

ENCLOSURE 1

NOTICE OF VIOLATION

Tennessee Valley Authority
Watts Bar Units 1 and 2

Docket Nos. 50-390 and 50-391
License Nos. CPPR-91 and CPPR-92

During an NRC inspection conducted August 1 through August 31, 1993, two violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR 50, Part 2, Appendix C, the violations are listed below:

- A. 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings," states that activities affecting quality shall be prescribed by documented instructions, procedures and drawings of a type appropriate to the circumstances and shall be performed in accordance with these instructions, procedures, and drawings.

Nuclear Quality Assurance Plan TVA-NQA-PLN89-A, Procedures and Instructions, Revision 3, Section 6.1, requires that quality-related activities shall be prescribed by documented procedures and instructions appropriate to the circumstances. Section 6.2, Document Control, requires that quality-related activities be performed in accordance with approved and controlled instructions, procedures, and drawings.

Contrary to the above, activities affecting quality were not prescribed by documented procedures and were not accomplished in accordance with approved procedures:

Site Standard Practice SSP-4.05, NRC Reporting Requirements, Revision 3, Appendix E, paragraph 2.1, states that determinations for potential reportability of adverse conditions in accordance with 10 CFR 50.55(e) are to be performed using screening forms and instructions similar to those contained in that appendix which can be found in key administrative control programs procedures.

1. As of August 31, 1993, SSP-4.05 was not adhered to, in that required instructions for performing potential reportability determinations were not established in administrative control program procedures, documenting nonconforming conditions using work requests, work orders, drawings, and deviations.
2. As of August 31, 1993, SSP 4.05 was not adhered to, in that reportability determinations for test deficiencies were not conducted using the screening forms.

Nuclear Quality Assurance Plan TVA-NQA-PLN89-A, Revision 3, Section 10.2.2.D, Corrective Actions for Adverse Conditions, requires that reworked items shall satisfy the original inspection and test requirements or acceptable alternatives.

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ANSI N45.2.4-1974 (IEEE 336), Installation, Inspection, and Testing Requirements for Instrumentation and Electric Equipment During the Construction of Nuclear Power Generating Stations, and ANSI N45.2.6-1974, Qualifications of Inspection, Examination, and Testing Personnel for the Construction Phase of Nuclear Power Plants require performance of inspections by certified personnel and documentation of the inspector, the type of observation, the instructions/procedures used, as well as the results.

Startup Manual Procedure SMP-9.0, Test Conduct, Revision 16, provides requirements and responsibilities for personnel involved in the conduct of all Startup and Test testing activities.

3. As of August 31, 1993, rework controls involving test deficiencies were not prescribed in procedures in that SMP-9.0 did not require rework to be in compliance with the original inspection and test requirements, or other comparable re-inspection alternatives.

SMP-9.0, paragraph 2.5.A requires that a chronological test log be maintained by the test director during troubleshooting of generic tests.

4. As of August 31, 1993, SMP-9.0 was not adhered to, in that entries were not available in a chronological log that detailed troubleshooting activities for six wiring installations reworked by the startup organization.

Site Standard Practice SSP-3.04, Corrective Action Program, Revision 10, paragraph 1.0, specifies that administrative control programs fulfill the requirement to identify and track to closure actions necessary to correct adverse conditions.

5. As of August 31, 1993, SSP-3.04 was not adhered to, in that, although test deficiencies 4 and 5 on Preoperational Test Instruction PTI-20-01 were documented on test deficiency forms, the basis for the failure to follow procedures and actions to prevent recurrence were not addressed on the test deficiency forms nor any other document.
6. As of August 27, 1993, SSP-3.04 was not adhered to, in that, although corrective action for three test deficiencies (all closed on May 17, 1993) stated that the resolution was "...accept-as-is. Vendor manual changes to follow.", no vendor manual revision request had been issued, nor was it otherwise documented or scheduled for issue.

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

- B. 10 CFR 50, Appendix B, Criterion III, Design Control, states that "measures shall provide for verifying or checking the adequacy of design, such as the performance of design reviews, by the use of alternate or simplified calculational methods..."

TVA Nuclear Quality Assurance Plan, TVA-NQA-PLN89-A, Revision 3, dated January 1, 1993, Section 7.4. cites ANSI N45.2.11-1974, Quality Assurance Requirements for the Design of Nuclear Power Plants, as the applicable standard for mandatory control of design processes. Section 4.2 of ANSI N45.2.11-1974 states: "Design analyses...shall be performed in a planned, controlled, and correct manner."

Contrary to the above, as of August 31, 1993, calculational methods used for design analysis were not implemented in a planned, controlled and correct manner in that the following four calculations contained examples of incorrect assumptions, unverified assumptions, an inadequate bounding analysis, and informal practices not defined in accordance with controlled procedures:

1. EPM-LB-090889 Revision 0, as addressed in discrepancy report (DR) 39.
2. WCG-E-085 Revision 0, as addressed in DR 17.
3. EPM-FM-320889, Revision 0, as addressed in DR 16.
4. The informal calculation documenting adequacy of soft seat material as addressed in DR 15.

These incorrect assumptions in the calculations contributed to incomplete information in decisions regarding plant equipment, and in the case of calculation EPM-FM-320889 resulted in failure to secure the position, after air flow balancing, of adjustable louvers serving safety related areas.

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

Pursuant to the provisions of 10 CFR 2.201, Tennessee Valley Authority is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Regional Administrator, Region II, and a copy to the NRC Resident Inspector, Watts Bar, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. If an adequate reply is not received within the time specified in this Notice, an

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order or demand for information may be issued as to why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

Dated at Atlanta, Georgia
this 4th day of October 1993