OPERATING DATA REPORT 10. 2.

50-315 DOCKET NO. 2-2-84 DATE W.T.Gillett COMPLETED BY W.T.Gillett TELEPHONE 616-465-5901

OPERATING STATUS

22.2

±

Donald C. Cook	1 No	ores	
2. Reporting Period:	January 1984		
3. Licensed Thermal Power (MWt):	3250		
4. Nameplate Rating (Gross MWe):	1152		
5. Design Electrical Rating (Net MWe):	1056		
 Maximum Dependable Capacity (Gross MW Maximum Dependable Capacity (Net MWe 	(ve):1020		

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 MIVe): ____

10. Reasons For Restrictions. If Any: ____

	This Month	Yrto-Data	Cumulative
11. Hours in Reporting Period	744	744	79,632
12. Number Of Hours Reactor Was Critical	567.1	567.1	58,185,1
13. Reactor Reserve Shutdown Hours	0	0	463
14. Hours Generator On-Line	559.9	559.9	56,903.6
15. Unit Reserve Shutdown Hours	0	0	321
16. Gross Thermal Energy Generated (MWH)	1,743,010	1,743,010	166,087,066
17. Gross Electrical Energy Generated (MINH)	575,230	575,230	54,501,520
18. Net Electrical Energy Generated (MWH)	554,473	554,473	52,434,813
19. Unit Service Factor	75.3	75.3	73.3
20. Unit Availabillar Factor	75.3	75.3	73.3
21. Unit Canadity Factor (Using MDC Net)	73.0	73.0	66.3
22. Unit Canadity Factor (Using DER Net)	72.3	72.3	63.4
23. Unit Forerd Outage Rate	24.7	24.7	8.0

24. Shurdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):

25. Units In Test St	atus (Prior to Commercial Operation)	:		Forecast		Achieved
	INITIAL CRITICALITY INITIAL ELECTRICITY COMMERCIAL OPERATION	-	•	<u> </u>	·	·
						14/
8403020044 PDR ADOCK 0 R	840131 5000315					• 1

AVERAGE DAILY UNIT POWER LEVEL

the state

DOCKET NO.	50-315
UNIT _	1
DATE _	2-2-84
COMPLETED BY_	W. T. Gillett
TELEPHONE 6	16-465-5901

MON	TH January 1984		
DAY	AVERAGE DAIL/ POWER LEVEL (MWE-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	1029	17	1028
2	1027	18	1025
3	1028	19	1026
4	1029	20	1027
5	1028	21	1023
6	924	22	1024
7	710	23	588
8	1028	24	_
9 "	1029	25	
10	1030	25	
11	1029	27	
12	1026	28	
13	1024	29	Television and the second
14	1019	30	
15	1026	21	210
16	1027	51	

INSTRUCTIONS

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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 menawatt.

UNIT SPUTDOWNS AND POWER REDUCTIONS

DOCKET NO. _50-315 UNITNAME D.C. Cook - Unit 1 DATE ______

COMPLETED BY B.A. Svensson

 TELEPHONE
 616/465-5901

 PAGE
 1 of 2

REPORT MONTH JANUARY, 1984

No.	Date	Type ¹	Duration (Hours)	Reason ²	Method of Shufting Down Reactor ³	Licensee Event Report #	System Code ⁴	Component Code ⁵	Cause & Corrective Action to Prevent Recurrence
210 211	840106 840123	F	0	F&H B&A	4	N.A. 84-002	ZZ CB	ZZZZZZ	Reactor power reduced to 80% to meet steam generator secondary side chem- istry requirements. Reactor power was further reduced to 50% to remove the east main feed pump from service to check for tube leaks in the F-P turbine condenser. Reactor power was returned to 99.5% on 840107 and held there due to the allowable power limit restriction. Reactor/Turbine Generator trip due to an indicated low flow on reactor coolant loop 2 caused by an instru- ment valve on one of the reactor coolant flow meters leaking through when returning the flow meter to service. The Unit was kept out and cooled down to Mode 5, cold shutdown, to permit maintenance on RHR cooldown
1 F: F: S: S:	E: Forced F: Forced S: Scheduled C-Refueling D-Regulatory Restriction E-Operator Training & License Examination F-Administrative G-Operational Error (Explain) H-Other (Explain)					mination	3 Metho 1-Man 2-Man 3-Aut 4-Oth	nd: mal mal Scram. omatic Scram. er (Explain)	4 Exhibit G - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG- 0161) 5 Exhibit 1 - Same Source

INSTRUCTIONS

This report should describe all plant shutdowns during the report period. In addition, it should be the source of explanation of significant dips in average power levels. Each significant reduction in power level (greater than 20% reduction in average daily power level for the preceding 24 hours) should be noted, even though the unit may not have been shut down completely¹. For such reductions in power level, the duration should be listed as zero, the method of reduction should be listed as 4 (Other), and the Cause and Corrective Action to Prevent Recurrence column should explain. The Cause and Corrective Action to Prevent Recurrence column should be used to provide any needed explanation to fully describe the circumstances of the outage or power reduction.

