

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

January 14, 1992
LIC-92-00/R

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Mail Station P1-137
Washington, DC 20555

Reference: Docket No. 50-285

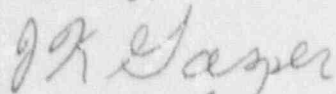
Gentlemen:

SUBJECT: December Monthly Operating Report (MOR)

Enclosed is the December 1991 MOR for Fort Calhoun Station (FCS) Unit No. 1 as required by FCS Technical Specification Section 5.9.1.

If you should have any questions, please contact me.

Sincerely,



W. G. Gates
Division Manager
Nuclear Operations

WGG/se1

Enclosures

c: LeBoeuf, Lamb, Leiby & MacRae
R. D. Martin, NRC Regional Administrator, Region IV
R. 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



AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-285
 UNIT Fort Calhoun Station
 DATE January 13, 1992
 COMPLETED BY G. R. Cavanaugh
 TELEPHONE (402)636-2474

MONTH December 1991

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	487	17	486
2	486	18	486
3	486	19	486
4	486	20	486
5	486	21	486
6	487	22	486
7	487	23	486
8	487	24	486
9	487	25	486
10	487	26	486
11	487	27	486
12	487	28	486
13	486	29	486
14	486	30	486
15	486	31	485
16	486		

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 January 13, 1992
 COMPLETED BY G. R. Cavanaugh
 TELEPHONE (402)636-2474

OPERATING STATUS

1. Unit Name: Fort Calhoun Station Notes
2. Reporting Period: December 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:
NA
9. Power Level to Which Restricted, If Any (Net MWe): NA
10. Reasons for Restrictions, If Any: NA

	This Month	Yr-to-Date	Cumulative
11. Hours in Reporting Period	744.0	8,760.0	160,130.0
12. Number of Hours Reactor was Critical	744.0	8,030.0	124,818.7
13. Reactor Reserve Shutdown Hours	0.0	0.0	1,309.5
14. Hours Generator On-Line	744.0	7,947.2	123,377.1
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	1,111,552.0	10,340,236.4	161,623,725.7
17. Gross Electrical Energy Generated (MWH)	378,520.0	3,426,000.0	53,176,126.2
18. Net Electrical Energy Generated (MWH)	361,687.9	3,248,975.1	50,733,751.4
19. Unit Service Factor	100.0	90.7	77.0
20. Unit Availability Factor	100.0	90.7	77.0
21. Unit Capacity Factor (Using MDC Net)	101.7	77.6	69.0
22. Unit Capacity Factor (Using DER Net)	101.7	77.6	67.1
23. Unit Forced Outage Rate	0.0	9.3	3.9

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):
Refueling Outage scheduled for February 1, 1992, and will last approximately three months.

25. If Shut Down at End of Report Period, Estimated Date of Startup: NA

26. Units In Test Status (Prior to Commercial Operation): Forecast Achieved

INITIAL CRITICALITY

INITIAL ELECTRICITY

COMMERCIAL OPERATION

Refueling Information
Fort Calhoun - Unit No. 1

Report for the month ending December 1991

1. Scheduled date for next refueling shutdown. February 1, 1992
2. Scheduled date for restart following refueling. April 29, 1992
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. Submitted November 27, 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. 1995 *

* Capability of full core offload of 133 assemblies lost. Reracking to be performed between the 1993 and 1995 Refueling Outages.

Prepared by Mark Y. Smith for KCM Date 1/14/92

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-285
 UNIT NAME Fort Calhoun Station
 DATE January 9, 1992
 COMPLETED BY G. R. Cavanaugh
 TELEPHONE 402 - 636-2474

REPORT MONTH December 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
There were no unit shutdowns or power reductions in December 1991.									

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 (Explain)
 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

December 1991
Monthly Operating Report

I. OPERATIONS SUMMARY

Fort Calhoun Station operated at a nominal 100% power throughout the month of December 1991.

On December 1, 1991, the Process Radiation Monitors for the Radioactive Waste Processing Building (RM-041, 042, & 043) were found to have zero sample flow due to a closed exhaust damper in the building ventilation system. This required entry into Technical Specification LCO 2.9.1 (2) which requires grab samples each 24 hours for gaseous activity and continuous sampling for particulate and iodine activity on the Rad Waste Building exhaust stack. The damper apparently failed closed due to the loss of the control air in the building. The control air system self-contained air compressor had tripped off and not restarted following a momentary loss of off-site (161kV) power. The air compressor was restarted and sample flow was re-established to the monitors shortly after discovery. This allowed clearing the LCO.

