TENNESSEE VALLEY AUTHORITY
CHATTANOOGA, TENNESSEE 37401
400 Chestnut Street Tower II

October 6, 1981

WBRD-50-390/81-49
WBRD-50-391/81-47

RECEIVED
OCT 14 1981
U.S. NUCLEAR REGULATORY COMMISSION

Mr. James P. O'Reilly, Director
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Region II - Suite 3100
101 Marietta Street
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2 - PIPE SUPPORT MOUNTING DEFICIENCIES - WBRD-50-390/81-49, WBRD-50-391/81-47 - FINAL REPORT

The subject deficiency was initially reported to NRC-OIE Inspector R. V. Crlenjak on May 6, 1981 in accordance with 10 CFR 50.55(e) as NCR WBN 372BR. Interim reports were submitted on June 5 and August 14, 1981. Enclosure is our final report.

If you have any questions, please get in touch with D. L. Lambert at FTS 857-2581.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills, Manager
Nuclear Regulation and Safety

Enclosure
cc: Mr. Victor Stello, Director (Enclosure)
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, DC 20555

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ENCLOSURE
WATTS BAR NUCLEAR PLANT UNITS 1 AND 2
PIPE SUPPORT MOUNTING DEFICIENCIES
WBRD-50-390/81-49, WBRD-50-391/81-47
10 CFR 50.55(e)
FINAL REPORT

Description of Deficiency

Hangers have been installed for the component cooling and residual heat removal systems using design drawings specifying attachment to the shield building; however, the analysis isometric and its companion load tables specify attachment to the auxiliary building. In addition, hangers representing a single node point on the safety injection system have been attached to the auxiliary building for restraint in the "Z" direction and to the shield building for the "Y" direction. This difference in anchor location can introduce stresses in the pipes which have not been evaluated during the analysis. This deficiency occurred due to design employees failing to identify discrepancies between isometric and design drawings when reviewing the design drawings.

Safety Implications

This deficiency could have resulted in stresses, which were not considered in the original analysis, being introduced into the piping for the component cooling, residual heat removal, and safety injection systems. These additional stresses could have resulted in the piping failing due to fatigue failure or overstressing, thus endangering the safe operations of the plant.

Corrective Action

TVA has reviewed and corrected any drawings found to be in error. All supports located on piping in the vicinity of the auxiliary and shield buildings are being reviewed to verify that they are attached to the appropriate building. Any necessary changes to the drawings will be made on ECN 2878. Changes to the drawings will be issued and the construction modifications completed by December 1, 1981.

In order to prevent further deficiencies, responsibilities when reviewing pipe support mounting drawings will be emphasized to design employees.