



ARKANSAS POWER & LIGHT COMPANY  
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October 15, 1982

2CAN108206

Director of Nuclear Reactor Regulation  
ATTN: Mr. Robert A. Clark, Chief  
Operating Reactors Branch #3  
Division of Licensing  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

SUBJECT: Arkansas Nuclear One - Unit 2  
Docket No. 50-368  
License No. NPF-6  
Technical Specification Change  
Request - Reactor Vessel Surveillance

Gentlemen:

AP&L is participating in an EPRI program, supported by the Universities of Arkansas and Missouri-Rolla, to analyze neutron radiation data immediately outside the ANO-2 reactor vessel. The primary purpose of this effort is to experimentally obtain the neutron flux and spectra immediately outside the reactor vessel and then to use this data to calculate the reactor vessel fluence. This work is therefore unique in that measured data outside the reactor vessel has not previously been available for calculations of fluence.

AP&L believes this effort may be of significant value in future predictions of reactor vessel embrittlement which is, of course, important in evaluating the effects of a potential thermal shock event. Individuals within NRC have, as well, indicated a significant interest in this program and the value of the data.

To support this ongoing effort, it has now become necessary to obtain additional data on the interior surface of the reactor vessel. The needed data can be obtained by removal of a surveillance capsule and analyzing the specimen.

The first capsule is scheduled to be removed, in accordance with ANO-2 Technical Specification Table 4.4-5, at five EFPY. It is now necessary to remove this specimen at the end of ANO-2 cycle 2 with approximately 630 EFPD.

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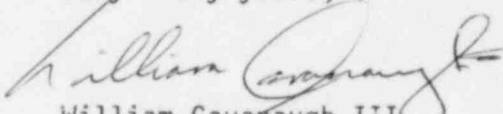
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Given the value of this program to the thermal shock issue, we believe removal of the five EFPY capsule at the end of cycle 2 is necessary and justified. We therefore request approval of the attached Technical Specification change.

The existing Technical Specification complies with 10CFR50 Appendix H Section 3.b. The proposed surveillance schedule will comply with the alternate paragraph 3.g.

From previous discussions with the Staff, we understand NRC is in support of this program and desires access and use of the results. As this is a cooperative effort between NRC and all other parties, we request an exemption to the fee requirements of 10 CFR 170.22.

Very truly yours,

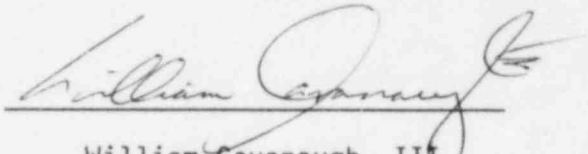
  
William Cayanaugh III

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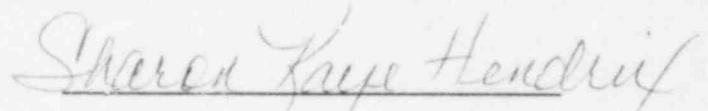
Attachment

STATE OF ARKANSAS    )  
                                  )  
COUNTY OF PULASKI    )            SS

I, William Cavanaugh, III, being duly sworn, subscribe to and say that I am Senior Vice President, Energy Supply for Arkansas Power & Light Company; that I have full authority to execute this oath; that I have read the document numbered 2CAN108206 and know the contents thereof; and that to the best of my knowledge, information and belief the statements in it are true.

  
\_\_\_\_\_  
William Cavanaugh, III

SUBSCRIBED AND SWORN TO before me, a Notary Public in and for the County and State above named, this 15<sup>th</sup> day of October, 1982.

  
\_\_\_\_\_  
Notary Public

My Commission Expires:

9-19-89