



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

John H. Garrity  
Vice President, Watts Bar Nuclear Plant

**JAN 23 1992**

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

Gentlemen:

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

WATTS BAR NUCLEAR PLANT (WBN) - INCREASED ENVIRONMENTAL TEMPERATURE IN  
THE MAIN STEAM VALVE VAULT ROOMS - OUTSTANDING ISSUE 24 (TAC 63632)

This letter revises the schedule for the resolution of the main steam  
line break (MSLB) outside containment issue.

In a letter dated September 26, 1989, TVA described its intention to  
adopt a different approach to resolve the issue of increased  
environmental temperature in the main steam valve vault rooms at WBN.  
This increased temperature results from taking into account superheating  
effects in the analysis for an MSLB outside containment. The approach  
that is now being used for WBN is based on the methodology that TVA used  
to evaluate environmental temperature in the main steam valve vault rooms  
for Sequoyah Nuclear Plant (SQN). The SQN methodology has been approved  
by the NRC staff.

In a letter dated March 26, 1991, TVA established a revised schedule of  
January 31, 1992, for completing WBN's analysis of an MSLB outside  
containment and for evaluating the environmental temperature and  
associated equipment qualification issues in the main steam valve vault  
rooms. This schedule must be further revised due to recent changes in  
equipment design and the engineering input used for the MSLB analysis.  
TVA has decided to install Westinghouse's new Eagle-21 process protection  
system at WBN prior to fuel loading. Part of this design change  
incorporates new steam line break protection features, as described in  
TVA's letter of July 10, 1991. Also, TVA is currently reevaluating  
certain accident analyses for WBN with the intent of justifying a  
reduction in the minimum required auxiliary feedwater (AFW) flow rate to  
the steam generators. The changes for new steam line break protection

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ENCLOSURE

LIST OF COMMITMENTS

TVA will demonstrate the applicability of the Sequoyah Nuclear Plant analysis for a main steam line break outside containment to Watts Bar Nuclear Plant and submit results to NRC by November 30, 1992.

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features and for the potentially reduced AFW flow rate affect the predicted values of mass and energy released to the valve vault rooms during an MSLB event. This, in turn, affects the temperature profiles for these rooms. The calculations and engineering evaluations needed to address the above changes will not be completed until the latter part of 1992. Therefore, TVA will demonstrate the applicability of the SQN analysis for an MSLB outside containment to WBN and submit results to NRC by November 30, 1992.

The enclosure states the commitment identified in this letter. If you have any questions, please telephone G. L. Pannell at (615) 365-1550.

Sincerely,



John H. Garrity

Enclosure

cc (Enclosure):

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