

OPERATING DATA REPORT

DOCKET NO. 50-316  
 DATE 8-4-81  
 COMPLETED BY W. T. Gillett  
 TELEPHONE 616-465-5901

OPERATING STATUS

1. Unit Name: Donald C. Cook 2
2. Reporting Period: July 1981
3. Licensed Thermal Power (MWt): 3391
4. Nameplate Rating (Gross MWe): 1133
5. Design Electrical Rating (Net MWe): 1100
6. Maximum Dependable Capacity (Gross MWe): 1118
7. Maximum Dependable Capacity (Net MWe): 1082
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	<u>744</u>	<u>5,087</u>	<u>31,391</u>
12. Number Of Hours Reactor Was Critical	<u>543.2</u>	<u>3,281.5</u>	<u>21,026.6</u>
13. Reactor Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>0</u>
14. Hours Generator On-Line	<u>538.7</u>	<u>3,195.1</u>	<u>20,234.7</u>
15. Unit Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>0</u>
16. Gross Thermal Energy Generated (MWH)	<u>1,775,877</u>	<u>10,433,273</u>	<u>64,052,907</u>
17. Gross Electrical Energy Generated (MWH)	<u>573,410</u>	<u>3,387,670</u>	<u>20,479,500</u>
18. Net Electrical Energy Generated (MWH)	<u>553,312</u>	<u>3,269,257</u>	<u>19,728,422</u>
19. Unit Service Factor	<u>72.4</u>	<u>62.8</u>	<u>69.9</u>
20. Unit Availability Factor	<u>72.4</u>	<u>62.8</u>	<u>69.9</u>
21. Unit Capacity Factor (Using MDC Net)	<u>68.7</u>	<u>59.4</u>	<u>65.0</u>
22. Unit Capacity Factor (Using DER Net)	<u>67.6</u>	<u>58.4</u>	<u>64.4</u>
23. Unit Forced Outage Rate	<u>0</u>	<u>1.3</u>	<u>13.4</u>

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	_____	_____

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-136

UNIT 2

DATE 8-4-81

COMPLETED BY W. T. Gillett

TELEPHONE 616-465-5901

MONTH July - 1981

DAY	AVERAGE DAILY POWER LEVEL (MWE-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>1077</u>	17	<u>1080</u>
2	<u>1037</u>	18	<u>1072</u>
3	<u>----</u>	19	<u>1081</u>
4	<u>----</u>	20	<u>1072</u>
5	<u>----</u>	21	<u>1073</u>
6	<u>----</u>	22	<u>1080</u>
7	<u>----</u>	23	<u>1062</u>
8	<u>----</u>	24	<u>1031</u>
9	<u>----</u>	25	<u>1042</u>
10	<u>----</u>	26	<u>1047</u>
11	<u>177</u>	27	<u>1053</u>
12	<u>872</u>	28	<u>1056</u>
13	<u>995</u>	29	<u>1046</u>
14	<u>396</u>	30	<u>1041</u>
15	<u>1065</u>	31	<u>1030</u>
16	<u>1078</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 July, 1981

DOCKET NO. 50-316  
 UNIT NAME D.C. Cook - Unit 2  
 DATE 8-13-81  
 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
98	810703	S	205.3	B	1	N.A.	ZZ	ZZZZZZ	Unit was removed from service to resolve a high temperature problem in the containment lower volume and the No. 24 RCP motor. RCS cooldown to Mode 5 to permit containment purge. RCS was drained to half-loop to permit maintenance on RCS. The lower containment ventilation units on No. 24 RCP motor cooler was flushed and cleaned. Return to service of the RCS was started on 810708. The reactor was critical 810711 and the unit paralleled the same day. 100% reactor power was reached on 810712. Reactor power reduced to 55% to remove the east main feed pump turbine from service to check the operation of the f-p turbine main steam supply control valve. No problems were found. Reactor power was returned to 100% on 810714.
99	810713	F	0	B	4	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

Docket No.: 50-316  
Unit Name: D. C. Cook Unit #2  
Completed By: C. E. Murphy  
Telephone: (616) 465-5901  
Date: August 10, 1981  
Page: 1 of 1

MONTHLY OPERATING ACTIVITIES - JULY, 1981

Highlights:

The Unit entered this reporting period operating at 100% power and operated there for the entire period except for those periods of time as detailed in the Summary.

At 1755 on July 28, 1981 the NRC dedicated telephone was found to be inoperable, at which time, an "UNUSUAL EVENT" was declared. At 1918 the telephone was restored to service and communications with the NRC Center was re-established and the "UNUSUAL EVENT" was cancelled.

Total electrical generation for the month was 573,410 mwh.

