

OPERATING DATA REPORT

DOCKET NO. 50-315
 DATE 12-2-82
 COMPLETED BY W. I. Gillett
 TELEPHONE 616-465-5901

OPERATING STATUS

1. Unit Name: Donald C. Cook 1
 2. Reporting Period: November 1982
 3. Licensed Thermal Power (MWt): 3250
 4. Nameplate Rating (Gross MWe): 1089
 5. Design Electrical Rating (Net MWe): 1054
 6. Maximum Dependable Capacity (Gross MWe): 1080
 7. Maximum Dependable Capacity (Net MWe): 1044
 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	8016	69,384
12. Number Of Hours Reactor Was Critical	720	4,864.4	51,137.6
13. Reactor Reserve Shutdown Hours	—	—	463
14. Hours Generator On-Line	720	4,746.7	49,968.9
15. Unit Reserve Shutdown Hours	—	—	321
16. Gross Thermal Energy Generated (MWH)	2,275,411	14,759,055	145,122,244
17. Gross Electrical Energy Generated (MWH)	747,420	4,841,400	47,723,180
18. Net Electrical Energy Generated (MWH)	720,744	4,667,456	45,908,134
19. Unit Service Factor	100	59.2	74.2
20. Unit Availability Factor	100	59.2	74.2
21. Unit Capacity Factor (Using MDC Net)	95.9	55.8	67.0
22. Unit Capacity Factor (Using DER Net)	95.0	55.2	63.8
23. Unit Forced Outage Rate	0	23.2	8.6

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: _____

25. Units In Test Status (Prior to Commercial Operation):	Forecast	Achieved
INITIAL CRITICALITY	—	—
INITIAL ELECTRICITY	—	—
COMMERCIAL OPERATION	—	—

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-315
 UNIT 1
 DATE 12-2-82
 COMPLETED BY A. Might
 TELEPHONE 616-465-5901

MONTH November 1982

DAY	AVERAGE DAILY POWER LEVEL (MWE-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>1029</u>	17	<u>1032</u>
2	<u>1031</u>	18	<u>1031</u>
3	<u>1030</u>	19	<u>1030</u>
4	<u>1031</u>	20	<u>1035</u>
5	<u>1027</u>	21	<u>1031</u>
6	<u>1022</u>	22	<u>1031</u>
7	<u>1033</u>	23	<u>1032</u>
8	<u>1032</u>	24	<u>1032</u>
9	<u>1033</u>	25	<u>1033</u>
10	<u>1032</u>	26	<u>1027</u>
11	<u>1033</u>	27	<u>1030</u>
12	<u>1030</u>	28	<u>1032</u>
13	<u>1025</u>	29	<u>613</u>
14	<u>1030</u>	30	<u>561</u>
15	<u>1032</u>	31	<u>—</u>
16	<u>1032</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 November, 1982

DOCKET NO. 50-315
 UNIT NAME D.C. Cook - Unit 1
 DATE 12-14-82
 COMPLETED BY B.A. Svensson
 TELEPHONE 616-465-5901
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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
189	821129	F	0	A	4	N.A.	CH	PUMPXX	Reactor power was reduced to 53% to remove the east main feedpump turbine from service due to excessive vibration. Investigation revealed that the coupling sleeve on the turbine half of the coupling was cracked the length of the sleeve. A complete new coupling was installed. Repair work was continuing at the end of the month. Reactor power was being maintained at 59%.

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 F - 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.

