

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

December 22, 1982

BLRD-50-438/82-21

BLRD-50-439/82-19

U.S. Nuclear Regulatory Commission
Region II

Attn: Mr. James P. O'Reilly, Regional Administrator
101 Marietta Street, Suite 100
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

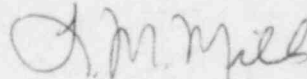
BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2 - SEISMIC ANALYSIS OF THE
AUXILIARY CONTROL BUILDING - BLRD-50-438/82-21, BLRD-50-439/82-19 -
FOURTH INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector
Ross Butcher on February 26, 1982 in accordance with 10 CFR 50.55(e) as
NCR BLN CEB 8201. This was followed by our interim reports dated
March 26 and July 22, 1982. Our third interim report was submitted on
September 20, 1982; however, it was incorrectly dated December 23, 1982.
Enclosed is our fourth interim report. We expect to submit our next report
by June 17, 1983.

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

Very truly yours,

TENNESSEE VALLEY AUTHORITY



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
BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2
SEISMIC ANALYSIS OF THE AUXILIARY-CONTROL BUILDING
NCR BLN CEB 8201
BLRD-50-438/82-21, BLRD-50-439/82-19
10 CFR 50.55(e)
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Description of Deficiency

The original seismic analysis of the Bellefonte Nuclear Plant Auxiliary-Control Building was performed in 1973 and was based on issued concrete general outline feature drawings that were not intended for use by the Division of Construction (CONST). Subsequently, outline drawings for use by CONST were issued and, in portions of the building, significant changes in the structural configuration were made. However, the seismic analysis personnel were unaware of the changes made by the later drawings. While assessing the potential changes in the original seismic analysis, that the location of the postaccident sampling facility in this structure would make, the discrepancy between the original and later outline drawings was noted. Preliminary investigations indicate potential significant changes in the structural responses. Consequently, the results of the present seismic analysis do not adequately reflect those of the current geometry. A revised seismic analysis is required.

The cause of the deficiency was a failure to coordinate design changes with appropriate organizations in accordance with the Division of Engineering Design Procedure EP 4.01.

Interim Progress

A revision to the original seismic analysis report has been completed and transmitted by official TVA memorandum to all affected organizations, and design review meetings have been held to formally discuss the new analysis with these organizations. This reanalysis has identified the need for the addition of two walls from elevation 686.0 to 704.5 feet, and Engineering Change Notice 1561 has been initiated to ensure the construction of these walls.

Other structures at Bellefonte will be evaluated against the seismic analysis models to determine if the problem extends to them. The evaluation will be documented in a detailed report. Also, existing drawing review procedures are being studied and revised to ensure that proposed structural modifications are evaluated for their effect on the original seismic analyses.

Studies are being made to determine if other TVA nuclear plants are affected.