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SUBJECT: Monthly operating rept for Sept 1988 for DC Cook Unit 1.
 W/881007 ltr.

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N.R.C. OPERATING DATA REPORT

DOCKET NO. 50-315
DATE 04-Oct-88
COMPLETED BY H. Giles
TELEPHONE 616-465-5901

OPERATING STATUS

1. Unit Name D. C. Cook Unit 1
2. Reporting Period SEPT 1988 notes
3. Licensed Thermal Power (MWt) 3250
4. Name Plate Rating (Gross MWe) 1152
5. Design Electrical Rating (Net MWe) 1030
6. Maximum Dependable Capacity (GROSS MWe) 1056
7. Maximum Dependable Capacity (Net MWe) 1020
8. If Changes Occur in Capacity Ratings (Items no. 3 through 7) Since Last Report Give Reasons

9. Power Level To Which Restricted. If Any (Net MWe)
10. Reasons For Restrictions. If Any:

	This Mo.	Yr. to Date	Cumm.
11. Hours in Reporting Period	720.0	6575.0	120527.0
12. No. of Hrs. Reactor Was Critical	522.3	6324.6	88162.5
13. Reactor Reserve Shutdown Hours	0.0	0.0	463.0
14. Hours Generator on Line	511.9	6301.9	86539.4
15. Unit Reserve Shutdown Hours	0.0	0.0	321.0
16. Gross Therm. Energy Gen. (MWH)	1448245	18246448	251245444
17. Gross Elect. Energy Gen. (MWH)	457110	5876520	82021190
18. Net Elect. Energy Gen. (MWH)	438265	5647052	78878050
19. Unit Service Factor	71.1	95.8	73.0
20. Unit Availability Factor	71.1	95.8	73.0
21. Unit Capacity Factor (MDC Net)	59.7	84.2	65.2
22. Unit Capacity Factor (DER Net)	59.1	83.4	63.2
23. Unit Forced Outage Rate	28.9	3.6	8.0

24. Shutdowns Scheduled over Next Six Months (Type, Date, and Duration):

Unit 1 Cycle 10-11 Refueling outage is currently scheduled to begin February 15, 1989.

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

26. Units in Test Status (Prior to Commercial Operation):

Forecast Achieved

INITIAL CRITICALITY
INITIAL ELECTRICITY
COMMERCIAL OPERATION

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11

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-315

UNIT NAME D.C. Cook Unit 1

DATE Oct. 10, 1988

COMPLETED BY J. W. Harner

TELEPHONE (616) 465-5901

Page: 1 of 2

REPORT MONTH SEPTEMBER

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
271	880907	S	207.6	A	1	NA	CI	PIPEA	The Unit shutdown and the reactor coolant system cooled down to Mode 4 due to a calculated leak rate of 0.96 gpm. Upon containment entry an instrument line was found broken between the manual isolation valve and the instrument, QDA-21. The instrument is the number 2 reactor coolant pump shaft seal thermal barrier differential pressure alarm. The failure was due to the pipe vibrating and rubbing against a structural support creating a fault. The failed section of piping was removed and replaced with a new one. The piping was then rerouted away from the support, thus preventing further problems or similar damage in the future. During the nine day outage selected Emergency Core Cooling System motor operated valves were inspected with no problems being identified. Also during this time selected SI valves which were found to be a problem on Unit 2 were inspected on Unit 1. These valves were 1-SI-151 East, 1-SI-151 West, 1-SI-166-L1 and 1-SI-166-L4 which are check valves in the cooldown lines and safety injection lines to the reactor coolant system. It was found that 1-SI-151 East and 1-SI-151 West both had one

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

(9/77)

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH SEPTEMBER

DOCKET NO. 50-315
 UNIT NAME D.C. Cook Unit 1
 DATE Oct. 10, 1988
 COMPLETED BY J. W. Harner
 TELEPHONE (616) 465-5901
 Page: 2 of 2

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
271 (con't)									broken retaining block stud which were removed and replaced the new ones. There are 2 of these studs in each valve which hold the clapper assembly in place. The stud materials of 1-SI-166-L1 and 1-SI-166-L4 were in question, thus these studs were removed and replaced with new ones.
272	880916	S	0.5	B	4	NA	ZZ	ZZZZZZ	<p>Prior to the unit heatup, a steam generator crevice flush of all four steam generators was performed. The unit was paralleled at 0224 hours (EDT), brought to 48% power and held here for turbine warming prior to overspeed testing.</p> <p>The reactor power level was reduced from 48% to 9% and at 1824 hours the unit was removed from parallel for turbine overspeed testing. The unit was returned to service at 1855 hours. The unit was returned to its administrative power limit of 90% on 9-17-88.</p>

1
 F: Forced
 S: Scheduled

2
 Reasons:
 A-Equipment Failure (Explain)
 B-Maintenance of 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

(9/77)

DOCKET NO: 50-315
UNIT NAME: D. C. Cook Unit 1
COMPLETED BY: J. W. Harner
TELEPHONE: (616) 465-5901
DATE: October 10, 1988
PAGE: 1 of 1

