

# OPERATING DATA REPORT

DOCKET NO. 50-316  
 DATE 10/6/80  
 COMPLETED BY W. T. Gillett  
 TELEPHONE 616-465-5901

## OPERATING STATUS

1. Unit Name: Donald C. Cook 2
2. Reporting Period: September 1980
3. Licensed Thermal Power (MWe): 3391
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	6,575	24,095
12. Number Of Hours Reactor Was Critical	720	5,731.4	16,811.3
13. Reactor Reserve Shutdown Hours	0	0	0
14. Hours Generator On-Line	720	5,639.3	16,141.2
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	2,393,783	18,493,353	50,717,733
17. Gross Electrical Energy Generated (MWH)	767,140	6,001,330	16,155,740
18. Net Electrical Energy Generated (MWH)	739,915	5,789,125	15,556,537
19. Unit Service Factor	100	85.8	75.7
20. Unit Availability Factor	100	85.8	75.7
21. Unit Capacity Factor (Using MDC Net)	95.0	81.4	69.6
22. Unit Capacity Factor (Using DER Net)	93.4	80.0	68.9
23. Unit Forced Outage Rate	0	1.1	9.5
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

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

\_\_\_\_\_  
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# AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-316

UNIT 2

DATE 10/6/80

COMPLETED BY W. T. Gillett

TELEPHONE 616-465-5901

MONTH September 1980

DAY AVERAGE DAILY POWER LEVEL  
(MWE-Net)

1	<u>1033</u>
2	<u>1032</u>
3	<u>1028</u>
4	<u>965</u>
5	<u>870</u>
6	<u>1029</u>
7	<u>1050</u>
8	<u>1047</u>
9	<u>1045</u>
10	<u>1066</u>
11	<u>1060</u>
12	<u>1058</u>
13	<u>1051</u>
14	<u>1052</u>
15	<u>1056</u>
16	<u>1051</u>

DAY AVERAGE DAILY POWER LEVEL  
(MWe-Net)

17	<u>1066</u>
18	<u>1070</u>
19	<u>1056</u>
20	<u>1056</u>
21	<u>1054</u>
22	<u>1000</u>
23	<u>944</u>
24	<u>1051</u>
25	<u>1052</u>
26	<u>948</u>
27	<u>887</u>
28	<u>1052</u>
29	<u>1051</u>
30	<u>1051</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 September, 1980

DOCKET NO. 50 - 316  
 UNIT NAME D.C. Cook - Unit 2  
 DATE 10-14-80  
 COMPLETED BY B.A. Svensson  
 TELEPHONE (616) 465-5901

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report #	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause & Corrective Action to Prevent Recurrence
83	800904	F	0	A	4	N.A.	ZZ	ZZZZZZ	Reactor power reduced to 54% to remove east main feed pump turbine from service to check feedpump turbine condenser for tube leaks. Two tubes were plugged. Reactor power returned to 100% 800905.
84	800922	F	0	A	4	N.A.	ZZ	ZZZZZZ	Reactor power reduced to 53% to remove the east main feedpump turbine from service to check feedpump turbine condenser for tube leaks. Six leaky tubes were plugged. Reactor power returned to 100% 800923.
85	800926	F	0	A	4	N.A.	ZZ	ZZZZZZ	Reactor power reduced to 60% to remove east main feedpump turbine from service to check feedpump turbine condenser for tube leaks. One tube was plugged. Reactor power returned to 100% 800927.

1  
 F: Forced  
 S: Scheduled

2  
 Reason:  
 A-Equipment Failure (Explain)  
 B-Maintenance of 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

## 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<sup>1</sup>. 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

<sup>1</sup>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 50 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: October 14, 1980  
Page: 1 of 2

MONTHLY OPERATING ACTIVITIES -- SEPTEMBER, 1980

Highlights:

The Unit operated at 100% power the entire reporting period except for 3 occasions when power was reduced to the 55-60% power level, while the East Main Feed pump was removed from service.

Total electrical generation for the month was 767,140 mwh.

Summary:

- 9/04/80 -- Unit loading was reduced to 54% power over a 2.25 hour ramp starting at 2115 hours to remove the East Main Feed pump from service. This was for checking and repair of a condenser tube leak.
- 9/05/80 -- The East Main Feed pump was returned to service and the Unit reloaded to 100% power over a 8.5 hour ramp starting at 0408 hours.
- 9/22/80 -- Unit loading was reduced to 53% power over a 1.25 hour ramp starting at 2203 hours, to remove the East Main Feed pump from service. This was for checking and repairs of a condenser tube leak.
- 9/23/80 -- The East Main Feed pump was returned to service and the Unit reloaded to 100% power over a 6.75 hour ramp starting at 0340 hours.
- Turbine Driven Auxiliary Feedwater pump was inoperable for a 7.75 hour period for repairs of steam leaks.
- 9/25/80 -- East Residual Heat Removal pump was inoperable for a 36 hour period starting at 0640 hours for repairs of a leak.
- 9/26/80 -- Unit loading was reduced to 60% power over a 1 hour ramp starting at 1910 hours to remove the East Main Feed pump from service. This was for inspection and repairs to a condenser leak.
- 9/27/80 -- East Main Feed pump was returned to service and the Unit was reloaded to 100% power over a 5.75 hour ramp starting at 0615.

Doc No.: 50-316  
Unit Name: D. C. Cook Unit #2  
Completed By: R. S. Lease  
Telephone: (616) 465-5901  
Date: October 14, 1980  
Page: 2 of 2

Summary :  
(cont.)

9/28/80 -- Vent Stack Radiation Monitors R-25 and R-26 were declared inoperable at 1900 hours when the sample pump seized. Repairs were made and these Monitors were again operable at 0045 hours 9/29/80.

9/29/80 -- Emergency Diesel Generator CD was inoperable for a 9.75 hour period, while a new Air Pressure regulator was installed.

Differential Protection Relays operated on balance of Plant 4KV/600 Volt Transformer 21-BMC at 0957 hours. Thorough checking of this transformer found no reason for the Differential Protection to operate. The transformer was returned to service at 2255 hours 10/1/80.



DOCKET NO.	<u>50 - 316</u>
UNIT NAME	<u>D. C. Cook - Unit No. 2</u>
DATE	<u>10-14-80</u>
COMPLETED BY	<u>B. A. Svensson</u>
TELEPHONE	<u>(616) 465-5901</u>
PAGE	<u>1 of 1</u>

MAJOR SAFETY-RELATED MAINTENANCE

SEPTEMBER, 1980

There was no major safety-related maintenance work performed during the month.



