OPERATING DATA REPORT

DOCKET NO. 50-315
DATE 9/7/82
COMPLETED BY W. T. Gillett
TELEPHONE 616-465-5901

OPERATING STATUS

1. Unit Name: Donald C. Cook 1
2. Reporting Period: August, 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	744	5831	67,199
12. Number Of Hours Reactor Was Critical	0	3333.3	49,606.5
13. Reactor Reserve Shutdown Hours	0	0	463
14. Hours Generator On-Line	0	3301.6	48,523.8
15. Unit Reserve Shutdown Hours	0	0	321
16. Gross Thermal Energy Generated (MWH)	0	10,505,062	140,868,251
17. Gross Electrical Energy Generated (MWH)	0	3,453,420	46,335,200
18. Net Electrical Energy Generated (MWH)	0	3,332,395	44,573,073
19. Unit Service Factor	0	56.7	72.2
20. Unit Availability Factor	0	56.7	72.2
21. Unit Capacity Factor (Using MDC Net)	0	54.7	67.3
22. Unit Capacity Factor (Using DER Net)	0	54.2	64.0
23. Unit Forced Outage Rate	0	24.8	8.3

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. 50-315

UNIT 1

DATE 9-1-82

COMPLETED BY A. Might

TELEPHONE 616-465-5901

MONTH August

DAY	AVERAGE DAILY POWER LEVEL (MWE-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	0	17	0
2	0	18	0
3	0	19	0
4	0	20	0
5	0	21	0
6	0	22	0
7	0	23	0
8	0	24	0
9	0	25	0
10	0	26	0
11	0	27	0
12	0	28	0
13	0	29	0
14	0	30	0
15	0	31	0
16	0		

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

DOCKET NO. 50-315
UNIT NAME D.C. Cook - Unit 1
DATE 9-13-82
COMPLETED BY B.A. Svensson
TELEPHONE 616-465-5901

REPORT MONTH August, 1982

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
185 Cont'd.	820703	S	744	B&C	1	N.A.	ZZ	ZZZZZZ	The Unit was removed from service at 0146 hours on 820703 for scheduled Cycle VI - VII refueling and maintenance outage. The Unit remained out of service the entire month.

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 (NUREG 0161)

5
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[1]. 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 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.

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[1] 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, 50 MW is too small a change to warrant explanation.

Docket No: 50-315
Unit Name: D. C. Cook Unit 1
Completed by: D. R. Campbell
Telephone: (616) 465-5901
Date: 9/8/82
Page: 1 of 1

MONTHLY OPERATING ACTIVITIES - AUGUST 1982

Highlights:

The Unit entered the reporting period in Mode 6 to continue the refueling outage that was started July 2, 1982. The entire core was unloaded to permit work on IMO-128 (Letdown isolation valve from the Reactor Coolant System to the Residaul Heat Removal Systems.), which required draining of the RCS loops. Repairs were made to IMO-128, the loops were refilled and core reload started. The Unit went into Mode 5 at 0845 hours, August 30, and remains in this Mode at the present time.

There was no electrical generation for the month.

Summary:

8/9/82	Reactor core completely unloaded from the vessel and the Reactor Coolant loops drained.
8/16/82	Unit back to Mode 6 and core reloading started.
8/20/82	Core loading completed.
8/23/82	Reactor head replaced.
8/30/82	Unit in Mode 5.

DOCKET NO.	50 - 315
UNIT NAME	D. C. Cook - Unit No. 1
DATE	9-13-82
COMPLETED BY	B. A. Svensson
TELEPHONE	(616) 465-5901
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MAJOR SAFETY-RELATED MAINTENANCE

AUGUST, 1982

M-1 Plugged ten tubes in steam generator #12 and ten tubes in steam generator #13. The tubes were plugged as a preventive measure and are those adjacent to the tube lane blocking devices. (Row 1, Columns 1, 2, 3, 4, 5, 90, 91, 92, 93 and 94.)

M-2 AB Diesel aftercoolers ESW regulating valve, WRV-721, was sticking partially open. Disassembled the valve, replaced a broken O-ring and bonnet gasket. Had valve tested.

M-3 Component cooling water containment isolation check valve, CCW-135, failed to meet type C leak rate test criteria. Lapped the valve discs and replaced rubber seats. Had the valve retested.

M-4 The fuel transfer system was damaged during dry checkout prior to refueling. Repaired the transfer cart, upender, upender basket and tracks.

M-5 No. 4 steam generator blowdown regulating valve, DRV-342, had a body-to-bonnet leak. Replaced the valve seat and plug gaskets. Replaced the operator diaphragm and repacked the valve. Had the valve tested.

M-6 A leak was discovered in a socket weld of the 1" vent line on the East RHR Heat Exchanger upstream of the vent valve, RH-125E. Re-welded the joint and had necessary NDE performed.

M-7 Inspected the controlled leakage seals on #11 reactor coolant pump. Replaced #1 seal insert, ring and runner, #2 seal insert and ring, and #3 seal runner.

M-8 Upon disassembly of the West Centrifugal Charging Pump, visual inspection revealed erosion of the internal cladding in the area of the discharge nozzle. The indications were ground out and welded. NDE was completed.

