OPERATING DATA REPORT

DOCKET NO. 50-316
DATE 1-5-81
COMPLETED BY W. T. Gillett
TELEPHONE 616-465-5901

OPERATING STATUS

1. Unit Name:	Donald C. Cook	2
2. Reporting Period:	December	1980
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

Notes

8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons:

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	8,784	26,304.0
12. Number Of Hours Reactor Was Critical	501.8	6,662.2	17,742.1
13. Reactor Reserve Shutdown Hours	0	0	0
14. Hours Generator On-Line	469.4	6,538.0	17,039.6
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	1,488,758	21,395,254	53,619,634
17. Gross Electrical Energy Generated (MWH)	480,050	6,937,420	17,091,830
18. Net Electrical Energy Generated (MWH)	462,782	6,691,753	16,459,165
19. Unit Service Factor	63.1	74.4	71.6
20. Unit Availability Factor	63.1	74.4	71.6
21. Unit Capacity Factor (Using MDC Net)	57.5	70.4	66.4
22. Unit Capacity Factor (Using DER Net)	56.5	69.5	65.7
23. Unit Forced Outage Rate	36.9	17.6	15.5

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		

(9/77)

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-316
UNIT 2
DATE 1-5-81
COMPLETED BY W. T. Gillett
TELEPHONE (616) 465-5901

MONTH December 1980

DAY	AVERAGE DAILY POWER LEVEL (MWE-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	----	17	1054
2	----	18	1073
3	----	19	1076
4	----	20	1067
5	----	21	1064
6	----	22	1065
7	----	23	1058
8	----	24	1063
9	----	25	1053
10	51	26	1059
11	773	27	1060
12	250	28	1064
13	809	29	1062
14	993	30	1046
15	----	31	1065
16	481		

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 December, 1980

DOCKET NO. 50 - 316
UNIT NAME D.C. Cook - Unit 2
DATE 1-14-81
COMPLETED BY B.A. Svensson
TELEPHONE (616) 465-5901
PAGE 1 of 2

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
89 Cont'd	801018	F	234.3	A	3	N.A.	HA	GENERA	The generator repair outage continued from the previous month. The reactor was brought critical on 801207. The unit was returned to service on 801210 and brought to 100% power on 801211. Total duration of outage 1270.3 hours.
90	801212	F	12.1	H	3	N.A.	ZZ	ZZZZZZ	Turbine/Reactor trip. The turbine trip was caused by low condenser vacuum. Condenser tube leakage repairs were in progress and the low vacuum condition resulted when removing a loose tube plug at a location where the tube had previously been removed. The unit was returned to service the same day. 100% reactor power was reached on 801213.

/Continued .....

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

(9/77)

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH DECEMBER, 1980

DOCKET NO. 50 - 316
UNIT NAME D.C. Cook - Unit 2
DATE 1-14-81
COMPLETED BY B.A. Svensson
TELEPHONE (616) 465-5901
PAGE 2 of 2

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
91	801214	F	28.2	A	3	N.A.	HA	GENERA	The unit tripped from 100% power due to loss of generator excitation. The reactor trip was initiated by the reactor coolant pump bus undervoltage relays and was followed by blackout, start-up of the emergency diesel generators and load sequencing. The loss of excitation was caused by a failure of the pilot exciter which was found on fire. The exact reason for the pilot exciter fire nas not been determined. The unit was returned to service on 801216 and brought to 100% power on 801217.

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)
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Method:
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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.: 50-316
Unit Name: D. C. Cook Unit #2
Completed By: C. E. Murphy
Telephone: (616) 465-5901
Date: January 14, 1981

MONTHLY OPERATING ACTIVITIES - DECEMBER, 1980

Highlights:

The Unit entered this reporting period in Mode 5 in the progress of running the Reactor Coolant Pumps and venting the Reactor Coolant System. The Unit had tripped from 100% power at 2057, Saturday, October 18, 1980. The cause of the trip was identified as a ground in the Main Turbine Generator.

The Unit reached 100% power at 1925, Thursday, December 11, 1980.

There were three outages of the Reactor and Turbine Generator Unit during the reporting period. This is detailed in the Summary.

Total electrical generation for the month was 480,050 mwh.

Summary:

12/04/80 - The Source Range N-32 was returned to service at 0730 on December 4, 1980. This was removed from service at 1158 on November 25, 1980 to replace the detector.

The East Containment Spray Pump was inoperable for a 9 hour period to repair a leak on an instrument line.

12/06/80 - The Turbine Driven Auxiliary Feed Pump was inoperable for a 5.25 hour period to repair a problem in the Trip and Throttle Valve Control Circuit.

12/08/80 - At 0847, manually tripped the Reactor during planned shutdown from low speed generator testing when it was discovered, there was no indicated bank overlap between D & C Control Banks. The bank overlap was repaired at 2015.

