

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

January 15, 1991

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

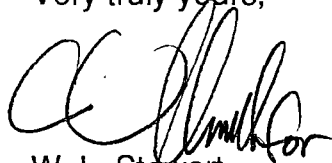
Serial No. 91-009
NO/RPC:vlh
Docket Nos. 50-280
50-281
License Nos. DPR-32
DPR-37

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 December 1990.

Very truly yours,



W. L. Stewart
Senior 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

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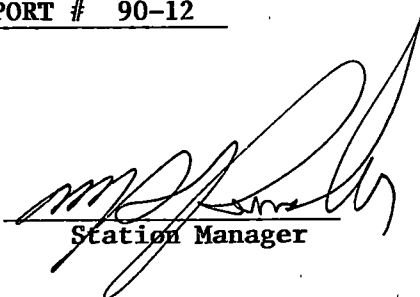
VIRGINIA ELECTRIC AND POWER COMPANY

SURRY POWER STATION

MONTHLY OPERATING REPORT

REPORT # 90-12

APPROVED:



Station Manager

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OPERATING DATA REPORT

DOCKET NO.: 50-280
 DATE: 01/05/91
 COMPLETED BY: L.A. Warren
 TELEPHONE: (804)357-3184 x355

OPERATING STATUS

NOTES

1. Unit Name: Surry Unit 1
2. Reporting Period: Dec. 01-31, 1990
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. Reason For Restrictions, If Any: _____

	<u>THIS MONTH</u>	<u>YTD</u>	<u>CUMULATIVE</u>
11. Hours In Reporting Period	744.0	8760.0	158016.0
12. Number of Hours Reactor Was Critical	336.2	6723.4	99474.2
13. Reactor Reserve Shutdown Hours	0	0	3774.5
14. Hours Generator On-Line	283.5	6657.0	97480.2
15. Unit Reserve Shutdown Hours	0	0	3736.2
16. Gross Thermal Energy Generated (MWH)	614311.8	15103107.3	226219910.3
17. Gross Electrical Energy Generated (MWH)	205315.0	5031420.0	73576823.0
18. Net Electrical Energy Generated (MWH)	195048.0	4772199.0	69783129.0
19. Unit Service Factor	38.1%	76%	61.7%
20. Unit Availability Factor	38.1%	76%	64.1%
21. Unit Capacity Factor (Using MDC Net)	33.6%	69.8%	57%
22. Unit Capacity Factor (Using DER Net)	33.3	69.1%	56.0%
23. Unit Forced Outage Rate	0%	4.4%	20.6%
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. Unit In Test Status (Prior to Commercial Operation): FORECAST ACHIEVED

INITIAL CRITICALITY _____
 INITIAL ELECTRICITY _____
 COMMERCIAL OPERATION _____

OPERATING DATA REPORT

DOCKET NO.: 50-281
 DATE: 01/05/91
 COMPLETED BY: L.A. Warren
 TELEPHONE: (804)357-3184 x355

OPERATING STATUS

NOTES

1. Unit Name: Surry Unit 2
2. Reporting Period: Dec. 01-31, 1990
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. Reason For Restrictions, If Any: _____

	<u>THIS MONTH</u>	<u>YTD</u>	<u>CUMULATIVE</u>
11. Hours In Reporting Period	744.0	8760.0	154896.0
12. Number of Hours Reactor Was Critical	744.0	7973.7	99172.3
13. Reactor Reserve Shutdown Hours	0	0	328.1
14. Hours Generator On-Line	716.9	7921.7	97570.6
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	1452121.4	18525133.5	228135468.3
17. Gross Electrical Energy Generated (MWH)	486700.0	6149515.0	74230114.0
18. Net Electrical Energy Generated (MWH)	459307.0	5837766.0	70378725.0
19. Unit Service Factor	96.4%	90.4%	63%
20. Unit Availability Factor	96.4%	90.4%	63%
21. Unit Capacity Factor (Using MDC Net)	79%	85.3%	58.3%
22. Unit Capacity Factor (Using DER Net)	78.3%	84.6%	57.7%
23. Unit Forced Outage Rate	3.6%	9.6%	15.2%
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): <u>Refueling Shutdown, 04/05/91, 67 days</u>			

25. If Shut Down at End of Report Period Estimated Date of Startup: _____
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: DECEMBER 1990

DOCKET NO.: 50-280

UNIT NAME: Surry Unit One

DATE: 01/05/91

COMPLETED BY: L.A. Warren

TELEPHONE: 804-357-3184 x355

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
901201	S	460.5	C	4	N/A	N/A	N/A	Unit shutdown for refueling continued. (Refueling outage began on 10-06-90). Returned to online status 12-20-90 at 0431 hours.

