

TENNESSEE VALLEY AUTHORITY
CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

APR 18 1982
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WBRD-50-390/81-93
WBRD-50-391/81-87

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 - THERMAL RANGE INCORRECTLY ANALYZED
WBRD-50-390/81-93, WBRD-50-391/81-87 - THIRD INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector R. V. Crlenjak on October 22, 1981 in accordance with 10 CFR 50.55(e) as NCR WBN CEB 8116. Interim reports were submitted on November 24, 1981 and March 2, 1982. Enclosed is our third interim report. We expect to submit our next report by September 20, 1982.

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

Very truly yours,

TENNESSEE VALLEY AUTHORITY

James A. Damer
for 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

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ENCLOSURE

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2
THERMAL RANGE INCORRECTLY ANALYZED
WBN CEB 8116
WBRD-50-390/81-93, WBRD-50-391/81-87
10 CFR 50.55(e)
THIRD INTERIM REPORT

Description of Deficiency

The Watts Bar FSAR, section 10.4.3.2, defines a thermal range for the Auxiliary Feedwater System of 40° to 120°F. The ASME Code, section NC-3651, for classes 2 and 3 piping systems, requires that the full range of moments be evaluated. A thermal range of 70° to 120°F was used to evaluate the moments for suction and discharge piping for the auxiliary feedwater pumps by the piping stress analyst. This condition may result in unconservative stress levels. Piping analysis problems affected by the above omission are units 1 and 2, 0600-200-02-05, -06, -07, -08, 0600-200-05-01, -02; unit 1, N3-3-10A, -12A and unit 2, N3-3-1A, -2A, -9A, -17A, -19A.

The analysis errors mentioned above were discovered during an analysis review.

Interim Progress

Most of the problems mentioned above have been reanalyzed with the correct thermal range model. The remainder are being reanalyzed with the correct thermal range model.