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William J. Museler
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FEB 22 1994

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. 50-390/93-90 and
50-391/93-90 - REPLY TO NOTICE OF VIOLATION

This letter responds to Inspection Report 50-390/93-90 and 50-391/93-90 dated
January 19, 1994, which identified a Severity Level IV violation concerning
inadequate corrective actions to resolve flooding conditions found in
electrical manholes.

Enclosure 1 addresses the specific example identified as Notice of Violation
50-390/93-90-01 and 50-391/93-90-01. The commitments for this letter are
summarized in Enclosure 2.

The revised submittal date for this response was discussed with NRC Region
II Staff on February 22, 1994.

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
REPLY TO NRC'S JANUARY 19, 1994 LETTER TO TVA
NRC VIOLATION 50-390,391/93-90-01

DESCRIPTION OF VIOLATION

10 CFR 50, Appendix B, Criterion XVI, Corrective Actions, requires that measures shall be established to assure that conditions adverse to quality are promptly identified and corrected.

Contrary to the above, on December 13, 1993 adequate corrective action was not taken to prevent and correct flooding conditions in the electrical cable manholes. The procedure issued for corrective action did not require an evaluation of the extent of the flooding in the manholes and did not require a determination of the possible effects of the flooding on the safety-related cables in the manholes.

TVA RESPONSE

TVA agrees with the violation.

REASON FOR VIOLATION

Lack of detailed instruction steps to follow-up and resolve the effects of flooding in manholes resulted from failure by responsible personnel to recognize the need for special instruction steps in the preventative maintenance procedure to assure engineering evaluation of submerged cables. The instruction contained steps to indicate evidence of flooding, but did not require personnel to record the level of water. It also required corrective action for unacceptable conditions, but did not specifically address the need for an engineering evaluation of the potential adverse effects of prolonged flooding.

CORRECTIVE ACTIONS TAKEN AND RESULTS ACHIEVED

The twenty-four electrical manholes in Preventative Maintenance Procedure WBN-0-PMP-040-0015 (which includes those manholes with Class 1E cable) have been reinspected, water removed from flooded manholes, and the sump pumps' operability restored where necessary.

The preventative maintenance procedure has been rewritten to explain the importance of assuring the manholes remain unflooded and pumps and controls remain operable. Further, specific instruction steps were added for obtaining engineering evaluation for the effects of flooding on submerged cable and to record the level of flooding.

The effects of flooding on cables in these manholes have been evaluated by Nuclear Engineering and documented in Problem Evaluation Report No. WBP930495. In particular, cables which were temporarily submerged have been evaluated and determined acceptable.

In addition to the corrective actions stated above, the affected cables are "megger" tested every two years in accordance with Maintenance Instruction (MI)-57.1, 6900 V Circuit Breakers Inspection. Acceptance Criteria is provided in MI-57.108, Installation, Resistance, and Continuity Test for Rotating Machinery, Cables, and Transformers.

CORRECTIVE ACTIONS TAKEN TO PREVENT RECURRENCE

The source of in-leakage in electrical manholes which experienced flooding will be identified and repaired. As an interim measure, manholes which experienced flooding will be checked more frequently and as conditions warrant, such as excessive rain, until the source of in-leakage is repaired.

DATE OF FULL COMPLIANCE

TVA expects to complete the above corrective action by May 20, 1994.

ENCLOSURE 2

LIST OF NEW COMMITMENTS

1. The source of in-leakage in electrical manholes which experienced flooding will be identified and repaired.
2. As an interim measure, manholes which experienced flooding will be checked more frequently and as conditions warrant, such as excessive rain, until the source of in-leakage is repaired.