

OPERATING DATA REPORT

DOCKET NO. 50-316
 DATE 7-6-81
 COMPLETED BY W.T. Gillett
 TELEPHONE 616-465-5901

OPERATING STATUS

1. Unit Name: Donald C. Cook 2
 2. Reporting Period: 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	720	4,343	30,647
12. Number Of Hours Reactor Was Critical	714.8	2,741.3	20,483.4
13. Reactor Reserve Shutdown Hours	0	0	0
14. Hours Generator On-Line	711.7	2,656.4	19,696.0
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	2,374,202	8,657,396	62,277,030
17. Gross Electrical Energy Generated (MWH)	776,890	2,814,260	19,906,090
18. Net Electrical Energy Generated (MWE)	750,136	2,715,945	19,175,110
19. Unit Service Factor	98.8	61.2	69.9
20. Unit Availability Factor	98.8	61.2	69.9
21. Unit Capacity Factor (Using MDC Net)	96.3	57.8	64.9
22. Unit Capacity Factor (Using DER Net)	94.7	56.8	64.3
23. Unit Forced Outage Rate	1.2	1.6	13.8
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. 50-316

UNIT 2

DATE 7-6-81

COMPLETED BY W. T. Gillett

TELEPHONE 616-465-5901

MONTH JUNE - 1981

DAY	AVERAGE DAILY POWER LEVEL (MWE-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>1046</u>	17	<u>1073</u>
2	<u>1076</u>	18	<u>1074</u>
3	<u>1082</u>	19	<u>1075</u>
4	<u>1076</u>	20	<u>1068</u>
5	<u>1074</u>	21	<u>1077</u>
6	<u>1064</u>	22	<u>1084</u>
7	<u>1073</u>	23	<u>1079</u>
8	<u>1074</u>	24	<u>1075</u>
9	<u>1070</u>	25	<u>1065</u>
10	<u>1067</u>	26	<u>1063</u>
11	<u>1062</u>	27	<u>1068</u>
12	<u>295</u>	28	<u>1069</u>
13	<u>1008</u>	29	<u>1064</u>
14	<u>1055</u>	30	<u>1064</u>
15	<u>1069</u>	31	<u>----</u>
16	<u>1067</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 June, 1981

DOCKET NO. 50-316
 UNIT NAME D.C. Cook - Unit 2
 DATE 7-14-81
 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
97	810612	F	8.3	A	3	81-026/03L-0	EB	GENERA	Reactor trip was due to loss of A.C. vital power supply CRID II. Loss of CRID II resulted in loss of power to the reactor coolant pump breaker position circuit, which looked to the reactor protection system logic as if the breaker had opened. This resulted in a reactor trip signal since reactor power was above permissive P-8. The failure of CRID II was due to a failure of a capacitor. The failed capacitor also blew an associated fuse. A design change has been initiated to replace the present capacitors with a new type rated for a higher operating temperature. The unit was returned to service the same day and power increased to 100% by 0030 on 810613.

¹
 F: Forced
 S: Scheduled

²
 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)

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

MONTHLY OPERATING ACTIVITIES - JUNE, 1981

Highlights:

The Unit entered this reporting period escalating the Reactor Power from 88% to 95%. The Unit was being returned to power from a 68 day refueling outage. At 0220 on June 1, the reactor was at 95% power and at 1806 the Unit reached 100% power for the first time on this core.

At 1320 on June 9, the NRC Hotline and all telephone communications was discovered to be inoperable. Communications was established by using the micro-wave phone. This was declared an "Unusual Event" at 1335 and complete communications was restored at 1445.

The Unit operated at 100% power for the remainder of this period except as detailed in the summary.

Total electrical generation for the month was 776,890 mwh.

Summary:

- 6-01-81 The Containment Air Particulate and Radio Gas Monitors (R-11/R-12) were inoperable for a 9.25 hour period to repair the sample pump.
- 6-02-81 R-11/R-12 Monitors were again inoperable from 0030 to 1330 on 6-4-81 to replace the sample pump.
- 6-04-81 R-11/R-12 Monitors were again inoperable for a 21 hour period to repair the Flow Meter.
- 6-05-81 Reactor Power was lowered to 92% for a 5.75 hour period while the Main Turbine Valves were tested.
- 6-06-81 R-11/R-12 Monitors were inoperable for a 3 hour period to repair the Flow Meter.
- 6-08-81 Circulating Water Recorder (SG-21) was inoperable for a 21 hour period to repair the recorder.
- 6-12-81 The Unit tripped from 100% power at 0101 due to a false indication of loss of RCS loop flow. This trip was caused by the loss of CRID II. The CRID was repaired and 100% reactor power was reached at 0832 on 6-11-81.
- 6-27-81 The West ESW pump was out of service for a 4.5 hour period to change oil.

