

October 16, 1995

2CAN109504

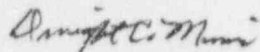
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Subject: Arkansas Nuclear One - Unit 2  
Docket No. 50-368  
License No. NPF-6  
Monthly Operating Report

Gentlemen:

The Arkansas Nuclear One - Unit 2 Monthly Operating Report for September 1995 is attached. This report is submitted in accordance with ANO-2 Technical Specification 6.9.1.6.

Very truly yours,



Dwight C. Mims  
Director, Licensing

DCM/eas

100084

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# OPERATING DATA REPORT

DOCKET NO: 50-368  
 DATE: October 16, 1995  
 COMPLETED BY: M. S. Whitt  
 TELEPHONE: (501) 858-5560

## OPERATING STATUS

1. Unit Name: Arkansas Nuclear One - Unit 2
2. Reporting Period: September 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): 895
10. Reasons For Restrictions. If Any: Self imposed power restriction to ~ 98.4% power based on T-hot limitations and the additional 300 steam generator plugs installed during outage 2P95-1.

	MONTH	YR-TO-DATE	CUMULATIVE
11. Hours in Reporting Period .....	720.0	6,551.0	136,007.0
12. Number of Hours Reactor was Critical .....	485.0	5,892.4	106,453.7
13. Reactor Reserve Shutdown Hours .....	0.0	0.0	0.0
14. Hours Generator On-Line .....	469.4	5,872.3	104,505.5
15. Unit Reserve Shutdown Hours ....	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH) .....	1,236,674	15,987,606	278,329,815
17. Gross Electrical Energy Generated (MWH) .....	411,845	5,342,157	91,711,729
18. Net Electrical Energy Generated (MWH) .....	388,988	5,092,652	87,290,441
19. Unit Service Factor .....	65.2	89.6	76.8
20. Unit Availability Factor .....	65.2	89.6	76.8
21. Unit Capacity Factor (Using MDC Net) .....	63.0	90.6	74.8
22. Unit Capacity Factor (Using DER Net) .....	59.2	85.2	70.4
23. Unit Forced Outage Rate .....	11.0	2.3	10.0
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): <u>Refueling outage 2R11 commenced September 23, 1995 with a scheduled duration of 29 days.</u>			
25. If Shut Down At End of Report Period. Estimated Date of Startup: <u>October 23, 1995</u>			
26. Units in Test Status (Prior to Commercial Operation):			

	Forecast	Achieved
INITIAL CRITICALITY	_____	12/05/78
INITIAL ELECTRICITY	_____	12/26/78
COMMERCIAL OPERATION	_____	03/26/80

# AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO: 50-368  
UNIT: Two  
DATE: October 16, 1995  
COMPLETED BY: M. S. Whitt  
TELEPHONE: (501) 858-5560

MONTH September 1995

DAY AVERAGE DAILY POWER LEVEL  
(MWe-Net)

1	402
2	-32
3	-26
4	419
5	841
6	878
7	877
8	882
9	883
10	882
11	881
12	881
13	880
14	877
15	880
16	879
17	880
18	881
19	877
20	827
21	793
22	738
23	-21
24	-17
25	-16
26	-6
27	-3
28	-4
29	-3
30	-2
31	0

AVGS: 540

## 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.

**NRC MONTHLY OPERATING REPORT**  
**OPERATING SUMMARY**  
**SEPTEMBER 1995**  
**UNIT TWO**

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The unit began the month of September at 98.3% power.

At 1130 hours on the first, an automatic reactor trip occurred due to a high water level in "B" steam generator. The high water level was the result of a painter inadvertently stepping on an instrument valve which vented the high pressure side of the "B" feedwater flow transmitter (2LT-1129.) This caused a low feed flow signal to be processed in the feedwater control system that resulted in the "B" steam generator being over fed with water. The reactor achieved criticality at 1526 hours on the second, but during startup activities to place the unit back on line, the unit experienced another automatic reactor trip at 1927 hours the same day.

The trip was generated due to the Axial Shape Index (ASI) exceeding its trip setpoint. After the reactor trip review was completed, the reactor attained criticality at 1011 hours on the third, with the turbine placed on line at 2146 hours the same day. Power was increased until 0111 hours on the fifth when the system dispatcher requested a power hold at 89%. At 0502 hours on the fifth, the dispatcher released the unit to continue power escalation.

The unit attained its 600°F T-hot limitation at 1327 hours on the fifth; and due to an apparent increase in fouling of the steam generators caused by the trip, initially the maximum power achievable was 97.8%. Over the next two weeks power was slowly increased back to 98.3% as the fouling on the steam generators decreased to pre-trip levels. At 1815 hours on the eighteenth, a power coastdown was commenced in preparation for ANO-2's eleventh refueling outage (2R11.)

Plant shutdown began at 2155 hours on the twenty-second. The reactor was manually tripped at 2338 hours the same day, marking the beginning of refueling outage 2R11.

The unit was off line for the remainder of the month.

UNIT SHUTDOWNS AND POWER REDUCTIONS  
REPORT FOR SEPTEMBER 1995

DOCKET NO.	50-368
UNIT NAME	ANO Unit 2
DATE	October 16, 1995
COMPLETED BY	M. S. Whitt
TELEPHONE	501-858-5560

<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>
95-04	950901	F	32	H	3	2-95-002-00	SJ	V	An automatic reactor trip on high water level in the "B" steam generator occurred when a painter inadvertently stepped on an instrument valve; thus, venting off the high side of the "B" main feedwater flow transmitter. This caused a low feed flow signal to be processed in the feedwater control system that resulted in the "B" steam generator being over fed with water. The completed and planned corrective actions for this event were submitted in correspondence 2CAN099504, dated September 28, 1995.
95-05	950902	F	26.3	G	3	2-95-003-00	JC	ZZZZZZ	An automatic reactor trip occurred during startup due to the ASI exceeding its trip setpoint. The completed and planned corrective actions for this event were submitted in correspondence 2CAN099502, dated September 26, 1995.
95-06	950922	S	192.4	C	1	N/A	ZZ	ZZZZZZ	The unit is off line for refueling outage 2R11.

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

<sup>2</sup>  
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)

<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-0161)

<sup>5</sup>  
Exhibit I - Same Source



### REFUELING INFORMATION

1. Name of facility: Arkansas Nuclear One - Unit 2
2. Scheduled date for next refueling shutdown: September 23, 1995
3. Scheduled date for restart following refueling: October 23, 1995
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. 10CFR Section 50.59)?

Yes.

Delete requirement for verification of position stops for the high pressure safety injection throttle valves. Revise Technical Specifications to account for the replacement of part-length control element assemblies with full-length control element assemblies. Revise containment cooling system response time to account for modification to eliminate water hammer.

5. Scheduled date(s) for submitting proposed licensing action and supporting information:  
Submitted during March and April 1995
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 planned

7. The number of fuel assemblies (a) in the core and (b) in the spent fuel storage pool:  
a) 177                      b) 637
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 988                      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: 1997 (Loss of full core off-load capability)