

APPL. EX. 92

REF: 46



May 13, 1977

Mr. James P. O'Reilly, Director
United States Nuclear Regulatory Commission
Office of Inspection and Enforcement, Region I
631 Park Avenue
King of Prussia, Pa. 19406

Subject: USNRC IV: T Letter dated April 12, 1977
Re: Site Inspection of March 8-11, 1977
Inspection Report No. 50-352/77-02
Limerick Generating Station - Unit 1
File: QUAL 1-2-2-1 (77-02)

Dear Mr. O'Reilly:

We offer the following responses to the subject letter regarding items identified during the NRC visit to Limerick Generating Station - Unit 1 on March 8-11, 1977 for inspection of construction activities authorized by NRC License No. CDFR-107.

- Attachment I - Response to Item A of Appendix A of subject letter.
- Attachment II - Response to Item B of Appendix A of subject letter.
- Attachment III - Response to Item C of Appendix A of subject letter.

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

Sincerely,

J. S. Boyer for U.S. Boyer

Attachments

JSC/grs

Copy to: V. S. Boyer
J. S. Kupper
E. J. Bradley
G. White
L. J. Clary

K. H. Logue
E. A. Mulford
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APPENDIX I

Response to Appendix A - Notice of Violation

N-099

Infraction:

- A. Criterion V of Appendix B of 10 CFR 50 states, in part, that: "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings." The Linerick PSAR Appendix D.1 and D.4, including Answer to Question #17, describes the application of this criterion and others to site subcontractors and vendors. Bechtel drawing C-236, Rev. 6, establishes 3/16-inch as fillet weld size for welding carbon steel stiffeners to stainless steel liner plate of the spent fuel pool structure. Subcontractor procedure CVT-01, Rev. 0, establishes visual inspection requirements for such welding, "Fillet welds shall be of the specified size with full throat and legs of uniform size."

Contrary to the above, on March 11, 1977, fillet welds at several locations on the liner plate were less than the specified 3/16-inch size and had less than full throat. The welding and subsequent quality inspection had not been accomplished in accordance with applicable drawings and procedures. The measures established to control special processes, and the program for inspection of liner/stiffener welding, which were established to comply with Criteria II and X of Appendix B of 10 CFR 50, were not effectively implemented.

Response:

A non-conformance report issued to provide corrective action for the condition identified above has resulted in the following:

1. Corrective Steps.

All completed welds have been reinspected at the site to assure that their size is in accordance with drawing requirements. Any undersized welds have been repaired and reinspected.

2. Action to prevent recurrence.

The vendor Plant and Field Superintendents have been reinstructed to assure that welds meet drawing requirements. The Plant and Site Q.A. Departments have been reinstructed in the drawing requirements and will verify compliance with the requirements during the visual inspection of the welds.

The Section Shop Inspector assigned to the Linerick work at the vendor's plant as well as other shop inspectors with similar assignments, were reminded of their surveillance requirements with regard to weld sizes and a check was made to assure shop inspectors have weld fillet gauges, if their assignment requires such.

ATTACHMENT II

Response to Appendix A - Notice of Violation

Infraction.

5. Criterion XIII of Appendix B of 10 CFR 50 states, in part, that: "Measures shall be established to control the handling and preservation of material and equipment in accordance with work and inspection instructions to prevent damage or deterioration." The Limerick PSAR, paragraph D.4.9, states, in part, that: "Vendors shall have written instruction to govern the handling ... and preservation of the items under contract so as to prevent degradation of quality" The Bechtel Technical Specification 5031-C-45 for the Spent Fuel Pool Liner requires, in paragraphs 7, 9, 14 and 16, that: "The application of heat to austenitic stainless steel is not permitted (and) Iron contamination of stainless steel shall be prevented Handling procedures shall include measures to protect liners surfaces from damage."

Contrary to the above, on March 8, 1977, the following conditions existed during field erection of the Spent Fuel Pool Liner: (1) Stainless steel exterior surfaces had been contaminated with the slag/iron residue from a thermal metal cutting process. Several areas exhibited large accumulations of fired slag/iron deposits which indicate that the base metal was subjected to uncontrolled elevated temperatures and iron contamination. This condition had not been prevented by control measures. (2) Stainless steel interior surfaces had been contaminated by an unidentified residue which had apparently been deposited in the presence of high heat which had burned a sheeting material in contact with the steel at several locations and of several square feet area. This condition had not been prevented by control measures.

Response.

Nonconformance reports have been issued to provide corrective action for the conditions identified above which has resulted in the following:

(1) Corrective Steps.

The Vendor has submitted SDDR-PLD-3 requesting acceptance of areas of contamination within the leak chases which was accepted. The concrete side of the liner plate, except within the leak chase, will be cleaned in accordance with Vendors Cleaning Procedure CP-1 to meet the cleanliness of Article 14, per Addition No. 9 to specification 5031-C-45 Revision 4.

Action Taken to Prevent Recurrence.

The Vendor has instructed their Plant and Field Superintendents to use pieces of scrap stainless, wood, or asbestos to shield the stainless steel surfaces from iron contamination during burning, grinding, and welding operations when contamination can occur. This activity is being monitored by Vendor's Plant and Site Q.A. Department.

(2) Corrective Steps.

The Vendor Site Q.A. Manager initiated an Engineering Corrective Action Request (ECAR) and described the nonconformance. The ECAR was submitted to Vendor Project Engineer in accordance with Section 6.0 of the Vendor Q.A. Manual. An approved Corrective Action which specified that the area to be cleaned in accordance with Vendor Clean Procedure CP-1 and examined in accordance with Liquid Penetrant Inspection Procedure OPT-01 to find any hidden stress corrosion cracks that may have occurred was implemented.

Action Taken to Prevent Recurrence.

Paper will only be used for shipping and storage and will be removed before field fabrication. In addition the removal of the paper prior to field fabrication will eliminate the possibility of contamination recurrence.

ATTACHMENT III

Response to Item C of Appendix A

Deficiency

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

The Limerick PSAR, Appendix D, paragraph D.1 states, in part, that: "(Philadelphia Electric) is responsible for coordinating the (Quality Assurance) program to assure that all necessary control requirements and procedures are followed. Bechtel Job Rule G-5 for Design Document Control, paragraph 4.2.3.4, directs that "Upon receipt from Project Engineering of an acceptable Quality Assurance Manual (and changes thereto) it is forwarded to Document Control for logging."

Contrary to the above, on March 8, 1977, the latest approved amendments (Nos. 3 and 4) to Testing and Inspection Procedure 3.20.A.1 were not entered in two controlled volumes of the Peabody Testing Quality Assurance Plan at separate on-site locations.

Response

The Bechtel controlled copies of Peabody's Manual have been reviewed and updated as necessary.

To prevent a recurrence of this, Job Rule G-5 for Design Document Control has been revised to more clearly describe the process of controlling Bechtel copies of field subcontractors' QA manuals. PDM is the only subcontractor on site working on safety related equipment besides Peabody, at the present time. Bechtel copies of PDM's QA Manual are being reviewed and will be updated if necessary within 30 days from the date of this letter. Bechtel copies of other site subcontractor QA manuals will be reviewed and revised if necessary, prior to the time when the subcontractors arrive or return to the site.