# OPERATING DATA REPORT

DOCKET NO. 50-316 DATE 12/31/81 COMPLETED BY A. Might TELEPHONE 616-465-5901

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# OPERATING STATUS

÷	Unit Name: Donald C. Cook Plant 2	Notes
**	Reporting Period: December, 1981	
-	Reporting . and 3391	
	Licensed Thermal Power (MWt):	
	Nameplate Rating (Gross MYe):	
5.	Design Electrical Rating (Net alme):	
6.	Maximum Dependable Capacity (Gross MWe): 1082	
7.	Maximum Dependable Capacity (Ner Mile): 1002	and and Range

8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report. Give Reasons:

# 9. Power Level To Which Restricted, If Any (Net MWe):

10. Remsons For Restrictions. If Any: -

8211150137 820125 PDR ADDCK 05000216 PDR

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11. Hours In Reporting Period $744$ $8,760$ $35,064$ 12. Number Of Hours Remeter Was Critical $0$ $0$ $0$ 13. Reactor Reserve Shutdown Hours $0$ $0$ $0$ $0$ 14. Hours Generator On-Line $744$ $6.181.4$ $23,221$ 14. Hours Generator On-Line $0$ $0$ $0$ 15. Unit Reserve Shutdown Hours $744$ $6.181.4$ $23,221$ 16. Gross Thermal Energy Generated (MWH) $2,517,865$ $20,441,187$ $74,060,821$ 17. Gross Elemical Energy Generated (MWH) $824,510$ $6,615,970$ $23,707,800$ 18. Net Eleminal Energy Generated (MWH) $796,211$ $6,384,976$ $22,844,141$ 19. Unit Service Factor $100$ $70.6$ $71.3$ 19. Unit Capacity Factor $98.9$ $67.4$ $66.6$ 21. Unit Capacity Factor (Using MEC Net) $97.3$ $66.3$ $65.9$ 22. Unit Capacity Factor (Using DER Net) $0$ $10.6$ $14.2$		This Month	Yrto-Data	. Cumulative
11. Hours in Reporting Period       744       6.279.9       24.025         12. Number Of Hours Reactor Was Critical       0       0       0       0         13. Reactor Reserve Shutdown Hours       744       6.181.4       23.221         14. Hours Generator On-Line       0       0       0       0         15. Unit Reserve Shutdown Hours       744       6.181.4       23.221         14. Hours Generator On-Line       0       0       0       0         15. Unit Reserve Shutdown Hours       744       6.181.4       23.221         16. Gross Themai Energy Generated (MWH)       2.517.865       20.441.187       74.060.821         17. Gross Elemical Energy Generated (MWH)       824.510       6.615.970       23.707.800         18. Net Electrical Energy Generated (MWH)       796.211       6.384.976       22.844.141         19. Unit Service Factor       100       70.6       71.3         100       70.6       71.3       66.6       66.6         21. Unit Capacity Factor (Using MEC Net)       97.3       66.3       65.9         22. Unit Capacity Factor (Using DER Net)       0       10.6       14.2		744	8,760	35,064
12. Number Of Hours Reactor Was Childed         13. Reactor Reserve Shutdown Hours         14. Hours Generator On-Line         15. Unit Reserve Shutdown Hours         16. Gross Thermal Energy Generated (MWH)         17. Gross Electrical Energy Generated (MWH)         18. Net Electrical Energy Generated (MWH)         19. Unit Service Factor         20. Unit Availability Factor         21. Unit Capacity Factor (Using MDC Net)         22. Unit Capacity Factor (Using DER Net)		the second se	6.279.9	24,025
14. Hours Generator On-Line       744       0.181.4       20,121         15. Unit Reserve Shutdown Hours       0       0       0         16. Gross Thermal Energy Generated (MWH)       2,517,865       20,441,187       74,060,821         17. Gross Electrical Energy Generated (MWH)       824,510       6,615,970       23,707,800         18. Net Electrical Energy Generated (MWH)       824,510       6,384,976       22,844,141         19. Unit Service Factor       100       70.6       71.3         20. Unit Availability Factor       98.9       67.4       66.6         21. Unit Capacity Factor (Using MDC Net)       97.3       66.3       65.9         22. Unit Capacity Factor (Using DER Net)       0       10.6       14.2		0	0	0
