OPERATING DATA REPORT

DOCKET NO. 50-316
DATE 5-3-84
COMPLETED BY W.T. Gillett
TELEPHONE 616-465-5901

OPERATING STATUS

1. Unit Name: Donald C. Cook 2
2. Reporting Period: April 1984
3. Licensed Thermal Power (MWt): 3411
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	719	2,903	55,487
12. Number Of Hours Reactor Was Critical	-	1,636.8	39,422
13. Reactor Reserve Shutdown Hours	-	-	-
14. Hours Generator On-Line	-	1,628	38,428.1
15. Unit Reserve Shutdown Hours	-	-	-
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	-	56.1	72.3
20. Unit Availability Factor	-	56.1	72.3
21. Unit Capacity Factor (Using MDC Net)	-	55.9	69.2
22. Unit Capacity Factor (Using DER Net)	-	54.2	67.9
23. Unit Forced Outage Rate	-	1.9	13.4

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

25. If Shut Down At End Of Report Period, Estimated Date of Startup: June 20, 1984
26. Units In Test Status (Prior to Commercial Operation):

	Forecast	Achieved
INITIAL CRITICALITY	-	
INITIAL ELECTRICITY		
COMMERCIAL OPERATION		

IE24

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-316

UNIT 2

DATE 5-2-84

COMPLETED BY W.T. Gillett

TELEPHONE 616-465-5901

MONTH April - 1984

DAY	AVERAGE DAILY POWER LEVEL (MWE-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	0	17	0
2	0	18	0
3	0	19	0
4	0	20	0
5	0	21	0
6	0	22	0
7	0	23	0
8	0	24	0
9	0	25	0
10	0	26	0
11	0	27	0
12	0	28	0
13	0	29	0
14	0	30	0
15	0	31	0
16	0		

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 [illegible]

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH APRIL, 1984

DOCKET NO. 50-316
UNIT NAME D.C. Cook - Unit 2
DATE 5-7-84
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	840310	S	728	B&C	1	N.A.	ZZ	ZZZZZZ	The Unit was removed from service on 840310 for scheduled Cycle IV - V refueling/maintenance outage. Refueling activities are presently in progress. Estimated return to service date is 840620.

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 completely[1]. 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 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.

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[1] Note 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 20 MW as the break point. For larger power reactors, 20 MW is too small a change to warrant explanation.

Docket No.: 50-316
Unit Name: D. C. Cook Unit 2
Completed By: G. J. Peak
Telephone: (616) 465-5901
Date: 5/7/84
Page: 1 of 1

MONTHLY OPERATING ACTIVITIES - APRIL 1984

Highlights:

The Unit entered the reporting period in Mode 5 with preparations underway for the fourth refueling of the reactor. The unloading of the core began on 4/18/84 but had to be stopped on 4/20/84 due to an inoperable source range instrument. The core unloading began again on 4/26/84 as Technical Specification Amendment 62 was received which allowed the removal of the last thirty fuel assemblies from the vessel with only one source range instrument operable. The core unloading was then completed on 4/26/84. Diesel Generator AB failed twice this reporting period as it tripped on overspeed both times. In accordance with Technical Specification 4.8.1.1.2a, the testing frequency of both Unit 2 Diesel Generators is now seven days. As the reporting period came to an end, all fuel was in the spent fuel pit waiting to be moved into the vessel.

Total electrical generation for the month was 0 MWH.

Summary:

4/4/84 An Unusual Event was declared at 1115 hours due to both Diesel Generators being inoperable. AB Diesel Generator was declared operable at 1248 hours and the Unusual Event was terminated.

4/5/84 Mode 6 was entered at 0545 hours.

4/16/84 An Unusual Event was declared at 0006 hours due to both Diesel Generators being inoperable.

4/17/84 AB Diesel Generator was declared operable at 0330 hours and the Unusual Event was terminated.

4/18/84 The core unloading began at 0032 hours.

4/20/84 Source range instrument N-32 was declared inoperable at 2322 hours and all fuel movement was stopped.

4/26/84 The core unloading began again at 1347 hours as Technical Specification Amendment 62 was received which allowed the removal of the last thirty fuel assemblies from the vessel with only one source range instrument. The core unload was complete at 2300 hours.

The Control Room Cable Vault Halon System remains inoperable as of 1707 hours on 4/14/83. The backup CO_2 System remains operable.

DOCKET NO.	50 - 316
UNIT NAME	D. C. Cook - Unit No. 2
DATE	5-7-84
COMPLETED BY	B. A. Svensson
TELEPHONE	(616) 465-5901
PAGE	1 of 1

MAJOR SAFETY-RELATED MAINTENANCE

APRIL, 1984

M-1 IMO-51, bit injection to loop 1 cold leg would not open. The limitorque was disassembled replacing the declutching shaft, tripper bar and fingers, tripper bar spacer, tripper bushings, repacked with grease and reassembled. Functional testing was performed satisfactorily following replacement of the control transformer.

M-2 Check valve FW-132-1, auxiliary feedwater to #1 steam generator was reported to be leaking by. Machined the seating surfaces of the clapper and lapped the valve seat. The valve was reassembled and returned to service following repairs.

M-3 Unit 2 east centrifugal charging pump cladding was found to have cracks and/or indications. The indications were removed and cracks were rewelded.

M-4 The #4 main bearing on the Unit 2 CD Emergency Diesel was inspected and replaced. Bearing replacement was required due to both bearing halves showing evidence of movement.

M-5 Performed 18-month surveillance inspection of the Unit 2 CD Emergency Diesel. Minor discrepancies were observed and corrected.

M-6 The west residual heat removal pump was removed from service for repair of the leaking mechanical seal. The pump was disassembled, the seal was inspected and adjusted for proper seal surface contact. The pump was reassembled, tested and returned to service.

M-7 VCR-205, upper containment purge supply was observed to be leaking by excessively. The valve was removed from service and sent out for repairs. Functional testing was performed satisfactorily after reinstallation.

M-8 The east RHR loop 1 and 4 injection line check valve, #SI-151E, was observed to have a body-to-bonnet leak. The bonnet was removed, gaskets replaced and retorqued to 1000 ft. lbs.

C&I-1 Vital instrument bus inverter, CRID 4, failed. Capacitor C-2 had shorted, destroying the associated diodes and SCR's. The components were replaced and the CRID was returned to service.

American Electric Power System
INDIANA & MICHIGAN ELECTRIC COMPANY
Donald C. Cook Nuclear Plant
P.O. Box 458, Bridgman, Michigan 49106

May 7, 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 April, 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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