

# OPERATING DATA REPORT

DOCKET NO. 50-315  
DATE 1-3-80  
COMPLETED BY W. L. Gillett  
TELEPHONE 616-465-5901

## OPERATING STATUS

1. Unit Name: Donald C. Cook 1
2. Reporting Period: December 1979
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	8,760	43,824
12. Number Of Hours Reactor Was Critical	557.9	5,750.0	32,961.7
13. Reactor Reserve Shutdown Hours	0	0	463
14. Hours Generator On-Line	555.7	5,669.9	32,083.2
15. Unit Reserve Shutdown Hours	0	0	321
16. Gross Thermal Energy Generated (MWH)	1,723,754	17,728,514	89,066,305
17. Gross Electrical Energy Generated (MWH)	573,090	5,867,680	29,157,340
18. Net Electrical Energy Generated (MWH)	553,050	5,660,137	27,997,314
19. Unit Service Factor	74.7	64.7	75.1
20. Unit Availability Factor	74.7	64.7	75.1
21. Unit Capacity Factor (Using MDC Net)	71.2	61.9	67.0
22. Unit Capacity Factor (Using DER Net)	70.5	61.3	62.0
23. Unit Forced Outage Rate	25.3	9.9	7.0
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):

INITIAL CRITICALITY  
INITIAL ELECTRICITY  
COMMERCIAL OPERATION

Forecast	Achieved
_____	_____
_____	_____
_____	_____

(4/77)

8001210 164

# AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-315

UNIT 1

DATE 1-8-80

COMPLETED BY W. T. Gillett

TELEPHONE 616-465-5901

MONTH December 1979

DAY AVERAGE DAILY POWER LEVEL  
(MWE-Net)

1	417
2	619
3	1041
4	1043
5	1043
6	1045
7	1042
8	1044
9	1025
10	1044
11	982
12	987
13	933
14	942
15	993
16	833

DAY AVERAGE DAILY POWER LEVEL  
(MWe-Net)

17	1033
18	1044
19	1044
20	1044
21	1044
22	1025
23	1038
24	739
25	0
26	0
27	0
28	0
29	0
30	0
31	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  
 DATE 1-14-80  
 COMPLETED BY B.A. Svensson  
 TELEPHONE (616) 465-5901  
 PAGE 1 of 2

REPORT MONTH December, 1979

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report #	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause & Corrective Action to Prevent Recurrence
153	791201	F	13.7	G	3	N.A.	RB	INSTRU	<p>While working on the rod control system to clear a "Rod Control Urgent Failure" alarm a wrong card was pulled, dropping the rods in that group which caused a "negative rate" reactor trip. The unit was returned to service the same day and reached 100% power on 791202. Reactor power reduced to 70% to perform N.I.S. Incore/Excore cross calibration. Power returned to 100% 791217.</p> <p>Unit shut down and brought to cold shutdown (Mode 5) due to a significant non-conformance identified during inspection/evaluation program performed in accordance with IE Bulletin No. 79-14. Analysis indicated that under the condition of</p> <p>(Continued On Next Page)</p>
154	791216	S	0	B	4	N.A.	ZZ	ZZZZZZ	
155	791224	F	174.6	H	1	79-065/01T-0	SE	SUPORT	

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 (IER) File (NUREG-  
 0161)

5  
 Exhibit I - Same Source

(9/77)

# UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH December, 1979

DOCKET NO. 50-315  
 UNIT NAME D.C. Cook-Unit 1  
 DATE 1-14-80  
 COMPLETED BY B.A. Svensson  
 TELEPHONE (616) 465-5901  
 PAGE 2 of 2

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report #	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause & Corrective Action to Prevent Recurrence
155 (Continued)									the design basis earthquake, the duct work on both trains of the containment air recirculation system would be stressed beyond yield. The unit remained out of service at the end of the month to effect required modifications.

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 I - Same Source

(9/77)

Docket No.: 50-315  
Unit Name: D. C. Cook Unit #1  
Completed By: R. S. Lease  
Telephone: (616) 465-5901  
Date: January 9, 1980  
Page: 1 of 3

**MONTHLY OPERATING EXPERIENCES -- DECEMBER, 1979**

**Highlights :**

The Unit entered this reporting period operating at 100% power. Power levels other than this are detailed in the summary.

There were 2 outages during the reporting period. These are also detailed in the summary.

Total electrical generation for the month was 573,090 Mwh.

**Summary :**

12/01/79 -- Power reduction for the purpose of testing Turbine valves was started at 0025 hours. When at 95% power control rods failed to move due to a Rod Urgent Failure Alarm and the power reduction was halted. At 1000 hours the Unit tripped from a negative rate trip caused when a card was pulled on Control Bank "A", Group 1, while trying to eliminate the problem with the Urgent Failure Alarm.

The Control Rod problem was repaired at 1710 hours and the reactor returned to criticality at 2136 hours. The Generating Unit was returned to service at 2341 hours.

