

N.R.C. OPERATING DATA REPORT

DOCKET NO. 50-315
 DATE 1/4/85
 COMPLETED BY CLIMER
 TELEPHONE 616-465-5901

OPERATING STATUS

1. Unit Name D. C. Cook Unit 1 -----
 2. Reporting Period Dec. 1984 :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	744.0	8784.0	87872.0
12. No. of Hrs. Reactor Was Critical	744.0	8075.8	65693.8
13. Reactor Reserve Shutdown Hours	0.0	0.0	463.0
14. Hours Generator on Line	744.0	8017.8	64361.5
15. Unit Reserve Shutdown Hours	0.0	0.0	321.0
16. Gross Therm. Energy Gen. (MWH)	2115145	24087860	189781573
17. Gross Elect. Energy Gen. (MWH)	686400	7875600	61771890
18. Net Elect. Energy Gen. (MWH)	659477	7550719	59431095
19. Unit Service Factor	100.0	91.3	75.2
20. Unit Availability Factor	100.0	91.3	75.2
21. Unit Capacity Factor (MDC Net)	86.9	84.3	68.1
22. Unit Capacity Factor (DER Net)	86.1	83.5	65.5
23. Unit Forced Outage Rate	0.0	5.0	7.5

24. Shutdowns Scheduled over Next Six Months (Type, Date, and Duration):
 - Surveillance/Maintenance Outage, Estimated January 11, 1985, Two weeks,
 - Refueling and Ten-year Surveillance Outage, Estimated April 1, 1985 - 4 Months.

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		

IE24
 11

AVERAGE DAILY POWER LEVEL (MWe-Net)

DOCKET NO. 50-315
UNIT ONE
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MONTH Dec. 84

DAY	AVERAGE DAILY POWER LEVEL	DAY	AVERAGE DAILY POWER LEVEL
1	741	17	1023
2	907	18	1025
3	1024	19	1026
4	1025	20	1025
5	1026	21	1006
6	1025	22	808
7	915	23	691
8	986	24	690
9	825	25	689
10	1026	26	687
11	1028	27	689
12	799	28	691
13	964	29	691
14	1023	30	690
15	1022	31	690
16	1022		

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH December, 1984

DOCKET NO. 50-315
 UNIT NAME D.C. Cook - Unit 1
 DATE 1-5-85
 COMPLETED BY B.A. Svensson
 TELEPHONE 616/465-5901
 PAGE 1 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
237	841207	F	0	B	4	N.A.	HC	HTEXCH	Reactor power reduced to 80% for main condenser tube leak checks. Two leaking tubes were plugged. Reactor power was returned to 100% the same day.
238	841208	F	0	B	4	N.A.	HH	HTEXCH	Reactor power reduced to 55% to permit removal of the east main feed pump from service to check the F-P Turbine Condenser for tube leaks. Reactor power was returned to 100% on 841209.
239	841212	F	0	B	4	N.A.	HH	HTEXCH	Reactor power was reduced to 57% to permit removal of the east main feed pump from service to check the F-P Turbine Condenser for tube leaks. One leaking tube was plugged. Reactor power was returned to 100% the same day.

¹
 F: Forced
 S: Scheduled

²
 Reason:
 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

UNIT SHUTDOWNS AND POWER REDUCTIONS

INSTRUCTIONS

This report should describe all plant shutdowns during the report period. In addition, it should be the source of explanation of significant dips in average power levels. Each significant reduction in power level (greater than 10% reduction in average daily power level for the preceding 24 hours) should be noted, even though the unit may not have been shut down completely¹. For such reductions in power level, the duration should be listed as zero, the method of reduction should be listed as 4 (Other), and the Cause and Corrective Action to Prevent Recurrence column should explain. The Cause and Corrective Action to Prevent Recurrence column should be used to provide any needed explanation to fully describe the circumstances of the outage or power reduction.

NUMBER. This column should indicate the sequential number assigned to each shutdown or significant reduction in power for that calendar year. When a shutdown or significant power reduction begins in one report period and ends in another, an entry should be made for both report periods to be sure all shutdowns or significant power reductions are reported. Until a unit has achieved its first power generation, no number should be assigned to each entry.

DATE. This column should indicate the date of the start of each shutdown or significant power reduction. Report as year, month, and day. August 14, 1977 would be reported as 770814. When a shutdown or significant power reduction begins in one report period and ends in another, an entry should be made for both report periods to be sure all shutdowns or significant power reductions are reported.

