

OPERATING DATA REPORT

DOCKET NO. 50-316
 DATE 8/4/82
 COMPLETED BY A. MIGHT
 TELEPHONE (616) 465-5901

OPERATING STATUS

1. Unit Name: Donald C. Cook 2
2. Reporting Period: July 1982
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	5087	40,151
12. Number Of Hours Reactor Was Critical	744	4593.1	28,618.1
13. Reactor Reserve Shutdown Hours	0	0	0
14. Hours Generator On-Line	744	4572.3	27,793.3
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	2,496,782	15,061,850	89,122,671
17. Gross Electrical Energy Generated (MWH)	801,930	4,938,010	28,645,810
18. Net Electrical Energy Generated (MWH)	773,938	4,765,474	27,609,615
19. Unit Service Factor	100	89.9	73.9
20. Unit Availability Factor	100	89.9	73.9
21. Unit Capacity Factor (Using MDC Net)	96.1	86.6	69.5
22. Unit Capacity Factor (Using DER Net)	94.6	85.2	68.6
23. Unit Forced Outage Rate	0	10.1	13.5
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

(9/77)

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-316

UNIT 2

DATE 8/3/82

COMPLETED BY A. Might

TELEPHONE (616)465-5901

MONTH July, 1982

DAY	AVERAGE DAILY POWER LEVEL (MWE-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>1069</u>	17	<u>1039</u>
2	<u>1063</u>	18	<u>1042</u>
3	<u>1062</u>	19	<u>1043</u>
4	<u>1061</u>	20	<u>1044</u>
5	<u>1063</u>	21	<u>1049</u>
6	<u>1059</u>	22	<u>1065</u>
7	<u>1053</u>	23	<u>1080</u>
8	<u>1054</u>	24	<u>1076</u>
9	<u>1047</u>	25	<u>1059</u>
10	<u>1036</u>	26	<u>1046</u>
11	<u>1051</u>	27	<u>1047</u>
12	<u>1053</u>	28	<u>1057</u>
13	<u>1039</u>	29	<u>1063</u>
14	<u>1049</u>	30	<u>1003</u>
15	<u>1045</u>	31	<u>696</u>
16	<u>1036</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 July, 1982

DOCKET NO. 50-316
 UNIT NAME D.C. Cook - Unit 2
 DATE 8-10-82
 COMPLETED BY E.L. Townley
 TELEPHONE 616-465-5901
 PAGE 1 of 1

No.	Date	Type ¹	Duration (Hours)	Reason ²	Method of Shutting Down Reactor ³	Licensee Event Report #	System Code ⁴	Component Codes ⁵	Cause & Corrective Action to Prevent Recurrence
113	820731	F	0	B	1	N.A.	ZZ	ZZZZZZ	A power reduction at 3% per hour was started at 0315 on 820731 to remove the Unit from service. This was due to a leak in steam generator #21 with a leak rate of 0.17 GPM. The Unit was removed from service at 0158 hours on 820801.

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 (NURIG
 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:

- 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.

MONTHLY OPERATING ACTIVITIES - JULY, 1982

Highlights:

The Unit operated at 100% power for the entire reporting period except as detailed in the summary.

The electrical generation for the month was 801,930 MWH.

Summary:

- 7-02-82 The "AB" Diesel Generator was inoperable for a 2.5 hour period for the ICS Calibration.
- 7-09-82 The flow path for the Boric Acid Storage Tank via the transfer pumps and charging pumps to the Reactor Coolant System was made inoperable for a 1.5 hour period to repair a body to bonnet leak on a manual isolation valve for Emergency Boration.
- 7-14-82 The North Rod Drive M.G. Set was out of service for a 7 hour period to replace a defective trip relay in the output breaker.
- 7-15-82 The Turbine Driven Auxiliary Feedpump was inoperable for a 1.5 hour period to replace a coil in the Trip and Throttle Valve.
- 7-24-82 The Loop 3 over temperature ΔT instrument was inoperable for 6.25 hours to replace the set-point module.
- 7-30-82 At 0000 hours a power reduction to 95% was started to perform a Moderator Temperature Coefficient Test. The test was completed at 1548 hours and the power level was returned to 100% at 0020 on July 31.
- 7-31-82 At 0145 the primary to secondary leak rate was calculated to be 0.17 gpm and at 0315 a controlled unit shutdown was started, with the Reactor being made sub-critical at 0211 on August 1, 1982. The Unit is presently cooled down to Mode 5. The RCS is degassed, depressurized, and at $\frac{1}{2}$ loop being cooled by the RHR System. Preparations are being made to inspect #21 Steam Generator, for locating and plugging of any tubes that indicate leakage.

DOCKET NO.	50 - 316
UNIT NAME	D. C. Cook - Unit No. 2
DATE	8-10-82
COMPLETED BY	B. A. Svensson
TELEPHONE	(616) 465-5901
PAGE	1 of 1

MAJOR SAFETY-RELATED MAINTENANCE

JULY, 1982

- M-1 No. 2 steam generator power-operated relief valve, MRV-223, had a body-to-bonnet leak. Replaced the bonnet gasket and seal ring and had the valve retested.

- M-2 Boric acid system isolation valve, CS-485, was leaking. Replaced the valve diaphragm.

- M-3 The discharge check valve for 2CD2 diesel fuel oil transfer pump, DF-115C, leaked by. Cleaned the discharge check valve for both 2CD2 and 2CD1 fuel oil transfer pumps.

- C&I-1 Reactor Coolant Pump No. 3 motor air cooler non-essential service water inlet flowmeter, WFA-953, was intermittently failing high. This caused flow mismatch alarms to be received. The problem was traced to a defective circuit board in WFA-953. After replacement of the circuit board, the transmitter was recalibrated.

- C&I-2 ABT-5 Feeder to CRP-3 failed to transfer automatically when lighting transformer 2 "N" was taken out of service for breaker cleaning. The lockout relay was adjusted and the ABT was cycled several times to verify correct operation.

- C&I-3 Steam generator No. 21 blowdown radiation monitor, R-19, had no flow indication. Replacement of the flow regulator diaphragm restored the flow to normal. The sight glass was also cleaned.

- C&I-4 Turbine-driven auxiliary feedwater pump control bus, distribution cabinet 2 DCN circuit 6, was inoperable. The trip and throttle valve coil was found to have shorted. The defective coil was replaced and the control bus was returned to service with no further incident.