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January 15, 1990

2CAN019003

U. S. Nuclear Regulatory Commission  
Document Control Desk  
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Washington, DC 20555

Subject: Arkansas Nuclear One - Unit 2  
Docket No. 50-368  
License No. NPF-6  
ANO-2 Plant Specific Diverse  
Emergency Feedwater Actuation  
System (DEFAS) Conceptual Design

Gentlemen:

In response to your correspondence of August 15, 1989, (2CNA098901) the Arkansas Power and Light Company (AP&L) is submitting our plant-specific, conceptual design for the Diverse Emergency Feedwater Actuation System (DEFAS) to be installed on Arkansas Nuclear One, Unit 2 (ANO-2) to complete the requirements of 10CFR50.62. This design is in conformance with the generic design concept discussed with the NRC staff and the Combustion Engineering Owners Group (CEOG) on July 12, 1989, and which was also the subject of your previously referenced correspondence.

In performing the review required by 10CFR50.59, AP&L determined that the probability of an event previously evaluated in the Licensing Basis Documents (i.e., Excess Heat Removal from a Secondary System Malfunction) would be increased, thus making DEFAS implementation an unreviewed safety question. The discussion of the generic design in the NRC's August 15, 1989 letter stated that because of the Diverse Scram System (DSS), Main Steam Isolation Signal (MSIS), and Emergency Feedwater Actuation System (EFAS) interlocks and the single failure design to avoid erroneous actuation, the probability of the occurrence of a spurious Emergency Feedwater (EFW) actuation during non-Anticipated Transient Without Scram (ATWS) events had been adequately minimized. AP&L agrees with the staff that the design does not unacceptably increase the probability of a previously evaluated accident.

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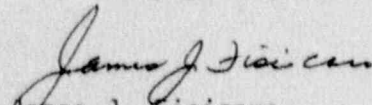


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Since the ANO-2 plant specific design for DEFAS is consistent both with the generic design presented to the staff by the CEOG and the design previously approved on Louisiana Power and Light Company's (LP&L) Waterford-3 facility AP&L will proceed with final design and hardware procurement to support implementation during the ANO-2 eighth refueling outage (2R8) as previously committed. However, considering the result of the 10CFR50.59 evaluation previously discussed, AP&L requests that the staff provide a Safety Evaluation Report (SER) prior to the implementation of the design. To support our schedule for 2R8, staff approval in the form of an SER will need to be received prior to the end of July 1990. The above information has been discussed with the ANO-2 NRR Project Manager.

Should you have any questions regarding this submittal, do not hesitate to contact my office.

Very truly yours,



James J. Fisicaro  
Manager, Licensing

JJF/MWT/lw

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