On December 4, 1991, a four-hour notification was made to the NRC due to a failure to adequately test the equalizing valve on the containment inner Personnel Air Lock (PAL) door. The equalizing valve had not been leak tested per Technical Specification 3.5(3) since 1974. As a precautionary measure the inner door was declared inoperable and the outer PAL door was immediately danger tagged closed to prevent a breach of Containment integrity. Preparations for testing the equalizing valve included fabricating a test assembly and obtaining a waiver of compliance from the NRC to allow the outer PAL door to be opened. On December 6, 1991 the NRC granted Omaha Public Power District (OPPD) a 72 hour waiver to allow testing of the inner PAL door equalizing valve. The valve was successfully tested on December 7, 1991.

On December 10, 1991, the last shipment of new Westinghouse fuel was received and inspected for the upcoming refueling outage. Currently all new fuel assemblies have been accepted by OPPD except for one (R-001). The assembly in question has a small surface defect on one fuel pin.

On December 16, 1991, a one-hour notification was made to the NRC based on discovery that portions of the tubing used to test the Containment PAL were not seismically qualified; thus, the PAL was outside the design basis of the plant. The non-qualified test equipment has been removed and new seismically rated tubing and isolation valves will be installed January 1992.

Unknown leakage from the RCS had been increasing over the last few months. During the month of December, efforts to identify the leak path found that the source of leakage was the High Pressure Safety Injection (HPSI) - Charging system crosstie valve HCV-2988. To prevent any further leakage from this path, the Charging - HPSI manual isolation valve (CH-151) was closed. This resulted in a reduction in RCS unknown leakage to normal values.

On December 19, 1991, the 161kV Offsite power feed to the plant was taken out of service to repair a power pole arm which had been damaged by a winter storm earlier in the year. Repairs were completed by OPPD's Electric Operations Division and power was restored in approximately six hours.

The following NRC inspections took place during December 1991:

IER No. 91-24 Routine Resident Inspection
IER No. 91-26 Special Inspection (Containment Integrity)

The following LERs were submitted during December 1991:

<u>LER NO.</u>	<u>Description</u>
91-24	ESF Actuation after Pulling Fuses
91-25	SI Pipe Supports Outside Design Basis
91-26	SRO without NRC Physical
91-27	RCDT Sampling (WD-1060)
91-28	Unmonitored Release on Loss of 161kV

A. SAFETY VALVES OR PORV CHALLENGES OR FAILURES WHICH OCCURRED

NONE

B. RESULTS OF LEAK RATE TESTS

Total RCS leak rate increased from 0.475 gpm at the first of the month to 0.712 gpm on December 18, when the major source of leakage was identified. Charging flow was leaking through HCV-2988 to the 2500 psig HPSI header and then through the "B" Safety Injection Tank leakage cooler to the Reactor Coolant Drain Tank. HCV-2988 is the cross connect valve between the charging header and the high pressure HPSI header. The valve is a solenoid operated valve that is normally open to provide a flow path for hot leg injection and long term core cooling. The valve is scheduled to be replaced during the 1992 refueling outage.

HCV-2988 was isolated by closing CH-191. This reduced the leakage to .137 gpm. With CH-191 closed, the total RCS leakage remained near this amount the rest of the month.

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 DECEMBER 1991

- Adjusted impeller lift and obtained new baseline data on three Raw Water Pumps (AC-10A, B, C)
- Replaced the gas bag assembly on the Suction Accumulator for Charging Pump (CH-1B).
- Straightened the top cap and installed a new diaphragm on the fresh air supply damper (YCV-871D) for Diesel Generator No. 2.
- On 125V DC Battery Charger No. 1, the silicon controlled rectifier (SCR) was found to be degraded and a replacement was installed. Also replaced a faulty amplifier module and re-soldered a loose connection on the SCR firing module.
- Installed the new Breaker for the Vacuum Deaerator Pump (DW-46A)
- Replaced ferro-resonance choke and filter components for Inverter "C" Bypass Transformer (EE-4Q)
- Replaced a defective coil for the Containment High Radiation Signal Lockout Relay Channel B (86B/CRHS)
- Specific tubes for Component Cooling Water Heat Exchanger AC-1D were cleaned to execute performance testing of various individual tubes.