

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

August 15, 1995

United States Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D. C. 20555

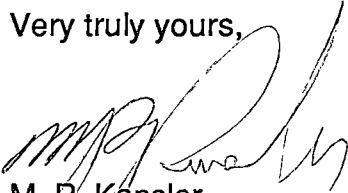
Serial No. 95-409
NO/RPC:vlh
Docket Nos. 50-280
50-281
License Nos. DPR-32
DPR-37

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 July 1995.

Very truly yours,



M. R. Kansler
Vice President - Nuclear Services

Enclosure

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

Mr. M. W. Branch
NRC Senior Resident Inspector
Surry Power Station

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**VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION
MONTHLY OPERATING REPORT
REPORT NO. 95-07**

Approved:


Station Manager

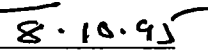

Date

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OPERATING DATA REPORT

Docket No.: 50-280
 Date: 08-01-95
 Completed By: D. Mason
 Telephone: (804) 365-2459

- 1. Unit Name:..... Surry Unit 1
- 2. Reporting Period:..... July, 1995
- 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:

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

10. Reasons For Restrictions, If Any: _____

	This Month	YTD	Cumulative
11. Hours In Reporting Period	744.0	5087.0	198167.0
12. Number of Hours Reactor Was Critical	744.0	4907.7	135377.4
13. Reactor Reserve Shutdown Hours	0	0	3774.5
14. Hours Generator On-Line	744.0	4873.2	133114.2
15. Unit Reserve Shutdown Hours.....	0	0	3736.2
16. Gross Thermal Energy Generated (MWH).....	1814287.8	11801004.3	310254743.5
17. Gross Electrical Energy Generated (MWH)....	592985.0	3946965.0	101560798.0
18. Net Electrical Energy Generated (MWH).....	569999.0	3802841.0	96511864.0
19. Unit Service Factor.....	100.0%	95.8%	67.2%
20. Unit Availability Factor.....	100.0%	95.8%	69.1%
21. Unit Capacity Factor (Using MDC Net).....	98.1%	95.7%	62.8%
22. Unit Capacity Factor (Using DER Net).....	97.2%	94.9%	61.8%
23. Unit Forced Outage Rate.....	0.0%	4.2%	16.3%

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):
 Refueling, September 7, 1995, 37 Days

25. If Shut Down at End of Report Period, Estimated Date of Start-up: _____

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

	FORECAST	ACHIEVED
INITIAL CRITICALITY	_____	_____
INITIAL ELECTRICITY	_____	_____
COMMERCIAL OPERATION	_____	_____

OPERATING DATA REPORT

Docket No.: 50-281
 Date: 08-01-95
 Completed By: D. Mason
 Telephone: (804) 365-2459

- 1. Unit Name:..... Surry Unit 2
- 2. Reporting Period:..... July, 1995
- 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:

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

10. Reasons For Restrictions, If Any: _____

	This Month	YTD	Cumulative
11. Hours In Reporting Period	744.0	5087.0	195047.0
12. Number of Hours Reactor Was Critical	744.0	3842.6	132180.1
13. Reactor Reserve Shutdown Hours	0	0	328.1
14. Hours Generator On-Line	744.0	3772.7	130239.8
15. Unit Reserve Shutdown Hours.....	0	0	0
16. Gross Thermal Energy Generated (MWH).....	1815635.3	8975029.7	304243494.0
17. Gross Electrical Energy Generated (MWH)....	595545.0	2979410.0	99421704.0
18. Net Electrical Energy Generated (MWH).....	574410.0	2871794.0	94464830.0
19. Unit Service Factor.....	100.0%	74.2%	66.8%
20. Unit Availability Factor.....	100.0%	74.2%	66.8%
21. Unit Capacity Factor (Using MDC Net).....	98.9%	72.3%	62.1%
22. Unit Capacity Factor (Using DER Net).....	98.0%	71.6%	61.5%
23. Unit Forced Outage Rate.....	0.0%	5.2%	13.1%

