

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Duane Arnold Energy Center	DOCKET NUMBER (2) 0 5 0 0 0 0 3 3 1	PAGE (3) 1 OF 0 1 2
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TITLE (4)
Reactor Scram from Jarred Instrument Rack

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)		
0 7	1 2	8 4	8 4	0 2	7 0	0 8	1 0	8 4	None			0 5 0 0 0 0		
												0 5 0 0 0 0		

OPERATING MODE (9) N

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 8: (Check one or more of the following) (11)

20.402(b)	20.405(c)	X	50.73(a)(2)(iv)	73.71(b)
20.405(a)(1)(i)	50.36(c)(1)		50.73(a)(2)(v)	73.71(c)
20.405(a)(1)(ii)	50.36(c)(2)		50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 386A)
20.405(a)(1)(iii)	50.73(a)(2)(i)		50.73(a)(2)(viii)(A)	
20.405(a)(1)(iv)	50.73(a)(2)(ii)		50.73(a)(2)(viii)(B)	
20.405(a)(1)(v)	50.73(a)(2)(iii)		50.73(a)(2)(ix)	

LICENSEE CONTACT FOR THIS LER (12)

NAME William J. Miller - Technical Support Supervisor	TELEPHONE NUMBER
	AREA CODE: 3 1 9 8 5 1 - 7 2 3 8

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS
A	JIC			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)

While in normal run mode at 0902 hours on 7/13/84, DAEC experienced a spurious reactor scram due to jarring of an instrument rack (1C-56) in the Reactor Building. The resultant transient was mild and all systems performed as designed. ECCS injection setpoints were not reached (low-low level of 1'9.5" above top of active fuel, for example) and the MSIV's remained open. Void collapse following the scram caused systems actuated on reactor low water level (170" above top of active fuel) to initiate (Groups II, III, IV and V isolations and Standby Gas Treatment Systems).

The jarring of the instrument rack occurred during construction of scaffolding adjacent to instrument rack 1C-56. The end of a 6' piece of scaffolding pipe fell against the instrument rack support which in turn jarred the reactor high pressure scram switches. Surveillance confirmed that the pressure setpoints remained in specification following the event. Reactor operation was resumed two days later.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		

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

While in normal run mode at 0902 hours on 7/13/84, DAEC experienced a spurious reactor scram (EIIS System JC) due to jarring of an instrument rack in the Reactor Building (1C-56). All systems performed as designed. ECCS injection setpoints were not reached (low-low level of 119.5" above top of active fuel, for example) and the MSIV's remained open. Void collapse following the scram caused systems actuated on reactor low water level (170" above top of active fuel) to initiate (Groups II, III, IV and V containment isolations and Standby Gas Treatment Systems, EIIS Systems JM and BH).

The jarring of the instrument rack occurred during construction of scaffolding (in support of fire protection modifications) adjacent to instrument rack 1C-56. The end of a 6' piece of scaffolding pipe fell against the instrument rack support which in turn jarred the reactor high pressure scram switches. Surveillance confirmed that the pressure setpoints remained in specification following the event. Reactor operation was resumed two days later.

The post event review confirmed that reactor pressure did not approach the 1035 psig setpoint prior to the event. This review was aided by construction personnel promptly identifying the circumstances surrounding the pipe impact on the instrument rack support. The 1C-56 instrument rack supports two of four RPS high pressure switches (Barksdale Model Number B2T M12SS - bourdon tubes). RPS A and B trip logic is fed (one each) from these two pressure switches.

Reactor power operation was delayed until 7/15/84 due to an unrelated RPS trip on 7/14/84. (See LER 84-028.)

In addition to the calibration check of the pressure switches discussed above, a series of meetings were held with personnel involved in various activities at DAEC (including construction, engineering and maintenance). During these meetings the Operations Supervisor reviewed the circumstances surrounding the event and emphasized the need for caution when working in sensitive plant areas. Specific instructions have been given to Operations Personnel to improve their awareness of in-plant construction activities and to alert workers to particularly sensitive plant equipment. Further, a multicolored demarkation has been painted on the floor around instrument racks 1C-55 and 56. See LER 84-029 for additional, corrective action regarding personnel error prevention.

Iowa Electric Light and Power Company

August 10, 1984

DAEC-84-509

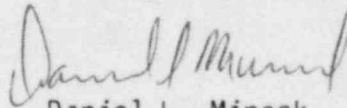
U. S. Nuclear Regulatory Commission
Document Control Desk
Washington, D. C. 20555

Subject: Duane Arnold Energy Center
Docket No. 50-331
Op. License DPR-49
Licensee Event Report No. 84-027

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/WMJ/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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