14. Hours Generator On-Line       0       0       0         15. Unit Reserve Shutdown Hours       0       20,441,187       74,060,821         16. Gross Thermal Energy Generated (MWH)       2,517,865       20,441,187       74,060,821         17. Gross Electrical Energy Generated (MWH)       824,510       6,615,970       23,707,800         18. Net Electrical Energy Generated (MWH)       796,211       6,384,976       22,844,141         19. Unit Service Factor       100       70.6       71.3         20. Unit Availability Factor       98.9       67.4       66.6         21. Unit Capacity Factor (Using MDC Net)       97.3       66.3       65.9         22. Unit Capacity Factor (Using DER Net)       0       10.6       14.2		711.	6,181,4	23,221
16. Gross Thermal Energy Generated (MWH)       2,517,865       20,441,187       74,060,821         17. Gross Electrical Energy Generated (MWH)       824,510       6,615,970       23,707,800         18. Net Electrical Energy Generated (MWH)       796,211       6,384,976       22,844,141         19. Unit Service Factor       100       70.6       71.3         20. Unit Availability Factor       98.9       67.4       66.6         21. Unit Capacity Factor (Using MDC Net)       97.3       66.3       65.9         22. Unit Capacity Factor (Using DER Net)       0       10.6       14.2		0	0	0
16. Gross Thermal Energy Cenerated (MWH)       824,510       6,615,970       23,707,800         17. Gross Electrical Energy Generated (MWH)       796,211       6,384,976       22,844,141         18. Net Electrical Energy Generated (MWH)       796,211       6,384,976       22,844,141         19. Unit Service Factor       100       70.6       71.3         20. Unit Availability Factor       98.9       67.4       66.6         21. Unit Capacity Factor (Using MDC Net)       97.3       66.3       65.9         22. Unit Capacity Factor (Using DER Net)       0       10.6       14.2		2 517 965	20 441 187	74 060 921
17. Gross Electrical Energy Generated (MWH)       824,510       0,015,970       22,844,141         18. Net Electrical Energy Generated (MWH)       796,211       6,384,976       22,844,141         19. Unit Service Factor       100       70.6       71.3         20. Unit Availability Factor       98.9       67.4       66.6         21. Unit Capacity Factor (Using MDC Net)       97.3       66.3       65.9         22. Unit Capacity Factor (Using DER Net)       0       10.6       14.2	16. Gross Thermal Energy Generated (MWH)	Constant and the second s		
13. Net Electrical Energy Generated (MWE)       796,211       0,304,370       20,004,370         19. Unit Service Factor       100       70.6       71.3         20. Unit Availability Factor       100       70.6       71.3         21. Unit Capacity Factor (Using MDC Net)       98.9       67.4       66.6         22. Unit Capacity Factor (Using DER Net)       97.3       66.3       65.9         10.6       14.2	17. Gross Electrical Energy Generated (MWH)		6 384 976	
19. Unit Service Factor       100       70.6       71.3         20. Unit Availability Factor       100       70.6       71.3         21. Unit Capacity Factor (Using MDC Net)       98.9       67.4       66.6         22. Unit Capacity Factor (Using DER Net)       97.3       66.3       65.9         20. Unit Capacity Factor (Using DER Net)       0       10.6       14.2	18. Net Electrical Energy Generated (MWE)	and the same of the lot of the same of the sam	terest statements and an and and	
20. Unit Availability Factor     100     70.0     71.9       21. Unit Capacity Factor (Using MDC Net)     98.9     67.4     66.6       22. Unit Capacity Factor (Using DER Net)     97.3     66.3     65.9       10.6     14.2		NAMES AND ADDRESS OF TAXABLE PARTY OF TAXABLE PARTY.	and the second sec	WELL DOWN THE OWNER OF THE OWNER OF THE OWNER
21. Unit Capacity Factor (Using MDC Net)     98.9     67.4     00.0       22. Unit Capacity Factor (Using DER Net)     97.3     66.3     65.9       10.6     14.2		The residence is a sub-section of the section of th		And in the owner of the owner owne
22. Unit Capacity Factor (Using DER Net)010.614.2		structure and the state of the		of the same state of the sam
		97.3	CARD AN INCOME AND	
	23. Unit Forced Outage Rate	0	10.6	14.2

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):

<ol> <li>If Shut Down At End Of Report Period, Estimated Date</li> <li>Units In Test Status (Prior to Commercial Operation):</li> </ol>		Forecast	Achieved
INITIAL CRITICALITY INITIAL ELECTRICITY COMMERCIAL OPERATION	•		
***Corrected Copy - 1-21-82			(4)?

