

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8709230249 DOC. DATE: 87/09/18 NOTARIZED: NO DOCKET #  
 FACIL: 50-331 Duane Arnold Energy Center, Iowa Electric Light & Pow 05000331  
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 ROTHERT, W. C. Iowa Electric Light & Power Co.  
 RECIP. NAME RECIPIENT AFFILIATION  
 DAVIS, A. B. Region 3, Office of Director

SUBJECT: Responds to NRC ltr re violations noted in Insp Rept  
 50-331/87-15. Corrective actions: drywell & torus nitrogen  
 makeup penetration valve will be inspected during next  
 refueling outage & pressure switch drawings will be updated.

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NOTES:

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|           | PD3-1 PD                   |  | 1      | 1    |  | CAPPUCCI, A   |  | 2      | 2    |
| INTERNAL: | AEOD                       |  | 1      | 1    |  | DEDRO         |  | 1      | 1    |
|           | NRR MORISSEAU, D           |  | 1      | 1    |  | NRR/DOEA DIR  |  | 1      | 1    |
|           | NRR/DREP/EPB               |  | 1      | 1    |  | NRR/DREP/RPB  |  | 2      | 2    |
|           | NRR/DRIS DIR               |  | 1      | 1    |  | NRR/PMAS/ILRB |  | 1      | 1    |
|           | <del>DE LIEBERMAN, J</del> |  | 1      | 1    |  | OGC/HDS2      |  | 1      | 1    |
|           | <del>REG FILE</del>        |  | 1      | 1    |  | RES DEPY GI   |  | 1      | 1    |
|           | RGNS FILE 01               |  | 1      | 1    |  |               |  |        |      |
| INTERNAL: | LPDR                       |  | 1      | 1    |  | NRC PDR       |  | 1      | 1    |
|           | NSIC                       |  | 1      | 1    |  |               |  |        |      |

Iowa Electric Light and Power Company

September 18, 1987  
NG-87-3456

Mr. A. Bert Davis  
Regional Administrator  
Region III  
U. S. Nuclear Regulatory Commission  
799 Roosevelt Road  
Glen Ellyn, IL 60137

Subject: Duane Arnold Energy Center  
Docket No: 50-331  
Op. License No: DPR-49  
Response to NRC Notice of Violation  
Transmitted with Inspection Report  
87-015

File: A-102, A-103

Dear Mr. Davis:

This letter and attachment are provided in response to the subject Notice of Violation concerning inspections of activities at the Duane Arnold Energy Center.

If you have any questions with regards to the response, please feel free to contact our office.

Very truly yours,

  
William C. Rothert  
Manager, Nuclear Division

WCR/JCT/go

Attachment: Response to Notice of Violations Transmitted with  
Inspection Report 87-015

cc: U. S. NRC Document Control Desk (Original)  
L. Liu  
L. Root  
R. McGaughy  
A. Cappucci  
NRC Resident Inspector - DAEC  
Commitment Control 870210

8709230249 870918  
PDR ADOCK 05000331  
G PDR

Iowa Electric Light and Power Company  
Response to Notice of Violation  
Transmitted with Inspection Report 87015

NRC Item of Violation 1 (Severity Level V)

10 CFR 50, Appendix B, Criterion XVI requires that in the case of significant conditions adverse to quality, such as failures, malfunctions or deficiencies, measures will be taken to assure that the cause is determined and corrective action is taken to preclude repetition.

Contrary to the above, the licensee did not determine the cause, or take corrective action to preclude repetition of the excessive and repetitive leakage through the drywell and torus nitrogen makeup penetration valves between 1977 and 1987.

Response to Item of Violation 1

1. Corrective Action Taken and The Results Achieved:

The drywell and torus nitrogen makeup penetration valves are Anchor Darling gate valves. Iowa Electric has reviewed the records of Local Leak Rate Tests (LLRTs) for the 27 Anchor Darling gate valves subject to LLRT. The review identified three valves that have experienced repeated LLRT failures, including one of the three drywell and torus makeup penetration valves (CV-4311) and two main steam line drain isolation valves (MO-4423 and MO-4424). Multiple failures of the latter two valves were identified as a trend in 1986 and Corrective Maintenance Actions Requests (CMARs) were initiated for repair of the valves during the 1987 refuel outage. It was determined that normal wear had caused excessive clearances between the disc and the seats. During the 1987 refuel outage, this problem was corrected by increasing the width of the discs for both valves MO-4423 and MO-4424.

Although CV-4311 has required repair on a number of occasions before it passed the LLRT, each time Iowa Electric repaired the valve leakage by various combinations of lapping the disc and seats, resurfacing and machining the disc and seats and repacking. On each occasion a LLRT and a valve stroke time test were both satisfactorily performed, but the root cause of the uneven disc and seat wear was not determined. Such a determination must be based on detailed inspections of the valve, which can only be performed during an outage. As discussed further below, such an analysis will be performed at the next refuel outage.

2. Corrective Action to Be Taken:

CV-4311 will be inspected during the next refuel outage (cycle 9/10). This inspection will include checking the alignment, dimensions, and integrity of appropriate components (valve and actuator) to determine what repairs and/or replacements are necessary to minimize the potential of recurring failures.

Iowa Electric will augment existing procedures to provide a standardized approach to the evaluation of equipment failure trends.

3. Date When Full Compliance is Achieved:

Full compliance will be achieved before startup from the next refuel outage (early 1989) with the completion of the CV-4311 inspection and appropriate corrective action.

NRC Item of Violation 2 (Severity Level V)

10 CFR 50, Appendix B, Criterion VI requires that measures shall be established to control the issuance of drawings, including changes, which prescribe activities affecting quality.

Contrary to the above, the latest revision of drawings APED C71-4Sh6 and APED C71-4Sh7 did not represent the correct as-built terminations on pressure switches PS 4315A and PS 4315D, respectively.

Response to Item of Violation 2

1. Corrective Action Taken and the Results Achieved:

Other drawings and procedures which refer to the terminations on PS4315A and PS4315D were reviewed and found to be consistent with the correct as-built terminal numbers.

The inaccurate terminal identifications were found as an error in the Startup/Construction Package. Copies of APED-C71-4sh6 and APED-C71-4sh7 were marked up to reflect correct as-built data. However, the data was not incorporated into subsequent revisions. Other drawings in the package were reviewed and similar deviations were not found. Based on this review, Iowa Electric believes this discrepancy was not caused by a programmatic problem.

Engineering Work Request (EWR) 87-0179 has been initiated to correct the current revisions of APED-C71-4Sh6 and C71-4Sh7.

2. Corrective Action to be Taken:

Drawings APED-C71-4Sh6 and C71-4Sh7 will be corrected to reflect the as-built terminal numbers.

3. Date When Full Compliance Will be Achieved:

Full compliance will be achieved by October 30, 1987 with the completion of EWR 87-0179.