



ARKANSAS POWER & LIGHT COMPANY

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June 27, 1984

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Director of Nuclear Reactor Regulation  
ATTN: Mr. J. F. Stolz, Chief  
Operating Reactors Branch #4  
Division of Licensing  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555

Director of Nuclear Reactor Regulation  
ATTN: Mr. James R. Miller, Chief  
Operating Reactors Branch #3  
Division of Licensing  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555

SUBJECT: Arkansas Nuclear One - Units 1 & 2  
Docket Nos. 50-313 and 50-368  
License Nos. DPR-51 and NPF-6  
NUREG 0737, Item II.B.3,  
Post Accident Sampling System

Gentlemen:

In a May 23, 1984 conference call members of your staff requested that AP&L provide a written response to two questions. These questions were 1) are the sensitivity and accuracy of the boron and chloride analyzers affected by radiation and 2) are the standard solutions used in the chloride and boron analyzers similar to the solution described in the NRC letter dated July 1, 1982, (ØCNAØ782Ø1).

In response to the first question, the boron and chloride analyzers at ANO are designed to operate under a radiation dose rate of  $10^5$  R/hr and up to  $1.5 \times 10^7$  REM. The second question concerned the standard test solutions

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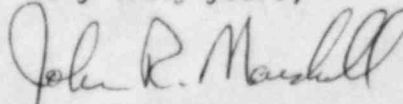
used in the chloride and boron analyzers. The standard solution used was similar to the sample solution described by the NRC. The solution contained:

	<u>Up To</u>
I <sup>-</sup>	40ppm
Cs <sup>+</sup>	100ppm
Ba <sup>+2</sup>	10ppm
La <sup>+3</sup>	10ppm
CL <sup>-</sup>	20ppm
Boron	4000ppm
Li <sup>+</sup>	2ppm
NO <sub>3</sub> <sup>-</sup>	22ppm
K <sup>+</sup>	130ppm
NaOH	buffered to ph7 (spray additive)

The presence of these chemicals in the test solutions did not appear to adversely impact the performance of the analyzers.

Although the items discussed in this letter have no adverse effect on the accuracy of the boron and chloride analyzers, as discussed in our letter dated October 31, 1984 (OCAN108314), we continue to experience problems with the overall analyzer accuracy. We have just recently completed another set of site acceptance tests on these analyzers and expect to forward an update to you shortly.

Very truly yours,



John R. Marshall  
Manager, Licensing

JRM/MCS/ac