



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

December 15, 1994

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

Gentlemen:

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

SEQUOYAH NUCLEAR PLANT (SQN) -- NOVEMBER 1994 MONTHLY OPERATING REPORT

Enclosed is the November 1994 Monthly Operating Report as required by SQN  
Technical Specification 6.9.1.10.

If you have any questions concerning this matter, please call  
J. W. Proffitt at (615) 843-6651.

Sincerely,

*R. H. Shell*

R. H. Shell  
Manager  
SQN Site Licensing

Enclosure  
cc: See page 2

*JE24*

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cc (Enclosure):

INPO Records Center  
Institute of Nuclear Power Operations  
700 Galleria Parkway  
Atlanta, Georgia 30339-5957

Mr. D. E. LaBarge, Project Manager  
U.S. Nuclear Regulatory Commission  
One White Flint, North  
11555 Rockville Pike  
Rockville, Maryland 20852-2739

Mr. Joseph Santucci, Manager  
Advanced Reactor Department  
Electric Power Research Institute  
3340 Hillview Avenue  
Palo Alto, California 94304

NRC Resident Inspector  
Sequoyah Nuclear Plant  
2600 Igou Ferry Road  
Soddy-Daisy, Tennessee 37379-3624

Regional Administration  
U.S. Nuclear Regulatory Commission  
Office of Inspection and Enforcement  
Region II  
101 Marietta Street, NW, Suite 2900  
Atlanta, Georgia 30323-2711

Regional Administrator  
U.S. Nuclear Regulatory Commission  
Region II  
101 Marietta Street, NW, Suite 2900  
Atlanta, Georgia 30323-2711

Mr. F. Yost, Director Research Services  
Utility Data Institute  
1200 G Street, NW, Suite 250  
Washington, D.C. 20005

TENNESSEE VALLEY AUTHORITY

SEQUOYAH NUCLEAR PLANT

MONTHLY OPERATING REPORT

TO THE

NUCLEAR REGULATORY COMMISSION

NOVEMBER 1994

UNIT 1

DOCKET NUMBER 50-327

LICENSE NUMBER DPR-77

UNIT 2

DOCKET NUMBER 50-328

LICENSE NUMBER DPR-79

OPERATIONAL SUMMARY  
NOVEMBER 1994

UNIT 1

Unit 1 generated 785,920 megawatthours (MWh) (gross) electrical power during November with a capacity factor of 94.84 percent.

On November 29 at 0713 EST, with Unit 1 operating at approximately 100 percent reactor power, an automatic turbine trip signal was generated from a loss of both 48-volt electrohydraulic control (EHC) power sources, resulting in a reactor trip. The immediate cause of the trip was the loss of both 48-volt direct current EHC power supplies as a result of an electrical spike on the power supply output.

Unit 1 remained in Mode 3 at the end of November.

UNIT 2

Unit 2 generated 293.207 megawatthours (MWh) (gross) electrical power during November with a capacity factor of 35.54 percent.

The Unit 2 Cycle 6 refueling outage ended on November 16 at 0209 EST when the generator was synchronized to the grid. On November 18 at 1649 EST, with the unit operating at approximately 30 percent reactor power, a manual power reduction was initiated when a steam leak resulted from a faulty weld on 2-VLV-7-542. This test connection could not be isolated for repair. Reactor power was reduced to 20 percent, and the generator was taken off-line for the repairs to be performed. Unit 2 was tied on-line on November 19 at 0436 EST, and reactor power increase was initiated. Unit 2 reached 100 percent reactor thermal power on November 25 at 0935 EST and remained at 100 percent power at the end of the month.

# AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-327 UNIT No. One DATE: 12-05-94

COMPLETED BY: T. J. Hollomon

TELEPHONE: (615) 843-7528

MONTH: NOVEMBER 1994

| DAY | AVERAGE DAILY POWER LEVEL<br>(MWe-Net) |
|-----|--|
| 1   | <u>1137</u>                            |
| 2   | <u>1136</u>                            |
| 3   | <u>1134</u>                            |
| 4   | <u>1130</u>                            |
| 5   | <u>1128</u>                            |
| 6   | <u>1134</u>                            |
| 7   | <u>1133</u>                            |
| 8   | <u>1132</u>                            |
| 9   | <u>1132</u>                            |
| 10  | <u>1132</u>                            |
| 11  | <u>1136</u>                            |
| 12  | <u>1129</u>                            |
| 13  | <u>1138</u>                            |
| 14  | <u>1134</u>                            |
| 15  | <u>1136</u>                            |
| 16  | <u>1134</u>                            |

| DAY | AVERAGE DAILY POWER LEVEL<br>(MWe-Net) |
|-----|--|
| 17  | <u>1133</u>                            |
| 18  | <u>1138</u>                            |
| 19  | <u>1142</u>                            |
| 20  | <u>1142</u>                            |
| 21  | <u>1067</u>                            |
| 22  | <u>1032</u>                            |
| 23  | <u>1050</u>                            |
| 24  | <u>1061</u>                            |
| 25  | <u>1067</u>                            |
| 26  | <u>1083</u>                            |
| 27  | <u>1081</u>                            |
| 28  | <u>1087</u>                            |
| 29  | <u>11</u>                              |
| 30  | <u>-15</u>                             |
| 31  | <u>0</u>                               |

# AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-328 UNIT No. Two DATE: 12-05-94  
 COMPLETED BY: T. J. Hollomon TELEPHONE: (615) 843-7528  
 MONTH: NOVEMBER 1994

| DAY | AVERAGE DAILY POWER LEVEL<br>(MWe-Net) | DAY | AVERAGE DAILY POWER LEVEL<br>(MWe-Net) |
|-----|--|-----|--|
| 1   | <u>-20</u>                             | 17  | <u>266</u>                             |
| 2   | <u>-21</u>                             | 18  | <u>200</u>                             |
| 3   | <u>-25</u>                             | 19  | <u>721</u>                             |
| 4   | <u>-21</u>                             | 20  | <u>826</u>                             |
| 5   | <u>-28</u>                             | 21  | <u>834</u>                             |
| 6   | <u>-21</u>                             | 22  | <u>846</u>                             |
| 7   | <u>-22</u>                             | 23  | <u>843</u>                             |
| 8   | <u>-23</u>                             | 24  | <u>872</u>                             |
| 9   | <u>-25</u>                             | 25  | <u>1086</u>                            |
| 10  | <u>-25</u>                             | 26  | <u>1132</u>                            |
| 11  | <u>-21</u>                             | 27  | <u>1141</u>                            |
| 12  | <u>-27</u>                             | 28  | <u>1128</u>                            |
| 13  | <u>-25</u>                             | 29  | <u>1117</u>                            |
| 14  | <u>-25</u>                             | 30  | <u>1092</u>                            |
| 15  | <u>-23</u>                             | 31  | <u>0</u>                               |
| 16  | <u>174</u>                             |     |  |

# OPERATING DATA REPORT

DOCKET NO. 50-327  
 DATE 12/05/94  
 COMPLETED BY T. J. Holloman  
 TELEPHONE (615) 843-7528

## OPERATING STATUS

1. Unit Name: Sequoyah Unit One
2. Reporting Period: November 1994
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): 1151.0
7. Maximum Dependable Capacity (Net MWe): 1111.0
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>8,016</u>        | <u>117,625</u>     |
| 12. Number of Hours Reactor Was Critical                                       | <u>679.2</u>       | <u>5,389.2</u>      | <u>61,418</u>      |
| 13. Reactor Reserve Shutdown Hours   | <u>0</u>           | <u>0</u>            | <u>0</u>           |
| 14. Hours Generator On-Line  | <u>679.2</u>       | <u>5,162.9</u>      | <u>59,991.4</u>    |
| 15. Unit Reserve Shutdown Hours  | <u>0</u>           | <u>0</u>            | <u>0</u>           |
| 16. Gross Thermal Energy Generated (MWH)                                       | <u>2,268,344.8</u> | <u>16,714,285.8</u> | <u>195,608,039</u> |
| 17. Gross Electrical Energy Generated (MWH)                                    | <u>785,920</u>     | <u>5,667,980</u>    | <u>66,370,634</u>  |
| 18. Net Electrical Energy Generated (MWH)                                      | <u>755,372</u>     | <u>5,445,573</u>    | <u>63,609,610</u>  |
| 19. Unit Service Factor  | <u>94.3</u>        | <u>64.4</u>         | <u>51.0</u>        |
| 20. Unit Availability Factor   | <u>94.3</u>        | <u>64.4</u>         | <u>51.0</u>        |
| 21. Unit Capacity Factor (Using MDC Net)                                       | <u>94.4</u>        | <u>61.1</u>         | <u>48.7</u>        |
| 22. Unit Capacity Factor (Using DER Net)                                       | <u>91.4</u>        | <u>59.2</u>         | <u>47.1</u>        |
| 23. Unit Forced Outage Rate  | <u>5.7</u>         | <u>4.3</u>          | <u>36.8</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: December 6, 1994



