



**Entergy  
Operations**

**Entergy Operations, Inc.**  
Route 3, Box 137G  
Russellville, AR 72501  
Tel: 501-964-3100

February 15, 1991

1CAN029111

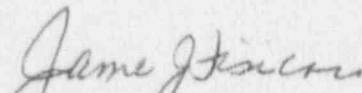
U. S. Nuclear Regulatory Commission  
Document Control Desk  
Mail Stop P1-137  
Washington, D.C. 20555

SUBJECT: Arkansas Nuclear One - Unit 1  
Docket No. 50-313  
License No. DPR-51  
Monthly Operating Report

Gentlemen:

The Arkansas Nuclear One - Unit 1 Monthly Operating Report for January, 1991 is attached. This report is submitted in accordance with ANO-1 Technical Specification 6.12.2.3. 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-1 Technical Specification 6.12.2.4.

Very truly yours,

  
James J. Visicaro  
Manager, Licensing

JJF/SAB/lpi  
Attachment

9102200071 910131  
PDR ADOCK 05000313  
R PDR

IE24  
11

cc: Mr. Robert D. Martin  
Regional Administrator  
U. S. Nuclear Regulatory Commission  
Region IV  
611 Ryan Plaza Drive, Suite 1000  
Arlington, TX 76011

NRC Senior Resident Inspector  
Arkansas Nuclear One - ANO-1 & 2  
Number 1, Nuclear Plant Road  
Russellville, AR 72801

Mr. Thomas W. Alexion  
NRR Project Manager, Region IV/ANO-1  
U. S. Nuclear Regulatory Commission  
NRR Mail Stop 11-B-19  
One White Flint North  
11555 Rockville Pike  
Rockville, Maryland 20852

Ms. Sheri Peterson  
NRR Project Manager, Region IV/ANO-2  
U. S. Nuclear Regulatory Commission  
NRR Mail Stop 11-B-19  
One White Flint North  
11555 Rockville Pike  
Rockville, Maryland 20852

OPERATING DATA REPORT

DOCKET NO: 50-313  
 DATE: January, 1991  
 COMPLETED BY: D. A. Schaubroeck  
 TELEPHONE: (501 964-5535)

OPERATING STATUS

1. Unit Name: Arkansas Nuclear One - Unit 1
2. Reporting Period: January 1-31, 1991
3. Licensed Thermal Power (Mwt): 2,568
4. Nameplate Rating (Gross MWe): 902.74
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): None
10. Reasons For Restrictions. If Any: None

	MONTH	YR-TO-DATE	CUMULATIVE
11. Hours in Reporting Period ....	744.0	744.0	141,307.0
12. Number of Hours Reactor was Critical .....	459.2	459.2	98,170.6
13. Reactor Reserve Shutdown Hours .....	0.0	0.0	5,044.0
14. Hours Generator On-Line .....	355.3	355.3	96,094.0
15. Unit Reserve Shutdown Hours ..	0.0	0.0	817.5
16. Gross Thermal Energy Generated (MWH) .....	783,052.0	783,052.0	215,839,169.0
17. Gross Electrical Energy Generated (MWH) .....	256,245.0	256,245.0	71,679,940.0
18. Net Electrical Energy Generated (MWH) .....	232,281.0	232,281.0	68,067,016.0
19. Unit Service Factor .....	47.8	47.8	68.0
20. Unit Availability Factor .....	47.8	47.8	68.6
21. Unit Capacity Factor (Using MDC Net) .....	37.3	37.3	57.6
22. Unit Capacity Factor (Using DEC Net) .....	36.7	36.7	56.7
23. Unit Forced Outage Rate .....	41.5	41.5	13.3
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): <u>ANO-1 Mid-Cycle Outage Scheduled to begin 4/7/91 and last approximately 3 weeks.</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: 50-313  
UNIT: One  
DATE: January, 1991  
COMPLETED BY: D. A. Schaubroeck  
TELEPHONE: (501) 964-5535

MONTH January, 1991

DAY            AVERAGE DAILY POWER LEVEL  
                  (MWe-Net)

1 .....	-5
2 .....	-6
3 .....	-8
4 .....	-14
5 .....	-31
6 .....	10
7 .....	152
8 .....	468
9 .....	618
10 .....	716
11 .....	-34
12 .....	-35
13 .....	-35
14 .....	-35
15 .....	-35
16 .....	-35
17 .....	-35
18 .....	-37
19 .....	-36
20 .....	-36
21 .....	45
22 .....	529
23 .....	792
24 .....	841
25 .....	843
26 .....	848
27 .....	848
28 .....	846
29 .....	847
30 .....	846
31 .....	847

AVGS: 312

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 ONE

---

Unit One began the month off line in an extension to the 1R9 refueling outage. The unit was placed on line for Cycle 10 operation on January 6 at 1204 hours.

On the sixth, at 2105 hours, the unit came off line to perform a scheduled turbine overspeed test. The unit returned to service on the seventh at 0126 hours. Power escalation to 100% was held for normal post-refueling activities such as NIS calibration, Xenon equalization, physics testing and fuel preconditioning. A brief hold also occurred due to electrical breaker problems. The unit reached 100% power on the tenth at 2208 hours.

On the tenth, at 2325 hours, the reactor tripped due to the exciter AC rotor winding fault. The unit went on line on the twenty-first at 0541 hours, and the turbine was manually tripped at 0555 hours that same day due to exciter bearing vibration.

The unit was placed back on line on the twenty-first, at 1153 hours, following bearing repairs. The unit ramped to full power with hold points for feedwater chemistry, NIS calibration and physics testing. The unit reached 100% power on the twenty-third at 1430 hours.

UNIT SHUTDOWNS AND POWER REDUCTIONS  
REPORT FOR JANUARY, 1991

DOCKET NO. 50-313  
 UNIT NAME One  
 DATE January, 1991  
 COMPLETED BY D. A. Schaubroeck  
 TELEPHONE (501) 964-5535

No.	Date	Type	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report #	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause & Corrective Action to Prevent Recurrence
91-01	910101	S	132.1	C	4	N/A	ZZ	ZZZZZZ	Unit refueling outage 1R9 continued.
91-02	910106	S	4.3	B	5	N/A	ZZ	ZZZZZZ	Post refueling outage turbine overspeed trip test.
91-03	910110	F	246.3	A	3	1-91-001	TL	EXC	Exciter winding fault caused RX trip.
91-04	910121	F	6.0	A	5	N/A	TL	EXC	Temporary exciter bearing vibration required manual turbine trip.

<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 1
2. Scheduled date for next refueling shutdown. April, 1992
3. Scheduled date for restart following refueling. June, 1992
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)?  
Technical Specification changes will be required for ANO-1 in order to increase our fuel enrichment from 3.5% to 4.1%
5. Scheduled date(s) for submitting proposed licensing action and supporting information. ANO is presently in the process of preparing a license amendment submittal to increase the fuel enrichment from 3.5% to 4.1%.
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.  
None.
7. The number of fuel assemblies (a) in the core and (b) in the spent fuel storage pool. a) 177 b) 566
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: 1995 (Loss of fullcore offload capability)

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

---

This annual report is submitted in the January Monthly Operating Report in response to requirements implemented as a result of NUREG-0737, Item II.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.