

REF. 50

SEP 18 1978

Pr. Royce Orier, Director United States Nuclear Regulatory Commission Office of Inspection and Enforcement, Region I 631 Park Avenue King of Prussia, PA 19406

Subject: USMRC IE; I Letter dated August 24, 1978
Re: Inspections Yos. 50-352/7803 and 50-352/7804

Limerick Cenerating Station - Units 1 and 2

Reference: Telecon H. R. Walters (PECO) and J. Mattia

(USHRC) 8/31/78

File: QUAL 1-2-2-1 (352/78-03) QUAL 1-2-2-1 (352/78-04)

Dear Mr. Grier:

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

Attachment I - Response to "Enclosure - Areas of Concern - Item A"

Attachment II - Response to "Enclosure - Areas of Concern - Item E"

Per the reference telecon, an extended date of September 13, 1978 was granted for these responses.

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

Sincerely,

- 10 TO

RJL/gra

bcc: R. H. Elias, Bechtel

J. S. Kemper

E. J. Bradley

G. White

E. C. Kistnar

H. R. Walters Local File

J. J. Clarey

D. Marano

R. A. Mulford

J. M. Corcoran W. J. Johnson

R. H. Zong

ATTACHMENT I

Response to "Enclosure-Areas of Concern" - Item A

Description of Concern

A. Notice of Violation dated May 10, 1978

This item of noncompliance concerned one instance of failure to fully implement the requirements of Liquid Penetrant Test Procedure IPPT-340-39-02, Revision 0. Namely, liquid penetrant test indications in excess of the acceptance standards were observed by subcontractor test personnel when pipe weld No. HEC-183-1-FW-8 was tested and accepted on April 2, 1978; however, it was not verified whether or not actual defects were present.

Our bases for the above finding included the following:
(1) on April 6 an NRC inspector observed that the
developing powder had not been removed from the weld
after it was tested on April 2 and the powder revealed
test indications which were in excess of the acceptance
standards, (2) on April 7 the weld was retested by a
qualified examiner from the licensee's constructor in
the presence of an NRC inspector and both observed
indications in excess of the acceptance standards, and
(3) records or other evidence were not available
indicating it had been verified that the indications did
not represent actual defects prior to acceptance of the
weld on April 2.

PECO's response to this apparent item of noncompliance was limited to actions which attested to the quality of the particular weld. Further coffective actions are required to assure that; (1) subcontractor test personnel are properly implementing the testing procedure with respect to the processing of indications which exceed acceptance standards, and (2) other previous liquid penetrant test indications which exceeded acceptance standards were not accepted without taking suitable actions to verify whether the indications represented actual defects.

Response

The chronology of events pertaining to the liquid penetrant nondestructive tests performed on weld NBC-183-1-FW-8 is described below. This provides background information and rationale used to determine the acceptability of the qualified examiner's evaluation of any indications revealed during the liquid penetrant test performed on April 2, 1978:

- o On March 17, 1978 a liquid penetrant test was performed and evaluated by a qualified subcontractor examiner in accordance with the subcontractor's approved liquid penetrant procedure IPPT-340-39-02, Revision O. The field weld was determined to be acceptable and the test was documented as required.
- o On April 2, 1978 the liquid penetrant test was again performed and evaluated by the same subcontractor examiner. This test was performed to accommodate the Authorized Nuclear Inspector's request to witness the liquid penetrant test of this weld. The liquid penetrant test or April 2 again determined the weld to be acceptable. This test was documented as required.

After the April 2, 1978 liquid penetrant test was performed the liquid penetrant test materials were not removed for cleanliness purposes as required. This was a failure to fully implement the requirements of procedure IPPT-340-39-02, Revision 0, but appears to have been an isolated case. Corrective actions have been taken to remind the subcontractor personnel of the procedure requirements.

o On April 6, 1978, during an NRC inspection the NRC inspector reported observing indications in the liquid penetrant test materials that had been left on the weld.

On April 7, at the request of, and in the presence of the NRC inspector, a liquid penetrant test was again performed, this time by Philadelphia Electric Company's Constructors personnel. The records of this test show apparent relevant indications. Since relevant indications could not be reproduced by a subsequent liquid penetrant test performed after the NRC inspection, the April 7 indications must have been false indications. PECO concludes that these false indications were the result of the difficulty in completely removing liquid penetrant materials from the April 2 test which had dried up and set for several days.

o On April 11, subsequent to the NRC inspection, another liquid penetrant test, described in our June 12, 1978 response, demonstrated that the evaluation conducted on April 2, 1978 was accurate and that any indications observed were evaluated to have been nonrelevant.

It is the PECO position that the indications revealed by the April 2 test, and later observed by the NRC Inspector on April 6, were evaluated as part of the April 2 test and that no relevant indications were present. There is no requirement to document in the test record any indications which are evaluated and determined to be nonrelevant, nor it is the policy of PECO, our constructor or subcontractors to do so. The existence of liquid penetrant test documentation indicating an acceptable weld is considered to be evidence that any indications requiring evaluation were, in fact, evaluated and found to be nonrelevent in accordance with the test procedure.

Philadelphia Electric Company is satisfied that the particular weld under question is acceptable and that any indications revealed by the April 2, 1978 liquid penetrant test were properly evaluated. Further, Philadelphia Electric Company is assured that the Subcontractors are properly performing liquid penetrant tests through the surveillance performed by the Constructor's Quality Control Personnel and by periodic Audits conducted by the PECO site Qualit. Assurance Personnel. These documented surveillances and audits assure that (1) subcontractor test personnel are properly implementing the testing procedure with respect to the processing of indications which exceed acceptance standards and (2) other previous liquid penetrant test indications which exceeded acceptance standards were not accepted without taking suitable actions to verify whether the indications represented actual defects.

With the welds for beam Nos. 24, 25, and 2, qualified by the above test and stress calculations indicating the present weld sizes are capable of accommodating the design loads, no change in weld thickness is expected to be necessary (Paragraph 2.6.2, AMS D1.1).

(2) Corrective Action to Assure that Suitable Measures are Provided and Implemented to Control Levistions from Quality Standards during the Design Process

The appropriate drawings will be reviewed for compliance with AMS D1.1 where similar field modifications to design have occurred. In addition, the Engineers and related staff in the Civil/Structural discipline will be reinstructed to review welding configurations for conformance with AMS D1.1.

(3) Completion of Corrective Actions

Items (1) and (2) above will be completed by January 5, 1977.