AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-315
UNIT 1
DATE 5-3-79
COMPLETED BY W. T. Gillett
TELEPHONE 616-465-5901

MONTH April 1979

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	1039	17	0
2	1036	18	0
3	1036	19	0
4	1024	20	0
5	1027	21	0
6	371	22	0
7	0	23	0
8	0	24	0
9	0	25	0
10	0	26	0
11	0	27	0
12	0	28	0
13	0	29	0
14	0	30	0
15	0	31	
16	0		

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.

(9/77)

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OPERATING DATA REPORT

DOCKET NO. 50-315
DATE 5-3-79
COMPLETED BY W.T. Gillett
TELEPHONE 616-465-5901

OPERATING STATUS

1. Unit Name: Donald C. Cook 1
2. Reporting Period: April 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

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	719	2,879	37,963.0
12. Number Of Hours Reactor Was Critical	128.8	2,211.9	29,423.6
13. Reactor Reserve Shutdown Hours	0	0	463
14. Hours Generator On-Line	128.8	2,205.1	28,618.4
15. Unit Reserve Shutdown Hours	0	0	321
16. Gross Thermal Energy Generated (MWH)	411,763	6,942,086	78,279,877
17. Gross Electrical Energy Generated (MWH)	137,490	2,306,110	25,595,770
18. Net Electrical Energy Generated (MWH)	132,695	2,224,982	24,562,159
19. Unit Service Factor	17.9	76.6	78.1
20. Unit Availability Factor	17.9	76.6	78.1
21. Unit Capacity Factor (Using MDC Net)	17.6	74.0	69.0
22. Unit Capacity Factor (Using DER Net)	17.5	73.3	63.2
23. Unit Forced Outage Rate	0	3.7	6.0

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)

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH April, 1979

DOCKET NO. 50-315
UNIT NAME D.C.Cook-Unit 1
DATE 5-11-79
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
149	790406	S	590.2	B,C	3	N.A.	ZZ	ZZZZZZ	The Unit was scheduled to be removed from service for refueling and maintenance after peak on 790406. The Unit tripped the same day due to loss of both main feed pump turbines caused by low F.P.T. condenser vacuum. The low vacuum condition was created by lake debris plugging up the condenser tube sheets. The Unit remained out of service at the end of the month.

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

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 completely[1]. 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 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 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 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.

[1]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 50 MW as the break point. For larger power reactors, 50 MW is too small a change to warrant explanation.

Docket No.: 50-315
Unit Name: D. C. Cook Unit #1
Completed By: R. S. Lease
Telephone: (616) 465-5901
Date: May 9, 1979
Page: (1)

MONTHLY OPERATING EXPERIENCES -- APRIL, 1979

Highlights

The Unit entered this reporting period operating at 100% power.

Total electrical generation for the month was 137,490 Mwh.

Summary

4/03/79 -- It was decided to allow power level to drop slightly because the F(z) as indicated by the APDMS was approaching the Tech. Spec. limit. On 04/04/79 power was at 98% and F(z) margin was adequate so no further reduction was made.

4/04/79 -- The Unit 1 Diesel Fire Pump was made inoperable for its 18-month Maintenance Inspection. The Pump was returned operable 4/07/79.

4/05/79 -- One phase of the 69KV off-site power source failed open during a windstorm at 2130 hours. Repairs were made and the source was again available at 0957 hours 4/6/79.

4/06/79 -- The West Main Feed Pump tripped followed by trip of the East Main Feed Pump and the Unit. The cause of the Feed Pump trips was low condenser vacuum due to debris on the condenser tube sheets. During the night there had been a windstorm with velocities up to 78 m.p.h. which caused extremely rough lake conditions, stirring up leaves from the bottom. The Unit had been scheduled out later the same day for its annual refueling outage, so no attempt was made to return it to service.

4/07/79 -- The Unit entered Mode 5 operation and degassing of the system was initiated. Also, H_2O_2 was injected for clean-up of the system.