NUMBER. This column should indicate the sequential number assigned to each shutdown or significant reduction in power for that calendar year. When a shutdown or significant power reduction begins in one report period and ends in another. an entry should be made for both report periods to be sure all shutdowns or significant power reductions are reported. Until a unit has achieved its first power generation, no number should be assigned to each entry.

DATE. This column should indicate the date of the start of each shutdown or significant power reduction. Report as year, month, and day. August 14, 1977 would be reported as 770814. When a shutdown or significant power reduction begins in one report period and ends in another, an entry should be made for both report periods to be sure all shutdowns or significant power reductions are reported.

TYPE. Use "F" or "S" to indicate either "Forced" or "Scheduled." respectively, for each shutdown or significant power reduction. Forced shutdowns include those required to be initiated by no later than the weekend following discovery of an off-normal condition. It is recognized that some judgment is required in categorizing shutdowns in this way. In general, a forced shutdown is one that would not have been completed in the absence of the condition for which corrective action was t ken.

DURATION. Self-explanatory. When a shutdown extends beyond the end of a report period, count only the time to the end of the report period and pick up the ensuing down time in the following report periods. Report duration of outages rounded to the nearest tenth of an hour to facilitate summation. The sum of the total outage hours plus the hours the generator was on line should equal the gross hours in the reporting period.

REASON. Categorize by letter designation in accordance with the table appearing on the report form. If category H must be used, supply brief comments.

METHOD OF SHUTTING DOWN THE REACTOR OR REDUCING POWER. Categorize by number designation

Note that this differs from the Edison Electric Institute (EEI) definitions of "Forced Partial Outage" and "Scheduled Partial Outage." For these terms, EEI uses a change of 30 MW as the break point. For larger power reactors, 30 MW is too small a change to warrant explanation. in accordance with the table appearing on the report form. If category 4 must be used, supply brief comments.

LICENSEE EVENT REPORT =. Reference the applicable reportable occurrence pertaining to the outage or power reduction. Enter the first four parts (event year, sequential report number, occurrence code and report type) of the five part designation as described in Item 17 of Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-0161). This information may not be immediately evident for all such shutdowns, of course, since further investigation may be required to ascertain whether or not a reportable occurrence was involved.) If the outage or power reduction will not result in a reportable occurrence, the positive indication of this lack of correlation should be noted as not applicable (N/A).

SYSTEM CODE. The system in which the outage or power reduction originated should be noted by the two digit code of Exhibit G - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-0161).

Systems that do not fit any existing code should be designated XX. The code ZZ should be used for those events where a system is not applicable.

COMPONENT CODE. Select the most appropriate component from Exhibit 1 - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-0161). using the following critieria:

- A. If a component failed, use the component directly involved.
- B. If not a component failure, use the related component: e.g., wrong valve operated through error: list valve as component.
- C. If a chain of failures occurs, the first component to maifunction should be listed. The sequence of events, including the other components which fail, should be described under the Cause and Corrective Action to Prevent Recurrence column.

Components that do not fit any existing code should be designated XXXXXX. The code ZZZZZZ should be used for events where a component designation is not applicable.

CAUSE & CORRECTIVE ACTION TO PREVENT RECUR-RENCE. Use the column in a narrative fashion to amplify or explain the circumstances of the shutdown or power reduction. The column should include the specific cause for each shutdown or significant power reduction and the immediate and contemplated long term corrective action taken, if appropriate. This column should also be used for a description of the major safety-related corrective maintenance performed during the outage or power reduction including an identification of the critical path activity and a report of any single release of radioactivity or single radiation exposure specifically associated with the outage which accounts for more than 10 percent of the allowable annual values.

For long textual reports continue narrative on separate paper and reference the shutdown or power reduction for this narrative.

