

OPERATING DATA REPORT

DOCKET NO. 50-315  
 DATE 9-2-81  
 COMPLETED BY M.A. Might  
 TELEPHONE 616-465-5901

OPERATING STATUS

1. Unit Name: Donald C. Cook 1  
 2. Reporting Period: August 1981  
 3. Licensed Thermal Power (MWe): 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	5,831	58,439
12. Number Of Hours Reactor Was Critical	730	4,178.1	43,699.1
13. Reactor Reserve Shutdown Hours	0	0	463
14. Hours Generator On-Line	657.3	4,095.7	42,652.8
15. Unit Reserve Shutdown Hours	0	0	321
16. Gross Thermal Energy Generated (MWH)	1,790,135	12,862,987	122,089,992
17. Gross Electrical Energy Generated (MWH)	579,000	4,277,760	40,133,420
18. Net Electrical Energy Generated (MWE)	555,230	4,127,275	38,586,416
19. Unit Service Factor	88.3	70.2	75.8
20. Unit Availability Factor	88.3	70.2	75.8
21. Unit Capacity Factor (Using MDC Net)	71.5	67.8	67.7
22. Unit Capacity Factor (Using DER Net)	70.8	67.2	63.9
23. Unit Forced Outage Rate	1.0	.6	6.3

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):  
Maintenance shutdown scheduled for December 1981 for two weeks.

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	_____	_____

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-315

UNIT 1

DATE 9-2-81

COMPLETED BY Ann Might

TELEPHONE 616-465-5901

MONTH August 1981

DAY	AVERAGE DAILY POWER LEVEL (MWE-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	0	17	1015
2	0	18	1035
3	0	19	1031
4	164	20	1035
5	430	21	1023
6	430	22	1011
7	277	23	1034
8	413	24	1032
9	436	25	1021
10	636	26	1033
11	636	27	1032
12	766	28	1031
13	870	29	1019
14	920	30	1031
15	748	31	1029
16	996		

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 August, 1981

DOCKET NO. 50-315  
 UNIT NAME D.C. Cook - Unit 1  
 DATE 9-14-81  
 COMPLETED BY B.A. Svensson  
 TELEPHONE (616) 465-5901  
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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
171 Cont'd.	810529	S	78.2	B&C	1	N.A.	ZZ	ZZZZZZ	The unit was removed from service at 2259 hours on 810529 for scheduled Cycle V-VI refueling and maintenance outage. Following completion of the outage work and low power physics testing the unit was returned to service at 0614 hours on 810804. The total length of the outage was 1591.2 hours. Unit removed from service for turbine overspeed testing. Reactor/Turbine trip from 48% reactor power. Reactor tripped from pressurizer High Level because Channel NLP-153 was inadvertently valved out with Channel NLP-152 in trip for calibration. 2/3 trip logic. The reactor was taken critical and the unit paralleled the same day. 48% reactor power was reached on 810808 and the power ascension program continued.
172	810804	S	1.7	B	1	N.A.	ZZ	ZZZZZZ	
173	810807	F	6.8	G	3	N.A.	ZZ	ZZZZZZ	

<sup>1</sup>  
 F: Forced  
 S: Scheduled

<sup>2</sup>  
 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)

<sup>3</sup>  
 Method:  
 1-Manual  
 2-Manual Scram.  
 3-Automatic Scram.  
 4-Other (Explain)

<sup>4</sup>  
 Exhibit G - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-0161)

<sup>5</sup>  
 Exhibit I - Same Source

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH August, 1981

DOCKET NO. 50-315  
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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
174	810814	F	0	H	4	81-033/01T-0	EB	SUPPORT	Started a power reduction from 97% power to 60% due to an engineering review indicating that the safety-related 4KV power busses had not been adequately supported for their seismic class. 60% power was reached at 0254 hours on 810815. At 0825 the seismic supports were temporarily repaired and power increase to 97% started. 97% power was reached at 0215 on 810816 and 100% power was reached for the first time in Cycle VI at 1403 hours on 810817.

1  
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5  
 Exhibit I - Same Source

Docket No.: 50-315  
Unit Name: D. C. Cook Unit #1  
Completed By: D. R. Campbell  
Telephone: (616) 465-5901  
Date: September 14, 1981  
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MONTHLY OPERATING ACTIVITIES - AUGUST, 1981

Highlights:

The Unit entered this period in Mode Three following refueling.

