

SEP 19 1977

Docket No. 50-313

Arkansas Power & Light Company
ATTN: Mr. William Cavanaugh, III
Executive Director, Generation
and Construction
P. O. Box 551
Little Rock, Arkansas 72203

Gentlemen:

RE: ARKANSAS NUCLEAR ONE - UNIT NO. 1

The Nuclear Regulatory Commission has reviewed the information that you are required by your technical specifications to submit as part of an Annual Operating Report and has concluded that much of the information now included in the Annual Operating Report can be deleted and still meet the desired NRC objectives. Therefore, we are planning to delete the requirements for an Annual Operating Report provided that certain information presently in the Annual Operating Report continues to be reported.

The purpose of this letter is to request that you submit a proposal to delete the requirement in your technical specifications for an Annual Operating Report. There is, however, one portion of your Annual Operating Report that must be retained in the Technical Specifications. The tabulation of occupational exposure data is needed by NRC and must continue to be submitted on an annual basis. This tabulation may be submitted along with any report of facility changes, tests or experiments required pursuant to 10 CFR 50.59(b), or as a separate submittal if you wish.

In addition, we request that you concurrently modify the content of your required Monthly Operating Report. You presently may be using three report formats contained in "Reporting of Operating Information - Appendix A Technical Specifications" Regulatory Guide 1.16 as your monthly report. The "Average Daily Unit Power Level" format remains the same and should continue to be used. The other two formats, "Operating Data Report" and "Unit Shutdowns and Power Reductions", along with their associated instructions for completing the formats, have been revised slightly. These revised formats should be used starting with your monthly report for January 1978. Twelve copies of each of the current formats and the associated instructions are enclosed for your use. Additional copies may be obtained from our Office of Management Information and Program Control. Along with the three report formats that provide much of the

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Arkansas Power & Light Company

- 2 -

needed monthly operating information, we request that you provide a "Narrative Summary of Operating Experience" that describes the operation of the facility, including major safety-related maintenance, for the monthly report period. The summary should be of the style and detail similar to that previously prepared for inclusion into the Annual Operating Report. This requested "Narrative Summary of Operating Experience" is to cover each one-month period only and is part of the Monthly Operating Report which should be submitted by the tenth of the month following the calendar month covered by the report to the Director, Office of Management Information and Program Control. You should state your intentions with respect to providing this revised Monthly Operating Report when you submit a proposal to delete the Annual Operating Report.

In lieu of the 1977 Annual Operating Report, the NRC will compile, from previously submitted reports, that information now judged necessary. This compilation of operating data will be transmitted to each licensee for validation and addition of any missing data. Additionally, a separate, one-time only, "Narrative Summary of Operating Experience" will be required to cover the transition period (calendar year 1977) because the narrative of operating experience was not submitted with previous Monthly Operating Reports nor will there be an Annual Operating Report which would have contained the narrative.

We request that you (1) propose a change to your technical specifications that would delete the requirement for an Annual Operating Report, (2) modify the content of your monthly report, (3) provide any missing data in the summary compilation which will be prepared and transmitted to you by NRC, and (4) provide a narrative of operating experience for the year 1977. We believe that this new reporting program will represent a significant paperwork reduction, provide more timely information and eliminate unnecessary information. We request that you make a submittal as soon as possible, but no later than November 1, 1977, so we may delete the requirement for the submittal of an Annual Operating Report by March 1, 1978.

Sincerely,

Don K. Davis
 Don K. Davis, Acting Chief
 Operating Reactors Branch #2
 Division of Operating Reactors

Enclosures:
 Monthly Report Formats
 and Instructions (12)

cc: *[Signature]* next page

OFFICE →	DOR:ORB-2	DOR:TA/ORS	DOR:ORB-2		
SURNAME →	RSnaider:esp	TJCarter	DKDavis		
DATE →	9/14/77	9/15/77	9/19/77		

September 19, 1977

cc w/enclosure:

Phillip K. Lyon, Esquire
House, Holms & Jewell
1550 Tower Building
Little Rock, Arkansas 72201

Mr. Donald Rueter
Manager, Licensing
Arkansas Power & Light Company
Post Office Box 551
Little Rock, Arkansas 72201

