHR in service, letdown out of service. "A" mixed bed was placed in service on 3/4 at 0545. A-MB out of service on 3/5 at 0100 as letdown was secured for MOVATS testing. Letdown in service on 3/5 at 0423, MOVATS complete. On 3/7 at 0800, letdown out of service due to loss of inventory in the RCS. Letdown back in service on 3/9 at 2215. Letdown secured for maintenance on 3/10 at 1359; back in service on 3/11 at 0433. A-MB taken out of service on 3/15 at 2146 for PDT pumpdown, back in serviceon 3/16 at 1500, remained in service through the end of the month.

UNIT 1&2 FUEL HANDLING DATE March 1989

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
		NONE DURING THIS PERIOD				

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

MONTH/YEAR MARCH 1989

NONE DURING THIS PERIOD