

OPERATING DATA REPORT

DOCKET NO. 50-316
 DATE 7-2-84
 COMPLETED BY W.T. Gillett
 TELEPHONE 616-55-5901

OPERATING STATUS

1. Unit Name: 2
2. Reporting Period: June 1984
3. Licensed Thermal Power (MWt): 3391
4. Nameplate 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 Number 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 Month | Yr.-to-Date | Cumulative |
|---|------------|-------------|-------------|
| 11. Hours In Reporting Period | 720 | 4367 | 56,951 |
| 12. Number Of Hours Reactor Was Critical | - | 1636.8 | 39,422 |
| 13. Reactor Reserve Shutdown Hours | - | 0 | 0 |
| 14. Hours Generator On-Line | - | 1628.0 | 38,428.1 |
| 15. Unit Reserve Shutdown Hours | - | 0 | 0 |
| 16. Gross Thermal Energy Generated (MWH) | - | 5,405,184 | 123,878,152 |
| 17. Gross Electrical Energy Generated (MWH) | - | 1,793,180 | 40,019,790 |
| 18. Net Electrical Energy Generated (MWH) | - | 1,731,606 | 38,584,977 |
| 19. Unit Service Factor | - | 37.3 | 70.3 |
| 20. Unit Availability Factor | - | 37.3 | 70.3 |
| 21. Unit Capacity Factor (Using MEC Net) | - | 37.2 | 67.2 |
| 22. Unit Capacity Factor (Using DER Net) | - | 36.0 | 66.0 |
| 23. Unit Forced Outage Rate | - | 1.9 | 13.4 |

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

December, 1984 - 3 Weeks - Surveillance Outage.

25. If Shut Down At End Of Report Period, Estimated Date of Startup: July 10, 1984.

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

Forecast

Achieved

INITIAL CRITICALITY
 INITIAL ELECTRICITY
 COMMERCIAL OPERATION

8407270336 840630
 PDR ADOCK 05000316
 R PDR

IE24

(1/77)

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-316

UNIT 2

DATE 7/2/84

COMPLETED BY A. Might

TELEPHONE (616) 465-5901

MONTH June 1984

DAY AVERAGE DAILY POWER LEVEL
(MWE-Net)

| | |
|----|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | - |
| 6 | - |
| 7 | - |
| 8 | - |
| 9 | - |
| 10 | - |
| 11 | - |
| 12 | - |
| 13 | - |
| 14 | - |
| 15 | - |
| 16 | - |

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

| | |
|----|---|
| 17 | - |
| 18 | - |
| 19 | - |
| 20 | - |
| 21 | - |
| 22 | - |
| 23 | - |
| 24 | - |
| 25 | - |
| 26 | - |
| 27 | - |
| 28 | - |
| 29 | - |
| 30 | - |
| 31 | - |

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.

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH JUNE, 1984

DOCKET NO. 50-316
UNIT NAME D.C. Cook-Unit 2
DATE 7-3-84
COMPLETED BY B.A. Svensson
TELEPHONE 616/465-5901
PAGE 1 of 1

| 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 |
|----------------|--------|-------------------|---------------------|---------------------|--|-------------------------------|-----------------------------|--------------------------------|--|
| 147 Cont'd. | 840310 | S | 720 | B&C | 1 | N.A. | ZZ | ZZZZZZ | The Unit was removed from service on 840310 for scheduled Cycle IV-V refueling/maintenance outage. The refueling and all outage work is essentially completed. Steam generator crevice flushing has been completed and reactor coolant system heatup is presently in progress. |

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

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 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 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 30 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:

- If a component failed, use the component directly involved.
- If not a component failure, use the related component; e.g., wrong valve operated through error; list valve as component.
- 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 ZZZZZ 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.

Docket No.: 50-316
Unit Name: D. C. Cook Unit 2
Completed By: G. J. Peak
Telephone: (616) 465-5901
Date: 07/05/84
Page: 1 of 1

MONTHLY OPERATING ACTIVITIES - JUNE 1984

Highlights:

The Unit entered the reporting period in Mode 5 with the Reactor Coolant System at the half loop elevation following the fourth refueling of the Reactor. The Reactor Coolant System was filled and vented and as the reporting period came to an end the Unit was in Mode 3 at operating temperature. The containment integrated leak rate test was successfully completed during the reporting period.

Summary:

- 6/9/84 The East Residual Heat Removal Pump was inoperable for a 15 hour period to repair a discharge sample valve.
- 6/11/84 The West Residual Heat Removal Loop was inoperable from 2030 hours on 6/11/84 to 1410 hours on 6/13/84 due to repairs being made on the Component Cooling Water System.
- 6/26/84 Mode 4 was entered at 1915 hours.
- 7/1/84 Mode 3 was entered at 0438 hours.

