

## LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)  
Duane Arnold Energy CenterDOCKET NUMBER (2)  
0 5 0 0 0 3 3 1 1 1 OF 0 1 2TITLE (4)  
Unplanned RWCU IsolationEVENT DATE (5)  
MONTH DAY YEAR  
0 6 3 0 8 4 8 4  
LER NUMBER (6)  
SEQUENTIAL NUMBER REVISION NUMBER  
0 2 4 0 0  
REPORT DATE (7)  
MONTH DAY YEAR  
0 7 3 0 8 4  
OTHER FACILITIES INVOLVED (8)  
FACILITY NAMES DOCKET NUMBER(S)  
None 0 5 0 0 0  
None 0 5 0 0 0OPERATING MODE (9) N  
POWER LEVEL (10) 0 0 0  
THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)  
20.402(b) 20.406(c) X 50.73(a)(2)(iv) 73.71(b)  
20.406(a)(1)(i) 50.36(e)(1) 50.73(a)(2)(v) 73.71(c)  
20.406(a)(1)(ii) 50.36(e)(2) 50.73(a)(2)(vii) OTHER (Specify in Abstract below and in Text, NRC Form 365A)  
20.406(a)(1)(iii) 50.73(a)(2)(i) 50.73(a)(2)(viii)(A)  
20.406(a)(1)(iv) 50.73(a)(2)(ii) 50.73(a)(2)(viii)(B)  
20.406(a)(1)(v) 50.73(a)(2)(iii) 50.73(a)(2)(x)LICENSEE CONTACT FOR THIS LER (12)  
NAME  
Kenneth S. Putnam, Technical Support Engineer  
TELEPHONE NUMBER  
AREA CODE 3 1 9 8 5 1 - 7 4 5 6COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)  
CAUSE SYSTEM COMPONENT MANUFACTURER REPORTABLE TO NPROS  
X C E NoSUPPLEMENTAL REPORT EXPECTED (14)  
YES (If yes, complete EXPECTED SUBMISSION DATE) X NO  
EXPECTED SUBMISSION DATE (15)  
MONTH DAY YEAR

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

On June 30, 1984, with the reactor critical and the plant in startup mode an unplanned partial Group V (Reactor Water Clean-Up Inlet Line) isolation was experienced due to noise in the Reactor Water Clean-Up (RWCU) leak detection electrical circuitry. The isolation was investigated and determined to be spurious. The RWCU system was subsequently returned to normal lineup.

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## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/85

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 4	— 0 0	0 2	OF	0 2

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

At 1333 hours with the reactor critical and the plant in startup mode, the isolation valve on the inlet line to the reactor water cleanup system (CE-ISV-2700) automatically closed for no immediately apparent reason, thus constituting an unplanned actuation of an engineered safety feature.

Operators immediately investigated and found that none of the applicable initiating conditions existed. The reactor water cleanup system is designed to isolate on any one of the following conditions:

1. High temperature downstream of the non-regenerative heat exchanger.
2. Reactor vessel low water level.
3. Standby liquid control system actuation.
4. High differential flow of the cleanup system.
5. High ambient temperature in the area of the system.
6. High differential temperature across the systems inlet and outlet ventilation ducts.

The spurious isolation of the reactor water cleanup system has been a recurrent problem. Study to reduce the susceptibility of this system to spurious electrical isolation signals (JM) is ongoing. The specific source of the spurious signals has not yet been identified due to the randomness of the event and the intermittent nature of the electrical isolation signal. Although isolation valves remain in the isolated condition following spurious initiation, the logic is not sealed in so as to allow diagnosing the source of the isolation. Therefore, a multi-channel recorder will be installed to monitor the isolation logic of the system in order to aid in the diagnosis of the specific root source or sources of the random electrical signals causing the spurious isolations.

Throughout the event the isolation components of the system performed as designed.

Iowa Electric Light and Power Company

July 30, 1984

DAEC-84-483

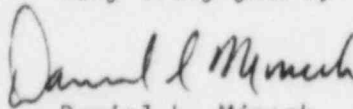
U. S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, D. C. 20555

Subject: Duane Arnold Energy Center  
Docket No. 50-331  
Op. License DPR-49  
Licensee Event Report No. 84-024

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  
Plant Superintendent - Nuclear  
Duane Arnold Energy Center

DLM/KSP/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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