July 28, 1980

Mr. Robert T. Carlson
Chief RC & ES Branch
U. S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, Pennsylvania 19406

SUSQUEHANNA STEAM ELECTRIC STATION
NRC INSPECTION REPORT 387/80-04 & 388/80-02
ERS 100450/100508 FILE 840-4
PLA-516

Dear Mr. Carlson:

Reference is to your letter of May 29, 1980 which forwarded IE Inspection Report 387/80-04 and 388/80-02 "Appendix A, Notice of Violation".

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

The Notice of Violation (Infraction) states as follows and the corrective measures are detailed below:

"locfr50, Appendix B, Criterion VII, states, in part: "Documentary evidence that material and equipment conform to the procurement requirements shall be available at the nuclear power plant...prior to installation or use of such material and equipment."

The Susquehanna PSAR, Section D.3.3.5, states, in part: "The quality assurance requirements include...vendor preparation and maintenance of appropriate test...records, certificates and other quality assurance documentation and vendor submittal of quality control records considered necessary for purchaser retention..."

The Bechtel Quality Assurance Manual Section III, Appendix 2, WFMC-1 Table 2, Note 7, states, in part: "For austenitic stainless steel welding material (300 series), a chemical analysis shall be performed for the elements listed below.

CR-Ni Stainless Material C, Cr, Mo, Ni, Mn, Si, P, S, (300 Series) V, Cb + Ta, Ti, Cu."

Contrary to the above, as of April 18, 1980, no documentary evidence was available at the plant for 300 series welding material, heat numbers 302171 and 7-55860 and others subsequently identified by the

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licensee, to verify vendor completion of tests for all elements specified. As a result at least one field weld was completed with the uncertified welding material."

(1) CORRECTIVE STEPS WHICH HAVE BEEN TAKEN AND THE RESULTS ACHIEVED:

It was determined that the two heats cited by the NRC were procured by Bechtel from weld rod at the Limerick Jobsite. The rod had been purchased from that source because it could not be obtained from normal sources of supply within the required time frame. Although the material in question was received at SSES in August '74, it had initially been received at Limerick as early as January '72. A review was also made of other filler material received on this purchase order, (F-3182) and it was determined that a total of eleven heats were discrepant in that trace elements required by ASME III, NB-2432.1 were not reported. These eleven heats of weldrod involved a total of 2313 pounds, of which twenty pounds are of one heat which is still available at this date. Of the two heats identified by the inspector, neither had been used for ASME welds or in safety related applications.

After contacts with the original suppliers of the weldrod proved negative with regard to the availability of trace element content, an investigation was made which established that the bulk of the weldrod had been used on non-safety related, non-ASME welds; however, five welds, within the QA Program, had been made using rod from two of the eleven heats. This was determined by reviewing the weldrod disbursal log books which are maintained in each of the jobsite rod rooms. Although not required to do so by Bechtel's existing program, these log books, since 1977, have routinely identified the heat numbers of the weldrod used to make a specific weld. A review of welding records for the time period prior to 1977 (that not covered by the aforementioned log book) disclosed that only two ASME stainless welds were made. These two welds are now considered to be quality indeterminate since the heat numbers of the weldrod utilized could not be established.

NCR 5707 was then issued to document the following:

- (a) Eleven heats of discrepant weldrod.
- (b) Five welds made with above weldrod 3 welds of which were made from the lot of rod which has residual material being held in segregated storage.
- (c) Two welds whose filler material could not be determined.

The twenty pounds of weldrod which remained on site were placed in the weldrod storage area of the jobsite warehouse and identified with an NCR Hold Tag. This storage area is maintained in a locked condition and has a posted access list limited to eight individuals. In addition, each of the welds noted above was identified with an NCR Hold Tag.

NCR 5707 has been dispositioned to require a chemical analysis of filler material that remains on site and chemical analyses of samples taken from actual welds made with heats of weldrod for which there is no remaining weldrod.