The Control Room Cable Vault Halon System remains inoperable as of 1707 hours on 4/14/83. The backup CO₂ System remains operable.

| | |
|--------------|-------------------------|
| DOCKET NO. | 50 - 316 |
| UNIT NAME | D. C. Cook - Unit No. 2 |
| DATE | 7-3-84 |
| COMPLETED BY | B. A. Svensson |
| TELEPHONE | (616) 465-5901 |
| PAGE | 1 of 2 |

MAJOR SAFETY-RELATED MAINTENANCE

JUNE, 1984

- M-1 Equalizing line for RH-127E developed a weld leak at the flange joint. The tubing was refitted and welded eliminating the defective portion.
- M-2 A weld leak was observed on the CCW line to #21 Reactor Coolant Pump lower motor bearing. The cracked weld was ground out and rewelded.
- M-3 The lower oil reservoir on #21 Reactor Coolant Pump Motor developed a leak between the copper tubing and reservoir plate. The leaking joint was cleaned and resoldered.
- M-4 Check Valve #RHR-141 was found to be leaking through. The valve was disassembled, lapped and checked for proper seating surface contact. Upon reassembly, leak rate testing was performed satisfactorily.
- M-5 The AB Emergency Diesel Generator tripped due to low lube oil pressure. Inspection of the lube oil foot valve revealed a damaged gasket, which caused low oil pressure. A new gasket was installed.
- M-6 The outer and inner 612' personnel airlock door compression seals were replaced using EPDM type seals and the 650 and 612 inner and outer personnel airlock door window gaskets were replaced using EPDM type gaskets.
- M-7 The boron injection tank outlet valves, ICM-250 and ICM-251, were observed to be leaking through. Upon disassembly, the seating surfaces were lapped until a proper contact pattern was obtained.
- M-8 ECR-31, Containment Air Monitor isolation was observed to be leaking through excessively. After disassembly and upon reassembly; the plug, seat, cage, and gaskets were replaced.
- M-9 Containment Air Monitor isolation valve, ECR-35, was observed to be leaking through excessively. Machining of seating surfaces was performed to obtain proper surface contact. The valve was also repacked.
- M-10 CMO-416, Component Cooling Water to miscellaneous services required excessive force to operate. The 16" centerline valve was replaced with a new Pratt valve. Functional testing was performed satisfactorily and the valve was returned to service.

| | |
|--------------|-------------------------|
| DOCKET NO. | 50 - 316 |
| UNIT NAME | D. C. Cook - Unit No. 2 |
| DATE | 7-3-84 |
| COMPLETED BY | B. A. Svensson |
| TELEPHONE | (616) 465-5901 |
| PAGE | 2 of 2 |

MAJOR SAFETY-RELATED MAINTENANCE

JUNE, 1984

- M-11 RH-114E, Sample Isolation Valve was observed to be leaking through. The valve bonnet was removed, and the seating surfaces lapped until a proper seating contact pattern was obtained. RH-114E was then reassembled and returned to service.
- M-12 ICM-305, Containment Sump to 2E RHR pump was found to be leaking through excessively. Upon disassembly, the seating surfaces were lapped until a proper contact pattern was obtained. The valve was then reassembled and leak rate tested.
- M-13 The Containment Air Monitor Isolation valve, #ECR-31, was observed to be leaking through excessively. The valve was disassembled, and seating surfaces were lapped to obtain proper seating surface contact. ECR-31 was then reassembled and leak rate tested.
- M-14 During B&C Leak Rate Testing, CPN-4 was observed to have a leak. Upon inspection, one hole was found in the bellows and was repaired by welding.
- M-15 Upon inspection of the #23 Reactor Coolant Pump seals, the following parts were replaced: #1 insert, #2 seal and insert, #3 seal and runner, all O-rings, and seal water Flex-gaskets. The pump was then aligned and coupled.
- M-16 The RHR discharge safety valve, #SV-104E, was found to be leaking through. The valve was rebuilt replacing the disc, pin, nozzle and gaskets. Upon reassembly, SV-104E was set at 600 lbs., tested and reinstalled into the system.
- C&I-1 On 2CD diesel the fuel rack trip cylinder shuttle valve was blowing air out of the exhaust port. The diaphragm on the shuttle valve was found to have a hole in it. The valve was replaced.



INDIANA & MICHIGAN ELECTRIC COMPANY

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

July 3, 1984

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 2
Technical Specification 6.9.1.6, the attached Monthly Operating
Report for the Month of June, 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
E. R. Swanson
R. O. Bruggee (NSAC)
R. C. Callen
S. J. Mierzwa
R. F. Kroeger
B. H. Bennett
J. D. Huebner
J. H. Hennigan
A. F. Kozlowski
R. F. Hering
J. F. Stietzel
PNSRC File
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ANI Nuclear Engineering Department

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