



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

January 27, 2009

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Mail Stop: OWFN P1-35
Washington, D.C. 20555-0001

In the Matter of)
Tennessee Valley Authority)

Docket No. 50-391

WATTS BAR NUCLEAR PLANT (WBN) UNIT 2 - FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT - SEVERE ACCIDENT MANAGEMENT ALTERNATIVES (TAC MD8203)

- References:
1. TVA letter dated February 15, 2008, "Watts Bar Nuclear Plant (WBN) - Unit 2 - Final Supplemental Environmental Impact Statement for the Completion and Operation of Unit 2"
 2. NRC letter dated June 3, 2008, "Watts Bar Nuclear Plant, Unit 2 - Request for Supplemental Information for Review of Supplemental Environmental Statement (TAC MD8203)"
 3. TVA letter dated July 2, 2008, "Watts Bar Nuclear Plant (WBN) - Unit 2 - Final Supplemental Environmental Impact Statement - Request for Additional Information (TAC MD8203)"

The purpose of this letter is to provide the Severe Accident Management Alternatives (SAMA) analysis report for WBN Unit 2. The WBN Unit 2 Final Supplemental Environmental Impact Statement for the Completion and Operation of WBN Unit 2 (June 2007) was submitted to NRC on February 15, 2008 (Reference 1). NRC requested additional information by letter dated June 3, 2008 (Reference 2). By letter dated July 2, 2008 (Reference 3), TVA responded to the NRC request for additional information and provided an open action required for licensing to submit by January 30, 2009, a WBN Unit 2 SAMA analysis consistent in scope and content with the SAMA analyses provided in support of recent license renewal applications.

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To ensure that the WBN Unit 2 SAMA analysis is consistent in scope and content with recent SAMA analyses for license renewal, TVA followed the methodology in the Nuclear Energy Institute's (NEI) SAMA Analysis Guidance Document (NEI 05-01 [Rev. A]).

Enclosure 1 provides the SAMA report. The report documents the development of a risk model to evaluate WBN Unit 2 severe accidents, the identification of SAMA candidates, and a cost benefit analysis of the candidates. A multiplication factor was applied to the internal event results to account for the contribution to core damage frequency from external events. The results of the SAMA evaluation identified four potentially cost beneficial procedural changes and one potentially cost beneficial training enhancement.

Enclosure 2 provides the listing of open actions required for licensing identified in Enclosure 1.

If you have any questions, please contact me at (423) 365-2351.

Sincerely,


Masoud Bajestani
Watts Bar Unit 2 Vice President

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