

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

Estimated burden per response to comply with this mandatory information collection request: 50 hrs. Reported lessons learned are incorporated into the licensing process and fed back to industry. Forward comments regarding burden estimate to the Records Management Branch (T-6 F33), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and to the Paperwork Reduction Project (3150-0104), Office of Management and Budget, Washington, DC 20503. If an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

FACILITY NAME (1) Cooper Nuclear Station		DOCKET NUMBER (2) 05000298	PAGE (3) 1 OF 3
---	--	-------------------------------	--------------------

TITLE (4)
Inadvertent Half-Group VII Isolation due to Deenergization of a Relay

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 NAME	DOCKET NUMBER
07	27	1999	1999	-- 006 --	00	08	26	1999	FACILITY NAME	DOCKET NUMBER
										05000
										05000

OPERATING MODE (9)	1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)								
POWER LEVEL (10)	100	20.2201(b)	20.2203(a)(2)(v)	50.73(a)(2)(i)	50.73(a)(2)(viii)					
		20.2203(a)(1)	20.2203(a)(3)(i)	50.73(a)(2)(ii)	50.73(a)(2)(x)					
		20.2203(a)(2)(i)	20.2203(a)(3)(ii)	50.73(a)(2)(iii)	73.71					
		20.2203(a)(2)(ii)	20.2203(a)(4)	X 50.73(a)(2)(iv)	OTHER					
		20.2203(a)(2)(iii)	50.36(c)(1)	50.73(a)(2)(v)	Specify in Abstract below or in NRC Form 366A					
		20.2203(a)(2)(iv)	50.36(c)(2)	50.73(a)(2)(vii)						

LICENSEE CONTACT FOR THIS LER (12)

NAME Radhey Sharma, Licensing Engineer	TELEPHONE NUMBER (include Area Code) (402) 825-3811
---	--

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX
A	JM	RLY	G080	N					

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 15 single-spaced typewritten lines) (16)

On July 27, 1999, at 0850 hours, while replacing the Primary Containment Isolation System [EIS Code: JM] relay, PCIS-REL-K75, it was discovered that an inadvertent half-group VII isolation occurred on Logic A. This isolation was caused by deenergization of PCIS-REL-K65 relay. Both the PCIS-REL-K75 and PCIS-REL-K65 relays are mounted on the same snap rail channel. The deenergization of PCIS-REL-K65 relay resulted in the closure of Reactor Recirculation Air Operated Valve, RR-AOV-741AV, and thus prevented the capability to sample the reactor coolant. A Group VII isolation is caused by either a Low-Low reactor water level signal or a High-High radiation in the main steam line signal. Neither of these signals were present at the time of the occurrence of the half-group VII isolation. On July 27, 1999, at 0937 hours, Cooper Nuclear Station (CNS) Technical Requirements Manual Limiting Condition for Operation (LCO) 3.4.1, Condition B, was entered due to CNS's inability to sample the reactor coolant.

The PCIS-REL-K65 relay and the half-group VII isolation were reset. The RR-AOV-741AV valve was reopened. On July 27, 1999, at 1112 hours, the LCO 3.4.1 was exited. On July 27, 1999, at 1150 hours, a Four-hour report of the event was submitted to the NRC per the 10CFR50.72(b)(2)(ii) requirements.

9908310262 990826
PDR ADOCK 05000298
S PDR

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

FACILITY NAME (1)	DOCKET (2)	LER NUMBER (6)			PAGE (3)
Cooper Nuclear Station	05000298	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 OF 3
		1999	-- 006 --	00	

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

PLANT STATUS

At the time of the event, the plant was in Mode 1, and at 100 percent power.

EVENT DESCRIPTION

On July 27, 1999, at 0850 hours, while replacing the Primary Containment Isolation System (EIS Code: JM) relay, PCIS-REL-K75, personnel from the Chemistry Department informed the Control Room that samples of the reactor coolant could not be obtained. An investigation of this condition revealed that an inadvertent half-group VII isolation occurred on Logic A. This isolation was caused by deenergization of the PCIS-REL-K65 relay. Both the PCIS-REL-K75 and PCIS-REL-K65 relays share a common snap rail channel in Panel 9-41. The deenergization of PCIS-REL-K65 relay resulted in the closure of Reactor Recirculation Air Operated Valve, RR-AOV-741AV, and thus prevented the capability to sample the reactor coolant. A Group VII isolation is caused by either of two signals: (1) Low-Low reactor water level greater than or equal to -113 inches, or (2) High-High radiation in the main steam line less than or equal to three times the normal full power level. Neither of these isolation signals were present at the time of the occurrence of the event.

On July 27, 1999, at 0937 hours, Cooper Nuclear Station (CNS) Technical Requirements Manual Limiting Condition for Operation (LCO) 3.4.1, Condition B, was entered due to CNS's inability to sample the reactor coolant. The power to PCIS-REL-K65 relay was verified. The relay was reset and determined to be functioning properly. The half-group isolation was reset, and the RR-AOV-741AV valve reopened. On July 27, 1999, at 1112 hours, the LCO was exited. On July 27, 1999, at 1150 hours, a Four-hour report of the event was submitted to the NRC per the requirements of 10CFR50.72(b)(2)(ii).

BASIS FOR REPORT

The event is being reported as a violation of Technical Specifications under 10CFR50.73(a)(2)(iv).

CAUSE

The cause of this event is attributed to inadequate process control. The Maintenance Procedure 7.3.16, "Low Voltage Relay Removal and Installation," has specific guidance in Step 3.1.1.7 to "Identify any special equipment line-ups or tag-outs necessary to prevent inadvertent equipment actuation or trips and record on Attachment 1, Section 6," but does not provide guidance concerning evaluation of adjacent components and potential effects, if perturbed. In addition, the work evaluation process, which includes work planning and pre-job walkdowns, did not identify the potential trip of PCIS-REL-K65 relay.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

FACILITY NAME (1)	DOCKET (2)	LER NUMBER (6)			PAGE (3)
Cooper Nuclear Station	05000298	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	3 OF 3
		1999	-- 006 --	00	

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

SAFETY SIGNIFICANCE

The safety significance of this event is minimal. The reactor water coolant sampling system does not perform a risk significant mitigation function, and therefore, a negligible risk occurred during this event.

This event is not a Safety System Functional Failure. The insertion of a half-group VII isolation did not result in a loss of any other safety function. In addition, no equipment failure occurred because of the half-group isolation, and the safety system was restored to an operable status immediately.

CORRECTIVE ACTIONS

1. CNS will revise Maintenance Procedure 7.3.16, by October 19, 1999, to include specific guidance concerning mounting evaluation and potential impact on remaining relays that share a common snap rail channel.
2. CNS will include, by October 19, 1999, a method in the work control process for evaluating the potential physical impact of maintenance on the surrounding components.

PREVIOUS EVENTS

LER 96-005, "Partial ESF Actuation of Containment Isolation Due to Personnel Error"