

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401
400 Chestnut Street Tower II

WBRD-50-391/82-45

84 OCT 10 1984
October 12, 1984

U.S. Nuclear Regulatory Commission
Region II
Attn: Mr. James P. O'Reilly, Regional Administrator
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30323

Dear Mr. O'Reilly:

WATTS BAR NUCLEAR PLANT UNIT 2 - INCORRECT SUPPORTS IN ANALYSIS
OF 3-INCH CVCS LINE - WBRD-50-391/82-45 - SIXTH INTERIM REPORT FOR UNIT 2

The subject deficiency was initially reported to NRC-OIE Inspector D. Quick on May 5, 1982 in accordance with 10 CFR 50.55(e) as NCR WBN CEB 8209. Interim reports were submitted on June 3 and December 15, 1982 and May 17, September 23, and November 15, 1983. Our final and revised final report for unit 1 were submitted on September 23 and November 15, 1983. Enclosed is our sixth interim report for unit 2. We expect to submit our next report for unit 2 on or about June 21, 1985.

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

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

Records Center (Enclosure)
Institute of Nuclear Power Operations
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Atlanta, Georgia 30339

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ENCLOSURE

WATTS BAR NUCLEAR PLANT UNIT 2
INCORRECT SUPPORTS IN ANALYSIS OF 3-INCH CVCS LINE
NCR WBN CEB 8209
WBRD-50-391/82-45
10 CFR 50.55(e)
SIXTH INTERIM REPORT FOR UNIT 2

Description of Deficiency

The 3-inch letdown line in the CVCS system from the crossover leg loop No. 3 to the regenerative heat exchanger has two inline isolation valves (node points 51 and 150 of EDS Nuclear, Incorporated's, analysis 0600200-08-10) which are analyzed with rigid supports on the valve operators in one direction. The as-designed supports for these locations are snubbers. This condition results in the analysis being invalid. Additional rigid support piping analysis problems recently identified, are also affected.

At TVA's request, EDS Nuclear performed the subject valve analysis with rigid valve operator supports. TVA subsequently decided to use snubbers in the design of the valve operator supports based upon the rigid supports loads. This decision was based upon the engineering judgment of a TVA design engineer and is documented in an EDS Record of Conversation (ROC) dated April 29, 1977. Guidelines concerning the design of valve operator supports had not been issued at the time this deficiency occurred.

Interim Progress (Unit 2)

TVA's fifth interim report on this item erroneously reported that 44 unit 2 analysis problems were identified as requiring reanalysis. Our fifth report also stated that engineering change notices (ECNs) 3653 and 3474 would be used to perform the work. This too was incorrect. A recent scoping effort has identified only three problems (250-08-10, 250-09-10, and 250-09-11) which will require reanalysis to qualify the valves with supports modeled on the operators. Additionally, ECNs 4715 and 4799 have been issued to perform the required work.

TVA will qualify all valves with supports modeled on the operators per the reanalysis of the three identified problems. The analysis qualifications will be performed in accordance with Watts Bar Nuclear Plant (WBN) Rigorous Analysis Handbook, Section 304. TVA will review the new support loads to ensure design modifications are made as required.