

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

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DEC 29 1986

Director of Nuclear Reactor Regulation  
Attention: Mr. B. Youngblood, Project Director  
PWR Project Directorate No. 4  
Division of Pressurized Water  
Reactor (PWR) Licensing A  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Dear Mr. Youngblood:

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

WATTS BAR NUCLEAR PLANT (WBN) - VERIFICATION AND VALIDATION PLAN (V&V) FOR  
EAGLE-21 DIGITAL HARDWARE

The purpose of this letter is to provide NRC with the WBN Verification and Validation (V&V) Plan associated with Eagle 21 replacement digital electronics hardware in the Protection System. A draft of this document was given to the NRC reviewers on November 20, 1986 in Pittsburgh. This submittal completes a TVA task as scheduled in my November 3, 1986 letter.

The enclosed V&V plan provides the description of the design, verification and validation process, and the general organization of activities that will be used in these areas on the Eagle-21 Protection System replacement hardware.

The November 1986 draft V&V plan was based on the South Texas Project V&V Plan enhancements that resulted from NRC audits. An addition to the plan is included as Section 5.4.4.2, "Criteria Utilized for Software Testing," which proposed criteria by which simple algorithm would not be tested. Application of this criteria will permit a more efficient use of resources. Documentation and justification can be provided to show that this approach still meets the intent of ANSI Standard 74.3.2. However, TVA had decided at this time not to include section 5.4.4.2 in this submittal to minimize the potential for schedule slippage. We are requesting that a discussion be held with the NRC reviewers upon their receipt of this document to consider the subsequent inclusion of this section. This can be handled independent of the current schedule.

According to the schedule, a TVA/NRC meeting on this plan is to be held during the week of January 26, 1987, with the NRC audit of the design process and application of the V&V plan the following week.

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Director of Nuclear Reactor Regulation

If you have questions on this topic please get in touch with Bernard Gergos at (615) 365-8837.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

  
J. A. Damer  
R. Gridley, Director  
Nuclear Safety and Licensing

Enclosure

cc (Enclosure):

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