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Jack L. Wilson  
Vice President, Sequoyah Nuclear Plant

December 16, 1991

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
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Gentlemen:

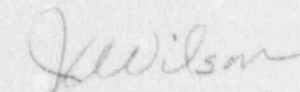
In the Matter of ) Docket Nos. 50-327  
Tennessee Valley Authority ) 50-328

SEQUOYAH NUCLEAR PLANT (SQN) - NOVEMBER 1991 MONTHLY OPERATING REPORT

Enclosed is the November 1991 Monthly Operating Report as required by SQN  
Technical Specification 6.9.1.10.

If you have any questions concerning this matter, please call  
M. A. Cooper at (615) 843-8924.

Sincerely,



J. L. Wilson

Enclosure  
cc: See page 2

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PDR ADCK 05000327  
R PDR

*Handwritten initials/signature*

U.S. Nuclear Regulatory Commission

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December 16, 1991

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TENNESSEE VALLEY AUTHORITY

NUCLEAR POWER GROUP  
SEQUOYAH NUCLEAR PLANT

MONTHLY OPERATING REPORT  
TO THE  
NUCLEAR REGULATORY COMMISSION  
NOVEMBER 1991

UNIT 1

DOCKET NUMBER 50-327

LICENSE NUMBER DPR-77

UNIT 2

DOCKET NUMBER 50-328

LICENSE NUMBER DPR-79

OPERATIONAL SUMMARY  
NOVEMBER 1991

UNIT 1

Unit 1 entered the Cycle 5 refueling outage on October 5, 1991. At the beginning of November, Unit 1 was in Mode 6 (defueled). On November 4, 1991, fuel movement began to reload the core and was completed on November 7, 1991. Unit 1 entered Mode 5 on November 14, 1991, at 2018 Eastern standard time (EST) and remained in Mode 5 through the end of November.

UNIT 2

Unit 2 generated 530,950 megawatthours (MWh) (gross) electrical power during November with a capacity factor of 63.46 percent. On November 7, 1991, at 1403 EST, Unit 2 reactor tripped on low-low steam generator level resulting from an inadvertent main steam isolation valve closure. On November 7, 1991, it was determined that various 480-volt (V) electrical boards did not have selective coordination between the feeder breakers and the load breakers on the boards as a result of a breaker design feature. On November 8, 1991, at 0056 EST, the 480-V Shutdown Board 1B2-B was inadvertently short circuited by electricians during activities to correct the breaker coordination problem resulting in a trip of the board. Unit 2 entered Mode 5 on November 8, 1991, at 2002 EST to repair the shutdown board and complete the modifications to correct the coordination problem. On November 14, 1991, 480-V Shutdown Board 1B2-B was repaired, and the breaker modifications were completed. At 0454 EST on November 15, 1991, Unit 2 entered Mode 4 and was again online on November 17, 1991, at 1417 EST. Unit 2 was operating at 100 percent reactor power level again on November 19, 1991, at 1233 EST.

POWER-OPERATED RELIEF VALVES (PORV) AND SAFETY VALVES SUMMARY

There were no challenges to PORVs or safety valves in November.

OFFSITE DOSE CALCULATION MANUAL (ODCM) CHANGES

There were no changes to the ODCM during November.

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-327      UNIT No. One      DATE: 12-04-91  
 COMPLETED BY: T. J. Hollomon      TELEPHONE: (615) 843-7528  
 MONTH: NOVEMBER 1991

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

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-328      UNIT No. Two      DATE: 12-04-91  
 COMPLETED BY: T. J. Hollomon      TELEPHONE: (615) 843-7528  
 MONTH: NOVEMBER 1991

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	1117	17	43
2	1117	18	494
3	1118	19	1089
4	1119	20	1114
5	1119	21	1119
6	1120	22	1122
7	637	23	1122
8	-28	24	1122
9	-26	25	1123
10	-16	26	1122
11	-19	27	1123
12	-16	28	1124
13	-21	29	1123
14	-20	30	1123
15	-37	31	NA
16	-35		

OPERATING DATA REPORT

DOCKET NO. 50-327  
 DATE Dec. 3, 1991  
 COMPLETED BY T. J. Holloman  
 TELEPHONE (615) 843-7528

