



Pennsylvania Power & Light Company

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Bruce D. Kenyon
Vice President-Nuclear Operations
215 / 770-4378

December 2, 1982

Mr. Thomas T. Martin, Director
Division of Engineering and Technical Programs
U.S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

SUSQUEHANNA STEAM ELECTRIC STATION
NRC INSPECTION OF JULY 21-23, 1982
REPORT NO. 50-387/82-31
ER 100450 FILE 840-4
PLA-1413

Dear Mr. Martin:

Reference is to your letter of November 2, 1982, which forwarded IE Inspection Report No. 50-387/82-31 and "APPENDIX A, NOTICE OF VIOLATION."

Your notice advised that PP&L was to submit within thirty (30) days of the date of the letter, a written reply addressing (1) the corrective steps which have been taken and the results achieved; (2) corrective steps which will be taken to avoid further violations; and (3) the date when full compliance will be achieved.

The "NOTICE OF VIOLATION" cites three (3) violations which are stated below, and each is followed by its corrective action response.

1. Violation:

10 CFR 50, Appendix B, Criterion III, requires that design control measures shall include provisions to assure that appropriate quality standards are specified and included in design documents; and deviations from such standards are controlled. Measures shall also be established for selection and review for suitability of materials, parts, equipment, and processes that are essential to the safety-related functions of the structures, systems, and components.

The Susquehanna PSAR, Appendix "D", Quality Assurance Program, D.3.2.2a, requires that the Project Engineer assure that drawings and specifications conform to the design bases.

Bechtel drawing "Detail 600" used to install "Q-listed" (safety-related) pipe supports requires that supports of this design provide 3-directional restraint.

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Contrary to the above, on or before July 21, 1982, the design and installation of the safety-related anchors shown on "Detail 600, SPA 600, and SPA 1312" were inadequate for the intended use in that the clamps, as installed, did not provide positive interferences to the pipe to resist axial and torsional slippage. The fabrication tolerances and the improper installation of bolts rendered the clamps unable to fulfill their safety-related function.

Response:

(1) Corrective steps which have been taken and results achieved:

An investigation was conducted to review the existing installations of Detail 600 (the correct drawing number for "Detail 600" is SP-2013), SPA 600, and SPA 1312 anchors. After clarification of the necessary installation/inspection criteria to ensure sufficient contact to resist axial and torsional slippage, the anchors were reworked as necessary. Calculations were performed to justify the shimming of the anchors in order to enable them to carry the required load. These calculations showed that all stresses are acceptable.

PP&L has performed a 100% inspection following all required rework and has verified contact between the pipe and the anchor as well as proper gap between the two halves of the anchor.

Detail 600, SPA 600, and SPA 1312 have been revised as necessary, and they now incorporate applicable dimensional tolerances including shimming and bolting requirements.

(2) Corrective steps which will be taken to avoid further violations:

Unit 2 small pipe hanger design which requires the use of SPA 600 or SPA 1312 (Detail 600 has been deleted from use on Unit 2) will have the hanger's unique detail drawing incorporate all information specified in SPA 600 or SPA 1312. This requirement will assure that all information necessary to fabricate, install, and inspect this type of anchor will be available on the hanger's unique detail drawing without the need to reference SPA 600 or SPA 1312.

(3) The date when full compliance will be achieved:

As a result of completion of the corrective action stated above, PP&L is now in full compliance.

2. Violation:

10 CFR 50, Appendix B, Criterion VI, requires that the document control measures shall assure that documents, including changes, are reviewed for adequacy and approved for release by authorized personnel and are distributed to and used at the location where the prescribed activity is performed.

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The Susquehanna PSAR, Appendix "D", Quality Assurance Program, D.3.3.4, requires that the project field organization will implement procedures that will control the distribution of drawings and assure that obsolete drawings are destroyed.

Contrary to the above, on or before July 21, 1982, a design change for safety-related pipe supports issued in December, 1981, "SPA 600" superseding "Detail 600" was not distributed to the field, thus the installation and inspection of this type of support continued to be done in accordance with the superseded drawing.

Response:

(1) Corrective steps which have been taken and results achieved:

A review of SPA 600 and Detail 600 anchors was undertaken. All differences between SPA 600 and Detail 600 were reconciled with the design requirements. An FCR was issued against Detail 600 and SPA 1312 to provide instructions which ensured adequate bearing surface between anchor and pipe.

