



May 10, 2011

10 CFR 50.4

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

Browns Ferry Nuclear Plant, Units 1, 2, and 3

Facility Operating License Nos. DPR-33, DPR-52, and DPR-68

NRC Docket Nos. 50-259, 50-260, and 50-296

Subject: Boiling Water Reactor Vessel and Internals Project - Notification of

Deviation from BWRVIP-25, "BWR Core Plate Inspection and Flaw"

**Evaluation Guidelines**"

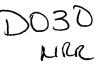
Reference: Letter from Boiling Water Reactor Vessel and Internals Project

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), Units 1, 2, and 3, will not fully implement the subject guidance of Boiling Water Reactor Vessel and Internals Project (BWRVIP), BWRVIP-25, "BWR Core Plate Inspection and Flaw Evaluation Guidelines." In accordance with the referenced BWRVIP letter dated October 30, 1997, Boiling Water Reactor (BWR) licensees that are part of the BWRVIP, are required to provide timely notification to the NRC of a decision, by the 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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BWRVIP-25 requires that BWR/2-5 plants without core plate repair wedges examine 50 percent of the core plate rim hold-down bolts by enhanced visual examination (EVT-1) from below the core plate (or by ultrasonic (UT) inspection from above the core plate once the technique is developed). However, it was determined that the bolts cannot be inspected by UT due to configuration issues and it has recently been concluded by the BWRVIP that an EVT-1 exam does not provide meaningful results. Accordingly, a technical justification for deviation from the BWRVIP guidance was developed.

The technical justification demonstrates that the core plate bolts have a relatively low susceptibility to cracking based on field experience and fabrication practices. In addition, should cracking occur in some bolts, the consequences are mitigated by redundancy in the bolting and associated alignment hardware. Finally, even with the extremely conservative assumptions of failures of both the bolting and the redundant hardware, the Standby Liquid Control system could be used to bring the reactor to a safe shutdown.

The BWRVIP is currently working on developing revised examination guidance for the core plate bolts and expects to complete that work, including gaining NRC approval of the revised guidance, by 2015. Until such time as new guidance is provided, BFN will perform visual examinations (VT-3) on 100 percent (34) of the core plate bolts from the top side during each refueling outage to ensure that significant degradation is not occurring. Given the low likelihood that the function of the core plate will be compromised by bolting failures, the VT-3 exams constitute an acceptable interim inspection strategy until such time as the BWRVIP develops revised guidance.

This deviation is effective until December 31, 2015, or until the NRC approves revised BWRVIP guidance, whichever occurs first. 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,

D. E. Culle

CC:

R. M. Krich

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