TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

October 14, 1981

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 - SEISMIC ANALYSIS OF CHECK VALVE IN CVCS - WBN CEB 8007 - FINAL REPORT

The subject deficiency was initially reported to NRC-OIE Inspector M. Thomas on October 2, 1980 in accordance with 10 CFR 50.55(e). Interim reports were submitted on October 31, 1980 and January 6, February 10, March 17, May 19, and July 23, 1981. Enclosed is our final report.

If you have any questions concerning this matter, please get in touch with M. R. Wisenburg at FTS 857-2778.

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
SEISMIC ANALYSIS OF CHECK VALVE IN CVCS
NCR WBN CEB 8007
10 CFR 50.55(e)
FINAL REPORT

Description of Deficiency

During a design review, it was discovered that a 3-inch check valve was overlooked in a piping analysis of the Chemical and Volume Control System (CVCS) - analysis problem N3-62-3A. Failure to consider the weight of the check valve could result in inadequate pipe supports due to unknown seismic loading.

Safety Implications

The operation of the CVCS is essential to the safe operation of the plant because the centrigual charging pumps in the CVCS also serve as boron injection pumps in the emergency core cooling system. Failure of one or more of the CVCS piping supports could render the system inoperable, thus adversely affecting the safety of operations of the plant.

Corrective Action

TVA has reanalyzed this piping to account for the omitted check valve. Piping support designs have been modified as required to qualify the piping and associated equipment components. To prevent recurrence the appropriate design personnel have been instructed to be more thorough in their review of physical drawings.