

OPERATING DATA REPORT

DOCKET NO. 50-316
DATE 7-1-83
COMPLETED BY W.T. Gillett
TELEPHONE 616-465-5901

OPERATING STATUS

1. Unit Name: DONALD C. COOK 2
2. Reporting Period: JUNE, 1983
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): 1118
7. Maximum Dependable Capacity (Net MWe): 1082
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	4,343	48,167
12. Number Of Hours Reactor Was Critical	549.6	3,695.1	34,508.5
13. Reactor Reserve Shutdown Hours	-	-	-
14. Hours Generator On-Line	549.6	3,615.4	33,577.1
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	1,851,461	11,858,599	108,122,830
17. Gross Electrical Energy Generated (MWH)	606,990	3,924,210	34,881,960
18. Net Electrical Energy Generated (MWH)	586,771	3,790,093	33,629,885
19. Unit Service Factor	76.3	83.2	74.0
20. Unit Availability Factor	76.3	83.2	74.0
21. Unit Capacity Factor (Using MDC Net)	75.3	80.7	69.9
22. Unit Capacity Factor (Using DER Net)	74.1	79.3	69.0
23. Unit Forced Outage Rate	4.1	1.4	12.7
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):			

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

8308110318 830714
PDR ADDCK 05000316
R PDR

(4/77)

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-316

UNIT 2

DATE 7-6-83

COMPLETED BY Ann Might

TELEPHONE (616)465-5901

MONTH JUNE, 1983

DAY AVERAGE DAILY POWER LEVEL
(MWE-Net)

1	<u>1085</u>
2	<u>1086</u>
3	<u>1086</u>
4	<u>1083</u>
5	<u>1082</u>
6	<u>1084</u>
7	<u>1073</u>
8	<u>1086</u>
9	<u>1074</u>
10	<u>1087</u>
11	<u>1070</u>
12	<u>825</u>
13	<u>1017</u>
14	<u>1078</u>
15	<u>1074</u>
16	<u>1066</u>

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

17	<u>1077</u>
18	<u>1100</u>
19	<u>1103</u>
20	<u>1100</u>
21	<u>1092</u>
22	<u>1085</u>
23	<u>934</u>
24	<u></u>
25	<u></u>
26	<u></u>
27	<u></u>
28	<u></u>
29	<u></u>
30	<u></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 megawatt.

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH JUNE, 1983

DOCKET NO. 50-316
 UNIT NAME D.C. Cook - Unit 2
 DATE 7-14-83
 COMPLETED BY B.A. Svensson
 TELEPHONE 616/465-5901
 SHEET 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
127	830611	S	0	H	4	N.A.	ZZ	ZZZZZZ	Reactor power reduced to 78% due to low system demand. Reactor power returned to 100% on 830613.
128	830623	F&S	170.4	A&B	3	83-052/03L-0	ED	INSTRU	Reactor tripped due to failure of vital instrument bus, CRID IV inverter. Since the Unit had been scheduled for a two-week outage starting 830624, the decision was made to start the outage one day early. The major reasons for the outage were to locate and plug the leaking tubes in steam generator No. 23 and perform ice condenser basket weighing. The Unit remained out of service at the end of the month.

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.: 50-316
Unit Name: D. C. Cook Unit 2
Completed By: R. S. Lease
Telephone: (616) 465-5901
Date: 7/1/83
Page: 1 of 1

MONTHLY OPERATING ACTIVITIES - JUNE 1983

Highlights:

The Unit entered the reporting period operating at 100%. There was one power reduction to 78% during the reporting period. The Unit tripped from 100% power at 2137 hours June 23, 1983 and remained out of service the remainder of the month.

Total electrical generation was 606,990 MWH.

Summary:

- 6/11/83 Unit power was reduced to 78% over a 4½ hour ramp starting at 2225 hours. This reduction was due to low customer demand.
- 6/13/83 The Unit was reloaded to 100% power over a 5-1/3 hour ramp.
- 6/23/83 The Unit tripped from 100% power at 2137 hours. When Vital Instrument Bus IV failed. This was declared as the start of a planned outage that had been scheduled to start the following day.
- 6/24/83 The Reactor Plant was cooled down to Mode 4 by 0711 hours and Mode 5 by 1923 hours.
- 6/27/83 The Reactor Coolant System was drained to the ½ loop level by 1605 hours and has remained in this condition the remainder of the reporting period.

Major reasons for the planned outage was to locate and plug leaking tube/s in #23 Steam Generator and to perform required Ice Condenser Surveillance.

Main Condenser Halbs were out of service, one half at a time, for a total of 37½ hours during the reporting period for identification and repair of circulating water leaks.