(1)	(2)	(3)	(4)
F: Forced	REASON:	METHOD:	
S: Scheduled	A - Equipment Failure (Explain)	1 - Manual	Exhibit G - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG 0161)
	B - Maintenance or Test	2 - Manual Scram.	
	C - Refueling	3 - Automatic Scram.	
	D - Regulatory Restriction	4 - Other (Explain)	
	E - Operator Training & License Examination		(5)
	F - Administrative		
	G - Operational Error (Explain)		
	H - Other (Explain)	3	Exhibit I - Same Source

**UNIT SHUTDOWN AND POWER REDUCTION
(Equal To or Greater Than 20%)**

REPORT MONTH: DECEMBER 1990

DOCKET NO.: 50-281
 UNIT NAME: Surry Unit Two
 DATE: 01/05/91
 COMPLETED BY: L.A. Warren
 TELEPHONE: 804-357-3184 x355

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
901221	S	0	B	4	N/A	TA	V	Ramped Unit to 79.5% power, 670 MW in order to perform 2-PT-1 (Turbine Governor Valve Freedom Test).
901223	F	0	A	4	N/A	EL	BDUC	Ramped Unit from 90% to 54% to reduce heat load on isolated phase bus duct. Failure of ground straps on bus duct created elevated temperatures on the bus duct.
901228	F	27.1	A	4	N/A	EL	BDUC	Ramped Unit down and opened the generator output breakers in order to replace failed ground straps.

(1)	(2)	(3)	(4)
F: Forced S: Scheduled	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)	METHOD: 1 - Manual 2 - Manual Scram. 3 - Automatic Scram. 4 - Other (Explain)	Exhibit G - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG 0161)
		4	(5) Exhibit 1 - Same Source

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO.: 50-280
UNIT NAME: Surry Unit 1
DATE: 01/05/91
COMPLETED BY: L.A. Warren
TELEPHONE: (804)357-3184 x355

MONTH: DECEMBER 1990

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>0</u>	17	<u>0</u>
2	<u>0</u>	18	<u>0</u>
3	<u>0</u>	19	<u>0</u>
4	<u>0</u>	20	<u>199</u>
5	<u>0</u>	21	<u>428</u>
6	<u>0</u>	22	<u>522</u>
7	<u>0</u>	23	<u>736</u>
8	<u>0</u>	24	<u>778</u>
9	<u>0</u>	25	<u>786</u>
10	<u>0</u>	26	<u>788</u>
11	<u>0</u>	27	<u>788</u>
12	<u>0</u>	28	<u>783</u>
13	<u>0</u>	29	<u>788</u>
14	<u>0</u>	30	<u>784</u>
15	<u>0</u>	31	<u>783</u>
16	<u>0</u>		

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: 01/05/91
COMPLETED BY: L.A. Warren
TELEPHONE: (804)357-3184 x355

MONTH: DECEMBER 1990

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>700</u>	17	<u>697</u>
2	<u>684</u>	18	<u>698</u>
3	<u>695</u>	19	<u>696</u>
4	<u>694</u>	20	<u>698</u>
5	<u>696</u>	21	<u>675</u>
6	<u>699</u>	22	<u>694</u>
7	<u>699</u>	23	<u>584</u>
8	<u>699</u>	24	<u>403</u>
9	<u>699</u>	25	<u>406</u>
10	<u>699</u>	26	<u>409</u>
11	<u>698</u>	27	<u>408</u>
12	<u>698</u>	28	<u>363</u>
13	<u>699</u>	29	<u>0</u>
14	<u>699</u>	30	<u>602</u>
15	<u>697</u>	31	<u>697</u>
16	<u>699</u>		

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: DECEMBER 1990

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

12/01/90 0000 This reporting period started with the Unit at CSD due to the ongoing Refueling Outage.

12/17/90 2213 Commenced Reactor start up.
2347 Reactor was critical.

12/18/90 0140 Commenced Low Power Physics Testing.
1837 Low Power Physics Testing completed.

12/19/90 0312 Reactor was at 2% power and holding.

12/20/90 0345 Started ramp up; 2% power.
0431 Unit on line.

12/23/90 1245 Unit at 100% power, 810 MWe.