The reactor was made critical at 0854 hours, August 1, 1981. This was the beginning of the Physics Testing.

Unit was paralleled at 0614 hour, August 4, 1981. At 1847 hours, August 4, 1981, Unit removed from service for overspeed testing. 2028 hours, August 4, 1981 the Unit was again paralleled.

At 1517 hours, August 7, 1981 the Unit tripped from pressurizer high level because channel NLP-153 was inadvertantly valved out with NLP-152 in trip for calibration. The trip was from 48% power. The reactor was made critical the same day, paralleled at 2205 hour and power physic tests were continued.

August 14, 1981 at 1800 hour, a power reduction was started due to an engineering review indicating that the safety related 4 KV power busses had not been adequately supported for their seismic class. Sixty percent power was reached at 0254 hour, August 15, 1981. At 0825 hours the seismic supports were temporarily repaired and a power increase started. Reactor power was at 100% at 1403 hours, August 17, 1981. The Unit operated at ~100% power for the remainder of the month, except for a short period of time at 90% power to test turbine valves.

Generation:

579,000 MWH.

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MAJOR SAFETY-RELATED MAINTENANCE

AUGUST, 1981

- M-1 Inspected the seals on No. 4 reactor coolant pump. Replaced the No. 3 seal and the No. 1 seal insert.
- M-2 A vent valve at the top of No. 3 steam generator, MS-106-3 had a packing leak. The leak was sealed by Furmanite injection
- M-3 Disassembled No. 1 through No. 4 steam generator stop valves, MRV-210, 220, 230 and 240 and replaced all upper and lower disc guide studs. Reassembled valves and had the valves tested.
- M-4 No. 3 steam generator stop valve dump valve, MRV-232 was leaking by. Replaced the valve stem and plug. Lapped the plug to the seat. Re-packed the valve and had it tested.
- M-5 The inner door of the containment personnel airlock on the 612' elevation had a broken interlock cable. Replaced the cable and tested the door.
- M-6 The tapered pin on the 1AB diesel fuel rack assembly at the bell crank shaft was worn and bent. Replaced the tapered pin and retested engine.
- C&I-1 MRV-233, steam generator No. 3 power operated relief valve would open approximately 4% when the controller was in the auto mode and not required. The controller's calibration was tested and the setpoint dial was found out of specification. The setpoint dial was adjusted to the correct value and proper operation of the controller was verified.
- C&I-2 A 4% difference was indicated on the pressurizer level protection set indication in the control room. The reference leg of NLP-151, protection channel No. 1 was filled. The indication returned to the correct value.
- C&I-3 Annunciator 11 Drop 6, 'Tavg High' was received with Tavg at approximately 561.5<sup>0</sup>F. The alarm module's calibration was tested and found to be out of specification. The module was recalibrated and returned to service.
- C&I-4 IPA-131, accumulator No. 3 control room indication failed. The instrument loop was tested and a fuse was found blown in the loop's power supply. The fuse was replaced. The test point voltage was measured at 1.7 volts with the normal maximum being 0.5 VDC. The problem was identified as a shorted feed-through in the penetration. The circuit was changed to a different penetration and correct operation of the instrument loop was verified.

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MAJOR SAFETY-RELATED MAINTENANCE

AUGUST, 1981

- C&I-5 Annunciator 9 Drop 23, north boric acid storage tank high temperature alarm was received in the control room. The temperature transmitter, QTC-410 indicated 170<sup>0</sup>F at the transmitter and 175<sup>0</sup>F at the control room panel. The alarm bistable's calibration was tested and the high alarm setpoint was found to be 1.875% low. The bistable was recalibrated and returned to service. The calibration of the transmitter was tested to determine the reason for the difference in indications. The process temperature point on the transmitter was found binding. The transmitter was within specifications and the pointer was freed.
- C&I-6 Control Rods' Control Bank C Low Alarm was received with the rods at 228 and all associated RPI Channels indicating > 228. The insertion limit computer modules were tested. ZY-4328 high limit was found out of specification. The high limit was calibrated to the correct value and the low alarm was verified to actuate at 220 steps.
- C&I-7 The 50' wind recorder paper drive was not working. The defective drive motor was replaced and all drive components checked.