



February 15, 1991

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U. S. Nuclear Regulatory Commission  
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SUBJECT: Arkansas Nuclear One - Unit 2  
Docket No. 50-368  
License No. NPF-6  
Monthly Operating Report

Gentlemen:

The Arkansas Nuclear One - Unit 2 Monthly Operating Report for January, 1991 is attached. This report is submitted in accordance with ANO-2 Technical Specification 6.9.1.6. Also, included as an attachment is the "1990 Annual Report of Safety and Relief Valves Failures and Challenges" which is submitted in accordance with ANO-2 Technical Specification 6.9.1.5(c).

Very truly yours,

*James J. Fisicaro*  
James J. Fisicaro  
Manager, Licensing

JJF/SAB/lpi  
Attachment

cc: Mr. Robert D. Martin  
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OPERATING DATA REPORT

DOCKET NO: 50-368  
 DATE: January, 1991  
 COMPLETED BY: M. S. Whitt  
 TELEPHONE: (501) 964-5560

OPERATING STATUS

1. Unit Name: Arkansas Nuclear One - Unit 2
2. Reporting Period: January 1-31, 1991
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): None
10. Reasons For Restrictions. If Any: None

|   | MONTH       | YR-TO-DATE  | CUMULATIVE    |
|---|-------------|-------------|---------------|
| 11. Hours in Reporting Period ....  | 744.0       | 744.0       | 95,136.0      |
| 12. Number of Hours Reactor was<br>Critical .....   | 744.0       | 744.0       | 71,354.7      |
| 13. Reactor Reserve Shutdown<br>Hours .....   | 0.0         | 0.0         | 1,430.1       |
| 14. Hours Generator On-Line .....   | 744.0       | 744.0       | 69,737.8      |
| 15. Unit Reserve Shutdown Hours ..  | 0.0         | 0.0         | 75.0          |
| 16. Gross Thermal Energy Generated<br>(MWH) .....   | 1,993,107.0 | 1,993,107.0 | 182,811,948.0 |
| 17. Gross Electrical Energy<br>Generated (MWH) .....  | 670,180.0   | 670,180.0   | 60,099,426.0  |
| 18. Net Electrical Energy<br>Generated (MWH) .....  | 640,983.0   | 640,983.0   | 57,147,521.0  |
| 19. Unit Service Factor .....   | 100.0       | 100.0       | 73.3          |
| 20. Unit Availability Factor .....  | 100.0       | 100.0       | 73.4          |
| 21. Unit Capacity Factor<br>(Using MDC Net) .....   | 100.4       | 100.4       | 70.0          |
| 22. Unit Capacity Factor<br>(Using DEC Net) .....   | 94.5        | 94.5        | 65.9          |
| 23. Unit Forced Outage Rate .....   | 0.0         | 0.0         | 12.6          |
| 24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): <u>2R8 Refueling Outage is scheduled to begin February, 1991; and the scheduled date for restart is April, 1991.</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  | _____    | _____    |
| INITIAL ELECTRICITY  | _____    | _____    |
| COMMERCIAL OPERATION | _____    | _____    |

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO: 50-368  
UNIT: Two  
DATE: January, 1991  
COMPLETED BY: M. S. Whitt  
TELEPHONE: (501) 964-5560

MONTH January, 1991

DAY            AVERAGE DAILY POWER LEVEL  
                  (MWe-Net)

|    |     |
|----|-----|
| 1  | 903 |
| 2  | 902 |
| 3  | 902 |
| 4  | 902 |
| 5  | 902 |
| 6  | 902 |
| 7  | 903 |
| 8  | 902 |
| 9  | 902 |
| 10 | 901 |
| 11 | 902 |
| 12 | 902 |
| 13 | 902 |
| 14 | 901 |
| 15 | 901 |
| 16 | 901 |
| 17 | 900 |
| 18 | 893 |
| 19 | 856 |
| 20 | 818 |
| 21 | 803 |
| 22 | 802 |
| 23 | 801 |
| 24 | 798 |
| 25 | 791 |
| 26 | 778 |
| 27 | 815 |
| 28 | 817 |
| 29 | 802 |
| 30 | 805 |
| 31 | 803 |

AVGS: 862

INSTRUCTION

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

NRC MONTHLY OPERATING REPORT

OPERATING SUMMARY

JANUARY, 1991

UNIT TWO

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The unit began the month operating at 100% full power (FP).

