



**CENTERIOR  
ENERGY**

**PERRY NUCLEAR POWER PLANT**

10 CENTER ROAD  
PERRY, OHIO 44081  
(216) 259-3737

Mail Address:  
P.O. BOX 97  
PERRY, OHIO 44081

**Michael D. Lyster**  
VICE PRESIDENT - NUCLEAR

May 22, 1992  
PY-CEI/NRR-1501 L

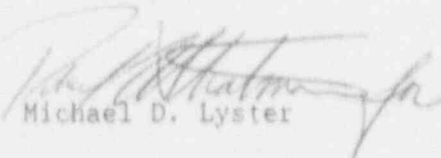
U.S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, D.C. 20555

Perry Nuclear Power Plant  
Docket No. 50-440  
LER 92-009

Dear Sir:

Enclosed is Licensee Event Report 92-009 for the Perry Nuclear Power Plant.

Sincerely,

  
Michael D. Lyster

MDL:RWG:ss

Enclosure: LER 92-009

cc: NRC Project Manager  
NRC Sr. Resident Inspector  
NRC Region III

9205260217 920522  
PDR ADOCK 05000440  
S PDR

Operating Companies  
Cleveland Electric Illuminating  
Toledo Edison

IE22  
11

LICENSEE EVENT REPORT (LER)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (F-530), U.S. NUCLEAR REGULATORY COMMISSION WASHIN. DC 20555 AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET WASHINGTON, DC 20503.

FACILITY NAME (1) Perry Nuclear Power Plant, Unit 1 DOCKET NUMBER (2) 050004401 OF 04 PAGE (3) 1

TITLE (4) Technical Specification Violation Due to operation of the Control Room Ventilation System in the Normal Mode with the Control Room Airborne Radiation Monitor Inoperable

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
04	24	92	92	009	00	05	22	92	
								DOCKET NUMBER(S)	
								05000	
								05000	

OPERATING MODE (9) 5 THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 50.72 (Ch. 4 one or more of the following) (11)

POWER LEVEL (10)	20.402(k)	20.405(i)	50.72(a)(2)(iv)	73.71(b)
0.00	20.405(i)(1)(ii)	50.38(i)(1)	50.73(i)(2)(iv)	73.71(c)
	20.405(i)(1)(iv)	50.38(i)(2)	50.73(i)(2)(v)	OTHER (Specify in Abstract below and in Text, NRC Form 368A)
	20.405(i)(1)(vi)	X 50.73(i)(2)(i)	50.73(i)(2)(vi)(A)	
	20.405(i)(1)(vii)	50.73(i)(2)(ii)	50.73(i)(2)(vi)(B)	
	20.405(i)(1)(viii)	50.73(i)(2)(iii)	50.73(i)(2)(ix)	

LICENSEE CONTACT FOR THIS LER (12) NAME: Henry L. Hegrat, Compliance Supervisor, Extension 5185 TELEPHONE NUMBER: AREA CODE 216, NUMBER 259-3737

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC

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

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

On April 25, 1992, a review of active Limiting Condition for Operation (ALCO) entries revealed that the Control Room Heating, Ventilation and Air Conditioning System (CRHVAC: M25/26) was operated in the "Normal" mode of operation vice the "Isolation" mode required by Technical Specification (T.S.) 3.3.7.1, Radiation Monitoring Instrumentation. At the time of the event, the plant was in the sixth week of the current refueling outage. The Control Room Ventilation Radiation Monitor logic had previously been disabled on March 30, 1992 to support CRHVAC modification and testing activities. The CRHVAC System had been placed in the isolation mode at that time to comply with applicable Action requirements of T.S. 3.3.7.1. The ALCO review determined that the T.S. Action Statement requirement had been violated on April 24, 1992 and again on April 25, 1992 when the M25/26 system was operated in the Normal mode prior to restoring operability to the Control Room Ventilation Radiation Monitor. During a subsequent investigation, it was discovered that additional violations of the T.S. 3.3.7.1 Action Statement requirements had occurred. The cause of this event is attributed to personnel error. Incorrect assumptions regarding the correlation between the Action requirements of T.S. 3.3.7.1 and T.S. 3.7.2 (Control Room Emergency Recirculation System) significantly contributed to this event.

As corrective action for this event, licensed and non-licensed personnel will review the specific details of the event to preclude a similar occurrence. Additionally, the Technical Specification action requirements involved will be evaluated for potential revision.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST 500 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATES TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20545, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (3)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
Perry Nuclear Power Plant, Unit 1	0 5 0 0 0 4 4 0	9 2	— 0 0 9	— 0 0	0 2	OF 0 4

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

## I. Introduction

On April 25, 1992, at approximately 0148 hours, the Control Room Heating, Ventilation, and Air Conditioning System (CRHVAC; M25/26) [VI] was operated in the "Normal" mode vice the "Isolation" mode, thereby violating the applicable Technical Specification Limiting Condition for Operating (LCO) Action requirements. At the time of the event, the plant was in Operational Condition 5 (shutdown) with the reactor coolant temperature at 82 degrees. This event is being reported pursuant to the requirements of 10CFR50.73(a)(2)(i)(B).

