



Tennessee Valley Authority, Post Office Box 2000, Soddy-Daisy, Tennessee 37379

December 14, 1996

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

Gentlemen:

In the Matter of
Tennessee Valley Authority

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)

Docket Nos. 50-327
50-328

SEQUOYAH NUCLEAR PLANT (SQN) - NOVEMBER 1996 MONTHLY
OPERATING REPORT

Enclosed is the November 1996 Monthly Operating Report as required by SQN
Technical Specification 6.9.1.10.

If you have any questions concerning this matter, please telephone
J. W. Proffitt at (423) 843-6651.

Sincerely,

R. H. Shell
Manager
SQN Site Licensing and Industry Affairs

Enclosure
cc: See page 2

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PDR ADOCK 05000327
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U.S. Nuclear Regulatory Commission
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December 14, 1996

cc (Enclosure):

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TENNESSEE VALLEY AUTHORITY

SEQUOYAH NUCLEAR PLANT

MONTHLY OPERATING REPORT

TO THE

NUCLEAR REGULATORY COMMISSION

NOVEMBER 1996

UNIT 1

DOCKET NUMBER 50-327

LICENSE NUMBER DPR-77

UNIT 2

DOCKET NUMBER 50-328

LICENSE NUMBER DPR-79

OPERATIONAL SUMMARY NOVEMBER 1996

UNIT 1

Unit 1 generated 745,062 megawatt-hours (MWh) (gross) electrical power during November with a capacity factor of 89.59 percent. On November 15 at 1700 EST, a Unit 1 shutdown was initiated for a planned maintenance outage. At approximately 35 percent power a manual reactor trip was initiated at 0031 EST on November 16 following feedwater isolations on all three heater strings. Unit 1 reactor was taken critical on November 17 at 1638 EST. Unit 1 was tied online on November 18 at 0510 EST. On November 19 with Unit 1 at approximately 57 percent power, a power decrease to 15 percent was initiated at 1759 EST to allow draining of the extraction line to No. 4 C intermediate heater. The generator was taken offline at 2110 EST on November 19 and the reactor was maintained at 15 percent power. On November 20 at 0100 EST, Unit 1 was tied online and reached 100 percent reactor power on November 21 at 0156 EST.

Unit 1 was operating at 100 percent power at the end of November.

UNIT 2

Unit 2 generated 721,515 megawatt-hours (MWh) (gross) electrical power during November with a capacity factor of 86.76 percent. Unit 2 was in Mode 4 at the beginning of November as a result of maintenance activities on the motor-driven auxiliary feedwater pumps. Maintenance and testing on MDAFW pumps was completed. On November 1, Unit 2 entered Mode 3 at 1105 EST following completion of the maintenance activities. Unit 2 reactor was taken critical on November 3 at 0755 EST. On November 4 at 1230 EST, Unit 2 entered Mode 1 and was tied online at 2330 EST. Unit 2 was operating at 100 percent power on November 5 at 2235 EST.

Unit 2 was operating at 100 percent reactor power at the end of November.

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-327

UNIT NO. One

DATE: 12-05-96

COMPLETED BY: T. J. Hollomon

TELEPHONE: (423) 843-7528

MONTH: NOVEMBER 1996

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	1136
2	1136
3	1136
4	1143
5	1143
6	1145
7	1144
8	1139
9	1147
10	1146
11	1148
12	1145
13	1147
14	1149
15	1074
16	-20

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
17	-30
18	179
19	461
20	741
21	1144
22	1149
23	1148
24	1147
25	1149
26	1148
27	1147
28	1151
29	1151
30	1150
31	N/A

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-328

UNIT NO. Two

DATE: 12-05-96

COMPLETED BY: T. J. Hollomon

TELEPHONE: (423) 843-7528

MONTH: NOVEMBER 1996

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	-28
2	-28
3	-28
4	-33
5	599
6	1132
7	1136
8	1139
9	1085
10	1089
11	1143
12	1145
13	1143
14	1144
15	1142
16	1141

