



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

JUL 29 1991

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Gentlemen:

In the Matter of the Application of)
Tennessee Valley Authority) Docket Nos. 50-390
50-391

WATTS BAR NUCLEAR PLANT (WBN) UNITS 1 AND 2 - MATERIAL PROGRAM DEFICIENCY -
SIGNIFICANT CORRECTIVE ACTION REPORT (SCAR) WBP 890634SCA -
WBRD 50-390/91-31 AND WBRD 50-391/91-31 - FINAL REPORT

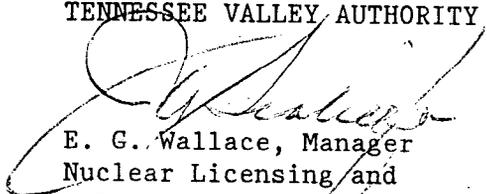
The subject deficiency was originally reported to the NRC Operations Center on June 28, 1991, in accordance with 10 CFR 50.55(e) as reportable. This deficiency had been recently reevaluated as part of the corrective action for NRC violation 50-390/90-30-02.

Enclosure 1 provides TVA's report for this deficiency. Enclosure 2 provides the commitment listed in this report.

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

Very truly yours,

TENNESSEE VALLEY AUTHORITY


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Enclosures
cc: See page 2

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ENCLOSURE 1

WATTS BAR NUCLEAR PLANT (WBN)
CLASS 1E SEISMIC SENSITIVE ELECTRICALLY ACTIVE DEVICES (SSEA)
SIGNIFICANT CORRECTIVE ACTION REPORT (SCAR) WBP 890634SCA
WBRD-50-390, 391/91-31
10 CFR 50.55(e)
FINAL REPORT

Description of Deficiency

TVA's seismic qualification program for instrumentation and electrical equipment at WBN is based on the requirements of IEEE-344. Electrical devices (motor starters, circuit breakers, relays, and magnetic contactors) identified as SSEA released from Power Stores' inventory for safety-related applications were not procured to the requirements of IEEE-344. The dates of the release of these devices are from February 1984 to January 1989.

The Replacement Items Program (RIP) Corrective Action Program (CAP) committed in part to a review of inventory and installed SSEA commercial grade Quality Assurance Level II devices. The evaluation was performed in accordance with Site Director's procedure, Administrative Instruction (AI)-5.19, "Previous Procurement Substantiation Process for Replacement Items." This AI states that installed items which cannot be verified as meeting applicable requirements shall be identified in a condition adverse to quality (CAQ).

The SSEA review consisted of 416 TVA Item Identification Code (TIIC) line items within the defined scope in the maintenance inventory and the TVA Materials Management System (MAMS) for installed locations. The review identified 56 cases out of the total review that were determined as not satisfying IEEE-344 and were identified in SCAR WBP 890634SCA. The cause was determined to be inadequate instructions in the Nuclear Quality Assurance Manual (NQAM), Part III, Section 2.1, which did not delineate Nuclear Engineering (NE) technical and quality specifications. As a result, appropriate supportive documentation satisfying IEEE-344 requirements was not requested or received.

Safety Implications

These devices, when installed in Class 1E equipment, must be able to change state, as required, to energize or deenergize the appropriate downstream component and permit the next desired operation sequence. Failure in the form of contact chatter in these devices may prevent satisfactory performance of the desired operation (i.e., safety function).

The procurement documentation supporting IEEE-344 requirements provides reasonable assurance that this safety function will be accomplished. Since the documentation was not available and it was cost effective to replace the device rather than perform a dedication, the qualification of these devices (56 cases) was designated as indeterminate.

Although there is no reason to believe that these devices are defective, after contacting various vendors/manufacturers, TVA determined it was more cost effective to replace these devices with newly procured IEEE-344 qualified devices rather than pursue additional documentation which satisfied IEEE-344 requirements.

Corrective Action

After contacting various vendors/manufacturers of the subject devices with insufficient documentation, WBN determined it would be more cost effective to procure new devices to replace the 56 cases found. TVA has a program in place which establishes appropriate technical and quality requirements for the new purchases and is dispositioning in-stock unqualified devices.

Corrective actions, including replacement of applicable installed equipment will be performed under the RIP CAP. As previously discussed with the staff, TVA will notify NRC of the completion of this CAP. Because resolution of this deficiency is procurement process dependent, TVA has established the declaration of readiness to load fuel as the completion milestone for this activity.

ENCLOSURE 2

LIST OF COMMITMENTS

Corrective actions, including replacement of applicable installed equipment will be performed under the RIP CAP. As previously discussed with the staff, TVA will notify NRC of the completion of this CAP. Because resolution of this deficiency is procurement process dependent, TVA has established the declaration of readiness to load fuel as the completion milestone for this activity.