# OPERATING DATA REPORT

DOCKET NO. 50-328  
 DATE 12/05/94  
 COMPLETED BY T. J. Hollomon  
 TELEPHONE (615) 843-7528

## OPERATING STATUS

- |   | Notes |
|---|-------|
| 1. Unit Name: <u>Sequoyah Unit Two</u>  |       |
| 2. Reporting Period: <u>November 1994</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>1146.0</u>   |       |
| 7. Maximum Dependable Capacity (Net MWe): <u>1106.0</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>109,585</u>     |
| 12. Number of Hours Reactor Was Critical                                       | <u>475.8</u>     | <u>4,853.5</u>      | <u>63,612</u>      |
| 13. Reactor Reserve Shutdown Hours   | <u>0</u>         | <u>0</u>            | <u>0</u>           |
| 14. Hours Generator On-Line  | <u>349.7</u>     | <u>4,672.2</u>      | <u>61,965.7</u>    |
| 15. Unit Reserve Shutdown Hours  | <u>0</u>         | <u>0</u>            | <u>0</u>           |
| 16. Gross Thermal Energy Generated (MWH)                                       | <u>944,910.6</u> | <u>15,230,849.9</u> | <u>194,993,802</u> |
| 17. Gross Electrical Energy Generated (MWH)                                    | <u>293,207</u>   | <u>5,206,233</u>    | <u>66,134,177</u>  |
| 18. Net Electrical Energy Generated (MWH)                                      | <u>273,187</u>   | <u>4,990,520</u>    | <u>63,268,806</u>  |
| 19. Unit Service Factor  | <u>48.6</u>      | <u>58.3</u>         | <u>56.5</u>        |
| 20. Unit Availability Factor   | <u>48.6</u>      | <u>58.3</u>         | <u>56.5</u>        |
| 21. Unit Capacity Factor (Using MDC Net)                                       | <u>34.3</u>      | <u>56.3</u>         | <u>52.2</u>        |
| 22. Unit Capacity Factor (Using DER Net)                                       | <u>33.1</u>      | <u>54.2</u>         | <u>50.3</u>        |
| 23. Unit Forced Outage Rate  | <u>2.3</u>       | <u>2.5</u>          | <u>35.4</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: \_\_\_\_\_



## UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: November 1994
 DOCKET NO: 50-327  
 UNIT NAME: One  
 DATE: 12/06/94  
 COMPLETED BY: T. J. Holloman  
 TELEPHONE: (615) 843-7528

| No. | Date   | Type <sup>1</sup> | Duration<br>(Hours) | Reason <sup>2</sup> | Method of<br>Shutting Down<br>Reactor <sup>3</sup> | Licensee<br>Event<br>Report No. | System<br>Code <sup>4</sup> | Component<br>Code <sup>5</sup> | Cause and Corrective<br>Action to<br>Prevent Recurrence   |
|-----|--------|-------------------|---------------------|---------------------|--|---------------------------------|-----------------------------|--------------------------------|---|
| 5   | 941129 | F                 | 40.8                | A                   | 3  | 327/94014                       | JJ                          | RJX                            | On November 29 at 0713 EST, with Unit 1 operating at 100 percent reactor power, an automatic turbine trip/reactor trip signal was generated from a loss of both 48-volt electrohydraulic control (EHC) power sources. The cause of the event was inadequate technical review in the changing of the EHC overvoltage trip point. A contributing factor was an increase in radio frequency interference, resulting in the overvoltage trip point being exceeded, causing the loss of EHC power supply. Actions are being developed to ensure that vendor information is properly evaluated before being utilized. |

<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 1994
 DOCKET NO: 50-328  
 UNIT NAME: Two  
 DATE: 12/06/94  
 COMPLETED BY: T. J. Hollomon  
 TELEPHONE: (615) 843-7528

| No. | Date   | Type <sup>1</sup> | Duration<br>(Hours) | Reason <sup>2</sup> | Method of<br>Shutting Down<br>Reactor <sup>3</sup> | Licensee<br>Event<br>Report No. | System<br>Code <sup>4</sup> | Component<br>Code <sup>5</sup> | Cause and Corrective<br>Action to<br>Prevent Recurrence  |
|-----|--------|-------------------|---------------------|---------------------|--|---------------------------------|-----------------------------|--------------------------------|--|
| 3   | 941101 | S                 | 362.1               | C                   | 4  | N/A                             | N/A                         | N/A                            | The Unit 2 Cycle 6 refueling outage ended on November 16 at 0209 EST when the generator was synchronized to the grid.  |
| 4   | 941118 | F                 | 8.2                 | B                   | 1  | N/A                             | SD                          | PSF                            | On November 18 at 1431 EST, a steam leak was discovered at Test Connection 2-VLV-7-542. The leak could not be isolated for repairs. At 1649 EST, power reduction was initiated, and the Unit 2 generator was removed from the grid. The cause of the leak was a failed weld. The weld was repaired, and the equipment was returned to service. |

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

<sup>2</sup>Reason:  
 A-Equipment Failure (Explain)  
 B-Maintenance or Test  
 C-Refueling  
 D-Regulatory Restriction  
 F-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