



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

John H. Garrity
Vice President, Watts Bar Nuclear Plant

OCT 16 1991

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

Gentlemen:

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

WATTS BAR NUCLEAR PLANT (WBN) UNITS 1 AND 2 - REVISED RESPONSE TO NRC
REQUEST FOR ADDITIONAL INFORMATION (RAI) ON STRUCTURAL AND GEOSCIENCES
ISSUES - SSER 6 OUTSTANDING ISSUE 19(j) (TAC 79717 and 80346)

Reference: TVA letter to NRC, August 22, 1991, Response to NRC
Request for Additional Information (RAI) on Structural and
Geosciences Issues - SSER 6 Outstanding Issue 19(j).

The referenced correspondence responded to the NRC RAI on Structural and
Geosciences Issues, from Supplemental Safety Evaluation Report (SSER) 6,
Outstanding Issue 19(j). In response to Question 2, TVA discussed and
provided for NRC review, Calculation WCG-1-771, "Example Calculation for
Qualification of Thermally Restrained Structures."

Calculation WCG-1-771 was prepared for the NRC Audit of April 15-10, 1991,
as an example of the application of the thermal methodology in TVA's
design guide and design criteria. Upon receipt of the RAI, the
calculation was submitted as requested. However, the submittal noted
that "the criteria used for linear analysis has subsequently been revised
to restrict the use of the energy balance method for acceptance.
Evaluations of actual structures subjected to thermal loads are being
prepared under the thermal portion of the Seismic/Civil Validation
Program."

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During the NRC audit of September 9-13, 1991, Calculation WCG-1-969, "Qualification of Worst Cases of Thermally Restrained Structures-Package I," (enclosed) was provided. This calculation evaluates 5 actual worst case members at WBN and was discussed with the NRC staff reviewer during the audit. Calculation WCG-1-771 has been voided as it is no longer applicable.

No FSAR revisions are identified in this response and no new commitments are contained in this letter.

If you have any questions, please telephone P. L. Pace at (615) 365-1824.

Sincerely,



John H. Garrity

Enclosure

cc (Enclosure):

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