TENNESSEE VALLEY AUTHORITY
CHATTANOOGA, TENNESSEE 37401
400 Chestnut Street Tower II

August 20, 1982

WBRD-50-390/82-46
WBRD-50-391/82-43

U.S. Nuclear Regulatory Commission
Region II
Attn: Mr. James P. O'Reilly, Regional Administrator
101 Marietta Street, Suite 3100
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2 - MISSPECIFICATION OF SEISMIC DISPLACEMENTS FOR STEAM GENERATORS - WBRD-50-390/82-46, WBRD-50-391/82-43 - SECOND INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector F. Long on April 30, 1982 in accordance with 10 CFR 50.55(e) as NCR WBN CEB 8208. Our first interim report was submitted on June 1, 1982. Enclosed is our second interim report. We expect to submit our next report by November 22, 1982.

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

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills, Manager
Nuclear Licensing

Enclosure
cc: Mr. Richard C. DeYoung, Director (Enclosure)
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, DC 20555

ENCLOSURE
WATTS BAR NUCLEAR PLANT UNITS 1 AND 2
STEAM GENERATOR DISPLACEMENTS AND SPECTRA
ON MAIN FEEDWATER LINES
WBRD-50-340/82-46, WBRD-50-341/82-43
10 CFR 50.55(e)
SECOND INTERIM REPORT

Description of Deficiency

In the design review of main feedwater lines, it was discovered that some erroneous displacements were used for the steam generator nozzle in main feedwater analysis problem 0600200-02-03. The cause of this deficiency is the oversight by TVA in the coordinate transformation from vendor's coordinate system to the TVA's coordinate system. At the same time it was also discovered that an incorrect seismic response spectra for steam generator No. 1 was used in main feedwater analysis problem 0600200-02-01. The cause of this second deficiency is still undetermined and is being investigated.

Interim Progress

Both problems were reanalyzed to determine the final effect on the piping and the nozzle. A careful review of all the other main feedwater analysis problems was done and it was determined no other displacement errors occurred in these analyses.

A coordinate system transformation relation was developed and a data sheet was filed with the vendor data as a means to avoid human error when transforming coordinates from vendor to TVA system. A new seismic response spectra was correctly digitized and used in the reanalysis of problem 0600200-02-01.

Both problems, 0600200-02-01 and 0600200-02-03, had similar end results. There was no overstressing of the piping or of the nozzle, but some significant changes occurred in the support loads. These loads were reviewed by design projects personnel and were determined to be acceptable.

The final report will contain the cause and action to prevent recurrence of the second deficiency.