



Entergy

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December 15, 1999

OCAN129904

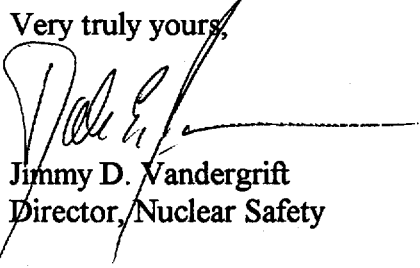
U. S. Nuclear Regulatory Commission  
Document Control Desk  
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Washington, DC 20555

Subject: Arkansas Nuclear One - Units 1 and 2  
Docket Nos. 50-313 and 50-368  
License Nos. DPR-51 and NPF-6  
Monthly Operating Report

Gentlemen:

Arkansas Nuclear One (ANO), Units 1 and 2 Technical Specifications 6.12.2.3 and 6.9.1.6, respectively, require the submittal of a Monthly Operating Report. The purpose of this letter is to complete the reporting requirement for November 1999.

Very truly yours,

  
Jimmy D. Vandergrift  
Director, Nuclear Safety

JDV/SLP  
Attachment

IE24

PDR ADDK 05000313

U.S. NRC  
December 15, 1999  
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**Arkansas Nuclear One**

**Unit 1**

**Monthly Operating Report**

OPERATING DATA REPORT

DOCKET NO: 50-313  
 UNIT: ANO Unit 1  
 DATE: Dec. 15, 1999  
 COMPLETED BY: Steven L. Coffman  
 TELEPHONE: (501) 858-5560

OPERATING STATUS

1. Unit Name: Arkansas Nuclear One - Unit 1
2. Reporting Period: November 1-30
3. Licensed Thermal Power (MWt): 2,568
4. Nameplate Rating (Gross MWe): 903
5. Design Electrical Rating (Net MWe): 850
6. Maximum Dependable Capacity (Gross MWe): 883
7. Maximum Dependable Capacity (Net MWe): 836
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: \_\_\_\_\_

	MONTH	YR-TO-DATE	CUMULATIVE
11. Hours in Reporting Period	720.0	8,016.0	218,707.0
12. Number of Hours Reactor Was Critical	720.0	7,218.8	167,899.4
13. Reactor Reserve Shutdown Hours	0.0	0.0	5,044.0
14. Hours Generator On-Line	701.2	7,165.0	165,349.9
15. Unit Reserve Shutdown Hours	0.0	0.0	817.5
16. Gross Thermal Energy Generated (MWH)	1,786,072	18,259,779	390,415,338
17. Gross Electrical Energy Generated (MWH)	623,800	6,336,662	131,556,761
18. Net Electrical Energy Generated (MWH)	597,949	6,075,264	125,326,652
19. Unit Service Factor	97.4	89.4	75.6
20. Unit Availability Factor	97.4	89.4	76.0
21. Unit Capacity Factor (Using MDC Net)	99.3	90.7	68.5
22. Unit Capacity Factor (Using DER Net)	97.7	89.2	67.4
23. Unit Forced Outage Rate	0.0	1.6	8.9
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): <u>A shutdown is planned January 7, 2000 for a Reactor Coolant Pump oil leak repair with an expected duration of approximately 2 days</u>			

25. If Shut Down At End of Report Period. Estimated Date of Startup: \_\_\_\_\_
  26. Units in Test Status (Prior to Commercial Operation):
- |                      | Forecast | Achieved        |
|----------------------|----------|-----------------|
| INITIAL CRITICALITY  | _____    | <u>08/06/74</u> |
| INITIAL ELECTRICITY  | _____    | <u>08/17/74</u> |
| COMMERCIAL OPERATION | _____    | <u>12/19/74</u> |



**UNIT SHUTDOWNS AND POWER REDUCTIONS  
REPORT FOR November, 1999**

<b>DOCKET NO.</b>	<u>50-313</u>
<b>UNIT NAME</b>	<u>ANO Unit 1</u>
<b>DATE</b>	<u>Dec. 15, 1999</u>
<b>COMPLETED BY</b>	<u>Steven L. Coffman</u>
<b>TELEPHONE</b>	<u>501-858-5560</u>

