OPERATING DATA REPORT

DOCKET NO. 50-316
DATE 3-6-84
COMPLETED BY W. T. Gillet
TELEPHONE 616-465-5901

OPERATING STATUS

1. Unit Name: Donald C. Cook 2
2. Reporting Period: February 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	696	1,440	49,425
12. Number Of Hours Reactor Was Critical	672.2	1,416.7	39,201.4
13. Reactor Reserve Shutdown Hours	0	0	0
14. Hours Generator On-Line	663.9	1,407.9	38,208
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	2,235,476	6,906,683	123,144,175
17. Gross Electrical Energy Generated (MWH)	738,120	1,548,680	39,775,290
18. Net Electrical Energy Generated (MWH)	713,057	1,495,371	38,348,742
19. Unit Service Factor	95.4	97.8	74.0
20. Unit Availability Factor	95.4	97.8	74.0
21. Unit Capacity Factor (Using MDC Net)	96.7	97.3	70.7
22. Unit Capacity Factor (Using DER Net)	93.1	94.4	69.5
23. Unit Forced Outage Rate	4.6	2.2	13.5

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):
Refueling outage 3/9/84 90 days

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

(9/77)

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-316

UNIT 2

DATE 3-6-84

COMPLETED BY W. T. Gillett

TELEPHONE 616-465-5901

MONTH February 1984

DAY	AVERAGE DAILY POWER LEVEL (MWE-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	1101	17	1078
2	1100	18	134
3	1100	19	217
4	1096	20	1014
5	1096	21	1067
6	1098	22	1068
7	1096	23	1083
8	1101	24	1069
9	1099	25	1086
10	1092	26	1090
11	1090	27	1095
12	1101	28	1097
13	1080	29	1101
14	1087	30	-
15	1094	31	-
16	1079		

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 FEBRUARY, 1984

DOCKET NO. 50-316
UNIT NAME D.C. Cook - Unit 2
DATE 3-8-84
COMPLETED BY B.A. Svensson
TELEPHONE 616/465-5901

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
146	840218	F	32.1	G	3	84-002	HJ	ZZZZZZ	The Unit tripped due to an apparent high water level in one of the moisture separator reheater, MSR, shells. The trip occurred while recovering from an automatic isolation of the MSR coils due to a cycle upset following turbine control valve testing. While attempting to repressurize the MSR coils an operating error was committed which rapidly admitted full pressure main steam to the South set of MSR coils. It is believed that this caused a vibration that shook the MSR shell high water level trip switch which resulted in the Unit trip from a false indication of high level. No apparent damage resulted. The Unit was returned to service on 840219 and reached 100% reactor power on 840220.

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 critieria:

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.

[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 30 MW as the break point. For larger power reactors, 30 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: 3/8/84
Page: 1 of 1

MONTHLY OPERATING ACTIVITIES - FEBRUARY 1984

Highlights:

The Unit entered the reporting period in Mode 1 with the reactor at 100% of rated thermal power. The Unit tripped on Feb. 18, 1984 due to high level in the Moisture Separator Reheaters while they were being put into service. A reactor startup commenced the next day and the Unit was subsequently loaded to 100% of rated thermal power where it operated the balance of the reporting period.

Preparations are being made for the fourth refueling outage which is scheduled to begin on March 9, 1984.

Total electrical generation for the month was 783,120 MWH.

Summary:

2/18/84 The Unit tripped at 0256 hours due to high level in the Moisture Separator Reheaters while they were being put into service.

2/19/84 Reactor startup commenced at 0200 hours. The reactor was critical at 0240 hours. Mode 1 was entered at 0330 hours. The main generator was paralleled at 1059 hours.

2/20/84 Power reached 100% at 0700 hours.

2/22/84 Train A of the Containment Hydrogen Monitoring System was inoperable from 1130 hours on 2/22/84 to 1445 hours on 2/24/84.

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	3-8-84
COMPLETED BY	B. A. Svensson
TELEPHONE	(616) 465-5901
PAGE	1 of 1

MAJOR SAFETY-RELATED MAINTENANCE

FEBRUARY, 1984

M-1 IMO-340, 1E RHR Heat Exchanger to Charging Pumps failed to close two out of four attempts. The close torque switch was increased from 1.375 to 1.5. The valve was tested and returned to service.

M-2 2CD Diesel Jacket Water Heater would not maintain 150°F. The heater and cable were replaced.

M-3 BD-101-3, #3 Steam Generator blowdown valve had a body-to-bonnet leak. The valve was repaired by Furmanite.

American Electric Power System
INDIANA & MICHIGAN ELECTRIC COMPANY
DONALD C. COOK NUCLEAR PLANT
P.O. Box 458, Bridgman, Michigan 49106
(616) 465-5901

March 8, 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 February, 1984 is submitted.

Sincerely,

W. G. Smith, Jr.
Plant Manager

WGS:ab

Attachments

IE24
1/1

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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