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)

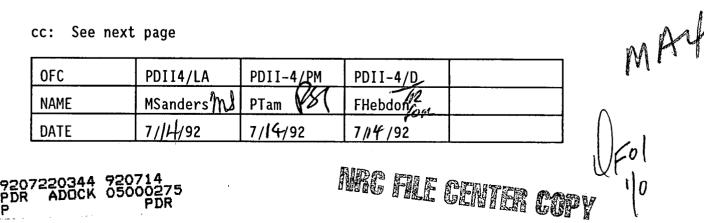
We have completed our review of your submittal dated July 11, 1991, regarding the capability of the Watts Bar Nuclear Plant to meet the guidelines of Standard Review Plan Technical Position 5-1 (RSB BTP 5-1), "Design Requirements of the Residual Heat Removal System". TVA's submittal included a qualitative 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



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

<u>DISTRIBUTION</u> 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	

.

.