



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

February 23, 1994

Docket No. 50-368

Mr. Jerry W. Yelverton  
Vice President, Operations ANO  
Entergy Operations, Inc.  
Route 3 Box 137G  
Russellville, Arkansas 72801

Dear Mr. Yelverton:

SUBJECT: COMPLIANCE WITH ELECTRICAL CIRCUITRY ISOLATION REQUIREMENTS AT  
ARKANSAS NUCLEAR ONE, UNIT 2 (ANO-2) (TAC NO. M82550)

During the electrical distribution system functional inspection (EDSFI) at ANO-2, the inspection team raised a concern regarding circuitry isolation. By letter dated June 18, 1992, the NRC staff concluded that the design basis calculation for the coordination of primary and secondary containment penetration overcurrent protection devices to protect the electrical conductor from damage, indicates several instances where no protection exists for overload conditions. The staff requested that Entergy Operations reassess this situation and initiate appropriate corrective actions if necessary.

By letter dated September 4, 1992, Entergy Operations responded to the containment penetration concern. The staff reviewed this response and asked for further clarification by letter dated February 26, 1993. Entergy Operations provided additional information and a revised calculation on August 20, 1993.

The staff's review of the revised calculation for the coordination of containment overcurrent protective devices indicates that backup protection does not exist for some circuits, as noted in the enclosed supplementary safety evaluation. Therefore, the design is not in conformance with Regulatory Guide 1.63. However, it is not clear, based on statements in the Safety Analysis Report (SAR), that compliance with Regulatory Guide 1.63 was part of the original licensing basis. Further, based on present plant operating experience and the likelihood of equipment failures due to overload current conditions, the staff believes that the safety significance of accident events given a failed primary protective device is low.

Nevertheless, similar EDSFI team findings at other nuclear power plants indicate that the existing staff position regarding containment overcurrent protection should be examined to assess the safety significance of overload current (fault) conditions and whether future revisions should be made to Regulatory Guide 1.63. Therefore, pending generic resolution of the safety significance of overload currents for containment electrical penetration overcurrent protection, the deviation to Regulatory Guide 1.63 is acceptable

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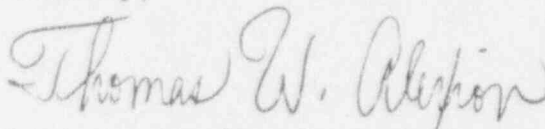
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at this time. However, the staff recommends that Entergy Operations continue to assess its position with regard to only one protection device as sufficient for the overload region, while the staff conducts its generic assessment.

Sincerely,

A handwritten signature in cursive script that reads "Thomas W. Alexion".

Thomas W. Alexion, Project Manager  
Project Directorate IV-1  
Division of Reactor Projects - III/IV/V  
Office of Nuclear Reactor Regulation

Enclosure:  
Supplementary Safety  
Evaluation

cc w/enclosure:  
See next page

Mr. Jerry W. Yelverton  
Entergy Operations, Inc.

Arkansas Nuclear One, Unit 2

cc:

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Mr. Jerry W. Yelverton

- 2 -

at this time. However, the staff recommends that Entergy Operations continue to assess its position with regard to only one protection device as sufficient for the overload region, while the staff conducts its generic assessment.

Sincerely,

ORIGINAL SIGNED BY:

Thomas W. Alexion, Project Manager  
Project Directorate IV-1  
Division of Reactor Projects - III/IV/V  
Office of Nuclear Reactor Regulation

Enclosure:  
Supplementary Safety  
Evaluation

cc w/enclosure:  
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