OPERATING DATA REPORT

DOCKET NO. 50-315
DATE 10-4-82
COMPLETED BY A.L. Tetlzlaff
TELEPHONE (616)465-5901

OPERATING STATUS

1. Unit Name: DONALD C COOK UNIT 1
2. Reporting Period: SEPTEMBER 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

Notes

8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons:

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	22.0	6551	67,919
12. Number Of Hours Reactor Was Critical	94.9	3428.2	49,701.4
13. Reactor Reserve Shutdown Hours	0	0	463
14. Hours Generator On-Line	13.7	3315.3	48,537.5
15. Unit Reserve Shutdown Hours	0	0	321
16. Gross Thermal Energy Generated (MWH)	12,755	10,517,817	140,881,006
17. Gross Electrical Energy Generated (MWH)	3,150	3,456,570	46,338,250
18. Net Electrical Energy Generated (MWH)	2,709	3,335,104	44,575,782
19. Unit Service Factor	1.9	50.6	73.7
20. Unit Availability Factor	1.9	50.6	73.7
21. Unit Capacity Factor (Using MDC Net)	.36	48.8	66.6
22. Unit Capacity Factor (Using DER Net)	.36	48.3	63.6
23. Unit Forced Outage Rate	95.8	29.7	8.8

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 10-1-82

COMPLETED BY Art Tetzlaff

TELEPHONE 616-465-5901

MONTH September

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	13
14	0	30	102
15	0	31	—
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

REPORT MONTH September, 1982

DOCKET NO. 50-315
UNIT NAME D.C.Cook - Unit 1
DATE 10-13-82
COMPLETED BY B.A. Svensson
TELEPHONE 616-465-5901

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	694.3	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. Low power physics testing was performed on 820915 thru 820917. The Unit was not returned to service until 2217 hours on 820929 pending completion of repairs to the North safety injection pump. Reactor power was increased to 35% for warming of the turbine-generator prior to turbine overspeed testing.
186	820930	S	12.0	B	1	N.A.	ZZ	ZZZZZZ	Unit removed from service for turbine overspeed testing and repair of pressurizer auxiliary spray valve, QRV-51. The Unit remained out of service at the end of the 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.

[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: 10/11/82
Page: 1 of 1

MONTHLY OPERATING ACTIVITIES - SEPTEMBER 1982

Highlights:

The Unit entered the reporting period in Mode 5 following the refueling outage. Core physic tests were begun on September 13th. The Unit was paralleled to the grid at 2217 hours September 29, 1982, and loaded to approximately 35% to warm the turbine generator rotor in preparation for over speed tests. The turbine generator was removed from service at 1158 hours on September 30, 1982, and the turbine over speed tests were completed successfully. The reactor was then shut down and the Unit cooled down to Mode 3 to make a repair to the Pressurizer Auxiliary Spray Valve. The Unit was returned to service October 1, 1982, and is now completing the power escalation testing.

The gross electrical generation for the month was 3,150 MWH.

Summary:

09/03/82 Reactor Coolant System being filled and vented.

09/15/82 Reactor critical at 0033 hours with low power physics tests in progress.

09/17/82 Entered Mode 3. Various combinations of operating Reactor Coolant Pumps were obtained for testing of the newly installed Reactor Vessel Level Indicating System.

09/29/82 Reactor is critical at 1315 hours.

09/29/82 Unit entered Mode 1 at 1815 hours, the turbine generator was paralleled at 2217 hours and held at approximately 35% power.

09/30/82 The turbine was tripped at 1158 hours and turbine over speed tests were completed.

DOCKET NO.	50 - 315
UNIT NAME	D. C. Cook - Unit No. 1
DATE	10-13-82
COMPLETED BY	B. A. Svensson
TELEPHONE	(616) 465-5901
PAGE	1 of 3

MAJOR SAFETY-RELATED MAINTENANCE

SEPTEMBER, 1982

M-1 The BIT outlet isolation valve to Loop 2, IMO-52, position indication was not correct. Replaced the limitorque housing cover which was cracked and reset limit and torque switches.

M-2 Control air system containment isolation valve, XCR-103, failed to meet Type C leak rate test criteria. Lapped the valve seating surfaces, replaced the gaskets and repacked the valve. Had the valve retested.

M-3 The manual operator would not engage on the RHR heat exchanger cross-tie valve, IMO-314. Investigation revealed that the bevel gear in the motor operator was broken. Replaced the bevel gear and had the valve tested.

M-4 Accumulator isolation valve, IMO-110, was leaking. Repaired bonnet leak, repacked and had valve tested.

M-5 Radiation monitoring system containment isolation check valve, SM-1, failed to meet the Type C leak rate test criteria. Replaced gasket and had the valve retested.