					UNIT SI	IUTDOWNS AN	D POWER R	EDUCTIONS 7, 1984	DOCKET NO. 50-315 UNIT NAME D.C. Cook - Unit DATE 2-13-84 COMPLETED BY B.A. Svensson TELEPHONE 616/465-5901 PAGE 2 of 2
Na.	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
211 (Contin	ued)								isolation valve IMO-128. The Unit was returned to service on 830131 and reactor power increased to 79% where it was being held for secondary chemistry requirements.
1 F: For S: Sch	reed reduited	2 Rease A-Eq B-Ma C-Re D-Re E-Op F-Ad G-O _I H-Oi	on: uipment F intenance fueling gulatory R erator Trai ministrativ serational I her (Expla	ailure (E or Test lestrictio ining & I re Error (E) in)	xplain) m License Exan xplain)	aination	3 Method 1-Manu 2-Manu 3-Auto 4-Other	l: ial matic Scram. r (Explain)	4 Exhibit G - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG- 0161) 5 Exhibit I - Same Source

INSTRUCTIONS

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DURATION. Self-explanatory. When a shutdown extends beyond the end of a report period, count only the time to the end of the report period and pick up the ensuing down time in the following report periods. Report duration of outages rounded to the nearest tenth of an hour to facilitate summation. The sum of the total outage hours plus the hours the generator was on line should equal the gross hours in the reporting period.

REASON. Categorize by letter designation in accordance with the table appearing on the report form. If category H must be used, supply brief comments.

METHOD OF SHUTTING DOWN THE REACTOR OR REDUCING POWER. Categorize by number designation

Note that this differs from the Edison Electric Institute (EEI) definitions of "Forced Partial Outage" and "Scheduled Partial Outage." For these terms, EEI uses a change of 30 MW as the break point. For larger power reactors, 30 MW is too small a change to warrant explanation. in accordance with the table appearing on the report form. If category 4 must be used, supply brief comments.

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For long textual reports continue narrative on separate paper and reference the shutdown or power reduction for this narrative.

Docket No.: 50-315 Unit Name: D. C. Cook Unit 1 Completed By: G. J. Peak Telephone: (616) 465-5901 Date: 2/6/84 Page: 1 of 2

MONTHLY OPERATING ACTIVITIES - JANUARY 1984

Highlights:

The Unit entered the reporting period in Mode 1 with the reactor holding at the 99.5% power level due to the Allowable Power Limit restriction. The Unit tripped on January 23, 1984 due to Indicated Low Flow on Reactor Coolant Loop 2. The decision was made to cool down and degas the Reactor Coolant System in order to repair a Pressurizer Enclosure Ventilation Unit and valve IMO-128, (RHR suction from RCS). These repairs were completed and the Unit was subsequently returned to service. Significant power reductions occurred to leak check the East Main Feedpump Turbine Condenser, and due to secondary side chemistry requirements. At the end of the reporting period the Unit was holding at the 79% power level, due to secondary side chemistry requirements.

Total electrical generator for the month was 575,230 MWH.

Summary:

- 1/4/84 The Control Room Fire Detection System was declared operable at 1210 hours. It had been inoperable at 1435 hours on 8/24/83 pending completion of functional testing of the fire detection system.
- 1/6/84 Power was reduced to 80% at 1329 hours to meet steam generator secondary side chemistry requirements.
- 1/7/84 Power was further reduced to 50% at 0520 hours to remove the East Main Feedpump from service to leak check the turbine condenser. Power was returned to 99.5% at 2118 hours and held there due to the Allowable Power Limit restriction.
- 1/12/84 The fuel handling area exhaust fans, HV-AFX-1 and 2 were declared operable at 1116 hours. They had been inoperable since 1321 hours on 11/2/83.
- 1/13/84 Power was reduced to 90% at 2329 hours for routine turbine valve testing.
- 1/14/84 Power was increased to 99% at 0248 hours and held there due to the Allowable Power Limit restriction.

AB Diesel Generator was inoperable from 1910 hours on 1/14 to 2205 hours on 1/16 due to a malfunction of the electrical overspeed trip circuit.

Docket No.: 50-315 Unit Name: D. C. Cook Unit 1 Completed By: G. J. Peak Telephone: (616) 465-5901 Date: 2/6/84 Page: 2 of 2

- 1/23/84 The Unit tripped at 1350 hours due to an indicated low flow on Reactor Coolant Loop 2 caused by an instrument valve on one of the reactor coolant flow meters leaking through when returning the flow meter to service.
- 1/24/84 Reactor coolant system being cooled down. Entered Mode 4 at 1145 hours.
- 1/25/84 Entered Mode 5 at 1120 hours.

