

Indiana Michigan  
Power Company  
Cook Nuclear Plant  
One Cook Place  
Bridgman, MI 49106  
616 465 5901



December 6, 1990

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

Gentlemen:

Pursuant to the requirements of Donald C. Cook Nuclear Plant  
Unit 2 Technical Specification 6.9.1.10, the attached Monthly  
Operating Report for the month of November 1990 is submitted.

Respectfully,

A handwritten signature in cursive script that reads 'A.A. Blind'.

A.A. Blind  
Plant Manager

Attachment

c: NRC Region III  
D.R. Hahn  
EPRI - Nuclear Safety Analysis Center  
R.C. Callen  
S.L. Hall  
J.G. Keppler  
INPO Records Center  
ANI Nuclear Engineering Department  
D.H. Williams, Jr.  
M.P. Alexich  
J.F. Kurgan  
J.J. Markowsky  
D.A. Timberlake  
D.W. Paul  
T.O. Argenta  
S.H. Steinhart  
J.A. Isom  
W.T. Gillett  
E.A. Smarrella  
J.C. Krieger  
B.A. Svensson  
E.C. Schimmel

9012190153 901130  
PDR ADOCK 05000316  
R PDR

Handwritten initials, possibly 'JFA', with the number '11' written below them.

N.R.C. OPERATING DATA REPORT

DOCKET NO. 50-316  
 DATE 03-Dec-90  
 COMPLETED BY WT GILLET  
 TELEPHONE 616-465-5901

OPERATING STATUS

1. Unit Name D. C. Cook Unit 2  
 2. Reporting Period NOV.90  
 3. Licensed Thermal Power (MWt) 3411  
 4. Name Plate Rating (Gross MWe) 1133  
 5. Design Electrical Rating (Net MWe) 1100  
 6. Maximum Dependable Capacity (GROSS MWe) 1100  
 7. Maximum Dependable Capacity (Net MWe) 1060  
 8. If Changes Occur in Capacity Ratings (Items no. 3 through 7) Since Last Report Give Reasons \_\_\_\_\_

notes

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	8016.0	113208.0
12. No. of Hrs. Reactor Was Critical	573.4	4361.9	74537.9
13. Reactor Reserve Shutdown Hours	0.0	0.0	0.0
14. Hours Generator on Line	527.9	4298.1	73027.6
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Therm. Energy Gen. (MWH)	1338296	13401228	224279118
17. Gross Elect. Energy Gen. (MWH)	429450	4369700	73165810
18. Net Elect. Energy Gen. (MWH)	411350	4214010	70459668
19. Unit Service Factor	73.3	53.6	65.9
20. Unit Availability Factor	73.3	53.6	65.9
21. Unit Capacity Factor (MDC Net)	53.9	49.6	59.9
22. Unit Capacity Factor (DER Net)	51.9	47.8	58.4
23. Unit Forced Outage Rate	0.0	9.0	13.5
24. Shutdowns Scheduled over Next Six Months (Type, Date, and Duration):			

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

AVERAGE DAILY POWER LEVEL (MWe-Net)

DOCKET NO. 50-316  
UNIT TWO  
DATE 03-Dec-90  
COMPLETED BY WT GILLETT  
TELEPHONE 616-465-5901

MONTH NOV. 90

DAY	AVERAGE DAILY POWER LEVEL	D'Y	AVERAGE DAILY POWER LEVEL
1	0	17	673
2	0	18	743
3	0	19	929
4	0	20	946
5	0	21	1073
6	0	22	1031
7	0	23	1078
8	0	24	1083
9	0	25	1086
10	229	26	1086
11	274	27	1085
12	412	28	1085
13	431	29	1087
14	442	30	1079
15	623		
16	664		

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: November 1990

DUCKET NO: 50-316  
 UNIT NAME: D.C. COOK UNIT 2  
 DATE: December 6, 1990  
 COMPLETED BY: F.C. Schimmel  
 TELEPHONE: (616) 465-5901

NO.	DATE	TYPE <sup>1</sup>	DURATION HOURS	REASON <sup>2</sup>	METHOD OF SHUTTING DOWN REACTOR <sup>3</sup>	LICENSEE EVENT REPORT NO.	SYSTEM CODE <sup>4</sup>	COMPONENT CODE <sup>5</sup>	CAUSE AND CORRECTIVE ACTION TO PREVENT RECURRENCE
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The unit was removed from service at 0225 hours on 900630 for cycle 7-8 refueling outage. The refueling and maintenance activities have been completed. The reactor was critical for the first time in cycle 8 on 901109, and the unit paralleled at 0006 hours on 901110. 100% power was reached at 0315 hours on 901121. There were no shutdowns or significant power reductions during the rest of the month.