TYPE. Use "F" or "S" to indicate either "Forced" or "Scheduled," respectively, for each shutdown or significant power reduction. Forced shutdowns include those required to be initiated by no later than the weekend following discovery of an off-normal condition. It is recognized that some judgment is required in categorizing shutdowns in this way. In general, a forced shutdown is one that would not have been completed in the absence of the condition for which corrective action was taken.

DURATION. Self-explanatory. When a shutdown extends beyond the end of a report period, count only the time to the end of the report period and pick up the ensuing down time in the following report periods. Report duration of outages rounded to the nearest tenth of an hour to facilitate summation. The sum of the total outage hours plus the hours the generator was on line should equal the gross hours in the reporting period.

REASON. Categorize by letter designation in accordance with the table appearing on the report form. If category H must be used, supply brief comments.

METHOD OF SHUTTING DOWN THE REACTOR OR REDUCING POWER. Categorize by number designation

¹Note that this differs from the Edison Electric Institute (EEI) definitions of "Forced Partial Outage" and "Scheduled Partial Outage." For these terms, EEI uses a change of 50 MW as the break point. For larger power reactors, 30 MW is too small a change to warrant explanation.

in accordance with the table appearing on the report form. If category 4 must be used, supply brief comments.

LICENSEE EVENT REPORT =. Reference the applicable reportable occurrence pertaining to the outage or power reduction. Enter the first four parts (event year, sequential report number, occurrence code and report type) of the five part designation as described in Item 17 of Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-0161). This information may not be immediately evident for all such shutdowns, of course, since further investigation may be required to ascertain whether or not a reportable occurrence was involved.) If the outage or power reduction will not result in a reportable occurrence, the positive indication of this lack of correlation should be noted as not applicable (N/A).

SYSTEM CODE. The system in which the outage or power reduction originated should be noted by the two digit code of Exhibit G - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-0161).

Systems that do not fit any existing code should be designated XX. The code ZZ should be used for those events where a system is not applicable.

COMPONENT CODE. Select the most appropriate component from Exhibit I - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-0161), using the following criteria:

- A. If a component failed, use the component directly involved.
- B. If not a component failure, use the related component; e.g., wrong valve operated through error: list valve as component.
- C. If a chain of failures occurs, the first component to malfunction should be listed. The sequence of events, including the other components which fail, should be described under the Cause and Corrective Action to Prevent Recurrence column.

Components that do not fit any existing code should be designated XXXXXX. The code ZZZZZZ should be used for events where a component designation is not applicable.

CAUSE & CORRECTIVE ACTION TO PREVENT RECURRENCE. Use the column in a narrative fashion to amplify or explain the circumstances of the shutdown or power reduction. The column should include the specific cause for each shutdown or significant power reduction and the immediate and contemplated long term corrective action taken, if appropriate. This column should also be used for a description of the major safety-related corrective maintenance performed during the outage or power reduction including an identification of the critical path activity and a report of any single release of radioactivity or single radiation exposure specifically associated with the outage which accounts for more than 10 percent of the allowable annual values.

For long textual reports continue narrative on separate paper and reference the shutdown or power reduction for this narrative.

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH December, 1984

DOCKET NO. 50-315
 UNIT NAME D.C. Cook - Unit 1
 DATE 1-5-85
 COMPLETED BY B.A. Svensson
 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
240	841222	F	0	F	4	N.A.	HC	HTEXCH	Reactor power initially reduced to 80% for main condenser tube leak checks. Reactor power further reduced to 70% due to low System load demand. Reactor power remained at 70% at the end of the month at the System's request.

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 S: Scheduled

²
 Reason:
 A-Equipment Failure (Explain)
 B-Maintenance or Test
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 E-Operator Training & License Examination
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(9/77)

UNIT SHUTDOWNS AND POWER REDUCTIONS

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This report should describe all plant shutdowns during the report period. In addition, it should be the source of explanation of significant dips in average power levels. Each significant reduction in power level (greater than 20% reduction in average daily power level for the preceding 24 hours) should be noted, even though the unit may not have been shut down completely¹. For such reductions in power level, the duration should be listed as zero, the method of reduction should be listed as 4 (Other), and the Cause and Corrective Action to Prevent Recurrence column should explain. The Cause and Corrective Action to Prevent Recurrence column should be used to provide any needed explanation. Fully describe the circumstances of the outage or power reduction.

