

OPERATING DATA REPORT

DOCKET NO. 50-315
 DATE 4-2-80
 COMPLETED BY W. T. Gillett
 TELEPHONE 616-465-5901

OPERATING STATUS

1. Unit Name: Donald C. Cook 1
2. Reporting Period: March 1980
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	2,184	46,008
12. Number Of Hours Reactor Was Critical	744	1,786.8	34,748.5
13. Reactor Reserve Shutdown Hours	0	0	463
14. Hours Generator On-Line	744	1,780.6	33,863.8
15. Unit Reserve Shutdown Hours	0	0	321
16. Gross Thermal Energy Generated (MWH)	2,410,741	5,600,794	94,667,099
17. Gross Electrical Energy Generated (MWH)	802,710	1,860,680	31,018,020
18. Net Electrical Energy Generated (MWH)	775,515	1,795,577	29,792,891
19. Unit Service Factor	100	81.5	77.3
20. Unit Availability Factor	100	81.5	77.3
21. Unit Capacity Factor (Using MDC Net)	99.8	78.7	67.6
22. Unit Capacity Factor (Using DER Net)	98.9	78.0	62.9
23. Unit Forced Outage Rate	0	18.5	7.6
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:

26. Units In Test Status (Prior to Commercial Operation):

Forecast

Achieved

INITIAL CRITICALITY

INITIAL ELECTRICITY

COMMERCIAL OPERATION

(4/77)

8004150 371

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-315
 UNIT 1
 DATE 4-2-80
 COMPLETED BY W. T. Gillett
 TELEPHONE 616-465-5901

MONTH March 1980

DAY	AVERAGE DAILY POWER LEVEL (MWE-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>1,042</u>	17	<u>1,047</u>
2	<u>1,044</u>	18	<u>1,045</u>
3	<u>1,045</u>	19	<u>1,046</u>
4	<u>1,045</u>	20	<u>1,047</u>
5	<u>1,044</u>	21	<u>1,045</u>
6	<u>1,044</u>	22	<u>1,045</u>
7	<u>1,045</u>	23	<u>1,026</u>
8	<u>1,029</u>	24	<u>1,045</u>
9	<u>1,044</u>	25	<u>1,046</u>
10	<u>1,044</u>	26	<u>1,045</u>
11	<u>1,015</u>	27	<u>1,045</u>
12	<u>1,048</u>	28	<u>1,046</u>
13	<u>1,045</u>	29	<u>1,046</u>
14	<u>1,046</u>	30	<u>1,033</u>
15	<u>1,034</u>	31	<u>1,046</u>
16	<u>1,045</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 March, 1980

DOCKET NO. 50-315
 UNIT NAME D.C. Cook-Unit
 DATE 4-8-80
 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
<u>NONE</u>									There were no Unit shutdowns or significant power reductions. The Unit operated at essentially 100% reactor power for the entire month.

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)

(9/77)

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 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:

- 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.

Doc No.: 50-315
Unit Name: D. C. Cook Unit #1
Completed By: R. S. Lease
Telephone: (616) 465-5901
Date: April 9, 1980
Page: 1 of 2

MONTHLY OPERATING ACTIVITIES -- MARCH, 1980

Highlights :

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

Total electrical generation for the month was 803,710 Mwh.

Summary :

3/5/80 -- The South half of "B" Condenser was out of service for a 5.5 hour period for checking of tube leakage.

3/6/80 -- The East Centrifugal Charging Pump was inoperable for a 30.75 hour period starting at 1533 hours. During this time the Outboard Bearing Vibration was reduced to normal limits...

3/7/80 -- The North half of "C" Condenser was out of service for a 3.5 hour period for checking of tube leakage.

3/8/80 -- Power was reduced to 90% for testing of Turbine Valves. Total time below 100% was 3.25 hours.

3/10/80 -- The Reciprocating Charging Pump was inoperable for a 6 hour period to repair a leak on the pump head.

3/15/80 -- Power was reduced to 90% for testing of Turbine Valves. Total time below 100% was 4 hours.

The 69/4KV Reserve Off-site Power Source was out of service for a 6.25 hour period for preventive maintenance.

