

LICENSEE EVENT REPORT (LER)

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|---|--------------------------------------|----------------------|
| FACILITY NAME (1) Duane Arnold Energy Center | DOCKET NUMBER (2) 0 5 0 0 0 3 3 1 | PAGE (3) 1 OF 012 |
|---|--------------------------------------|----------------------|

TITLE (4)
Standby Filter Unit Initiation by Spurious Signal

| EVENT DATE (5) | | | LER NUMBER (6) | | | REPORT DATE (7) | | | OTHER FACILITIES INVOLVED (8) | | |
|----------------|-----|------|----------------|-------------------|-----------------|-----------------|-----|------|-------------------------------|--|------------------|
| MONTH | DAY | YEAR | YEAR | SEQUENTIAL NUMBER | REVISION NUMBER | MONTH | DAY | YEAR | FACILITY NAMES | | DOCKET NUMBER(S) |
| 06 | 17 | 84 | 84 | 020 | 00 | 07 | 17 | 84 | None | | 0 5 0 0 0 |
| | | | | | | | | | | | 0 5 0 0 0 |

OPERATING MODE (9) N

POWER LEVEL (10) 0 5 7

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)

| | | | | | | | |
|-------------------|--------------------------|------------------|-------------------------------------|----------------------|--------------------------|--|--------------------------|
| 20.402(b) | <input type="checkbox"/> | 20.406(c) | <input checked="" type="checkbox"/> | 50.73(a)(2)(iv) | <input type="checkbox"/> | 73.71(b) | <input type="checkbox"/> |
| 20.406(a)(1)(i) | <input type="checkbox"/> | 50.36(e)(1) | <input type="checkbox"/> | 50.73(a)(2)(v) | <input type="checkbox"/> | 73.71(c) | <input type="checkbox"/> |
| 20.406(a)(1)(ii) | <input type="checkbox"/> | 50.36(e)(2) | <input type="checkbox"/> | 50.73(a)(2)(vii) | <input type="checkbox"/> | OTHER (Specify in Abstract below and in Text, NRC Form 366A) | |
| 20.406(a)(1)(iii) | <input type="checkbox"/> | 50.73(a)(2)(i) | <input type="checkbox"/> | 50.73(a)(2)(viii)(A) | <input type="checkbox"/> | | |
| 20.406(a)(1)(iv) | <input type="checkbox"/> | 50.73(a)(2)(ii) | <input type="checkbox"/> | 50.73(a)(2)(viii)(B) | <input type="checkbox"/> | | |
| 20.406(a)(1)(v) | <input type="checkbox"/> | 50.73(a)(2)(iii) | <input type="checkbox"/> | 50.73(a)(2)(x) | <input type="checkbox"/> | | |

LICENSEE CONTACT FOR THIS LER (12)

| | |
|---|---|
| NAME Wendell Keith, Technical Engineer | TELEPHONE NUMBER AREA CODE 3 1 9 8 5 1 - 7 3 3 9 |
|---|---|

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

| CAUSE | SYSTEM | COMPONENT | MANUFACTURER | REPORTABLE TO NRC | CAUSE | SYSTEM | COMPONENT | MANUFACTURER | REPORTABLE TO NRC |
|-------|--------|-----------|--------------|-------------------|-------|--------|-----------|--------------|-------------------|
| C | I | L R I S | N 3 0 5 | No | | | | | |

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE) NO

EXPECTED SUBMISSION DATE (15)

| | | |
|-------|-----|------|
| MONTH | DAY | YEAR |
| | | |

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

The "A" Standby Filter Unit (SFU) was started automatically 4 times on 3 separate days by spurious initiation signals from the control building air intake "A" Radiation Monitor. In each case, the radiation in the area was confirmed to be at normal background levels. The signals were identified as false and the SFU was reset.

After investigation, it is believed that a cause of the "A" initiation may be high moisture or thunderstorms. Replacement of these monitors and relocation to a less exposed area have been initiated.

As radiation was at normal background levels and the SFUs functioned as designed, there was no effect on the health and safety of the public.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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|---|--|----------------|-------------------|-----------------|----------|----|-----|
| FACILITY NAME (1) Duane Arnold Energy Center | DOCKET NUMBER (2) 0 5 0 0 0 3 3 1 | LER NUMBER (6) | | | PAGE (3) | | |
| | | YEAR | SEQUENTIAL NUMBER | REVISION NUMBER | | | |
| | | 8 4 | 0 2 0 | 0 | 0 0 2 | OF | 0 2 |

TEXT (If more space is required, use additional NRC Form 366A's) (17)

The "A" Standby Filter Unit (SFU, EIIS VI) started automatically on a spurious initiation signal from the control building air intake "A" Radiation Monitor (EIIS IL; RIS). (The SFUs provide make-up air to the control room in the event it is isolated. See LER 84-004 for a more complete description.) This occurred at 1707 and 1725 hours on 6/17/84, at 1643 hours on 6/20/84, and at 0430 hours on 7/10/84. After each SFU initiation, radiation monitor readings were normal. The reactor power was at 57%, 57%, 93%, and 98%, respectively. In each case, the SFU performed its design function. The initiations were diagnosed as spurious and the SFU was reset.

These radiation monitors (NMC, Inc., Model GA-2T0) have had problems related to moisture or lightning over ten years operation. Thunderstorms were passing over the plant on 6/17/84 and 7/10/84. Checks of the "A" instrument have found no moisture. The instrument was source-checked satisfactorily.

A search of previous occurrences found 12 initiations of the "A" SFU due to spurious signals from the "A" radiation monitor in the past 2 1/2 years. In the same period, there were no radiation monitor initiations on the "B" side. It was decided to switch the "A" and "B" elements in an attempt to further diagnose the problem. This changeout has not, as of yet, helped diagnose this problem. Further information related to the changeout is contained in LER 84-26.

LERs 84-003, 84-004, and 84-011 have described earlier SFU actuations which were initiated by signals other than high radiation. LERs 77-050 and 83-037 reported previous failures of these radiation monitors. Engineering work is in progress to have these monitors replaced and relocated to a less exposed area.

Although actual conditions requiring SFU initiation did not exist (high air intake radiation), these events are reportable as actuations of an engineered safety feature. There was no radiation beyond normal background levels. The event was correctly diagnosed as a false initiation. Both trains of SFU remained operable throughout the events.

Iowa Electric Light and Power Company

July 17, 1984
DAEC-84-448

U. S. Nuclear Regulatory Commission
Document Control Desk
Washington, D. C. 20555

Subject: Duane Arnold Energy Center
Docket No. 50-331
Op. License DPR-49
Licensee Event Report No. 84-020

Gentlemen:

In accordance with 10 CFR 50.73 please find attached a copy of the subject Licensee Event Report.

Very truly yours,

Daniel L. Mineck for

Daniel L. Mineck
Plant Superintendent - Nuclear
Duane Arnold Energy Center

DLM/WRK/kp

attachment

cc: Mr. James G. Keppler
Regional Administrator
Region III
U. S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, IL 60137

NRC Resident Inspector - DAEC

File A-118a

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