OPERATING STATUS

- |   | Notes |
|---|-------|
| 1. Unit Name: <u>Sequoyah Unit One</u>  |       |
| 2. Reporting Period: <u>November 1991</u>   |       |
| 3. Licensed Thermal Power (Mwt): <u>3411.0</u>  |       |
| 4. Nameplate Rating (Gross MWe): <u>1220.6</u>  |       |
| 5. Design Electrical Rating (Net MWe): <u>1148.0</u>  |       |
| 6. Maximum Dependable Capacity (Gross MWe): <u>1162.0</u>   |       |
| 7. Maximum Dependable Capacity (Net MWe): <u>1122.0</u>   |       |
| 8. If Changes Occur in Capacity Ratings (Item Numbers 3 Through 7) Since Last Report, Give Reasons: |       |

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

	This Month	Yr-to-Date	Cumulative
11. Hours in Reporting Period	<u>720</u>	<u>8,016</u>	<u>91,321</u>
12. Number of Hours Reactor Was Critical	<u>0.0</u>	<u>6,519.3</u>	<u>46,591</u>
13. Reactor Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>0</u>
14. Hours Generator On-Line	<u>0.0</u>	<u>8,500.1</u>	<u>45,596.1</u>
15. Unit Reserve Shutdown Hours	<u>0.0</u>	<u>0</u>	<u>0</u>
16. Gross Thermal Energy Generated (MWH)	<u>0.0</u>	<u>21,711,324.0</u>	<u>148,997,391</u>
17. Gross Electrical Energy Generated (MWH)	<u>0</u>	<u>7,348,370</u>	<u>50,468,956</u>
18. Net Electrical Energy Generated (MWH)	<u>(2,271)</u>	<u>7,086,158</u>	<u>48,383,034</u>
19. Unit Service Factor	<u>0.0</u>	<u>81.1</u>	<u>49.9</u>
20. Unit Availability Factor	<u>0.0</u>	<u>81.1</u>	<u>49.9</u>
21. Unit Capacity Factor (Using MDC Net)	<u>-0.3</u>	<u>78.8</u>	<u>47.2</u>
22. Unit Capacity Factor (Using DER Net)	<u>-0.3</u>	<u>77.0</u>	<u>46.2</u>
23. Unit Forced Outage Rate	<u>0.0</u>	<u>2.3</u>	<u>41.6</u>

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):  
Unit 1 Cycle 5 refueling outage began October 5, 1991, at 0249 (EDT). Generator  
synchronization is scheduled for December 14, 1991.

25. If Shut Down At End Of Report Period, Estimated Date of Startup: December 16, 1991

OPERATING DATA REPORT

DOCKET NO. 50-328  
 DATE Dec. 4, 1991  
 COMPLETED BY T. J. Holloman  
 TELEPHONE (615) 843-7528

OPERATING STATUS

- |   | Notes |
|---|-------|
| 1. Unit Name: <u>Sequoyah Unit Two</u>  |       |
| 2. Reporting Period: <u>November 1991</u>   |       |
| 3. Licensed Thermal Power (MWT): <u>3411.0</u>  |       |
| 4. Nameplate Rating (Gross MWe): <u>1220.5</u>  |       |
| 5. Design Electrical Rating (Net MWe): <u>1148.0</u>  |       |
| 6. Maximum Dependable Capacity (Gross MWe): <u>1162.0</u>   |       |
| 7. Maximum Dependable Capacity (Net MWe): <u>1122.0</u>   |       |
| 8. If Changes Occur in Capacity Ratings (Item Numbers 3 Through 7) Since Last Report, Give Reasons: |       |

