

OPERATING DATA REPORT

DOCKET NO. 50-316  
 DATE 5-4-81  
 COMPLETED BY A. L. Tetzlaff  
 TELEPHONE 616-465-5901

OPERATING STATUS

1. Unit Name: Donald C. Cook Unit 2  
 2. Reporting Period: April 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	<del>720</del> 719.0	<del>2,880</del> 2879	29,183
12. Number Of Hours Reactor Was Critical	0	1,728.1	19,470.2
13. Reactor Reserve Shutdown Hours	0	0	0
14. Hours Generator On-Line	0	1,728.1	18,757.7
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	0	5,833,391	59,453,025
17. Gross Electrical Energy Generated (MWH)	0	1,897,710	18,989,540
18. Net Electrical Energy Generated (MWH)	0	1,833,871	18,293,036
19. Unit Service Factor	0	60.0	70.2
20. Unit Availability Factor	0	60.0	70.2
21. Unit Capacity Factor (Using MDC Net)	0	58.9	65.5
22. Unit Capacity Factor (Using DER Net)	0	57.9	64.8
23. Unit Forced Outage Rate	0	0	14.2

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):  
Refueling Outage started March 14, 1981 will end May 13, 1981

25. If Shut Down At End Of Report Period, Estimated Date of Startup: May 13, 1981  
 26. Units In Test Status (Prior to Commercial Operation):

	Forecast	Achieved
INITIAL CRITICALITY	_____	_____
INITIAL ELECTRICITY	_____	_____
COMMERCIAL OPERATION	_____	_____

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-316  
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MONTH April 1981

DAY	AVERAGE DAILY POWER LEVEL (MWE-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	----	17	----
2	----	18	----
3	----	19	----
4	----	20	----
5	----	21	----
6	----	22	----
7	----	23	----
8	----	24	----
9	----	25	----
10	----	26	----
11	----	27	----
12	----	28	----
13	----	29	----
14	----	30	----
15	----	31	----
16	----		

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 April, 1981

DOCKET NO. 50-316  
 UNIT NAME D.C. Cook - Unit 2  
 DATE 5-13-81  
 COMPLETED BY B.A. Svensson  
 TELEPHONE (616) 465-5901

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
93	810314	S	720	B&C	1	N.A.	ZZ	ZZZZZZ	The unit was removed from service for Cycle II - III refueling outage at 0006 hours on 800314. The unit remained out of service the entire month. Estimated return to service date 800515.

<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: D. R. Campbell  
Telephone: (616) 465-5901  
Date: May 12, 1981  
Page: 1 of 1

MONTHLY OPERATING ACTIVITIES - APRIL, 1981

Highlights:

The Unit entered this reporting period in Mode 6 with refueling in progress. The Unit returned to Mode 5 at 1340 hours, April 21, 1981, refueling complete.

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UNIT NAME	D. C. Cook - Unit No. 2
DATE	5-13-81
COMPLETED BY	B. A. Svensson
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MAJOR SAFETY-RELATED MAINTENANCE

APRIL, 1981

- M-1 Component cooling motor operated containment isolation valve, CCM-433, failed to pass the Type C leak rate test. Disassembled the valve, cleaned the valve internals and lapped the seat. Reassembled the valve and had it retested.
- M-2 Component cooling water containment isolation check valve, CCW-244-72, failed to pass the Type C leak rate test. Replaced the valve disc, lapped seat and had valve retested.
- M-3 Non-essential service water containment isolation check valves, NSW-415-3, NSW-419-2, NSW-419-3, NSW-244-2 and NSW-244-4 failed to pass the Type C leak rate test. Replaced the valves and had the new valves tested.
- M-4 Non-essential service water containment isolation check valve, NSW-415-2, failed to pass the Type C leak rate test. Disassembled the valve, replaced the disc and cleaned the valve internals. Reassembled the valve and had it retested.
- M-5 Non-essential service water containment isolation check valve, NSW-419-4, failed to pass the Type C leak rate test. Disassembled valve and cleaned valve internals. Reassembled using new gaskets and had the valve retested.
- M-6 Non-essential service water containment isolation check valve, NSW-244-1, failed the Type B and C leak rate test. Disassembled valve, cleaned the valve internals, reassembled with new gaskets and had valve tested.
- M-7 Non-essential service water containment isolation regulating valve, WCR-95E, failed to pass the Type B and C leak rate test. Disassembled valve, cleaned the valve internals and lapped the plug and seat. Reassembled and had valve retested.
- M-8 Boric acid filter bypass valve on the discharge of No. 3 boric acid transfer pump, CS-416-3, was leaking. Replaced the bonnet assembly and had the valve operability verified.
- M-9 During routine inspection of ESW supply check valves to 2CD diesel jacket water coolers, ESW-141-E, was found to have a bad seat. Replaced the seat.
- M-10 Non-essential service water containment isolation check valves, NSW-417-3 and NSW-417-4, failed to pass the Type C leak rate test. Disassembled, cleaned valve internals, lapped the seats and reassembled using new gaskets. Had the valves tested.

