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

March 13, 1992
LIC-92-091R

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

Reference: Docket No. 50-285

Gentlemen:

SUBJECT: February 1992 Monthly Operating Report (MOR)

Enclosed is the February 1992 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

W. G. Gates
Division Manager
Nuclear Operations

WGG/sel

Enclosures

c: LeBoeuf, Lamb, Leiby & MacRae
S. D. Bloom, NRC Project Engineer
R. D. Martin, NRC Regional Administrator, Region IV
R. P. Mullikin, NRC Senior Resident Inspector
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IE24
1/1

45-5124

OMAHA PUBLIC POWER DISTRICT
Fort Calhoun Station Unit No. 1

FEBRUARY 1992
Monthly Operating Report

I. OPERATIONS SUMMARY

Fort Calhoun Station was operational only for the first 7 hours during February. The plant was shutdown for the remainder of the month for its Thirteenth Refueling Outage. The turbine generator output breakers were opened on February 1, 1992. The reactor entered Mode 3 (T_{avg} > 515°F and shutdown margin > 4%) the same day. Main Steam Safety Valve (MSSV) testing commenced while in Mode 3 with five of ten valves found to be out-of-tolerance. Since Technical Specifications require eight of ten MSSVs to be operable, OPPD made a four hour report to the NRC pursuant to 10 CFR 50.72(b)(2)(i).

After MSSV testing was completed, a plant cooldown and RCS boration was initiated per OI-RC-4 (RCS Cooldown) with shutdown cooling entry conditions being achieved on February 2, 1992. Mode 4 (T_{avg} < 210°F and shutdown margin > 3% was achieved on February 4, 1992. Mode 5 (T_{avg} < 210°F and refueling boron concentration) was achieved at 11:41 hours the same day.

The RCS was taken water solid per OI-RC-4 to cool down the pressurizer on February 5, 1992. After the pressurizer temperature was less than 200°F, a vent path was opened and the pressurizer was drained to 50%. With the pressurizer cooled and vented, the manway was removed on February 6, 1992 in preparation for going to midloop (< 1010' RCS level). The RCS was taken to midloop for three and one-half hours to dump steam generator tubes, then returned to 50% inventory in the pressurizer.

On February 7, 1992 the RCS was drained to one foot below the Reactor Vessel (RV) flange in preparation for RV head stud detensioning. Problems were encountered during detensioning of stud #16. The stud required much more torque to remove than did the other studs. Stud removal was completed on February 13, 1992. An investigation is ongoing to determine the reason for the difficulties with RV stud #16. During that time, the 161 kV power source was taken out of service to perform a modification which included adding a ring bus. This will allow the 161 kV source to be powered from two separate feeder sources after the completion of a new feeder line to the 161 kV substation. The new feeder line is scheduled for completion during the 1993 Refueling Outage.

On February 16, 1992 the RV head was removed and the reactor refueling cavity was filled in preparation for core off-load. Off-load operations commenced on February 20, 1992 and were completed February 22, 1992. During that period all 133 fuel assemblies were transferred from the reactor core to the spent fuel pool.

On February 23, 1992 the reactor refueling cavity was drained. The RCS level was taken to midloop (no fuel was in the reactor) for steam generator nozzle dam installation and placement of equipment for the RV thermal shield inspection.

On February 26, 1992 the reactor refueling cavity was refilled. The core support barrel with thermal shield was removed from the RV and placed on a rotating inspection stand in the lower cavity.

During the same time, the Safety Injection and Refueling Water Tank (SIRWT) was drained. This was done to accommodate replacement of the SIRWT suction valves LCV-383-1 and 383-2.

On February 28, 1992, the modification to the 161 kV electrical system was completed and the 161 kV system was returned to service. Additionally, testing of a temporary diesel was completed. The temporary diesel was installed for the 1992 Outage for use in the event of a loss of off-site sources and on-site AC power. The temporary diesel will be in the standby mode when DG-1 is taken out of service for maintenance in March.

The following NRC inspections took place during February 1992:

IER NO.	TITLE
92-03	Fuel Integrity and Reactor Subcriticality (Initial Phase)
92-06	Inservice Inspection Programs

The following LERs were submitted during February 1992:

LER No.	Report Date	Description
92-01	02/20/92	Unmonitored Release on Loss of 13.8 kV system
92-02	02/26/92	PAL Door Seal
92-03	02/27/92	Missed Fire Watch
92-06	02/24/92	RM-041/42/43 Annunciation Problem

A. SAFETY VALVES OR PORV CHALLENGES OR FAILURES WHICH OCCURRED

On February 2, 1992, OP-ST-RC-3004 (PORV Low Temperature, Low Pressure Exercise Test) was successfully completed. This test requires each PORV to be cycled once.

B. RESULTS OF LEAK RATE TESTS

Due to the plant shutdown and subsequent cooldown and depressurization for refueling, only one RCS leak rate test was performed. That test, performed on February 1, determined the total RCS leakrate to be 0.290 gpm. Known leakage was 0.120 gpm and unknown leakage was 0.170 gpm.

Repairs to be made during the refueling outage are expected to reduce the total RCS leakage to about 25% of that recorded on February 1, 1992.

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

Amendment No.	Description
None.	