Docket No.: 50-316
Unit Name: D. C. Cook Unit 2
Completed By: C. E. Murphy
Telephone: (616) 465-5901
Date: July 8, 1981
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Summary (continued):

- 6-28-81 The East ESW pump was out of service for a 6.5 hour period to change oil.
- 6-29-81 The ESW Radiation Monitor (R-20) was out of service for a 3.5 hour period to repair the clutch.

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DATE	7-14-81
COMPLETED BY	B. A. Svensson
TELEPHONE	(616) 465-5901
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MAJOR SAFETY-RELATED MAINTENANCE

JUNE, 1981

- M-1 Low flow on R-11 and R-12 containment air radiation monitor. Replaced pump. Tested satisfactorily.
- M-2 IMO-270, north safety injection pump discharge cross-connect would not open and indicated a ground. Replaced motor and adjusted torque switch. Valve tested satisfactorily.
- M-3 ICM-250, boron injection tank discharge isolation valve would not open from control room. Increased torque switch setting. Valve retested satisfactorily.
- M-4 CD diesel jacket water expansion tank float controlled regulating valve, QT-132 was not working. Float was replaced. Valve tested satisfactorily.
- C&I-1 SG-018, containment air temperature recorder failed. The recorder servo-motor and selector switch assembly were replaced and the recorder returned to service.
- C&I-2 When control rods for Bank D control were stepped in, Control Bank C also started to move in prior to the overlap point. The problem was traced to the overlap decoder board. The circuit board was replaced, the counter was reset and clocked to the proper count.
- C&I-3 Annunciator 10, drop 17, power range lower detector high flux deviation auto defeat was received. Each power range channel was defeated on an individual basis to isolate the channel. The alarm, however, failed to clear. The averaging circuit had failed. The card was removed and amplifiers AIY and AZX were replaced. A function test verified the circuit's operability. The unit's calibration was performed and returned to normal operation.
- C&I-4 The power actuation setpoint of the APDMS was previously calibrated for 85%. The NIS indicated 88.5% and the APDMS had not actuated. The test power supply meter indication was found reading 0.35 volts low. The actuation bistables were recalibrated to the correct values.
- C&I-5 The inlet and outlet valves for DSR-301 and DSR-302 R-19 monitors were open but low flow was observed. Rotometers and regulators No. 1 and No. 2 were removed. The tube and diaphragm on No. 1 were replaced with spares. The regulator diaphragm on No. 2 was also replaced. The instruments were installed and functionally tested.
- C&I-6 Steam Generator No. 3 flow to Radiation Monitor Channel R-19 ceased. The blockage in the line was cleared and normal flow to R-19 was established.

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MAJOR SAFETY-RELATED MAINTENANCE

JUNE, 1981

- C&I-7 During the Unit 2 trip, FMO-201 and FMO-204 did not close as required. The problem was traced to a switch on BY breaker 'A' which transmits a signal to the solid state protection system for feedwater isolation. The failed switch was replaced and a functional test was performed to verify normal operation.
- C&I-8 Annunciator 10, drop 17, lower detector high flux deviation was alarming with normally low quad power tilt ratio. Replacement of a defective averaging circuit card operational amplifier cleared the spurious alarm.
- C&I-9 While performing a surveillance test procedure on bus load shedding relays, a General Electric Company Model NGV-13B Relay, 27-2-T21B for bus T21B, was found with its contacts welded together. A new NGV relay was installed, calibrated and proper operation was verified.
- C&I-10 Rod position indication system for control rod D4 of control bank D indicated 14 steps from the demand position. Movement of control rod D4 was verified through primary coil voltage measurements. The signal conditioning module was adjusted for correct operation.
- C&I-11 Annunciator 2, drop 22, CAS fire detection operating alarm failed to function during surveillance test. The problem was traced to a failed annunciator card. The annunciator card was replaced and the alarm was functionally tested.
- C&I-12 Main turbine stop valve B, train B, had a broken proximity switch bracket. While the unit was in the 'trip' mode for stop valve testing the bracket was replaced. The proximity switch operation was verified to be correct.
- C&I-13 CFI-419, east RHR heat exchanger component cooling water discharge flow indication was determined to be out of specification. The instrument loop was recalibrated and correct flow indication was verified.
- C&I-14 Steam Generators No. 1 and No. 2 blowdown radiation monitor R-19 was receiving no flow through its rotometer, DFI-311. The rotometer was disassembled and cleaned, and a leaking swagelok fitting was replaced to restore proper flow to R-19.