

FEB 16 2007

May 8, 2006. Enclosure 1 provides TVA's responses to NRC Questions 1 and 9 of the September 12, 2006 letter.

On December 29, 2006, the NRC issued a second request for additional information concerning the subject amendment request. Enclosure 2 provides TVA's response to the December 29, 2006 letter.

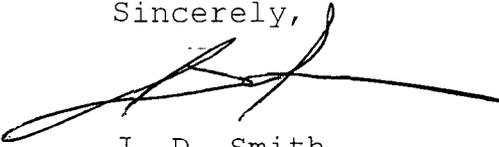
In the May 8, 2006, request for change to the TS for UHS, TVA provided changes to bases pages B 3.6-28 and B 3.6-37 associated with an increase in the peak containment pressure due to the reanalysis of the containment response with an UHS temperature of 88 degrees Fahrenheit (F). The analysis performed for the May 8, 2006, TS change was performed using the existing steam generators at the time of the submittal. Subsequent to this submittal, TVA replaced the steam generators at WBN Unit 1 during the last refueling outage that ended in November 2006. To support the replacement of the steam generators, a separate containment analysis was performed with the replacement steam generators (RSGs) using an UHS temperature of 88 degrees F. The results of the RSG containment analysis involved a change to the containment peak pressure and an increase in the required ice condenser ice weight which were submitted to the NRC in References 1 and 2. The TS changes associated with the RSG containment reanalysis were approved by the NRC in Reference 3. Since the containment reanalysis performed for the RSG supersedes the containment analysis provided in the May 8, 2006 TS change request, TVA is removing the changes to bases pages B 3.6-28 and B 3.6-37 from TS change TS-06-09.

There are no commitments associated with this submittal. If you have any questions concerning this matter, please call me at (423)365-1824.

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I declare under penalty of perjury that the foregoing is true and correct. Executed on this 16th day of February 2007.

Sincerely,

A handwritten signature in black ink, appearing to read 'J. D. Smith', with a long horizontal flourish extending to the right.

J. D. Smith
Manager, Site Licensing
and Industry Affairs (Acting)

Enclosures

cc: See page 4

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Enclosures

cc (Enclosures):

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ENCLOSURE 1

TENNESSEE VALLEY AUTHORITY
WATTS BAR NUCLEAR PLANT (WBN) UNIT 1
DOCKET NO. 50-390

PROPOSED LICENSE AMENDMENT REQUEST WBN-TS-06-09
REVISION OF ULTIMATE HEAT SINK (UHS) TEMPERATURE

TVA submitted an application for an amendment to revise the WBN Unit 1 Technical Specification (TS) to increase the UHS temperature limit. The NRC submitted a request for additional information dated September 12, 2006. TVA responded to Questions 2 through 8 in a letter dated December 29, 2006. TVA's responses to NRC questions 1 and 9 are provided below:

NRC QUESTION 1

In Page 5, Tennessee Valley Authority (TVA) states:

"The conclusion of the review is that there is sufficient justification to increase the UHS [ultimate heat sink] upper temperature allowable limit from 85°F to 88°F. Operational procedure guidelines will be enhanced, as required, in order to implement this limit."

Provide/describe the specific operational procedure guidelines, as required, in order to implement this proposed limit of 88°F.

RESPONSE TO QUESTION 1

The operational procedure guidelines are planned to be contained in a Technical Instruction (TI). The TI contents are planned as described below:

1. Require a review of outstanding corrective action program problem evaluation reports (PERs) to determine if there are areas in the piping system which currently experience flow restrictions due to silt accumulation and/or macrofouling. The PERs will also be reviewed to determine if there are other conditions that could adversely affect the flow to the equipment served by the ERCW System such that the equipment will not receive the flow established during the performance of the preoperational test flow balance. Outstanding PERs, including those involving degraded/non-conforming conditions that affect the ERCW System will also be evaluated to determine the aggregate affect on the operation of the ERCW System.

