50-390
50-391

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

November 3, 1980

1980 NOV 7 PM 4 40

US NRC DISTRIBUTION SERVICES BRANCH

DOCUMENT CONTROL DISTRIBUTION UNIT

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 - VALVE ACCELERATIONS FOR PIPING ANALYSIS - WBN CEB 8008 - FIRST INTERIM 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). Enclosed is our first interim report. We expect to provide additional information by January 13, 1981.

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

B019
S.1/1

5

ENCLOSURE

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2
VALVE ACCELERATIONS FOR PIPING ANALYSIS
NCR WBN CEB 8008
10 CFR 50.55(e)
FIRST INTERIM REPORT

Description of Deficiency

The calculation of seismic loads on certain safety-related piping system valves was contracted out by TVA to the engineering firm EDS Nuclear, Inc., in San Francisco. During a design review of the contractor's report, it was discovered that there is an apparent contradiction between TVA design criteria documents and the EDS analysis concerning allowable accelerations for valves. The TVA criterion states that valve accelerations shall be limited to 3 g's horizontal and 2 g's vertical. The EDS analysis report indicated that the allowable acceleration used in their analyses was 3.61 g's maximum for the square root of the sum of the squares combination of horizontal and vertical accelerations. EDS requested that the maximum value of 3.61 g's be permitted in their analyses. TVA approved their request, but now is questioning the correctness of the criterion interpretation.

Corrective Action

TVA is evaluating the design criteria and the correctness of the interpretation.