

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

June 9, 1981

OFFICIAL COPY

Mr. James P. O'Reilly, Director
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Region II - Suite 3100
101 Marietta Street
Atlanta, Georgia 30303



Dear Mr. O'Reilly:

SEQUOYAH NUCLEAR PLANT UNIT 2 - SAFETY INJECTION PUMP BREAKER LOCKOUT -
NCR 27P - REVISED FINAL REPORT

The subject deficiency was initially reported to NRC-OIE Inspector M. Thomas on June 19, 1980, in accordance with 10 CFR 50.55(e). An interim report was submitted on July 18, 1980. Our final report (submitted August 25, 1980) stated that work in this deficiency would be completed by November 3, 1980. This commitment has not been met. Enclosed is our revised final report which clarified our safety implication and revises our commitment to complete work on this deficiency.

If you have any questions, please get in touch with D. L. Lambert at FTS 857-2581.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L M Mills

L. M. Mills, Manager
Nuclear Regulation and Safety

Enclosure

cc: Mr. Victor Stello, Director (Enclosure)
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, DC 20555

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ENCLOSURE
SEQUOYAH NUCLEAR PLANT UNIT 2
SAFETY INJECTION PUMP BREAKER LOCKOUT
NCR 27P
10 CFR 50.55(e)
REVISED FINAL REPORT

Description of Deficiency

During preoperational testing of Sequoyah unit 2 safety injection pumps (2A-A and 2B-B) it was found that if the pumps were given a closed (start) signal for greater than 0.32 seconds while a pump trip condition existed, the 6900V breakers would lock out, preventing pump start. There is no visual or audio indication to operations employees when this lockout condition exists. The breakers appear to be available for service when they actually are not.

Safety Implications

The lack of an indication of the locked-out condition of the circuit breakers could preclude the operator from recognizing and correcting the condition. This could result in a failure of the safety injection pumps to start automatically under emergency conditions. This could result in less core cooling capability than was assumed in the plant safety analysis, jeopardizing the safe operation of the plant. This condition also applies to the breakers for other loads on the 6.9 kV shutdown boards.

Corrective Action

TVA has investigated this problem and has found it to be common only to Sequoyah and Watts Bar Nuclear Plants. To alleviate the problem, the seal-in contact of the 1X relays will be removed from the circuit breakers in the 6900V shutdown boards. This will provide the operator with indication of the condition and allow him to take simple corrective action from the main control room (i.e., operation of the handswitch for the affected load).

In our previous response, it was indicated that the corrective action specified above would be completed before November 3, 1980. Based upon a recent design review, TVA determined that the work has not been completed. This condition has been evaluated for significance to plant safety; as a result, it was determined that most of the affected loads are not required for fuel loading of Sequoyah unit 2. The relays for the Sequoyah unit 2 centrifugal charging pumps will be corrected before fuel loading for that unit. The other affected relays of that unit will be corrected before plant heatup. Both Watts Bar units will be corrected before fuel loading.