



Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402

August 2, 2012

10 CFR 50.4  
10 CFR 50.90

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

Watts Bar Nuclear Plant, Unit 1  
Facility Operating License No. NPF-90  
NRC Docket No. 50-390

**Subject: Response to NRC Request for Supplemental Information Regarding Application to Allow Selective Implementation of Alternate Source Term to Analyze the Dose Consequences Associated with Fuel Handling Accidents (TAC No. ME8877)**

- Reference:
1. Letter from TVA to NRC, "Application to Allow Selective Implementation of Alternate Source Term to Analyze the Dose Consequences Associated with Fuel Handling Accidents (WBN-TS-11-19)," dated June 13, 2012
  2. Electronic Mail from NRC to TVA, "Alt Source Term for Fuel Handling Accident Amendment request (WBN-TS-11-19) deficiencies need to be supplemented," dated July 24, 2012
  3. Letter from NRC to TVA, "Watts Bar Nuclear Station, Unit 1 – Supplemental Information Needed for Acceptance of Requested Licensing Action Regarding Application to Allow Selective Implementation of Alternate Source Term to Analyze the Dose Consequences Associated with Fuel Handling Accidents (TAC No. ME8877)," dated July 27, 2012

By the Reference 1 letter, the Tennessee Valley Authority (TVA) submitted a request for amendment to the Technical Specifications (TS) for Watts Bar Nuclear Plant (WBN), Unit 1. The amendment request proposed to allow selective implementation of alternate source term to analyze the dose consequences associated with fuel handling accidents (WBN-TS-11-19) at WBN, Unit 1. By the Reference 2 Electronic Mail, the NRC

requested a conference call to discuss what operator actions were added, deleted, or changed, including actions credited in the Updated Final Safety Analysis Report (UFSAR) accident analysis. In addition, TVA was requested to provide any changes, additions or deletions of procedures and training for these affected operator actions.

In a telephone call between TVA and NRC representatives on July 25, 2012, TVA representatives clarified that no operator actions were added, deleted, or changed in the accident analysis. TVA identified that the assumptions of the fuel handling accident were provided as part of the Reference 1 letter in Enclosure 2, which is the calculation utilized to determine the radiological consequences associated with a fuel handling accident. The assumptions are described on pages 11 through 13 of the calculation. The assumptions do not include any operator actions and no deletions related to operator actions were made in the calculation. The NRC requested during the phone conversation that this supplemental information be provided. Subsequent to the phone conversation, the NRC issued a formal letter (Reference 3) on July 27, 2012, requesting the information described in the electronic mail and requesting the information be provided to the NRC within 13 days of the letter.

Accordingly, the following are the responses to the three questions provided in the electronic mail and NRC letter of references 2 and 3:

Question 1 response: No operator actions were added, deleted, or changed in the accident analysis.

Question 2 response: There are no associated procedure changes related to operator actions since no operator actions were added, deleted, or changed.

Question 3 response: There are no associated training changes related to operator actions since no operator actions were added, deleted, or changed.

No changes are necessary to the enclosure and attachments provided in the Reference 1 letter.

TVA has determined that the supplemental information provided by this letter does not affect the no significant hazards considerations associated with the proposed TS changes provided in the reference letter. The proposed TS changes still qualify for a categorical exclusion from environmental review pursuant to the provisions of 10 CFR 51.22(c)(9). Additionally, in accordance with 10 CFR 50.91(b)(1), TVA is sending a copy of this letter to the Tennessee State Department of Environment and Conservation.

There are no regulatory commitments associated with this submittal. Please address any questions regarding this request to Terry Cribbe at 423-751-3850.

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I declare under penalty of perjury that the foregoing is true and correct. Executed on the  
2nd day of August 2012.

Respectfully,

A handwritten signature in black ink, appearing to read 'J. W. Shea', written over the word 'Respectfully,'.

J. W. Shea  
Vice President, Nuclear Licensing

cc:

NRC Regional Administrator - Region II  
NRC Senior Resident Inspector – Watts Bar Nuclear Plant, Unit 1  
NRC Senior Resident Inspector – Watts Bar Nuclear Plant, Unit 2  
Director, Division of Radiological Health - Tennessee State Department of  
Environment and Conservation