

Docket Nos. 50-259
50-260
50-296

OCTOBER 13 1981

Mr. Hugh G. Parris
Manager of Power
Tennessee Valley Authority
500 A Chestnut Street, Tower II
Chattanooga, Tennessee 37401



Dear Mr. Parris:

RE: BROWNS FERRY PLANT UNITS 1, 2 AND 3, NUREG-0737, ITEM II.K.3.15

- Reference a. - TVA ltr dated Dec. 23, 1980, Mills to Denton
- b. - BWR Owners Group Evaluation of NUREG-0737, II.K.3.15
- c. - TVA ltr dated July 16, 1981, Mills to Denton

Item II.K.3.15 of NUREG-0737 requires that by July 1, 1981, the High Pressure Coolant Injection and Reactor Core Isolation Cooling Systems be modified to prevent inadvertent isolation due to starting steam flow transients. A post-implementation review of your submittal is necessary to support a reasonable assurance finding by the NRC staff that the modifications accomplish this goal. We have reviewed your submittals (References a and c) and determined that insufficient information was presented to support such a finding.

Your submittal was reviewed to the following criteria:

1. Assurance that the pipe-break detection logic has been modified such that pressure spikes resulting from initiation of HPCI and/or RCIC do not cause spurious system isolation.
2. Acceptability of the proposed Technical Specifications necessary to implement the modification (e.g. surveillance on time delay relay setting, flow or response time set point changes, etc.).
3. No degradation of the safety function of the primary system isolation due to the modification.

You have elected to employ, at least in part, the BWR Owners Group modification (Reference b) which incorporates a time delay relay (TDR). We have reviewed this position, and your submittal, and determined that you should address two additional items. First, it must be established

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that the modification meets criteria 1 and 3. Specifically, to meet criterion 1, some plant specific test data or information should be presented to demonstrate that the modification, with your plant specific delay setting, prevents spurious isolations of the systems. In addition, to meet criterion 3, it must be shown that the installation of the TDR does not degrade the primary safety function of the system. Assuming a break in the steam line under normal operating conditions, the installation of the TDR extends the blowdown time of the primary system up to the TDR set point. The Owners Group position states that this extended period is within the design basis assumptions of the original plant safety analysis. However, you must affirm, on a plant specific basis, that this extended blowdown outside containment is acceptable in the event of a line break. Your analysis should include consideration of the plant transient and the equipment qualification aspects for accident mitigation.

Second, the Owners Group position notes that Technical Specifications concerning surveillance of the time delay setting are necessary. Your submittal did not propose such Technical Specifications. You should propose the appropriate Surveillance Requirements and Limiting Conditions of Operation for the HPCI and RCIC systems which address this item. The incorporation of these requirements into the facility's Technical Specifications will support our reasonable assurance finding.

Please submit your response to this letter within 60 days of its receipt. Include the plant specific information discussed above and any additional information which demonstrates that the modification complies with the review criteria. It is our intent to issue Safety Evaluations for this item.

Sincerely,

----- SIGNED BY -----

Thomas A. Ippolito, Chief
 Operating Reactors Branch #2
 Division of Licensing

cc: See next page

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Mr. Hugh G. Parris

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