

N.R.C. OPERATING DATA REPORT

DOCKET NO. 50-315
 DATE 12/3/85
 COMPLETED BY CLIMER
 TELEPHONE 616-465-5901

OPERATING STATUS

1. Unit Name D. C. Cook Unit 1 -----
 2. Reporting Period NOV 85 inotes -----
 3. Licensed Thermal Power (MWt) 3250 -----
 4. Name Plate Rating (Gross MWe) 1152 -----
 5. Design Electrical Rating (Net MWe) 1030 -----
 6. Maximum Dependable Capacity (GROSS MWe) 1056 -----
 7. Maximum Dependable Capacity (Net MWe) 1020 -----
 8. If Changes Occur in Capacity Ratings (Items no. 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 Mo.	Yr. to Date	Cumm.
11. Hours in Reporting Period	720.0	8016.0	95688.0
12. No. of Hrs. Reactor Was Critical	294.6	2162.6	67856.4
13. Reactor Reserve Shutdown Hours	0.0	0.0	463.0
14. Hours Generator on Line	213.1	2069.3	66430.8
15. Unit Reserve Shutdown Hours	0.0	0.0	321.0
16. Gross Therm. Energy Gen. (MWH)	297751	5716272	193885776
17. Gross Elect. Energy Gen. (MWH)	86040	1847880	63619770
18. Net Elect. Energy Gen. (MWH)	78548	1773401	61204496
19. Unit Service Factor	29.6	25.8	70.8
20. Unit Availability Factor	29.6	25.8	70.8
21. Unit Capacity Factor (MDC Net)	10.7	21.7	64.0
22. Unit Capacity Factor (DER Net)	10.6	21.5	61.6
23. Unit Forced Outage Rate	36.3	5.5	7.4
24. Shutdowns Scheduled over Next Six Months (Type, Date, and Duration):			

25. If Shut Down At End of Report Period, Estimated Date of Startup:
 UNIT SHUT DOWN FOR VALVE REPAIRS, EXPECTED STARTUP 12/13/85

26. Units in Test Status (Prior to Commercial Operation):
 Forecast Achieved
 INITIAL CRITICALITY
 INITIAL ELECTRICITY
 COMMERCIAL OPERATION

8602190421 851130
 PDR ADOCK 05000315
 R PDR

IE24
 1/1

AVERAGE DAILY POWER LEVEL (MWe-Net)

DOCKET NO. 50-315
 UNIT ONE
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MONTH NOV 85

DAY	AVERAGE DAILY POWER LEVEL	DAY	AVERAGE DAILY POWER LEVEL
1	0	17	138
2	0	18	207
3	0	19	210
4	0	20	204
5	0	21	391
6	0	22	427
7	0	23	431
8	0	24	616
9	0	25	636
10	0	26	0
11	0	27	0
12	0	28	0
13	0	29	0
14	0	30	0
15	0	31	0
16	13		

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH November, 1985

DOCKET NO. 50-315
 UNIT NAME D.C. Cook - Unit 1
 DATE 12-6-85
 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
246 Cont'd.	850406	S	382.1	B&C	2	N.A.	ZZ	ZZZZZZ	The Unit was removed from service on 850406 for the scheduled Ten-Year ISI and Cycle VIII - IX Refueling/Maintenance outage. The outage work has been completed and initial criticality for Cycle V occurred on 851113. Low power physics testing was completed on 851115 and the Unit was paralleled to the System at 2206 hours on 851116. The reactor power was increased to 30% for turbine warming prior to overspeed testing. The total length of the outage was 5395.7 hours.
247	851117	S	3.5	B	1	N.A.	ZZ	ZZZZZZ	At 1517 hours the Unit was removed from service for turbine overspeed testing. The Unit was returned to service at 1850 hours the same day. The power ascension testing program

