

PHILADELPHIA ELECTRIC COMPANY

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JOHN S. KEMPER  
VICE PRESIDENT  
ENGINEERING AND RESEARCH

JUN 26 1981



Mr. Boyce Grier, Director  
United States Nuclear Regulatory Commission  
Office of Inspection and Enforcement, Region I  
631 Park Avenue  
King of Prussia, PA 19406

SUBJECT: USNRC IE Region Letter dated June 1, 1981  
RE: Site Inspection of April 1-30, 1981  
Inspection Report No. 50-352/81-06 & 50-353/81-05  
Limerick Generating Station - Units 1 and 2

FILE: QUAL 1-2-2 (352/81-06 & 353/81-05)

Dear Mr. Grier:

In response to the subject letter regarding items identified during the subject inspection of construction activities authorized by NRC License Nos. CPPR-106 and -107, we transmit herewith the following:

Attachment I - Response to Appendix A

Also enclosed as required by the Notice of Violation, is an affidavit relating to the response.

Should you have any questions concerning these items, we would be pleased to discuss them with you.

Sincerely,

*John S. Kemper*

JPE:drd  
Attachment

Copy to: Director of Inspection and Enforcement ✓  
United States Nuclear Regulatory Commission  
Washington, D.C. 20555

J. P. Durr, USNRC Resident Inspector

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COMMONWEALTH OF PENNSYLVANIA :  
COUNTY OF PHILADELPHIA : ss.

JOHN S. KEMPER, being first fully sworn, deposes  
and says:

That he is Vice President of Philadelphia Electric  
Company, the holder of Construction Permits CPPR-106 and  
CPPR-107 for Limerick Generating Station Units 1 and 2; that  
he has read the foregoing Response to Inspection Report  
No. 50-352/81-06 and 50-353/81-05 and knows the contents thereof;  
and that the statements and matters set forth therein are true  
and correct to the best of his knowledge, information and belief.

John S. Kemper

Subscribed and sworn to  
before me this 26<sup>th</sup> day  
of June, 1981.

Elizabeth H. Boyer  
Notary Public  
ELIZABETH H. BOYER  
Notary Public, Phila., Phila. Co.  
My Commission Expires Jan. 30, 1985

## ATTACHMENT I

### RESPONSE TO APPENDIX A

#### Violation - A

10 CFR 50, Appendix B, Criterion XVI, states, in part, that: "Measures shall be established to assure that conditions adverse to quality .... are promptly identified and corrected."

The Limerick PSAR, paragraph D.4.12, states, in part: "The program shall provide input for the initiation of corrective action and followup as appropriate."

The Limerick Quality Assurance Plan, Volume 1, Appendix S, "Procedure for Processing Field Initiated Finding Reports", paragraph S-5.1.7, states: "The Responsible Organization shall take or have corrective action taken ....".

Contrary to the above, welding inadequacies were not properly corrected; in that Field Finding Report N-173, issued on November 1, 1979 for corrective action on an NRC finding which resulted in the January 11, 1980 forwarding of a citation for noncompliance with fire damper welding requirements, was improperly closed out by the architect-engineer and that closure was accepted by the licensee on February 6, 1980. Closure was based on contractor rework of fire damper installations to assure compliance with the approved Field Change Request FCR-C6351 requirement for alternate, interim welding of fire damper exterior welds which do not meet accessibility requirements and upon future fire damper installation in accordance with FCRC6351 or an alternate acceptable method. NRC inspection in April 1981 disclosed that fire protection dampers FPD-202-3, FPD-201-31, and FPD-202-44 had exterior welds without sufficient access for inspection.

This is a Severity Level IV Violation (Supplement II.D.1) applicable to CPPR-106.

#### Response to Violation

Corrective actions taken by the Licensee to ensure that identified Items of Noncompliance will be completely corrected and will not recur were:

1. A review was performed on the Licensee responses since 1979 to NRC Items of Noncompliance. Any response which committed to future actions was followed up to ensure that the actions were satisfactorily accomplished.
2. Philadelphia Electric Company Finding Report N-173 was initially closed out based on a commitment by the HVAC Subcontractor to perform a reinspection of all previously installed fire dampers. In the future, all finding reports generated as a result of NRC Items of Noncompliance with acceptable resolutions will not be closed out until the corrective actions have been satisfactorily accomplished and verified.

In addition to the above actions, the HVAC Subcontractor has inspected all 148 installed trap door fire dampers to determine if the welds were accessible for inspection. Any welds found to be inaccessible for inspection were fixed in accordance with the option allowed by Drawing C-616. Eleven (11) of the inaccessible welds were determined, due to size limitations and existing interference problems, to be neither accessible for inspection nor fixable per the allowed option of Drawing C-616. These eleven were evaluated and dispositioned as acceptable "use-as-is" by Bechtel Project Engineering since they will meet the actual design requirements.

The corrective actions taken by the HVAC Subcontractor to prevent recurrence were: 1) Quality Control Inspectors have had training courses in the requirements of AWS D1.1 and Specification G-20, 2) A special training session was held for the Quality Control Inspectors regarding the actions to be taken when, and if, welds or other attributes cannot be adequately inspected because of accessibility, and 3) the Site Inspection Procedure, PPM-5.3 was revised to include a requirement in the in-process inspection plan for checking welds for accessibility for inspection.

The above actions taken by the HVAC Subcontractor were completed by June 24, 1981.

#### Violation - B

10 CFR 50, Appendix B, Criterion V, requires in part that: "Activities affecting quality shall be ... accomplished in accordance with these instructions, procedures, or drawings."

The Limerick PSAR, Appendix D, paragraph 6.4, states in part: "Bechtel Construction Department .... is responsible for construction of the plant to approved engineering specifications ....".

Bechtel specification 8031-C-41A, paragraph 4.4, states in part: "All welding shall be in accordance with the "Structural Welding Code," AWS D1.1 ....".

The "Structural Welding Code", AWS D1.1, requires in paragraph 3.6.4: "For buildings....undercut shall not be more than 0.01 inches deep when its direction is transverse to primary tensile stress in the part that is undercut, nor more than 1/32 inches for all other situations.

Contrary to the above, on April 22, 1981, welding undercut in excess of 1/32 inches was observed on the North Reactor Building Exhaust Stack in welds on beam members 22D2 and 24D4R.

This is a severity Level V Violation (Supplement II), applicable to CPPR-106 and CPPR-107.

## Response to Violation

The welding deficiencies on shop welds in the Reactor Building South Exhaust Stack, identified by the NRC Inspector, were reported on a Nonconformance Report and evaluated by Bechtel Project Engineering to be acceptable to "use-as-is" considering the actual design requirements.

Since final delivery on the structural steel was made approximately two years ago, corrective action to prevent recurrence with American Bridge is no longer feasible. However, to assure that no existing conditions remain which would affect plant safety, 100% inspection on all shop welded connections was performed on one of the four Reactor Building exhaust stacks. Minor welding discrepancies were identified similar to those identified by the NRC Inspector. These have been evaluated by Project Engineering and were determined to be acceptable "use-as-is" based on the actual design requirements.

As a result of the 100% inspection on one of the stacks, the structural steel in the other stacks was given a 5% inspection on shop welds. Minor weld deficiencies were also identified in these stacks and were dispositioned similarly.

In addition, the Bechtel Quality Control Receipt Inspectors have been instructed to increase their inspection of any future structural steel which we may receive from other vendors.