



Dr. Sandford (Iowa)

UNITED STATES
ATOMIC ENERGY COMMISSION
DIRECTORATE OF REGULATORY OPERATIONS
REGION III
799 ROOSEVELT ROAD
GLEN ELLYN, ILLINOIS 60137

TELEPHONE
(312) 858-2660

March 8, 1973

Iowa Electric Light & Power Company
ATTN: Mr. Charles W. Sandford
Vice President, Engineering
Security Building
P. O. Box 351
Cedar Rapids, Iowa 52405

Docket No. 50-331

Gentlemen:

Thank you for your letters dated January 29 and February 15, 1973, informing us of the steps you have taken to correct the items of noncompliance which we brought to your attention in our letter dated December 29, 1972. We will examine these matters during our next inspection.

A copy of RO Inspection Report No. 050-331/72-11, referenced in our letter of December 29, 1972, is enclosed. In accordance with Section 2.790 of the AEC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter, our letter of December 29, 1972, your letters of January 29 and February 15, 1973, and the enclosed inspection report will be placed in the AEC's Public Document Room. If the inspection report contains information which you or your contractors believe to be proprietary, it is necessary that you submit a written application to this office, within 20 days of the date of this letter, requesting that such information be withheld from public disclosure. If such an application is submitted, it must identify the basis for which information is claimed to be proprietary. The application should be prepared so that proprietary information identified is contained in a separate part of the application, since the application will also be placed in the Public Document Room. If we do not receive an application to withhold information, or are not otherwise contacted within the specified time period, the enclosed report and the previously identified letters will be placed in the Public Document Room.

Iowa Electric Light
& Power Company

- 2 -

March 8, 1973

Unless you wish to make application to withhold information, no reply to this letter is necessary; however, should you have questions concerning the enclosed inspection report, we will be glad to discuss them with you.

Sincerely yours,

Boyce H. Grier
Regional Director

Enclosure:

RO Inspection Rpt No. 050-331/72-11

bcc w/ltrs dtd 1-29-73 & 2-15-73:

RO Chief, RCB

RO Chief, RT&OB

RO:HQ (4)

Licensing (4)

DR Central Files

Regions I & II

PDR

Local PDR

NSIC

DTIE

OGC, Beth, P-506A

IOWA ELECTRIC LIGHT AND POWER COMPANY

General Office

CEDAR RAPIDS, IOWA

January 29, 1973

IE-73-839

C. W. SANDFORD
VICE PRESIDENT

Mr. Boyce H. Grier
Regional Director
U. S. Atomic Energy Commission
Directorate of Regulatory Operations
Region III
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Re: Duane Arnold Energy Center #1
Subject: Site Visit, December 7-8, 1972
File: A-110, Q-42

Dear Mr. Grier:

This is in reply to the concerns expressed in your letter of December 29, 1972 resulting from the site visit of your Mr. Sutton on December 7 and 8, 1972.

With regard to the unauthorized heating and bending of pipe, this subject was covered in our letter to Mr. Kruesi dated December 21, 1972. The physical corrective action described is proceeding. The inspection activity is still under way and being documented. As indicated, these will be completed in time to permit any needed repair work to be completed prior to system hydro. Indoctrination meetings are continuing and the document notebooks are in the hands of field personnel.

With regard to the matter of the field weld on pipe spool DCA-6-1 lacking the welder identification, although the field welding checklist was completed, we present the following information:

The incident in question occurred as follows:

The welder completed the weld in question on spool DCA-6-1 immediately before noon and left the area on December 1, 1972. He failed to stamp his welder's identification on the weld as required. Shortly after noon, the welding inspector checked the weld and found it acceptable except for the missing welding identification. The welding engineer then notified the responsible General Foreman and Area Piping Superintendent that the welder's identification number was not on the weld. The response from both was that the welder would be notified at once and properly identify the weld with his identification. The welding inspector then proceeded to sign off

FEB 1 1973

the final acceptance of the weld without physically verifying that the welder had properly identified the weld.

Corrective steps have included the following:

1. The Bechtel Welding Engineer in whose area the incident occurred has been counselled by the Project Field Engineer and Lead Welding Engineer and instructed that under no condition is he to complete signing of the welding papers until he has physically checked the welding for proper identification.
2. Bechtel has started indoctrination sessions for piping supervisory personnel which includes Welding Engineers, Piping Superintendents and Piping Engineers. These same personnel attend indoctrination sessions with manual piping personnel in the change house. A copy of all specifications pertinent to their area of work has been distributed to those personnel responsible for knowing the content of applicable specifications or procedures.
3. During December, Iowa Electric QA personnel included welder identification as one of the items of an overall audit of field pipe erection practices. Identification was found lacking on 4 of the 57 randomly selected welds inspected. Correction was immediate on 3 of the welds. The fourth weld was part of a pipe which was to be discarded. Audits of this subject will continue on a spot basis.
4. Iowa Electric QA personnel have pointed out the problem to Engineering personnel concerned with piping system baseline UT examination. The IE Engineering personnel have been requested to instruct the UT crew to be alert to the problem during their work.

