

50-328

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

September 18, 1981 P 22

Mr. James P. O'Reilly, Director
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Region II - Suite 3100
101 Marietta Street
Atlanta, Georgia 30303



Dear Mr. O'Reilly:

SEQUOYAH NUCLEAR PLANT UNIT 2 - INCORRECT INSULATION WEIGHT USED IN PIPING
ANALYSIS - NCR SQN CEB 8008 - REVISED FINAL REPORT

The subject deficiency was initially reported to NRC-OIE Inspector C. R. McFarland on April 24, 1980, in accordance with 10 CFR 50.55(e). Interim reports were submitted on May 23, and October 16, 1980, and January 9, and February 26, 1981. Our final report was submitted on April 8, 1981. This report on unit 2 inadvertently provided corrective actions which were applicable to unit 1. (The unit 1 deficiency was handled under Licensee Event Report (LER) SQRD-50-327/80-054.) Enclosed is our revised final report which correctly discusses the corrective actions on unit 2. This matter was discussed with Inspector R. V. Crlenjak on September 15, 1981.

If you have any questions, please get in touch with D. L. Lambert at FTS 857-2581.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills

L. M. Mills, Manager
Nuclear Regulation and Safety

Enclosure

cc: Mr. Victor Stello, Director (Enclosure)
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ENCLOSURE
SEQUOYAH NUCLEAR PLANT UNIT 2
INCORRECT INSULATION WEIGHT USED IN PIPING ANALYSIS
NCR SQN CEB 8008
REVISED FINAL REPORT

Description of Deficiency

Insulation weights that were originally provided were used in the piping analysis. When the "as-constructed" insulation drawings are received, they are reviewed to determine if any significant changes were made that affect the seismic analysis of safety-related piping. Upon review of the piping analysis for unit 2, discrepancies between some actual insulation weights and the data used for the piping analysis were discovered.

Safety Implications

Had this condition remained uncorrected, some pipe supports may have been overstressed during a seismic event resulting in failures and possible pipe breaks. Therefore, this could have adversely affected plant safety.

Corrective Action

The "as-constructed" insulation drawings for unit 2 were evaluated during the implementation of NRC OIE Bulletin 79-14. The 79-14 program plan required comparison of the "as-constructed" insulation weight with the analysis weight. If the analysis insulation weight deviated from the "as-constructed" weight by a margin of 15 percent, then a discrepancy number was assigned and appropriate action was taken to resolve the discrepancy. When required, piping systems were reanalyzed, support design loads were evaluated, and, if required, design modifications were made. This work was completed as a part of Engineering Change Notice (ECN 2971) which is the ECN under which all OIE Bulletin 79-14 work was performed.

It is impossible to totally prevent the insulation weight changes which occur between the time of the piping analyses and completion of the insulation installation. To help prevent recurrence and to ensure that insulation weight changes are incorporated, the affected personnel have been requested to verify agreement between the analysis and "as-constructed" insulation drawings when doing reanalyses. Also, analyses insulation weights were compared with "as-constructed" insulation weights during implementation of NRC OIE Bulletin 79-14, thereby assuring that all insulation weight changes were reviewed.