Summary:

- 7-02-81 - At 2300 the Unit was started down in power to resolve the problem of unusual high Containment temperatures. The Unit entered Mode 3 at 0120 on July 3, 1981. At 1235 on July 4, it was decided to place the Unit in Cold Shut-down and perform repairs to various packing leaks and to readjust the Ventilation dampers in the Lower Volume of the Containment.
- 7-10-81 - At 0637, a Unit start-up was commenced. The Reactor was critical at 0937 on July 11, and paralleled with the Grid at 1407. The Unit was at 100% power at 1045 on July 14, 1981.
- 7-18, 7-25 - Reactor power was reduced to 90% for periods of approximately 3 hours while turbine valve testing was performed.

DOCKET NO.	50 - 316
UNIT NAME	D. C. Cook - Unit No. 2
DATE	8-13-81
COMPLETED BY	B. A. Svensson
TELEPHONE	(616) 465-5901
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MAJOR SAFETY-RELATED MAINTENANCE

JULY, 1981

- M-1 CRV-410 and CRV-411, CCW surge tank make-up valves were leaking by. Replaced plug in CRV-411. Both valves were lapped in, blued and reassembled. Valves tested satisfactorily.
- M-2 Body-to-bonnet leak on CS-328L4, normal charging line to loop 4 cold leg. Replaced bonnet gasket and corroded studs and nuts.
- M-3 No. 24, RCP motor running hot. Inspected, cleaned and reinstalled motor air coolers.
- M-4 QRV-111, loop 4 letdown to regenerative heat exchanger had a body-to-bonnet leak. Replaced bonnet gasket and corroded studs and nuts. Leak stopped.
- M-5 RC-102L-1, RTD loop bypass isolation valve leaks by. Removed defective valve from system and welded in new valve.
- M-6 No. 4 steam generator stop valve dump valve, MRV-241, was leaking by. Replaced the seat ring and machined the plug. Had the valve tested.
- M-7 Containment spray test line isolation valve, CTS-105W, would not operate due to stripped threads. Replaced the yoke bushing and dressed threads on the stem.
- M-8 The suction strainer on the "W" containment spray pump was leaking. Ground out cracks in "tee" type strainer housing and welded the excavated areas. Had necessary NDE performed and completed hydrostatic test.
- C&I-1 Nuclear Instrumentation System Source Range Channel N-31 indication would periodically increase. The cables on the drawer assembly were removed and the connectors were cleaned. Surveillance test 2 THP 4030 STP 123 was performed and verified the channel operability.
- C&I-2 Steam Generator No. 2, steam generator water level high deviation alarm was received. The steam generator's level was indicating 44% calibration of the difference bistable of the steam generator level control loop was found to be out of specification. The bistable was recalibrated and monitored for correct operation.
- C&I-3 As the Solid State Protection System Train A Multiplexer Test Switch was placed into the A+B position, eight status lights began to flash on the control room panels. The problem was traced to an isolation board at location A503. The circuit board was replaced with a spare. Seven (7) of the eight (8) status lights responded accordingly. The eighth status light problem was corrected by adjusting the proximity switch on the Main Turbine Stop Valve B Train B.

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MAJOR SAFETY-RELATED MAINTENANCE

JULY, 1981

- C&I-4 CRID IV Inverter failed. The 150 ampere fuse was replaced and failed capacitor C2 was replaced. The C2 capacitor in CRID's 1 and 3 were also replaced. Capacitors C1 and C4 were replaced in all CRID inverters.
- C&I-5 The emergency air supply for NRV-152, pressurizer power operated relief valve had decreased to 850 psig without producing an alarm at the required setpoint of 900 psig. The alarm instrument was recalibrated and the indicating gauge was also recalibrated.
- C&I-6 Containment Instrument Room temperature high annunciation was received at 120°F, although the room temperature did not appear to be anywhere near this level. The alarm setpoint was found to be 89°F, and was readjusted to the proper 120°F point per IMP.028.
- C&I-7 Process Radiation Monitor R-19, steam generator blowdown sampling did not respond to a radiation check source while a surveillance test was being performed. The R-19 detector was replaced and recalibrated, restoring the process monitor to operability.
- C&I-8 Temperatures of steam generators 1 and 4 ventilator housings were measured at 152°F and 158°F respectively, but the high alarms on annunciator panel 3 (drops 47 and 50) were not received. Recalibration of alarm units for all 4 steam generator housing vents, VTA-110, 120, 130 and 140 resulted in proper annunciation.
- C&I-9 Nuclear instrumentation channel N43 power range, gain potentiometer on the front of the drawer assembly displayed high sensitivity to vibration and would alter the percent power indication 10 percent. The gain potentiometer was replaced with a spare component and correct operation of the channel was verified.
- C&I-10 The Axial Power Distribution Monitoring System failed and would not produce the correct printouts or sequence properly. The D-116 minicomputer + 15 volt power supply had failed which resulted in locking up the computer. A transistor was replaced in the power supply. The power supply was adjusted to provide the + 15 volts and a functional test of the APDMS system was performed.
- C&I-11 Loop 4 delta T-Tavg protection set failed. The cold leg RTD was found to be open electrically. The spare RTD (NTP-240, TE-440B) was placed into service and the resistance to voltage converter calibration was performed. The surveillance test was performed to verify the protection channels operability.