# OPERATING DATA REPORT

DOCKET NO.	50-316
	12/31/81
COMPLETED SY	A. Might
TELEPHONE	616-465-5901

# OPERATING STATUS

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1. Unit Name: Donald C. Cook Plant 2	Notes	
2. Reporting Period: December, 1981		
3. Licensed Thermal Power (MWt):		
4. Nameplate Racing (Gross MWe):1100		
4. Namepiate Kating (Ords Mile): 1100 5. Design Electrical Rating (Net Mile): 1100		1
A Main Description Company (Cross MWe)* 1110		
6. Maximum Dependable Capacity (Gross Mile): 1082		
7. Maximum Dependable Capacity (Net MWe): 1002 8. If Changes Occur in Capacity Ratings (Items Number 3	Through 7) Since Last Report, Give Re:	asons:
8. If Changes Ofer in Capacity Karags (mains . Mainter s		
9. Power Level To Which Repainted, If Any (Net MWe):		and the second second
10. Reasons For Restrictions, I hay:	/	
10. Kessons For Restrictions, in this	. /	
	/	
T /	his Month Yrto-Date	Cumulative
	/	05.000
11. Hours In Reporting Period	8,760	35,064
12. Number Of Hours Remotor Was Critical	6,279.9	24.025
13. Reactor Reserve Shutdown Hours	0	0
14. Hours Generator On-Line	6.181.4	23,221
15. Unit Reserve Shutdown Hours	0 0	0
	7,865 20,441,187	74,060,821
16. Gross Thermal Energy Cenentied (MWH) 2,51 82	7,440,480	23,707,800
17. Gross Alectrical Anergy Generative (in the set	7,181,187	22,844,141
13. Net meetin there's Generates (minter)	100 70.6	71.3
19. Unit Service Factor	100 70.6	71.3
20. Unit Availability Factor	98.9 75.8	66,6
21. Unit Capacity Factor (Using MDC Net)	97.3 74.5	65.9
22. Unit Capacity Factor (Using DER Net)	0 10.6	14.2
23. Unit Forced Outage Rate	and Duration of Eacht	
24. Shutdowns Scheduled Over New 6 Months (Type, Dat		1.
		1
15. If Shut Down At End Of Report Period, Estimated Dat	te of Startup:	
15. If Shut Down At and Or Report Feriod, Estimated Da	Forecast	Achieved
25. Units In Test Status (Prior to Commercial Operation):		
INITIAL CRITICALITY		
INITIAL ELECTRICITY	· · · · · · · · · · · · · · · · · · ·	-
	and the state of the state of the state	
COMMERCIAL OPERATION	·	

DOCKET NO. 50-316 UNIT 2 DATE 12/31/81 COMPLETED BY A. Might

TELEPHONE 616 465-5901

MONT	H December, 1981		
DAY	AVERAGE DAILY POWER LEVEL (MWE-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	1073	17	1063
2	1075	18 .	1075
3	1073	19	1076
4	1070	20	1076
5	1069	21	1074
6	1051	22	1070
7	1072	23	1070
8	1073	24	1071
9	1072	25	1071
10	1072	25	1064
11	1065	27	1069
12	1070	28	1071
13	1071	29	1072
14	1073	30	1063
15	1072	31	1071
16	1069		

# INSTRUCTIONS

On this format list the average daily unit power level in MWe-Net for each day in the reporting month. Compute to the nearest whole megawatt.

						IUTDOWNS ANI REPORT MONTI			DOCKET NO. UNIT NAME DATE COMPLETED BY TELEPHONE PAGE D.C.Cook - Uni 1-14-82 B.A. Svensson (616) 465-5901 D.C.Cook - Uni 1-14-82 (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 #	System Cude <sup>4</sup>	Component Cude <sup>5</sup>	Cause & Corrective Action to Prevent Recurrence
None							•		There were no unit shutdowns or sig- nificant power reductions during the month. The unit operated at a capac- ity factor of 98.9% (Using MDC Net).
1 F: Forced S: Scheduled (9/77)					3-Auto		4 Exhibit G - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG 0161) 5 Exhibit 1 - Same Source		

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Docket No.: 50-316 Unit Name: D. C. Cook Unit #2 Completed By: C. E. Murphy Telephone: (616) 465-5901 Date: January 8, 1982 Page: 1 of 1

## MONTHLY OPERATING ACTIVITIES - DECEMBER, 1981

#### Highlights:

The Unit entered this reporting period operating at 100% power and has operated through the entire period, except for those short periods of time as detailed in the Summary.

Total electrical generation for this month was 824,510 mwh.

