



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555

June 18, 1992

Docket Nos. 50-368

Mr. Neil S. Carns
Vice President, Operations ANO
Entergy Operations, Inc.
Route 3 Box 137G
Russellville, Arkansas 72801

Dear Mr. Carns:

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION REGARDING 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. The NRC staff has reviewed this concern and provides the enclosed safety evaluation.

The staff has concluded that the existing design does provide for adequate protection against credible faults in non-Class 1E loads from affecting Class 1E station battery power supplies. The staff also found that the existing design does not meet the requirements of Regulatory Guide (RG) 1.75 regarding physical separation and isolation of Class 1E electrical circuits; however, the original design of ANO-2 was not required to meet those requirements.

The staff also concluded that the design basis calculation for the coordination of containment penetration overcurrent protection devices to protect the electrical conductor from damage indicates several instances in which no protection exists for overload conditions. Therefore, the design is not in conformance with RG 1.63. The updated safety analysis report (USAR) states that the present design is in compliance with RG 1.63.

In view of the above, the staff requests that you consider the following and respond regarding your plans and schedules for resolution:

- (1) Revise USAR Section 8.3.2.1 to address the remote possibility of an inadvertent battery discharge caused by overload conditions and to modify the assertion that the DC supply to engineered safety feature (ESF) distribution panels 2D23 and 2D24 is not affected by any fault in the non-ESF circuits of panels 2D21 and 2D22.
- (2) Reassess the existing coordination of the primary and secondary containment penetration overcurrent protective devices to assure that adequate protection is provided for the full range of overcurrent conditions (short-circuits and overloads) for the affected circuits and initiate appropriate corrective actions if warranted.

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The reporting requirements contained in this letter affect fewer than ten respondents; therefore, Office of Management and Budget clearance is not required under Public Law 96-511.

We request your response within 60 days of receipt of this letter to enable the staff to complete its review in a timely manner.

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:
Safety Evaluation

cc: See next page

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Mr. Neil S. Carns

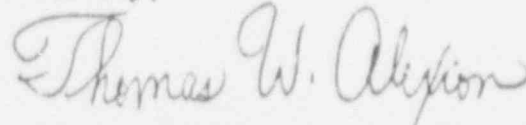
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Sincerely,

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:
Safety Evaluation

cc: See next page

Mr. Neil S. Carns
Entergy Operations, Inc.

Arkansas Nuclear One, Unit 2

cc:

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