TENNESSEE VALLEY AUTHORITY
CHATTANOOGA, TENNESSEE 37401

6N 38A Lookout Place

APR 24 1990

10 CFR 2.201

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 NOS. 50-390/89-25 AND 50-391/89-23 - REPLY TO NOTICE OF VIOLATION 390/89-25-01

Enclosure 1 is TVA's response to the subject violation transmitted in NRC's letter to TVA dated February 21, 1990.

Enclosure 2 provides a list of the new commitments made in this submittal.

Delays in submitting this response were discussed with Ken Barr on March 22, 1990 and with Becky Long on April 9, 1990.

If there are any questions, please telephone G. R. Ashley at (615) 365-8527.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

Mark O. Medford, Vice President
Nuclear Technology and Licensing

Enclosures
cc: See page 2

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U.S. Nuclear Regulatory Commission

cc (Enclosures):
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ENCLOSURE 1

RESPONSE TO NOTICE OF VIOLATION
390/89-25-01

Description

10 CFR Part 50, Appendix B, Criterion III, "Design Control," states that measures shall be established to assure that the design basis for components to which Appendix B applies shall be correctly translated into specifications, drawings, procedures, and instructions. Criterion III is implemented by the Quality Assurance (QA) Topical Report, Revision 10, paragraph 17.1.3, which states that design control measures will be provided by translating TVA and industry standards and specifications into design input documents.

Contrary to the above, as of January 16, 1990, the licensee failed to establish measures to ensure that applicable regulatory requirements and design bases would be correctly translated into design input documents, in that critical installation requirements delineated in the vendor manual for the excess letdown heat exchanger were not considered or included in specifications, drawings, procedures, or instructions. This resulted in equipment installation conditions that failed to meet the vendor manual requirements.

This is a Severity Level IV Violation (Supplement II) and applies to Unit 1.

Admission of the Violation

TVA admits the violation occurred as stated.

Reason For The Violation

This violation is attributed to inadequate design specification. There was no direction to refer to the vendor manual for torque requirements. As a result, at the time of dispositioning Nonconforming Condition Report (NCR) 4491 R, which involved torquing mounting bolts where studs were welded to embedded plates for a number of installations, responsible personnel failed to note the special requirements in the vendor manual for the excess letdown heat exchanger.

Corrective Action Steps Taken And Results Achieved

Unit 1 and common heat exchangers within the scope of the QA program were reviewed for excessive torque on the foundation bolts that would prevent expansion, and only the excess letdown heat exchanger showed this condition.

Westinghouse has evaluated the effect of torquing the anchor bolts on the sliding support, and concluded that the membrane stress at the support pad/shell is within the normal allowable with a margin of more than 100 percent, and that there is no fatigue problem based on plant cycles to date.

Corrective Steps Which Will Be Taken To Avoid Further Violation

TVA will rework the foundation bolts for the excess letdown heat exchanger to meet vendor requirements. TVA will issue a design change notice (DCN) to provide the torque information on the drawing.

TVA recognizes that this violation is an example of inadequate design control by failing to address vendor requirements in design output governing installation of equipment. The Vendor Information Corrective Action Program (CAP) Plan programmatically addresses inadequate consideration of vendor requirements.

As described in Section 4.1.6 of the Vendor Information CAP Plan, TVA will confirm the adequacy of the installed configuration for vendor supplied features. This confirmation will rely, in part, on the verification of vendor requirements and corrective actions performed through the vertical slice review and the CAPs and special programs outlined in Volume 4 of the Nuclear Performance Plan (NPP).

TVA will determine by analysis the population of vendor supplied components and vendor requirements to which the results of the NPP programs can be extrapolated. For vendor engineering requirements that are not covered by analysis or the NPP programs, TVA is reviewing the vendor requirements against the design input and output requirements. Conflicts or omissions will be evaluated to determine whether physical confirmation of the adequacy of plant features is required.

Attributes that do not conform to vendor engineering requirements, as determined by analysis or physical verification, will be analyzed for extent of condition and safety significance. Required corrective action will be initiated using TVA's condition adverse to quality program.

Recurrence control is being accomplished in accordance with the Vendor Information CAP Plan by issuing new and revised procedures governing control and use of vendor documents, and by providing training on these procedures.

Date When Full Compliance Will Be Achieved

TVA will be in full compliance by September 1, 1991.

ENCLOSURE 2

LIST OF COMMITMENTS

1. TVA will rework the foundation bolts for the excess letdown heat exchanger to meet vendor requirements.

2. TVA will issue a design change notice (DCN) to provide the torque information on the drawing.