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 Start-up: _____

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

	FORECAST	ACHIEVED
INITIAL CRITICALITY	_____	_____
INITIAL ELECTRICITY	_____	_____
COMMERCIAL OPERATION	_____	_____

**UNIT SHUTDOWN AND POWER REDUCTION
 (EQUAL TO OR GREATER THAN 20%)**

REPORT MONTH: July, 1995

Docket No.: 50-280
 Unit Name: Surry Unit 1
 Date: 08-03-95
 Completed by: Craig Olsen
 Telephone: (804) 365-2155

(1)	(2)	(3)	(4)	(5)
Date	Type	Duration Hours	Reason	Method of Shutting Down Rx
			LER No.	System Code
			Component Code	Cause & Corrective Action to Prevent Recurrence

None During the Reporting Period

(1)
 F: Forced
 S: Scheduled

(2)
 REASON:
 A - Equipment Failure (Explain)
 B - Maintenance or Test
 C - Refueling
 D - Regulatory Restriction
 E - Operator Training & Licensing Examination
 F - Administrative
 G - Operational Error (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 SHUTDOWN AND POWER REDUCTION
 (EQUAL TO OR GREATER THAN 20%)**

REPORT MONTH: July, 1995

Docket No.: 50-281
 Unit Name: Surry Unit 2
 Date: 08-03-95
 Completed by: Craig Olsen
 Telephone: (804) 365-2155

(1) Date	(1) Type	(2) Duration Hours	(2) Reason	(3) Method of Shutting Down Rx	LER No.	(4) System Code	(5) Component Code	Cause & Corrective Action to Prevent Recurrence
-------------	-------------	--------------------------	---------------	--	------------	-----------------------	--------------------------	--

None During the Reporting Period

(1)
 F: Forced
 S: Scheduled

(2)
 REASON:
 A - Equipment Failure (Explain)
 B - Maintenance or Test
 C - Refueling
 D - Regulatory Restriction
 E - Operator Training & Licensing Examination
 F - Administrative
 G - Operational Error (Explain)

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 METHOD:
 1 - Manual
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 3 - Automatic Scram.
 4 - Other (Explain)

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 Exhibit G - Instructions for Preparation of Data Entry Sheets
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(5)
 Exhibit 1 - Same Source.

AVERAGE DAILY UNIT POWER LEVEL

Docket No.: 50-280
Unit Name: Surry Unit 1
Date: 08-01-95
Completed by: Barry C. Bryant
Telephone: (804) 365-2786

MONTH: July, 1995

<u>Day</u>	<u>Average Daily Power Level (MWe - Net)</u>	<u>Day</u>	<u>Average Daily Power Level (MWe - Net)</u>
1	778	17	764
2	779	18	762
3	780	19	762
4	779	20	762
5	778	21	762
6	775	22	763
7	776	23	760
8	755	24	757
9	777	25	755
10	772	26	755
11	772	27	756
12	773	28	757
13	772	29	758
14	770	30	755
15	768	31	752
16	765		

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.

AVERAGE DAILY UNIT POWER LEVEL

Docket No.: 50-281
Unit Name: Surry Unit 2
Date: 08-01-95
Completed by: Barry C. Bryant
Telephone: (804) 365-2786

MONTH: July, 1995

<u>Day</u>	<u>Average Daily Power Level (MWe - Net)</u>	<u>Day</u>	<u>Average Daily Power Level (MWe - Net)</u>
1	777	17	772
2	780	18	772
3	780	19	771
4	780	20	768
5	778	21	769
6	778	22	770
7	776	23	768
8	777	24	765
9	777	25	763
10	778	26	764
11	777	27	763
12	778	28	764
13	778	29	766
14	777	30	765
15	771	31	761
16	773		

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.

SUMMARY OF OPERATING EXPERIENCE

MONTH/YEAR: July, 1995

The following 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:

07/01/95	0000	The reporting period began with the unit operating at 100% power, 820 MWe.
07/31/95	2400	The reporting period ended with the unit operating at 100% power, 790 MWe.

UNIT TWO:

07/01/95	0000	The reporting period began with the unit operating at 100% power, 820 MWe.
07/31/95	2400	The reporting period ended with the unit operating at 100% power, 795 MWe.

**FACILITY CHANGES THAT DID NOT
REQUIRE NRC APPROVAL**

MONTH/YEAR: July, 1995

DC-87-034-3 Design Change Package 7-05-95

Design Change Package 87-034-3 replaced existing safety-related service water piping and valves due to biological fouling, sedimentation entrainment, and erosion.

