Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402

APR 04 1991

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Gentlemen:

In the Matter of) Docket Nos. 50-260
Tennessee Valley Authority)

BROWNS FERRY NUCLEAR PLANT (BFN) - UNIT 2 - RESPONSE TO NRC SAFETY EVALUATION ON RECLASSIFICATION OF THE REACTOR BUILDING CLOSED COOLING WATER (RBCCW) SYSTEM OUTSIDE CONTAINMENT

References:
1. Letter from T. M. Ross (NRC) to D. A. Nauman (TVA) dated March 6, 1991, "Reclassification of the Reactor Building Closed Cooling Water System Outside Containment"

2. Letter from M. O. Medford (TVA) to NRC dated March 16, 1990, "Browns Ferry Nuclear Plant (BFN) - Unit 2 - Response to Inspection Report 50-260/89-44"

This letter requests a supplement to the safety evaluation report (SER) regarding RBCCW reclassification which was provided in Reference 1. The SER documented the NRC staff evaluation of the TVA response to Inspection Report 50-260/89-44 [unresolved item Emergency Maintenance Guideline (EMG)-033] provided in Reference 2. The NRC concluded in their evaluation that the portion of the RBCCW system outside containment was important to safety, and therefore should continue to be classified as seismic Class I. TVA has completed its review of the SER and maintains its position on this issue that the portion of the RBCCW System outside the primary containment isolation boundary is not important to safety and therefore should be reclassified as seismic Class II.

EMG-033 identified that a portion of the RBCCW system was eliminated from the Unit 2 IE Bulletin 79-14/79-02 program scope even though these lines were designated seismic Class I in the Final Safety Analysis Report (FSAR). The TVA response to EMG-033 identified the reclassification of the portion of the RBCCW system outside the primary containment isolation boundary from seismic Class I to seismic Class II. The basis for this reclassification was documented in a 10 CFR 50.59 safety evaluation which concluded that this change did not involve an unreviewed safety question.

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The RBCCW system at BFN provides a supply of cooling water to designated auxiliary plant equipment. The equipment supplied inside the primary containment includes the reactor recirculation pump seals and motor coolers, drywell equipment drain sump cooler, and drywell air coolers. The equipment supplied outside the primary containment includes the drywell air compressor aftercoolers, fuel pool heat exchangers, reactor building equipment drain cooler, reactor coolant sample cooler, reactor water cleanup (RWCU) recirculation pump coolers, and RWCU non-regenerative heat exchangers.

Section 1.6.7 and Appendix C of the BFN FSAR states that seismic Class I includes those structures, equipment and components whose failure or malfunction, might cause, or increase the severity of, an accident which would endanger the public health and safety. This category includes those structures, equipment, and components required for safe shutdown and isolation of the reactor. The RBCCW system inside the primary containment and outside containment up to and including the isolation valves, is required for drywell integrity and is therefore designated as seismic Class I.

The FSAR also states that seismic Class II includes those structures, equipment, and components which are important to reactor operation, but are not essential for preventing an accident that would endanger the public health and safety, and are not essential for the mitigation of the consequences of these accidents. It also states that any item designated as Class II shall not degrade the integrity of any item designated Class I. As discussed in the 10 CFR 50.59 safety evaluation, the RBCCW system is the preferred method for cooling the equipment it serves, and is important to reactor operation. However, the RBCCW system is not the safety related source of cooling for this equipment and is not essential for the mitigation of the consequences of accidents. Therefore, the portion of the RBCCW system outside the primary containment isolation boundary is not required for safe shutdown and can be reclassified from seismic Class I to Class II. In addition, any modifications to the seismic Class II portion of the system will still be evaluated under the guidelines of 10 CFR 50.59.

Based on the above discussion and the previously performed 10 CFR 50.59 safety evaluation, TVA has shown that the portion of RBCCW affected by this change and the components it supplies are not required to prevent or mitigate the consequences of accidents. In addition, the seismic Class II designation of this portion of the RBCCW system will ensure that it will not de de the integrity of any system, structure, or component designated seismic Class I should a safe shutdown earthquake occur. Therefore, TVA requests the staff to issue a supplement to the safety evaluation on reclassification of the portion of the RBCCW system outside the primary containment isolation boundary to seismic Class II.

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Reference 1 also requested TVA to confirm that emergency and/or abnormal operating procedures exist to support the contingent use of alternate cooling methods if the RBCCW system were to fail. Loss of RBCCW at BFN is procedurally controlled by Abnormal Operating Instructions 1, 2, and 3-AOI-70-1. These instructions provide symptoms, automatic actions, and operator actions for a partial and/or complete loss of RBCCW.

If you have any questions please contact Patrick P. Carier, Manager of Site Licensing, at (205) 729-3566.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

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