TENNESSEE VALLEY AUTHORITY
CHATTANOOGA, TENNESSEE 37401

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JAN 16 1987

WBRD-50-390/87-01
WBRD-50-391/87-01

10 CFR 50.55(e)

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Office of Nuclear Reactor Regulation
Washington, D.C. 20555

Attn: Dr. J. Nelson Grace

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2 - INADEQUATE SUPPORT SHOWN ON TYPICAL VALVE SUPPORT DRAWINGS - WBRD-50-390/87-01, WBRD-50-391/87-01 - INTERIM REPORT

The subject deficiency was initially reported to NRC-Region II Inspector Gordon Hunegs on December 17, 1986 in accordance with 10 CFR 50.55(e) as SCR WBN CEB 8684. Enclosed is our interim report. We expect to submit our next report on or about July 2, 1987.

If there are any questions, please get in touch with R. D. Schulz at (615) 365-8527.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

J. A. Domer

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Enclosure
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ENCLOSURE
WATTS BAR NUCLEAR PLANT UNITS 1 & 2
INADEQUATE SUPPORT SHOWN ON TYPICAL VALVE DRAWINGS
WBRD-50-390/87-01, WBRD-50-391/87-01
SCR WBN CEB 8684
10 CFR 50.55(e)
INTERIM REPORT

Description of Deficiency

TVA typical support drawings 47A054-41 and -42 for Watts Bar Nuclear Plant (WBN) provide for the support of a valve by attachment only to the upper part of the valve. The bottom of the valve is unsupported. This configuration does not comply with the support requirements for seismic qualification of affected valves. To date, TVA has identified this deficiency to be applicable only to solenoid-actuated valves attached to 3/8-inch heavy wall tubing used in radiation sampling lines, system 43. Approximately 75 installed valves are affected by the deficiency.

This deficiency resulted from a failure by responsible design personnel to have the typical support design reviewed and qualified by component qualification personnel at the time of initial design.

Safety Implications

The present design does not provide adequate support for an affected valve. The attached tubing is inadequate to restrain the dynamic mass of the valve under worst-case seismic loading conditions. As a result, the tubing could break and render the radiation sampling system incapable of performing its design function. This could result in false or inadequate information being available for operator use and, subsequently, could result in incorrect actions/responses by the operator. This could adversely affect the safety of operations of the plant.

Interim Progress

TVA is initiating engineering change notices (ECNs) for units 1 and 2 to revise the affected drawings to show adequate support for the valves. TVA also intends to add supports to the existing affected valve installations per the revised drawings.

TVA will provide the final report addressing specifics of the corrective actions and defining actions to prevent recurrence on this item to NRC on or about July 2, 1987.