12/02/79 -- Power increase was stopped at 48% at 0415 hours due to an indicated Quadrant Power Tilt ratio of greater than 1.02. The Quadrant Power Tilt cleared and power increase was again started at 1105 hours with the Unit being loaded to 100% by 1530 hours.

12/04/79 -- Containment Recirculation Fan CEQ-2 was inoperable for a 2.5 hour period for repairs to a Test Damper.

12/08/79 -- Power was reduced to 85% for testing of Turbine valves. Total time below 100% power was 5.5 hours.

#13 Circulating Water Pump failed at 0805 hours. Temperature rise across the Condensers increased to greater than 23°F but less than 27°F. Tech. Spec's allow operation in this area with a failed pump but not to exceed 72 hours.

Docket No.: 50-315  
Unit Name: D. C. Cook Unit #1  
Completed By: R. S. Lease  
Telephone: (616) 465-5901  
Date: January 9, 1980  
Page: 2 of 3

12/08/79 -- 34.5KV Reserve Feed Cables 12AB and 12CD were out of (Cont'd) service, one at a time, for a 5 hour period each. This was to allow reconnecting of Transformers 201AB and 201CD.

12/10/79 -- Auxiliary Feedwater Valves FMO-212 and FMO-242 were inoperable for a 10.5 hour period for cleaning and inspection of switchgear.

12/11/79 -- Power was reduced to 95% at 0015 hours. This was to reduce the temperature rise across the Condensers to less than 23°F.

Meteorological instruments of wind speed, wind direction and temperatures were removed from service for modifications. These instruments were returned to service 12/24/79.

12/13/79 -- Power was reduced to 85% for a period of 18.75 hours to remove the South half of "A" Condenser from service for checking of tube leaks.

12/16/79 -- Power was reduced to 70% starting at 0930 hours. This was to perform required Incore/Excore Nuclear Instrumentation Cross Calibration. The Unit was reloaded to 100% power over a 4 hour ramp starting at 2209 hours. The #13 Circulating Water Pump had been returned to service at 2142 hours which allowed the return to 100% power.

12/21/79 -- Vent Stack Radiation Monitor R-22 was inoperable for an 11.25 hour period for repairs.

12/22/79 -- Power was reduced to 85% for testing of Turbine valves. Total time below 100% power was 4.6 hours.

12/24/79 -- The Unit was started down and out at 1645 hours. Reason for the outage was that the design deficiencies in the Containment Hydrogen Skimmer System had been identified. The Turbine was tripped at 1724 hours and the Reactor tripped at 1730 hours. The Reactor Plant entered Mode 4 at 2250 hours.

12/25/79 -- The Reactor Plant entered Mode 5 at 1535 hours.

The Unit remains in Mode 5 while seismic analysis and required modifications are being performed on the safety related systems.

Docket No.: 50-315  
Unit Name: D. C. Cook Unit #1  
Completed By: R. S. Lease  
Telephone: (616) 465-5901  
Date: January 9, 1980  
Page: 3 of 3

12/26/79 -- The 12AB 34.5KV Reserve Feed underground cables were out of service for a 1 hour period. This was to modify the protection circuit of these cables. During this time 4KV Buses T11A and T11B were energized from the Reserve Auxiliary Power Source.

DOCKET NO.	50 - 315
UNIT NAME	D. C. Cook - Unit No. 1
DATE	1-14-80
COMPLETED BY	B. A. Svensson
TELEPHONE	(616) 465-5901
PAGE	1 of 1

MAJOR SAFETY RELATED MAINTENANCE

DECEMBER, 1979

- M-1 Residual heat removal cooldown flow instrument, IFI-335, was found to have weld leaks on impulse lines. Faulty welds were cut out. New coupling and nipple were installed. Required NDE was performed.
- C&I-1 Steam generator level control system on loop 3 displayed erratic operation during the testing of stop valves. The tracking and auto-manual relays of the controller were cleaned. Operation of the control system was verified through recorder traces.
- C&I-2 Drumming area radiation monitor channel R-8 had failed low. The connection to the monitor was repaired and proper operation of channel R-8 was verified.
- C&I-3 Radiation monitor channel R-22, waste liquid off-gas, had failed high. The detector G.M. tube and associated connectors were cleaned to restore proper function.
- C&I-4 Limit switches on the ice condenser glycol isolation valve, VCR-21, were causing a D.C. ground. The switches were disassembled and their contacts and connections were cleaned to remove the D.C. ground condition.
- C&I-5 Nuclear instrumentation system source range channel N-32 failed low. Tests performed on the system indicated the detector had failed. The source range detector was replaced and the detector's high voltage was adjusted for correct operation.
- C&I-6 MR-50, containment dew point recorder, blue pen failed low. All terminations in the recorder terminal were tightened. The mirrors were cleaned and the detectors were rebalanced. A general inspection of all wiring in the unit was performed.