2. Review work orders for impact on the performance of the ERCW system.
3. The heat exchangers, coolers, and other equipment served by the ERCW system will be reviewed to ensure they are in good condition and the Component Cooling System heat exchanger and the Diesel Generator Jacket Water heat exchanger performance tests verify the heat exchangers are performing within their design requirements.
4. The ERCW pump surveillance data will be evaluated to ensure the pumps are performing within the levels that existed during the performance of the Preoperational Flow Balance test.
5. The results of the various procedures used to verify that the ERCW piping system flow paths are clear of obstruction will be reviewed to ensure there are no blockages that will restrict flow to the equipment served by the ERCW System.
6. The Technical Instruction TI-31.08, "Flow Balancing Valves Setpoint Positions," will be reviewed to ensure that the positions of the throttle valves used for flow balancing the ERCW System are consistent with the positions established during the performance of the ERCW System Preoperational Flow Balance Test PTI-67-02 and any changes in valve positions have been evaluated for acceptability.

The results of the review are to be documented in a report as part of WBN's summer readiness.

NRC QUESTION 9

TVA indicated that since ERCW flow margins above the existing flow requirements were utilized in validating acceptable performance at the higher ERCW temperature, specific evaluations will be performed prior to unit operations above 85°F. The performance of these specific evaluations will validate any margin based inputs utilized in the original analyses that determined acceptable performance could be achieved at the higher ERCW temperature. As indicated in the above item 2, validation of the available flow margins that are being credited is requested in support of the staff's review of the proposed change. Furthermore, provide additional discussion detailing specifically how these evaluations will be performed to assure conservative results consistent with licensing basis assumptions.

RESPONSE TO QUESTION 9

Please refer to the response to Questions 2 and 5 contained in TVA's letter dated December 29, 2006 for a discussion on margins used to justify the increase in the UHS temperature.

To ensure that the margins credited remain valid, TVA will evaluate:

- The ERCW pump surveillance data to ensure the pumps are operating within the same levels that existed during the performance of the preoperational flow balance test instruction PTI-67-02.
- The condition of the system based on various technical instructions that monitor the condition of the ERCW piping system to ensure the piping system is free of flow blockages and restrictions.
- The positions of the throttle valves used to balance the cooling water flow to the equipment served by the ERCW System to ensure the positions are consistent with the positions established during the performance of the flow balance test and any changes in valve positions have been evaluated for acceptability.

TVA has resumed performance testing of the Component Cooling System Heat Exchangers A and C and the Jacket Water Heat Exchangers associated with Diesel Generators 1A-A, 1B-B, 2A-A, and 2B-B to ensure they are operating within their design basis requirements.

These items are being incorporated into a TI as discussed in response to Question 1. The response to Question 1 provides additional details concerning the evaluations that will be performed prior to operating the plant with the UHS temperature above 85°F.

Enclosure 2

TENNESSEE Valley Authority WATTS BAR NUCLEAR PLANT (WBN) UNIT 1 DOCKET NO. 50-390

PROPOSED LICENSE AMENDMENT REQUEST WBN-TS-06-09 REVISION OF ULTIMATE HEAT SINK (UHS) TEMPERATURE

TVA submitted an application for an amendment to revise the WBN Unit 1 Technical Specification (TS) to increase the UHS temperature limit. The NRC submitted a request for additional information dated December 29, 2006. TVA's responses to NRC questions are provided below:

NRC QUESTION 1

Section 3.7, "Fire Protection," of the May 8, 2006, license amendment application only discusses the effect of the proposed UHS maximum temperature increase on the high-pressure fire suppression system. Any impact on safe-shutdown components/systems and their ability to achieve and maintain post-fire safe shutdown, which is part of the Fire Protection Program, should also be discussed in this section.

RESPONSE TO QUESTION 1

WBN is designed as a Hot Standby plant. During the initial recovery stages from an Appendix R event; the unit can be placed in Hot Standby until equipment alignments can be implemented that will permit unit shutdown. Subsection 3.3.1 of the attachment to enclosure 1 of the May 08, 2006 submittal contains additional discussion of an Appendix R event regarding the impact on safe-shutdown components/systems.

NRC QUESTION 2

Note 9 to Table 2 of the above license amendment application indicated that emergency diesel generator load shedding is performed to reduce the electrical loading to 100 percent. Will this load shedding be accomplished as part of a permanent design change or as post-fire manual actions?

RESPONSE TO QUESTION 2

Procedure AOI-30.2, "Fire Safe Shutdown," currently requires comparison of the electrical load to the generator limits and requires consideration of manual load shedding of electrical loads.