The Control Room Cable Vault "Halon" Fire Suppression System remained inoperable the entire reporting period. This system is being evaluated for required modifications. The backup CO₂ System remains operable.

DOCKET NO.	<u>50 - 316</u>
UNIT NAME	<u>D. C. Cook - Unit No. 2</u>
DATE	<u>7-14-83</u>
COMPLETED BY	<u>B. A. Svensson</u>
TELEPHONE	<u>(616) 465-5901</u>
PAGE	<u>1 of 2</u>

MAJOR SAFETY-RELATED MAINTENANCE

JUNE, 1983

- M-1 No. 4 boric acid transfer pump discharge pressure was lower than required. The pump impeller clearance was adjusted and the pump retested.

- M-2 The ESW safety valve on the West CCW Heat Exchanger, SV-15-1W, was leaking by. The valve was removed. The gasket was replaced and seating surfaces were lapped. The inlet piping was cleaned and the valve retested and reinstalled.

- M-3 The drain valve, MS-136-1, for No. 1 steam generator stop valve was eroded due to steam leakage. Replaced the valve and had the necessary NDE performed.

- M-4 MRV-220, No. 2 steam generator stop valve had a broken linear bearing in crosshead. Replaced the linear bearing. Had the valve retested.

- M-5 The No. 2 steam generator main steam protection channel instrument root valve, MPP-221V1, had a packing leak and the backseat was steam cut. Replaced the valve and had NDE performed.

- M-6 Motor operated containment isolation valve, ICM-321, the isolation from the West RHR pump to loops 2 and 3, had a packing leak. Repacked the valve and had it tested.

- M-7 CVCS letdown regulating valve, QRV-162, operator diaphragm was leaking. Replaced the operator diaphragm and had the valve tested.

- M-8 A leaking tube was identified in No. 2-3 steam generator. Plugged leaking tube, Row 1, Column 72.

- C&I-1 Turbine stop valve "C" position proximity switch for train "B" solid state protection system was stuck in the "closed" position. The switch was replaced and the stop valve was satisfactorily tested.

- C&I-2 Intermediate range nuclear instrumentation high level trip channel II and power range N1 overpower trip to range channel I status lights were "blinking in". Replacement of solid-state protection system isolation circuit board, A505, corrected the status light annunciation.

- C&I-3 Critical control room power inverter, 15KVA, failed. Two 25 microfarad oil-filled capacitors and two 200 ampere fuses were replaced to restore the inverter to operation.

DOCKET NO.	<u>50 - 316</u>
UNIT NAME	<u>D. C. Cook - Unit No. 2</u>
DATE	<u>7-14-83</u>
COMPLETED BY	<u>B. A. Svensson</u>
TELEPHONE	<u>(616) 465-5901</u>
PAGE	<u>2 of 2</u>

MAJOR SAFETY-RELATED MAINTENANCE

JUNE, 1983

- C&I-4 "W" motor driven auxiliary feedwater pump low suction pressure trip alarm was received for no apparent reason. A bourdon tube on pressure switch, CPS-245B, was leaking and was replaced. Calibration of the other two suction pressure switches was verified also.
- C&I-5 Containment purge valves, VCR-101 through -106, (train A) closed spuriously. A defective E PROM integrated circuit chip was identified and replaced on lower containment airborne radiation monitors, ERS-2300 and -2400.
- C&I-6 Containment pressure relief fan, 2-HV-CPR-1, and isolation valve, VCR-107, (train B) tripped off/shut spuriously during pressure reliefs. E PROM integrated circuit chips on lower containment radiation monitors ERS-2300 and -2400 were changed out to correct the problems.
- C&I-7 Control room instrument distribution inverter (CRID IX) failed. A blown fuse and a shorted capacitor were identified and replaced in the inverter. CRID IV then appeared to operate normally, but later the same fuse blew again. All diodes and SCR's in the inverter were checked. No problem could be found. The fuse was replaced and the inverter reassumed its load without further incident.



INDIANA & MICHIGAN ELECTRIC COMPANY

DONALD C. COOK NUCLEAR PLANT
P.O. Box 458, Bridgman, Michigan 49106
(616) 465-5901

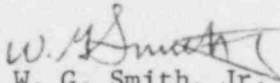
July 14, 1983

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, 1983 is submitted.

Sincerely,


W. G. Smith, Jr.
Plant Manager

WGS:ab

Attachments

cc: R. S. Hunter
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
H. L. Sobel
J. D. Huebner
J. H. Hennigan
A. F. Kozlowski
R. F. Hering
J. F. Stietzel
PNSRC File
INPO Records Center

IE 24

1/1