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MAR 19 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. 50-390/92-45,  
50-391/92-45 REPLY TO NOTICE OF VIOLATIONS - FAILURE TO FOLLOW PROCEDURES FOR  
MATERIAL STORAGE INSPECTIONS

This letter responds to Inspection Report 50-390/92-45, 50-391/92-45 dated  
February 17, 1993, which identified a Severity Level IV violation concerning  
failure to follow procedure for conducting warehouse and cable storage area  
inspections.

Enclosure 1 to this letter addresses the specific examples described in  
Inspection Report 50-390/92-45, 50-391/92-45 and the corrective actions taken  
by TVA. Corrective actions taken in procedures will be appropriately  
annotated to assure process changes cannot be made without sufficient  
management evaluation considering this violation.

Enclosure 2 is provided to correct information written in Inspection Report  
50-390/92-45, 50-391/92-45 concerning Thermo-Lag fire endurance testing.

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

Very truly yours,

William J. Museler

Enclosures

cc: See page 2

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cc (Enclosures):

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## ENCLOSURE 1

### WATTS BAR NUCLEAR PLANT UNIT 1 RESPONSE TO NRC'S FEBRUARY 17, 1993 LETTER TO TVA NRC VIOLATION 390/92-45-01, 391/92-45-01

#### DESCRIPTION OF VIOLATION

10 CFR 50, Appendix B, Criterion V, Instructions, Procedures and Drawings, are implemented in part by TVA's Nuclear Quality Assurance Plan, Paragraph 6.0, which endorses ANSI N45.2-1971 and states that quality related activities shall be prescribed by documented procedures and instructions and shall be performed in accordance with approved and controlled instructions, procedures, and drawings.

Contrary to the above, on January 21, 1993, three examples of failure to follow procedures were identified.

Site Standard Practice SSP-10.03, paragraph 2.2.6, requires Nuclear Stores to schedule and perform verification inspections of storage facilities such that each area is verified no less frequently than once each year. Contrary to this requirement, Nuclear Stores could not provide inspection records which verify storage area inspections were performed in 1992.

Site Standard Practice SSP-10.03 and Quality Assurance Instruction QAI-10.06 specify quarterly inspection for material storage areas to assure that each area is inspected annually. Inspections for at least 20 storage areas (Huts 6-12, 14-17, 19, 21, 22, 22B, 26, 28, 30, 31, and Yards 1 and 2) were not performed annually during 1991 and 1992 with actual intervals ranging from 16 to 23 months.

Site Standard Practice SSP-10.03, Appendix F, requires Nuclear Stores to perform quarterly inspections of electrical cable storage areas, and Quality Assurance Instruction QAI-10.06 and design drawing 47A100-2 require quarterly Quality Control inspections for electrical cable storage. However, the verification and inspection schedules (matrices) being used by both Nuclear Stores and Quality Control for both 1992 and 1993 reflect verification and inspection of current cable storage areas (Huts 27 and 29) only in the second quarter of the year. The last documented Quality Control inspection of the cable storage areas was performed on May 14, 1992. The last documented Nuclear Stores verification of Huts 27 and 29 was in December 1991.

#### REASON FOR VIOLATION

Lack of storage inspections and inspection records were the result of failure to follow procedure by the responsible Nuclear Stores and Quality Control (QC) personnel; inadequate procedure for QC inspections; and lack of accountability, in that inspection ownership was not clear among management in Nuclear Stores, the Materials Improvement Project, and Quality Control.

TVA does not believe this condition resulted in any hardware problems. During the time frame of the deficiency, Watts Bar's warehouse facilities were undergoing extensive upgrades. Three large buildings were renovated to create new warehouse storage. Material located in older warehouse storage areas was being evaluated on an item-by-item basis prior to being placed in inventory as acceptable for issuance. Physical condition of these items was a part of the acceptance criteria in that process as a result of previous warehouse storage concerns.

#### CORRECTIVE ACTIONS TAKEN

All storage areas have been inspected and documented.

#### CORRECTIVE ACTIONS TAKEN TO PREVENT RECURRENCE

Applicable procedures have been reviewed to ensure that adequate measures have been established to:

- (1) properly process inspection documentation to Document Control Records Management (DCRM), and
- (2) properly define and schedule required inspections.

Site Standard Practice (SSP)-10.03, "Handling, Storage, and Shipping," and Quality Assurance Instruction (QAI)-10.06, "Inspection of Storage Facilities," have been revised to clarify single authority ownership of warehouse and cable storage area inspections. QC is now responsible for completing and documenting inspections with Nuclear Stores personnel assisting as needed.

A storage area inspection schedule meeting ANSI N45.2.2 and N45.2.3 requirements has been incorporated into QAI-10.06. This procedure includes the requirement to perform quarterly inspection of cables and their reels in accordance with 47A100 series drawings.

Nuclear Stores and QC Receipt Inspection Group personnel have been trained to the new revisions of SSP-10.03 and QAI-10.06, respectfully. Nuclear Stores and QC personnel have been made aware of the circumstances and consequences of the subject violation and past related events (Violation 390/90-22-05).

TVA has reinstated the Tracking and Reporting of Open Items (TROI) data base as a scheduling requirement for warehouse and cable storage area inspections.

Appropriate management corrective actions have been taken to address personnel failure to follow procedure and accountability issues.

#### DATE OF FULL COMPLIANCE

With respect to the cited issues, TVA is now in full compliance.

ENCLOSURE 2

WATTS BAR NUCLEAR PLANT  
THERMO-LAG FIRE ENDURANCE TESTING  
IFI 390, 391/92-45-03

Item 5 in NRC Inspection Report 50-390, 391/92-45 dated February 17, 1993, discussed TVA's Thermo-Lag Fire Endurance testing conducted December 21 through 23, 1992 and January 7, 1993, and opened IFI 390, 391/92-45-03. Information in paragraph 5(b), (second paragraph on page 13), indicates that TVA will verify that the cables would have passed the fire endurance acceptance criteria requirement of 325°F cold side temperature through compression load tests. To prevent misunderstanding, it should be noted that the compressive load testing (cable functionality testing) is conditional upon the results of the additional fire endurance testing to be conducted in late March through early April. TVA will only perform cable functionality testing if the results of the upcoming fire endurance testing results in the average of cold side thermocouples on a raceway greater than 250°F above initial temperature or if any individual thermocouple exceeds 325°F above its initial temperature. This information is in accordance with TVA's response to Question 2 in the reply (dated February 10, 1993) to the NRC Request For Additional Information (RAI) on the TVA Conduit Fire Barrier Fire Endurance Testing Program (TAC M63648), dated December 2, 1992.