

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-315

UNIT 1

DATE 3-1-79

COMPLETED BY W.T. Gillett

TELEPHONE 616-465-5901

MONTH February 1979

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	1041
2	1045
3	878
4	1014
5	1039
6	312
7	679
8	1041
9	1035
10	1035
11	1046
12	1047
13	1044
14	1045
15	1044
16	1044

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
17	1039
18	1033
19	1041
20	1044
21	1043
22	1042
23	1040
24	1041
25	1041
26	1041
27	1046
28	1048
29	----
30	----
31	----

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.

7903210044

(9/77)

OPERATING DATA REPORT

DOCKET NO. 50-315
 DATE 3-1-79
 COMPLETED BY W. I. Gillett
 TELEPHONE 616-465-5901

OPERATING STATUS

1. Unit Name: Donald C. Cook 1
2. Reporting Period: February 1979
3. Licensed Thermal Power (MWt): 3,250
4. Nameplate Rating (Gross MWe): 1,089
5. Design Electrical Rating (Net MWe): 1,054
6. Maximum Dependable Capacity (Gross MWe): 1,080
7. Maximum Dependable Capacity (Net MWe): 1,044
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	672	1416	36,480.0
12. Number Of Hours Reactor Was Critical	655.2	1399.2	28,610.9
13. Reactor Reserve Shutdown Hours	0	0	463
14. Hours Generator On-Line	652.8	1396.8	27,810.1
15. Unit Reserve Shutdown Hours	0	0	321
16. Gross Thermal Energy Generated (MWH)	2,091,567	4,390,973	75,728,764
17. Gross Electrical Energy Generated (MWH)	693,310	1,457,410	24,747,070
18. Net Electrical Energy Generated (MWH)	669,231	1,406,227	23,743,404
19. Unit Service Factor	97.1	98.6	79.2
20. Unit Availability Factor	97.1	98.6	79.2
21. Unit Capacity Factor (Using MDC Net)	95.4	95.1	69.7
22. Unit Capacity Factor (Using DER Net)	94.5	94.2	63.7
23. Unit Forced Outage Rate	2.9	1.4	5.9
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):

INITIAL CRITICALITY
 INITIAL ELECTRICITY
 COMMERCIAL OPERATION

Forecast	Achieved
_____	_____
_____	_____
_____	_____

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH February, 1979

DOCKET NO. 50-315
 UNIT NAME D.C. Cook-Unit
 DATE 3-8-79
 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
144	790203	S	0	B	4	N/A	ZZ	ZZZZZZ	Reactor power reduced to 70% to perform N.I.S. incore/excore cross calibration. Power returned to 100% 780204.
145	790206	F	19.2	H	1	79-006/03L-0	ZZ	ZZZZZZ	During a "feed and bleed" operation on the pressurizer relief tank a failure occurred of the pressurizer relief tank rupture disc. The pressure surge caused all ice condenser inlet doors to indicate open. The Unit was removed from service to permit closing the ice condenser inlet doors and replace the rupture discs. The Unit was returned to service 790207 and loaded to 100% the same day.

1
 F: Forced
 S: Scheduled

2
 Reason:
 A-Equipment Failure (Explain)
 B-Maintenance of 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

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 taken.

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

¹Note 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 50 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 I - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-0161), using the following criteria:

- 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 malfunction 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 RECURRENCE. 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.

Docket No.: 50-315
Unit Name: D. C. Cook Unit #1
Completed By: R. S. Lease
Telephone: (616) 465-5901
Date: March 5, 1979

OPERATING EXPERIENCES -- FEBRUARY, 1979.

Highlights

This Unit has operated at full power the entire reporting period except for one outage and other load reductions as required for maintenance.

Summary

02/03/79 -- Loading was reduced to 70% (780 MWe) starting down at 1130 hours. This was for Cross Calibration of Incore/Excore Nuclear Instrumentation. Power was returned to 100% (1080 MWe) by 0350 hours 2/04/79.

02/06/79 -- One of two Pressurizer Relief Tank ruptured diaphragms ruptured at 0455 hours. This caused all Ice Condenser doors to indicate open. The Unit was started down at 0730 hours and removed from service at 0816. All Ice Condenser doors were reclosed by 0920 hours.

The ruptured disc failed during a feed and bleed maneuver to reduce the temperature of the water in the tank. Both ruptured discs were replaced on the tank.

02/07/79 -- The Reactor was returned to criticality at 0108 hours and the Generator paralleled to the system at 0329 hours. The Unit was loaded to 100% (1080 MWe) by 1545 hours.

02/09/79 -- Loading was reduced to 85% (830 MWe) to remove #11 CWP from service for repair of a lube oil leak. Power was returned to 100% (1080 MWe) by 0255 hours 2/10/79.

02/18/79 -- Loading was reduced to 90% (980 MWe) for testing of Turbine valves. Total time below 100% power was 2.25 hours.

DOCKET NO. 50 - 315
UNIT NAME D. C. Cook - Unit No. 1
DATE 3-14-79
COMPLETED BY B. A. Svensson
TELEPHONE (616) 465-5901

MAJOR SAFETY-RELATED MAINTENANCE

FEBRUARY, 1979

- M-1 : Unit 1 East centrifugal charging pump mechanical seal leaked. A new mechanical seal was installed and operational retest of the pump was satisfactory.
- M-2 : During inspection of aux. feedwater motor operated valves, FM0-231 was found to have a broken jumper wire at terminal #46. Repaired broken wire. Had valve tested and returned to service.
- M-3 : Cooling water safety valve on TDAFP oil cooler, SV-140 was leaking by. Relapped seat and disc. Performed set point check.
- C&I-1 : Heat tracing circuit train 112, the emergency boration line, would not maintain temperature. The train B control thermostat set point was adjusted to increase the temperature of the line to 175°F.
- C&I-2 : DRV-150, the emergency drain valve from the reactor coolant drain tank to the pipe tunnel sump, failed to the closed position. The coil of the solenoid supplying air to the valve failed. The coil was replaced and proper operation verified.
- C&I-3 : The APDMS system actuated at 71% and 69% power levels. The required power level actuation is 84%. The isolation amplifiers of NIS channels N41 and N42 sending the power level signal to the APDMS were recalibrated.
- C&I-4 : The control room cable vault fire detection system alarmed. A check of the fire detectors was performed. One detector was found alarming. The detector was removed, cleaned and adjusted for the correct sensitivity. The system reset was actuated and the alarm cleared.
- C&I-5 : Radiation monitoring system channel R-2, containment area monitor, failed low. The connector was found loose at the containment penetration and an open connection. The connector and wire were repaired and the channel returned to normal operation.
- C&I-6 : Radiation monitoring channels R-11 and R-12, filters supply pump would fail. The air flow of the pump required adjustment to 10 SCFM. The excessive air flow resulted in the filter pump trips.
- C&I-7 : ILS-950, refueling water storage tank level recorder, indicated 96.5% when the tank overflow was reached. The calibration calculations were in error. Measurements were performed and the revised calculations of 124" to 487" H₂O were used in calibrating the level transmitter.