



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

December 10, 2010

10 CFR 50.4(b)(6)
10 CFR 50.34(b)
10 CFR 2.390(d)(1)

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 (WBN) Unit 2 – Final Safety Analysis Report (FSAR) – Response to Requests for Additional Information

This letter responds to a number of requests for additional information (RAIs) regarding the Unit 2 FSAR.

Enclosure 1 provides the responses to RAIs involving multiple FSAR chapters. This includes a revised version of the response to **RAI SBPB 9.1 - 2** originally provided by TVA letter dated July 31, 2010 (Reference 1.).

Enclosure 2 provides the layout drawings and calculation for RAI 12 - 6.

Enclosure 3 provides summary heat load and flow tables for RAI 9.2 - CCS - 4.

Enclosure 4 provides the response to RAI 15.0.0 - 1.b. Enclosure 4 contains information proprietary to Westinghouse. The nonproprietary version of Enclosure 4 and the applications for withholding will be provided two weeks after receipt from Westinghouse. TVA requests that the Westinghouse proprietary information be withheld from public disclosure in accordance with 10 CFR § 2.390.

Enclosure 5 provides summary heat load and flow tables for RAI 9.2.1 - ERCW - 3.

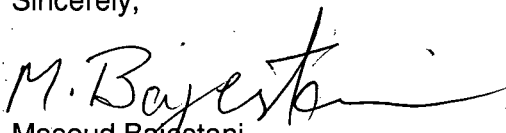
Enclosure 6 provides the new commitments contained in this letter.

If you have any questions, please contact Bill Crouch at (423) 365-2004.

A053
NRR

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 10th day of December, 2010.

Sincerely,


Masoud Bajestani
Watts Bar Unit 2 Vice President

Enclosures:

1. Responses to RAIs Regarding Unit 2 FSAR
2. Response to RAI 12 - 6.
3. Summary Heat Load and Flow Tables for RAI 9.2 - CSS - 4.
4. Response to RAI 15.0.0 - 1.b.
5. Summary Heat Load and Flow Tables for RAI 9.2.1 - ERCW - 3.
6. List of New Regulatory Commitments

Attachments:

1. Draft Change Pages Referenced in the Response to RAIs 9.2 - CCS -1, 9.2 - CCS -1, and 9.2 - CCS -1
2. Drawings Referenced in the Response to RAI 10.4.9 - BOP - AFW - 3
3. Figures Referenced in the Response to RAI 15.5 - 2

References:

1. TVA to NRC letter dated July 31, 2010, "Watts Bar Nuclear Plant (WBN) Unit 2 – Final Safety Analysis Report (FSAR) – Response to Preliminary Requests for Additional Information and Requests For Additional Information" (ADAMS Accession No. ML102290258)
2. NRC to TVA letter dated August 27, 2010, "Watts Bar Nuclear Plant, Unit 2 - Request for Additional Information Regarding Licensee's Final Safety Analysis Report Amendment Related to Chapters 11, 'Radioactive Waste Management' and 12, 'Radiation Protection' (TAC No. ME2731)" (ADAMS Accession No. ML102360201)
3. TVA to NRC letter dated June 3, 2010, "Watts Bar Nuclear Plant (WBN) Unit 2 – Final Safety Analysis Report (FSAR) – Response to Preliminary Requests for Additional Information" (ADAMS Accession No. ML101600477)
4. NRC to TVA letter dated September 17, 2010, "Watts Bar Nuclear Plant, Unit 2 - Request for Additional Information Regarding Final Safety Analysis Report Amendment Related to Section 9.2 (TAC No. ME4074)" (ADAMS ML102510313)
5. NRC to TVA letter dated September 20, 2010, "Watts Bar Nuclear Plant, Unit 2 - Request for Additional Information Regarding Final Safety Analysis Report Related to Section 15 (TAC No. ME4074)" (ADAMS Accession No. ML102590244)
6. NRC to TVA letter dated October 20, 2010, "Watts Bar Nuclear Plant, Unit 2 - Request for Additional Information Regarding Final Safety Analysis Report Amendment Related to Section 9.2.1 (TAC No. ME4074)" (ADAMS ML102880442)
7. NRC to TVA letter dated November 9, 2010, "Watts Bar Nuclear Plant, Unit 2 - Request For Additional Information Regarding Final Safety Analysis Report Amendment Related to Section 10.4.9 (TAC No. ME4074)" (ADAMS ML103060411)

cc (Enclosures):

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A02 100927 001; A02 100927 002; A02 101028 002;
A02 101115 003)