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

June 30, 2014

10 CFR 50.36

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, Unit 2 - Supplemental Safety Evaluation Report Appendix HH Open Item 132 Commitment Closure

References:
1. TVA letter to NRC dated January 12, 2012, "Watts Bar Nuclear Plant (WBN) Unit 2 - Final Safety Analysis Report (FSAR) - Chapter 15.2.4 Inadvertent Boron Dilution"
2. TVA letter to NRC dated March 5, 2012, "Watts Bar Nuclear Plant, Unit 2 - Final Safety Analysis Report (FSAR), Amendment 108

Reference 1 provided the results of analyses for inadvertent boron dilution events. The NRC documented the review and acceptability of the information provided in Supplemental Safety Evaluation Report (SSER) 26. The NRC also stated in SSER 26 that Appendix HH open item 132 was closed. The Tennessee Valley Authority (TVA) also made the following three specific commitments in Reference 1 to document that the physical modifications and the additional administrative controls credited in the analyses had been completed.

1. Incorporate the information provided in Enclosure 2 in a future amendment to the WBN Unit 2 FSAR.
2. Submit a letter to NRC documenting that the plant modifications to add a high VCT level alarm to the main control room annunciator system have been completed
3. Submit a letter to NRC documenting that procedure changes associated with limiting the number of operating primary water pumps and isolating potential boron dilution paths have been made.

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Commitment 1 was completed with the submittal of FSAR Amendment 108 as described in Reference 2.

A high level alarm was added to the volume control tank (VCT) that alarms and illuminates an unused main control room annunciator panel. The physical installation was made with Field Change Request (FCR) 60574. Software revisions were made by FCRs 62851 and 62852. This fulfills commitment 2.

Annunciator Response Instruction (ARI) 2-ARI-109-115, CVCS &RHR - RPS & ESF was revised to include the new annunciator window and to identify inadvertent boron dilution event as a possible cause for the alarm. The ARI also identified Abnormal Response Instruction (AOI) 2-AOI-34, Immediate Boration as a response instruction. General Operating Instruction 2-GO-06, "Unit Shutdown From Hot Standby To Cold Shutdown", has been prepared and approved. This instruction includes the specific actions to limit the use of primary water pumps when the plant is in Mode 4, Hot Shutdown or Mode 5, Cold Shutdown with a reactor coolant pump (RCP) in service, and to isolate the potential boron dilution paths, either by closing valves or placing pumps in pull-to-lock, after the last RCP is removed from service. This procedure will not be active for use until shortly before Unit 2 receives the Operating License. This completes commitment 3.

There are no new regulatory commitments contained in this letter. If you have any questions, please contact me at (423) 365-2004.

Respectfully,

Gordon P. Arent
Director, Licensing
Watts Bar

cc: U. S. Nuclear Regulatory Commission
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