

Bechtel Power Corporation

Engineers — Constructors

15740 Shady Grove Road
Gaithersburg, Maryland 20877
301—258-3000



October 27, 1983

Mr. Richard DeYoung, Director
Office of Inspection & Enforcement
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

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Dear Mr. DeYoung:

BLSM- 83/269
File: 0490.4
SNUPPS Project, Bechtel Job No. 10466
Design Deficiency Involving
Combination Supports for Class 1E
Electrical Cable Trays and
HVAC Ducts

On October 25, 1983, Mr. R. Baer of your office was informed by Bechtel (J. Kroehler) of a SNUPPS Project design deficiency reportable under 10 CFR 21 involving nine combination supports for Class 1E electrical cable trays and HVAC ducts which had been incorrectly classified and issued as "Seismic II/I" rather than safety-related "Q".

Five supports are located in the Reactor Building and four in the Auxiliary Building at each of the SNUPPS units - Callaway and Wolf Creek.

Seismic II/I items are those portions of structures, systems, and components whose continued function is not required, but whose failure caused by a Safe Shutdown Earthquake (SSE), could reduce the function of a Seismic Category I structure, system or component to an unacceptable safety level. The QA Program for Seismic II/I items utilizes portions of the 10 CFR 50 Appendix B program as necessary to satisfy the requirements of NRC Regulatory Guide 1.29, "Seismic Design Classification," Regulatory Position C.4.

As a result of the misclassification, the procurement, installation, and inspection for these supports was specified with less than a full safety-related QA Program. In addition to the misclassification, the five supports in the Reactor Building were analyzed seismically, employing assumptions for support rigidity that were not suitably conservative for this application.

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Bechtel concludes that these supports could be damaged during a seismic event such that the cable trays and, therefore the cables, would not have sufficient support to assure an uninterrupted supply of power to safeguards systems. The capability for safe shutdown of the plant could be compromised.

The deficiency was identified on October 21, 1983 during a joint Civil and Mechanical Engineering review of Seismic II/I HVAC duct supports in the SNUPPS scale model, when it was discovered that some of the supports being reviewed were also supporting Class 1E electrical cable trays in addition to non-category I HVAC ducts. Engineering subsequently determined that each plant has a total of twenty supports containing both cable trays and HVAC ducts. The classifications of the other eleven supports were made correctly.

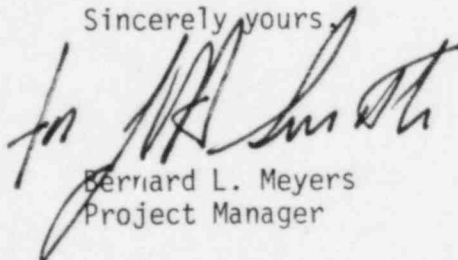
Bechtel plans to re-analyze the five supports in the Reactor Building for adequacy of seismic design. Supports will be modified if required. The procurement, installation, and inspection of the nine affected supports will also be reviewed for compliance with requirements for safety-related structures.

Mr. Baer was informed that SNUPPS plans to notify NRC Regions III and IV of this generic deficiency in accordance with the requirements of 10 CFR 50.55(e). He indicated that a separate 10 CFR 21 report would not be necessary if the requirements for 10 CFR 21 reporting are addressed in the 10 CFR 50.55(e) report.

Mr. Baer was informed that while this deficiency was detected in the SNUPPS design, it resulted from a breakdown in the exchange of design information among several Engineering disciplines, and was not necessarily unique to the SNUPPS units. The Bechtel policy is to issue Management Corrective Action Reports (MCARs) to all other Bechtel nuclear projects whenever significant deficiencies are detected, so that reviews for applicability can be performed. That practice will be observed for this deficiency.

This problem was also discussed with Mr. E. Kelly of the Region I Office.

Sincerely yours,



Berriard L. Meyers
Project Manager

JKJ/jmd

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cc: Mr. R. Baer, Office of Inspection & Enforcement, USNRC, Washington, D.C.
Dr. T. E. Murley, Director, Region I, USNRC
Mr. J. A. Keppler, Director, Region III, USNRC
Mr. J. Collins, Director, Region IV, USNRC
Mr. N. A. Petrick, SNUPPS
Mr. S. J. Seiken, SNUPPS
Mr. E. W. Creel, Kansas Gas & Electric Co.
Mr. F. D. Field, Union Electric Co.

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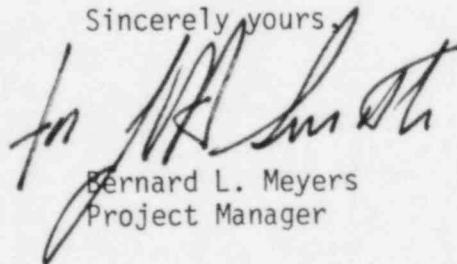
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