#### Summary:

- 12-02-81 The East and West Centrifugal Charging Pumps were inoperable, one at a time, for a 2 hour period each, for the purpose of changing oil.
- 12-04-81 Reactor Power was reduced to 98% for a 2.5 hour period while the Main Turbine Valves were tested.
- 12-06-81 Reactor Power was reduced to 90% for a 5.5 hour period due to the Axial Power Distribution Monitoring System (APDMS) being inoperable.
- 12-10-81 The Auxiliary Building Fire Detection System was inoperable for a 27 hour period. A Fire Watch was established during this period.
- 12-11-81 Reactor Power was reduced to 99% for a 3 hour period to test the Main Turbine Valves.

DOCKET NO. UNIT NAME DATE COMPLETED BY TELEPHONE PAGE 50 - 316 D. C. Cook - Unit No. 2 1-14-82 B. A. Svensson (616) 465-5901 1 of 2

### MAJOR SAFETY-RELATED MAINTENANCE

## DECEMBER, 1981

- M-1 No. 4 steam generator power operated relief valve, MRV-243, had a body-tobonnet leak. Replaced the piston ring and gaskets. Had valve tested.
- M-2 Pressurizer heater molded case circuit breakers on motor control center PHA-2 would not function properly. Replaced and tested two circuit breakers.
- <u>C&I-1</u> WFA-902, nonessential service water flow for reactor coolant pump No. 2 motor air cooler failed to the high end of scale. The circuit board of the transmitter had failed. The transmitter was repaired and the transmitter calibration was performed. Upon returning the transmitter to service, the flow mismatch alarm cleared and normal indication returned.
- C&I-2 Radiation monitoring channel R-11, containment atmosphere particulate, was periodically producing high alarms. The alarm would actuate, however, the drawer alarm would not seal in. The cause of the problem was traced to the bistable board. The board was replaced and the alarm dial calibration was performed.
- <u>C&I-3</u> The main power breaker for the flux mapping system tripped and could not be reset. The circuit breaker was restored to service by utilizing the opposite side of the breaker for switching.
- <u>C&I-4</u> The float control valve on the Unit 2 CD diesel generator jacket water surge tank would not function on a high level indication. The float was found filled with water due to several holes. The float was repaired and the assembly was installed. Normal operation of the control valve was verified.
- <u>C&I-5</u> QRV-251, charging flow control valve failed open. Upon investigation, it was discovered that the bridge amplifier in the Foxboro control module had failed. The bridge amplifier was replaced with a new one and calibrated for proper operation of the valve.
- <u>C&I-6</u> IFC-325, residual heat removal system west pump mini-flow control, would not operate correctly. The transmitter was recalibrated, filled and vented.
- <u>C&I-7</u> Low level alarms for accumulators No. 1 and No. 2 were received with normal control room indication. The instrument loops for ILA-110, ILA-111, ILA-120 and ILA-121 were tested and found to be within specifications. The auxiliary relays for the low alarms functioned intermittently. The relays were replaced with spares and correct operation was verified.

DOCKET NO. UNIT NAME DATE COMPLETED BY TELEPHONE PAGE 50 - 316 D. C. Cook - Unit No. 2 1-14-82 B. A. Svensson (616) 465-5901 2 of 2

## MAJOR SAFETY-RELATED MAINTENANCE

## DECEMBER, 1981

C&I-8

Reactor coolant pump No. 3 oil cooler discharge temperature indication was below the other pumps. The voltage to current converter calibration was tested and determined to be out of specification. The instrument was recalibrated and returned to normal service. System INDIANA & MICHIGAN ELECTRIC COMPANY DONALD C. COOK NUCLEAR PLANT P.O. Box 458, Bridgman, Michigan 49106 (616) 465-5901

January 14, 1982

Director, Office of Management Information and Program Control U. S. Nuclear Regulatory Commission Washington, D.C. 20555

Gentlemen:

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Pursuant to the requirements of Donald C. Cook Nuclear Plant Unit 2 Technical Specification 6.9.1.6, the attached Monthly Operating Report for the Month of December, 1981 is submitted.

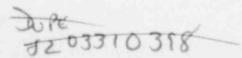
Sincerely,

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

WGS:ab

Attachments

cc: R. S. Hunter J. E. Dolan R. W. Jurgensen NRC Region III E. R. Swanson W. Lavallee (NSAC) R. C. Callen S. J. Mierzwa R. F. Kroeger H. L. Sobel J. D. Huebner J. M. Hennigan A. F. Kozlowski R. F. Hering J. F. Stietzel PNSRC File



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