

Indian Point 3  
Nuclear Power Plant  
P.O. Box 215  
Buchanan, New York 10511  
914 736.8001



Robert J. Barrett  
Site Executive Officer

October 17, 2000  
IPN-00-073

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

SUBJECT: Indian Point 3 Nuclear Power Plant  
Docket No. 50-286  
License No. DPR-64  
Licensee Event Report # 2000-004-01  
**Missed Control Room Oxygen Detector Surveillance Tests is a Condition  
Prohibited By Technical Specification Caused by Personnel Error**

Dear Sir:

The attached Licensee Event Report (LER) 2000-004-01 revision is submitted to clarify that the missed surveillance constitutes non-compliance with the operability requirements of the limiting condition for operation. The attached meets the reporting requirements of 10 CFR 50.73(a)(2)(i)(B).

NYPA is making no new commitments in this LER.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Robert J. Barrett', written over a horizontal line.

Robert J. Barrett  
Site Executive Officer  
Indian Point 3 Nuclear Power Plant

cc: See next page

TE22

cc: Mr. Hubert J. Miller  
Regional Administrator  
Region I  
U. S. Nuclear Regulatory Commission  
475 Allendale Road  
King of Prussia, Pennsylvania 19406-1415

INPO Record Center  
700 Galleria Parkway  
Atlanta, Georgia 30339-5957

U.S. Nuclear Regulatory Commission  
Resident Inspectors' Office  
Indian Point 3 Nuclear Power Plant

**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)

Indian Point 3

DOCKET NUMBER (2)

05000286

PAGE (3)

1 OF 3

TITLE (4)

Missed Control Room Oxygen Detector Surveillance Tests is a Condition Prohibited By Technical Specification Caused by Personnel Error

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
02	05	1995	2000	-- 004	-- 01	10	17	2000	N/A	05000
									N/A	05000

  

OPERATING MODE (9)	N	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)	<input checked="" type="checkbox"/>	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)		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

Dennis Main, Operations Engineer

TELEPHONE NUMBER (Include Area Code)

914-736-6205

**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

**SUPPLEMENTAL REPORT EXPECTED (14)**

YES (If yes, complete EXPECTED SUBMISSION DATE).

NO

EXPECTED SUBMISSION DATE (15)

MONTH DAY YEAR

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

On May 18, 2000, at approximately 0500 hours, with steady state power at approximately 100 percent, Operations determined that the channel check required by Technical Specification (TS) 4.5.A.5.e was not being performed on the Oxygen detector in the Control Room locker room. Operations subsequently determined that channel checks had not been documented between February 5, 1995 and May 18, 2000. The missed surveillance tests is a condition prohibited by TS 4.5.A.5.e. and, as noted in TS 4.1, constitutes a non-compliance with the limiting condition for operation in TS 3.3.H.3. The cause of the event was human error, removal of the channel check requirement from the operator log sheets. The cause of that human error is indeterminate. The event was found when an operator noticed the locker room Oxygen detector was turned off. Immediate corrective action was taken to turn on the oxygen detector and check the channel. Corrective action was taken to list the required detectors on the Conventional Cold Shutdown and Hot log sheets. An extent of condition review of channel checks required by Technical Specifications found no other channel check requirements missing from the log sheets. There is no safety significance to public health and safety. Two channels of oxygen detection were maintained per Technical Specification and analyses have shown that a CO2 release would not result in toxic levels of CO2 in the control room.

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

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Indian Point 3	05000286	2000	-- 004	-- 01	2 OF 3

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

Note: The Energy Industry identification system Codes are identified within the brackets {}

**DESCRIPTION OF EVENT**

On May 18, 2000, at approximately 0500 hours, with steady state power at approximately 100 percent, Operations determined that the channel check required by Technical Specification (TS) 4.5.A.5.e was not being performed on the Oxygen detector (DET) in the Control Room (NA) locker room. Operator log sheets did not require a channel check of the detector. This was identified after Operations found the locker room Oxygen detector turned off (potentially since the last surveillance on April 28, 2000). Immediate corrective action was taken to turn on the oxygen detector and check the channel. The missed surveillance tests resulted in a condition prohibited by TS since the surveillance was not performed for a period longer than allowed by TS. Deviation Event Report 00-01183 was written for this event.

