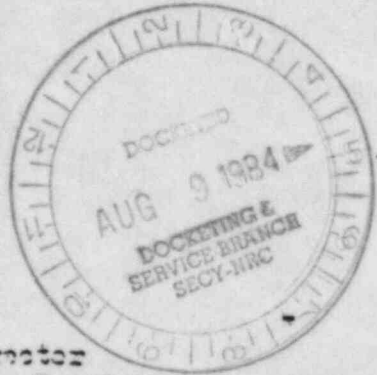


REF: 55



JUL 20 1978

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 IR;I Letter dated June 16, 1978  
RE: Site Inspection of May 16-23, 1978  
Inspection Report No. 50-352/78-0A; 50-353/78-02  
Limerick Generating Station - Units 1 & 2  
File: GUAL 1-2-2 (352/78-0A)

Dear Mr. Grier:

*file*

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

Attachment I - Response to Appendix A

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

Sincerely,

*DL*  
*Law* 7-18-78  
*Rich. Jones* 7-18-78  
*JAL* 7-18-78  
HJL:drd

*V. A. Boyce*

Attachment

- Blind Copy to:
- R. H. Elias, Bechtel
  - J. S. Kemper
  - E. J. Bradley
  - G. White
  - E. C. Kistner
  - H. R. Walters/Local File (2)
  - J. J. Clarey
  - R. A. Mulford
  - J. M. Concoran
  - W. J. Johnson/R. H. Zeng
  - Project File (2)

ATTACHMENT I

Response to Appendix A - Notice of Violation

Description of Infraction

10 CFR 50, Appendix B, Criterion III states, in part, that "Measures shall be established to assure that applicable regulatory requirements ... are correctly translated into specification, drawings, procedures and instructions. These measures shall include provisions to assure that appropriate quality standards are specified and included in design documents and that deviations from such standards are controlled ..."

Paragraph D.7.3 of the Quality Assurance Program documented in the PSAR states, in part, that "... items included in the Bechtel Engineering design control (are) ... determine that the required design bases, PSAR commitments and other regulatory requirements are incorporated properly into the design drawings ..."

Paragraphs C.2.6 and 5.2.5.2.1, of the PSAR, specify the American Welding Society (AWS) Code D1.1 as a quality standard for Class 1 seismic structures.

Contrary to the above, as of May 16, 1978, the measures provided did not assure that unacceptable deviations from quality standard for Class 1 seismic structures were controlled.

- A. Structural steel was installed in the containment, a Class 1 seismic structure, per Bechtel drawing No. C-875, Revision 6, using welding procedures for prequalified fillet weld joints. The weld joints do not meet the criteria in Section 2.7 of the AWS D1.1 code for prequalified fillet weld joints.
- B. Structural steel was installed in the containment, a Class 1 seismic structure, per Bechtel drawing No. C-875, Revision 6, using bars to fill large weld joint gaps. The application of the bars does not meet the criteria in Section 2.4 of the AWS D1.1 code for use of fillers.

Response to Item A

The weld joints shown in Details 4A and 9 on Dwg. 8031-C-875.Rev. 6, are considered prequalified welds as either fillet welds of AWS D1.1 Fig. 2.7.1 types or partial penetration groove welds of the EC-P2 or EC-P4 types as applicable under AWS D1.1 Fig. 2.10.1. The approved welding procedure used, Bechtel welding procedure P1-A-1h (Structural) is applicable for both fillet welds and partial penetration groove welds.

\* AWS D1.1-72, Rev. 1-73, Rev. 2-74 Structural Welding Code

50-352/78-04  
50-353/78-02  
I/1

Calculations indicate that the partial penetration and/or fillet welds shown in Details 4A and 9 of Dwg. 8031-C-875 are capable of effectively accommodating the design loads.

To clarify requirements, Dwg. 8031-C-875 has been revised to show the vertical weld between the transition plate and the loose plate as a fillet weld when the included angle between the base materials is greater than  $60^{\circ}$  and as a partial penetration groove weld when the included angle is between  $45^{\circ}$  and  $60^{\circ}$ .

#### Response to Item B

Detail 9 of Dwg. 8031-C-875, Rev. 6, was developed in order to resolve an assembly problem as provided by AWS D1.1 para. 2.4.1.2. Section 3.3 of AWS indicates that when there is an assembly problem corrections approved by the engineer are to be provided. As required by AWS, Detail 9 was developed and approved by Bechtel - Project Engineering as a corrective measure.

Detail 9 is in compliance with Section 2.4 in that all filler plates as fabricated by Bechtel at the site are  $\frac{1}{4}$  inch or thicker. To be sure that there is no misunderstanding, Dwg. 8031-C-875 has been revised to show a  $\frac{1}{4}$  inch minimum thickness for the filler plates.

Detail 9 clearly shows that the filler plate must be of sufficient size so that width "w" is continuous through the filler plate. No further limitations on plate dimensions are required per engineering design.

50-352/78-04  
50-353/78-02  
1/2