NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

LICENSEE EVENT REPORT (LER)

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

TITLE (4)

RPS Trip from a Spurious LPRM 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)
0 6	0 6	8 5	8 5	0 1 8	0 0	0 7	0 5	8 5	None	0 5 0 0 0
										0 5 0 0 0

OPERATING MODE (9)	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
N	20.402(b)	20.405(c)	X 50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10): 0 0 0	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 366A)
	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)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
James C. Smith, Acting Technical Support Supervisor	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	
X	I G	D E T	G 0 8 0	Y							

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO				

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

On 6/06/85, the reactor was in cold shutdown for a refueling outage. Calibration work was being performed on a Local Power Range Monitor (LPRM) when a Reactor Protection System (RPS) trip occurred. The trip was caused by a spurious signal from the LPRM due to a noise spike during testing and reinstallation. The affected LPRM is shared by two Average Power Range Monitors (APRM's) so a full RPS trip signal was received.

The RPS trip was reset and the APRM channel "B" was bypassed to avoid recurrence. Troubleshooting was initiated on the suspect LPRM. Since all control rods were fully inserted, there was no rod movement resulting from the RPS trip. There was no effect on the health and safety of the public.

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

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

On 6/06/85, the reactor was in cold shutdown, all control rods were fully inserted, and the mode switch was in refuel position. The fuel was reloaded in the vessel with the reactor head off. Calibration maintenance work was being performed on the Local Power Range Monitors (LPRM's) (EIIS System IG) in the backpanel area of the control room.

At 0928 hours, a full Reactor Protection System (RPS) trip occurred due to a spurious high (> 15% power) Average Power Range Monitor (APRM) trip. This was during the approximate time that the test equipment was being disconnected from a LPRM and the LPRM was being reconnected.

The cause of the trip is believed to be the LPRM spiking high when it was placed back into service. This suspect LPRM supplies signals to two APRM's which feed both RPS channels "A" and "B" (EIIS System JC). The trip therefore completed sufficient logic for the full RPS trip.

The RPS trip opened the scram valves but there was no control rod movement since the rods were already fully inserted. The trip was reset and APRM channel "B" was bypassed to avoid recurrence. Two other APRM channels of RPS channel "B" were operable as required per Technical Specification Table 3.1-1. Troubleshooting on the affected LPRM is currently being performed and APRM channel "B" will be placed back into service prior to plant startup.

With the plant in the refuel mode, the engineered safety feature auto-initiation had no effect on the health and safety of the public. Although there was no safety significance to this event, it is being reported pursuant to 10 CFR 50.73(a)(2)(iv) which requires reporting "...manual or automatic actuation of any Engineered Safety Feature."

Iowa Electric Light and Power Company

July 1, 1985
DAEC-85-0552

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. 85-018

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/JCS/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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July 1, 1985

TO:
L. Liu
S. Tuthill
R. McGaughy
E. Root (Safety Committee)
E. Matthews
P. Ward
H. Rehrauer
D. Wilson
R. Hannen
K. Young
G. VanMiddlesworth
K. Howard
Operations Shift Supervisors
DAEC Supervision - Routing Slip
STA Coordinator
INPO
R. Salmon
T. Dalton
R. Lessly
P. Seckman
DAEC Commitment Control

FROM: D. Mineck
Plant Superintendent - Nuclear

FILE: A-118a

Please find attached one copy of a Licensee Event Report that has been transmitted to the NRC.

Unique Report No.

Reportable Occurrence Report No. 85-018

Notification Letter No. DAEC-85-0552

DR Number 85-272

kp*