(2) Corrective steps which will be taken to avoid further violations:

For Unit 2, all small pipe support drawings except those included in the large pipe coupled analysis (as defined in the SFHO plant design small pipe scope document) will be designed in the field.

Field Procedures FP-P-22, rev. 0 (for small pipe); FP-P-20, rev. 3 (for large pipe); FP-G-4, rev. 19; and FP-P-11, rev. 6 reflect the changes made to assure the expeditious processing of drawings received from SFHO or originated in the field.

(3) The date when full compliance will be achieved:

As a result of completion of the corrective actions stated above, PP&L is now in full compliance.

3. Violation:

10 CFR 50, Appendix B, Criterion II, requires that the QA program shall take into account the need for special controls, processes, test equipment, tools, and skills to attain required quality; and shall provide for indoctrination and training of personnel performing activities affecting quality as necessary to assure that suitable proficiency is achieved and maintained.

The Susquehanna PSAR, Appendix "D", Quality Assurance Program, D.2.10, requires that the inspection program verify conformance with specifications and drawings.

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Contrary to the above, on July 22, 1982, the inspector identified that the licensee's follow-up inspection to determine the acceptability of safety-related pipe supports did not identify all the unacceptable supports. Anchor (SP-HCC-137-2-15) inspected and accepted by the licensee's QC was found by the inspector to be a deficient installation.

Response:

- (1) Corrective steps which have been taken and results achieved:

This violation occurred as a result of PP&L-QC performing the support inspections with instructions and acceptance criteria which had not been clearly defined on the Work Authorization Package. Subsequent to the identification of this violation by the NRC Inspector, PP&L-Engineering and Bechtel Engineering established the necessary criteria which ensured that the original design intent would be met. The detailed inspection criteria included gap tolerances, shim sizes and locations, and contact requirements.

A 100% reinspection was made to assure that all supports meet the proper design criteria.

- (2) Corrective steps which will be taken to avoid further violations:

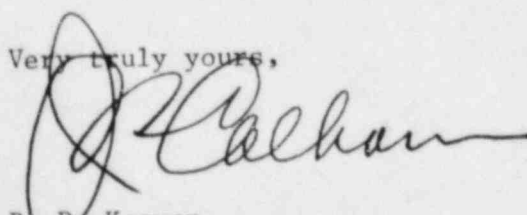
A training session has been conducted by the Supervisor-QC for PP&L QC personnel relative to the need for assuring that adequate inspection criteria have been identified prior to commencing inspection activities.

- (3) The date when full compliance will be achieved:

As a result of completion of the corrective action stated above, PP&L is now in full compliance.

We trust the Commission will find our response acceptable.

Very truly yours,


for B. D. Kenyon

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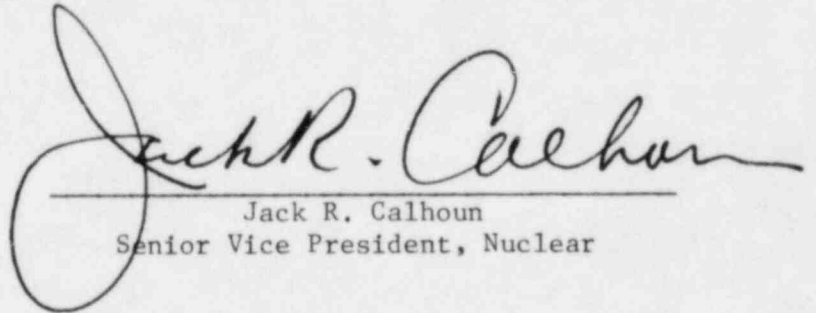
Attachment

cc: Mr. Gary G. Rhoads
U. S. Nuclear Regulatory Commission
P.O. Box 52
Shickshinny, PA 18655

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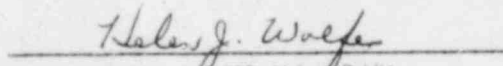
COMMONWEALTH OF PENNSYLVANIA)
: SS
COUNTY OF LEHIGH)

I, Jack R. Calhoun, being duly sworn according to law, state that I am Senior Vice President, Nuclear, of Pennsylvania Power & Light Company and that the facts set forth on the attached response by Applicants to the NOTICE OF VIOLATION dated November 2, 1982, are true and correct to the best of my knowledge, information and belief.



Jack R. Calhoun
Senior Vice President, Nuclear

Sworn to and subscribed
before me this *2nd* day
of *December* 1982.



HELEN J. WALTER, Notary Public
Allentown, Lehigh County, Pennsylvania
My Commission Expires April 4, 1983