

Omaha Public Power District  
444 South 16th Street Mall  
Omaha, Nebraska 68102-2247  
402/636-2000

February 14, 1991  
LIC-91-067R

U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Mail Station PI-137  
Washington, DC 20555

Reference: Docket No. 50-285

Gentlemen:

SUBJECT: January Monthly Operating Report (MOR)

Please find enclosed the January 1991 Monthly Operating Report for the Fort Calhoun Station Unit No. 1 as required by Technical Specification Section 5.9.1.

If you should have any questions, please contact me.

Sincerely,

*W. G. Gates*

W. G. Gates  
Division Manager  
Nuclear Operations

WGG/se1

Enclosures

c: LeBoeuf, Lamb, Leiby & MacRae  
R. J. Martin, NRC Regional Administrator, Region IV  
P. P. Mullikin, NRC Senior Resident Inspector  
D. K. Sentell, Combustion Engineering  
R. J. Simon, Westinghouse  
Office of Management & Program Analysis (2)  
INPO Records Center  
American Nuclear Insurers

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AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-285  
 JNIT Fort Calhoun Station  
 DATE February 6, 1991  
 COMPLETED BY M. L. EDWARDS  
 TELEPHONE (402)636-2451

MONTH January 1991

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	0	17	488
2	0	18	489
3	0	19	489
4	0	20	488
5	0	21	488
6	0	22	488
7	0	23	488
8	0	24	488
9	101	25	488
10	116	26	489
11	403	27	488
12	462	28	488
13	463	29	488
14	476	30	488
15	488	31	488
16	488		

INSTRUCTIONS

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

OPERATING DATA REPORT

DOCKET NO. 50-285  
 UNIT Fort Calhoun Station  
 DATE February 6, 1991  
 COMPLETED BY M. L. EDWARDS  
 TELEPHONE (402) 536-2451

OPERATING STATUS

1. Unit Name: Fort Calhoun Station Notes
2. Reporting Period: January 1991
3. Licensed Thermal Power (Mwt): 1500
4. Nameplate Rating (Gross MWe): 502
5. Design Electrical Rating (Net MWe): 478
6. Maximum Dependable Capacity (Gross MWe): 502
7. Maximum Dependable Capacity (Net MWe): 478
8. If changes occur in Capacity Ratings (Item Numbers 3 through 7) Since Last Report, Give Reasons:  
 N/A
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	744.0	744.0	152,114.0
12. Number of Hours Reactor was Critical	564.0	564.0	117,352.7
13. Reactor Reserve Shutdown Hours	0.0	0.0	1,309.5
14. Hours Generator On-Line	553.2	553.2	115,983.1
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	788,242.8	788,242.8	152,071,732.1
17. Gross Electrical Energy Generated (MWH)	259,966.0	259,966.0	50,010,092.2
18. Net Electrical Energy Generated (MWH)	247,636.9	247,636.9	47,732,413.2
19. Unit Service Factor	74.4	74.4	76.2
20. Unit Availability Factor	74.4	74.4	76.2
21. Unit Capacity Factor (Using MDC Net)	69.6	69.6	68.0
22. Unit Capacity Factor (Using DER Net)	69.6	69.6	66.5
23. Unit Forced Outage Rate	5.6	25.6	3.6
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): None			

25. If Shut Down at End of Report Period, Estimated Date of Startup: N/A
26. Units In Test Status (Prior to Commercial Operation): Forecast Achieved

INITIAL CRITICALITY  
 INITIAL ELECTRICITY N/A  
 COMMERCIAL OPERATION

Refueling Information  
Fort Calhoun - Unit No. 1

Report for the month ending January 1991

1. Scheduled date for next refueling shutdown. September 1991
2. Scheduled date for restart following refueling. November 1991
3. Will refueling or resumption of operation thereafter require a technical specification change or other license amendment? Yes
  - a. If answer is yes, what, in general, will these be?  
  

Incorporate specific requirements resulting from reload safety analysis.
  - b. 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. N/A
  - c. If no such review has taken place, when is it scheduled? N/A
4. Scheduled date(s) for submitting proposed licensing action and support information. June 1991
5. 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. New fuel supplier  
New LOCA Analysis
6. The number of fuel assemblies:
  - a) in the core 133 Assemblies
  - b) in the spent fuel pool 477 Assemblies
  - c) spent fuel pool storage capacity 729 Assemblies
  - d) planned spent fuel pool storage capacity Planned to be increased with higher density spent fuel racks.
7. The projected date of the last refueling that can be discharged to the spent fuel pool assuming the present licensed capacity. 1994\*

\* Capability of full core offload of 133 assemblies lost.