In addition to the above corrective action, Bechtel site QA personnel include the verification of welder identification in their review of piping systems. Several omissions of identification markings have been noted, but the weld papers had not been completed. All cases were called to the attention of Engineering personnel for incorporation of proper identification symbols. This surveillance will continue as long as pipe erection and welding take place.

We appreciate the opportunity to comment on these items.

Very truly yours,


C. W. Sandford
Vice President

GAC:CWS:hh

cc: Mr. L. D. Root
Mr. G. A. Cook
Mr. L. E. Rosetta

IOWA ELECTRIC LIGHT AND POWER COMPANY

General Office

CEDAR RAPIDS, IOWA

February 15, 1973
IE-73-878

C. W. SANDFORD
VICE PRESIDENT

Mr. Boyce H. Grier
Regional Director
U. S. Atomic Energy Commission
Directorate of Regulatory Operations
Region III
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Re: Duane Arnold Energy Center #1
Subject: Site Visit December 7 and 8, 1972
Reference: IE-73-839 dtd 1/29/73, same subject
File: A-110, Q-142

Dear Mr. Grier:

This is to supplement our letter of January 29, 1973 (IE-73-839) replying to the concerns expressed in your letter of December 29, 1972.

We desire to expand on the information included in the above letter regarding the heating and bending of pipe. The heating and bending discussed in our referenced letter was first identified by Bechtel inspection personnel on October 18, 1972. Verbal orders were issued by Bechtel in a Change House meeting of piping and welding personnel to stop the practice. The heating and bending had been performed by personnel with extensive experience in industrial applications where such activities are common place, and acceptable. They were not aware that this practice requires prior authorization at DAEC.

On November 15, 1972 Iowa Electric management became aware of the practice of heating and bending. Subsequent investigation showed that between October 18, 1972 and November 9, 1972 a total of 11 cases were identified by Bechtel inspection personnel. On November 16, 1972 Iowa Electric personnel discussed the problem with Bechtel personnel and suggested guidelines for evaluation.

On November 16, 1972, Iowa Electric issued a Non Conformity Report and a Significant Deficiency Report. These documents required:

1. Verification of approved remedial action and its implementation.
2. Determination of the circumstances surrounding the occurrence.
3. Action to prevent recurrence.

At the time of your inspector's visit on December 7, 1972, 18 cases had been identified. On December 13, 1972, Iowa Electric instructed Bechtel to initiate a formal visual inspection program of pipes for evidence of heating

FEB 22 1973

and to resolve any additional identified cases in the same manner as those previously identified. Those pipes being inspected include all impact tested pipe, regardless of size, and all pipe of safety-related systems, four inches in diameter and larger. As a result of the inspection, by February 1, 1973, a total of twenty-three (23) cases have been identified and are under evaluation. Also, as of February 1, 1973, 9 cases have been evaluated and resolution approved.

As a consequence of the identification of the problem, Bechtel, with the concurrence of IE management and QA initiated the following steps to impress their personnel with the important engineering criteria to which their work is to be accomplished.

1. The welders continue to attend regular QA/QC indoctrination meetings with special emphasis on welding. These meetings now have been expanded to include highlights of the piping specifications.
2. During the weekly piping superintendent's meetings, the review of engineering criteria has been included.
3. QC personnel and the Lead Piping Engineer will periodically attend the superintendent's meetings, to review specification requirements and comment on foreseeable/existing areas.
4. Preparation and distribution to piping and welding personnel of notebooks of documents which include piping specifications M-113, M-114, M-190 and M-192 and the Mechanical (piping) and Welding Sections from the Bechtel Field Inspection Manual, and pertinent welding procedures, has been completed.

The indoctrination meetings and weekly meeting have been held and the document notebooks are in the hands of piping and welding supervisory personnel.

The pipe inspection activities for previously installed pipe should be completed by March 1, 1973. Physical remedial work should be completed by April 1, 1973.

The help clarify one point in our discussion of the finished weld lacking welder identification, please add the following sentence after the sentence ending on the top of page 2 of our January 29, 1973 letter.

"The welder apparently failed to return and mark the weld. This condition was noted by your inspector on December 7, 1972."

We appreciate the opportunity to expand our comments on these matters.

Very truly yours,


C. W. Sandford
Vice President

LDR:GAC:CWS:hh

cc: Mr. L. D. Root J. R. Newman
 Mr. G. A. Cook M. R. Muir
 Mr. L. E. Rosetta M. J. Jacobson