TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

84 AUG 14 P1: 33 August 7, 1984

U.S. Nuclear Regulatory Commission Region II Attn: Mr. James P. O'Reilly, Regional Administrator 101 Marietta Street, NW, Suite 2900 Atlanta, Georgia 30323

Dear Mr. O'Reilly:

WATTS BAR NUCLEAR PLANT UNIT 1 - NRC-OIE REGION II INSPECTION REPORT 50-390/84-45 - RESPONSE TO VIOLATION

The subject inspection report cited TVA with a Severity Level IV Violation (390/84-45-01) in accordance with 10 CFR 2.201. Enclosed is our response to the subject violation.

If you have any questions concerning this matter, please get in touch with R. H. Shell at FTS 858-2688.

To the best of my knowledge, I declare the statements contained herein are complete and true.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills, Manager Nuclear Licensing

Enclosure

cc (Enclosure):

Mr. Richard C. DeYoung, Director Office of Inspection and Enforcement U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Records Center
Institute of Nuclear Power Operations
1100 Circle 75 Parkway, Suite 1500
Atlanta, Georgia 30339

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ENCLOSURE

WATTS BAR NUCLEAR PLANT UNIT 1 NRC-OIE REGION II INSPECTION REPORT 50-390/84-45 RESPONSE TO VIOLATION

Severity Level IV Violation - 390/84-45-01

Criterion III, Design, of 10 CFR 50 Appendix B, requires that measures to assure design control shall include provisions to assure that appropriate quality standards are specified and included in design documents.

Contrary to the above, between June 4-8, 1984, systems required to mitigate the consequences of a postulated accident were not being designed to appropriate quality standards in that two supports were improperly designed for the hydrogen collector system. Shim plates were used to support the allowable limit. As a result, these two supports may not be able to perform their intended function during a seismic event.

Admission or Denial of the Alleged Violation

TVA admits the violation occurred as stated.

Reason for the Violation

One-quarter-inch-thick shim plates between the 12-inch-diameter hydrogen collector piping and the tube steel member of the supports were inadvertently allowed to extend past the side of the tube steel as part of the original support design. These shim plates were located such that their 1/4-inch face would be in contact with 3/8-inch-thick lugs and thereby prevent the lugs from bearing against the tube steel member. The designer and checker of the supports failed to check the bearing stress in the area where the shim plates would come into contact with the lugs.

Corrective Steps Taken and Results Achieved

A steel plate has been added to each face of the tube steel member where a lug previously would have been in contact with the 1/4-inch face of the shim plate. The added plates' thicknesses are equal to the amount the shim plate protrudes past the face of the tube steel. Each lug will now bear against a minimum surface length equal to its height less the pipe gap. The adequacy of the lugs with steel plates added to the tube steel members to increase the bearing area has also been checked and documented in the support calculation packages.

The corrective action was accomplished under field change requests (FCRs) MH 3533 and MH 3534.

Corrective Steps Taken to Avoid Further Violations

A review of support drawings on this system and a sample of those on other systems indicates that this is not a recurring deficiency. It is an unusual occurrence in support design when a bearing stress failure governs. To prevent this from recurring, support designers have been made aware of this violation and have been informed of the need to check bearing stresses.

Date When Full Compliance Will Be Achieved

TVA is now in full compliance.