The replacement components have superior pressure, temperature, and corrosion resistant properties and do not impact the function or operation of the Service Water System. Therefore, an unreviewed safety question does not exist.

DR S-95-1244 Deviation Reports 7-06-95
DR S-95-1268 (Safety Evaluation No. 95-074)

Safety Evaluation 95-074 assessed Deviation Reports S-95-1244 and S-95-1268 concerning the loss of capability to obtain a sample from the Unit 1 pressurizer relief tank vapor space due to an inoperable sampling line.

The evaluation concluded that this condition is acceptable since there are alternate means of sampling the Reactor Coolant System (RCS). Compliance with Technical Specification sampling surveillance requirements continues to be maintained using routine samples obtained from the RCS Letdown Subsystem. Therefore, an unreviewed safety question does not exist.

SE 95-075 Safety Evaluation 07-06-95

Safety Evaluation 95-075 assessed the impact of an inoperable meteorological monitoring recorder for "Wind Speed Lower" in the main control room.

The evaluation concluded that this condition is acceptable since an alternate means of monitoring "Wind Speed Lower" is available in the main control room. Furthermore, the ability to obtain wind speed values is not impacted by this recorder being inoperable. Therefore, an unreviewed safety question does not exist.

SE 95-080 Safety Evaluation 7-12-95

Safety Evaluation 95-080 assessed the impact of temporarily removing fuses for the A, B, and C Steam Generator Level Protection Channel III signal comparators. Removal of the fuses prevents spurious control room alarms during the performance of channel calibration and functional testing.

Only one protection channel at a time is removed from service for testing as allowed by Technical Specifications. Thus 2 of 3 steam generator level protection channels remain operable to initiate the design protective action, if required. In addition, adequate procedural guidance is provided to assure the restoration of the initial conditions, including requirements for independent verification and appropriate notifications. Therefore, an unreviewed safety question does not exist.

**FACILITY CHANGES THAT DID NOT
REQUIRE NRC APPROVAL**

MONTH/YEAR: July, 1995

DC-91-031-3 Design Change Package 7-13-95

Design Change Package 91-031-3 installed flow limiting spray shields on the expansion joints downstream of the motor-operated isolation valves that supply service water to the bearing and component cooling heat exchangers. Closure plates were also installed around the 96 inch expansion joint shields located at the condenser outlets.

These modifications were implemented in order to protect the Emergency Switchgear Room (ESGR) and the Turbine Building valve pits from potential flooding as a result of a Service Water system pipe rupture. Installation of these modifications satisfies an Individual Plant Evaluation flooding concern, which is not a station design basis event. Therefore, an unreviewed safety question does not exist.

DC-92-069-3 Design Change Package 7-14-95
(Safety Evaluation No. 94-031)

Design Change Package 92-069-3 replaced the solenoid-operated valves (SOV) which vent the actuator dome of the main feedwater regulating valves (MFRV) upon a closure signal.

The replacement SOVs have a larger orifice which vents the actuator dome more quickly, allowing the MFRVs to close faster. The instrument air supply header tubing lines were also enlarged to ensure an adequate supply of air is available to the MFRVs. These modifications improved the control and closure response time of the MFRVs which will help mitigate an excessive cooldown of the Reactor Coolant system upon a MFRV isolation signal. Therefore, an unreviewed safety question does not exist.

AC S2-95-0718 Administrative Control 7-18-95
TM S2-95-10 Temporary Modification (Safety Evaluation No. 95-082)

Temporary Modification (TM) S2-95-10 installed an electrical jumper to prevent the Component Cooling (CC) excess letdown control valve 2-CC-HCV-208 from closing during the replacement of a field bus module.

Administrative control of the CC thermal barrier discharge trip valves was established since the removal of the field bus module defeated the high flow trip function of these valves. The trip valves were controlled by a licensed operator who was capable of closing the applicable thermal barrier trip valve if a high flow condition was noted across either loop. Therefore, an unreviewed safety question does not exist.