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

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH November, 1985

DOCKET NO. 50-315
 UNIT NAME D.C. Cook - Unit 1
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 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
247 Cont'd. 248	851125	F	121.3	B	3	Later	ZZ	ZZZZZZ	was commenced, but was not completed due to a reactor trip. A reactor trip occurred from 78% reactor power due to a negative rate trip. The trip resulted from one power range channel's bistable being in the tripped position for surveillance testing and a spurious signal on a second power range channel while taking detector current readings for quadrant power tilt determination. During a containment inspection after the reactor trip, a leak was discovered on No. 12 R.C. Pump casing flange. To repair the leak, the RCS had to be cooled down and drained to half-loop. The Unit remained shut down in Mode 5 at the end of the month.

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 B Maintenance or Test
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 E Operator Training & License Examination
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 G Operational Error (Explain)
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(9/77)

Docket No.: 50-315
Unit Name: D.C. Cook Unit 1
Completed By: D. A. Bruck
Telephone: (616) 465-5901
Date: December 9, 1985
Page: 1 of 3

MONTHLY OPERATING ACTIVITIES - NOVEMBER, 1985

HIGHLIGHTS:

The reporting period began with the reactor coolant system in Mode 3 and 536°F temperature.

The low power physics testing began on 11-13-85 with the reactor being critical for the first time in Cycle IX at 1605 hours. The low power physics testing was completed at 2300 hours on 11-15-85 and the generator was paralleled to the grid at 2206 on 11-16-85.

On 11-17-85, the unit was removed from service to perform turbine overspeed testing. The unit was returned to service the same day.

On 11-20-85, reactor power was increased to 48%. On 11-24-85, reactor power was increased to 68%. On 11-25-85, a reactor power increase to 80% began. A reactor trip occurred from 78% due to an inadvertant negative rate trip.

On 11-26-85, a reactor coolant system cooldown was started to repair leaks on the No. 12 reactor coolant pump flange. Mode 4 was entered on 11-26-85 and Mode 5 was entered on 11-27-85.

The reporting period ended with the reactor coolant system in Mode 5, cold shutdown.

Gross electrical generation for the month of November was 86,040 MWH.

SUMMARY:

- 11-04-85 At 1631, an inadvertant source range reactor trip, while in Mode 3 occurred while performing surveillance tests.
- 11-06-85 At 0251, the Turbine Driven Auxiliary Feed Pump failed to start for surveillance testing due to erratic governor control.
- 11-09-85 At 0548, the Turbine Driven Auxiliary Feed Pump was declared operable.

Docket No.: 50-315
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11-12-85 At 0230, a turbine trip occurred while in Mode 3, due to Hi-Hi steam generator level.

At 1024, an inadvertant ESF actuation from high steam line flow coincident with Lo-Lo Tave occurred which resulted in a safety injection actuation and steam line isolation. The cause was simultaneous surveillance testing of high steam line flow channels requiring bistables to be tripped and an auxiliary feedwater system test adding water to the steam generators, resulting in RCS cooldown to the Lo-Lo Tave value.

11-13-85 At 1605, the reactor became critical for the first time in Cycle IX.

11-14-85 At 0915, a power increase began, stabilizing at 2% at 1150.

11-15-85 At 2300, low power physics testing was completed.

11-16-85 At 1300, a power increase began and the reactor entered Mode 1 at 1320.

At 1426, the main turbine was rolled.

At 1540, the main turbine experienced high vibration and a shutdown was begun.

At 1555, the main turbine tripped on high vibration.

At 2000, a power increase began and the reactor entered Mode 1 at 2018.

At 2050, the main turbine was rolled.

At 2206, the generator was paralleled to the grid.

11-17-85 At 0150, the power increase stopped at 30%.

At 0210, a unit shutdown was begun per Tech. Spec. 3.0.3 due to MFC-110 and MFC-111 being inoperable.

At 0436, MFC-110 was declared operable and a power increase began, stabilizing at 29% at 0720.

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11-17-85 At 1250, a reactor power decrease to perform turbine overspeed testing began.

