



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

MAY 14 2008

10 CFR 50.36a(a)(2)

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

Gentlemen:

In the Matter of the)
Tennessee Valley Authority)

Docket No. 50-390

WATTS BAR NUCLEAR PLANT (WBN) UNIT 1 - ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT - 2007

In accordance with the requirements of the WBN Unit 1 Technical Specifications, Section 5.9.2, "Annual Radiological Environmental Operating Report," and the WBN Offsite Dose Calculation Manual (ODCM), Administrative Control Section 5.1, the 2007 Annual Radiological Environmental Monitoring Program (REMP) results and Data Supplement for WBN are enclosed. The REMP implements 10 CFR 50, Appendix I, Sections IV.B.2, IV.B.3, and IV.C.

The report describes and summarizes the results of radioactivity measurements made in the vicinity of WBN and laboratory analyses of samples collected in the area. The results of the analysis indicate that exposure to members of the general public that may have been attributable to the operation of WBN is negligible. The radioactivity identified in this report was primarily the result of fallout or natural background. Any activity which may be present in the environment as a result of plant operations does not represent a significant contribution to the exposure of members of the public.

There are no regulatory commitments in this letter. If you should have any questions, please contact me at (423) 365-1824.

Sincerely,

M. K. Brandon
Manager, Site Licensing
and Industry Affairs

Enclosure
cc: See page 2

JEQS
NRR

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Enclosures

cc (Enclosures):

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Enclosure

**Watts Bar Nuclear Plant
2007 Annual Radiological Environmental Monitoring Program (REMP)
and Data Supplement**