

ARKANSAS POWER & LIGHT COMPANY
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October 7, 1979

WILLIAM CAVANAUGH III
Vice President
Generation & Construction

1-109-7

Director of Nuclear Reactor Regulation
ATTN: Mr. H. R. Denton, Director
Division of Site Safety & Environmental
Analysis
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: Arkansas Nuclear One-Unit 1
Docket No. 50-313
License No. DPR-51
Potential Unreviewed Safety Question on
Interaction Between Non-safety Grade
Systems and Safety Grade Systems
(File: 1510)

Gentlemen:

This letter and the attached report responds to your September 17, 1979 letter on the above subject.

In conjunction with Babcock and Wilcox, we have reviewed the specific non-safety grade systems listed in IE Information Notice 79-22, as well as others, for potential interactions that could constitute a substantial safety hazard. We have not been able to identify such an interaction. While, in some cases, we have identified variations from the FSAR licensing bases, the basic conclusion of the FSAR, that these events do not constitute an undue risk to the health and safety of the public, remains unchanged.

Our investigation, within the limited time frame required by your September 17 letter, has convinced us that continued operation is warranted. Justification for continued operation is provided in the attached report. In addition, Nuclear Safety Analysis Center has determined that the probability of severe consequences resulting from one of these high energy pipe breaks is very low for a typical nuclear power plant. The Probabilistic Analysis of IE Information Notice 79-22 Scenarios was prepared by NSAC as a result of AIF's promotion of an industry wide generic response to this concern. We have participated with AIF to the extent possible and the above referenced probability analysis will be submitted to you by NSAC later this week. Further AIF's generic analysis promotes that such breaks are more likely to be small cracks rather than catastrophic failures so that the resulting adverse environment builds up over a period of time providing a high potential for detection prior to component failure. Additionally, our review recognized the difference

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between a demonstrated deficiency (e.g. determination that a control component would operate in a fashion not within the limits presented in the safety analysis) and a potential unreviewed question. As previously stated, we have not identified any events that would change the conclusions of the FSAR, that is, that these events do not constitute an undue risk to the health and safety of the public.

As a result of the Three Mile Island event, there are a significant number of industry, governmental and regulatory investigations under way examining the licensing bases and the operating procedures of nuclear generating facilities. These investigations are already identifying areas where studies may result in the consideration of new or revised events as part of the bases for assuring the continued safety of nuclear power plants. NUREG-0578 outlines several such events and suggests remedies.

NUREG-0578 requirements for analyses of potential safety problems envision the kinds of scenarios identified by Westinghouse and made the subject of IE Information Notice 79-22. Section 3.2 of NUREG-0578, page 17 states in part,

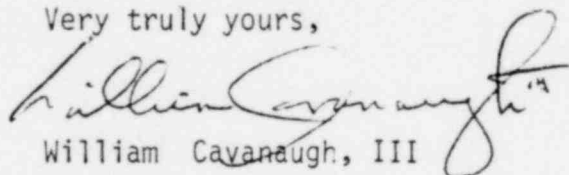
"...The NRC requirements for non-safety systems are generally limited to assuring that they do not adversely affect the operation of safety systems..."

Further, on page A-45 of NUREG-0578,

"Consequential failures shall also be considered..."

We, therefore, believe that the scope of the action required by IE Information Notice 79-22 is fully consistent with the requirements of NUREG-0578 and, therefore, will be integrated with the planned response sequence for compliance with NUREG-0578.

Very truly yours,



William Cavanaugh, III

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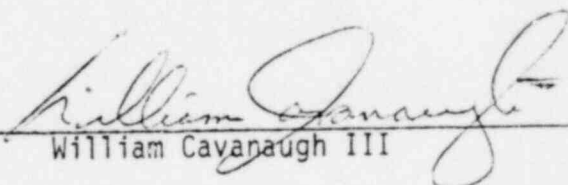
Attachment

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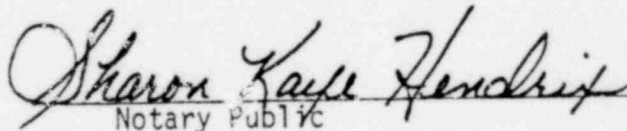
STATE OF ARKANSAS
COUNTY OF PULASKI

SS

William Cavanaugh III, being duly sworn, states that he is Vice President, Generation & Construction, for Arkansas Power & Light Company; that he is authorized on the part of said Company to sign and file with the Nuclear Regulatory Commission this Supplementary Information; that he has reviewed or caused to have reviewed all of the statements contained in such information, and that all such statements made and matters set forth therein are true and correct to the best of his knowledge, information and belief.


William Cavanaugh III

SUBSCRIBED AND SWORN TO before me, a Notary Public in and for the County and State above named, this 8th day of October 1979.


Notary Public

My Commission Expires:

My Commission Expires 9/1/81

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