DOCKET NO.	50 - 315
UNIT NAME	<u>D. C. Cook - Unit No. 1</u>
DATE	<u>12-14-82</u>
COMPLETED BY	<u>B. A. Svensson</u>
TELEPHONE	<u>(616) 465-5901</u>
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MAJOR SAFETY-RELATED MAINTENANCE

NOVEMBER, 1982

- M-1 The North boric acid tank recirc valve, QRV-410, appeared plugged. Disassembled and cleaned valve internals. Reassembled using new gaskets and bonnet studs. Had the valve tested.
- M-2 The North control room air conditioner chiller package would not turn on. The molded case circuit breaker would not reset. Replaced the breaker and had the package started and it ran without problems.
- M-3 An electrical ground developed on one circuit of pressurizer backup heaters on bus 11PHA. The feed wires to one of the backup circuit breakers were found burned and grounded to the tub. Replaced the wires and the circuit breaker and had the circuit functionally tested.
- M-4 The isolation valve for the alternate supply to the turbine driven auxiliary feedpump from ESW, WMO-753, would not open. The motor was damaged due to installation of a recent modification which reversed the motor rotation. Replaced the motor and had phase rotation problem corrected. Had the valve tested.
- C&I-1 Containment non-essential service water isolation valve, WCR-932, failed closed and could not be opened from the control room. Water was found to have entered the actuating asco valve coil, shorting it electrically. The terminal box was dried and the coil was replaced. Correct valve operation was verified after repair.
- C&I-2 Containment non-essential service water isolation valve, WCR-914, lower containment ventilation Unit No. 4, failed closed and caused a "CD battery ground" annunciation. The terminal box was dried and asco solenoid was replaced. Correct valve operation was verified after repair.
- C&I-3 Subcooling margin monitor pressure readings were abnormally high with temperature readings below normal. The instrument temperature module was in error and was replaced and calibrated. Pressure transmitter, NPS-122, was recalibrated to correct the pressure input. The subcooling margin monitor response was verified with the Westinghouse P-250 computer and also with the Technical Support Center computer. All are in coincidence at Tsat. margin of 48°F at 100% power.

Docket No.: 50-315
Unit Name: D. C. Cook Unit 1
Completed By: C. E. Murphy
Telephone: (616) 465-5901
Date: 12-9-82
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MONTHLY OPERATING ACTIVITIES - NOVEMBER 1982

Highlights:

The Unit entered the reporting period operating at 100% power. Reactor power was reduced to ~95% four times during this reporting period for Turbine Control Valve testing. These will be addressed in the summary.

On November 28, a vibration problem developed on the East Main Feedpump which resulted in the Unit load being reduced in a normal 6% per hour rate. At 0536 hours on November 29, the Unit load decrease was stopped at the 53% power level and the feedpump was removed from service for repairs.

The Unit load remained at 53% power for the remainder of this reporting period. The feedpump vibration problem proved to be a turbine to pump coupling problem and Maintenance is proceeding with repairs.

The gross electrical generation for the month was 747,420 MWH.

Summary:

- 11/5/82 93% power at 2250 hours for turbine valve testing. Returned to 100% power at 0615 hours on 11/6/82.
- 11/10/82 The East Centrifugal Charging Pump was inoperable for an 8 hour period for maintenance repairs.
- 11/12/82 95% power at 2250 hours for turbine valve testing. Returned to 100% power at 0245 hours on 11/13/82.
- 11/16/82 The High Demand Fire Pump was inoperable for a 3.5 hour period for maintenance repairs.
- 11/17/82 The Turbine Driven Auxiliary Feedpump was inoperable for a 30.5 hour period for work on RFC-12-2524.
- 11/19/82 97% power at 2100 hours for turbine valve testing. Returned to 100% power at 0005 hours on 11/20/82.
- 11/26/82 95% power at 2100 hours for turbine valve testing. Returned to 100% power at 0133 hours on 11/27/82.
- 11/28/82 2238 hours, Reactor power reduced to 99% due to increasing vibration on the East Main Feedpump Turbine.
- " " 2305 hours, Reactor power reduced to 98%.
- " " 2323 hours, Ramping Reactor power down to reduce vibration on the East Main Feedpump Turbine.

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11/29/82 0208 hours, Reducing Reactor power at 6% power to
remove the EMFPT from service.

" " 0536 hours, stopped power reduction at 53%.

" " 0551 hours, EMFPT removed from service.