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

NRC REGION

December 17, 1982 AM 10:57

WBRD-50-390/81-18
WBRD-50-391/81-17

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 - REROUTING OF HIGH-PRESSURE FIRE PROTECTION PIPING - WBRD-50-390/81-18, WBRD-50-391/81-17 - SEVENTH INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector R. W. Wright on January 30, 1981 in accordance with 10 CFR 50.55(e) as NCR SWP 8103. Interim reports were submitted on March 2 and June 3, 1981. A final report was submitted on August 14, 1981, and additional information was submitted on September 18, 1981. Subsequent interim reports were submitted on March 2, July 20, and October 15, 1982. We expect to submit our next report on or about June 22, 1983.

Three areas within the plant were identified as possibly to contain the worst case condition. Hydraulic calculations for these areas were completed and checked to reveal that head and flow deficiencies existed in the distribution system serving one of the three areas. As stated in previous reports, we identified no deficiencies in the other two areas analyzed. It was concluded that the cumulative effect of the large number of FCRs for piping changes/additions on the "schedule method" for selection of pipe sizes, which is the method we had used, was the major cause of the head/flow deficiency.

The calculations also revealed that increasing the pipe head diameter, serving this one area, to the next larger size would eliminate the deficiency. ECN 3362 will be issued to increase the fire protection pipe header size from 4 inches to 6 inches for both Units 1 and 2. The scheduled completion date of the header replacement is July 15, 1983.

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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

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