TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

February 4, 1983

WBRD-50-390/83-02
WBRD-50-391/83-02

83 FEB 7 AID: 31

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 - IMPROPER OVERLAPPING ANALYSIS TECHNIQUES - WBRD-50-390/83-03, WBRD-50-391/83-03 - FIRST INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector P. Fredrickson on January 11, 1983 in accordance with 10 CFR 50.55(e) as NCR WBN CEB 3221 R1. Enclosed is our first interim report. We expect to submit our next report on or about June 30, 1983.

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, D.C. 20555

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ENCLOSURE

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2
IMPROPER OVERLAPPING ANALYSIS TECHNIQUES
NCR WBN CEB 8221 R1
WBRD-50-390/83-03, WBRD-50-391/83-03
10 CFR 50.55(e)
FIRST INTERIM REPORT

Description of Deficiency

Analysis overlapping techniques were not incorporated correctly in the analytical mathematical models for certain piping analysis problems. Terminal points were unconservatively overlapped using snubbers; therefore, terminal stiffness was not included in the thermal analysis. Piping systems affected are the Essential Raw Cooling Water, Component Cooling Water, Chemical and Volume Control, Safety Injection, Auxiliary Feedwater, and Reactor Coolant Systems.

Interim Progress

TVA is currently reviewing all of the analysis problems where overlapping techniques were used. This effort is being performed under Engineering Change Notices 3608 and 3013. Several analysis problems have been identified which will require reanalysis and subsequent field modifications.