12/31/90 2400 This reporting period ended with the Unit operating at 100% power and 825 MWe.

SUMMARY OF OPERATING EXPERIENCE

MONTH/YEAR: DECEMBER 1990

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

12/01/90 0000 This reporting period started with the Unit operating at 90% power and 740 MWe due to the inoperable M-12 Control Rod.

12/02/90 1027 The Unit experienced a Runback from 90% power and 740 MWe to 83% power and 700 MWe as a result of the loss of "F" Transfer Bus.

1710 Started ramp up; 84% power, 695 MWe.

1907 Stopped ramp; 90% power, 740 MWe.

12/21/90 0807 Started ramp down to perform 2-PT-29.1; 90% power, 740 MWe.

0918 Stopped ramp; 79.5% power, 670 MWe.

1400 Started ramp up; 79% power, 650 MWe.

1557 Stopped ramp; 90% power, 740 MWe.

12/23/90 1055 Started ramp down to reduce the circulating currents causing overheating in ground straps on the Isolated Phase Bus Duct; 90% power, 740 MWe. The overheating was a result of ground strap failures.

1925 Stopped ramp; 54% power, 440 MWe.

12/28/90 2007 Started ramp down to replace ground straps on Isolated Phase Bus Duct; 54.5% power, 440 MWe.

2241 Unit off line, Reactor maintained critical.

12/29/90 2338 Started power increase; 7×10^{-6} amps on Intermediate Range.

2355 Reactor was at 2% power.

12/30/90 0147 Unit on line and ramp up continued.

1004 Stopped ramp; 90% power, 740 MWe.

12/31/90 2400 This reporting period ended with the Unit operating at 90% power and 740 MWe.

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: DECEMBER 1990

DCP 88-01

INSIDE RECIRCULATION SPRAY PUMP FULL FLOW TEST LINE UNIT 1

This Design Change provides recirculation test piping and a temporary sump to allow full flow testing of the IRS pumps. The piping was designed to ANSI B31.1 code requirements and includes flow and pressure instrumentation to meet ASME XI requirements for pump testing.

The recirculation test piping and temporary sump will be connected/installed during Unit shutdown conditions only. This modification will not affect the operation of the safety-related IRS pumps. It will not affect the design basis of the IRS system to mitigate LOCA or SLB accidents. The modified IRS pump discharge piping will meet the original station design criteria. This modification increases the reliability of the IRS pumps since the periodic testing will be used to assess the flow capacity and operational readiness of the pumps.

The only permanent change to the IRS system piping installed under this design change is the addition of a flanged spool piece in the pump discharge line. This piping section has been designed to meet safety related and seismic requirements. There are no valves installed in the pump discharge piping which could be misaligned (closed) and prevent initiation of spray flow. Therefore, an unreviewed safety question is not created.

EWR-89-713

ENGINEERING WORK REQUEST UNITS 1&2
(Safety Evaluation #N89-0036)

12/01/90

The valve operator spring precompression for valve 1/2-RC-PCV-1455/2455 A&B will be increased such that the valve will begin to operate at 40 PSIG versus the current setting of 38 PSIG.

The increase of valve operator spring precompression is required to prevent the valve from being forced opened due to Reactor Coolant Spray (RCS) pressure during PT-11 testing and to provide additional seating force margin during normal operations. An unreviewed safety question does not exist because the design basis operation, function and level of integrity of the valves remains unchanged.

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: DECEMBER 1990

- EWR-89-042 ENGINEERING WORK REQUEST UNIT 1 12/02/90
- An electrical cable, 1-CC-TC-114A, in the Component Cooling system was damaged and required replacement with a different qualified cable type.
- An existing cable, mark number NVB, is to be replaced with a new cable, mark number NGB-35. Both cables are one pair, number 16 AWG, shielded. Only the jacket material is different. An unreviewed safety question is not created.
- EWR-89-458 ENGINEERING WORK REQUEST UNIT 1&2 12/02/90
- During recent testing of the Bottled Air System, the existing pressure control valves, 1-VS-PCV-531/532, functioned erratically and did not properly provide the design flow rate of 300 cfm.
- To assure that the design flow rate is achieved, new Fisher pressure control valves were installed as replacements. The consequences or probability of an accident were not created due to the component replacement with safety related equipment which performs in accordance with design basis requirements.
- EWR-89-529 ENGINEERING WORK REQUEST UNITS 1&2 12/03/90
- This request was performed to reduce spurious alarms being received on the Chemical and Volume Control System (CVCS) heat trace annunciator in the control room.
- CVCS heat trace annunciator under temperature setpoint and backup control setpoints are being reviewed and reset to eliminate spurious alarms. No changes are being made to the existing equipment and the alarm will continue to communicate problems associated with the CVCS heat tracing. An unreviewed safety question is not created.
- TM-S1-90-052 TEMPORARY MODIFICATION (SE 90-288) 12-04-90
- This temporary modification installed a test plug. The Type 'C' test valve used for penetration leak testing of the O-rings for an electrical penetration was broken off and temporarily replaced with a test plug until the valve was replaced.
- Containment integrity continued to be met during this installation. The test plug only replaces the valve which is used to perform the O-ring leakage testing. The plug does not affect the ability of the O-ring/flanges to perform their pressure retaining functions. An unreviewed safety question was not created.

