

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



**New York Power  
Authority**

John H. Garrity  
Resident Manager

July 06, 1993  
IPN-93-076

U.S. Nuclear Regulatory Commission  
Document Control Desk  
Mail Station PI-137  
Washington, D.C. 20555

Subject: Indian Point 3 Nuclear Power Plant  
Docket No. 50-286  
Licensee Event Report 93-022-00, "Electrical  
Tunnel Fire Protection Sprinkler Zone 15  
Inoperable Due To Personnel Error"

Dear Sir:

The attached Licensee Event Report (LER) 93-022-00 is hereby submitted in accordance with the requirements of 10CFR50.73. This event is of the type defined in the requirements pursuant to 10CFR50.73(a)(2)(i)(B).

We also submit this LER to satisfy the Technical Specification section 3.14.B.2.b requirement to provide a Special Report to the Nuclear Regulatory Commission for this event which resulted in a fire protection sprinkler system being inoperable for greater than 14 days.

No new commitments are being made by this submittal.

Very truly yours,

A handwritten signature in cursive script that reads "John H. Garrity".

John H. Garrity  
Resident Manager  
Indian Point Three Nuclear Power Plant

JHG/DO/vjm

cc: See next page

9307130041 930706  
PDR ADOCK 05000286  
S PDR

Handwritten initials "JEG" in a stylized, slanted cursive font, located in the bottom right corner of the page.

Mr. Thomas T. Martin  
Regional Administrator  
Region 1  
U.S. Nuclear Regulatory Commission  
475 Allendale Road  
King Of Prussia, Pennsylvania 19406-1415

Institute of Nuclear Power Operations  
700 Galleria Parkway  
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U.S. Nuclear Regulatory Commission  
Resident Inspectors' Office  
Indian Point Unit 3

**LICENSEE EVENT REPORT (LER)**

<b>FACILITY NAME (1)</b> Indian Point 3	<b>DOCKET NUMBER (2)</b> 05000286	<b>PAGE (3)</b> 1 OF 4
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**TITLE (4)**  
Electrical Tunnel Fire Protection Sprinkler Zone 15 Inoperable Due To 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
05	11	93	93	-- 022 --	00	07	06	93	FACILITY NAME	DOCKET NUMBER 05000
									FACILITY NAME	DOCKET NUMBER 05000

<b>OPERATING MODE (9)</b>	N	<b>THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)</b>			
		<input type="checkbox"/> 20.402(b)	<input type="checkbox"/> 20.405(c)	<input type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 73.71(b)
<b>POWER LEVEL (10)</b>	000	<input type="checkbox"/> 20.405(a)(1)(i)	<input type="checkbox"/> 50.36(c)(1)	<input type="checkbox"/> 50.73(a)(2)(v)	<input type="checkbox"/> 73.71(c)
		<input type="checkbox"/> 20.405(a)(1)(ii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(vii)	<input checked="" type="checkbox"/> OTHER
		<input type="checkbox"/> 20.405(a)(1)(iii)	<input checked="" type="checkbox"/> 50.73(a)(2)(i)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)	(Specify in Abstract and in Text, NRC Form A)
		<input type="checkbox"/> 20.405(a)(1)(iv)	<input type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)	
		<input type="checkbox"/> 20.405(a)(1)(v)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(x)	

**LICENSEE CONTACT FOR THIS LER (12)**

<b>Name</b> John Aloï, Performance Supervisor	<b>TELEPHONE NUMBER (Include Area Code)</b> (914) 736-8342
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**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)**

<b>YES</b> (If yes, complete EXPECTED SUBMISSION DATE).	X	<b>NO</b>	<b>EXPECTED SUBMISSION DATE (15)</b>	<b>MONTH</b>	<b>DAY</b>	<b>YEAR</b>
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**ABSTRACT**

On June 5 1993, with the plant in the cold shutdown condition, Instrumentation and Control (I&C) technicians determined that electrical tunnel fire protection sprinkler zone 15 had been made inoperable during the performance of a surveillance test performed on May 11, 1993. This condition remained unknown to plant personnel despite the presence of a trouble alarm on the subject zone. As a result, no compensatory action was taken as required by Technical Specification section 3.14.B.2.a. The cause of this event was personnel error. Corrective actions included apprising test personnel of the need to question system operability when systems do not respond as expected, and revising surveillance test 3PT-A13 to include new operability criteria. The electrical tunnel fire protection sprinkler zone 15 was declared operable on June 11, 1993. This Licensee Event Report (LER) also satisfies the requirement in Technical Specification section 3.14.B.2.b to provide a Special Report to the Commission when a fire protection sprinkler system has been inoperable for greater than 14 days.