Prepared by Kim Hall Date 2-8-91



UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-285  
 UNIT NAME Fort Calhoun Station  
 DATE February 7, 1991  
 COMPLETED BY M.J. Edwards  
 TELEPHONE (402) 636-2451

REPORT MONTH January 1991

No.	Date	Type (1)	Duration (Hours)	Reason (2)	Method of Shutting Down Reactor (3)	Licensee Event Report #	System Code (4)	Component Code (5)	* Cause & Corrective Action to Prevent Recurrence
90-08	901215	F	190.8	H	1	LER 90-028	XX	PSX, AA	<p>On December 15, 1990, a through-wall leak on an installed spare Control Element Drive Mechanism (CEDM) pressure housing was identified and a cooldown to cold shutdown was initiated. The affected CEDM housing and a second installed spare housing were removed and replaced with blank flanges. FCS was returned to service on January 8, 1991.</p> <p>*See LER 90-028 for further cause and corrective actions.</p>

1  
 F-Forced  
 S-Scheduled

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

3  
 Method:  
 1-Manual  
 2-Manual Scram  
 3-Automatic Scram  
 4-Other (Explain)

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

5  
 Exhibit I - Same Source

OMAHA PUBLIC POWER DISTRICT  
Fort Calhoun Station Unit No. 1

January 1991  
Monthly Operating Report

I. OPERATIONS SUMMARY

In January, Fort Calhoun Station was starting up from cold shutdown following repair of a Reactor Coolant System (RCS) leak on the control element drive mechanism (CEDM) housing. During the RCS hot hydrostatic test, a pressurizer to code safety valve loop seal inlet flange was found to be leaking. The RCS was cooled down and depressurized for repairs to the flange. The hydrostatic test performed during the following heat-up still showed some leakage on the flange but at an acceptable rate. Weekly monitoring of the leak was scheduled and continues to be performed.

The reactor was taken critical and the generator placed on-line January 8, 1991. A nominal 100% power was attained January 14, 1991. The scheduled monitoring of the flange leak on January 17 showed the leak had increased. Furmanite was used to seal the leakage area and this decreased the leak rate to approximately one drip per minute.

The following NRC inspections took place in January:

IR 90-45 Monthly Inspection (From December 5, 1990 to January 14, 1991)  
IR 91-02 Service Water Systems Team Inspection  
IR 91-03 Monthly Inspection (Continued from January 15, 1991)

The following LERs were submitted:

LER 90-27 Inadequate Hourly Fire Patrols  
LER 90-28 Leakage Through Control Element  
Drive Mechanism Housing (Voluntary Report)

A. SAFETY VALVES OR PORV CHALLENGES OR FAILURES WHICH OCCURRED

NONE

B. RESULTS OF LEAK RATE TESTS

The results of the Reactor Coolant System Leak Rate Tests for January, 1991 indicate that the removal of CEDM pressure housings #9 and #13 with the subsequent installation of blind flanges on these penetrations has corrected the high RCS leakages experienced last fall. Total RCS leakage averaged 0.08 gpm divided equally between "known" and "unknown" leakage.

The Leak Rate Tests for the month began on January 8, 1991. Because of the "feed and bleed" operations and RCS specific volume changes associated with plant start-up and power ascension, the RCS leak rates during this period were relatively less accurate. After a few days, equilibrium conditions were achieved and the negative leak rates no longer appeared. The minimum calculated leak rate for the month appeared on January 12, 1991. This leak rate was -0.253 gpm total and -0.310 gpm unknown. The maximum leak rate was calculated during a plant transient and is not representative of the actual leak rate. The maximum leak rate of 0.337 gpm total and 0.271 gpm "unknown" was calculated on January 25, 1991.

C. CHANGES, TESTS AND EXPERIMENTS REQUIRING NUCLEAR REGULATORY COMMISSION AUTHORIZATION PURSUANT TO 10CFR50.59

<u>Amendment No.</u>	<u>Description</u>
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None

D. SIGNIFICANT SAFETY RELATED MAINTENANCE FOR THE MONTH OF JANUARY, 1991

During the forced outage ending January 8, 1991, many maintenance items were completed/corrected including the following:

Replace the solenoid valve and rebuilt the air cylinders on the steam generator RC-2A main steam isolation valve (HCV-1041A).

The raw water (RW) pump strainer (AC-12B) was replaced with a rebuilt strainer.

Rebuilt the valve actuator on the Component Cooling Water (CCW) inlet valve (HCV-491A) for heat exchanger AC-1C.

Rebuilt the operator on the CCW inlet valve (HCV-489A) for heat exchanger AC-1A.

Rebuilt positioner air relays for the containment cooling coil outlet isolation valve (HCV-400C).

Machined a pressurizer to code safety valve loop seal inlet flange (RC-142) and replaced gasket. A slight leak remained and Furmanite was used to seal it.

CCW/RW heat exchanger (AC-1D) was taken out of service to replace the lifting lugs on the end bell flanges. The raw water relief valve (RW-223) was rebuilt.