

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401  
1630 Chestnut Street Tower II

March 21, 1985

Director of Nuclear Reactor Regulation  
Attention: Ms. E. Adensam, Chief  
Licensing Branch No. 4  
Division of Licensing  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Dear Ms. Adensam:

In the Matter of Application of ) Docket Nos. 50-390  
Tennessee Valley Authority ) 50-391

During a March 19, 1985 telephone conversation that was held between TVA and NRC representatives to discuss several questions NRC had about the Watts Bar Radiological Emergency Preparedness (REP), TVA committed to provide the following information:

A copy of WBN REP revisions 10 and 11.

A letter documenting the following:

- a. Public information brochures have been distributed to the residents around WBN.
- b. Operational status of the WBN prompt notification system.
- c. Status of commitments made by TVA's letter dated July 19, 1984 from L. M. Mills to you.

Enclosed is the TVA response to these questions.

If you have any questions concerning this matter, please get in touch with K. Mali at FTS 858-2682.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

*J. A. Domer*  
J. A. Domer

Nuclear Engineer

Sworn to and subscribed before me  
this 21st day of March 1985

*Paulette H. White*  
Notary Public  
My Commission Expires 8-24-88

Enclosure  
cc: See page 2

8503270480 850321  
PDR ADOCK 05000390  
F PDR

AD45  
11

Director of Nuclear Reactor Regulation

March 21, 1985

cc: U.S. Nuclear Regulatory Commission (Enclosure)  
Region II  
Attn: Dr. J. Nelson Grace, Regional Administrator  
101 Marietta Street, NW, Suite 2900  
Atlanta, Georgia 30323

ENCLOSURE  
WATTS BAR NUCLEAR PLANT  
RESPONSE TO RADIOLOGICAL EMERGENCY PREPAREDNESS (REP)  
QUESTIONS

1. Copies of revisions 10 and 11 of the WBN REP were sent to NRC on March 19, 1985.
2.
  - a. As required in 10 CFR 50, Appendix E, part IV.D.2, and NUREG 0654, FEMA REP 1, part II.G.2, provisions have been made for annual dissemination of basic emergency planning information to the public in the plume exposure pathway at WBN. Notices directing the transient population to sources of local emergency information have been placed in hotels, motels, and welcome centers. The Watts Bar Emergency Information Brochure was mailed by TVA to the public in August 1984. Transient brochures were placed in public-use areas also during August 1984. Agricultural brochures were mailed to appropriate residents and farmers in the 50-mile ingestion pathway during 1981. It will be redistributed in 1986.
  - b. The WBN prompt notification system is operational. The fixed sirens have been installed and monthly tests of the sirens have been conducted since September 1984. The mobile alert routes are referenced in the State radiological emergency plan and individually identified in county implementing procedures. These routes were run by the designated officials in the September 1984 REP exercise. The State has notified us that the tone-alert radio component of the system has been installed and that the radios are operational.
  - c. On July 19, 1984, TVA responded to a letter from E. G. Adensam to H. G. Parris dated March 6, 1984 (A02 840309 008), which requested that TVA provide the relationship between the containment high-range radiation monitors and the radioactivity uniformly dispersed in the containment for a range of degraded core condition source terms. TVA's response indicated that a Westinghouse Owners Group was addressing this problem and would utilize the results in Appendix C of IP-6 in the KEC-IPD.

TVA has developed a computer program based on these results of the recently completed owners group investigation. The program provides a methodology for relating post-accident core damage with measurements of radionuclide concentrations. The radionuclide measurements, together with auxiliary readings of core exist thermocouple temperatures, water level within the pressure vessel, containment radiation monitors, and hydrogen production are used to develop an estimate of the kind and extent of fuel damage. The program was utilized in the recent Sequoyah exercise and NRC Region II has requested TVA to demonstrate the program in the May meeting of the Southeast Utility Emergency Planning Group. The program is in the TVA process for implementation and is expected to be approved for use by the WBN exercise scheduled for July.

Because of recent TVA reorganizations, the WBN Post-Accident Core Damage Assessment Methodology Code will be utilized by the Central Emergency Control Center (CECC) Plant Assessment Team and not the Knoxville Emergency Center team, as indicated in the original response.

The results of this program will be utilized by the CECC to develop recommendations to the State for protective actions. Prior to the staffing of the CECC, the site will utilize the radiation monitor readings and release rates in WBN IP-1 to classify the event and the logic diagram in WBN IP-5 to make initial protective action recommendations to the State.