3/16/80 -- The Wall Fire Spray System around Unit 1 Main Transformer operated at 0832 hours. No reason for operation was found and the system was reset.

3/18/80 -- Radiation Monitor R-31 and R-32 were inoperable for a 6.75 hour period for replacement of the sample pump.

The South half of "C" Condenser was out of service for a 4.5 hour period for checking of tube leakage.

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3/23/80 -- Power was reduced to 90% for testing of Turbine Valves.
Total time below 100% was 7 hours.

3/24/80 -- The High Demand Fire Pump was inoperable for a 24 hour
period starting at 2150 hours for repairs to the pump
strainer.

3/25/80 -- Safeguard Fan 1-HV-AES-1 was inoperable for a 26 hour
period starting at 0520 hours. This was to make repairs
to a binding damper.

3/30/80 -- Power was reduced to 90% for testing of Turbine Valves.
Total time below 100% was 6 hours.

The Automatic Fire Protection Spray System operated on
Transformer 1-AB at 2340 hours. As a precautionary
measure Auxiliary Power Feed to 4KV Buses 1-A and 1-B
was transferred to the Reserve Off-site Source. After
checking and finding no reason for spray actuation the
water was valved off at 2340 hours. The cause of the
actuation was traced to a failed relay. Repairs were
made and the circuit returned to normal.

3/31/80 -- Buses 1-A and 1-B were returned to normal supply at
0744 hours.

DOCKET NO.	50 - 315
UNIT NAME	D. C. Cook - Unit No. 1
DATE	4-8-80
COMPLETED BY	B. A. Svensson
TELEPHONE	(616) 465-5901
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MAJOR SAFETY-RELATED MAINTENANCE

MARCH, 1980

- M-1 During operation of the motor driven auxiliary feedpump, higher than normal vibration and temperature indications were observed on the outboard pump bearing. The bearing was replaced and the pump tested.
- M-2 A damper on the spent fuel area exhaust ventilation unit was binding. Repaired damper and had unit tested.
- M-3 Higher than normal vibrations were experienced on the east centrifugal charging pump. Checked pump bearings, checked runout on thrust runner, aligned gear case to pump, aligned motor to gear case, adjusted balance weight on bearing housing, lubricated couplings and had pump tested.
- M-4 The reciprocating charging pump head gasket leaked. Replaced head gasket and had pump tested.
- M-5 The face damper air cylinder for ESF ventilation unit HV-AES-1 was sticking. Replaced broken coupling on damper linkage and disassembled, cleaned, lubricated and reassembled damper air cylinder. Checked operation.
- C&I-1 Flux mapping system detector E indicated a shorted condition, and the position decoder was not functioning properly. Detector D was located at the bottom of core position thimble C7 (Detector D operation in emergency mode) and would not move. The D and E detector ten path transfer selector boxes were inspected. The ten path for detector E was found shifted and the limit switch for path C7 had misaligned. The switch and transfer device was repositioned. Detector E was withdrawn from the detector E ten path and placed into detector D normal position. Detector E was placed into the storage location. The detector A drive wheel was inspected and appeared to be scarred. The detector current of E returned to normal, and the system was placed into service.
- C&I-2 Flux mapping system detector A, located 25 inches from the top of core, could not be moved. The drive wheel was inspected and found damaged. The detector cable helix was dislocated. The detector drive wheel and the detector were replaced with spares. The drive wheel clutch was adjusted to the proper torque. Normal operation of detector A and drive system was verified.

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MAJOR SAFETY-RELATED MAINTENANCE

MARCH, 1980

- C&I-3 Detectors number 1 and number 2 of the axial power distribution monitoring system would not complete scans as required. The system's operation was observed, and the flux mapping system selected path for the detectors indicated different top of core limits and bottom of core limits. Nuclear section personnel corrected the limit adjustments. Normal system operation returned.
- C&I-4 The axial power distribution monitoring system would not initiate scans at the proper time period. The detector drive systems were verified operational on manual scans. The K3G auto start relay was replaced with a spare relay. The system was cycled through the time sequence.
- C&I-5 The 1AB transformer trouble alarm was received. The relay coil had failed. The relay was replaced with a new type.

