

ENCLOSURE 1

CORRECTED NOTICE OF VIOLATION

Tennessee Valley Authority  
Watts Bar 1

Docket No. 50-390  
License No. CPPR-91

During the Nuclear Regulatory Commission (NRC) inspection conducted on August 21 to September 20, 1986, a violation of NRC requirements was identified. The violation involved failure to properly change Plant Operations Review Committee (PORC) approved procedures. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR 2, Appendix C (1985), the violation is listed below:

10 CFR 50, Appendix B, Criterion V as implemented by TVA's QA Topical Report, TVA-TR-75-1A, Rev. 8 paragraph 17.2.5 requires that activities affecting quality be prescribed by approved procedures of a type appropriate to the circumstance and shall be accomplished in accordance with these procedures. Paragraph 17.2.5 further implements this requirement by requiring preoperational test instructions affecting safety-related functions of CSSC (Critical Structures, Systems and Components) be reviewed by the Plant Operation Review Committee or a special test committee (including the plant Quality Assurance Staff and Office of Engineering) for inclusion of appropriate acceptance criteria and technical adequacy. Paragraph 17.2.11 requires that test instructions are --- reviewed by qualified personnel including the plant QA staff and approved by the plant manager. ANCI N18.7, 1976, Section 5.2.15 "Review, Approval and Control of Procedures" requires review and approval prior to initial use and that changes be reviewed and approved by the same organizations that performed the original review. Section 5.2.5 "Temporary Procedures" requires review and approval of temporary procedures in accordance with Section 5.2.15.

Contrary to the above, because the licensee failed to implement the above requirements in Administrative Procedure (A.I.) 6.2, when test addenda were constructed from previously-approved test procedures, the addenda did not receive Plant Operations Review Committee or Preoperational Test Committee approval. The addenda changed the scope, technique or sequential order of the original test.

This is a Severity Level IV violation (Supplement III), and applies to Unit 1.

Pursuant to the provisions of 10 CFR 2.201, Tennessee Valley Authority is hereby required to submit to this Office within 30 days of the date of the letter transmitting this Notice a written statement or explanation in reply including: (1) admission or denial of the violation, (2) the reason for the violation if admitted, (3) the corrective steps which have been taken and the results achieved, (4) the corrective steps which will be taken to avoid further

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violations, and (5) the date when full compliance will be achieved. Where good cause is shown, consideration will be given to extending the response time.

FOR THE NUCLEAR REGULATORY COMMISSION

ORIGINAL SIGNED BY  
GARY G. ZECH



Stewart D. Ebnetter, Director,  
TVA Projects Division  
Office of Special Projects

Dated at Washington, DC  
this 21 day of August 1987

## ENCLOSURE 2

### STAFF ASSESSMENT OF LICENSEE RESPONSE

#### Restatement of Violation:

10 CFR 50, Appendix B, Criterion V as implemented by TVA's QA Topical Report TVA-TR-75-1A, Rev. 8 paragraph 17.2.5. requires that activities affecting quality be prescribed by approved procedures of a type appropriate to the circumstance and shall be accomplished in accordance with these procedures. Watts Bar Administrative Instruction (AI) 3.1 Rev. 15, "Plant Instructions - Control and Use," requires intent changes to approved procedures be handled through the same formal review process as the original procedure.

Contrary to the above, when the test addenda were constructed from previously approved test procedures, the addenda did not receive Plant Operations Review Committee approval even though they were intent changes to the original procedure. The addenda changed the scope, technique or sequential order of the original test.

This is a Severity Level IV Violation (Supplement II)

#### Summary of Licensee Response:

- a. The Notice of Violation cited AI 3.1 incorrectly. AI 6.2 "Preoperational Test Program" is the correct procedure.
- b. The examples in the inspection report were reviewed and two of three were invalid while the third was a failure to follow AI 6.2.

#### Summary of NRC Evaluation:

The NRC staff has carefully reviewed the licensee's response and associated material and has concluded that the violation occurred, the violation was programmatic, and the violation was not properly reviewed by the licensee for root cause and corrective action to prevent further violations. Also, the licensee identified that an incorrect procedure was cited by the NRC and properly identified the correct procedure and provided their response with the recognition that the procedure at issue was AI 6.2.

The NRC Notice of Violation (NOV) addressed the programmatic subject of preparation and review of changes to test procedures. While the NOV discussed the issue in the context of failure to follow a licensee procedure (AI 3.1) the licensee's review of the NOV was deficient in that, while it corrected the procedure at issue to AI 6.2, it assumed the adequacy of AI 6.2. Subsequent review shows that procedure AI 6.2 is inadequate in that it does not implement the requirements of TVA's QA Topical Report - Rev. 8, the Watts Bar Final Safety Analysis Report (FSAR) chapter 14, nor American National Standard (ANSI) N18.7-1976. Therefore, the licensee did not determine the proper corrective actions to be taken. The AI 6.2 procedure adherence violation identified by the licensee and discussed in their February 4, 1987 response letter to the NRC is minor compared to the programmatic implications of the NOV issued by the NRC on January 7, 1987. For these reasons, The NRC staff considers the licensee's February 4, 1987 letter to be an inadequate response.

