November 8, 2001

Mr. J. A. Scalice
Chief Nuclear Officer and
Executive Vice President
Tennessee Valley Authority
6A Lookout Place
1101 Market Street
Chattanooga, Tennessee 37402-2801

SUBJECT: WATTS BAR NUCLEAR PLANT, UNIT 1 — REQUEST FOR ADDITIONAL INFORMATION RE: TRITIUM PRODUCTION PROGRAM INTERFACE ISSUES 8, 9, 11, AND 12 (TAC NO. MB1884)

Dear Mr. Scalice:

The Nuclear Regulatory Commission staff has reviewed your letter of April 20, 2001, giving information on Watts Bar's Tritium Program. We need additional information to complete our review. I discussed the enclosed Request for Additional Information with Mr. Rickey Stockton on October 29, 2001, and he agreed to respond to this request by November 15, 2001. Please contact me if you have any questions.

Sincerely,

/RA/

L. Mark Padovan, Project Manager, Section 2
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-390

Enclosure: Request for Additional Information

cc w/enclosure: See next page

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Request for Additional Information

Tritium Production Program Interface Issues 8, 9, 11, and 12

Watts Bar Nuclear Plant, Unit 1

Docket No. 50-390

April 20, 2001, Tennessee Valley Authority (TVA) Submittal "Watts Bar Nuclear Plant (WBN) – Unit 1 – Revision to the Spent Fuel Pool Cooling Analysis Methodology"

1. TVA states in Section III of Enclosure 1, "Proposed Methodology Change – Description and Evaluation of the Proposed Change" that "Analyses have been performed that support the proposed change." Please provide these analyses or a summary of these analyses, including the methodology (e.g., equations, code, how to determine heat exchanger heat removal capability, etc.), important assumptions and results.

2. TVA states in Section III of Enclosure 1, "Procedures are in place to assure that at no time during core off-loading activities will the design basis limits of the SFPCCS [spent fuel pool cooling and cleanup system] be exceeded." Please explain these procedures.

3. Please provide the data used to calculate the "time to boil," "SFP [spent fuel pool] heat-up rate," "boil-off rate," and "time until 10 feet of water over racks" (e.g., amount of water in the SFP, the heat capacity of the SFP and other structures, etc.).

4. The first paragraph of Enclosure 2 "UFSAR [Updated Final Safety Analysis Report] Markups," states that "to assure that the spent fuel pool temperature does not exceed 150 ^{0}F." However, the table in Enclosure 1 shows the maximum SFP temperature to be 159.24 ^{0}F. Please explain this discrepancy.

5. In Sections 1.5.8 and 1.5.9 of Enclosure 3, TVA states that "the increase in allowable decay heat associated with the reduced SFP heat exchanger fouling factors and lower CCS [cooling and cleanup system] temperature is approximately 14 MBtu/Hr." However, this increase is stated to be 10 MBtu/Hr in the same sections of TVA's May 1, 2001, submittal. Please explain the discrepancy.

cc:
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