-19

- 1/29/84 Reactor coolant system heatup started with Mode 4 entered at 0358 hours. Entered Mode 3 at 1355 hours.
- 1/30/84 The Reactor went critical at 2246 hours.
- 1/31/84 Mode 1 was entered at 0120 hours. The main turbine was rolled at 0453 hours. The main generator was paralleled to the grid at 0600 hours.

The Control Room Cable Vault Halon System remains inoperable as of 1400 hours on 4/5/83. The backup CO₂ System for the Control Room Cable Vault remains operable.

DOCKET NO.	50 - 315
UNIT NAME	D. C. Cook - Unit No. 1
DATE	2-13-84
COMPLETED BY	B. A. Svensson
TELEPHONE	(616) 465-5901
PAGE	1 of 2

MAJOR SAFETY-RELATED MAINTENANCE

JANUARY, 1984

- <u>M-1</u> AB diesel auxiliary jacket water pump had a abnormal rubbing noise. Investigation revealed bad motor bearings. The bearings were replaced.
- <u>M-2</u> The north waste gas compressor discharge valve, #WD-221N, was leaking by. The valve was disassembled, diaphragm replaced and reassembled.
- <u>M-3</u> MRV-222, #2 S/G steam stop trip valve was disassembled. The stem, plug, seat and packing were replaced. New gaskets were installed and the valve was reassembled and tested.
- <u>M-4</u> The south waste gas compressor was compressing gas to the gas decay tanks at a very slow rate. The defective diaphragm on the suction valve was replaced.
- <u>M-5</u> QRV-61, alternate charging line to loop #1 cold leg failed to open. The diaphragm in the air operator was replaced. A retest was performed and the valve was returned to service.
- <u>M-6</u> The south waste gas compressor's pumping capacity was below normal. The impeller clearance was adjusted. The compressor tested satisfactorily and was returned to service.
- <u>M-7</u> 1-CD diesel lube oil heater pump had an abnormal noise while in operation. The pump was replaced with a new one and a function test was performed.
- <u>M-8</u> QRV-162, air operated 75 GPM letdown orifice isolation valve was found with air leaking around the diaphragm. The diaphragm was replaced, a retest performed, and the valve was returned to service.
- <u>M-9</u> NRV-151, pressurizer power operated relief valve leaked by. The valve was disassembled replacing the plug, stem, packing, seat ring, and gaskets. Upon reassembly the valve was tested and returned to service.
- <u>M-10</u> IMO-128, loop 2 hot leg to RHR pumps had a packing leak. Investigation revealed the yoke assembly to be damaged by boric acid and steam from the packing leak. The yoke assembly was replaced. The valve was repacked, tested and returned to service.

DOCKET NO.	50 - 315
UNIT NAME	D. C. Cook - Unit No. 1
DATE	2-13-84
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MAJOR SAFETY-RELATED MA. NTENANCE

JANUARY, 1984

<u>C&I-1</u> Control rod shutdown bank "L" rod J-3 position indication was 12 steps from demand. The position of rod J-3 was calculated per **12 THP 6030 IMP.038. The indicator amplifier was found to be out of calibration, with the rod in step with demand. The indicator amplifier for rod J-3 was recalibrated.

- <u>C&I-2</u> Emergency diesel generator "AB" received a spurious engine overspeed trip when the generator room door was opened. Thorough troubleshooting revealed a defect in the Dynalco tachometer unit. A new tach. was installed and calibrated. The engine was then started and was tripped by an overspeed signal to verify correct operation.
- <u>C&I-3</u> Steam generator #4 steam flow instrument MFC-141 read 0.5x10⁶ PPH with no steam flow. Recalibration of the square-root extractor module returned the instrument to operable status.
- <u>C&I-4</u> Normal reactor coolant system charging valve, QRV-62, did not open properly upon demand. "Asco" solenoid valve fr QRV-62 was replaced.

INDIANA & MICHIGAN ELECTRIC COMPANY Stern DONALD C. COOK NUCLEAR PLANT P.O. Box 458, Bridgman, Michigan 49106 (616) 465-5901

February 13, 1984

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 January, 1984 is submitted.

Sincerely,

W. Amer. W. G. Smith, Jr. Plant Manager

WGS:ab

Attachments

cc: J. E. Dolan M. P. Alexich R. W. Jurgensen NRC Region III E. R. Swanson R. O. Bruggee (NSAC) R. C. Callen S. J. Mierzwa R. F. Kroeger B. H. Bennett J. D. Huebner J. H. Hennigan A. F. Kozlowski R. F. Hering J. F. Stietzel PNSRC File INPO Records Center

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