

OPERATING DATA REPORT

DOCKET NO. 50-315
 DATE 7/2/84
 COMPLETED BY W.T. Gillet
 TELEPHONE 616-465-590

OPERATING STATUS

1. Unit Name: D. C. Cook 1
 2. Reporting Period: June 1984
 3. Licensed Thermal Power (MWt): 3250
 4. Nameplate 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

Notes

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. Reasons For Restrictions, If Any:

	This Month	Yr-to-Date	Cumulative
11. Hours In Reporting Period	720	4367	83,255
12. Number Of Hours Reactor Was Critical	606.2	4007.1	61,625.1
13. Reactor Reserve Shutdown Hours	-	-	463
14. Hours Generator On-Line	598.4	3975.6	60,319.3
15. Unit Reserve Shutdown Hours	-	-	321
16. Gross Thermal Energy Generated (MWH)	1,861,180	12,078,272	176,422,328
17. Gross Electrical Energy Generated (MWH)	607,910	3,969,190	57,895,480
18. Net Electrical Energy Generated (MWE)	585,850	3,822,362	55,702,702
19. Unit Service Factor	83.1	91.0	74.3
20. Unit Availability Factor	83.1	91.0	74.3
21. Unit Capacity Factor (Using MDC Net)	79.8	85.8	67.3
22. Unit Capacity Factor (Using DER Net)	79.0	85.0	64.5
23. Unit Forced Outage Rate	16.9	9.0	7.9

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):
 September, 1984 - 3 Weeks - Surveillance Outage.

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

8407270377 840630
 PDR ADOCK 05000315
 R PDR

(4/77)

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-315

UNIT 1

DATE 7/2/84

COMPLETED BY A. Might

TELEPHONE (616) 465-5901

MONTH June 1984

DAY AVERAGE DAILY POWER LEVEL
(MWE-Net)

1	<u>1030</u>
2	<u>1029</u>
3	<u>1031</u>
4	<u>1030</u>
5	<u>1030</u>
6	<u>1030</u>
7	<u>1029</u>
8	<u>1028</u>
9	<u>1021</u>
10	<u>1019</u>
11	<u>1028</u>
12	<u>1030</u>
13	<u>1030</u>
14	<u>1029</u>
15	<u>1029</u>
16	<u>1020</u>

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

17	<u>505</u>
18	<u>-</u>
19	<u>-</u>
20	<u>-</u>
21	<u>-</u>
22	<u>10</u>
23	<u>477</u>
24	<u>864</u>
25	<u>1024</u>
26	<u>1020</u>
27	<u>1017</u>
28	<u>1015</u>
29	<u>1016</u>
30	<u>1025</u>
31	<u>-</u>

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 number.

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH JUNE, 1984

DOCKET NO. 50-315
 UNIT NAME D.C. Cook - Unit 1
 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
223	840616	F	0	B	4	N.A.	HH	HTEXCH	Reactor power reduced to 58% to remove the west main feed pump from service to check the feed pump turbine condenser for tube leaks. No leaks were found.
224	840617	F	121.6	A	3	84-008-0	IA & IB	INSTRU	During the power ascension from the feed pump outage a reactor trip occurred from 68% power. The cause of the trip was the failure of vital A.C. instrument bus, CRID IV. The CRID failure also caused safety injection actuation on Train A. Following repairs to CRID IV and other unrelated maintenance, the Unit was returned to service on 840622 and 100% power was reached on 840624.

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

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:

- 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.

Docket No.: 50-315
Unit Name: D. C. Cook Unit 1
Completed By: G. J. Peak
Telephone: (616) 465-5901
Date: 7/5/84
Page: 1 of 2

MONTHLY OPERATING ACTIVITIES - JUNE 1984

Highlights:

The Unit entered the reporting period in Mode 1 at 100% rated thermal power. The Unit tripped and a Train A Safety Injection occurred on June 17, 1984 due to the failure of the CRID IV inverter. The CRID IV inverter failure was caused by a blown capacitor. The Unit was subsequently returned to service and as the reporting period came to an end the Unit was operating at 100% power. A major power reduction occurred to remove the West Main Feedpump from service for a condenser tube leak check.

Total electrical generation for the month was 607,910 MWH.

Summary:

- 6/7/84 The East Motor Driven Auxiliary Feedwater Pump was inoperable from 1015 hours on 6/7/84 to 1355 hours on 6/9/84 for work on the suction safety valve.
- The CD Diesel Generator was inoperable for a 5.5 hour period for work on the governor.
- 6/10/84 The East Motor Driven Auxiliary Feedwater Pump was inoperable for a 6 hour period due to an improperly functioning emergency leak off valve.
- 6/13/84 The CD Diesel Generator was inoperable for a 20 hour period due to problems with the governor.
- 6/16/84 A power reduction to 58% at 5% per hour began at 2230 hours to remove the West Main Feedpump from service for a condenser tube leak check.
- 6/17/84 The 58% power level was reached at 0745 hours. The West Main Feedpump Turbine Condenser was leak checked and a power increase started at 1640 hours. During this power increase at about 68% at 2034 hours the Unit tripped and a Train A Safety Injection occurred. The cause was the failure of the CRID IV inverter which failed due to a blown capacitor.
- 6/22/84 The reactor was made critical again at 1423 hours. Mode 1 was entered at 2047 hours. The Main Turbine was rolled at 2118 hours. The Main Generator was paralleled at 2215 hours.

Docket No.: 50-315
Unit Name: D. C. Cook Unit 1
Completed By: G. J. Peak
Telephone: (616) 465-5901
Date: 7/5/84
Page: 2 of 2

Summary: (continued)

6/24/84 The Unit reacted 100% power at 2040 hours.

The Control Room Cable Vault Halon System remains inoperable as of 1400 hours on 4/5/83. The backup CO₂ system for the Control Room Cable Vault remains operable.

DOCKET NO.	<u>50 - 315</u>
UNIT NAME	<u>D. C. Cook - Unit No. 1</u>
DATE	<u>7-3-84</u>
COMPLETED BY	<u>B. A. Svensson</u>
TELEPHONE	<u>(616) 465-5901</u>
PAGE	<u>1 of 1</u>

MAJOR SAFETY-RELATED MAINTENANCE

JUNE, 1984

- M-1 East Motor Driven Auxiliary Feed Pump test valve, #FRV-255, was found to be leaking through. Upon removal of the valve bonnet, pieces of metal were found holding the valve plug open. The piping was cleaned and inspected using a Bore-scope. FRV-255 was then reassembled installing a new plug, cage and gaskets.
- M-2 East Motor Driven Auxiliary Feed Pump discharge check valve, #FW-128, was observed to be leaking through. Inspection of the seating surfaces after disassembly failed to reveal any discrepancies. The piping was checked for foreign material, none was found. The valve was then reassembled and returned to service.
- M-3 The ice condenser top deck door above Bay II was allowing air flow to enter into the ice condenser which caused ice build-up on the intermediate deck doors. Tape was replaced on the top deck door to prevent air/moisture leakage.
- C&I-1 CD Diesel's inverter failed. Two (2) bad capacitors were found to be the problem. The capacitors were replaced.
- C&I-2 During installation of RFC-12-1858 (replacement of CRID inverter commutating capacitors C-2) a leaking C-1 was found in CRID I inverter. All capacitors in the bank were replaced.



INDIANA & MICHIGAN ELECTRIC COMPANY

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

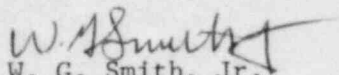
July 3, 1984

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 1
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
INPO Records Center
ANI Nuclear Engineering Department

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