MONTHLY OPERATING ACTIVITIES - SEPTEMBER 1988

HIGHLIGHTS:

The Unit shutdown and the reactor coolant system cooled down to Mode 4 due to a calculated leak rate of 0.96 gpm. Upon containment entry an instrument line was found broken between the manual isolation valve and the instrument, QDA-21. The instrument is the number 2 reactor coolant pump shaft seal thermal barrier differential pressure alarm. The failure was due to the pipe vibrating and rubbing against a structural support creating a fault. The failed section of piping was removed and replaced with a new one. The piping was then rerouted away from the support, thus preventing further problems or similar damage in the future. During the nine day outage selected Emergency Core Cooling System motor operated valves were inspected with no problems being identified. Also during this time selected SI valves which were found to be a problem on Unit 2 were inspected on Unit 1. These valves were 1-SI-151 East, 1-SI-151 West, 1-SI-166-L1 and 1-SI-166-L4 which are check valves in the cooldown lines and safety injection lines to the reactor coolant system. It was found that 1-SI-151 East and 1-SI-151 West both had one broken retaining block stud which were removed and replaced with new ones. There are 2 of these studs in each valve which hold the clapper assembly in place. The stud materials of 1-SI-166-L1 and 1-SI-166-L4 were in question, thus these studs were removed and replaced with new ones.

Prior to the unit heatup, a steam generator crevice flush of all four steam generators was performed. The unit was paralleled at 0224 hours (EDT), brought to 48% power and held here for turbine warming prior to overspeed testing.

The reactor power level was reduced from 48% to 9% and at 1824 hours the unit was removed from parallel for turbine overspeed testing. The unit was returned to service at 1855 hours. The unit was returned to its administrative power limit of 90% on 09-17-88.

An unusual event was declared on 09-22-88 due to a fire in a plastics factory in the village of Stevensville.

DETAILS

9-7-88 At 0440 hrs. a planned unit shutdown and reactor coolant cooldown was commenced due to an elevated reactor coolant leak rate of 0.96 gpm.

9-7-88 The reactor coolant system was cooled down and the unit entered Mode 4 at 1914 hrs.

9-14-88 Following the repairs of the reactor coolant system leak, SG crevice flush, and reactor coolant heat-up the unit entered Mode 3 at 0540 hrs.

9-15-88 The unit entered Mode 2 with a reactor startup at 0447 hrs. The startup was terminated due to criticality not being reached at the conditions calculated, (ECP).

After recalculating an estimated critical rod position (ECP) a reactor startup at 1602 hrs was commenced. The reactor reached criticality at 1629 hrs.

The reactor entered Mode One at 2105 hrs.

9-16-88 The Unit was paralleled at 0224 hours (EDT) and reactor power was increased to 48%. Reactor power was held at this power level for turbine warming in preparation for a scheduled turbine overspeed test.

Reactor power was reduced to 9% power and the unit was removed from parallel at 1824 hours (EDT) to perform the scheduled main turbine overspeed test. The unit was returned to service at 1855 hours.

9-17-88 The unit reached the 90% administrative power limit at 1133 hrs. and remained there for the remainder of the reporting period.

9-22-88 At 0407 hrs. an unusual event was declared due to a fire in a plastics factory in the local community of Stevensville. The unit exited the unusual event at 0740 hrs after it was determined no hazardous gases existed.

DOCKET NO.	50-315
UNIT NAME	D. C. Cook - Unit No. 1
DATE	October 7, 1988
COMPLETED BY	J. W. Harner
TELEPHONE	(616) 465-5901
PAGE	1 of 1

MAJOR SAFETY-RELATED MAINTENANCE

SEPTEMBER 1988

- M-1 1-QDA-21 (#2 reactor coolant pump shaft seal thermal barrier differential pressure alarm). Instrument piping broken due to rubbing against structural member. The broken pipe was replaced with a new one and rerouted to prevent a reoccurrence.
- M-2 1-HV-AES-2 had an air leak through the charcoal bed which was greater than the technical specification limit due to a damaged damper gasket. The damper gasket was replaced with a new one and the damper linkage adjusted accordingly.
- M-3 1-SI-151 East and West (residual heat removal cooldown lines check valves). Found each valve had 1 broken retaining block stud which was removed and replaced with a new stud.
- M-4 1-SI-161-L1 and 1-SI-161-L4 had studs made of questionable materials. These studs were removed and replaced with new studs.

Indiana Michigan
Power Company
Cook Nuclear Plant
P.O. Box 458
Bridgman, MI 49106
616 465 5901



U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555

October 7, 1988

Gentlemen:

Pursuant to the requirements of Donald C. Cook Nuclear Plant Unit 1
Technical Specification 6.9.1.10, the attached Monthly Operating
Report for the month of September 1988 is submitted.

Sincerely,

W. G. Smith, Jr.
W. G. Smith, Jr.
Plant Manager

WGS/jd

cc: D. H. Williams, Jr.
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C. A. Erikson
J. J. Markowsky
D. A. Timberlake
R. F. Kroeger
B. L. Jorgensen
M. J. Parvin
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