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: DECEMBER 1990

EWR-88-587

ENGINEERING WORK REQUEST UNITS 1&2

12/06/90

This request provided generic guidance for Motor Operated Valve maintenance on spring packs. The request also established a record of correct assembly of spring packs after disassembly and cleaning.

This request does not create an unreviewed safety question.

SAFETY EVALUATION (SE 90-289)

12-06-90

This safety evaluation analyzed the loading of known failed fuel assemblies in dry storage casks. The evaluation examined the known effectiveness of vacuum drying to remove water from failed rods and the potential for release of radioactive isotopes from the fuel rod gap during the drying process. As a related issue, the release of radioactive isotopes resulting from the failure of a fuel rod during the vacuum drying of the cask cavity was evaluated.

An unreviewed safety question does not exist because the vacuum drying process for dry storage casks is effective in removing any water from the gap of the failed fuel rods. In addition, gas isotopes will not be present in the gap of failed fuel rods at levels detectable during the vacuum drying process. If a fuel rod should fail during vacuum drying, the release of Kr-85 would result in calculated doses of 0.36 mRem (skin) and 0.004 mRem (whole body) at the Station Boundary.

AC-S1-90-1207

ADMINISTRATIVE CONTROL (SE 90-290)

12-07-90

Administrative Control was established over certain normally closed and locked manual containment isolation valves while in an open position to allow supply of instrument air from the turbine building Instrument Air system. Administrative control will be established to ensure that containment integrity can be maintained in accordance with the Technical Specification (TS) definition in TS 1.0. Specifically, an operator will be stationed with instructions to close the valves immediately (within 30 seconds) upon notification from the control room. In addition, the administrative control will ensure the ability to maintain the limits for containment partial pressure in accordance with the limits of TS 3.8. Therefore, an unreviewed safety question is not created.

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: DECEMBER 1990

TM-S1-90-59 TEMPORARY MODIFICATION (SE 90-292A) 12-16-90

Electrical jumpers will be installed to provide continuity through the low flow reactor trip circuitry during replacement of relay FC-434XA. The jumper is required to maintain train 'A' low flow circuitry in the energized condition while normal continuity is broken for relay replacement.

Replacement of relay FC-434XA using this jumper will affect only Train 'A' reactor trip circuitry. Further, the jumper will provide electrical continuity through the Train 'A' circuitry and failure of the jumper will result in a reactor trip. Therefore, an unreviewed safety question is not created.

TM-S1-90-60 TEMPORARY MODIFICATION (SE 90-293A) 12-17-90

This temporary modification is necessary to provide an electrical jumper to allow replacement of a failed relay in the reactor protection circuitry. Replacement of the relay is necessary to provide the third operable reactor protection system circuit for RCS low flow. Failure of the jumper will result in a reactor trip. The jumper will be removed before unit startup. Therefore, an unreviewed safety question is not created.

TM-S1-90-61 TEMPORARY MODIFICATION (SE 90-293) 12-17-90

Electrical jumpers will be installed to provide continuity through the low flow reactor trip circuitry during replacement of relay FC-1XB. The jumper is required to maintain train 'B' low flow circuitry in the energized condition while normal continuity is broken for relay replacement.

Replacement of relay FC-1XB is necessary to provide redundant relay failure protection for RCS Loop 'A', Train 'B' RPS low flow protection logic. The jumper will maintain the RPS circuitry energized during relay replacement. Failure of the jumper will result in a reactor trip. Therefore, an unreviewed safety question is not created.

