

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Duane Arnold Energy Center										DOCKET NUMBER (2) 0 5 0 0 0 3 3 1 1										PAGE (3) 1 OF 2	
TITLE (4) Inadvertent Steam Line High Radiation RPS Trip During Surveillance Test																					
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	0 8	8 5	8 5	0 2	5	0 0	0 8	0 7	8 5	None						0 5 0 0 0 0 0 0					
OPERATING MODE (9) N			THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5: (Check one or more of the following) (11)																		
POWER LEVEL (10) 0 0 0			20.402(b)				20.405(e)				<input checked="" type="checkbox"/> 50.73(a)(2)(iv)				73.71(b)						
			20.405(a)(1)(i)				50.38(a)(1)				<input type="checkbox"/> 50.73(a)(2)(v)				73.71(c)						
			20.405(a)(1)(ii)				50.38(a)(2)				<input type="checkbox"/> 50.73(a)(2)(vi)				OTHER (Specify in Abstract below and in Text, NRC Form 366A)						
			20.405(a)(1)(iii)				50.73(a)(2)(i)				<input type="checkbox"/> 50.73(a)(2)(vii)(A)										
			20.405(a)(1)(iv)				50.73(a)(2)(ii)				<input type="checkbox"/> 50.73(a)(2)(vii)(B)										
			20.405(a)(1)(v)				50.73(a)(2)(iii)				<input type="checkbox"/> 50.73(a)(2)(ix)										
LICENSEE CONTACT FOR THIS LER (12)																					
NAME Brad Thomas, Technical Support 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 NPROS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS		
SUPPLEMENTAL REPORT EXPECTED (14)										EXPECTED SUBMISSION DATE (15)											
YES (If yes, complete EXPECTED SUBMISSION DATE)										<input checked="" type="checkbox"/> NO											
ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-spaced typewritten lines) (16)																					

At 1610 hours on July 8, 1985, while the reactor was shut down for a refueling outage, a full Reactor Protection System (RPS) trip signal and a containment isolation Group I: Main Steam Isolation Valves (MSIV's), MSIV drains and Recirculation Sample Valves isolation signal were received from the main steam line radiation monitors. Control rods had previously been fully inserted following refueling. At the time of the trip, technicians were performing a main condenser vacuum pump isolation functional test which requires deenergizing two main steam line high radiation instrument channels. An RPS relay for one of these instruments was to be jumpered prior to deenergizing the channels to prevent a full RPS trip. A procedural deficiency caused the trip due to jumpering across a relay from an instrument which was not being deenergized. The trip was reset at 1616 hours after operators had determined the cause. The procedure is being permanently corrected and the test was satisfactorily completed on July 11, 1985 using a revised procedure.

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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 8 5 — 0 2 5 — 0 0 0 2 OF 0 2	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			

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

On July 8, 1985, the plant was in a refuel outage with the mode switch in the shutdown position, the reactor was completely refueled, and all control rods were in their fully inserted position. At 1610 hours, the Reactor Protection System (RPS, EIIS System JC) tripped and a Group I isolation (JM) occurred per design after receiving a main steam line high radiation signal.

At the time of the trip, technicians were performing a main condenser vacuum pump automatic isolation functional test, which demonstrates automatic securing and isolation of the vacuum pump due to main steam line high radiation. This test is performed once each operating cycle while the plant is in cold shutdown. The test requires deenergizing two main steam line radiation monitor instrument channels, one in each of the two RPS trip logic trains "A" and "B", which together initiate condenser vacuum pump and main steam line isolations. A relay from one of the two monitors in the RPS logic was to be jumpered prior to deenergizing the monitors so that only one of the two RPS logic sides would receive a trip signal (a deenergized relay), preventing an unnecessary full RPS trip and Group I isolation. All Group I valves were in their closed positions prior to the trip so no valve movement took place.

The test was performed in accordance with the appropriate procedure. However, a procedural deficiency, a result of the latest procedure revision (made since the last refuel outage) caused the RPS trip. An RPS relay which was not to be deenergized was jumpered across instead of one of the two deenergized relays.

The RPS trip and Group I isolation were reset at 1616 hours after verifying the functional test was the cause. The procedure is being permanently corrected and the test was successfully completed using a revised procedure on July 11, 1985.

This event is being reported pursuant to 10 CFR 50.73(a)(2)(iv) which requires reporting "... manual or automatic actuation of any Engineering Safety Feature."

Iowa Electric Light and Power Company

July 31, 1985
DAEC-85-699

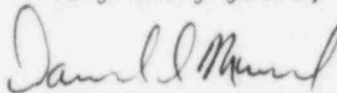
U. S. Nuclear Regulatory Commission
Document Control Desk
Washington, D. C. 20555

Subject: Duane Arnold Energy Center
Docket No. 50-331
Op. License DPR-49
Licensee Event Report No. 85-025

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/BNT/kp

attachment - LER 85-025

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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