Mr. John W. Anderson, Jr.
Plant Superintendent
Arkansas Nuclear One
Post Office Box 603
Russellville, Arkansas 72801

Arkansas Polytechnic College
Russellville, Arkansas 72801

OPERATING DATA REPORT

DOCKET NO. _____
 DATE _____
 COMPLETED BY _____
 TELEPHONE _____

OPERATING STATUS

1. Unit Name: _____
2. Reporting Period: _____
3. Licensed Thermal Power (MWt): _____
4. Nameplate Rating (Gross MWe): _____
5. Design Electrical Rating (Net MWe): _____
6. Maximum Dependable Capacity (Gross MWe): _____
7. Maximum Dependable Capacity (Net MWe): _____

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	_____	_____	_____
12. Number Of Hours Reactor Was Critical	_____	_____	_____
13. Reactor Reserve Shutdown Hours	_____	_____	_____
14. Hours Generator On-Line	_____	_____	_____
15. Unit Reserve Shutdown Hours	_____	_____	_____
16. Gross Thermal Energy Generated (MWH)	_____	_____	_____
17. Gross Electrical Energy Generated (MWH)	_____	_____	_____
18. Net Electrical Energy Generated (MWH)	_____	_____	_____
19. Unit Service Factor	_____	_____	_____
20. Unit Availability Factor	_____	_____	_____
21. Unit Capacity Factor (Using MDC Net)	_____	_____	_____
22. Unit Capacity Factor (Using DER Net)	_____	_____	_____
23. Unit Forced Outage Rate	_____	_____	_____
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	_____	_____

INSTRUCTIONS FOR COMPLETING OPERATING DATA REPORT

This report should be furnished each month by licensees. The name and telephone number of the preparer should be provided in the designated spaces. The instructions below are provided to assist licensees in reporting the data consistently. The number of the instruction corresponds to the item number of the report format.

1. **UNIT NAME.** Self-explanatory.
2. **REPORTING PERIOD.** Designate the month for which the data are presented.
3. **LICENSED THERMAL POWER (MW_t)** is the maximum thermal power, expressed in megawatts, currently authorized by the Nuclear Regulatory Commission.
4. **NAMEPLATE RATING (GROSS MW_e)**. The nameplate power designation of the turbine-generator in megavolt amperes (MVA) times the nameplate power factor of the turbine generator.
5. **DESIGN ELECTRICAL RATING (NET MW_e)** is the nominal net electrical output of the unit specified by the utility and used for the purpose of plant design.
6. **MAXIMUM DEPENDABLE CAPACITY (GROSS MW_e)** is the gross electrical output as measured at the output terminals of the turbine-generator during the most restrictive seasonal conditions.
7. **MAXIMUM DEPENDABLE CAPACITY (NET MW_e)**. Maximum dependable capacity (gross) less the normal station service load.
8. Self-explanatory.
9. **POWER LEVEL TO WHICH RESTRICTED, IF ANY (NET MW_e)**. Note that this item is applicable only if restrictions on the power level are in effect. Short-term (less than one month) limitations on power level need not be presented in this item.

Since this information is used to develop figures on capacity lost due to restrictions and because most users of the "Operating Plant Status Report" are primarily interested in energy actually fed to the distribution system, it is requested that this figure be expressed in MWe-Net in spite of the fact that the figure must be derived from MW_t or percent power.
10. **REASONS FOR RESTRICTIONS, IF ANY.** If item 9 is used, item 10 should explain why. Brief narrative is acceptable. Cite references as appropriate. Indicate whether restrictions are self-imposed or are regulatory requirements. Be as specific as possible within space limitations. Plants in startup and power ascension test phase should be identified here.
11. **HOURS IN REPORTING PERIOD.** For units in power ascension at the end of the period, the gross hours from the beginning of the period or the first electrical production, whichever comes last, to the end of the period.

