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Bruce D. Kenyon
Vice President-Nuclear Operations
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AUG 17 1984

Mr. Stewart D. Ebnetter, Chief
Engineering Programs Branch
U.S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

SUSQUEHANNA STEAM ELECTRIC STATION
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION
ON IE BULLETIN 83-07
ER 100450/100508 FILE 842-03
PLA-2276

Docket No. 50-387
50-388

Reference: (1) Chapter 17, Susquehanna Steam Electric Station FSAR.

Dear Mr. Ebnetter:

This letter provides PP&L's response to your request for additional information under IE Bulletin 83-07, "Apparently Fraudulent Products Sold by Ray Miller, Inc."

PP&L's interpretation of the general concern raised by IE Bulletin 83-07 is that fraudulent practices by equipment suppliers, if undetected, may adversely affect the safe operation of Susquehanna. PP&L employs a comprehensive and rigorous quality assurance program. This program, by itself, helps to mitigate or prevent any impact on the safe operation of the plant by fraudulent practices of suppliers. To provide additional assurance, PP&L has developed two programs which are specifically tailored to detect fraud in certain classes of material (e.g. unfabricated metal products) which we believe to be more susceptible to misrepresentation. Both of these programs utilize testing on a sampling basis to demonstrate and confirm the quality associated with a particular item.

The first of these programs is a short term duration random sampling and testing program designed to provide assurance that bulk materials from the Susquehanna architect-engineer's construction phase inventory are of sufficient quality to meet the needs of the purpose for which they are intended. More information on this program is provided in Attachment 1 to this letter. The second program is a long term action designed to detect and mitigate fraudulent actions by future suppliers of unfabricated metal products. Additional information on this long term program is provided in Attachment 2.

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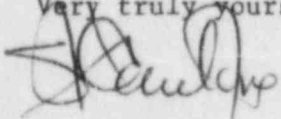
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Mr. Stewart D. Ebnetter

PP&L believes that the two programs described above will provide a second line of assurance of component quality. The procurement control provisions of PP&L's Operational QA (OQA) program are seen as the first line and principal element in our capability to detect fraudulent products or practices. A detailed description of PP&L's OQA program is provided in Reference (1).

PP&L's Procurement and Receipt Inspection elements within the Nuclear QA (NQA) organization have been apprised of and are sensitive to the fraudulent practices identified in IE Bulletins 83-06 and 83-07. These organizations and other elements of PP&L NQA are responsible under the provisions of the OQA Program for assessing the conformance of items and attendant documentation being supplied with the requirements of the procurement documents and for a determination that the documentation supplied correlates with and is representative of the items supplied. Such assessments/determinations are accomplished by NQA Procurement as an integral part of their performance of supplier evaluations, insitu audits of suppliers, and customer "Hold Points" as specified in selected procurement documents and by NQA Receipt Inspection as part of the receipt inspection process. Any instance of apparently fraudulent products are rigorously investigated to establish, to the extent possible, the scope of the problem and the impact on safety and plant operations while controlling such items as nonconforming.

Based on the above, PP&L feels confident that fraudulent practices by material suppliers will not adversely affect the safe operation of Susquehanna. We trust the Commission will find this response acceptable.

Very truly yours,



for B. D. Kenyon
Vice President-Nuclear Operations

Attachment 1: Short Term Program
Attachment 2: Long Term Program

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

Mr. R. H. Jacobs - NRC Sr. Resident Inspector

Attachment 1

Short Term Program

Program Purpose: To detect and mitigate fraudulent actions by suppliers of material known to be prone to fraudulent representation.

Program Scope: As part of a larger program for the transfer of material in the Bechtel inventory, additional record reviews and/or physical testing was done on a sampling basis on those items prone to misrepresentation by vendors. The results from this testing provide an indication of the quality of installed material since the test samples were drawn from the same source as the material actually installed in the plant.

Program Provisions

1. A review was conducted to identify a specific scope of materials susceptible to misrepresentation by vendors. As part of this process industry literature, society bulletins, NRC publications, Susquehanna QA/QC records and other sources were reviewed.
2. A sampling plan was developed for material testing based upon the following.
 - a. A review of appropriate material standards (ASTM etc.) and project specifications to determine the basis for the manufacturers testing program.
 - b. The number and type of samples were selected based on engineering judgment of the following.
 - (1) most frequently used sizes
 - (2) largest quantity of a type used
 - (3) original manufacturing quality standards
 - (4) potentially deficient features of the material
 - c. Retesting for materials which do not pass the original testing was in accordance with the applicable material standard (ASTM, etc.).
3. As a result of 1. and 2. above materials under the following project specifications were selected for testing as indicated.
 - a. C-16: Miscellaneous Steel

Samples from the largest two, randomly selected lots of each of the following:

 - (1) Structural Steel: 2 - test coupons for tensile test
 2 - test coupons for chemical analysis