At 1415, an inadvertant Engineered Safety Features actuation occurred due to high alarms on containment radiation monitors 1401 and 1409.

At 1517, the generator was disconnected from the grid to perform turbine overspeed testing.

At 1532, the turbine tripped on high vibration.

At 1850, the generator was paralleled with the grid and power was stabilized at 29% at 0100.

11-20-85 At 1900, the Turbine Driven Auxiliary Feed Pump was declared inoperable due to governor oil leaking.

At 2245, a power increase began, stabilizing at 48% at 0534.

11-23-85 At 1312, the Turbine Driven Auxiliary Feed Pump was declared operable.

11-24-85 At 0006, a power increase began, stabilizing at 68% at 0924.

11-25-85 At 1850, a power increase to 80% began.

At 2243, with reactor power at 78%, the reactor tripped due to a negative rate trip. The trip resulted from one NIS power range channel's bistables being in the tripped position for surveillance testing and a spurious signal on a second power range channel while taking detector current readings for quadrant power tilt determination.

At 2300, the Turbine Driven Auxiliary Feed Pump was declared inoperable due to a broken control air line to the speed controller.

11-26-85 At 1623, a cooldown of the reactor coolant system was started, entering Mode 4 at 2220.

11-27-85 At 1854, the reactor coolant system entered Mode 5.

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MAJOR SAFETY-RELATED MAINTENANCE

NOVEMBER, 1985

- M-1 Reactor trip bypass breaker "B" would not close when racked into the test position. The fuse block stabs were found to be spread open. The gap between the stabs was closed and the fuse block reinstalled. The breaker now operates properly.
- M-2 Turbine Driven Auxiliary Feed Pump Trip and Throttle Valve was leaking by. Replaced internals and bonnet. Valve tested okay after repairs.
- M-3 Found water in oil supply for Turbine Driven Auxiliary Feed Pump governor. Removed governor, drained and flushed system. New governor was installed temporarily. Old governor was repaired by manufacturer and reinstalled on November 23, 1985.
- C&I-1 NIS, source range channel N-31, was reading erratic. Found source range preamplifier bad. Replaced source range preamplifier with new preamplifier. Performed source range calibration and surveillance test and declared N-31 operable.
- C&I-2 Reactor coolant wide range Thot on loop 2 has a large deviation compared to the other three loops.
- Found R/I NTR-220, I/I NTR-120A and recorder out of calibration. Recalibrated R/I, I/I and recorder. I/I NTR-120 could not be calibrated and had to be replaced. Loop 2 now agrees with the other three loops.
- C&I-3 Loop 1 wide range Thot is reading 20°F higher than the other three channels.
- Found R/I NTR-110 to be out of calibration high. Recalibrated the I/I. The four channels now agree with each other.
- C&I-4 NPP-152, pressurizer pressure indication channel II is reading 35 to 40 psig lower than the other two channels.
- Transmitter was found to be out of specification and could not be brought within specifications. Replaced with new transmitter, recalibrated and returned to service.
- C&I-5 Steam generator #1 steam flow indication channels MFC-110 and 111 were exhibiting low readings. The square root extractor for MFC-110 was replaced and MFC-111's transmitter was recalibrated to restore correct flow indication to the channels.



INDIANA & MICHIGAN ELECTRIC COMPANY

Donald C. Cook Nuclear Plant
P.O. Box 458, Bridgman, Michigan 49106

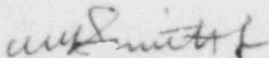
December 6, 1985

Director, Office Of Management Information
and Program Control
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Gentlemen:

Pursuant to the requirements of Donald C. Cook Nuclear Plant Unit 1
Technical Specification 6.9.1.6, the attached Monthly Operating Report
for the Month of November, 1985 is submitted.

Sincerely,


W. G. Smith, Jr.
Plant Manager

WGS:ab

Attachments

cc: J. E. Dolan
M. P. Alexich
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