

April 19, 1996

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U. S. Nuclear Regulatory Commission
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Subject: Arkansas Nuclear One - Units 1 and 2
Docket Nos. 50-313 and 50-368
License Nos. DPR-51 and NPF-6
Response To Generic Letter 96-01

Gentlemen:

On January 10, 1996, the NRC issued Generic Letter (GL) 96-01, "Testing of Safety-Related Logic Circuits." The generic letter requests that all addressees perform a review of their electrical schematic drawings and logic diagrams for engineered safety features systems against plant surveillance test procedures to ensure that all portions of the logic circuitry are adequately addressed in the surveillance procedures that implement the technical specification requirements.

In late 1994, a multi-disciplined, Engineered Safeguards (ES) Testing Task Force was formed at Arkansas Nuclear One (ANO) to address an identified condition regarding ES testing during outages that was not meeting the intent of certain technical specification requirements. The task force's objectives were to review industry guidance and experience, review the design basis of affected systems, review technical specification surveillance requirements and to clarify testing requirements. The intent of the review was to ensure that surveillances were conducted in accordance with technical specification requirements.

The 1994 review covered part of the scope requested by the generic letter including control circuitry for ES actuated devices and emergency diesel generator load shedding and sequencing, but did not include instrumentation systems. Reasons for not reviewing instrument testing included the perception that identified problems were isolated to circuit breaker logic, protective instrumentation design specifications were better defined to support test development, and fewer industry problems were related to protective instrumentation testing.

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The review considered both states of all circuit elements in the control/actuation portion of the circuit and included provisions to verify that either the failure mode would be identified by a surveillance test, or the function of the component was classified as category 1, 2, or 3. Category 1 items must be tested to fulfill surveillance requirements; category 2 items should be tested based on safety significance; category 3 items are not safety significant and are not required to be tested. Category 1 discrepancies were treated as an incomplete surveillance test. Category 2 discrepancies were added to an existing test procedure and Category 3 discrepancies were classified as optional, with no corrective action required.

Each technical specification surveillance was reviewed in order to fully define the basis for which components or functions would be expected to satisfy testing required to: 1) meet the literal wording of a surveillance requirement, or 2) verify the reliability of a component whose function is not required per 1 above but is strongly recommended due to its potential safety significance. Appropriate procedure revisions have been incorporated to address the recommended actions identified by the task force.

We believe the methodology utilized by the task force satisfies the Requested Actions of GL 96-01 for those components that were reviewed. The details of the task force's review and conclusions are available onsite for review.

A more recent review subsequently identified certain logic contacts in the Unit 1 reactor protection system (RPS) that were not being tested. In response to GL 96-01, a review of the RPS and Engineered Safeguards Actuation Systems (ESAS) will be performed. The review will be completed on the schedule requested by the generic letter, currently estimated to be March 20, 1998, for ANO-1 and April 11, 1997, for ANO-2. The review will include RPS, ESAS and the emergency feedwater initiation and control system for Unit 1 and the plant protection system for Unit 2.

Should you have questions or comments, please contact me.

Very truly yours,

Dwight C. Mims

Dwight C. Mims
Director, Nuclear Safety

DCM/dwb

To the best of my knowledge and belief, the statements contained in this submittal are true.

SUBSCRIBED AND SWORN TO before me, a Notary Public in and for
Johnson County and the State of Arkansas, this 19 day of April,
1996.

Juana M. Tapp
Notary Public
My Commission Expires 11-8-2000



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