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
17	1143
18	1149
19	1147
20	1148
21	1145
22	1145
23	1144
24	1144
25	1145
26	1145
27	1144
28	1148
29	1148
30	1147
31	N/A

OPERATING DATA REPORT

DOCKET NO. 50-327
 DATE 12/05/96
 COMPLETED BY T. J. Hollomon
 TELEPHONE (423) 843-7528

OPERATING STATUS

Notes

1. Unit Name: Sequoyah Unit One
2. Reporting Period: November 1996
3. Licensed Thermal Power (MWt): 3411.0
4. Nameplate Rating (Gross (MWe): 1220.6
5. Design Electrical Rating (Net MWe): 1148.0
6. Maximum Dependable Capacity (Gross MWe): 1155.0
7. Maximum Dependable Capacity (Net MWe): 1117.0
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>8,040</u>	<u>135,169</u>
12. Number of Hours Reactor Was Critical	<u>679.9</u>	<u>7,684.2</u>	<u>76,579</u>
13. Reactor Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>0</u>
14. Hours Generator On-Line	<u>663.5</u>	<u>7,601.2</u>	<u>74,827.6</u>
15. Unit Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>0</u>
16. Gross Thermal Energy Generated (MWh)	<u>2,159,005.3</u>	<u>25,491,890.5</u>	<u>243,823,306</u>
17. Gross Electrical Energy Generated (MWh)	<u>745,062</u>	<u>8,744,429</u>	<u>82,909,774</u>
18. Net Electrical Energy Generated (MWh)	<u>718,140</u>	<u>8,439,419</u>	<u>79,523,566</u>
19. Unit Service Factor	<u>92.2</u>	<u>94.5</u>	<u>55.4</u>
20. Unit Availability Factor	<u>92.2</u>	<u>94.5</u>	<u>55.4</u>
21. Unit Capacity Factor (Using MDC Net)	<u>89.3</u>	<u>94.0</u>	<u>52.7</u>
22. Unit Capacity Factor (Using DER Net)	<u>86.9</u>	<u>91.4</u>	<u>51.2</u>
23. Unit Forced Outage Rate	<u>0.6</u>	<u>0.7</u>	<u>32.3</u>
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):	<u>Unit 1 is scheduled to enter a refueling outage on March 21, 1997 with a duration of 50 days.</u>		

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

OPERATING DATA REPORT

DOCKET NO. 50-328
 DATE 12/05/96
 COMPLETED BY T. J. Hollomon
 TELEPHONE (423) 843-7528

OPERATING STATUS

1. Unit Name: Sequoyah Unit Two
2. Reporting Period: November 1996
3. Licensed Thermal Power (MWt): 3411.0
4. Nameplate Rating (Gross (MWe): 1220.6
5. Design Electrical Rating (Net MWe): 1148.0
6. Maximum Dependable Capacity (Gross MWe): 1155.0
7. Maximum Dependable Capacity (Net MWe): 1117.0
8. If Changes Occur in Capacity Ratings (Item Numbers 3 Through 7) Since Last Report, Give Reasons:

