

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401  
400 Chestnut Street Tower II

A-26

January 19, 1982



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

Dear Ms. Adensam:

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

Enclosed for NRC review is information concerning Radiological Emergency Planning for Watts Bar Nuclear Plant units 1 and 2 provided in response to R. L. Tedesco's letter to H. G. Parris dated December 7, 1981. Included are attachments with specific information concerning the prompt notification system (Attachment 1) and evacuation time estimates (Attachment 2).

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

Very truly yours,

TENNESSEE VALLEY AUTHORITY

*L. M. Mills*  
L. M. Mills, Manager  
Nuclear Regulation and Safety

Sworn to and subscribed before me  
this 19<sup>th</sup> day of January 1982.

Paulette H. White  
Notary Public

My Commission Expires 9-5-84

Enclosure (4)

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WATTS BAR NUCLEAR PLANT UNITS 1 AND 2  
RADIOLOGICAL EMERGENCY PLANNING

1. Prompt Notification System:

The number of fixed sirens for the Watts Bar facility is expected to exceed that of the Sequoyah facility because of the limited resources of the State of Tennessee in the Watts Bar area. Provide the exact number of sirens that will be needed.

Response:

The description of the Watts Bar Nuclear Plant (WBN) Prompt Notification System is provided as attachment 1.

2. Nearsite Location of Emergency Press Center:

Provide the location of the nearsite emergency press-center for the Watts Bar facility.

Response:

The location and description of the nearsite press center will be provided by January 28, 1982.

3. Meteorological Program:

The Watts Bar meteorological program submitted in TVA's October 29, 1981 submittal is incomplete. Provide information in sufficient detail to show that the criteria in Appendix 2 of NUREG-0654 have been met at the Watts Bar facility.

Response:

A detailed description of the WBN meteorological program as it relates to the implementation of NUREG-0654, Appendix 2, criteria will be provided by February 8, 1982.

4. Dose Calculational Methodology:

Provide the dose calculation methodology for identifying the potential scope of radiological consequences of emergency situations at the Watts Bar facility. Include capabilities for dose projection using real-time meteorological information (i.e., the appropriate OHS-20-80 document for the Watts Bar facility) and capabilities for dispatching the radiological monitoring teams.

Response:

A detailed description of the dose calculational methodology (i.e., the OHS-20-80 equivalent for WBN), the Offsite Dose Calculation Manual for WBN, and the field radiological monitoring capability will be provided by February 8, 1982.

5. Evacuation Times Assessment Study:

Provide an evacuation times assessment study within the plume exposure pathway emergency planning zone of the Watts Bar facility in accordance with the criteria set forth in Appendix 4 to NUREG-0654.

Response:

The evacuation time study for the WBN plume exposure emergency planning zone is provided as attachment 2.

6. Emergency Plan Implementing Procedures:

Provide the emergency plan implementing procedures in accordance with the requirements of Section V of Appendix E to 10 CFR Part 50.

Note: The implementing procedures are required to be submitted "no less than 180 days prior to scheduled issuance of an operating license" for your facility.

Response:

The WBN Implementing Procedures Document will be provided by February 25, 1982.

7. H. P. Technicians for Radiation Protection:

Table 1 of the Watts Bar Radiological Emergency Plan states there are two onsite H. P. Technicians under "Major Tasks-Radiation Protection." Table B-1 of NUREG-0654 calls for four additional H. P. Technicians. We require these personnel as part of the Watts Bar Radiological Emergency Plan.

Response:

A revised Table 1 to the WBN Radiological Emergency Plan (WBN-REP) will be submitted along with the final WBN-REP on January 28, 1982.

Attachment 1

Description of Watts Bar Nuclear Plant  
Prompt Notification System

The system will consist of three components:

1. Fixed sirens
2. Mobile sirens
3. Tone alert radios

Fixed sirens:

Nineteen 125-dB electronic sirens will be used for warning areas where there are high concentrations of transient people. Such areas would be Watts Bar Lake, boat launches, marinas, and campgrounds.

Eight 125-dB, ten 115-dB and twenty-nine local coverage electromechanical sirens will be used to warn permanent residents in the more densely populated areas.

Mobile sirens:

State and local emergency personnel will patrol predetermined routes with mobile sirens. These routes will be predominately in the sparsely populated areas of the 5- to 10-mile emergency planning zone (EPZ).

Tone alert radios:

These radios will be placed in selected institutions, both public and private, within the 10-mile EPZ.