



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

William J. Museler  
Site Vice President  
Watts Bar Nuclear Plant

MAR 15 1993

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) - NRC INSPECTION REPORT NO. 390, 391/93-03 -  
REPLY TO NOTICE OF VIOLATION

This letter responds to Inspection Report 390, 391/93-03 dated February 11, 1993, which identified a violation related to failure to fully comply with procedural requirements for advanced authorized design changes. TVA's response to this violation is provided in the enclosure.

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

Very truly yours,

William J. Museler

Enclosure  
cc: See page 2

29F055

9303230203 930315  
PDR ADOCK 05000390  
Q PDR

TEO1

U.S. Nuclear Regulatory Commission  
Page 2

MAR 15 1980

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

U.S. Nuclear Regulatory Commission  
Page 2.

MAR 15 1993

GLP:PLP:SMA:EMW

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

M. K. Brandon, NET E7-WBN  
R. M. Bellamy, STC 1C-WBN  
M. J. Burzynski, LP 5B-C  
S. O. Casteel, FSB 2K-WBN  
E. S. Christenbury, ET 11H-K  
J. D. Christensen, QAC 1A-WBN  
W. R. Cobean, Jr., LP 3B-C  
L. M. Cuoco, LP 5B-C  
W. L. Elliott, IOB 1A-WBN  
M. J. Fecht, LP 5B-C  
R. W. Huston, Rockville Licensing Office  
R. W. Johnson, FSB 2Q-WBN  
N. C. Kazanas, FSB 1B-WBN  
O. D. Kingsley, Jr., LP 6A-C  
M. O. Medford, LP 3B-C  
T. J. McGrath, LP 3B-C  
R. M. McSwain, MR 2C-C  
D. E. Moody, MOB 2R-WBN  
G. R. Mullee, BR 5D-C  
D. E. Nunn, LP 3B-C  
D. E. Nunn, FSB 1A-WBN  
RIMS, QAC 1G-WBN

S:\CWT\SMA\930301.VIO

ENCLOSURE

WATTS BAR NUCLEAR PLANT UNIT 1  
REPLY TO NRC'S FEBRUARY 11, 1993 LETTER TO TVA  
VIOLATION 390/93-03-01

DESCRIPTION OF VIOLATION

10 CFR 50 Appendix B, Criterion V as implemented by TVA Nuclear Quality Assurance (NQA) Plan, TVA-NQA-PLN 89-A Revision 2, Section 6.1 requires that activities effecting quality shall be prescribed by documented instructions, procedures or drawings of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures or drawings. Instructions, procedures or drawings shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished.

Engineering Administrative Instruction EAI-3.05, Design Change Notices, Revision 9 dated November 11, 1992, Section 5.5.1 requires that Advance Authorizations (AA) to Field-Design Change Notices (F-DCN) are not to be used to change system logic, function, performance or operation without being coordinated with the Startup and Test Manager and documented by signature on the AA-DCN. Additionally the following items will not be changed via the AA process without the same coordination and signature: Wire terminal points, system setpoints, protective device ratings or configuration.

Contrary to the above, on January 8, 1993, eleven (11) AAs to DCN F21935-A were issued on System 211 (6.9kv Shutdown Boards) without being coordinated with the Startup and Test Manager, nor documented by signature on the AA-DCN.

REASON FOR VIOLATION

Six of the eleven AAs to DCN F-21935-A issued on System 211 were not coordinated with the Startup and Test Manager as required by EAI-3.05. The other five AAs did not meet the criteria of EAI-3.05 requiring coordination with Startup and Test. Since the field engineer was working closely with the Startup engineer, the field engineer mistakenly assumed that the Startup engineer was acting on behalf of the Startup Manager and that their interface met the intent of procedure EAI-3.05. The Startup Manager had not delegated this authority to the Startup engineer. Contributing to the field engineer's misunderstanding, EAI-3.05 was not precise on who should sign the AA (field engineer or Startup and Test Manager) and the AA form did not designate signature space for the Startup Manager. In several cases, the field engineer signed the AA form referencing the startup interface.

#### CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED

On January 11, 1993, Problem Evaluation Report (PER) WBPER 930006 was issued to evaluate the causes of the AA-FDCN problem and to determine any corrective actions required. TVA reviewed F-DCNs initiated since November 12, 1992, to identify any AAs subject to the limitations for Startup and Test Manager approval. There were 259 F-DCNs with 342 AA changes identified. Twenty-one of the AA changes were identified as meeting the EAI-3.05 criteria for requiring approval by Startup and Test. In addition, TVA reviewed AAs initiated after November 12, 1992, on F-DCNs initiated prior to November 12 for open workplans contained in the workplan library. No additional AAs subject to the EAI-3.05 limitations were identified. The 21 AAs, including those identified during the NRC inspection, were submitted to the Startup and Test Manager for review and approval.

Each of the 21 AAs were reviewed by Startup and Test management and dispositioned. The AAs involving completed tests were reviewed for impact and determined not to require retesting. Those involving Preoperational Test Instructions (PTI) not yet approved were provided to the responsible engineer for consideration in the PTI. Startup and Test management approved and signed all 21 changes as submitted. (Note: The six System 211 AAs had been initiated during a period of retesting on System 211. As a result of the aforementioned coordination of these AAs between the field engineer and test director, the changes were appropriately considered for inclusion in the retesting efforts.)

On January 11, 1993, TVA Engineering management issued a memorandum which suspended further AA changes subject to the EAI-3.05 limitations without Engineering Manager or Field Support Manager approval. This was an interim action pending final review of the issue. No AAs subject to the limitations were approved during this interim period.

#### CORRECTIVE STEPS TAKEN TO AVOID FURTHER VIOLATIONS

On January 28, 1993, Engineering revised EAI-3.05 (Revision 11) to prohibit future use of advanced authorizations to change logic, function, performance, or operation.

#### DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

With respect to the identified discrepancies, TVA is now in compliance.