

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

William J. Museler Site Vice President Watts Bar Nuclear Plant

MAR 2 6 1993

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

Gentlemen:

9304060337 930326 PDR ADDCK 05000390

PDR

ŧ

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

WATTS BAR NUCLEAR PLANT (WBN) - STEAM GENERATOR LEVEL INSTRUMENTATION CALCULATION ERRORS - PROBLEM EVALUATION REPORT WBPER920228 - SECOND INTERIM REPORT

The purpose of this letter is to notify NRC of a delay in completing the substantial safety hazard evaluation of the condition identified by Problem Evaluation Report WBPER920228.

TVA notified NRC by letter dated November 23, 1992, of a safety impact review being conducted for the identified condition. The review progress to date is as follows: (1) TVA calculations which use the Westinghouse setpoint methodology have been reviewed to determine if bias process uncertainties were correctly combined. Only calculation 1-LS-63-180 (permissive for automatic switchover from the refueling water storage tank to the containment sump for a safety injection) used the square root of the sum of the squares methodology to combine a bias process uncertainty in calculating the channel statistical allowance. However, this calculation has been voided due to Eagle 21 changes and is to be replaced by a Westinghouse calculation for incorporation into WCAP-12096. (2) Post-accident monitoring calculation 1-LT-3-038 (steam generator narrow range level), post-accident monitoring calculation 1-LT-3-43 (steam generator wide range level), and calculation 1-LT-3-148 (auxiliary feedwater level control) have been revised to account for downcomer uncertainty and fluid velocity effects, as necessary. The resulting values do not exceed any safety limit. (3) Normal reference leg temperature change effects have been determined to be addressed by correct methodology in TVA calculations. (4) The WBN steam generator narrow range level transmitters are calibrated for 75 percent power level, which is the power level used by Westinghouse to calculate the process measurement accuracy uncertainty for WBN. (5) TVA has provided Westinghouse with necessary WBN plant specific information.

U.S. Nuclear Regulatory Commission Page 2

MAR 2 6 1993

The remaining items to be performed are as follows: (1) Westinghouse will revise WCAP-12096, "Westinghouse Setpoint Methodology for Protection Systems," to correctly combine the bias process measurement accuracy errors. Additionally, fluid velocity and downcomer error effects will be included in calculating narrow range steam generator level accuracy. (2) TVA will evaluate changes to WCAP-12096 to determine potential impact if left uncorrected. (3) The potential impact evaluation will be used to complete the substantial safety hazard evaluation of WBPER920228.

The final substantial safety hazard evaluation for WBPER920228 should be completed by June 15, 1993. Appropriate NRC notifications required by 10 CFR 50.55(e) will be made at that time, if necessary.

Should there be any questions regarding this information, please telephone P. L. Pace at (615) 365-1824.

Very truly yours,

William J. Museler

cc: NRC Resident Inspector Watts Bar Nuclear Plant P.O. Box 700 Spring City, Tennessee 37381

> Mr. P. S. Tam, Senior Project Manager U.S. Nuclear Regulatory Commission One White Flint North 11555 Rockville Pike Rockville, Maryland 20852

Mr. B. A. Wilson, Project Chief U.S. Nuclear Regulatory Commission Region II 101 Marietta Street, NW, Suite 2900 Atlanta, Georgia 30323