D. SIGNIFICANT SAFETY RELATED MAINTENANCE FOR THE MONTH OF FEBRUARY 1992

During February 1992, the Fort Calhoun Station maintenance staff performed many activities to support the refueling outage. Some of the significant safety related maintenance activities performed were:

Completed repairs and post maintenance testing to the inlet valve of the storage pool demineralizer, AC-317.

Completed repairs to charging pump CH-1A Ammeter A/CH-1A.

Replaced raw water pump AC-10B with a new assembly and adjusted the impeller lift on AC-10C and AC-10D raw water pumps.

Performed NDE Inspection and repacked the HPSI Pump SI-2A Bearing Cooler CCW Outlet Drain Valve, AC-126.

Due to the significant maintenance work to be completed on the diesel generators, EDG-1 and EDG-2, Temporary Modification 92-019 was installed into the respective control circuits of each diesel. This minimizes inadvertent starts of the diesels during the refueling outage. The temporary modification will be removed prior to startup.

Performed maintenance on instrument loop power supplies FQ342, LQ2904X, LQ2944X, LQ2964X and PQ2941.

Performed maintenance on SG-RC-2A Feedwater Isolation Valve HCV-1386.

Replaced Solenoid Valve to SG-RC-2A Containment Isolation Valve HCV-2506B.

Performed testing and maintenance to the following MOVs:

HCV-265 (Boric Acid Storage Tank Outlet Valve)
HCV-308 (Charging Pumps Discharge to HPSI Header Isolation Valve)
HCV-318 (HPSI to RC Loop 2A Isolation Valve)
HCV-321 (HPSI to RC Loop 2B Isolation Valve)
HCV-341 (Shutdown Cooling Heat Exchangers Temperature Control Valve)

Performed trevitest and setpoint checks for the following main steam safety valves:

MS-275, MS-276, MS-277, MS-278, MS-279, MS-280, MS-281, MS-282, MS-291 and MS-292

Performed repairs to HCV-484, Shutdown Cooling Heat Exchanger AC-4A Outlet Valve.

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO.	50-285
UNIT	FORT CALHOUN STATION
DATE	MARCH 11, 1992
COMPLETED BY	G. R. CAVANAUGH
TELEPHONE	402-636-2474

MONTH FEBRUARY 1992

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

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 MARCH 11, 1992
COMPLETED BY G. R. CAVANAUGH
TELEPHONE 402-636-2474

OPERATING STATUS

1. Unit Name: FORT CALHOUN STATION
2. Reporting Period: FEBRUARY 1992

NOTES

3. Licensed Thermal Power (MWt): 1500
4. Nameplate Rating (Gross MWe): 502
5. Design Elec. Rating (Net MWe): 478
6. Max. Dep. Capacity (Gross MWe): 502
7. Max. Dep. Capacity (Net MWe): 478

8. If changes occur in Capacity Ratings (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.....	696.0	1440.0	161570.0
12. Number of Hours Reactor was Critical	7.0	751.0	125569.7
13. Reactor Reserve Shutdown Hours.....	.0	.0	1309.5
14. Hours Generator On-line.....	2.0	746.0	124123.1
15. Unit Reserve Shutdown Hours.....	.0	.0	.0
16. Gross Thermal Energy Generated (MWH)	667.1	958856.1	162582581.8
17. Gross Elec. Energy Generated (MWH)..	.0	323236.0	53499362.2
18. Net Elec. Energy Generated (MWH)....	.0	306776.6	51040528.0
19. Unit Service Factor.....	.3	51.8	76.8
20. Unit Availability Factor.....	.3	51.8	76.8
21. Unit Capacity Factor (using MDC Net)	.0	44.6	68.8
22. Unit Capacity Factor (using DER Net)	.0	44.6	66.9
23. Unit Forced Outage Rate.....	.0	.0	3.9

24. Shutdowns scheduled over next 6 months (type, date, and duration of each):
THE PLANT IS CURRENTLY SHUTDOWN FOR THE 13TH REFUELING OUTAGE. THE OUTAGE IS CURRENTLY SCHEDULED TO BE COMPLETED 4/27/92.

25. If shut down at end of report period, estimated date of startup: 04/27/92

26. Units in test status (prior to comm. oper.):

		Forcast	Achieved
INITIAL CRITICALITY			
INITIAL ELECTRICITY	N/A		
COMMERCIAL OPERATION			

Refueling Information
Fort Calhoun - Unit No. 1

Report for the month ending February 1992

1. Scheduled dated for next refueling shutdown. — Refueling outage began on February 1, 1992

2. Scheduled date for restart following refueling. — April 27, 1992

3. Will refueling or resumption of operations 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 — 0 Assemblie
   b) in the spent fuel pool — 662 Assemblies
   c) spent fuel pool storage capacity — 729 Assemblies
   d) planned spent fuel pool storage capacity — Planned to be i creased 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 Wanke — Date 3/13/92

UNIT SHUTDOWNS AND POWER REDUCTIONS

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

REPORT MONTH February 1992

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
92-01	2-1-92	S	694	C	1		XX	XXXXXX	On February 1, 1992, the 13th Fort Calhoun Station Refueling Outage commenced.

[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 1 - Same Source

(9/77)