

IOWA ELECTRIC LIGHT AND POWER COMPANY

General Office

CEDAR RAPIDS, IOWA

February 15, 1979

SAMUEL J. TUTHILL

SENIOR VICE PRESIDENT

Mr. James G. Keppler, Director
Office of Inspection and Enforcement
Region III
799 Roosevelt Road
Glen Ellyn, IL 60137

Re: Duane Arnold Energy Center
Subject: Response to Inspection Report 78-33
File: A-102 Inspection Report 78-33

Dear Mr. Keppler:

This letter is in response to Mr. Keppler's letter concerning an inspection of activities at the Duane Arnold Energy Center conducted on November 12-16, 21-22, 1978. The following response indicates the actions which have been or will be taken to correct the items of noncompliance identified in Mr. Keppler's letter.

Response to Infraction 1

1. Corrective action taken and the results achieved:

A Maintenance Department Directive describing welder qualification document control for the recirculation safe end repair was approved and issued on November 24, 1978. As stated in the inspection report, the directive was issued after welding activities had resumed. However, this action was not an intentional violation of previous commitments and resulted from a licensee misunderstanding of the November 14 meeting and Immediate Action Letter (IAL) requirements. This misunderstanding was further compounded by the conversation with your staff just prior to resumption of welding during which our steps to comply with the IAL were discussed and were interpreted as being satisfactory to meet the intent of the IAL.

As previously discussed with NRC Inspectors, the licensee's interpretation is that welders did not make production welds prior to the complete establishment of code conforming qualifications. All records indicate that each welder had tested and was signed off on the Welder Performance Qualification Record (WPQR) by the Welding Engineer responsible for qualification prior to making a

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production weld. This sign-off certified that the welder had passed all requirements for qualification as per ASME Code Section IX. However, certain welders did perform production welding prior to review and approval of the WPQR by the Supervising Engineer Construction, contrary to the requirements of the licensee's Special Process Procedures Manual. The practice was discontinued when the discrepancy was identified and requirements were clarified in the Maintenance Department Directive on welder qualification document control described above.

2. Corrective actions to be taken to avoid further noncompliance:

The Maintenance Department Directive for welder qualification document control as described in (1) above was unique to the recirculation safe end repair effort. A review of the Special Process Procedures Manual and associated permanent plant procedures will be performed to identify required changes for welder qualification document control. The results of the review and proposed implementation schedule will be reviewed with the NRC Site Inspector.

3. Date when full compliance will be achieved:

Maintenance Department Directive No. 2 - Welder Qualification Document Control was issued on November 24, 1978. The review of the Special Process Procedures Manual and plant procedures covering welder qualification document control will be completed by June 30, 1979.

Response to Infraction 2

1. Corrective action taken and the results achieved:

All weld filler material ovens available for service were checked for calibration status and calibrations were performed where appropriate. A Special Order directive was issued to personnel responsible for issuing weld filler material ovens emphasizing calibration and storage requirements.

2. Corrective actions to be taken to avoid further noncompliance:

In the future, calibrations on all portable weld filler material ovens available for service will be kept current whether or not they are intended for use. The calibration schedule for the ovens will be changed so that all ovens are due for calibration at the same time. (In the past, one third of the inventory of ovens in use were calibrated each month). Each quarter calibration records will be reviewed against the inventory list to assure that ovens are accounted for and calibrated.

3. Date when full compliance will be achieved:

The welder filler material oven calibration schedule will be revised by April 1, 1979.

Response to Infraction 3

1. Corrective action taken and the results achieved:

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a. In order to verify that the use of carbon steel slag hammers would not have a deleterious effect on inconel welds, an evaluation was performed by an outside consultant and mock-up testing was performed by the on-site repair contractor. The consultant evaluation concluded that the use of a carbon steel slag hammer would not have a detrimental effect on the integrity of the inconel welds. The scope of the evaluation included carbon steel contamination on the surface of the weld and contamination within intermediate weld passes. The on-site contractor mock-up testing demonstrated that due to the different hardness between the carbon steel slag hammer and inconel, carbon would not be deposited on the inconel. Even assuming a small amount of carbon transfer from the hammer to the inconel, the resultant iron dilution of the inconel weld would be negligible.

In order to clarify the requirements for tool issue and storage during safe end repair welding activities, Maintenance Department Directive 1403-1-Crack Repair Tool Issue and Storage was issued on November 24, 1978. In addition, revisions were made to repair procedures involving welding to specify proper tool use. Personnel assigned to issue tools at the tool crib were also reinstructed on the requirements for storage and issue of tools to be used in the welding activities associated with the safe end repair.

b. and c. A procedure for control of weld filler material was added as an attachment to the recirculation safe end repair procedures involving welding. This procedure specified requirements for labeling, issue, transporting and return of weld filler material. It also included requirements for control of partially consumed weld filler material at the work location.

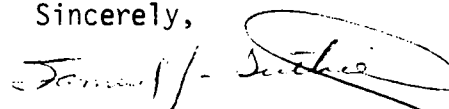
2. Corrective action to be taken to avoid further noncompliance:

The Maintenance Department Directive for tool control and the weld filler material control repair procedure attachment were unique to the recirculation safe end repair effort. A review of the plant procedures covering tool control and weld filler material control for safety related welding activities will be performed to identify required changes. The results of the review and proposed implementation schedule will be reviewed with the NRC Site Inspector.

3. Date when full compliance will be achieved:

The review of permanent plant procedures covering tool control and weld filler material control will be completed by April 1, 1979.

Sincerely,



Samuel J. Tuthill
Senior Vice President

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cc: Director, Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555