

March 31, 2008

10 CFR 50.90

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

Gentlemen:

In the Matter of) Docket No. 50-390
Tennessee Valley Authority (TVA))

WATTS BAR NUCLEAR PLANT (WBN) UNIT 1 - TECHNICAL SPECIFICATION (TS)
CHANGE TS-07-04, REACTOR TRIP SYSTEM/ENGINEERED SAFETY FEATURE LOGIC,
REACTOR TRIP BREAKER ALLOWABLE OUTAGE TIME, AND SURVEILLANCE
TESTING INTERVAL RELAXATIONS - RESPONSE TO REQUEST FOR ADDITIONAL
INFORMATION

References:

1. TVA Letter to NRC Dated June 8, 2007, "Watts Bar Nuclear Plant (WBN) Unit 1 – Technical Specification (TS) Change TS-07-04, Reactor Trip System/Engineered Safety Feature Logic, Reactor Trip Breaker Allowable Outage Time, and Surveillance Testing Interval Relaxations"
2. NRC Letter to TVA Dated November 20, 2007, "Watts Bar Nuclear Plant Unit 1 – Request for Additional Information Regarding Technical Specification Change TS-07-04, Reactor Trip System/Engineered Safety Feature Logic, Reactor Trip Breaker Allowable Outage Time, and Surveillance Testing Interval Relaxations (TAC NO. MD5880)"
3. TVA Letter to NRC Dated December 26, 2007, "Watts Bar Nuclear Plant (WBN) Unit 1 – Technical Specification (TS) Change TS-07-04, Reactor Trip System/Engineered Safety Feature Logic, Reactor Trip Breaker Allowable Outage Time, and Surveillance Testing Interval Relaxations – Response to Request for Additional Information"

The purpose of this letter is to respond to NRC's request for additional information (RAI) provided by email from Margaret Chernoff, NRC, to Michael K Brandon, WBN on March 4, 2008, concerning the subject License Amendment Request. TVA submitted the License Amendment Request (LAR) by Reference 1. NRC provided an initial set of RAI questions in Reference 2 and TVA responded to these questions in Reference 3.

The enclosure provides the responses to the RAI questions provided in the March 4, 2008 email. There are no commitments made in this letter.

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If you have any questions concerning this matter, please call me at (423) 365-1824.

I declare under penalty of perjury that the foregoing is true and correct. Executed on this 31st day of March 2008.

Sincerely,

Original signed by

M. K. Brandon
Manager, Site Licensing
and Industry Affairs

Enclosures

cc (Enclosures):

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ENCLOSURE

REQUEST FOR ADDITIONAL INFORMATION (RAI) WATTS BAR NUCLEAR PLANT (WBN) UNIT 1 TECHNICAL SPECIFICATIONS (TS) CHANGE REQUEST TS-07-04

To support Nuclear Regulatory Commission assessment of the acceptability of the proposed changes, please provide the response to the following items:

- 1. Identify the version and date of the PRA model used for the risk evaluations supporting the proposed change.**

Response:

Revision 3 of the probability risk assessment (PRA) model (June 2005) was used for the risk evaluations supporting the proposed change. Since the original TS change request was made, WBN has continued to upgrade the PRA to meet the requirements of Regulatory Guide 1.200. No changes made to the model after revision 3 to the Reactor Trip or solid state protection system (SSPS) impact the TS change request.

- 2. Identify plant changes (i.e., modifications, procedure revisions, LARs, or other) not incorporated into the PRA model revision supporting this amendment and discuss their impact on the proposed WCAP-14333 and WCAP-15376 CTs, bypass test times, or surveillances.**

Response:

WBN has not made any modifications to the reactor trip breaker (RTB) or SSPS that would impact this application. Design change notices (DCNs) listed as impacting the SSPS and RTB system and not yet incorporated into the PRA were reviewed for impacts. The list below includes DCNs reviewed and their impacts:

- DCN 51124 added a filter capacitor on the Enable signal line in the SSPS computer demultiplexer to eliminate spurious alarms caused by noise. The addition of the capacitor to the SSPS computer demultiplexer Enable line does not affect the reactor trip/logic portion of the RPS or SSPS. The demultiplexer, where the capacitor was installed, is electrically separated from the trip/logic portion of SSPS by isolation boards in SSPS. This DCN has no impact on the PRA or the TS change request.
- DCN 51661 regreared the operators of some safety injection and containment spray valves resulting in response time changes for the valves. This DCN did not impact the surveillance frequency or completion times of RTB/SSPS discussed in the TS change request.
- DCN 51297 changed the system description for the SSPS system to replace the calorimetric method of verifying reactor coolant system flow with elbow tap differential pressure. This change did not impact the surveillance frequency or completion times of RTB/SSPS discussed in the TS change request.
- DCN 50911 added a test point on the back of the reactor trip panel to verify permissive P-4 contacts. The addition of this test point has no impact on the PRA or TS change request.

- DCN 51754 replaced the WBN steam generators with new generators. This resulted in revised setpoints to Reactor Trip System (RTS) and Engineered Safety Features Actuation System (ESFAS) instrumentation for functions listed in Technical Specification TS Tables 3.3.1-1 and 3.3.2-1 respectively. These changes did not impact the reactor trip/SSPS logic or the surveillance frequency or completion times of RTB/SSPS discussed in the TS change request.

WBN surveillance procedures continue to comply with current RTB/SSPS surveillance frequencies and are modeled in the WBN PRA. They will be revised upon NRC approval of the TS change request.

3. Provide an evaluation of the peer review F&Os with respect to the proposed LAR. Discuss the risk impact on the proposed CT, bypass test times, and STI changes.

Response:

There were no A or B level findings related to reactor trip or ESFAS signals; therefore there is no risk impact. TVA's review of the Westinghouse Owners Group Probabilistic Safety Analysis peer review team conclusions are discussed further in TVA's June 8, 2007 TS change request submittal (Reference 1 of the cover letter), Enclosure 5, Table 1 "WCAP-14333 Implementation Guidelines: Applicability of the Analysis General Parameters", Note 19.