

# AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-315

UNIT 1

DATE 12-4-78

COMPLETED BY W. T. Gillett

TELEPHONE 616-465-5901

MONTH November 1978

DAY AVERAGE DAILY POWER LEVEL  
(MWe-Net)

1	1042
2	1042
3	1043
4	1029
5	1042
6	1041
7	1040
8	1028
9	1028
10	1026
11	1043
12	1041
13	1039
14	1040
15	1035
16	1033

DAY AVERAGE DAILY POWER LEVEL  
(MWe-Net)

17	1032
18	1033
19	1036
20	1032
21	1034
22	1035
23	1035
24	1031
25	1032
26	1035
27	1036
28	1034
29	971
30	892
31	

## 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.

(9/77)

781220 0174

000000

# OPERATING DATA REPORT

DOCKET NO. 50-315  
 DATE 12-4-78  
 COMPLETED BY W. T. Gillett  
 TELEPHONE 616-465-5901

## OPERATING STATUS

1. Unit Name: Donald C. Cook 1
2. Reporting Period: November 1978
3. Licensed Thermal Power (MWt): 3,250
4. Nameplate Rating (Gross MWe): 1,089
5. Design Electrical Rating (Net MWe): 1,054
6. Maximum Dependable Capacity (Gross MWe): 1,080
7. Maximum Dependable Capacity (Net MWe): 1,044
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	<u>720</u>	<u>8,016</u>	<u>34,320</u>
12. Number Of Hours Reactor Was Critical	<u>720</u>	<u>6,009.2</u>	<u>26,631.9</u>
13. Reactor Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>463</u>
14. Hours Generator On-Line	<u>720</u>	<u>5,879.7</u>	<u>25,849.5</u>
15. Unit Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>321</u>
16. Gross Thermal Energy Generated (MWH)	<u>2,306,615</u>	<u>18,100,430</u>	<u>69,656,623</u>
17. Gross Electrical Energy Generated (MWH)	<u>767,390</u>	<u>5,970,420</u>	<u>22,735,510</u>
18. Net Electrical Energy Generated (MWH)	<u>740,625</u>	<u>5,753,551</u>	<u>21,803,765</u>
19. Unit Service Factor	<u>100</u>	<u>73.3</u>	<u>78.3</u>
20. Unit Availability Factor	<u>100</u>	<u>73.3</u>	<u>78.3</u>
21. Unit Capacity Factor (Using MDC Net)	<u>98.5</u>	<u>68.8</u>	<u>68.5</u>
22. Unit Capacity Factor (Using DER Net)	<u>97.6</u>	<u>68.1</u>	<u>64.3</u>
23. Unit Forced Outage Rate	<u>0</u>	<u>3.9</u>	<u>4.8</u>
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

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

# UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH November, 1978

DOCKET NO. 50-315  
 UNIT NAME D.C. Cook-Unit  
 DATE 12-14-78  
 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
139	781129	S	0	B	4	N/A	ZZ	ZZZZZZ	Reactor power reduced to 70% to perform N.I.S. Incore/Excore cross calibration. Power returned to 99% 781130.

<sup>1</sup>  
 F: Forced  
 S: Scheduled

<sup>2</sup>  
 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)

<sup>3</sup>  
 Method:  
 1-Manual  
 2-Manual Scram.  
 3-Automatic Scram.  
 4-Other (Explain)

<sup>4</sup>  
 Exhibit G - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-0161)

<sup>5</sup>  
 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<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 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:

- If a component failed, use the component directly involved.
- If not a component failure, use the related component: e.g., wrong valve operated through error: list valve as component.
- 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: R. S. Keith  
Telephone: (616) 465-5901  
Date: December 13, 1978

OPERATING EXPERIENCE -- NOVEMBER, 1978

Highlights

The Unit was on line throughout the entire month. 50% of the Cycle III expected life was passed.

Summary

- 11/01/78 -- The Unit entered this reporting period operating at 100% power producing 1070 megawatts electrical gross generation.
- 11/04/78 -- Radiation Monitor R-25 was inoperable from 0625 to 1500 hours because of failure of the slow speed paper drive motor.
- 11/07/78 -- "AB" Emergency Diesel Generator was inoperable from 1140 to 1555 hours because of a faulty voltage regulator card. The card was damaged when it caught on the pocket of the technician working in the area. Both windspeed and direction recorders were out of service from 1130 to 1900 hours when a cable to the tower was damaged during construction/excavation activities.
- 11/09/78 -- Reactor Coolant System leak rate test shows the system leakage is running between 0.8 and 0.9 gpm. A portion of this leakage has been identified as coming from a leaking pressurizer safety valve. The average rate of leakage from the pressurizer safety valve is 0.6 gpm.
- 11/10/78 -- "CD" Emergency Diesel Generator was inoperable from 0718 to 1509 hours for installation of design change RFC-DC-12-919.
- 11/11/78 -- Containment equalization fan CEQ-1 was inoperable from 1329 to 1915 hours.
- 11/17/78 -- CEQ-2 fan was inoperable from 0809 to 1700 hours.  
Emergency Power Breaker 1-EP was open from 1055 to 1252 hours to tie in the power supply to test the Unit #1 spare main transformer.



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Unit Name: D. C. Cook Unit #1  
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Date: December 13, 1978  
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11/29/78 -- At 1900 hours started reducing power to 70% to perform  
(cont) Incore/Excore Cross Calibration.

11/30/78 -- Incore/Excore Cross Calibration was completed and the  
Unit returned to 99% power producing 1070 megawatts  
electrical gross generation.

Reactor Coolant System leak rate is 1.033 gpm with  
0.818 gpm attributed to a leaking pressurizer safety  
valve.



DOCKET NO. 50 - 315  
UNIT NAME D. C. COOK - UNIT NO. 1  
DATE 12-14-78  
COMPLETED BY B. A. Svensson  
TELEPHONE (616) 465-5901

MAJOR SAFETY-RELATED MAINTENANCE

NOVEMBER, 1978

- M-1 South waste gas compressor moisture separator makeup valve, RRV-385 was not maintaining proper level. Valve diaphragm was replaced and proper operation verified.
- M-2 Middle boric acid storage tank recirculation bypass valve, CS-429M, would not operate. Replaced valve bonnet.
- M-3 No. 2 boric acid transfer pump did not develop required discharge pressure. The impeller was replaced and pump retested satisfactorily.