



**CENTERIOR  
ENERGY**

**PERRY NUCLEAR POWER PLANT**

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**R. A. Stratman**

VICE PRESIDENT - NUCLEAR

December 10, 1992  
PY-CEI/NRR-1590 L

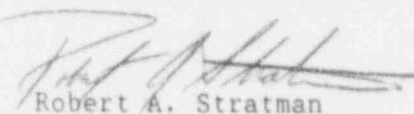
U.S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, D.C. 20555

Perry Nuclear Power Plant  
Docket No. 50-440  
LER 92-023

Dear Sir:

Enclosed is Licensee Event Report 92-023 for the Perry Nuclear Power Plant.

Sincerely,



Robert A. Stratman

RAS:CRE:ss

Enclosure: LER 92-023

cc: NRC Project Manager  
NRC Resident Inspector  
NRC Region III

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Operating Companies  
Cleveland Electric Illuminating  
Toledo Edison

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## LICENSEE EVENT REPORT (LER)

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

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNSB 7714), 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.

FACILITY NAME (1)  
Perry Nuclear Power Plant, Unit 1DOCKET NUMBER (2)  
05000 440PAGE (3)  
1 OF 5TITLE (4)  
Mispositioned Containment Atmosphere Transmitter Instrument Valve Results  
in Tech Spec Violation

EVENT DATE (5)			LER NUMBER (6)			REPORT NUMBER (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
11	10	92	92	023	00	12	10	92		05000

OPERATING MODE (9)	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (1)				
POWER LEVEL (10)	20.402(b)		20.405(c)	50.73(a)(2)(iv)	73.71(b)
	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
	20.405(a)(1)(iii)	X	50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	(Specify in Abstract below and in Text, NRC Form 366A)
	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  
Charles R. Elberfeld, Compliance Engineer, Ext. 5264TELEPHONE NUMBER (include Area Code)  
(216) 259-3737

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRCDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRCDS

## SUPPLEMENTAL REPORT EXPECTED (14)

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

## ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On November 10, 1992, at 2150, discovery of a mispositioned instrument isolation valve for a Containment Atmosphere Monitoring System pressure transmitter resulted in the identification of a Technical Specification violation. The transmitter was calibration checked and returned to service.

The cause of this event is attributed to an inadequate surveillance instruction, combined with inattention to detail on the part of the technicians who returned the transmitter to service on March 26, 1992. A contributing factor is a lack of procedural guidance to verify instrument valve position prior to Operational Condition changes, for Technical Specification related instruments whose channel check does not readily indicate that the instrument is in service.

To prevent recurrence, the surveillance instruction is being revised to more explicitly identify applicable instrument valves. Operations and Engineering personnel will develop procedural guidance to ensure applicable instrumentation is in service prior to Operational Condition changes. The technician who restored the transmitter to service on March 26, 1992 has been counseled. This event and the lessons learned will be reviewed by all Instrumentation and Control (I&C) technicians, supervisors, and surveillance writers.

# LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNB 7714), 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.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
Perry Nuclear Power Plant, Unit 1	05000 440	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 OF 5
		92	023	00	

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

## I. Introduction

On November 10, 1992, at 2150, discovery of a mispositioned instrument isolation valve [ISV] for a Containment Atmosphere Monitoring System [IK] pressure transmitter resulted in the identification of a violation of Technical Specification LCO 3.3.7.5 ACTION for an inoperable Accident Monitoring Instrumentation channel. At the time of discovery, the plant was in Operational Condition 1 (Power Operation) at 99 percent of rated thermal power, with the Reactor Pressure Vessel [RPV] at saturated conditions at approximately 1017 psig. This event is being reported under the requirements of 10CFR50.73(a)(2)(i)(B).

## II. Description of Event

On November 8, 1992, operations personnel noticed that the containment pressure reading for the Emergency Response Information System (ERIS) computer point D23EA001 was reading a negative 0.3 psig while other control room indications showed a positive 0.3 psig containment pressure. Computer technicians determined that the ERIS computer and associated software was operating correctly on November 9, and on November 10, 1992, the associated containment pressure transmitter 1D23-N270A was declared inoperable. Further troubleshooting by Instrumentation and Controls (I&C) technicians revealed that the instrument sensing line manifold isolation valve was closed and the manifold test valve was opened with the test port plugged. In this configuration, the transmitter could not sense containment pressure.

The manifold valves were positioned correctly in accordance with plant procedures, the transmitter and instrument loop were satisfactorily calibration checked in accordance with Surveillance Instruction (SVI-D23-T1503A) "Containment Pressure (Accident Monitoring) Wide Range Channel A Calibration for 1D23-N270A," and the instrument channel was returned to service on November 11, 1992, at 0212.

This transmitter also supplies a signal to the wide range pressure channel of recorder [PR] 1D23-R250A, which provides continuous monitoring and is part of one Accident Monitoring Instrumentation Channel listed in Technical Specification Table 3.3.7.5-1 Instrument 5. Research and analysis by I&C engineering personnel indicate that the last documented removal of the transmitter from service was on March 25, 1992, in accordance with Surveillance Instruction (SVI-D23-T2002) "Containment Atmosphere Monitoring Isolation Valves Seat Leakage and Position Indication Test." The instrument was supposed to be returned to service on March 26, 1992, in accordance with the same instruction. Analysis of previous charts from 1D23-R250A does not indicate conclusively how long the Accident Monitoring Channel was inoperable because containment is usually maintained at a stable pressure (close to atmospheric) and small

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 INFORMATION AND RECORDS MANAGEMENT BRANCH (MNB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (D150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
Perry Nuclear Power Plant, Unit 1	05000440	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	3 OF 5
		92	- 023 -	00	

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

amplitude pressure fluctuations can not be discerned on the recorder charts due to the limited resolution of the wide range instrumentation (-10 to +60 in. Hg). However, it was determined that the channel was inoperable for longer than the times allowed by Technical Specification Table 3.3.7.5-1 Action 80-a., and the appropriate actions were not taken until the control room operators were aware of the instrument channel inoperability on November 10, 1992. Other applicable containment pressure transmitters were checked and found to be in service.

