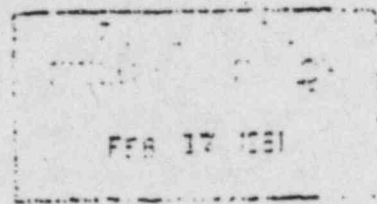


APPL. Ex. 124

REF: 80



February 10, 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 January 21, 1981
RE: Site Inspection of December 4-31, 1980
Inspection Report No. 50-352/80-21 & 50-353/80-19
Limerick Generating Station - Units 1 and 2

File: QVAL 1-2-2 (352/80-21 & 353/80-19)

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,

E. C. Kemper
J. S. Kemper

Chief Mech. Eng.
for J. S. Kemper

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JPE/gra
Attachment

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

J. P. Durr, USNRC Resident Inspector

cc:

- | | |
|------------------------|--------------------------|
| R. H. Elias, Bechtel | H. R. Walters/Local File |
| E. R. Klossin, Bechtel | J. J. Clarey |
| E. J. Bradley | R. A. Malford (2) |
| C. White | J. M. Corcoran |
| E. C. Kistner | Project File (2) |
| G. N. DeCowsky | |

ATTACHMENT I

RESPONSE TO APPENDIX A

Violation - A

10CFR 50, Appendix B, Criterion V, states, in part: "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstancesInstructions, procedures, or drawings shall include appropriate quantitative and qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished.

The Limerick PSAR, Appendix D.4, states, in part: "... Bechtel Construction will have a Quality Control Program. These programs shall cover the necessary quality control requirements... including appropriate elements of the following items:

D.4.3, Control of Special Processes, Test and Inspection

1. The vendor shall operate under a controlled manufacturing system and shall have written procedures or instructions for control of special fabrication and construction processes such as welding.
2. ...shall have written procedures for control of the required testing and inspection programs... These programs shall cover all... weld fitup inspections..."

Contrary to the above, the Bechtel Quality Assurance Manual - ASME Section III, Division 1, Document No. WD-1, paragraph 7.4, provides for sampling inspections (surveillance) without specifying a sampling plan. There are no quantitative or qualitative criteria for sampling rates, acceptance levels, or increased inspection frequencies set forth. Records are not maintained to support a sampling inspection plan such as rejection rates. This item applies to Unit No. 1 and Unit No. 2.

This is a Severity Level V Violation (Supplement II).

Response to Violation

The use of surveillance inspections is a key element of an effective inspection program and is a common practice in the nuclear construction industry. The inspection program employs numerous methods of verifications including inspections, witnessing, tests, reviews and surveillances. Surveillances are defined in the (Bechtel) Limerick Quality Control Program as:

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"Surveillance (S) - To progressively monitor by randomly witnessing and inspecting items and work operations before, during, or after in-process construction. This inspection activity requires that the responsible construction quality control engineer be present in the general work area identified in the Project Quality Control Instruction as often and for as long a time period as is necessary to effectively monitor the designated activity for compliance with prescribed requirements."

In addition, since surveillances are employed on ASME Section III activities, surveillances are defined in the ASME approved (Bechtel) Limerick Quality Assurance Manual as:

"To progressively monitor by randomly witnessing and inspecting items and work operations before, during and after in-process construction. This inspection activity requires that the responsible construction quality control engineer be present in the general work area identified in the applicable inspection instruction as often and for as long a time period as is necessary to effectively monitor the designated activity for compliance with prescribed requirements. When the activity is designated as surveillance only, initial and date the acceptance block for the item and activity which the surveillance was on. If surveillance was not performed on items and activities designated with a surveillance code, the Acceptance Block shall remain blank."

These surveillances are part of the inspection program to assure quality. Surveillance inspections are employed in almost all areas and are an effective means of assuring quality and of reducing the number of final rejects.

The acceptance of pipe welds, which is the subject about which this question arose, is based on satisfactory in-process surveillance results plus the satisfactory results of the inspection program requirements of 100% final inspections, including tests, and nondestructive examinations required by the applicable codes and standards.

The NRC Report reference to criteria V, "quantitative and qualitative acceptance criteria" applies to the requirement for establishing criteria which an inspector uses to determine an item to be satisfactory or unsatisfactory. This criteria is properly included in the Limerick inspection program. Also, the inspection program for pipe welds requires a 100% inspection to accept the welds. The application of criteria V requirements to quantify surveillance is not appropriate. Further, it is our considered opinion that the pursuit of requiring surveillances to be numerically quantified, would restrict the discretion used by inspectors familiar through their experiences with the many variables associated with an activity. The effect could be a less effective inspection program.

Accordingly, it is our opinion that this is not a violation of Appendix B, the PSAR or the Limerick Quality Assurance Program. We request that this item of noncompliance be reconsidered.

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Violation - B

10CFR 50, Appendix B, Criterion IX, states, in part: "... special processes, including welding... are controlled and accomplished.. in accordance with... specifications, criteria, and other special requirements.

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

The "Installation and Maintenance Manual for Electrical Penetration Assemblies," 8031-E-40-36-2, paragraph 5.2.4, states, in part, that: "Temperature resulting from welding, in excess of 300°F may damage parts of penetration assemblies..."

Contrary to the foregoing, about December 4, 1980, containment electrical penetration 10Jx101B was welded utilizing welding procedure specification WS, P1-AT-Ag(CVM)1, which limits interpass temperatures to 350°F. This item applies to Unit No. 1 only.

This is a Severity Level V Violation (Supplement II).

Response to Violation

Because of the indeterminate temperature applied to electrical penetration 10Jx101B, the manufacturer, Conax Corporation, must inspect the penetration to determine what damage occurred. This inspection will be complete by April 1, 1981. Any components that are of indeterminate quality will be replaced by June 1, 1982.

To prevent recurrence, Job Rule G-16, Job Rule for Welding was revised on January 29, 1981 to provide a procedure to assure that the Bechtel welding engineer is aware of vendor's welding instructions. A special welding instruction will be issued as necessary, depending on the review of the vendor's installation instructions. The Bechtel welding QC engineer assures that the special welding instructions are implemented through the use of QCI W-1.00, QCI W 2.00, and WR-9 forms. Welding inspections required by the special welding instructions are added in accordance with Project Special Provision G-6.1, paragraph 4.3.4 of the Bechtel Quality Control Notices Manual.

Pertaining to the electrical penetrations, QCI E-6.6 was revised on January 7, 1981, to include an activity for the Bechtel electrical QC engineer to review the WR-5 forms to assure that the Bechtel welding QC engineers have inspected the welding in accordance with special welding instructions. Special Welding Instructions No. 1 was issued on January 29, 1981 describing the procedure that assures proper precautions are taken to prevent damage to the electrical penetrations.

COMMONWEALTH OF PENNSYLVANIA :

ss.

COUNTY OF PHILADELPHIA :

EDWARD C. KISTNER, being first duly sworn, deposes
and says:

That he is Chief Mechanical Engineer of Philadelphia
Electric Company, the holder of Construction Permits CPPR-106 and
CPPR-107 for Linerick Generating Station Units 1 and 2; that he
has read the foregoing Response to Inspection Report No. 50-352/
80-21 and 50-353/80-19 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.

Edward C. Kistner

Subscribed and sworn to
before me this 13th day
of FEBRUARY, 1981

Joseph A. ...
Notary Public

Notary Public for the County of Philadelphia
My Commission Expires February 28, 1982