

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37400

830 Power Building

January 24, 1978

Mr. James P. O'Reilly, Director  
Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
Region II - Suite 1217  
230 Peachtree Street, NW.  
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2 - REPORTABLE DEFICIENCY -  
DISCREPANCY DISCOVERED IN LOCA SEISMIC ANALYSIS OF REACTOR COOLANT  
LOOP - NCR 11 - SECOND INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Region II,  
Inspector L. E. Foster, on August 15, 1977, in accordance with  
10 CFR 50.55(e). Our first interim report was submitted September 15,  
1977, with a supplement submitted October 4, 1977. Enclosed is our  
second interim report.

The final report on this deficiency will be transmitted to your  
office on or before July 15, 1978.

Very truly yours,

  
J. E. Gilleland  
Assistant Manager of Power

Enclosure

cc: Dr. Ernst Volgenau, Director (Enclosure)  
Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

ENCLOSURE

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2 - REPORTABLE DEFICIENCY -  
DISCREPANCY DISCOVERED IN LOCA SEISMIC ANALYSIS OF REACTOR COOLANT LOOP - NCR 11

SECOND INTERIM REPORT

Description of Condition

Westinghouse reported to TVA and Engineering Data Systems (EDS) that in performing the final reactor coolant loop analysis they had discovered discrepancies in their previous models. For seismic response, these discrepancies included misrepresentations of the reactor coolant pump tie rods and reactor vessel support stiffnesses. The revised seismic and LOCA analyses resulted in new displacements of the reactor coolant loop branch nozzles. The displacements are used by EDS for branch piping analysis.

Interim Progress

Westinghouse has corrected the analytical representation of the reactor coolant loop system. No support changes were required in the primary system as a result of Westinghouse's reanalysis. Using the new displacements for branch nozzles, TVA is generating new response spectra for the branch piping system. This work is almost finished. When complete, the branch piping system will be reanalyzed by EDS using this data.