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For long textual reports continue narrative on separate paper and reference the shutdown or power reduction for this narrative.

Docket No.: 50-315
Unit Name: D.C. Cook Unit 1
Completed By: A. S. Puplis
Telephone: (616) 465-5901
Date: January 02, 1985
Page: 1 of 2

MONTHLY OPERATING ACTIVITIES - DECEMBER, 1984

HIGHLIGHTS:

The Unit entered the reporting period in Mode 1 at 75% rated thermal power due to main condenser leak checks. The Unit reached 100% at noon on 12-2-84. Major power reductions occurred for the following reasons:

- 1) To remove "B" North Condenser half from service for tube leak checks.
- 2) To remove "E" Main Feed Pump Turbine Condenser from service for tube leak checks.
- 3) To meet system load demand which required the Unit be at 70% rated thermal power.

The Unit ended the reporting period at 70% rated thermal power.

Total electrical generation for the month was 686,400 MWH.

SUMMARY:

- 12-2-84 At 0740 power was increased to 100% which was achieved at 1200 on 12-2-84.
- 12-4-84 At 1415, power operated relief valve block valve, NMO 151 was tested and found to be inoperable.
- 12-7-84 At 0830 Reactor power was decreased to 80% to take "B" North Condenser half out of service for tube leak checks.
- 12-7-84 At 2150, Reactor power being increased to 100% power which was achieved at 0321 on 12-8-84.
- 12-8-84 At 1950, Reactor power was decreased to 55% to take the "E" Main Feed Pump Turbine Condenser out of service for tube leak checks.
- 12-9-84 At 0600, Reactor power being increased to 100%, which was reached at 1325 on 12-9-84.
- 12-12-84 At 1200, Reactor power was decreased to 57% to take the "E" Main Feed Pump Condenser out of service for tube leak checks.

Docket No.: 50-315
Unit Name: D.C. Cook Unit 1
Completed By: A. S. Puplis
Telephone: (616) 465-5901
Date: January 02, 1985
Page: 2 of 2

- 12-12-84 At 2225, Reactor power being increased to 100% which was reached at 0715 on 12-13-84.
- 12-22-84 At 0830 Reactor power was decreased to 80% to remove the "B" North Condenser from service for apparent tube leaks.
- 12-22-84 At 1114 Reactor power was further decreased to 70% per System demand.
- 12-24-84 At 1207, a failed bearing was discovered in the speed increaser of the East Centrifugal Charging Pump.

The Control Room Cable Vault Halon System remains inoperable as of 1400 hours on 4-05-83. The backup CO₂ System for the Control Room Cable Vault remains operable.

DOCKET NO. 50 - 315
UNIT NAME D. C. Cook - Unit No. 1
DATE 1-4-85
COMPLETED BY B. A. Svensson
TELEPHONE (616) 465-5901
PAGE 1 of 1

MAJOR SAFETY-RELATED MAINTENANCE

DECEMBER, 1984

- M-1 Replaced all internal parts on No. 3 S/G Stop Trip Valve MRV-231, as required to eliminate seat leakage. Post-repair functional testing was performed to verify valve operability.
- M-2 The speed increaser for the East Centrifugal Charging Pump failed and had to be replaced with a spare unit.



INDIANA & MICHIGAN ELECTRIC COMPANY

Donald C. Cook Nuclear Plant
P.O. Box 458, Bridgman, Michigan 49106

January 4, 1985

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

Gentlemen:

Pursuant to the requirements of Donald C. Cook Nuclear Plant Unit 1
Technical Specification 6.9.1.6, the attached Monthly Operating
Report for the Month of December, 1984 is submitted.

Sincerely,

W. G. Smith, Jr.
Plant Manager

WGS:ab

Attachments

cc: J. E. Dolan
M. P. Alexich
R. W. Jurgensen
NRC Region III
B. L. Jorgensen
R. O. Bruggee (NSAC)
R. C. Calen
S. J. Mierzwa
R. F. Kroeger
B. H. Bennett
P. D. Rennix
J. H. Hennigan
Z. Cordero
J. J. Markowsky
J. F. Stietzel
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ANI Nuclear Engineering Department

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