



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

Tea

June 23, 1980

Docket No. 50-313

Mr. William Cavanaugh, III
Vice President, Generation
and Construction
Arkansas Power & Light Company
P. O. Box 551
Little Rock, Arkansas 72203

Dear Mr. Cavanaugh:

In our review of the proposed Appendix I Technical Specifications for Arkansas Nuclear One, Unit No. 1 (ANO-1) and in our discussions with your staff on this issue we have become concerned about the present operability status of the ANO-1 waste gas system. Accordingly, we request the information identified in the enclosure within 30 days on receipt of this letter.

Sincerely,

A handwritten signature in dark ink, appearing to read "Tom Novak".

Thomas M. Novak, Assistant Director
for Operating Reactors
Division of Licensing

Enclosure:
Request for Additional
Information

cc w/enclosure:
See next page

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Arkansas Power & Light Company

cc w/enclosure(s):

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Honorable Ermil Grant
Acting County Judge of Pope County
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Director, Technical Assessment
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U. S. Environmental Protection Agency
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ATTN: EIS COORDINATOR
1201 Elm Street
First International Building
Dallas, Texas 75270

Director, Bureau of Environmental
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4815 West Markham Street
Little Rock, Arkansas 72201

REQUEST FOR ADDITIONAL INFORMATION

Enclosure

CONCERNING

THE WASTE GAS SYSTEM

FOR

ARKANSAS NUCLEAR ONE, UNIT NO. 1

DOCKET NO. 50-313

1. Per previous telephone conversations it was the NRC staff's understanding that Arkansas Power and Light Company (AP&L) was about to complete a thorough evaluation of the ANO-1 waste gas system. Provide the details of the findings of this evaluation, the proposed changes or modifications which are planned, the schedules for implementation of the changes and the expected operating results of the changes.
2. Provide an operational description of the hydrogenated portion of the waste gas system (i.e., the surge tank/decay tank train) and the performance history of the waste gas system, specifically addressing the following:
 - a. oxygen and hydrogen levels - design versus actual
 - b. waste gas holdup times - design versus actual
 - c. system availability
 - d. problem areas
 - e. modification history.
3. Per the ANO-1 FSAR, aerated gases are separated from all gases associated with primary system water (which contains hydrogen gas) to prevent the formation of an explosive mixture anywhere in the gaseous waste system. In this regard, provide the following information:
 - a. the means available for monitoring (or measuring) the oxygen concentration at specified locations in the system
 - b. monitoring (measuring) frequency
 - c. means available for corrective action, requirements for taking corrective action, and history of any such past action
 - d. in lieu of oxygen monitoring capabilities to demonstrate that explosive mixtures do not exist anywhere in the system, provide analyses to this effect.

If oxygen levels in the waste gas system have been, or are suspected of having been, higher than trace levels (say greater than 100 ppm), please provide the following information, in order that we may perform our own evaluation of the potential for a hydrogen explosion, specifically addressing the following points:

- a. sources of oxygen inleakage
- b. data taken to evaluate this problem
- c. actions taken to insure that explosive conditions do not exist within the system
- d. what assurance do you have that explosive conditions do not exist at the local points of air inleakage; particularly at the degasifier/waste gas system interface
- e. what corrective actions have been taken, to date, to minimize oxygen inleakage into the system
- f. what corrective actions are planned in this regard, and provide a schedule for their implementation.