M-6 The clutch would not engage to allow handwheel operation of the RHR heat exchanger bypass valve, IMO-324. Replaced broken bevel gear in the motor operator and had the valve tested.

M-7 CCW return line containment isolation valve, CCM-452, from RCP coolers would not operate. Replaced the butterfly valve. Replaced the worm gear, drive sleeve and bearings in the motor operator. Had the valve tested.

M-8 The West CCW heat exchanger ESW outlet valve, WMO-737, leaked by. Replaced the butterfly valve and had it tested.

M-9 Glycol containment isolation valve, VCR-10, operator had an air leak. Replaced the operator diaphragm and had the valve tested.

M-10 CVCS letdown regulating valve, QRV-111, had a body-to-bonnet leak. Replaced the bonnet gasket and the bonnet studs and had the valve tested.

M-11 Steam generator blowdown isolation valves, BD-103-1, 2, 3 and 4, leaked by. Replaced all four valves. Had necessary NDE performed and completed leak test at operating pressure.

DOCKET NO. 50 - 315
UNIT NAME D. C. Cook - Unit No. 1
DATE 10-13-82
COMPLETED BY B. A. Svensson
TELEPHONE (616) 465-5901
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MAJOR SAFETY-RELATED MAINTENANCE

SEPTEMBER, 1982

M-12 Threads were stripped out on a reactor coolant system, Loop 4 RTD well fitting. Installed a welded cap on the fitting and had NDE performed.

M-13 Main feedwater check valve to #4 steam generator, FW-118-4, had a leak at the bearing cap due to the cap fastener holes being drilled too deep. Similar check valves, FW-118-1, 2 and 3, also had fastener holes which were drilled too deep. Welded the bottom of the affected bolt holes, had necessary NDE performed and completed a leak test at operating pressure.

M-14 The North boric acid filter outlet valve, CS-422, was leaking; replaced the valve diaphragm.

M-15 The South waste gas compressor was reported to have a mechanical seal leak. Replaced the compressor and had it tested.

M-16 Blowdown regulating valve for #1 steam generator, DRV-311, had a body-to-bonnet leak. Replaced bonnet gasket, repacked valve and had the valve tested.

M-17 The containment isolation valve to radiation monitor R-11 and R-12, ECR-31, was found to have a bent stem. Replaced the st plug and gaskets. Lapped the valve seat and had the valve ret

M-18 Blowdown regulating valve for #1 steam generator, DRV-311, had a bent stem. Replaced the valve stem, packing and gaskets. Had the valve tested.

M-19 The dump valve for #2 steam generator stop valve, MRV-221, was leaking by. Replaced the valve disc, seat and stem. Had the valve tested.

M-20 The normal CVCS letdown regulating valve, QRV-112, air operator was leaking. Replaced the operator diaphragm and had the valve tested.

M-21 Pressurizer auxiliary spray regulating valve, QRV-51, had a body-to-bonnet leak. Replaced the valve gaskets and two bonnet studs. Had the valve tested.

M-22 Radio-gas detector sample containment isolation valve, ECR-31, was binding during operation. The valve stem was found to be bent. Replaced the valve stem and plug. Had the valve tested.

DOCKET NO.	50 - 315
UNIT NAME	D. C. Cook - Unit No. 1
DATE	10-13-82
COMPLETED BY	B. A. Svensson
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MAJOR SAFETY-RELATED MAINTENANCE

SEPTEMBER, 1982

M-23 The lower containment personnel airlock inner door equalizing valve was leaking by. Readjusted valve operating linkage and functionally tested.

M-24 An unacceptable indication was discovered in the main feedwater line to #2 steam generator. The indication was ground out and rewelded. Necessary NDE was performed.

C&I-1 Unit vent air particulate process radiation monitor, R-25, failed low. The detector connector wiring was repaired and a new scintillation tube and high-voltage power supply were installed to restore proper operation to R-25.

C&I-2 Diesel generator 1AB power inverter failed, making the 1AB diesel inoperable. Four silicon controlled rectifiers and their respective diodes were replaced, along with the "transformer gate" and "shorting" printed circuit boards. The repaired system was tested first by simulating the diesel generator output power, and then by running the diesel. After a frequency adjustment, 1AB diesel was declared operable.

C&I-3 Feedwater regulating valve to No. 4 steam generator, FRV-240, failed to stroke within the prescribed 8 seconds closing time. It was discovered that the pneumatic booster associated with the valve had exhaust orifice diameters of 5/32". This booster was replaced with a unit having the proper 1/2" diameter exhaust openings. FRV-240 then closed within the alloted time.

C&I-4 Residual heat removal bypass cooldown regulator valve, IRV-311, had a broken airline which caused it to fail to the open position. The broken line was refitted to the valve bonnet. The valve was cycled and found to be satisfactory.