

DCS

Iowa Electric Light and Power Company

May 26, 1992  
NG-92-2426

Mr. James Lieberman, Director  
Office of Enforcement  
U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555

Subject: Duane Arnold Energy Center  
Docket No: 50-331  
Op. License DPR-49  
Response to Notice of Violation and  
Proposed Imposition of Civil  
Penalty (EA 92-056)  
File: A-102

Dear Mr. Lieberman:

A letter from Mr. A. Bert Davis, U. S. NRC Region III Regional Administrator, to Iowa Electric Light and Power Company, dated May 1, 1992, transmitted a Notice of Violation and Proposed Imposition of Civil Penalty. The letter and NRC regulations require Iowa Electric to reply within thirty days. This letter and the attachment constitute the required reply.

Pursuant to the requirements of 10 CFR 2.201(a), Attachment 1 to this letter, "Reply to a Notice of Violation," provides our (1) admission of the violation, (2) the reasons for the violation, (3) the corrective steps that have been taken and the results achieved, (4) the corrective steps that will be taken to avoid further violations, and (5) the date when full compliance will be achieved.

We acknowledge your concerns about the unplanned exposure. We recognize that deficiencies in our Radiation Protection program did exist. The NRC staff's assessment of the causes of these deficiencies is consistent with our own. As discussed during the enforcement conference on April 9, 1992, we have taken actions to insure radiation protection controls to prevent a substantial potential for an exposure in excess of 10 CFR Part 20 limits. We, therefore, will not submit a response pursuant to 10 CFR 2.205 protesting the Civil Penalty. We enclose our check in the amount of \$12,500.00, payable to the Treasurer of the United States.

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This response, consisting of this letter and attachments, is true and accurate to the best of my knowledge and belief.

IOWA ELECTRIC LIGHT AND POWER COMPANY

By John F. Franz Jr.  
JOHN F. FRANZ, JR.  
Vice President, Nuclear Division

Subscribed and sworn to before me on  
this 26<sup>th</sup> day of May, 1992.

William M. Surman  
Notary Public in & for the State of Iowa

JFF/DR/pwj+

Attachments: 1) Response to Notice of Violation  
2) Check No. 360834

cc: D. Robinson  
L. Liu  
L. Root  
R. McGaughy  
C. Shiraki (NRR)  
A. Bert Davis (Region III)  
NRC Resident Inspector - DAEC  
Commitment Control

Iowa Electric Light and Power Company  
Response to Notice of Violation  
Transmitted with Inspection Report 92-07

By letter dated May 1, 1992, the NRC transmitted a "Notice of Violation and Proposed Imposition of Civil Penalty." It identified the following violations and proposed a civil penalty of \$12,500.00.

I. Violation A

A. NRC Description of Violation

10 CFR 20.201(b) requires that each licensee make such surveys as may be necessary to comply with the requirements of 10 CFR Part 20 and which are reasonable under the circumstances to evaluate the extent of radioactive hazards that may be present. As defined in 10 CFR 20.201(a), "survey" means an evaluation of the radiation hazards incident to the production, use, release, disposal, or presence of radioactive materials or other sources of radiation under a specific set of conditions.

Contrary to the above, on March 15, 1992, the licensee did not make an adequate survey to assure compliance with that part of 10 CFR 20.101 that limits the radiation exposure to the whole body. Specifically, dose rates in the area of the recirculation system 'A' riser were not determined by survey of the specific work location.

B. Iowa Electric Response

1. Admission of the Violation

Iowa Electric Light and Power Company (IELP) admits that an adequate survey of the dose rates was not performed at the specific work location of the recirculation system 'A' riser.

2. Reason for the Violation

This violation was caused by deficiencies in the methodology used by the technician doing the prejob survey. A survey of the general area dose rates near the 'A' recirculation riser was performed. A survey of the specific work location

instead of the general area would have provided more representative dose rates.

3. The Corrective Steps that have been Taken and the Results Achieved

All work in the drywell was immediately suspended. A thorough survey of all riser penetrations, including the 'A' recirculation riser work area, was conducted. While this event was nonreportable, prompt notifications were made to the NRC and IELP senior management. A preliminary post-event review was conducted, and a root cause evaluation was initiated. A temporary hold was placed on outage work while DAEC management met with supervisors, who then instructed all workers on the incident and again outlined management's expectations for safe work practices. Meetings were held with Health Physics staff to review the incident and clarify job coverage expectations and procedures. Establishment of stay times for work in locked high radiation areas was required. Notification to the industry of the event was made through the INPO network.

These immediate steps included a stop work order that continued until workers were informed of the incident, management expectations for safe work practices clarified, and changes implemented.

4. Corrective Steps that will be Taken to Avoid Further Violations

To preclude recurrence of violations of this type, we have created an ALARA job history file specifically for any vessel drain down evolution.

Additional written guidance for job coverage in high radiation areas was issued that: (1) emphasized expectations for comprehensive surveys to protect workers; (2) emphasized the need for enough survey points for a representative picture of the work location; and (3) added the requirement for a health physics technician to accompany the worker on initial entry to the work area for a determination of work area dose rates.

This event and the above written guidance will be incorporated into the DAEC health physics technician continuing training and the contractor

health physics technician training programs. Health physics procedures will be revised to reflect additional survey guidance for technicians.

5. Date when Full Compliance will be Achieved

Full compliance will be achieved after the next cycle of health physics continuing training scheduled for completion by September 30, 1992.

II. Violation B

A. NRC Description of the Violation

10 CFR 19.12 requires, in part, that all individuals working in or frequenting any portion of a restricted area be kept informed of radiation levels in the frequented portions of the restricted area, be instructed in the purposes and functions of the protective devices employed, and be instructed in the appropriate response to warnings made in the event of any unusual occurrence that may involve exposure to radiation.

Contrary to the above, on March 15, 1992, two workers involved with the inservice inspection of the recirculation system 'A' riser in the drywell, a high radiation area, were not adequately instructed in the operation of digital dosimeters in that the alarm signals were not demonstrated or otherwise appropriately described; were not adequately instructed in the appropriate response to the digital dosimeter alarms; and were not adequately informed of the actual radiation levels in their work area.

B. Iowa Electric Response

1. Admission of the Violation

Iowa Electric Light and Power Company admits that two contract workers were not adequately instructed in: (1) the operation of their digital dosimeters; (2) the appropriate response to the digital dosimeter alarms; and (3) the actual radiation levels in their work area.

2. Reasons for the Violation

This violation was caused by a failure to include a level of sufficient detail in instructions to workers on the requirements for use of alarming dosimetry, and by the failure to identify the actual radiation levels, as discussed in the response to Violation A.

3. Corrective Steps that have been Taken and the Results Achieved

In addition to the corrective steps outlined in Violation A, plant and outage management, with radiation protection management, met with maintenance workers to specifically address related work issues. Iowa Electric management held a meeting with the ISI contractor and their management to discuss the event. A demonstration of the alarms made by the electronic alarming dosimeters used at DAEC was given to all workers. The Health Physics Supervisor issued a memorandum to all workers stating the requirements for users of Alnor alarms. DAEC procedures for operation have been revised. General Employee Training has been revised to include a demonstration of electronic alarming dosimetry, the appropriate response to alarms, and the different types of alarming sounds produced. These immediate corrective steps resulted in immediate worker understanding of Alnor dosimetry and proper response to alarms.

4. Corrective Steps that will be Taken to Avoid Further Violations

The corrective steps identified in Violation A and those identified above should preclude recurrence of this event.

5. Date when Full Compliance Will be Achieved

Full compliance will be achieved by September 30, 1992.