

**TENNESSEE VALLEY AUTHORITY**

CHATTANOOGA, TENNESSEE 37401  
400 Chestnut Street Tower II

August 2, 1982

U.S. Nuclear Regulatory Commission  
Region II  
Attn: Mr. James P. O'Reilly, Regional Administrator  
101 Marietta Street, Suite 3100  
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2 - NRC OIE REGION II INSPECTION REPORT  
50-390/82-09, 50-391/82-07 - RESPONSE TO VIOLATION

The subject inspection report dated May 28, 1982 cited TVA with one Severity Level IV Violation in accordance with the provisions of 10 CFR 2.201. Enclosure 1 is our response to that violation. The submittal date of this response was based upon TVA's receipt of Appendix A to the subject Inspection Report. The Inspection Report repeatedly references Inspection Report 390/82-05, 391/82-03; however, TVA has yet to receive that Inspection Report. These matters were discussed with OIE Region II inspectors on several occasions.

Enclosure 2 is TVA's response to the five items addressed in the transmittal letter to Inspection Report 50-390/82-09, 50-391/82-07.

If you have any questions, please get in touch with R. n. Shell at FTS 858-2688.

To the best of my knowledge I declare the statements contained herein are complete and true.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

*DS Kammer*

D. S. Kammer  
Nuclear Engineer

**Enclosures**

cc: Mr. Richard C. DeYoung, Director (Enclosures)  
Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

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ENCLOSURE 1

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2  
RESPONSE TO VIOLATION

Violation 50-390/82-09-02, 50-391/82-07-02

10 CFR 50, Appendix B, Criterion XVIII, requires that a comprehensive system of planned and periodic audits be carried out to verify compliance with all aspects of the quality assurance program and to determine the effectiveness of the program. The approved QA program, FSAR section 17.1A, commits to Safety Guide 28, which endorses ANSI N45.2-1971. Section 19 of the standard specifies the same requirements as Appendix B.

Contrary to the above, as of February 25, 1982, the comprehensive system of planned and periodic audits of those construction phase activities performed by the Division of Nuclear Power and not interfacing with OEDC was not carried out in that the Office of Power Quality Assurance and Audit Staff did not conduct any audits of such Watts Bar activities in 1981 and had scheduled no audits of such Watts Bar activities for 1982.

This is a Severity Level IV Violation (Supplement II.D.1)

Admission or Denial of Alleged Violation

TVA admits the violation occurred as stated.

Reasons for the Violation

No audits, of the type addressed in the violation, were conducted in 1981 due to the failure of the operational QA audit program to recognize the extent of related Division of Nuclear Power (NUC PR) activities at Watts Bar that should have been audited.

Corrective Action taken and Results Achieved

Audits of NUC PR activities at Watts Bar were resumed in 1982 starting with OPQAA-WB-82-SP-10 conducted in April 1982.

Corrective Action taken to Avoid Further Violations

Watts Bar is now included with other TVA nuclear plants in the Operation Audit Schedule and will be audited routinely in the future. Long-term audit plans have recently been developed to anticipate future activities that will need to be audited and to predict needed resources to accomplish these audits.

Date of Full Compliance

TVA was in full compliance on this violation with the issuance of the Operational Audit Schedule on July 1, 1982.

ENCLOSURE 2

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2  
INSPECTION REPORT 50-390/82-09, 50-391/82-07

Item 1

Complete the Nuclear Review Staff management review of the Watts Bar Quality Assurance Program.

Response

At the time of the February 18, 1982 meeting, TVA was in the process of completing an NSRS review of the Watts Bar QA Program. This review was of limited scope and has since been completed.

A decision was subsequently made to perform a comprehensive NSRS review of the WBNP QA Program. This review was completed on March 19, 1982 and encompassed all of the Office of Engineering Design and Construction (OEDC). The report of findings was transmitted to OEDC on June 3, 1982. OEDC is required to respond in writing on all findings within 60 days of the date of issue of the report.

Copies of the NSRS report and the OEDC response will be provided to NRC-OIE following transmittal to and subsequent review by NSRS.

Item 2

Verify that equipment important to safety is included on the facility critical safety system component list (CSSC) to ensure appropriate quality assurance program coverage.

Response

TVA has undertaken a program to create a controlled single listing identifying the systems, structures, and components covered by the quality assurance program. The listing will be used by our design, construction, and operations and maintenance organizations for determining program requirements. This listing will be in sufficient detail so that knowledgeable engineers can determine whether a particular item requires QA during design, construction, or operation. In addition, the listing will provide the bases in the form of safety functions, for the inclusion of plant features in the QA program so that the engineer can determine what QA requirements apply and when they apply. We presently anticipate that this listing will be in the form of a computerized matrix of items versus safety functions.

This effort is currently underway using resources from TVA's design, construction, and operations groups. We anticipate issuance of a usable, quality listing by September 1, 1982, with final issue by January 1, 1983. Upon final issue, all programs and work will be consistent with the controlled single listing. This schedule will permit extensive trial use before fuel loading in August 1983. In addition, a control mechanism is being established to ensure that the list remains current and correct.

Item 3

Review your identification of design for equipment important to safety and verify that the issued final design and the as-built construction satisfy the design requirements.

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Response

The attached report entitled "Design and Construction Quality Program Description and Evaluation" for Watts Bar delineates the OEDC program for equipment and systems important to safety. NRR and OIE representatives were given copies of this report during the April 26, 1982 meeting in Bethesda, Maryland, with Director Harold Denton.

Item 4

Extend the scope of the current review of system tentative transfers to include all transfers accomplished after December 1, 1980. Identify retesting for outstanding work items uncovered by this review.

Response

Tentative transfers which have occurred since April 12, 1982 do not require a review since Revision 3 of QCI-1.22, "Transfer of Permanent Features to the Division of Nuclear Power," became effective on that date. Revision 3 of QCI-1.22 provides acceptable assurance that outstanding work on a system will be identified at the time of tentative transfer by requiring multiple walkdowns and providing detailed instructions for preparation of punchlists.

The scope of this review will be limited to safety-related tentative transfers which potentially could have unidentified outstanding work items that could adversely affect the results of completed preoperational testing and possibly requiring retest.

The review of tentatively transferred systems will be accomplished by engineering personnel presently working in WBN CONST and will consist of a detailed field inspection of transferred features along with a review of all quality assurance documentation required for the features. The NUC PR Preoperational Test Group will examine the results of the review to determine if retests may be required. The review will be completed in January 1983.

Item 5

Evaluate the generic application of any deficiencies identified by these reviews to other units within the Tennessee Valley Authority system and implement corrective action if necessary.

Response

Any deficiencies identified by the NSRS management review of the Watts Bar Quality Assurance Program or by any other reviews of programs important to safety, i.e., identification of design requirements for equipment important to safety, will be reviewed and evaluated for generic applicability to Bellefonte Nuclear Plant--the only other units that remain actively under construction. These deficiencies, if deemed to be generic and applicable, will have appropriate corrective actions identified and implemented.

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Deficiencies identified by these reviews will also be evaluated for applicability to SQN's existing program since their programs are similar to Watts Bar's. Review of applicability to other plants is not deemed necessary because their programs are either not similar to Watts Bar's or the plants are in a deferred status.

One generic action is already underway. The response to Item 2 on identification of structures, systems, and components covered under the QA program will be applied to all plants under construction.