## II. Event Description

The CRHVAC system had been placed in the Emergency Recirculation/Isolation mode on March 30, 1992 due to the disabling of the logic associated with the Control Room Ventilation Radiation Monitor. This mode of operation was required to satisfy the LCO Action requirements of T.S. 3.3.7.1.b, Action 72. The radiation monitor had been disabled to support an extensive modification of the CRHVAC System. It was later determined that the CRHVAC had been operated in Normal on April 24, 1992 as part of the post-modification testing under Temporary Instruction (TXI)-140, "M25/26 Design Change Package (DCP) 91-0028 Retest." At 0148 hours on April 25, 1992, Train A of the CRHVAC System was shifted to the Normal operating mode from the Emergency Recirculation mode in preparation for a Division 1 Loss of Offsite Power (LOOP) test. At 1124 hours on April 25, 1992, a Unit Supervisor performing a review of active LCO information noted that the Action Requirements for the LCO specified that the CRHVAC System be maintained in the Emergency Recirculation/Isolation mode vice the Normal mode. The CRHVAC system was immediately returned to the Emergency Recirculation mode. A surveillance test was subsequently performed to restore operability to the Control Room Radiation Monitor. At 1457 hours on April 25, 1992, the Control Room Radiation Monitor was declared operable.

During the follow-up investigation of this event, it was determined that additional violations of the LCO for the inoperable Control Room Ventilation Radiation Monitor had occurred. During the period from April 19, 1992 to April 25, 1992, several doors had been opened to allow fresh air into the Control Room area while the modification referenced above was in progress. The opening of these Control Room envelope barriers was controlled under an additional LCO (ALCO 92-431) for the Control Room Emergency Recirculation System. All action requirements for this LCO were satisfied and appropriately documented. There were no core alterations, fuel handling activities, or evolutions with a potential for draining the reactor vessel in progress during the period when the Control Room doors were open.

## III. Cause Analysis

This event is attributed to personnel error. The LCO Action statement for the inoperable Control Room Radiation Monitor had been in effect for approximately three weeks when the Action Statement requirements were violated.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST 300 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20545, AND TO THE PAPERWORK REDUCTION PROJECT (2150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)  Perry Nuclear Power Plant, Unit 1	DOCKET NUMBER (2)  0500044092	LER NUMBER (8)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
			009	00	003	OF	04

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

The LCO for the inoperable Control Room Radiation Monitor was properly documented on an Active LCO Tracking Sheet (ALCO 92-411) on March 30, 1992, when the radiation monitor was disabled. The Active LCO Tracking Sheet contained an adequate description of the reason for the LCO and included all the associated action requirements. An additional Active LCO Tracking Sheet was initiated on April 19, 1992, after completing core alterations, for the purpose of allowing control room barriers to be opened as necessary to provide fresh air into the Control Room.

It was incorrectly assumed that the Technical Specification Action requirements for both LCOs were identical since the Control Room Ventilation Radiation Monitor functions as a support system for the CRHVAC system. This cognitive error was not noted during subsequent reviews of the LCOs or associated documentation for the work in progress.

Technical Specification Action 3.7.2.b.2 (Control Room Emergency Recirculation System) states:

"With both control room emergency recirculation subsystems inoperable, suspend CORE ALTERATIONS, handling of irradiated fuel in the Fuel Handling Building and the primary containment, and operations with a potential for draining the reactor vessel."

No additional actions are required for this LCO. However, when the radiation monitoring support system is inoperable, T.S. 3.3.7.1.b Action 72 requires, if the monitor is not restored within 7 days, the plant to initiate and maintain operation of the Control Room emergency filtration system in the isolation mode; thereby making the action requirements for the support system more restrictive than the requirements for the supported system. This apparent inconsistency in T.S. requirements is considered a contributing factor to this event.

As part of the shift turnover for Control Room operators, all active LCOs are reviewed to ensure compliance with applicable Technical Specifications. Although the LCO associated with the Control Room Radiation Monitor had been reviewed by all applicable personnel, sufficient attention to detail was not paid to the LCO Action requirements to prevent the violations which occurred.

IV. Safety Analysis

The Control Room Airborne Radiation Monitor is used to monitor the Control Room atmosphere for and noble gas activity in order to maintain Control Room habitability as required by 10CFR50, Appendix A, Criterion 19. Upon detection of high gaseous radioactivity, the monitor initiates a signal to isolate the Control Room from the outside environment.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST 500 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (F530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20545, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)  Perry Nuclear Power Plant, Unit 1	DOCKET NUMBER (2)  0 5 0 0 0 4 4 0	LER NUMBER (3)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
		9 2	0 0 9	0 0	0 4	OF 0 4

TEXT (if more space is required, use additional NRC Form 386A's) (17)

The following actions are required by the Technical Specifications when this monitor is inoperable:

1. Assure a portable continuous noble gas monitor or the Control Room Area Radiation Monitor is operable in the Control Room within 24 hours.
2. Restore the inoperable monitor to operable status within 7 days.
3. If requirement 2 cannot be satisfied, initiate and maintain operation of the Control Room emergency filtration system in the isolation mode of operation within 1 hour.

The above requirements had been satisfied except as noted previously. Compliance with the LCO action requirements for T.S. 3.7.2.b (Control Room Emergency Recirculation System) had been maintained for the duration for which the LCO was applicable (April 19-25, 1992). These action requirements ensure that the bases for the system are not compromised; including the requirement for maintaining radiation exposure for personnel occupying the Control Room within specified limits during design basis accidents.

Fuel handling activities in the containment building were completed on April 19, 1992. Since the plant had been shutdown for an extended period and no fuel handling activities occurred during the interim period, the consequences of this event are not considered to be safety significant.

No previous events were identified involving improper operation of the CRHV/C System with the radiation monitoring isolation function disabled.

V. Corrective Actions

Upon discovery of the violation, immediate actions were taken to restore the operability of the Control Room Ventilation Radiation Monitor. For corrective actions to prevent recurrence, all licensed and non-licensed operators will receive training on the lessons learned from this event. Attention to detail when reviewing Technical Specification LCO requirements will be emphasized during the training. Additionally, the Technical Specification requirements associated with the inoperable Control Room Ventilation Radiation Monitor will be evaluated for potential revision to reconcile the apparent inconsistency.

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