For units in commercial operation at the end of the period, the gross hours from the beginning of the period or of commercial operation, whichever comes last, to the end of the period or decommissioning, whichever comes first. Adjustments in clock hours should be made in which a change from standard to daylight-savings time (or vice versa) occurs.
12. **NUMBER OF HOURS REACTOR WAS CRITICAL.** Show the total number of hours the reactor was critical during the gross hours of the reporting period.
13. **REACTOR RESERVE SHUTDOWN HOURS.** The total number of hours during the gross hours of reporting period that the reactor was removed from service for administrative or other reasons but was available for operation.
14. **HOURS GENERATOR ON-LINE.** Also called Service Hours. The total number of hours expressed to the nearest tenth of an hour during the gross hours of the reporting period that the unit operated with breakers closed to the station bus. These hours, plus those listed in Unit Shutdowns for the generator outage hours, should equal the gross hours in the reporting period.
15. **UNIT RESERVE SHUTDOWN HOURS.** The total number of hours expressed to the nearest tenth of an hour during the gross hours of the reporting period that the unit was removed from service for economic or similar reasons but was available for operation.
16. **GROSS THERMAL ENERGY GENERATED (MWH).** The thermal output of the nuclear steam supply system during the gross hours of the reporting period, expressed in megawatt hours (no decimals).
17. **GROSS ELECTRICAL ENERGY GENERATED (MWH).** The electrical output of the unit measured at the output terminals of the turbine-generator during the gross hours of the reporting period, expressed in megawatt hours (no decimals).
18. **NET ELECTRICAL ENERGY GENERATED (MWH).** The gross electrical output of the unit measured at the output terminals of the turbine-generator minus the normal station service loads during the gross hours of the reporting period, expressed in megawatt hours. Negative quantities should not be used. If there is no net positive value for the period, enter zero (no decimals).
19. For units still in the startup and power ascension test phase, items 19-23 should not be computed. Instead, enter N/A in the current month column. These five factors should be computed starting at the time the unit is declared to be in commercial operation. The cumulative figures in the second and third columns should be based on commercial operation as a starting date.
- 23.

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 large power reactors, 50 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 to this narrative.

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. _____
 UNIT NAME _____
 DATE _____
 COMPLETED BY _____
 TELEPHONE _____

REPORT MONTH _____

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

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

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. _____

UNIT _____

DATE _____

COMPLETED BY _____

TELEPHONE _____

MONTH _____

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

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.

19. **UNIT SERVICE FACTOR.** Compute by dividing hours the generator was on line (item 14) by the gross hours in the reporting period (item 11). Express as percent to the nearest tenth of a percent. Do not include reserve shut-down hours in the calculation.
20. **UNIT AVAILABILITY FACTOR.** Compute by dividing the unit available hours (item 14 plus item 15) by the gross hours in the reporting period (item 11). Express as percent to the nearest tenth of a percent.
21. **UNIT CAPACITY FACTOR (USING MDC NET).** Compute by dividing net electrical energy generated (item 18) by the product of maximum dependable capacity (item 7) times the gross hours in the reporting period (item 11). Express as percent to the nearest tenth of a percent.
22. **UNIT CAPACITY FACTOR (USING DER NET).** Compute as in item 21, substituting design electrical rating (item 5) for maximum dependable capacity.
23. **UNIT FORCED OUTAGE RATE.** Compute by dividing the total forced outage hours (from the table in Unit Shutdowns and Power Reductions) by the sum of hours generator on line (item 14) plus total forced outage hours (from the table in Unit Shutdowns and Power Reductions). Express as percent to the nearest tenth of a percent.
24. **SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE, AND DURATION OF EACH).** Include type (refueling, maintenance, other), proposed date of start of shutdown, and proposed length of shutdown. It is recognized that shutdowns may be scheduled between reports and that this item may not be all inclusive. Be as accurate as possible as of the date the report is prepared. This item is to be prepared each month and updated if appropriate until the actual shutdown occurs.
25. Self-explanatory.
26. Self-explanatory. Note, however, that this information is requested for all units in startup and power ascension test status and is not required for units already in commercial operation.

TEST STATUS is defined as that period following initial criticality during which the unit is tested at successively higher outputs, culminating with operation at full power for a sustained period and completion of warranty runs. Following this phase, the unit is generally considered by the utility to be available for commercial operation.

Date of **COMMERCIAL OPERATION** is defined as the date that the unit was declared by the utility owner to be available for the regular production of electricity, usually related to the satisfactory completion of qualification tests as specified in the purchase contract and to the accounting policies and practices of the utility.