**FACILITY CHANGES THAT DID NOT
REQUIRE NRC APPROVAL**

MONTH/YEAR: July, 1995

- | | | |
|--|---|----------|
| DR S-95-1391 | Deviation Report
(Safety Evaluation No. 95-083) | 7-20-95 |
| <p>Safety Evaluation 95-083 assessed Deviation Report S-95-1391 concerning the loss of capability to obtain a sample from the Unit 2 pressurizer vapor space due to an inoperable sampling line.</p> <p>The evaluation concluded that this condition is acceptable since there are alternate means of sampling the Reactor Coolant System (RCS). Compliance with Technical Specification sampling surveillance requirements continues to be maintained using routine samples obtained from the RCS Letdown Subsystem. Therefore, an unreviewed safety question does not exist.</p> | | |
| FS 95-14 | Updated Final Safety Analysis Report Change
(Safety Evaluation No. 95-084A) | 7-20-95 |
| <p>UFSAR Change 95-14 revised Section 6.2.4.1.4, "[Safety Injection System] Normal Operation [Tests and Inspections]," to correctly reflect the operational status of the low head safety injection and outside recirculation spray pumps' suction lines between the containment sump and the valve pit.</p> <p>This change was administrative in nature and had no material impact on plant equipment, operation, inspection, or testing. Therefore, an unreviewed safety question does not exist.</p> | | |
| SE 95-085 | Safety Evaluation | 07-22-95 |
| <p>Safety Evaluation 95-085 assessed the removal of Unit 1 Annunciator Panels "A" through "E" from service to allow troubleshooting and repair of the system.</p> <p>The instrument channels associated with the affected annunciators remained operable. Alternate indications were used and increased monitoring was performed. The work activities involved the nonsafety-related annunciator logic panel and did not affect any protection circuit. Therefore, an unreviewed safety question does not exist.</p> | | |
| TM S1-95-09 | Temporary Modification
(Safety Evaluation No. 95-084) | 7-25-94 |
| <p>Temporary Modification (TM) S1-95-09 defeated the speed adjustment circuit of Hydro Test Pump 1-SI-P-2 until replacement parts can be procured. The pump was set at a fixed speed that is capable of supporting accumulator operations.</p> <p>The TM did not negatively impact the performance of the hydro test pump or the Safety Injection system. No fission product barriers or safety-related systems were affected. Therefore, an unreviewed safety question does not exist.</p> | | |

**FACILITY CHANGES THAT DID NOT
REQUIRE NRC APPROVAL**

MONTH/YEAR: July, 1995

TM S1-95-08
TM S1-95-10

Temporary Modifications
(Safety Evaluation No. 95-078)

7-28-95

Temporary Modifications (TM) S1-95-08 and S1-95-10 blocked the low flow trip signal to the 1A1 and 1A2 Feedwater Pump motors during the repair of valve 1-FW-129.

The TMs did not affect any other feedwater pump manual or automatic control functions. No Consequence Limiting Safeguards, Reactor Protection, or Engineered Safeguards Features circuits were affected. Therefore, an unreviewed safety question does not exist.

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

MONTH/YEAR: July, 1995

**Operational Quality Assurance Program Topical Report
(Safety Evaluation No. 95-079)**

7-11-95

The Operational Quality Assurance Program Topical Report was revised to reflect Technical Specification Amendment 197 regarding the review of safety evaluations by the Management Safety Review Committee and the review of procedure changes and revisions by the Station Nuclear Safety and Operating Committee.

The changes are administrative or editorial in nature. They have no material impact on plant equipment, operation, inspection, or testing and do not affect the Technical Specifications margin of safety. Therefore, an unreviewed safety question does not exist.

TESTS AND EXPERIMENTS THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: July, 1995

