NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/88

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Perry Nuclear Power Plant, Unit 1	0 5 0 0 0 4 4 0	1 OF 0 2

TITLE (4)

Inadvertent Breaker Actuation Results In BOP Isolation

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 5 0 0 0
1 2	2 8	8 6	8 6	0 9 1	0 0	0 1	2 7	8 7		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)			
2		20.402(b)	20.405(c)	X 50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10)		20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
0 0 7		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
	AREA CODE
Paul Russ, Compliance Engineer, ext. 6472	2 1 6 2 5 9 - 3 7 3 7

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	

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 December 28, 1986 at 0304, a Nuclear Steam Supply Shutoff System (NSSSS) Division 2 Balance of Plant (BOP) isolation occurred when a power supply breaker for the isolation actuation relays was inadvertently opened. The event occurred when a maintenance worker removed the access cover plate to the breaker panel. When it was confirmed that the open breaker caused the isolation, operators returned the breaker to the closed position. The isolation was reset and all affected systems were returned to service by 0330.

The cause of this event was personnel error. Although the maintenance worker was aware he was working on energized equipment, when removing the access cover plate he inadvertently opened the breaker supplying power to the NSSSS actuation relays. A contributing cause to this event was the small clearances provided by the design configurations which exist when removing the access cover plate.

To prevent recurrence, the individual involved has been counseled. Other appropriate maintenance personnel will receive training on this event with emphasis on the necessity of exercising caution when working on energized breaker panels exhibiting similar small clearances.

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
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TEXT *(If more space is required, use additional NRC Form 366A's)* (17)

On December 28, 1986 at 0304, a Nuclear Steam Supply Shutoff System (NSSSS) Division 2 Balance of Plant (BOP) isolation occurred when a power supply breaker for the isolation actuation relays was inadvertently opened. At the time of the event, the plant was in Operational Condition 2 (Startup) with reactor power approximately 7 percent. Reactor vessel [RPV] pressure was approximately 940 psig and reactor coolant temperature approximately 520 degrees.

On December 28, a maintenance worker was removing a panel access cover plate in accordance with a work order to add a spare breaker to EK-1-B1. Due to the small clearance between the breakers and the access cover plate, breaker 22 was inadvertently opened at 0304 while the access cover plate was being removed. The breaker actuation caused a power loss to NSSSS Division 2 BOP actuation relays resulting in a NSSSS Division 2 BOP isolation. Major systems that isolated due to the BOP isolation include Containment Vessel Chilled Water and Liquid Radwaste Sumps. Plant response to the breaker actuation was as designed. Plant operators responded to the isolation in accordance with plant instructions and discovered the cause to be the opened breaker. Operators subsequently returned the breaker to the closed position. The isolation was reset and all affected systems were returned to service by 0330.

The cause of this event was personnel error. Although the maintenance worker was aware he was working on energized equipment while removing the access cover plate he inadvertently opened the breaker supplying power to the NSSSS actuation relays. A contributing cause to this event was the small clearances provided by the design configuration which exist when removing the access cover plate (Manufacturer: Cutler Hammer Products, model # 6CF793597-H).

The isolation and resultant short term shutdown of the Containment Vessel Chilled Water, the Liquid Radwaste Sumps, and other affected BOP systems is not safety significant regardless of power level. No previous similar events were identified.

To prevent recurrence the individual involved has been counseled and other appropriate maintenance personnel will receive training on this event with emphasis on the necessity of exercising caution when working on energized breaker panels exhibiting similar small clearances.

Energy Industry Identification System Codes are identified in the text as [XX].