

July 14, 1992

Docket Nos. 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 - COMPLETION OF REVIEW ON NATURAL  
CIRCULATION COOLDOWN (TAC M79317 AND M79318)

We have completed our review of your submittal dated July 11, 1991, regarding the capability of the Watts Bar Nuclear Plant to meet the guidelines of Standard Review Plan Technical Position 5-1 (RSB BTP 5-1), "Design Requirements of the Residual Heat Removal System". TVA's submittal included a qualitative system and equipment comparison of Watts Bar to Diablo Canyon along with the results of a computer simulation of Watts Bar natural circulation/boron mixing/cooldown.

The Diablo Canyon test results have been reviewed in the past and accepted by the staff as a basis for concluding that BTP RSB 5-1 has been satisfied. Our Reactor System Branch (SRXB) evaluation identified and evaluated the plant parameters that may affect application of the Diablo Canyon natural circulation test results to Watts Bar. On the basis of TVA's submittal and our evaluation, we conclude that TVA has demonstrated that the Diablo Canyon natural circulation tests are applicable to Watts Bar, thus meeting the guidelines of BTP RSB 5-1. Details of our review will be published in Supplement 10 of the Watts Bar Safety Evaluation Report.

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

OFC	PDII4/LA	PDII-4/PM	PDII-4/D	
NAME	MSanders <i>ms</i>	PTam <i>PT</i>	FHebdon <i>FH</i>	
DATE	7/14/92	7/14/92	7/14/92	

9207220344 920714  
PDR ADDCK 05000275  
P PDR

NRC FILE CENTER COPY

*MAF*

*DFol 1/0*

Watts Bar Nuclear Plant

Tennessee Valley Authority  
ATTN: Dr. Mark O. Medford

cc:

Mr. John B. Waters, Director  
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  
P.O. Box 2000  
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  
T.E.R.R.A. Building 6th Floor  
150 9th Avenue North  
Nashville, Tennessee 37219-5404

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

DISTRIBUTION

Docket File

NRC PDR

Local PDR

J. Partlow

12-G-18

S. Varga

14-E-4

G. Lainas

14-H-3

F. Hebdon

B. Wilson

RII

H. Livermore

RII

G. Walton

RII

J. Johnson

RII

P. Tam

M. Sanders

OGC

15-B-18

ACRS (10)

WBN Rdg. File