## NRC Evaluation

The NRC Staff evaluated several aspects of this violation including: a) the licensee's response, b) the licensee's QA Topical Report, c) Final Safety Analysis Report (FSAR) Chapter 14, d) the applicable national standard, e) licensee procedure AI 6.2, and f) the inspection history. Each is discussed in the paragraphs below:

- a. The licensee's response of February 4, 1987, correctly points out that the NRC referred to the wrong AI (3.1 vice 6.2), goes on to determine that a procedure adherence violation against AI 6.2 did occur in one of the three examples discussed in Inspection Report 390/86-20 and continues on, focusing on the identified procedure adherence violation. The licensee provided their response with the recognition that AI 6.2 should have been the focus of the violation.
- b. The staff review of the TVA QA Topical Report, Rev. 8, Section 17.2.5 "Instructions, Procedures and Drawings" shows that the PORC (Plant Operation Review Committee) reviews plant level instructions affecting safety-related functions of Critical Structures, Systems and Components (CSSC) except a special test committee may review pre-op test instructions. Section 17.2.11 "Test Control" states that all pre-operational tests are accomplished in accordance with written and approved procedures. Test instructions are prepared under the supervision of the plant staff, reviewed by qualified personnel, including the plant QA staff and approved by the plant manager.
- c. The staff review of FSAR Figure 14.2.6 "Pre-operational Test Instruction Flow Chart (Amendment 55)" showed: 1) PORC review of test instructions and 2) that a major test deficiency is one that requires a deviation from the instructions. Resulting proposed instruction changes are reviewed by the PORC.
- d. The staff review of American National Standard (ANSI) N18.7-1976, the primary standard applying to this area, provided the following information:

Section 5.3, "Preparation of Instructions and Procedures" requires:

- Activities affecting safety [testing] be described by written procedures... and accomplished in accordance with these instructions and procedures.
- Procedures shall provide appropriate quantitative or qualitative acceptance criteria.
- Procedures shall provide an approved pre-planned method of conducting operations.
- Procedures shall be prepared and approved prior to implementation as required by Sections 4.3 and 5.2.15.

Section 5.2.2 "Procedure Adherence" requires in part that "procedures be followed and provides for rules for temporary changes if it is clear that the temporary change does not change the intent of the procedure." It further describes types of procedures that shall be present and referred to directly to include "extensive or complex jobs, tasks which are infrequently performed, and tasks in which operations must be performed in sequence." Testing fits all these criteria.

Section 5.2.5 "Temporary Procedures" discusses their use to direct operations during testing, among other situations, but requires the review process of Sections 4.3 and 5.2.15 as applicable and approval by the management representative assigned approval authority.

Section 4.3 "Independent Review Program" does not appear to apply to this evaluation.

Section 5.2.15 "Review, Approval and Control of Procedures" states in part that it applies to documents including those which describe organizational interfaces or prescribe activities affecting safety-related structures, systems or components. These documents also include test procedures not limited to safety-related structures, systems or components. This section further states that procedures shall assure that documents, including revisions and changes, are reviewed by appropriately qualified personnel and approved for release by authorized personnel. This section goes on to require that each procedure shall be reviewed and approved prior to initial use... then continues on to require that... rules shall be established which clearly delineate the review of procedures by knowledgeable personnel other than the originator and approval of procedures and procedure changes by authorized individuals. Changes to documents shall be reviewed and approved by the same organizations that perform the original review and approval unless the owner designates another qualified organization.

Section 5.2.19.1 "Pre-operational Tests" as modified by USNRC Regulatory Guide 1.33, and Section 5.3.10 "Test and Inspection Procedures" list a host of required procedure attributes.

e. Staff evaluation of AI 6.2 shows that, in following AI 6.2:

- The licensee staff does not have to follow test procedures as written and approved. In fact, the test director can make many changes on-the-spot, at will. The NRC Notice of Violation addressed even the writing of new procedures using bits and pieces of old procedures without PORC approval.
- The licensee has introduced into the implementing instructions concepts not approved by the standards. These involve the concepts of "safety-related change to a safety-related procedure", "non-safety-related change to a safety-related procedure" and "editorial change". The licensee does not review "non-safety-related" changes prior to implementation. Changes to the test sequence and valve lineup changes are specifically called "non-safety-related".