## III. Cause of Event

The cause of this event is attributed to an inadequate surveillance instruction, combined with inattention to detail on the part of the technicians who returned the transmitter to service on March 26, 1992. The step in SVI-D23-T2002 to restore the transmitter states, "Restore 1D23-PT-N270A to service by opening sensing line isolation valve. Perform independent verification of valve opening." This step does not conform to the general requirement of Plant Administrative Procedure (PAP-0517) "Preparation of Technical Specification Surveillance Instructions" which states, "SVIs should be written to 'stand alone.' They should not use any secondary documents or work orders to perform any part of the test. This characteristic is significant due to its ability to reduce performance errors by incorporating all steps within one document, the primary instruction." In this event, the technicians who performed the restoration required the use of an additional drawing to help determine the appropriate "sensing line isolation valve." Although the instrument valves were appropriately identified in the drawing and had identification number tags in the field, the instrument valve was not appropriately identified within the SVI. Due to confusion with SVI-D23-T2002, and despite the use of the instrument loop diagram drawing, the technician inadvertently opened the instrument manifold test valve, instead of the instrument sensing line manifold isolation valve, when the instrument was supposed to be returned to service.

Analysis of the 1D23-R250A recorder charts indicates no change in channel output since before entry into Operational Condition 2 on June 9, 1992. It should be noted, however, that there are not many changes in the process parameter and that the main opportunity to document a containment pressure change using the wide range instrumentation is when the Containment Vessel/Drywell Purge System is operated. That system is operated infrequently. A monthly channel check is required by Technical Specification Table 4.3.7.5-1 Item 5, but unless the Containment Vessel/Drywell Purge system was being operated, no differences in instrument response would have been noted between the wide range channels. This is not a shortcoming of the channel check. The monthly channel check is effective in determining gross equipment failure. Another contributing factor to this event is the lack of procedural guidance to verify the position of some Technical Specification required instrument valves prior to changing Operational



# LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 30.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNSB 7714), 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.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
Perry Nuclear Power Plant, Unit 1	05000 440	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	4 OF 5
		92	023	00	

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Conditions. Not all instrument valves are verified prior to a mode change after a refuel outage. The instrumentation isolation valves in this event are not among those valves verified.

## IV. Analysis of Event

The operability of the accident monitoring instrumentation ensures that sufficient information is available on selected plant parameters to monitor and assess important variables following an accident. This capability is consistent with the recommendations of Regulatory Guide 1.97 and NUREG-0737. In this event, one of two channels of Accident Monitoring Containment Pressure Instrumentation was inoperable from March 26 until November 11, 1992. The plant was in a refuel outage on March 26, 1992, and did not enter Operational Condition 2 (Startup) until June 9, 1992. Therefore, the plant was operated in a condition prohibited by Technical Specifications from June 9, 1992 until November 10, 1992, with the exception of some short periods in which the plant was shut down for maintenance/repairs.

The Accident Monitoring Containment Pressure Instrumentation provides alarm, indication, and continuous monitoring functions only and does not provide any safety system actuation functions. During the period in which the plant operated in a prohibited condition, no accidents or containment pressure transients occurred that required the use of the Accident Monitoring channels. Additionally, the redundant channel was operable during this period, and would have performed its intended function if needed; therefore, this event is not considered to be safety significant.

Previous events of valve mispositioning with causes of personnel error of an indeterminate nature are documented by LERs 90-034, 90-038, 90-041, and 91-024. The corrective actions for LERs 90-038 and 91-024 included locking specific valves in the required positions. These corrective actions could not be reasonably expected to prevent the November 10, 1992 event from occurring. The corrective actions for LERs 90-034 and 90-041 included training appropriate personnel to the events and stressing the importance of procedural compliance and attention to detail.

## V. Corrective Actions

To prevent recurrence, SVI-D23-T2002 is being revised to more explicitly identify applicable instrument valves, and other appropriate SVIs are being reviewed to ensure that instrument valves are adequately identified. Operations and Engineering personnel will evaluate Technical Specification required instrumentation to determine which instruments have channel checks that do not readily indicate whether the instrument is in service and establish the appropriate procedural guidance to ensure that the instrumentation is in service

**LICENSEE EVENT REPORT (LER)**  
**TEXT CONTINUATION**

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Perry Nuclear Power Plant, Unit 1	05000 440	92	- 023 -	00	5 OF 5

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

prior to making Operational Condition changes. The technician who restored the transmitter to service on March 26, 1992, (the other technician is no longer on site) has been counseled on the importance of procedural compliance and attention to detail in relation to valve manipulations. This event and the lessons learned will be reviewed by all I&C technicians, supervisors, and surveillance writers. As part of the established requalification training program, all plant licensed operators will be instructed on the lessons learned from this event.

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