

SNUPPS

Standardized Nuclear Unit  
Power Plant System

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Rockville, Maryland 20850  
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January 23, 1981

SLNRC 81-003 FILE: 0491.10.2/C-202B  
SUBJ: Pipe Whip Restraint Design  
Discrepancies

Mr. Boyce Grier  
Director, Region I  
Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
631 Park Avenue  
King of Prussia, Pennsylvania 19406

Ref: STN 50-482  
STN 50-483  
STN 50-486



Dear Mr. Grier:

On December 24, 1980, NRC Region I (Mr. J. Mattia) was informed by the SNUPPS QA Manager (Seiken) of a potential generic deficiency in the analytical techniques used by the Bechtel Power Corporation in design of pipe whip restraints used for the SNUPPS standard power block. The problem reported to Mr. Mattia involves nonconservative techniques used by Bechtel in addressing the dynamic impact effects on the restraints. As a result, the possibility exists that the energy absorbing devices (Energy Absorbing Material and upset rods) do not adequately account for the postulated impact of the pipe under all conditions. The restraints involved are mostly those for pipe diameter Size 4 inches or less. Other conservatisms normally used in the analysis may possibly offset some portion of this problem; however, these conservatisms are difficult to quantify. As a result, it was concluded that the problem would be treated and reported to the NRC as a potential generic deficiency under 10CFR50.55(e) criteria. We are advised by Bechtel that this problem is unique to the SNUPPS units only.

In the Dec. 24th telecon report, it was indicated that Bechtel was proceeding to review earlier design calculations to determine specific restraints which are effected by this problem. A final report indicating the scope and extent of the problem and a plan of remedial and corrective actions were anticipated within the normal 30 day reporting period. Although these actions are well advanced, they will not be completed for another several weeks. Consequentially, a final report will not be issued until Feb. 28, 1981. Mr. Carlson, Region I, NRC, was informed on Jan. 20th of this revised schedule for issuance

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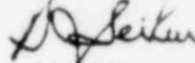
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of the final report and suggested a summary be provided to the NRC for use as an interim report. We trust the summary described herein will prove sufficient in this regard.

Very truly yours,



S. J. Seiken  
QA Manager

SJS:dck:5a26

cc: Mr. J. A. Keppler, Director, Region III USNRC  
Mr. W. Wescott, Region III, USNRC  
Mr. Karl Seyfrit, Director, Region IV, USNRC  
Mr. Victor Stello, Jr., Director, Office of Inspection and  
Enforcement, USNRC, Washington, D.C.  
T. Vandell, Wolf Creek Resident Inspector, USNRC  
W. Hansen, Callaway Resident Inspector, USNRC