



Tennessee Valley Authority, Post Office Box 2000, Spring City, Tennessee 37381-2000

April 21, 2011

10 CFR 50.34

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

Watts Bar Nuclear Plant, Unit 2  
NRC Docket No. 50-391

**Subject: WATTS BAR NUCLEAR PLANT (WBN) UNIT 2 - WITHDRAWAL OF A PREVIOUS COMMITMENT**

Reference: TVA letter dated June 28, 2010, "Watts Bar Nuclear Plant (WBN) Unit 2 – Request for Additional Information (RAI) Regarding Licensee’s Final Safety Analysis Report Amendment Related to Section 4.2.2, ‘Reactor Vessel Internal Components’ (TAC No. ME2731)”

The purpose of this letter is to withdraw a previous commitment made in the referenced letter. In that letter, TVA committed to replace prior to Unit 2 operation the current Unit 2 clevis insert bolts to a design which uses X-750 alloy with a high temperature heat (HTH) treatment, rolled threads, and a larger radius on the undercut of the cap screw head. Upon further evaluation, TVA has determined that this replacement is unwarranted at this time.

The justification for this withdrawal stems from the fact that the bolting failure phenomenon has only known to have occurred at one unit in the industry. The phenomenon appears to be time based, and the breakage only occurs after many operating cycles. In discussions with personnel at the affected plant, TVA has learned that the cause is not yet known and that any change might be at best neutral to solving the problem. TVA has also confirmed via these discussions that bolting at the affected plant’s other unit does not have the same issue. In addition, WBN Unit 1 has operated with the same type bolting since 1995 with no failure of these bolts.

The initial NRC RAI cited the Staff Requirements Memorandum dated July 25, 2007 (ADAMS Accession No. ML093370274) directing TVA to look for opportunities to resolve issues where the unirradiated state of WBN Unit Bar 2 makes the issue easier to resolve. At this time, the root cause of the subject issue has not been determined, an industry resolution has not been established, the problem appears to be restricted to a single unit at another utility, and WBN

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Unit 1 has operated with the X-750 bolting approximately sixteen years with no failure of these bolts. Even though WBN Unit 2 is not yet irradiated, TVA has decided to withdraw the previous commitment to replace the X-750 alloy insert bolts since replacement is not a definite solution for a near term problem.

If you should have any questions, please call Bill Crouch at (423) 365-2004.

Respectfully,



David Stinson  
Watts Bar Unit 2 Vice President

cc: U. S. Nuclear Regulatory Commission  
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