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MAJOR SAFETY-RELATED MAINTENANCE

APRIL, 1981

- M-11 Non-essential service water valve, NSW-247-3, was leaking by. Disassembled valve and cleaned valve internals. Lapped the seat and reassembled the valve.
- M-12 Non-essential service water containment isolation regulating valve, WCR-930, failed to pass the Type C leak rate test. Lapped the valve seat and had the valve retested.
- M-13 Containment drain header containment isolation regulating valve, DCR-260, failed to pass the Type C leak rate test. Disassembled, cleaned the valve internals and reassembled using new gaskets. Had the valve retested.
- M-14 Instrument purge supply containment isolation valves, VCR-101 and 201, failed to pass the Type C leak rate test. Cleaned valve internals and had the valves retested.
- M-15 Reactor coolant drain tank vent line containment isolation check valve, N-160, was leaking by. Disassembled valve, cleaned internals, lapped seat and reassembled.
- M-16 Containment spray system containment isolation check valves, CTS-131E and W were leaking by. Disassembled, cleaned valve internals and reassembled.
- M-17 Component cooling water check valves, CCW-224-3 and CCW-225-3, would not seat during a test. Disassembled and cleaned the internals in both valves. Reassembled and informed Operations Department to complete the test.
- M-18 The north boric acid tank outlet isolation valve, CS-437N, was very difficult to operate. Inspection revealed the diaphragm valve bonnet internals were corroded. Replaced the bonnet assembly.
- M-19 The 2CD diesel 4 rear bank cylinder starting air valve stem was broken. Disassembled engine and examined all cylinders. Replaced one cylinder head, piston and sleeve. Replaced three starting air valves and other minor parts that were broken or damaged. Tested engine and performed 18-month surveillance.
- M-20 The 2CD diesel turbocharger rotor was damaged by metallic debris which had entered the turbocharger. Replaced the rotor and bearings. Changed oil. Retested engine and performed 18-month surveillance.

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APRIL, 1981

- M-21 The No. 1 steam generator stop valve, MRV-210, was disassembled to remove and inspect the disc guide studs. Three of the studs were broken. All of the studs were replaced with new studs.
- M-22 Emergency essential service water supply isolation valve to the Turbine Driven Aux Feed Pump, ESW-240, was leaking by. Replaced the valve.
- M-23 Containment ventilation drain header isolation valve, DCR-621, failed to pass the Type B and C leak rate test. Disassembled, lapped valve seats, reassembled and had the valve retested.
- M-24 The stem of RC-129, pressurizer safety valve loop seal drain valve was bent. Replaced the valve stem assembly, yoke assembly, repacked the valve and reconnected the reach rod.
- M-25 The reactor coolant filter outlet check valve, CS-395, had a body to bonnet leak. Replaced bonnet gasket.
- M-26 Pressurizer power operated relief valve isolation valve, NMO-151, was not closing completely. Adjusted limit torque operator auxiliary switches. Also, cleaned torque switch contacts and freed torque switch which was binding slightly. Had the valve tested.
- M-27 Check valve, N-160, in the nitrogen supply line to the reactor coolant drain tank was leaking. Replaced the valve gasket and had valve retested.
- M-28 2 West ESW supply header isolation valve, WMO-706, was leaking by. Found butterfly valve shaft bound. Freed valve and cleaned internals. Had valve tested.
- M-29 Essential service water safety valves for the CCW heat exchangers, SV-15E and W, were leaking by when ISI test was conducted. Lapped seats, cleaned valves and had the valves retested.
- M-30 Instrument room purge exhaust containment isolation valves, VCR-102 and 202, failed to pass Type C leak rate test. Inspected, cleaned and adjusted valves. Had them retested.
- M-31 Inspected seals on No. 2-1 reactor coolant pump. Replaced No. 1 seal insert, No. 3 seal ring and No. 3 seal runner. Reassembled and aligned pump to motor.

