



**PUBLIC
SERVICE
INDIANA**

S. W. Shields
Senior Vice President -
Nuclear Division

November 18, 1983
S83-32
SVP-0159-83

Mr. James G. Keppler,
Regional Administrator
U. S. Nuclear Regulatory Commission
Region III
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Docket Nos.: STN 50-546
STN 50-547
Construction Permit Nos.:
CPPR - 170
CPPR - 171

Marble Hill Nuclear Generating Station - Units 1 and 2

Dear Mr. Keppler:

On July 1, 1983, Mr. L. G. Yeager of Public Service Company of Indiana, Inc. (PSI) notified your office of a potentially reportable item as required by 10 CFR 50.55(e). A PSI audit of Sargent & Lundy (S&L), PSI's architect engineer, identified two findings involving the use of incorrect input values in design calculations. The Marble Hill piping design specification for the Containment Spray System gave a system temperature of 300°F. However, the Marble Hill FSAR indicated a system temperature of 260°F. It was later determined that the temperature of 260°F was correct. The A.S.M.E. Boiler and Pressure Vessel Code Section III, Appendix I, 1974 Edition through the Summer 1976 Addenda states that the allowable stress for SA-312 TP-304 material at 260°F is 17,080 psi. Contrary to this, S&L used an allowable stress of 17,650 psi at 210°F in the Marble Hill LCS01 Revision 3 dated May 28, 1981 and LCS02 Revision 1 dated May 28, 1981 piping stress calculations. These calculations are for specific analytical subsystems of the Unit 1 Containment Spray System. The resultant decrease in allowable stress to 17,080 psi in the calculations means that prior to the audit finding, the original value of 17,650 psi used by S&L could have potentially allowed stresses in excess of A.S.M.E. Code requirements. These types of situations could potentially allow a situation to arise whereby the safe operations of the plant could be adversely affected. The second finding involved multiple problems dealing primarily with incorrect thermal and seismic header displacements used in the analysis of subsystem LCS06.

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Letter: J. G. Keppler

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Sargent & Lundy has reviewed 68 additional stress reports for design inconsistencies to determine the scope of the problem. PSI has requested Sargent & Lundy to do additional work pertaining to the second finding. PSI submittal of a final report will await satisfactory disposition and closeout of both findings. If any impact on issued piping or supports is determined to exist, appropriate corrective action will be taken.

This letter is intended to fulfill the requirements of an interim report as required by 10 CFR 50.55(e). A further report will be filed on or before February 10, 1984. If you have any questions regarding this matter, please contact me at your convenience.

Sincerely,

A handwritten signature in cursive script, appearing to read 'S. W. Shields', with a large flourish at the end.

S. W. Shields

SWS/LGY/bak

cc: Director of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

J. E. Konklin
J. F. Schapker