The Turbine Driven Auxiliary Feed Pump was inoperable for a 2.25 hour period to repair a steam leak.

12/09/80 - The North Control Room Air Handling package was inoperable for a 12 hour period for a breaker inspection.

12/11/80 - The Containment Radiation Monitor R-11 was inoperable for a 9 hour period to check the alarm setpoint.

Summary:

12/12/80 - At 0427, the Unit tripped from 100% power due to Low Vacuum in "C" Condenser. Tube leakage repairs were in progress in "C" South Condenser.

The Reactor was critical at 1436, and the Generator paralleled at 1643. The Unit was loaded to 100% at 1720 on 12-13-80.

12/14/80 - At 2218, the Unit tripped from 100% power. The trip was caused by a loss of field excitation which was a result of a fire at the Pilot Exciter. The trip was accompanied with an Emergency Bus Blackout and both Diesels running. The Emergency Buses were returned to normal reserve power at 2305.

The Reactor was critical at 0104 on 12-16-80 and the Generator paralleled at 0230. The Unit was loaded to 100% by 0500, on 12-17-80.

12/16/80 - The "E" Component Cooling Water Pump was inoperable for a 27 hour period due to a Low Flow on Lubricating Oil.

The "W" Motor Driven Auxiliary Feedwater Pump was inoperable for a 3 hour period to replace a suction gasket.

R-25 and R-26, the Vent Stack Monitors were inoperable for a 1 hour period to adjust the paper drive.

12/18/80 - The West Component Cooling Water Pump was inoperable for a 1.5 hour period to change oil.

12/19/80 - The East Component Cooling Water Pump was inoperable for a 1.5 hour period to change oil.

12/20/80 - At 1138 the Reactor power was reduced to 97% to place the Moisture Separator/Reheaters in service for testing. Reactor Power was returned to 100% at 1220. The MSR Testing was completed at 1847 and they were removed from service at 1952.

12/30/80 - At 0840 the Reactor power was lowered to 90% to perform a Moderator Temperature Coefficient Evaluation. The Reactor power was returned to 100% at 1613.

The "W" RHR pump was inoperable for a 3.25 hour period to change oil.

The "E" RHR pump was inoperable for a 1.25 hour period to change oil.

DOCKET NO.	50 - 316
UNIT NAME	D. C. Cook - Unit No. 2
DATE	1-14-81
COMPLETED BY	B. A. Svensson
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PAGE	1 of 2

MAJOR SAFETY-RELATED MAINTENANCE

DECEMBER, 1980

M-1 The studs and nuts from the flanges of the auxiliary feedpump turbine trip and throttle valves were removed. Non-destructive examinations of the studs and nuts were performed. All rejected items were replaced.

M-2 A socket weld on the 1" line to the east CTS pump discharge pressure instrument, IPA-210 was leaking. The pipe was removed from the socket, cut and rewelded. All necessary NDE was performed.

M-3 The east motor driven auxiliary feedpump emergency leak-off line safety valve, SV-141 was leaking by. Lapped the seat and disc. Valve was tested and reinstalled.

M-4 The boric acid blender outlet valve, CS-386 was leaking. Replaced the valve diaphragm.

M-5 Replaced damaged valve stem/bonnet assembly on R-158, glycol isolation valve, VCR-21 bypass. The system was refilled, valve operated properly.

M-6 The north suction strainer on the west motor driven auxiliary feedpump was leaking. Replaced the gasket.

M-7 The east component cooling water pump outboard bearing had very little oil flow. The bearing end cap spiral passage was not passing enough flow. Replaced the end cap. Tested satisfactorily.

M-8 The 2CD diesel bypass lube oil pump motor was grounded. Replaced the motor. Tested satisfactorily.

C&I-1 Solid state protection system, Train A, test point P-10 gave improper indication. A defective universal circuit board in the A 412 location was replaced. The SSPS Train A was checked by performing the logic surveillance.

C&I-2 Protection channel 2, steam generator No. 1 level transmitter BLP-111 failed high. Both sensing lines to the transmitter were found to contain sediment. After blowing out the lines and refilling them with deionized water, proper operation was verified.

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MAJOR SAFETY-RELATED MAINTENANCE

DECEMBER, 1980

C&I-3 Pressurizer pressure indicators, NPP-152 and NPP-153 had a 20 PSIG difference in pressure. Pressure transmitter NPP-151, NPP-153 and NPS-153 were found to be out of calibration and were recalibrated. Pressurizer pressure readings then returned to correct values on the above indicators.

C&I-4 The letdown heat exchanger temperature control valve, CRV-470 would not function in automatic operation. The calibration of EPT-470 was found to be out of specification. EPT-470 was recalibrated and the control system was placed into the automatic mode. The system maintained the correct temperature.

C&I-5 NR-42, nuclear instrumentation system power range, N43 upper detector flux recorder failed. The recorders servo motor and feedback potenteometer were replaced. The recorder was calibrated and returned to service.