

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401
400 Chestnut Street Tower II

February 2, 1983

WBRD-50-390/82-50
WBRD-50-391/82-47

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 - INCOMPLETE OR UNDOCUMENTED CHECKING
OF ANALYSIS - WBRD-50-390/82-50, WBRD-50-391/82-47 - SECOND INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector
R. V. Crlenjak on May 13, 1982 in accordance with 10 CFR 50.55(e) as NCR
WBN CEB 8211. Our first interim report was submitted on June 15, 1982.
Enclosed is our second interim report. We expect to submit our next report
by June 24, 1983.

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

Very truly yours,

TENNESSEE VALLEY AUTHORITY

D S Kammer

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, D.C. 20555

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ENCLOSURE

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2
INCOMPLETE OR UNDOCUMENTED CHECKING OF ANALYSIS
NCR WBN CEB 8211
WBRD-50-390/82-50, WBRD-50-391/82-47
10 CFR 50.55(e)
SECOND INTERIM REPORT

Description of Deficiency

During a routine analysis review, the following deficiencies were discovered within TVA's Division of Engineering Design, Civil Engineering Branch (CEB).

TVA Engineering procedure EN DES-EP 3.03, Design Calculations, section 2.3, states, "Safety-related design calculations shall be checked for adequacy by a qualified person or group other than the preparer."

The following piping stress analysis problems do not meet the requirements set forth in EN DES-EP 3.03 for independent checking: N3-62-7A, N3-62-8A, N3-62-9A, N3-70-9A, N3-70-10A, N3-26-5A, and N3-63-2A. The preparer also performed the checking for these problems.

In addition, an evaluation of analysis problems N3-72-2A and -5A indicate that incomplete checking was performed. The checklist on file for N3-72-2A and -5A is identified as "preliminary" and only a cursory check was performed. A "final" checklist was not completed which requires a detail check of the input and output to the computer analysis.

Other analysis problems (N3-63-4A, N3-70-8A, and N3-72-4A) reflect an independent check on the issued isometrics but do not have on file a signed off checklist.

The above situations may apply to analysis problems not yet identified.

Interim Progress

CEB has reviewed all analysis problems for which it is responsible to ensure that an independent review and a complete check has been performed. This review resulted in several analysis problems being identified as not receiving an adequate review in accordance with EN DES-EP 3.03

An independent review will be performed for those problems which were found to be improperly reviewed. Those analysis problems which indicate nonconservative pipe stresses, movements, and/or support loads will be reanalyzed and any affected drawings will be reissued.