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

	This Month	Yr-to-Date	Cumulative
11. Hours in Reporting Period	<u>720</u>	<u>8,016</u>	<u>83,281</u>
12. Number of Hours Reactor Was Critical	<u>97.1</u>	<u>7,793.1</u>	<u>48,264</u>
13. Reactor Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>0</u>
14. Hours Generator On-Line	<u>479.8</u>	<u>7,738.8</u>	<u>47,299.2</u>
15. Unit Reserve Shutdown Hours	<u>0.0</u>	<u>0</u>	<u>0</u>
16. Gross Thermal Energy Generated (MWH)	<u>1,567,576.9</u>	<u>26,154,023.4</u>	<u>148,428,474</u>
17. Gross Electrical Energy Generated (MWH)	<u>530,950</u>	<u>8,819,465</u>	<u>50,307,681</u>
18. Net Electrical Energy Generated (MWH)	<u>506,022</u>	<u>8,499,857</u>	<u>48,125,935</u>
19. Unit Service Factor	<u>66.6</u>	<u>96.5</u>	<u>56.8</u>
20. Unit Availability Factor	<u>66.6</u>	<u>96.5</u>	<u>56.8</u>
21. Unit Capacity Factor (Using MDC Net)	<u>62.6</u>	<u>94.5</u>	<u>51.5</u>
22. Unit Capacity Factor (Using DER Net)	<u>61.2</u>	<u>92.4</u>	<u>50.3</u>
23. Unit Forced Outage Rate	<u>33.4</u>	<u>3.5</u>	<u>36.4</u>

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):  
Unit 2 Cycle 5 refueling outage is scheduled to begin March 13, 1992, and is currently scheduled as a 60-day outage.

25. If Shut Down At End Of Report Period, Estimated Date of Startup: N/A



UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: November 1991

DOCKET NO: 50-327

UNIT NAME: One

DATE: 12/04/91

COMPLETED BY: T. J. Holloman

TELEPHONE: (615) 843-7528

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report No.	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause and Corrective Action to Prevent Recurrence
9	911005	S	720.0	C	1				Unit 1 Cycle 5 refueling outage continues.

<sup>1</sup>F: Forced  
S: Scheduled

<sup>2</sup>Reason:  
A-Equipment Failure (Explain)  
B-Maintenance or Test  
C-Refueling  
D-Regulatory Restriction  
E-Operator Training and License Examination  
F-Administrative  
G-Operational Error (Explain)  
H-Other (Explain)

<sup>3</sup>Method:  
1-Manual  
2-Manual Scram  
3-Automatic Scram  
4-Continuation of Existing Outage  
5-Reduction  
9-Other

<sup>4</sup>Exhibit G-Instructions for Preparation of Data Entry sheets for Licensee Event Report (LER) File (NUREG-1022)

<sup>5</sup>Exhibit I-Same Source

## UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: November 1991DOCKET NO: 50-328UNIT NAME: TWODATE: 12/04/91COMPLETED BY: T. J. HollomanTELEPHONE: (615) 843-7528

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report No.	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause and Corrective Action to Prevent Recurrence
5	911107	F	240.2	A	3	50-328/91006 50-327/91026	SB ED	ISV BKR	On 11/7/91, at 1403 EST, Unit 2 reactor tripped on low-low steam generator level resulting from an inadvertent main steam isolation valve closure. On 11/7/91, it was determined that various 480-V electrical boards did not have selective coordination between the feeder breakers and the load breakers on the boards as a result of a breaker design feature. On 11/8/91, at 0056 EST, the 480-V Shutdown Board 1B2-B was inadvertently short circuited by electricians during activities to correct the breaker coordination problem resulting in a trip on the board. Unit 2 entered Mode 5 on 11/8/91, at 2002 EST to repair the shutdown board and complete the modifications to correct the coordination problem. On 11/14/91, 480-V Shutdown Board 1B2-B was repaired, and the breaker modifications were completed. At 0454 EST on 11/15/91, Unit 2 entered Mode 4 and was again online on 11/17/91, at 1417 EST. Unit 2 was operating at 100% reactor power level again on 11/19/91 at 1233 EST.

<sup>1</sup>F: Forced  
S: Scheduled

<sup>2</sup>Reason:  
A-Equipment Failure (Explain)  
B-Maintenance or Test  
C-Refueling  
D-Regulatory Restriction  
E-Operator Training and License Examination  
F-Administrative  
G-Operational Error (Explain)  
H-Other (Explain)

<sup>3</sup>Method:  
1-Manual  
2-Manual Scram  
3-Automatic Scram  
4-Continuation of Existing Outage  
5-Reduction  
9-Other

<sup>4</sup>Exhibit G-Instructions  
for Preparation of Data  
Entry sheets for Licensee  
Event Report (LER) File  
(NUREG-1022)

<sup>5</sup>Exhibit I-Same Source