- Samples taken from the same heat but from different pieces of steel
- References: ASTM A-6, ASTM A-36
- (2) Machine Bolts & Nuts: Samples per ASTM A-307
- (3) High Strength Bolts: Samples per ASTM A-325
- (4) Tubing: Samples per ASTM A-500
- (5) Miscellaneous Steel: 2 - samples per lot test per the ASTM Standard stated in C-16

Testing was in accordance with the applicable ASTM Standard for each of these items. Each sample was tested for chemical and physical properties. The materials were found to conform to the requirements of the applicable standard.

b. C-19: Shear Studs

One sample from two randomly selected lots or heats of the following size:

3/4" 0

Each sample was tested for adequacy of chemical and physical properties to meet the requirements of ASTM A-108-81 Grade 1015, and for compliance with the mill test reports and certificates of conformance of record. The testing results were satisfactory.

c. C-72: Expansion Anchors

Samples from one randomly selected lot or shipment of each of the selected lot or shipment of each of the following types and sizes of anchors:

Hilti Kwik-Bolt : 5/8" 0, 3/4" 0

Phillips Wedge : 1/2" 0, 3/4" 0

Phillips Sleeve : 1/2" 0, 3/4" 0

Each sample was tested for conformance to the requirements of Federal Specification FF-S-325. The Phillips Sleeve Expansion Anchors satisfactorily passed testing. Testing of the Hilti Kwik-Bolt and Phillips Wedge Expansion Anchors was not completed due to test block concrete failure before the specified proof loading for the anchors was reached. Those tests will be rerun with more substantial test blocks. Based upon our extensive construction testing program for expansion anchors, PP&L feels confident that the testing will ultimately confirm that these anchors are accurately represented by the manufacturers documents.

d. C-92: Spot-Welded Strut Material

Two randomly selected samples from one randomly selected lot or heat of each of the following:

- (1) Unistrut single channel
- (2) B-Line Systems Channel

Each sample was tested for conformance to the specified ASTM standard referenced in the material requirements of Specification C-92. The channels satisfactorily passed testing.

e. J-709: Instrument Tubing

One randomly selected sample of the following size of tubing:

3/8" O.D. x 0.065 SMLS, Stainless Steel Grade 304

Each sample was tested for chemical and mechanical conformance to the requirements of ASTM A-213 and the flare & flattening requirements of ASTM A-450. The testing results were satisfactory.

f. E-132: Cable Tray (Safeguards)

The following randomly selected samples from one randomly selected lot of cable tray:

- (1) 1 - Section of 4-inch tray
- (2) 1 - Section of 6-inch tray

Each sample will be tested for conformance with the requirements of NEMA Standard VE-1-1979. The testing results were satisfactory.

g. M-204: Nuclear Service Piping

Two randomly selected samples from each of two randomly selected 10-foot lengths of pipe.

Schedule 80 Pipe was selected and tested to the requirements of ASTM/ASME SA-106 Grade B. The test results were satisfactory.

Schedule: All testing is complete except for the proof load testing of the Hilti Kwik-Bolt and Phillips Wedge Expansion Anchors. This testing was terminated during the initial run due to concrete failure in the testing apparatus. The expansion anchors did not fail during the testing. The testing will be repeated and results are expected by the end of 1984.

All other testing proceeded normally and the test results conformed to the relevant product specifications. The test results are available for NRC review upon request.

Attachment 2

Long Term Program

Program Purpose: To detect and mitigate fraudulent actions by suppliers of material known to be prone to fraudulent representation.

Program Scope: Unfabricated metal products.

Program Provisions:

1. All intended procurements of unfabricated metals shall be reviewed to the following criteria. Those procurements that meet these criteria shall be subjected to the remaining provisions of this program as they are considered to be most prone to misrepresentation or fraud.
 - a. The material is to be procured from a supplier who is other than the manufacturer.
 - b. The material will not be permanently marked by the manufacturer with the manufacturer's unique identification.
 - c. The supplier will be required by the procurement documents to provide Certified Test Documentation representative of the specific material being supplied.
 - d. The lot size procured is sufficiently large to justify a sampling testing program upon receipt.
2. The procurement documents for material judged to meet the criteria defined in 1. above shall have a provision incorporated to inform the supplier that these materials will be subject to confirmatory testing by the buyer upon receipt on a random sampling basis, this testing to confirm the validity of the Certified Test Documents being supplied.
3. Upon receipt of material procured under the terms established in 2. above, NQA Receipt Inspection shall determine if a sample of the material is to be tested. If it is selected, the lot material shall be maintained on HOLD, a sample selected, and arrangements made to have the proper testing performed. This testing would be done by PP&L or an external testing lab under contract to PP&L. With appropriate administrative controls for traceability, this material can be released for use without waiting for test results.
4. Test failures would have to be investigated through PP&L Procurement with the supplier to determine if misrepresentation or fraud was a factor. Further sampling and testing may well be required to further establish a basis for a claim of misrepresentation or fraud.

Schedule: This program is scheduled to be implemented September 1, 1984.