



Omaha Public Power District
444 South 16th Street Mall
Omaha NE 68102-2247

November 15, 1996
LIC-96-0174

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

Reference: Docket No. 50-285

SUBJECT: October 1996 Monthly Operating Report (MOR)

Enclosed please find the October 1996 MOR for Fort Calhoun Station (FCS)
Unit No. 1 as required by FCS Technical Specification 5.9.1.

If you should have any questions, please contact me.

Sincerely,

T. L. Patterson
Division Manager
Nuclear Operations

TLP/mle

Enclosures 200074

c: Winston & Strawn
L. J. Callan, NRC Regional Administrator, Region IV
L. R. Wharton, NRC Project Manager
W. C. Walker, NRC Senior Resident Inspector
R. J. Simon, Westinghouse
INPO Records Center

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OMAHA PUBLIC POWER DISTRICT
Fort Calhoun Station Unit No. 1

OCTOBER 1996
Monthly Operating Report

1. OPERATIONS SUMMARY

Fort Calhoun Station (FCS) Unit No. 1 operated at a nominal 45% power level until October 4th at 1529 hours when power was reduced in preparation for the scheduled refueling outage. The reduced power level prior to the outage was a planned process, which successfully reduced reactor coolant system (RCS) radionuclide concentrations and associated outage dose. The generator was taken offline at 2207 hours and on October 5th at 0339 hours, the reactor was made subcritical. Scheduled maintenance and modifications are being completed and all twenty-eight incore nuclear detector strings have been replaced. The following events occurred in October.

On October 5th at 1339 hours, FCS was performing a plant cooldown to 400°F per procedure OP-3A when steam generator low pressure trip signals were received on two of the four reactor protective system (RPS) channels. The reactor trip signal occurred as a result of not installing the bypass keys prior to reaching the low pressure trip setpoint. A four-hour notification was made to the NRC pursuant to 10 CFR 50.72(b)(2)(ii). This event is described in Licensee Event Report (LER) 96-007.

A discrepancy between FCS procedure OI-FH-1, "Fuel Handling Equipment Operation," and the Design Basis Control Room Habitability Radiological Consequences Calculation was identified on October 8th. A four-hour non-emergency notification was made to the NRC pursuant to 10 CFR 50.72(b)(2)(iii)(D). An Operations Memorandum was generated to ensure both control room filtration units are placed in the filtered air makeup mode and that at least one of the units is in service during irradiated fuel movements. Appropriate controls have been implemented throughout the current refueling outage. This event is described in LER 96-003.

The steam generator primary side manways were removed on October 12th causing radiation levels in containment to rise above the containment radiation high signal setpoint. A ventilation isolation actuation signal (VIAS) resulted, which ensured that the release remained below the limits specified in 10 CFR 20. A four-hour non-emergency notification was made to the NRC pursuant to 10 CFR 50.72(b)(2)(ii). This event is described in LER 96-008.

On October 17th, Wyle Labs notified OPPD that the "As-Found" lift pressure of Pressurizer Safety Valves (PSV) RC-141 and RC-142 appeared to be outside of the specified lift setting acceptance criterion. This event is described in LER 96-009.

On October 18th, a four-hour non-emergency notification was made to the NRC pursuant to 10 CFR 50.72(b)(2)(iii)(C). A breach of containment closure was identified during core offload. Refueling operations were stopped and maintenance was dispatched to close the flowpath. Refueling operations were not permitted to resume until containment was walked down to verify closure. This event is described in LER-96-010.

On October 30th, a four-hour non-emergency notification was made to the NRC pursuant to 10 CFR 50.72(b)(2)(iii)(C) when a breach of containment closure was identified during fuel reload. The path identified was through an open secondary manway on Steam Generator "A" through a 1/2 inch needle valve that was 1/16th inch open. This event is described in LER-96-011.

