#### TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401 6N 38A Lookout Place

## OCT 25 1990

U.S. Nuclear Regulatory Commission ATTN: Document Control Desk Washington, D.C. 20555

Gentlemen:

In the Matter of the Application of ) Docket Nos. 50-390 Tennessee Valley Authority ) 50-391

WATTS BAR NUCLEAR PLANT (WBN) - NRC INSPECTION REPORT NO. 390, 391/90-20 - REPLY TO NOTICE OF VIOLATION 390/90-20-01

TVA's response to the subject violation is provided in the enclosure. If there are any questions, please telephone P. L. Pace at (615) 365-1824.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

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Mark O. Medford, Vice President Nuclear Assurance, Licensing, and Fuels

## Enclosure

cc (Enclosure):

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NRC Resident Inspector Watts Bar Nuclear Plant P.O. Box 700 Spring City, Tennessee 37381

Mr. P. S. Tam, Senior Project Manager U.S. Nuclear Regulatory Commission One White Flint, North 11555 Rockville Pike Rockville, Maryland 20852

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#### **ENCLOSURE**

## RESPONSE TO NRC NOTICE OF VIOLATION 390/90-20-01

#### DESCRIPTION OF VIOLATION

Part 50 of Title 10 of the Code of Federal Regulations, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," is implemented in part by the Nuclear Quality Assurance Plan (NQAP), paragraph 9.1.4, C, which endorses American National Standards Institute (ANSI) N45.2 and states that activities affecting quality shall be prescribed by documented instructions, procedures, or drawings of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, and drawings.

Contrary to the above, during this inspection period, the inspector observed concrete expansion anchor bolts installed in conduit supports 2-CSP-292-N1615 and -N1616 that failed to comply with Construction Process Instruction (CPI)-8.1.8-H-400 and CPI-8.1.8-C-501A because of inadequate thread engagement, but were documented as acceptable by a quality control (QC) inspector on February 16, 1990, in accordance with the referenced procedures.

#### ADMISSION OR DENIAL OF THE VIOLATION

TVA admits the violation occurred.

#### REASON FOR THE VIOLATION

The violation occurred because of a misinterpretation of the procedure and an oversight on the part of the QC inspector. WBN-CPI-8.1.8-G-100, "Expansion, Grouted, and Undercut Anchors," in a subnote requires anchor bolts to be "completely through the nut" and the "start of the thread to be level with the outside face of the nut." The inspector interpreted this to mean that the top of the bolt is to be flush with the top of the nut.

The instruction refers to WBN-CPI-8.1.8-C-501A, "Erection of Structural Steel," for final tightening. This instruction states that "all bolted connections, when properly tightened, shall exhibit visible evidence of complete threading through the nut . . . by a minimum of one thread exposed." The QC inspector failed to take into account this further instruction. The bolts found not to meet thread engagement requirements were near flush, but under the top of the nuts.

#### CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED

TVA reviewed the QC inspector's certification for inspections performed and determined that they met the requirements of TVA's certification program, Quality Management Procedure (QMP)-102.5.

#### ENCLOSURE .

# RESPONSE TO NRC NOTICE OF VIOLATION 390/90-20-01

### CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED (continued)

TVA reinspected wedge bolt anchor installations that had been inspected by the subject QC inspector. The only wedge bolts found not to meet thread engagement requirements were those bolts already identified by the findings. The anchor bolts on the identified supports were reworked and redocumented.

WBN-CPI-8.1.8-G-100 has been revised for clarity. It now has an additional instruction in the subnote which provides a method of verification of the bolt projection above the nut.

### CORRECTIVE STEPS WHICH WILL BE TAKEN TO AVOID FURTHER VIOLATIONS

The clarification of WBN-CPI-8.1.8-G-100, noted above, was made in order to avoid any further misinterpretations.

#### DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

All corrective actions were completed by October 15, 1990.