<u>NO.</u>	<u>DATE</u>	<u>TYPE</u> <sup>1</sup>	<u>DURATION</u> <u>(HOURS)</u>	<u>REASON</u> <sup>2</sup>	<u>METHOD OF</u> <u>SHUTTING DOWN</u> <u>REACTOR</u> <sup>3</sup>	<u>LICENSEE</u> <u>EVENT</u> <u>REPORT #</u>	<u>SYSTEM</u> <u>CODE</u> <sup>4</sup>	<u>COMPONENT</u> <u>CODE</u> <sup>5</sup>	<u>CAUSE &amp; CORRECTIVE ACTION TO</u> <u>PREVENT RECURRENCE</u>
99-03	991106	S	18.8	H	1	N/A	TG	TBLK	Shutdown to replace a potentially defective Turbine Trip Block Diaphragm as recommended by the turbine vendor.

**1**  
F: Forced  
S: Scheduled

**2**  
Reason:  
A - Equipment Failure (Explain)  
B - Maintenance of Test  
C - Refueling  
D- Regulatory Restriction  
E - Operator Training & License Examination  
F - Administration  
G - Operational Error  
H - Other (Explain)

**3**  
Method:  
1 - Manual  
2 - Manual Scram.  
3 - Automatic Scram.  
4 - Continuation  
5 - Load Reduction  
9 - Other

**4**  
Exhibit G - Instructions  
for Preparation of Data  
Entry Sheets for Licensee  
Event Report (LER) File (NUREG-0161)

**5**  
Exhibit I - Same Source

# **NRC MONTHLY OPERATING REPORT**

## **OPERATING SUMMARY**

**November 1999**

### **UNIT ONE**

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The Unit began the month at full power. At 2200 hours on the fifth, a power reduction was commenced to replace a potentially defective turbine trip block diaphragm as recommended by the turbine vendor. At 0157 hours on the sixth, the turbine was taken off line, while the reactor remained critical. At 2043 hours on the sixth, the Unit was tied back to the grid and achieved full power at 0440 hours the following day. The Unit continued to operate at full power for the remainder of the month.

Note: There were no challenges to the primary system code safeties nor automatic actuations of the electromatic relief valve during this reporting period.

**Arkansas Nuclear One**  
**Unit 2**  
**Monthly Operating Report**



**OPERATING DATA REPORT**

DOCKET NO: 50-368  
 UNIT: ANO Unit 2  
 DATE: Dec. 15, 1999  
 COMPLETED BY: Steven L. Coffman  
 TELEPHONE: (501) 858-5560

**OPERATING STATUS**

1. Unit Name: Arkansas Nuclear One - Unit 2
2. Reporting Period: November 1-30
3. Licensed Thermal Power (MWt): 2,815
4. Nameplate Rating (Gross MWe): 942.57
5. Design Electrical Rating (Net MWe): 912
6. Maximum Dependable Capacity (Gross MWe): 897
7. Maximum Dependable Capacity (Net MWe): 858
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: \_\_\_\_\_

	<u>MONTH</u>	<u>YR-TO-DATE</u>	<u>CUMULATIVE</u>
11. Hours in Reporting Period	720.0	8,016.0	172,536.0
12. Number of Hours Reactor Was Critical	353.7	6,539.2	138,126.8
13. Reactor Reserve Shutdown Hours	0.0	0.0	0.0
14. Hours Generator On-Line	322.7	6,476.1	135,814.2
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	741,822	17,809,393	364,354,178
17. Gross Electrical Energy Generated (MWH)	234,208	5,832,942	120,089,275
18. Net Electrical Energy Generated (MWH)	221,186	5,567,221	114,346,089
19. Unit Service Factor	44.8	80.8	78.7
20. Unit Availability Factor	44.8	80.8	78.7
21. Unit Capacity Factor (Using MDC Net)	35.8	80.9	77.2
22. Unit Capacity Factor (Using DER Net)	33.7	76.2	72.7
23. Unit Forced Outage Rate	0.0	0.0	8.7
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. Units in Test Status (Prior to Commercial Operation):
- |                      | <u>Forecast</u> | <u>Achieved</u> |
|----------------------|-----------------|-----------------|
| INITIAL CRITICALITY  | _____           | <u>12/05/78</u> |
| INITIAL ELECTRICITY  | _____           | <u>12/26/78</u> |
| COMMERCIAL OPERATION | _____           | <u>03/26/80</u> |