Pursuant to the above actions, Bechtel QA performed a monitoring activity to determine if the problem extended to other purchase orders and/or welds. Early implications are that two additional heats of filler material may be involved. QA issued QAR-F-611 requesting a more comprehensive review of weldrod purchase orders and material test reports to be performed by QC and Field Engineering.

(2) CORRECTIVE STEPS WHICH HAVE BEEN TAKEN TO AVOID FURTHER ITEMS OF NONCOMPLIANCE:

All weld filler metal certifications are reviewed at receipt in accordance with BQAM, Appendix 2 and QCI 8856/R-1.00. This review is performed by the lead QC welding engineer, who by virtue of his involvement with this infraction and the resultant NCR and QAR, has been alerted to the potential problems in the area of material test report review.

(3) DATE WHEN FULL COMPLIANCE WAS ACHIEVED:

- (a) Resolution of QAR-F-611 to be accomplished by 08/21/80.
- (b) Resolution of NCR 5707 to be accomplished by 09/30/80.
- (c) Closeout of this infraction to be accomplished by 09/30/80.

Very truly yours,

A. R. Sabol

Manager-Nuclear Quality Assurance

ARS:mcb

cc: Mr. Robert M. Gallo

U. S. Nuclear Regulatory Commission

P.O. Box 52

Shickshinny, Pennsylvania 18655



UNITED STATES NUCLEAR REGULATORY COMMISSION REGION I 631 PARK AVENUE

KING OF PRUSSIA, PENNSYLVANIA 19406

MAY 29 1980

Pennsylvania Power & Light Company ATTN: Mr. Norman W. Curtis Vice President Engineering and Construction (N-4) 2 North Ninth Street Allentown, PA 18101

Gentlemen:

Subject: Combined Inspection Nos. 050-387/80-04 and 050-388/80-02

This refers to the inspection conducted by Mr. R. M. Gallo of this office on March 3, 1980 to March 12, 1980, and March 20, 1980 to April 18, 1980, at Susquehanna Steam Electric Station, Units 1 and 2, Salem Township, Pennsylvania of activities authorized by NRC License Nos. CPPR-101 and CPPR-102, and to thediscussions of our findings held by Mr. R. M. Gallo with Mr. A. R. Sabol of your staff of your staff at the conclusion of the inspection.

Areas examined during this inspection are described in the Office of Inspection and Enforcement Inspection Report which is enclosed with this letter. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations by the inspector.

Based on the results of this inspection, it appears that one of your activities was not conducted in full compliance with NRC requirements, as set forth in the Notice of Violation, enclosed herewith as Appendix A. This item of noncompliance has been categorized into the levels as described in our correspondence to you dated December 31, 1974. This notice is sent to you pursuant to the provisions of Section 2.201 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations. Section 2.201 requires you to submit to this office, within thirty (30) days of your receipt of this notice, a written statement or explanation in reply including: (1) corrective steps which have been taken by you and the results achieved; (2) corrective steps which will be taken to avoid further items of noncompliance; and (3) the date when full compliance will be achieved.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosures will be placed in the NRC's Public Document Room. If this report contains any information that you (or your contractor) believe to be proprietary, it is necessary that you make a written application within 20 days to this office to withhold such information from public disclosure. Any such application must be accompanied by an affidavit executed by the owner of the information, which

identifies the document or part sought to be withheld, and which contains a statement of reasons which addresses with specificity the items which will be considered by the Commission as listed in subparagraph (b) (4) of Section 2.790. The information sought to be withheld shall be incorporated as far as possible into a separate part of the affidavit. If we do not hear from you in this regard within the specified period, the report will be placed in the Public Document Room.

Should you have any questions concerning this inspection, we will be pleased to discuss them with you.

Sincerely,

Robert T. Carlson, Chief

Reactor Construction and Engineering

Support Branch

Enclosures:

1. Appendix A, Notice of Violation

2. Office of Inspection and Enforcement Combined Inspection Report Numbers 387/80-04 and 388/80-02

cc w/encl: -

A. R. Sabol, Manager, Nuclear Quality Assurance

W. E. Barberich, Licensing Engineer

S. H. Cantone, Superintendent of Plant