1	2	3	4	5
F: Forced	Reason:	Method:	Exhibit G - Instructions	Exhibit I: Same Source
S: Scheduled	A: Equipment Failure (Explain)	1: Manual	for preparation of data	
	B: Maintenance or Test	2: Manual Scram	entry sheets for Licensee	
	C: Refueling	3: Automatic Scram	Event Report (LER) File	
	D: Regulatory Restriction	4: Other (Explain)	(NUREG 0161)	
	E: Operator Training and License Examination			
	F: Administrative			
	G: Operational Error (Explain)			
	H: Other (Explain)			

DOCKET NO: 50-316  
UNIT NAME: D.C. Cook Unit 2  
COMPLETED BY: E.C. Schimmel  
TELEPHONE: (616) 465-5901  
DATE: December 6, 1990  
PAGE: 1 of 1

MONTHLY OPERATING ACTIVITIES - November 1990

HIGHLIGHTS

The unit entered the reporting period in mode 3. The unit entered mode 2 at 2342 hours on November 7, 1990. Reactor criticality was achieved at 0235 hours on November 8, 1990. The unit entered mode 1 at 1735 hours on November 9, 1990. The unit was paralleled to the power grid at 0006 hours on November 10, 1990. Unit power was increased to 48% Rated Thermal Power starting 0028 hours on November 10, 1990. Unit power was increased to 62% Rated Thermal Power starting 1915 hours on November 14, 1990. Unit power was increased to 90% Rated Thermal Power starting 1237 hours on November 18, 1990. Unit power was increased to 100% Rated Thermal Power starting 1530 hours on November 20, 1990. The unit exited the reporting period at 100% Rated Thermal Power.

Gross electrical generation for the month of July was 429450 MWH.

DETAILS

11/07/90	2009	Commenced dilution of the Reactor Coolant System Boron concentration.
	2342	The unit is in mode 2.
11/08/90	0235	First reactor criticality in cycle 7
	0512	Low power physics testing is completed.
11/09/90	0755	Commenced unit power increase to 2% Rated Thermal Power.
	0947	The unit is at 2% Rated Thermal Power to allow for establishing main condenser vacuum.
	1539	Commenced unit power increase to 4% Rated Thermal Power.
	1550	The unit is at 4% Rated Thermal Power.
	1701	Commenced unit power increase to 8% Rated Thermal power.
	1735	The unit is in mode 1.
11/10/90	0006	The main generator is paralleled to the power grid for the first time in cycle 8.
	0028	Commenced unit power increase to 48% Rated Thermal Power.

11/12/90	0508	The unit is at 48% Rated Thermal Power.
11/14/90	1915	Commenced unit power increase to 62% Rated Thermal Power.
11/15/90	0445	The unit is at 62% Rated Thermal Power.
11/15/90	0823	Commenced unit power increase to 68% Rated Thermal Power.
	1117	The unit is at 68% Rated Thermal Power.
11/18/90	1237	Commenced unit power increase to 90% Rated Thermal Power.
11/19/90	0023	The unit is at 90% Rated Thermal Power.
	1530	Commenced unit power increase to 100% Rated Thermal Power.
	1625	Unit power is held at 91% due to the Quadrant Power Tilt Ratio approaching its technical specification limit.
11/20/90	1423	Resumed unit power increase to 100% Rated Thermal Power.
11/21/90	0315	The unit is at 100% Rated Thermal Power.

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PAGE: 1 of 1

MAJOR SAFETY-RELATED MAINTENANCE - November 1990

- 2-M-1 Pressurizer safety valve 2-SV-45-C was leaking by. The leaking valve was removed from service and replaced with a new valve.
- 2-M-2 Pressurizer safety valve 2-SV-45-A was leaking by. The leaking valve was removed from service and replaced with a new valve.
- 2-M-3 The East Component Cooling Water Heat Exchanger service water outlet shutoff valve would not fully close. The defective valve was removed from service and replaced with a new valve.
- 2-M-4 The Regenerative Heat Exchanger charging header inlet drain to Reactor Coolant Drain Tank shutoff valve, 2-CS-323, was leaking by. The leaking valve was removed from service and replaced with a new valve.