Docket No. 50-390

Mr. Oliver D. Kingsley, Jr. Senior Vice President, Nuclear Power Tennessee Valley Authority 6N 38A Lookout Place 1101 Market Street Chattanooga, Tennessee 37402-2801

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Dear Mr. Kingsley:

SUBJECT: WATTS BAR UNIT 1 - TVA RESPONSE TO NOTICE OF VIOLATION RESULTING FROM INSPECTION REPORT 50-390/89-200

This is a response to your letter dated April 27, 1990, that replied to the Notice of Violation resulting from our Broad-Based Construction Assessment documented in the subject inspection report. Your letter was reviewed by the assessment team leader, Mr. Steven R. Stein. Specifically, we found:

- Examples 1 and 3, Violation A, are still considered violations of requirements. However, we recognize that you are eliminating the data sheet method of documenting QC verifications and instituting an inspection report method. The new method, if properly implemented, will eliminate the deficient use of the data sheets.
- (2) TVA's response and actions to Example 2, Violation A are adequate.
- (3) TVA's response and actions to Examples 1 through 4, Violation B, are in general adequate. However, we plan to verify your corrective actions when complete because of the extent and scope of work required to fully implement the corrective actions.

Details may be found in the enclosed document. If you or your staff would like clarification of this letter or its enclosure, please feel free to call.

Sincerely,

Original signed by

Peter S. Tam, Senior Project Manager Project Directorate II-4 Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

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Enclosure: As stated

cc w/enclosure: See next page

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REVIEW OF TVA'S REPLY TO NRC INSPECTION REPORT 50-390/89-200 NOTICE OF VIOLATION

Violation A, Examples 1 and 3:

TVA denied examples 1 and 3 of Violation A. TVA asserts that the post-inspection requirements marked as "N/A" relate to restoration of temporary conditions and temporary wire lifts associated with internal wiring and components. And since the work being performed (removal and later reinstallation of hand switches) did not involve temporary changes to "installed equipment," the requirements were appropriately marked as not applicable.

TVA also asserts that the use of Data Sheet 1 was proper and the activity being documented could be identified through generic notes in the comments section of the form along with the associated design documents also listed on the data sheets.

TVA's reply only addressed the replacement of resistors in certain hand switches. The reply did not address the team's findings regarding other control board components.

The team found and reported that the work plans being used to remove and reinstall devices on the control room boards did not include a QC verification for device ratings or other post-installation attributes. The QC inspectors also had expressed to the team concerns about their inability to verify ratings. The control boards were being modified extensively with many devices removed and temporarily stored in other locations before reinstallation. The scope and extent of the work provided many opportunities for error. An effective, prudent quality program would permit the QC inspectors to verify attributes such as device ratings and proper connection. An effective program also would include a QA review for verification points that have been eliminated.

It was the generic nature of Data Sheet 1 that the team found to be inadequate. The form was used to document QC verification for various types of wiring and termination work without explicitly documenting what was previously verified. The inadequate use of the form was also evidenced by the numerous explanatory notes that were required in an attempt to document what was performed. A final QA review for completeness of the work plan would not be effective if the reviewer could not determine what work had been performed and what had been QC verified.

The NRC team still considers these examples to be violations of requirements. However, it also recognizes that TVA is eliminating the data sheet method of documenting QC verifications and instituting an inspection report method. The new method, if properly implemented, will eliminate the deficient use of the data sheets.

Violation A, Example 2:

TVA's response and actions to this example are adequate.

Violation B, Examples 1 through 4:

TVA's response and actions to the specific examples and to the violation in general are adequate. However, the NRC should verify corrective actions when complete because of the extent of several examples and the scope of work required to fully implement the corrective actions.