M-9 Pressurizer power-operated relief valve, NRV-153, leaked by. Replaced valve internals and gaskets, repacked valve and had it tested.

M-10 Inspection of IMO-128, the motor-operated isolation valve for RHR pump suction revealed a broken valve disc holder. The valve stem, valve discs, valve disc holder, frame, bonnet studs and nuts and bonnet gasket were replaced. Repacked the valve, reset valve travel limits and tested.

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UNIT NAME D. C. Cook - Unit No. 1
DATE 9-13-82
COMPLETED BY B. A. Svensson
TELEPHONE (616) 465-5901
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MAJOR SAFETY-RELATED MAINTENANCE

AUGUST, 1982

M-11 A leak developed in the instrument line to the West RHR system flow instrument IFI-331. Ground out socket weld and rewelded. Had required NDE performed.

M-12 The North waste gas compressor was not operating properly. The diaphragm for the suction valve, RRV-378, was replaced and the valve was tested satisfactorily.

M-13 A leak developed in the drain line for the East RHR heat exchanger. Ground out socket weld and rewelded. Had required NDE performed.

M-14 CVCS letdown regulating valve, QRV-160, had a body-to-bonnet leak. Replaced the valve gaskets and bonnet studs. Had the valve tested.

M-15 A leak developed in the equalizing line for the RHR valve, IMO-350, on the West RHR train. A cracked weld was grounded out and rewelded. Necessary NDE was performed.

M-16 The nitrogen containment isolation check valve to the reactor coolant drain tank, N-160, failed to meet the type C leak rate test criteria. Opened valve and cleaned internals. Valve tested satisfactorily.

M-17 The CTS pumps suction valves, IMO-215 and IMO-225, were leaking by. Lapped the valve discs and seats and repacked both valves. Had valves tested.

M-18 The charging pump suction valve from the RWST, IMO-910, had a body-to-bonnet leak. Replaced the bonnet gasket and bonnet studs and nuts. Had valve tested.

M-19 Two short sections of the containment divider barrier seal were found to have surface cracks. Replaced cracked sections of seal material.

M-20 The RHR letdown regulating valve to the CVCS system, IRV-300, had a body-to-bonnet leak. Replaced the bonnet gasket and had the valve tested.

M-21 A leak developed in the equalizing line for the RHR pump suction valve, IMO-350. A 3/4" pipe and elbow were replaced. The required NDE was performed.

M-22 An oil leak was observed on 1AB emergency diesel #4 front cylinder inlet valve pushrod sleeve. Replaced the gasket and O-ring. Had the engine run for test.

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MAJOR SAFETY-RELATED MAINTENANCE

AUGUST, 1982

C&I-1 AB diesel generator starting air receiver pressure low, annunciator panel 19 drop 3, was not received with the pressure at 160 psig. Repair of a broken wire on a terminal board in the diesel room corrected the annunciator problem.

C&I-2 "E" motor driven auxiliary feedwater pump blackout sequence timer was found to exceed technical specification maximum time. When connected to a relay tester, the time relay "double pumped". Tightening the prime contact mover on the time relay corrected the trouble.

C&I-3 Containment auxiliary subpanel annunciator panel #24 experienced a loss of 250VDC power during the performance of a containment sump flow capacity test. Troubleshooting the AFC-2 circuit revealed an error in wiring at the containment 650' level airlock. This error had caused four 250 VDC power supplies plus an annunciator flasher card to fail. Replacement of the defective components restored power to the annunciator panel.

C&I-4 Radioactive liquid release flowrate gauge RFI-285 was indicating 18 gpm flow with no actual flow through the piping. This gauge is used to document radioactive liquid release. The flow D/P transmitter, squareroot extractor and flow indicator were recalibrated to specifications, to restore correct flow readings to RFI-285.

C&I-5 Fuel manipulator crane "tube down" indicator was inoperative. The actuating proximity switch was replaced to correct the "tube down" indication.

C&I-6 During testing of 1AB diesel generator, the mechanical overspeed trip device did not trip the engine when its setpoint was exceeded, although proper mechanical operation of the device was observed. The failure to trip was ultimately caused by failure of the governor power inverter due to blowing of a fuse. With loss of power, the electronic overspeed relay, Dynalco speed sensor, and Woodward mechanical governor were all inoperative. "AB" battery was still powering trip solenoid valve SV-5, however, the operator was able to trip the engine by de-energizing SV-5, allowing release of the control signal.

C&I-7 Low suction pressure trip annunciator was received on the "W" motor-driven auxiliary feedwater pump. Replacement of a sluggish-acting Mercoid pressure switch corrected the difficulty.

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UNIT NAME	D. C. Cook - Unit No. 1
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MAJOR SAFETY-RELATED MAINTENANCE

AUGUST, 1982

C&I-3 Accumulator #4, narrow range pressure channel IPA-141, failed low and then returned to a normal pressure reading. Defective containment penetration connections were reworked and the pressure transmitter was recalibrated to insure reliability and accuracy of IPA-141.

C&I-9 Nitrogen supply valve to accumulator, GRV-313, was leaking N_2 to atmosphere. A broken diaphragm assembly was replaced and missing screws on the regulator gauges were installed to repair the N_2 leaks.