

ENCLOSURE 1

NOTICE OF VIOLATION

Tennessee Valley Authority
Watts Bar

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

During an NRC inspection conducted on January 25-29, 1993, and February 2-8, 1993, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C, the violation is listed below:

10 CFR 50 Appendix B Criterion III and the licensee accepted Quality Assurance Program, TVA-NQA-PLN 89-A, Nuclear Quality Assurance Plan, Revision 2, Section 7.2, Program Elements, require that measures shall be established to assure that applicable regulatory requirements and design basis, as defined in paragraph 50.2, and as specified in the license applications for those structures, systems and components to which this appendix applies are correctly translated into specifications, drawings, procedures, and instructions. The design control measures shall provide for verifying or checking the adequacy of design such as by the performance of design reviews, by the use of alternate or simplified calculational methods, or by the performance of a suitable testing program. The licensee Quality Assurance Program endorses the requirements of ANSI N45.2.11-1974, Quality Assurance Requirements for the Design of Nuclear Power Plants. This standard, Section 4.0 requires that design activities shall be prescribed and accomplished in accordance with procedures of a type sufficient to assure that applicable design inputs are correctly translated into specifications, drawings, procedures or instructions. Methods shall provide for relating the final design back to the source of design input. Additionally, the design activities shall be documented in sufficient detail to permit verification and auditing as required by this standard.

Site Standard Practice (SSP) 9.03, Design Change Control, Revision 5, contains requirements for design changes, and plant modifications based on design changes, at Watts Bar Nuclear Plant. Section 2.2.B.4 of this procedure specifies that design requirements shall be appropriately translated via design process documents (e.g. calculations or analysis) into design output documents. Additionally, Section 2.2.D.1 specifies that design output documents shall accurately reflect design requirements and shall be prepared, reviewed, and approved in accordance with the design engineering program.

Engineering Administrative Instruction EAI-3.05 Design Change Notices, Revision 10, provides requirements for the use of Design Change Notices (DCNs) at Watts Bar Plant and implements the requirements of SSP-9.03. Section 5.1.8.g of this procedure requires that the Responsible Lead Engineer shall ensure the problem solution/change is technically correct, adequate, and complete.

Contrary to the above, on December 6, 1992, DCN M21675A, Revise Fast Transfer Scheme for 6.9KV Shutdown Boards, was approved and issued for use without complying with the requirements of SSP 9.03 and EAI-3.05 in that the following design deficiencies were contained in the DCN:

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- Failure to include post-modification test acceptance criteria and analysis which demonstrated acceptable dead bus transfer time.
- Failure to provide a jumper to establish continuity in 6.9KV Circuit Breaker closing circuits.
- Failure to identify the use of a 2B-B Shutdown Board auxiliary contact in the Essential Raw Cooling Water Control Valve circuit which resulted in the possible interconnection of the 120 VAC and 125 VDC power systems.
- Failure to correctly back circle design changes involving auxiliary contacts.
- Failure to correctly identify auxiliary contacts as coming from the 2B2-B Shutdown Board.
- Failure to correctly identify a 6.9 KV Shutdown Board trip signal to the 480 V Shutdown Board bus-tie breaker.

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 at the facility that is the subject of this Notice, 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 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 8th day of March 1993