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

June 24, 2011

10 CFR 50.4(b)(6)
10 CFR 50.34(b)

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 - Response to Final Safety Analysis Report (FSAR), Chapter 11 and Final Supplemental Environmental Impact Statement (FSEIS) Request For Additional Information - Supplemental**

Reference: 1. TVA Letter to NRC Dated May 20, 2011, "Watts Bar Nuclear Plant (WBN) Unit 2 - Response to Final Safety Analysis Report (FSAR), Chapter 11 and Final Supplemental Environmental Impact Statement (FSEIS) Request For Additional Information"

The purpose of this letter is to correct a value shown in a revised page for FSEIS, Table 3-23 provided in Reference 1. Reference 1 provided both a markup and a revised page for this Table 3-23. The Unit 2 Evaluation value of "6.66E+00" contained in the table markup was correct but the corresponding value in the table on the revised page was incorrectly shown as "6.66E+01" instead of "6.66E+00."

The enclosure provides the correction to the revised page along with adding the units for the values contained in the table. TVA apologies for any inconvenience that this error may have caused.

There are no new commitments provided in this letter. If you have any questions, please contact Bill Crouch at (423) 365-2004.

D030
NRR

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 24th day of June, 2011.

Respectfully,

E. E. Freeman
Watts Bar Unit 2 Completions Manager

Enclosure:

1. Revised FSEIS, Table 3-23

cc (Enclosure):

U. S. Nuclear Regulatory Commission
Region II
Marquis One Tower
245 Peachtree Center Ave., NE Suite 1200
Atlanta, Georgia 30303-1257

NRC Resident Inspector Unit 2
Watts Bar Nuclear Plant
1260 Nuclear Plant Road
Spring City, Tennessee 37381

Enclosure

Watts Bar Nuclear Plant

Revised FSEIS, Table 3-23

Table 3-22 - Comparison of Estimated Annual Airborne Releases and Resulting Doses

	1972 (Table 2.4-2)	Unit 1 FSAR	Unit 2 Evaluation	Units 1 & 2 Combined	Unit 1 10-year Operational Average	10CFR50 Appendix I Guidelines per Unit
Particulate Activity (Ci[1])	3.00E-01	4.71E-01	4.71E-01	9.42E-01	9.29E-05	10
Noble Gas Activity (Ci[1])	7.00E+03	4.84E+03	4.84E+03	9.68E+03	2.70E-03	N/A[2]
External Dose (mrad[3])	6.60E+00	2.71E+00	3.50E+00	6.21E+00	3.69E-01	10
Organ Dose (mrem[4])	3.50E+00 (inhalation and milk only)	9.41E+00 (all pathways)	9.15E+00 (all pathways)	1.86E+01 (all pathways)	8.30E-02 (all pathways)	15

[1] Ci = Curies
[2] N/A = Not Applicable
[3] mrad = millirad
[4] mrem = millirem

Two conclusions can be drawn from the data in Table 3-20:

- The Unit 2 FSAR estimates, even though based on very conservative (worst-case) assumptions, indicate that estimated doses continue to meet the per unit dose guidelines given in 10 CFR Part 50, Appendix I.

- Historical WBN operational data for airborne effluents indicate that actual releases and resulting dose estimates (external and organ) to the public are a small fraction of the Appendix I guideline (averaging about 1 percent or less).

Based on these conclusions, the analyses of radiological impact from airborne release in the 1972 FES continue to be valid, and operation of WBN Unit 2 would not materially change the results.

Population Doses

TVA has estimated the radiological impact from the normal operation of WBN Unit 2 using a 50-mile regional population projection for the year 2040 of 1,523,385. The estimated population doses are presented by the 1972 FES, the WBN Unit 1 FSAR, Unit 2, Unit 1 and Unit 2 totals, and recent historical data from WBN (as submitted in the annual radioactive Effluent Reports to the NRC) are presented in Table 3-23.

Table 3-23 - Estimated Population Doses From Operation of Watts Bar Nuclear Plant (man-rem)

1972 (Table 2.4-4)	Unit 1 FSAR	Unit 2 Evaluation	Units 1 & 2 Combined	Unit 1 10-year Operational Average	10 CFR 50 Appendix I Guidelines
3.10E+01	4.35E+00	6.66E+00	1.10E+01	3.38E-01	N/A