In August 1991, the NRC issued Technical Specification Amendment 108 requiring two operable toxic gas monitoring systems with a daily channel check. The design, as discussed in the TS basis, is one system in the Control Room consisting of a channel for oxygen (two detectors, one in the Control Room and one in the adjacent locker room), ammonia and chlorine detection and a second system in the air intakes consisting of a channel for oxygen, ammonia and chlorine detection. The channel checks were originally recorded on a Control Room Log Sheet (Revision 24 issued October 1991). That log sheet had a single space for indicating that both systems were indicating properly. Operations believes that both oxygen detectors were checked when completing the log sheet because the indicators for the two detectors were located in close proximity. Channel checks were next recorded on the Rover Log Sheet (Revision 13 issued August 1992) which identified the individual detectors in each channel and had two oxygen detectors for the one system. The channel checks for cold shutdown were added to the Conventional Cold Shutdown Log (Revision 25 issued October 1994 in the same manner as the Rover Log Sheet). The channel checks in Revision 26 of the Conventional Cold Shutdown Log Sheet (issued January 1995) identified a single oxygen detector for each system. Revision 1 of the Conventional Hot Log Sheet (issued in March 1995) was prepared by using the Conventional Cold Shutdown Log and adding specific items. It also identified a single oxygen detector for each system. Operations concluded that the event occurred on February 5, 1995 when Revision 26 of the Conventional Cold Shutdown Log was first used. The improper documentation of channel checks continued when the plant was started up, after Revision 1 of the Conventional Hot Log had been issued.

To determine cause, Operations reviewed their records of changes to the logs. The cause was human error but Operations was unable to identify the cause of the error. The change could have been intentional but no change document was found to indicate the change was done intentionally. The change could have been an inadvertent error since Revision 26 of the Conventional Cold Shutdown Log was a significantly reformatted log sheet. The change to the log could have been accepted by operators as requiring both detectors to be operable since the indicators for the two channels were next to each other on the same panel.

**CAUSE OF EVENT**

The direct cause of the event, removal of the second oxygen detector from the operator log sheets, was human error. The cause of that human error is indeterminate.

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

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

**CORRECTIVE ACTIONS**

The following corrective actions have been performed under the Indian Point corrective action program to address this event:

1. Shortly after the Oxygen detector was found off, the detector was turned on and the channel readout was checked.
2. The Conventional Hot Log and Conventional Cold Shutdown Log have been revised to list the two oxygen detectors in the one system.
3. An extent of condition review was conducted and verified that channel check requirements are included in the log sheets for other Technical Specification instrumentation.

**ANALYSIS OF EVENT**

This event is reportable under 10 CFR 50.73(a)(2)(i)(B). The Licensee shall report any operation or condition prohibited by the plant's Technical Specifications.

This event meets the reporting criteria because documentation did not exist to show that TS required channel checks were performed on one of two oxygen detectors in the system required by TS. The missed surveillance is a condition outside TS because the surveillance was not performed for a period greater than allowed by TS. The TS frequency for the surveillance is at least once per day. The required documentation did not exist between February 5, 1995 and May 18, 2000, a period of about five years and three months. This time period bounds the period that the detector was turned off. The plant did not meet the system operability requirements in TS 3.3.H.3 since the detector is considered inoperable, per TS 4.1, when a required surveillance is not performed.

Licensee Event Reports (LER) for the previous two years were reviewed to identify conditions where the plant was in a condition prohibited by Technical Specifications as a result of a missed surveillance. Three LERs (i.e., 98-004, 99-001, and 99-005) were identified where inadequate surveillance tests resulted in a condition prohibited by Technical Specification. There were no LERs due to missed surveillance testing.

**SAFETY SIGNIFICANCE**

This event had no effect on the health and safety of the public. There were no actual safety consequences for the event because there were no toxic gas releases. The Control Room never lost redundancy because two systems with one oxygen detector per system were controlled by the Technical Specifications. Additionally, NYPA believes that the Control Room would have remained habitable even if no oxygen detector had been available. By letter dated September 10, 1985 NYPA requested deletion of the toxic gas monitoring system based on a CO2 tank integrity analysis and probability evaluations for offsite rail accidents related to chlorine and ammonia. By letter dated March 13, 1986, the NRC rejected the request based upon a disagreement with the probability evaluations for offsite rail accident. There was no mention of the CO2 tank integrity analysis which concluded that CO2 would not reach toxic levels in the Control Room.

A review of this event against the guidelines of NEI 99-02, Rev. 0, "Regulatory Assessment Performance Indicator Guideline," concluded it was not a safety system functional failure (SSFF). The event did not meet the definition of a SSFF defined as in 10 CFR 50.73(a)(2)(v), an event or condition that alone could have prevented fulfillment of a safety function.