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10 CFR 50.4

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Browns Ferry Nuclear Plant, Unit 3
Facility Operating License No. DPR-68
NRC Docket No. 50-296

Subject: **Boiling Water Reactor Vessel Internals Project (BWRVIP) - Notification of Deviation from BWRVIP-41, Revision 3, BWR Jet Pump Assembly Inspection and Flaw Evaluation Guidelines**

Reference: Letter from Boiling Water Reactor Vessel and Internals Project (BWRVIP) to the Nuclear Regulatory Commission, "BWRVIP Utility Commitments to the BWRVIP," dated October 30, 1997

The Tennessee Valley Authority (TVA) is providing notification that the Browns Ferry Nuclear Plant (BFN), Unit 3, will not fully implement the subject guidance of BWRVIP-41, Revision 3, "BWR Jet Pump Assembly Inspection and Flaw Evaluation Guidelines." In accordance with the referenced BWRVIP letter dated October 30, 1997, BWR licensees that are part of the Boiling Water Reactor Vessel and Internals Project (BWRVIP) are required to provide timely notification to the NRC of a decision, by a licensee, to not fully implement the applicable BWRVIP product.

A deviation disposition has been prepared, reviewed, and approved in accordance with BWRVIP-94, Revision 1, "BWR Vessel and Internals Project Program Implementation Guide," and TVA internal procedures. This deviation disposition provides assurance that there are no safety implications or reliability concerns with the deviation.

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The BFN, Unit 3, deviation concerns one item. BFN, Unit 3, is not meeting the requirements for visual examination (i.e., EVT-1) of the riser brace to yoke welds (Welds RB-2a, b, c, and d) for Jet Pumps 5 and 6 as stipulated by BWRVIP-41, Revision 3.

During the In-Vessel Visual Inspection of Unit 3 performed in 1992 in preparation for unit restart, crack indications were identified at the two attachment welds of the riser brace to the riser pipe (RS-8 and RS-9) adjacent to Jet Pump Number 5 at the reactor vessel 90° azimuth. A repair clamp was installed between the riser brace yoke and the riser pipe to capture the riser brace and perform the function of the deficient weld attachment. The repair clamp was also designed to allow future inspections of the existing cracks. However, it was discovered during the initial baseline inspection that the repair clamp obstructed inspection of the riser brace to yoke (RB-2) welds. The RB-2 welds are categorized as a medium priority location. A BWRVIP baseline inspection has been conducted for all three units at BFN, and no indications have been observed at this location. Additionally, a stress analysis for the jet pump riser brace repair that was performed by General Electric Nuclear Energy demonstrated that the calculated riser brace leaf stresses due to the repair clamp were well within the allowable limits. This provides a reasonable level of assurance that the RB-2 welds associated with Jet Pumps 5 and 6 are intact. Therefore, TVA is waiving this examination for the Unit 3 Jet Pumps 5 and 6. The vendor-recommended inspection will continue to be performed every other refueling outage to ensure that the repair clamp is performing its function as designed. This inspection will also reveal any signs of increased flow-induced vibration, which may be indicative of failure of the RB-2 welds.

The next scheduled inspection to ensure that the repair clamp is performing its function as designed will be performed during Unit 3 Refueling Outage 16 (U3R16) in 2014. Since this inspection will serve in place of the BWRVIP-41 mandated inspection of the RB-2 welds, this deviation disposition will remain in effect until that time. Following the next inspection, the results will be evaluated and another deviation disposition will be prepared if results are satisfactory. Evaluating this condition every four years (i.e., every other refueling outage) will provide greater attention to this location than performance of the BWRVIP-41 mandated inspection, because the reinspection frequency is 25 percent during each 6-year BWRVIP inspection cycle, meaning that a particular location would be inspected every 24 years (i.e., every 12th refueling outage).

This deviation is effective for the next two BFN, Unit 3, 2-year fuel cycles (i.e., Cycle 15 - spring 2010 to spring 2012, and Cycle 16 - spring 2012 to spring 2014). This notification is being transmitted for information only. TVA is not requesting any specific action from the NRC.

There are no new regulatory commitments in this letter. If you have any questions, please contact Tom Matthews at (423) 751-2687.

Respectfully,

R. M. Krich

cc:

NRC Regional Administrator - Region II
NRC Senior Resident Inspector - Browns Ferry Nuclear Plant