2. SAFETY VALVES OR PORV CHALLENGES OR FAILURES WHICH OCCURRED

During the month of October, no power operated relief valves (PORV) or primary system safety valve challenges or failures occurred. Surveillance testing of PORV valves PCV-102-1 and PCV-102-2 was completed satisfactorily. (See previous section for discussion on Valves RC-141 and RC-142.)

3. RESULTS OF LEAK RATE TESTS

Leak rate tests conducted through October 4th were steady at slightly above 0.2 gpm. Leak rate tests conducted on October 5th and 6th were slightly higher as a result of shutting the plant down to begin the refueling outage. No leak rate tests were conducted after October 6th.

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

<u>Amendment No.</u>	<u>Description</u>
176	Amendment 176 revises Sections 2.18, 3.14, 3.3 and 5.10 of the Technical Specifications. The Amendment relocates snubber operability requirements to the Updated Safety Analysis Report and incorporates snubber examination and testing requirements into Section 3.3 for ASME Section XI requirements.
177	Amendment 177 modifies Paragraph 2.B(2) of Facility Operating License No. DPR-40 to reference 10 CFR Part 40 allowing the use of source materials, in the form of depleted or natural uranium, as reactor fuel.
178	Amendment 178 changes Section 4.3.2 to allow the use of zircaloy or ZIRLO® fuel cladding and the use of depleted uranium as reactor fuel material. Two new Westinghouse Topical Reports are also being added to Section 5.9.5.

5. SIGNIFICANT SAFETY RELATED MAINTENANCE FOR THE MONTH OF OCTOBER 1996

- Replaced eleven (11) General Electric (GE) Type SBM switches and two (2) GE CR120A relays.
- Replaced sixteen (16) Agastat relays.
- Replaced sight glass on Diesel Generator Fuel Oil Day Tank FO-2-1.
- Rebuilt shuttle valves for Containment Purge Exhaust Isolation Valve PCV-742B and Containment Purge Air Inlet Outboard Isolation Valve PCV-742D.

- Replaced Breaker Unit (cubicle and breaker: 52/1B3C) 1B3C-1B3C.
- Replaced RMS-9 Trip Unit On Breaker 1B3C-2.
- Rebuilt Component Cooling Water Pump AC-3B.
- Repaired chains and pulley on Containment Equipment Access Hatch AE-1.
- Performed a variety of maintenance tasks on Diesel Generator No. 1.
- Performed dynamic MOVAT testing and replaced torque switch on Steam Generator RC-2B, Isolation Valve HCV-1385.
- Replaced grease in Low Pressure Safety Injection (LPSI) to RC Loop 1B Isolation Valve HCV-327 and LPSI to RC Loop 1A Isolation Valve HCV-329.
- Rewelded support for Main Steam Line B Relief Valve MS-281.
- Removed Pressurizer Safety Valves RC-141 and RC-142 and sent them to Wyle Labs for setpoint surveillance testing.
- Retorqued two bolts on Steam Generator RC-2B Steam Separator Cannister.
- Rebuilt LPSI Pump Motor SI-1A-M.
- Replaced flange studs and nuts on Safety Injection Refueling Water Tank, Outlet Check Valve SI-140.
- Replaced diaphragm on Safety Injection Leakage Cooler Accumulator SI-7D.

6. OPERATING DATA REPORT

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7. AVERAGE DAILY UNIT POWER LEVEL

Attachment II

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Enclosure

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8. UNIT SHUTDOWNS AND POWER REDUCTIONS

