



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

March 25, 1993

Docket No. 50-390
and 50-391

Tennessee Valley Authority
ATTN: Dr. Mark O. Medford, Vice President
Nuclear Assurance, Licensing and Fuels
3B Lookout Place
1101 Market Street
Chattanooga, Tennessee 37402-2801

Dear Dr. Medford:

SUBJECT: WATTS BAR NUCLEAR PLANT - DESIGN BASIS ACCIDENT SPECTRA FOR THE
STEEL CONTAINMENT VESSEL (TAC M79692 and M79693)

In a January 29, 1991 letter, TVA responded to a question regarding the design basis accident (DBA) analysis and governing breaks given the approval of leak-before-break (LBB) methodology. The question was raised during the staff's audit of FSAR Amendment 64. Additional information was submitted by TVA in a letter dated September 20, 1991.

The staff has reviewed TVA's submittals and concludes that additional information is needed to complete its review. Specifically, the following issues need to be addressed by TVA:

- (1) Example of controlling local pressurization time histories for key subcompartments adjacent to the steel containment vessel (SCV) shell.
- (2) Basis and assumptions used to calculate controlling local pressure loading time histories applied on the SCV shell.
- (3) Detailed technical discussions of the assumptions and parameters used in the axisymmetric analysis and generation of the ANSYS finite element model of the SCV, including sketches of the model.
- (4) Discussion of resulting SCV dynamic response spectra for key break locations, and the means for generating enveloped spectra for selected locations.
- (5) Discussion of how a typical dynamic load for an attachment design is developed from an enveloped spectrum corresponding to a lower compartment break location.
- (6) Tabulation of design loads for key attachment points of the SCV.

290009

NRC FILE CENTER COPY

9303310136 930325
PDR ADDCK 05000390
A PDR

MAY
JFol
110

Dr. Mark O. Medford

- 2 -

If you need clarification on this request for additional information, please feel free to call. We will discuss with your staff, in the next licensing status meeting, an acceptable target date for your response. This requirement affects 9 or fewer respondents and, therefore, is not subject to Office of Management and Budget review under P.L. 96-511.

Sincerely,

A handwritten signature in black ink that reads "Peter S. Tam". The signature is written in a cursive style with a large, stylized initial "P".

Peter S. Tam, Senior Project Manager
Project Directorate II-4
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

cc: See next page

Dr. Mark O. Medford

- 2 -

If you need clarification on this request for additional information, please feel free to call. We will discuss with your staff, in the next licensing status meeting, an acceptable target date for your response. This requirement affects 9 or fewer respondents and, therefore, is not subject to Office of Management and Budget review under P.L. 96-511.

Sincerely,

Original signed by

Peter S. Tam, Senior Project Manager
Project Directorate II-4
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

cc: See next page

Distribution

Docket File

NRC & Local PDRs

WBN Reading

S. Varga

G. Lainas

F. Hebdon

M. Sanders

V. Nerses

P. Tam

Yong S. Kim 7-H-15

OGC

ACRS (10)

P. Fredrickson

E. Merschoff

J. Partlow

cc: Plant Service List

OFFICE:	PDII-4/LA	PDII-4/PM	PDII-4/D
NAME	MSanders <i>MS</i>	PTam:as <i>PST</i>	EHebdon <i>for</i>
DATE	3/25/93	3/25/93	3/25/93

DOCUMENT NAME: WBRAI

Watts Bar Nuclear Plant

Tennessee Valley Authority
ATTN: Dr. Mark O. Medford

cc:

Mr. John B. Waters, Chairman
Tennessee Valley Authority
ET 12A
400 West Summit Hill Drive
Knoxville, Tennessee 37902

Mr. D. E. Nunn, Vice President
3B Lookout Place
1101 Market Street
Chattanooga, Tennessee 37402-2801

Mr. W. J. Museler, Vice President
Watts Bar Nuclear Plant
Tennessee Valley Authority
P.O. Box 2000
Spring City, Tennessee 37381

Mr. M. J. Burzynski, Manager
Nuclear Licensing and Regulatory Affairs
Tennessee Valley Authority
5B Lookout Place
Chattanooga, Tennessee 37402-2801

Mr. G. L. Pannell, Site Licensing Manager
Watts Bar Nuclear Plant
Tennessee Valley Authority
3B Lookout Place
Spring City, Tennessee 37381

TVA Representative
Tennessee Valley Authority
11921 Rockville Pike
Suite 402
Rockville, Maryland 20852

Mr. Michael H. Mobley, Director
Division of Radiological Health
3rd Floor, L and C Annex
401 Church Street
Nashville, Tennessee 37243-1532

General Counsel
Tennessee Valley Authority
ET 11H
400 West Summit Hill Drive
Knoxville, Tennessee 37902

The Honorable Robert Aikman
County Judge
Rhea County Courthouse
Dayton, Tennessee 37321

The Honorable Johnny Powell
County Judge
Meigs County Courthouse
Route 2
Decatur, Tennessee 37322

Regional Administrator
U.S.N.R.C. Region II
101 Marietta Street, N.W.
Suite 2900
Atlanta, Georgia 30323

Senior Resident Inspector
Watts Bar Nuclear Plant
U.S.N.R.C.
Route 2, Box 700
Spring City, Tennessee 37381