At 2330 hours both Emergency Diesel Generators started and accepted their designed load. Cause of start was a degraded system voltage actuation. At this time both Units were off the line and they were receiving auxiliary power from the normal outside source. 7 of the 8 Reactor Coolant Pumps were in operation. As the 8th pump was started, the degraded voltage actuation was initiated.

4/12/79 -- Cleanup of the RCS was completed and the system drained to 1/2 loop.

4/15/79 -- Initial lift of the Reactor head was made. Due to leakage problems in the refueling cavity, the removal of the head was not accomplished until 4/18/79.

4/20/79 -- Fuel shuffle was started this day and completed 4/26/79.

4/28/79 -- The Reactor head was again set in place.

DOCKET NO.	50 - 315
UNIT NAME	D. C. Cook - Unit No. 1
DATE	5-11-79
COMPLETED BY	B. A. Svensson
TELEPHONE	(616) 465-5901

MAJOR SAFETY-RELATED MAINTENANCE

APRIL, 1979

M-1 The north waste gas compressor would not operate properly. Replaced diaphragm in suction valve, RRV-378. Operational retest satisfactorily.

M-2 WCR-906, NESW containment isolation valve did not pass STP.203 leak test. Cleaned internals, lapped plug to cage. Reassembled with new gaskets.

M-3 WCR-907, NESW containment isolation valve did not pass STP.203 leak test. Cleaned internals, lapped cage seat and machined disc seat. Reassembled with new gaskets.

M-4 WCR-911, NESW containment isolation valve did not pass STP.203 leak test. Cleaned internals, and lapped seat. Reassembled with new gaskets.

M-5 WCR-910, NESW containment isolation valve did not pass STP.203 leak test. Cleaned internals and lapped seat. Reassembled with new gaskets.

M-6 WCR-946, NESW containment isolation valve did not pass STP.203 leak test. Cleaned internals, lapped plug and cage. Reassembled with new gaskets.

M-7 WCR-926, NESW containment isolation valve did not pass STP.203 leak test. Cleaned internals and lapped seat. Reassembled with new gaskets.

M-8 WCR-930, NESW containment isolation valve did not pass STP.203 leak test. Cleaned internals and lapped plug. Reassembled with new gaskets.

M-9 WCR-909, NESW containment isolation valve did not pass STP.203 leak test. Cleaned internals and lapped seat. Reassembled with new gaskets.

M-10 Hydraulic snubbers #65 and #66 were of a style that required an unwieldy reservoir piping installation. Replaced the snubbers with a newer model which improved the reservoir piping configuration. The new snubbers were tested prior to installation.

MAJOR SAFETY-RELATED MAINTENANCE

APRIL, 1979

M-11 Twelve carbon steel valves were discovered to have been installed as steam generator level instrument root valves in lieu of stainless steel valves as specified. Stainless steel valves were installed as replacements per specifications. All required NDE was performed.

M-12 ICM-260, safety injection pump discharge containment isolation motor-operated valve to cold legs 1 and 4 had a body to bonnet leak. Replaced bonnet gasket and had valve retested.

C&I-1 The rod position indication system for rod F-6 indicated a deviation greater than 12 steps from the demand position. The output signal level of the signal conditioning module was measured and recorded at 2.635 vdc. The signal conditioning module's calibration was performed after the secondary coil voltage of the LVDT was determined to be within specifications. One hour after the calibration the output of the signal conditioning module again changed. Resistance measurements of the cables to the LVDT were measured and indicated a higher than normal secondary coil resistance of 290. The high resistance of the cable was traced to the connector on the reactor vessel head and will be tested during the outage.

C&I-2 The 50 foot wind speed and direction recorder failed. The detectors on the tower were frozen due to weather conditions. As the ambient temperature increased, the detectors returned to operation.

C&I-3 The 150 foot wind speed and direction recorder failed. The wind speed cups on the primary and secondary transmitters required replacement. The wind directional vane on the primary also was replaced.