On January eighteenth, at 1415 hours, a power reduction to 97.5% was commenced due to a Control Element Assembly (CEA) dropping into the Reactor core. After the CEA was withdrawn, power was further reduced to 88% per the dispatcher's request on the same day at 2200 hours. The reduction in power to 88% was required to minimize the coastdown time at the end of the cycle because of fuel limitations. On the twenty-fifth, at 1846 hours, power was reduced to 86% in order to locate and plug a leaking condenser tube.

On the twenty-sixth, at 2237 hours, power was returned to 88% and the unit operated on that level through end of the month.

UNIT SHUTDOWNS AND POWER REDUCTIONS  
REPORT FOR JANUARY, 1991

DOCKET NO. 50-368  
 UNIT NAME Two  
 DATE January, 1991  
 COMPLETED BY M. S. Whitt  
 TELEPHONE (501) 964-5560

| <u>No.</u> | <u>Date</u> | <u>Type<sup>1</sup></u> | <u>Duration<br/>(Hours)</u> | <u>Reason<sup>2</sup></u> | <u>Method of<br/>Shutting<br/>Down Reactor<sup>3</sup></u> | <u>Licensee<br/>Event<br/>Report #</u> | <u>System<br/>Code<sup>4</sup></u> | <u>Component<br/>Code<sup>5</sup></u> | <u>Cause &amp; Corrective<br/>Action to<br/>Prevent Recurrence</u> |
|------------|-------------|-------------------------|-----------------------------|---------------------------|--|--|------------------------------------|---------------------------------------|--|
|------------|-------------|-------------------------|-----------------------------|---------------------------|--|--|------------------------------------|---------------------------------------|--|

None

<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 &  
 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  
 5-Load 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

DATE: January, 1991

REFUELING INFORMATION

1. Name of facility: Arkansas Nuclear One - Unit 2
2. Scheduled date for next refueling shutdown. February, 1991  
(Beginning of Cycle 8 criticality was 11/18/89).
3. Scheduled date for restart following refueling. April, 1991
4. Will refueling or resumption of operation thereafter require a technical specification change or other license amendment? If answer is yes, what, in general, will there be? If answer is no, has the reload fuel design and core configuration been reviewed by your Plant Safety Review Committee to determine whether any unreviewed safety questions are associated with the core reload (Ref. 10 CFR Section 50.59)?  
None Expected. Reload fuel design is in progress.
5. Scheduled date(s) for submitting proposed licensing action and supporting information. None Required.
6. Important licensing considerations associated with refueling, e.g., new or different fuel design or supplier, unreviewed design or performance analysis methods, significant changes in fuel design, new operating procedures.  
To obtain the presently planned cycle 8 length of 420 EFPD, it will be necessary to raise the current peak rod burnup limits. A report justifying an increase was submitted in July, 1989\*
7. The number of fuel assemblies (a) in the core and (b) in the spent fuel storage pool. a) 177 b) 489
8. The present licensed spent fuel pool storage capacity and the size of any increase in licensed storage capacity that has been requested or is planned, in number of fuel assemblies.  
present 968 increase size by 0
9. The projected date of the last refueling that can be discharged to the spent fuel pool assuming the present licensed capacity.  
DATE: 1996 (Loss of fullcore offload capability)

\*NOTE: NRC approval was given on the Extended Burnup Topical in November, 1990. Therefore, allowing Cycle 8 operation to continue at its specified cycle length.

ATTACHMENT  
ANNUAL REPORT OF SAFETY VALVE  
AND RELIEF VALVE  
FAILURES AND CHALLENGES

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This annual report is submitted in the January Monthly Operating Report in response to requirements implemented as a result of NUREG-0737, Item 11.K.3.3 and to fulfill Technical Specification reporting requirements (TS 6.12.2.4 for Unit 1 and TS 6.9.1.5.C for Unit 2).

ANO-1: no challenges to the primary system code safeties nor electromatic relief valve (ERV) have occurred in the year 1990.

ANO-2: no challenges to the primary system code safeties have occurred in the year 1990. ANO-2 does not have an ERV.