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO: 50-368  
 UNIT: ANO Unit 2  
 DATE: Dec. 15, 1999  
 COMPLETED BY: Steven L. Coffman  
 TELEPHONE: (501) 858-5560

MONTH November 1999

DAY            AVERAGE DAILY POWER LEVEL  
 (MWe-Net)

1 .....	<u>890</u>
2 .....	<u>893</u>
3 .....	<u>892</u>
4 .....	<u>889</u>
5 .....	<u>491</u>
6 .....	<u>402</u>
7 .....	<u>0</u>
8 .....	<u>0</u>
9 .....	<u>0</u>
10 .....	<u>0</u>
11 .....	<u>0</u>
12 .....	<u>0</u>
13 .....	<u>0</u>
14 .....	<u>0</u>
15 .....	<u>0</u>
16 .....	<u>0</u>
17 .....	<u>0</u>
18 .....	<u>0</u>
19 .....	<u>0</u>
20 .....	<u>0</u>
21 .....	<u>0</u>
22 .....	<u>0</u>
23 .....	<u>14</u>
24 .....	<u>166</u>
25 .....	<u>341</u>
26 .....	<u>689</u>
27 .....	<u>886</u>
28 .....	<u>889</u>
29 .....	<u>886</u>
30 .....	<u>888</u>
31 .....	<u>N/A</u>

AVGS:            307

**INSTRUCTION**

On this format, list the average daily unit power level in MWe-Net for each day in reporting month. Complete to the nearest whole megawatt.

**UNIT SHUTDOWNS AND POWER REDUCTIONS  
REPORT FOR November 1999**

<b>DOCKET NO.</b>	<u>50-368</u>
<b>UNIT NAME</b>	<u>ANO Unit 2</u>
<b>DATE</b>	<u>Dec. 15, 1999</u>
<b>COMPLETED BY</b>	<u>Steven L. Coffman</u>
<b>TELEPHONE</b>	<u>501-858-5560</u>

<u>NO.</u>	<u>DATE</u>	<u>TYPE</u> <sup>1</sup>	<u>DURATION</u> <u>(HOURS)</u>	<u>REASON</u> <sup>2</sup>	<u>METHOD OF</u> <u>SHUTTING DOWN</u> <u>REACTOR</u> <sup>3</sup>	<u>LICENSEE</u> <u>EVENT</u> <u>REPORT #</u>	<u>SYSTEM</u> <u>CODE</u> <sup>4</sup>	<u>COMPONENT</u> <u>CODE</u> <sup>5</sup>	<u>CAUSE &amp; CORRECTIVE ACTION TO</u> <u>PREVENT RECURRENCE</u>
99-02	991105	S	38.3	H	5	N/A	ZZ	ZZZZZZ	After commencing a power reduction for Steam Generator mid cycle inspection, the System dispatcher held the Unit at 54% for load demand.
99-03	991107	S	397.3	H	1	N/A	ZZ	ZZZZZZ	Shutdown for 2P99 Steam Generator mid-cycle inspection outage

**1**  
F: Forced  
S: Scheduled

**2**  
Reason:  
A - Equipment Failure (Explain)  
B - Maintenance of Test  
C - Refueling  
D- Regulatory Restriction  
E - Operator Training & License Examination  
F - Administration  
G - Operational Error  
H - Other (Explain)

**3**  
Method:  
1 - Manual  
2 - Manual Scram.  
3 - Automatic Scram.  
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5 - Load Reduction  
9 - Other

**4**  
Exhibit G - Instructions  
for Preparation of Data  
Entry Sheets for Licensee  
Event Report (LER) File (NUREG-0161)

**5**  
Exhibit I - Same Source

# **NRC MONTHLY OPERATING REPORT**

## **OPERATING SUMMARY**

**November 1999**

**UNIT TWO**

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The Unit began the month at full power. At 2224 hours on the fourth, a power reduction was commenced in preparation for 2P99 Steam Generator mid-cycle inspection outage. After holding at 54% for system dispatcher load demand, the unit was taken off line at 0000 hours on the seventh. Following the mid cycle outage, the Unit achieved criticality at 0619 hours on the twenty-second. The Unit was placed back on line at 1319 hours on the twenty-third, and achieved full power at 2325 hours on the twenty-sixth.

Note: There were no challenges to the primary system code safeties nor automatic actuations of the low temperature overpressure protection valves during this reporting period.