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MAJOR SAFETY-RELATED MAINTENANCE

APRIL, 1981

- M-32 Inspected the seals on No. 2-2 reactor coolant pump. Replaced the rings and runners for No. 2 and No. 3 seals. Reassembled and aligned pump to motor.
- M-33 Inspected seals on No. 2-3 reactor coolant pump. Replaced No. 3 seal ring. Reassembled and aligned pump to motor.
- M-34 Inspected seals on No. 2-4 reactor coolant pump. Replaced seal rings and runners for all three seals. Reassembled and aligned pump to motor.
- M-35 No. 3 boric acid transfer pump was leaking. Replaced the mechanical seal and had pump tested.
- M-36 CVCS letdown safety valve, SV-51, was leaking by. Valve was inspected and could not be repaired due to lack of parts. Replaced with a new valve which was tested prior to installation.
- M-37 Auxiliary feedwater motor operated regulating valve, FMO-242, was leaking by. Replaced valve seat, machined valve plug and reassembled using new gaskets. Repacked valve and had it tested.
- M-38 2AB2 diesel fuel oil transfer pump discharge check valve, DF-115A, leaked by. Lapped seat.
- M-39 CD diesel jacket water surge tank float valve was leaking by. Replaced valve.
- M-40 One inch line to RHR flow instrument IFI-330 in "E" RHR heat exchanger room had a weld leak. Cut pipe from elbow and rewelded. Had NDE performed.
- M-41 Containment ventilation drain header containment isolation valve, DCR-621, failed to pass the Type C leak rate test. Disassembled and inspected valve, reassembled using new gaskets and had valve retested.
- M-42 Lower containment purge containment isolation valves, VCR-104 and 204, failed to pass Type C leak rate test. Cleaned and adjusted valve internals. Increased the O.D. of the disc in VCR-104 by welding and filing. Had valve retested.
- M-43 Charging system hand valves, CS-300E and CS-349 had packing leaks. Repacked valves.



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MAJOR SAFETY-RELATED MAINTENANCE

APRIL, 1981

- M-44 Steam generator blowdown containment isolation valve, DCR-340, was leaking by. Disassembled valve, machined disc and lapped seat and disc. Reassembled with new gaskets and had valve tested.
- M-45 CCW surge tank fill valve, CRV-411, was leaking by. Lapped valve seat and had valve tested.
- M-46 Steam generator blowdown containment isolation valve, DCR-330, was leaking by. Disassembled valve. Machined and had valve tested.
- M-47 Steam generator blowdown containment isolation valve, DCR-310, was leaking by. Disassembled and inspected valve. Reassembled with new gaskets and had valve tested.
- M-48 Steam generator blowdown containment isolation valve, DCR-330, had a packing leak. Repacked and had valve tested.
- M-49 Boron injection tank outlet valve, ICM-250, failed to pass the Type C leak rate test. Disassembled, lapped and cleaned valve internals. Reassembled valve and had it retested.
- M-50 Safety injection system check valve, SI-161-L4, had a body to bonnet leak. Replaced bonnet gasket.
- M-51 CD diesel jacket water vent valve, ESW-162CD, had a broken stem. Replaced valve internals and gaskets. Also, cleaned internals of valve.
- M-52 The 2CD2 diesel fuel oil transfer pump discharge check valve, DF-115C, was leaking by. Replaced the valve seat and stem and had valve retested.