PROCEDURE OR METHOD OF OPERATION CHANGES

THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: DECEMBER 1990

1-PT-18.3A

SURVEILLANCE TEST PROCEDURE (SE 90-291)

12-09-90

This change involved the testing methodology employed for testing the Safety Injection (SI) system check valves to the RCS cold legs. The change allowed the testing of the valves at full flow conditions with the RX head bolted.

The integrity of the RCS was the major issue evaluated. RCS temperature effects were evaluated by the NSSS vendor (Westinghouse). During the test 45 degree Fahrenheit water from the RWST will be injected into the RCS at a rate of 600 gpm at CSD conditions. The evaluation concluded that the Over Pressure Mitigation System (OPMS) and Technical Specification requirements for OPMS operation (TS 3.1.G) can be relied upon to relieve RCS pressure during the test in combination with establishing an atmospheric vent for the RCS prior to the test. Plant operators have instructions to terminate the test if pressurizer level exceeds 80% to avoid solid plant conditions. Therefore, an unreviewed safety question is not created.

TESTS AND EXPERIMENTS THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: DECEMBER 1990

NONE DURING THIS REPORTING PERIOD

VIRGINIA POWER
SURRY POWER STATION
CHEMISTRY REPORT

MONTH/YEAR: DECEMBER 1990

PRIMARY COOLANT ANALYSIS	UNIT NO. 1			UNIT NO. 2		
	MAX.	MIN.	AVG.	MAX.	MIN.	AVG.
Gross Radioact., $\mu\text{Ci/ml}$	7.01E-1	3.23E-4	9.25E-2	2.01E-1	1.27E-2	1.27E-1
Suspended Solids, ppm	0.0	0.0	0.0	0.0	0.0	0.0
Gross Tritium, $\mu\text{Ci/ml}$	4.82E-2	4.82E-2	4.82E-2	1.35E-1	1.06E-1	1.19E-1
Iodine-131, $\mu\text{Ci/ml}$	3.96E-5	2.60E-3	1.28E-3	2.66E-3	1.41E-4	6.32E-4
Iodine-131/Iodine-133	0.13	0.07	0.09	0.16	0.06	0.10
Hydrogen, cc/kg	28.9	4.7	19.4	33.2	25.2	27.6
Lithium, ppm	2.59	0.00	1.71	2.34	1.47	1.76
Boron - 10, ppm*	445	178	329	90	32	43
Oxygen, (DO), ppm	3.000	≤ 0.005	0.202	≤ 0.005	≤ 0.005	≤ 0.005
Chloride, ppm	0.014	< 0.001	0.003	0.004	≤ 0.001	0.002
pH @ 25 degree Celsius	6.55	4.66	5.74	7.31	6.07	7.17

* Boron - 10 = Total Boron x 0.196

REMARKS:

Unit One: Lithium concentration was out-of-spec (high) from 12/27/90 at 2020 hours until 12/28/90 at 1705 hours. The Lithium was 2.38 ppm; the limit is 2.35 ppm. The Lithium concentration was out of spec for 20 hours and 45 minutes.

UNIT 1&2

FUEL HANDLING

DATE: DECEMBER 1990

NEW OR SPENT FUEL SHIPMENT #	DATE STORED	NUMBER OF ASSEMBLIES PER SHIPMENT	ASSEMBLY NUMBER	ANSI NUMBER	INITIAL ENRICHMENT	NEW OR SPENT FUEL SHIPPING CASK ACTIVITY LEVEL
N/A	12/19/90	CASK CASTOR/ V/21 500.13	P15		3.11	N/A
			E02	LMO074	2.61	
			E08	LMO078	2.61	
			E09	LMO076	2.61	
			0N3	LMO6FO	3.41	
			0N7	LMO6FY	3.41	
			0N9	LMO6GD	3.41	
			1N1	LMO6FZ	3.41	
			1N3	LMO6GH	3.41	
			1N5	LMO6G0	3.41	
			1N6	LMO6ES	3.41	
			1N8	LMO6FX	3.41	
			1N9	LMO6FK	3.41	
			2N0	LMO6G3	3.41	
			2N1	LMO6FM	3.41	
			2N2	LMO6EV	3.41	
			2N4	LMO6F7	3.41	
			2N5	LMO6G7	3.41	
			2N6	LMO6GE	3.41	
			2N7	LMO6FB	3.41	
			3N3	LMO6FE	3.41	

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

MONTH/YEAR: DECEMBER 1990

NONE DURING THIS REPORTING PERIOD