Notes

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>8,040</u>	<u>127,129</u>
12. Number of Hours Reactor Was Critical	<u>664.1</u>	<u>6,307.8</u>	<u>78,901</u>
13. Reactor Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>0</u>
14. Hours Generator On-Line	<u>624.50</u>	<u>6,214.7</u>	<u>76,990.9</u>
15. Unit Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>0</u>
16. Gross Thermal Energy Generated (MWh)	<u>2,093,736.4</u>	<u>20,909,577.4</u>	<u>245,451,174</u>
17. Gross Electrical Energy Generated (MWh)	<u>721,515</u>	<u>7,184,560</u>	<u>83,408,332</u>
18. Net Electrical Energy Generated (MWh)	<u>695,237</u>	<u>6,914,506</u>	<u>79,916,375</u>
19. Unit Service Factor	<u>86.7</u>	<u>77.3</u>	<u>60.6</u>
20. Unit Availability Factor	<u>86.7</u>	<u>77.3</u>	<u>60.6</u>
21. Unit Capacity Factor (Using MDC Net)	<u>86.4</u>	<u>77.0</u>	<u>56.3</u>
22. Unit Capacity Factor (Using DER Net)	<u>84.1</u>	<u>74.9</u>	<u>54.8</u>
23. Unit Forced Outage Rate	<u>13.3</u>	<u>8.7</u>	<u>31.4</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: N/A

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: NOVEMBER 1996DOCKET NO.: 50-327UNIT NAME: OneDATE: 12/05/96COMPLETED BY: T. J. HollomonTELEPHONE: (423) 843-7528

No.	Date	Type ¹	Duration (Hours)	Reason ²	Method of Shutting Down Reactor ³	Licensee Event Report No.	System Code ⁴	Component Code ⁵	Cause and Corrective Action to Prevent Recurrence
9	961116	S	52.7	B	2	50-327/96010	SN	LCV	On November 16 at 0031 EST, during a Unit 1 shutdown for planned maintenance activities a manual reactor trip was initiated. The manual trip was initiated following feedwater heater isolations. This event occurred as a result of the No. 3 heater drain tank by-pass level control valve failing to open in response to an increased level in the tank. The cause of the event was a failure to properly evaluate the affects of setting the proportional band to 50 percent. Changing the proportional band to 50 percent resulted in a decrease in the operational range of the controller. The setpoint for the controller was set outside the operating range with the proportional controller set at 50 percent. Appropriate procedures and the vendor manual will be revised to address the affects of changing the proportional band. Unit 1 was tied online on November 18 at 0510 EST.

¹F: Forced
S: Scheduled

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

³Method
1-Manual
2-Manual Scram
3-Automatic Scram
4-Continuation of Existing Outage
5-Reduction
9-Other

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

⁵Exhibit I - Same Source

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: NOVEMBER 1996DOCKET NO.: 50-327UNIT NAME: OneDATE: 12/05/96COMPLETED BY: T. J. HollomonTELEPHONE: (423) 843-7528

No.	Date	Type ¹	Duration (Hours)	Reason ²	Method of Shutting Down Reactor ³	Licensee Event Report No.	System Code ⁴	Component Code ⁵	Cause and Corrective Action to Prevent Recurrence
10	961119	F	3.8	B	5	N/A			On November 19 with Unit 1 at approximately 57 percent power, a power decrease to 15 percent was initiated at 1759 EST to allow draining of water from the extraction line to No. 4 C intermediate heater. The generator was taken offline at 2110 EST on November 19 and the reactor was maintained at 15 percent power. On November 20 at 0100 EST, Unit 1 was again tied online and reached 100 percent reactor power on November 21 at 0156 EST.

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G-Operational Error (Explain)
H-Other (Explain)

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UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: NOVEMBER 1996DOCKET NO.: 50-328UNIT NAME: TwoDATE: 12/05/96COMPLETED BY: T. J. HollomonTELEPHONE: (423) 843-7528

No.	Date	Type ¹	Duration (Hours)	Reason ²	Method of Shutting Down Reactor ³	Licensee Event Report No.	System Code ⁴	Component Code ⁵	Cause and Corrective Action to Prevent Recurrence
3	961101	F	95.5	A	4	50-328/96005	J1	PS	Unit 2 continued in an outage resulting from a manual reactor trip on October 11 at 0827 EDT as a result of an unexpected loss of turbine load. Following maintenance on RCP seals and motor driven auxiliary feedwater pumps Unit 2 was returned to service on November 4 at 2330 EST.

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S: Scheduled

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

³Method
1-Manual
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