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9. REFUELING INFORMATION, FORT CALHOUN STATION UNIT NO. 1

Attachment IV

ATTACHMENT I
OPERATING DATA REPORT

DOCKET NO. 50-285
UNIT FORT CALHOUN STATION
DATE NOVEMBER 08, 1996
COMPLETED BY M. L. EDWARDS
TELEPHONE (402) 533-6929

OPERATING STATUS

1. Unit Name: FORT CALHOUN STATION
2. Reporting Period: OCTOBER 1996

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.....	745.0	7320.0	202514.0
12. Number of Hours Reactor was Critical	99.6	6102.4	159810.4
13. Reactor Reserve Shutdown Hours.....	.0	.0	1309.5
14. Hours Generator On-line.....	94.1	6056.0	158036.5
15. Unit Reserve Shutdown Hours.....	.0	.0	.0
16. Gross Thermal Energy Generated (MWH)	62573.9	8707871.3	211394179.6
17. Gross Elec. Energy Generated (MWH)..	18716.0	2911913.9	69845639.1
18. Net Elec. Energy Generated (MWH)....	16944.0	2774638.5	66632007.3
19. Unit Service Factor.....	12.6	82.7	78.0
20. Unit Availability Factor.....	12.6	82.7	78.0
21. Unit Capacity Factor (using MDC Net)	4.8	79.3	71.0
22. Unit Capacity Factor (using DER Net)	4.8	79.3	69.5
23. Unit Forced Outage Rate.....	.0	6.0	4.1

24. Shutdowns scheduled over next 6 months (type, date, and duration of each):
REFUELING OUTAGE COMMENCED ON OCTOBER 5, 1996 WITH A SCHEDULED DURATION OF 44 DAYS.

25. If shut down at end of report period, estimated date of startup: 11/17/96

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

INITIAL CRITICALITY
INITIAL ELECTRICITY
COMMERCIAL OPERATION

N/A

ATTACHMENT II
AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO.	50-285
UNIT	FORT CALHOUN STATION
DATE	NOVEMBER 08, 1996
COMPLETED BY	M. L. EDWARDS
TELEPHONE	(402) 533-6929

MONTH OCTOBER 1996

DAY AVERAGE DAILY POWER LEVEL
 (MWe-Net)

1	188
2	186
3	186
4	146
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0
13	0
14	0
15	0
16	0

DAY AVERAGE DAILY POWER LEVEL
 (MWe-Net)

17	0
18	0
19	0
20	0
21	0
22	0
23	0
24	0
25	0
26	0
27	0
28	0
29	0
30	0
31	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.

ATTACHMENT III
UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-285
UNIT NAME Fort Calhoun St.
DATE November 8, 1996
COMPLETED BY M. L. Edwards
TELEPHONE (402) 533-6929

REPORT MONTH October 1996

No.	Date	Type	Duration (Hours)	Reason	Method of Shutting Down Reactor ³	Licensee Event Report No.	System Code ⁴	Component Code ⁵	Cause & Corrective Action to Prevent Recurrence
96-06	961004	S	650.9	C	1	N/A	ZZ	ZZZZZZ	A power reduction commenced on October 4, 1996 in preparation for a scheduled refueling outage. The power reduction began at 1529 hours and the generator was taken offline at 2207 hours. On October 5, 1996 at 0339 hours, the reactor was made subcritical. The reduced power level prior to the outage was a planned process, which successfully reduced reactor coolant system (RCS) radionuclide concentrations and associated outage dose.

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
H-Other (Explain)

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

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

5
Exhibit H - Same Source

Attachment IV
Refueling Information
Fort Calhoun Station Unit No. 1

Report for the month ending: October 31, 1996

1.	Scheduled date for next refueling shutdown.	Shutdown - October 5, 1996
2.	Scheduled date for restart following refueling.	November 17, 1996
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?	1) Allow use of source material for fuel assemblies. 2) Allow use of ZIRLO® fuel cladding.
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.	1) Amendment 177 was received on October 7, 1996. 2) Amendment 178 was received on November 1, 1996.
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.	For Cycle 17, the new fuel batch will contain mid-grid design changes to mitigate future grid-to-rod fretting failures.
6.	The number of fuel assemblies: a) in the core b) in the spent fuel pool c) spent fuel pool storage capacity	133 Assemblies 618 Assemblies 1083 Assemblies
7.	The projected date of the last refueling that can be discharged to the spent fuel pool assuming the present licensed capacity.	2007 Outage

Prepared by: 

Date: 11/12/96