

50-316

# OPERATING DATA REPORT

DOCKET NO. 50-316  
 DATE 9-5-80  
 COMPLETED BY W.T. Gillett  
 TELEPHONE 616-465-5901

## OPERATING STATUS

1. Unit Name: D. C. Cook Unit 2
2. Reporting Period: August 1980
3. Licensed Thermal Power (MWt): 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	744	5,855	23,375
12. Number Of Hours Reactor Was Critical	744	5,011.4	16,091.3
13. Reactor Reserve Shutdown Hours	0	0	0
14. Hours Generator On-Line	744	4,919.3	15,421.2
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	2,496,594	16,099,570	48,323,950
17. Gross Electrical Energy Generated (MWH)	791,640	5,234,190	15,388,600
18. Net Electrical Energy Generated (MWH)	763,384	5,049,210	14,816,622
19. Unit Service Factor	100	82.3	74.1
20. Unit Availability Factor	100	82.3	74.1
21. Unit Capacity Factor (Using MDC Net)	94.8	79.7	68.6
22. Unit Capacity Factor (Using DER Net)	93.3	78.4	67.9
23. Unit Forced Outage Rate	0	1.3	9.9
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

(9/77)

8009160 283



# AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO.: 50-316

UNIT 2

DATE 9-5-80

COMPLETED BY W. T. Gillett

TELEPHONE 616-465-5901

MONTH AUGUST 1980

DAY AVERAGE DAILY POWER LEVEL  
(MWE-Net)

1	<u>1030</u>
2	<u>1024</u>
3	<u>1026</u>
4	<u>1027</u>
5	<u>1021</u>
6	<u>1020</u>
7	<u>1016</u>
8	<u>1014</u>
9	<u>1012</u>
10	<u>1012</u>
11	<u>1015</u>
12	<u>1026</u>
13	<u>1023</u>
14	<u>1016</u>
15	<u>1024</u>
16	<u>1059</u>

DAY AVERAGE DAILY POWER LEVEL  
(MWe-Net)

17	<u>1061</u>
18	<u>1057</u>
19	<u>1006</u>
20	<u>947</u>
21	<u>1054</u>
22	<u>1054</u>
23	<u>1052</u>
24	<u>913</u>
25	<u>1055</u>
26	<u>1051</u>
27	<u>1044</u>
28	<u>1043</u>
29	<u>1043</u>
30	<u>1034</u>
31	<u>1030</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 AUGUST, 1980

DOCKET NO. 50 - 316  
 UNIT NAME D. C. Cook - Unit #2  
 DATE 9-12-80  
 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
81	800819	F	0	A	4	N.A.	ZZ	ZZZZZZ	Reactor power reduced to 55% 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% 800820.
82	800824	F	0	A	4	N.A.	ZZ	ZZZZZZ	Reactor power reduced to 60% to remove the east main feed pump turbine from service to check feed pump turbine condenser for tube leaks. Five tubes were plugged. Reactor power returned to 100% the same day.

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 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.

MONTHLY OPERATING ACTIVITIES -- AUGUST, 1980

Highlights :

The Unit entered the reporting period operating at 100% power.

During the reporting period there were two reductions to 60% power which are detailed in the Summary.

Total gross electrical generation for the month was 791,640 mwh.

Summary :

8/4/80 -- Vent Stack Radiation Monitor R-25 was inoperable for a 1.5 hour period for repairs to the Filter Paper Drive.

8/12/80 -- The West Motor Driven Auxiliary Feedwater Pump was inoperable for a 39 hour period starting at 0700 hours. This was to repair a leaking pump casing joint.

8/14/80 -- Containment Radiation Monitors R-11 and R-12 were inoperable for a 7 hour period for replacement of the sample pump.

8/19/80 -- Unit was reduced to 60% power over a 1.25 hour ramp starting at 2156 hours. The East Main Feed Pump was removed from service for checking of tube leaks in it's condenser.

The Turbine Driven Auxiliary Feedwater Pump was inoperable for a 28 hour period starting at 0646 hours for re-routing of Turbine exhaust piping.

8/20/80 -- The Unit was reloaded to 100% power over a 7.25 hour ramp starting at 0254 hours.

8/24/80 -- Power was reduced to 60% over a 2 hour ramp starting at 0320. This was to remove the East Main Feed Pump from service to check for tube leaks in it's condenser. The Unit was reloaded to 100% power over a 6 hour ramp starting at 0900.

8/29/80 -- The Steam Jet Air Ejector Discharge Radiation Monitor R-15 was inoperable for a 48 hour period starting at 0930. This was for water proofing of the detector tube.

The turbine driven

This steam jet Air Ejector Discharge Indicator



DOCKET NO.	50 - 316
UNIT NAME	D. C. Cook - Unit No. 2
DATE	9-12-80
COMPLETED BY	B. A. Svensson
TELEPHONE	(616) 465-5901
PAGE	1 of 1

MAJOR SAFETY-RELATED MAINTENANCE

AUGUST, 1980

- M-1 Circuit breaker 21A9, supply to ESS motor control center EZC-A, tripped for no apparent reason. Solid state trip device for the breaker was replaced and the breaker was tested satisfactorily.
- M-2 The west motor driven auxiliary feedpump casing was leaking. Replaced casing gasket and repacked inboard end. Performed pump operability test.
- M-3 The sample pump for radiation monitor R-11 would not pump. Replaced with a new pump.
- M-4 The south control room air conditioner chiller had an oil leak and a freon leak. The leaks on capillary tubes to the oil pressure switch were repaired and the unit was recharged with freon.
- C&I-1 The pressurizer proportional heaters would not energize. The problem was identified as the air flow-switch for the cabinet. The flow switch was replaced and normal operation of the proportional heaters was verified.
- C&I-2 Radiation Monitoring Channel R-33, gland steam condenser vent monitor, indicated greater than the lab samples. The check source cable had broken allowing the check source to fall to the bottom of the well near the detector. The check source was removed and the drive cable repairs completed. Normal indication returned to the R-33 channel.

