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MAR 17 1995

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) - UNITS 1 AND 2 - NRC INSPECTION REPORT NO.  
390, 391/94-88 - REPLY TO NOTICE OF VIOLATION (NOV)

The purpose of this letter is to provide a reply to Notice of Violation  
390/94-88-01. NOV 390/94-88-01 identified two examples of failure to  
follow corrective action procedures which are addressed in Enclosure 1.

Enclosure 2 provides the list of commitments made in this submittal. If  
you should have any questions, contact P. L. Pace at (615)-365-1824.

Sincerely,

  
O. J. Zeringue

Enclosures  
cc: See page 2

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Enclosures

cc (Enclosures):

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ENCLOSURE 1

WATTS BAR NUCLEAR PLANT UNIT 1  
REPLY TO NOTICE OF VIOLATION  
NRC FEBRUARY 15, 1995 LETTER TO TVA  
NRC VIOLATION 390/94-88-01

"10 CFR 50 Appendix B, Criterion V, Instructions, Procedures, and Drawings, and Tennessee Valley Authority NQA TVA-NQA-PLN89-A, Revision 4, Section 6.1, Procedures and Instructions, require in part that quality-related activities shall be prescribed by documented procedures and instructions appropriate to the circumstances and that the activities shall be accomplished in accordance with these procedures and instructions.

Contrary to the above, the following were identified:"

EXAMPLE 1

"Modifications and Addition Instruction MAI-3.3, Cable Terminating, Splicing, and Testing For Cables Rated Up to 15,000 Volts, Revision 13, Section 6.2.15, provides for securing cables to panels using cable mounts to arrange cable bundles. The use of tie wraps is not specified as an approved method of supporting cable bundles.

As of January 9, 1995, the Class 1E field cable 1PS117A, located between control room panels 1-M-5 and 1-M-6, was not supported in accordance with Modification and Addition Instruction MAI-3.3 requirements as evidenced by being vertically supported through the use of a three tie wraps. Additional Class 1E field cables were then secured to field cable 1PS117A with no other support points. Furthermore, the tie wraps were secured to a metal rod wedged at the top of the control panel."

TVA RESPONSE - Example 1

TVA agrees that this violation example occurred.

REASON FOR THE VIOLATION - Example 1

This violation example occurred because of a personnel error. Research into this condition revealed no work implementing document that installed the unqualified cable support. Review of cable cards revealed that two of the cables in question were installed on May 9, 1977, and were terminated on December 2, 1977; however, no work package number was indicated. Without further information, TVA concludes that this is a failure by the personnel involved in the installation and termination to properly support these cables.

CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED - Example 1

Work order 95-02647-00 has been implemented to correct the condition identified by this violation example.

TVA will conduct inspections of vendor wired safety-related electrical

panels/boards which have not already been inspected under other panel inspection programs to identify if other unapproved/undocumented cable supports exist. Any additional examples found will also be corrected.

#### CORRECTIVE STEPS TAKEN TO AVOID FURTHER VIOLATIONS - Example 1

TVA's evaluation of this condition determined that this condition was created by previous work control programs in existence prior to December 21, 1990. Stop work order WBN 90-01 was issued on this date identifying work control program problems. As part of the restart of construction after November 1991 employees were trained to new procedures in addition to "total quality" and "employee responsibilities." As noted in the inspection report, individuals performing work in the area of this panel did not identify the deficient condition for correction. To address this issue, TVA will provide a lessons learned to field personnel to ensure that they are aware of the need to identify discrepant conditions.

However, the need for further recurrence control actions will be evaluated pending the results of the panel/board inspections. If further actions are required, this response will be updated.

#### DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

With regards to the violation example, TVA is presently in full compliance. TVA will complete further panel/board inspections and will take any further corrective actions by Unit 1 fuel load.

#### EXAMPLE 2

"Modification and Addition Instruction MAI-3.3, Cable Terminating, Splicing, and Testing For Cables Rated Up To 15,000 Volts, Revision 13, Section 6.2.9.o, requires that Raychem materials be installed following manufacturer's instructions approved by site engineering. Engineering-approved Raychem vendor manual WBN-VTM-R098-0010 specifies installation criteria for heat shrink tubing including visible flow of sealant at each end of tubing.

As of January 12, 1995, Raychem heat shrink tubing for repairing damaged vendor wire 17-9 at Class 1E outboard containment electrical penetration 1-PENT-293-0052-B was not installed in accordance with the vendor manual instructions in that there was no visible flow of sealant at the repair sleeve end thereby indicating inadequate sealing. As a result, the installed Raychem tubing was able to be rotated around the vendor wire."

#### TVA RESPONSE - Example 2

TVA agrees that this violation example occurred.

REASON FOR THE VIOLATION - Example 2

The violation example occurred because of personnel error. The craftsman involved failed to provide sufficient heating of the raychem repair sleeve which resulted in improper shrinkage. This Raychem sleeve was installed in 1990 prior to the above-mentioned construction stop work order.

CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED - Example 2

Work order 94-20914-07 has been implemented to correct the improper shrinkage of this violation example. In addition, TVA has identified two other examples during a Nuclear Assurance assessment. However, these applications are for mechanical protection only to prevent inadvertent grounding of the shield at the area of jacket removal. This configuration provides no seal mechanism. Therefore, there is no increased potential for hardware failure. These additional deficiencies will be evaluated and corrective action taken if required.

TVA will inspect an additional population of splices for adhesive flow during the extent of condition review for Significant Corrective Action Report (SCAR) WBSA950002.

CORRECTIVE STEPS TAKEN TO AVOID FURTHER VIOLATIONS - Example 2

As stated above, stop work order WBN 90-01 was issued on December 21, 1990, due to construction work control problems. As part of construction restart, new site procedures were issued and personnel were better trained. In addition, training in the installation of Raychem material was developed and provided to the craft.

As noted in the inspection report, individuals performing work in the area of this sleeve did not identify the deficient condition for correction. Therefore, TVA will provide a lessons learned to field personnel to ensure that they are aware of the need to identify discrepant conditions.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

With regard to the violation example, TVA is presently in full compliance. TVA will complete an additional inspection of splices for adhesive flow and take any further corrective action by Unit 1 fuel load.

ENCLOSURE 2

LIST OF COMMITMENTS

1. TVA will conduct inspections of vendor wired safety-related electrical panels/boards which have not already been inspected under other panel inspection programs to identify if other unapproved/undocumented cable supports exist. Any additional examples found will also be corrected.
2. The need for further recurrence control actions will be evaluated pending the results of the panel/board inspections. If further actions are required, this response will be updated. (Example 1)
3. Individuals performing work in these areas did not identify the deficient condition for correction. To address this issue, TVA will provide a lessons learned to field personnel to ensure that they are aware of the need to identify these conditions. (Examples 1 and 2)
4. The two additional deficiencies will be evaluated and corrective action taken if required. (Example 2)
5. TVA will inspect an additional population of splices for adhesive flow during the extent of condition review for Significant Corrective Action Report (SCAR) WBSA950002. (Example 2)

TVA will complete the above actions by Unit 1 fuel load.