None During the Reporting Period

CHEMISTRY REPORT

MONTH/YEAR: July, 1995

Primary Coolant Analysis	Unit No. 1			Unit No. 2		
	Max.	Min.	Avg.	Max.	Min.	Avg.
Gross Radioactivity, $\mu\text{Ci/ml}$	4.39E-1	2.28E-1	3.20E-1	2.04E-1	1.11E-1	1.71E-1
Suspended Solids, ppm	≤ 0.01	≤ 0.01	≤ 0.01	≤ 0.01	≤ 0.01	≤ 0.01
Gross Tritium, $\mu\text{Ci/ml}$	9.48E-2	5.73E-2	7.16E-2	4.63E-1	3.51E-1	4.03E-1
^{131}I , $\mu\text{Ci/ml}$	7.59E-4	5.67E-4	6.57E-4	1.54E-4	8.30E-5	1.17E-4
$^{131}\text{I}/^{133}\text{I}$	0.08	0.06	0.07	0.10	0.05	0.08
Hydrogen, cc/kg	48.0	33.0	40.7	47.9	35.4	41.9
Lithium, ppm	1.27	0.80	1.00	2.33	2.08	2.21
Boron - 10, ppm*	19.8	1.6	10.4	187.6	176.0	184.6
Oxygen, (DO), ppm	≤ 0.005	≤ 0.005	≤ 0.005	≤ 0.005	≤ 0.005	≤ 0.005
Chloride, ppm	≤ 0.050	≤ 0.001	0.004	≤ 0.050	0.002	0.007
pH at 25 degree Celsius	8.59	7.45	7.84	6.81	6.62	6.73

* Boron - 10 = Total Boron x 0.196

Comments:

None

**FUEL HANDLING
 UNITS 1 & 2**

MONTH/YEAR: July, 1995

New or Spent Fuel Shipment Number	Date Stored or Received	Number of Assemblies per Shipment	Assembly Number	ANSI Number	Initial Enrichment	New or Spent Fuel Shipping Cask Activity
New Fuel Unit 1 Batch 16 Shipment 3	7/11/95	12	10A	LM11H6	3.8012	14.6 Ci
			01A	LM11GX	3.8106	
			23A	LM11HK	3.8068	
			14A	LM11HA	3.8024	
			12A	LM11H8	3.8015	
			13A	LM11H9	3.8013	
			07A	LM11H3	3.8038	
			61A	LM11JP	3.9998	
			04A	LM11H0	3.7996	
			18A	LM11HE	3.8094	
			62A	LM11JQ	4.0053	
			64A	LM11JS	4.0040	
Unit 1 Batch 16 Shipment 4	7/13/95	12	19A	LM11HF	3.8151	14.75
			22A	LM11HJ	3.8066	
			48A	LM11JA	4.0060	
			52A	LM11JE	4.0081	
			16A	LM11HC	3.8079	
			26A	LM11HN	3.8071	
			44A	LM11J6	4.0105	
			42A	LM11J4	4.0109	
21A	LM11HH	3.8066				

**FUEL HANDLING
 UNITS 1 & 2**

MONTH/YEAR: July, 1995

New or Spent Fuel Shipment Number	Date Stored or Received	Number of Assemblies per Shipment	Assembly Number	ANSI Number	Initial Enrichment	New or Spent Fuel Shipping Cask Activity
Unit 1 Batch 16 Shipment 4 (Continued)						
			11A	LM11H7	3.8019	
			17A	LM11HD	3.8108	
			20A	LM11HG	3.8024	
Unit 1 Batch 16 Shipment 5						
	7/18/95	12	59A	LM11JM	4.0017	14.58
			05A	LM11H1	3.8035	
			15A	LM11HB	3.8095	
			33A	LM11HV	3.8058	
			32A	LM11HU	3.8036	
			28A	LM11HQ	3.8072	
			29A	LM11HR	3.8064	
			25A	LM11HM	3.8077	
			30A	LM11HS	3.8002	
			31A	LM11HT	3.8103	
			37A	LM11HZ	4.0026	
			06A	LM11H2	3.8046	
Unit 1 Batch 16 Shipment 6						
	7/20/95	8	35A	LM11HX	3.8119	9.75
			27A	LM11HP	3.8045	
			24A	LM11HL	3.8062	
			08A	LM11H4	3.6014	
			38A	LM11J0	4.0062	
			51A	LM11JD	4.0090	

**FUEL HANDLING
UNITS 1 & 2**

MONTH/YEAR: July, 1995

New or Spent Fuel Shipment Number	Date Stored or Received	Number of Assemblies per Shipment	Assembly Number	ANSI Number	Initial Enrichment	New or Spent Fuel Shipping Cask Activity
Unit 1 Batch 16 Shipment 6 (Continued)			34A	LM11HW	3.8019	
			36A	LM11HY	3.8102	

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

MONTH/YEAR: July, 1995

None During the Reporting Period