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DESCRIPTION OF EVENT

On May 11, 1993, with the plant in a cold shutdown condition, technicians were performing surveillance test 3PT-A13, revision 8, "Electrical Tunnel Heat Detector (IC) and Water Sprinkler (KP) Systems Operability Test." Upon performing step 3.32, the zone 15 trouble alarm annunciated and would not reset. This was noted in the comments section 4.0 of the test. The technicians stopped the test at that point and planned to continue it the following day. On May 12, 1993, they received permission from the Shift Supervisor to continue the remainder of the test starting at step 3.33. Because zone 15 was still alarming, step 3.64 of the test could not be performed as required. They completed the remainder of the test. Subsequently, the appropriate personnel reviewed it. Because the operability criteria of the procedure was met, the test was signed as having passed. Problem Identification (PID) #53256 was issued to address the inability of the zone 15 trouble alarm to clear. The technicians and the reviewers erroneously assumed that the trouble alarm was the result of a problem with the alarm circuit and not with the fire protection sprinkler system.

On June 5, 1993, work request 93-03435-01 was issued to the Instrumentation and Control (I&C) department to investigate why the zone 15 spray system water discharge trouble alarm would not reset. The plant staff concluded that zone 15 had been inoperable since May 11, 1993. The Shift Supervisor initiated immediate corrective action by posting a continuous fire watch in accordance with Technical Specification section 3.14.B.2.a. A Significant Occurrence Report (SOR) was written to identify and document the deficiency. Investigating further, the I&C technicians discovered that the Static-O-Ring (S382) model 4-N6-L4-B2A-RRX pressure switch (63) vent line for zone 15 was plugged. This resulted in a hydraulic lock on the pressure switch that caused it to erroneously open its associated contact. This would have prevented the heat detectors for zone 15 from opening the dousing valve. The vent line was removed and cleaned out. The trouble alarm cleared immediately. The electrical tunnel fire protection sprinkler zone 15 was declared operable on June 11, 1993.

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CAUSE OF EVENT

The cause of this event was personnel error due to a lack of knowledge regarding system behavior. The plant staff involved with the performance and review of this test failed to realize that the alarm condition indicated zone 15 inoperability. A contributing factor was that the test's operability criteria did not require the absence of trouble alarms for system operability.

CORRECTIVE ACTION

Surveillance test 3PT-A13 was revised to include the presence of trouble alarms as an operability concern. This was completed on June 9, 1993. Personnel involved with the test were counselled and reminded of the importance of possessing a questioning attitude, especially when systems do not respond as anticipated.

ANALYSIS OF EVENT

Operable fire protection sprinkler systems in the electrical tunnel are necessary to meet the requirements of Technical Specification section 3.14.B.1.a. The Authority determined that the plant had an inoperable fire protection sprinkler system on zone 15. As a result, this event is reportable pursuant to 10CFR50.73(a)(2)(i)(B). This Licensee Event Report (LER) also satisfies the requirement in Technical Specification section 3.14.B.2.b to provide a Special Report to the Commission regarding the inoperability of a spray and/or a sprinkler system for a period of greater than 14 days. The fire protection sprinkler system zone 15 was inoperable for 31 days.

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SAFETY SIGNIFICANCE

This event did not affect the health and safety of the public. Although the dousing valve would not have tripped to flood the dry pipe system, the significance of this event was mitigated by the following plant features and actions.

- An hourly, roving fire watch was in place throughout the area as a conservative measure during the current outage.
- Smoke detectors located in the area were operable.
- Heat detectors connected to zone 15 would have alarmed in the Control Room, if actuated.
- The fire protection sprinkler system could have been manually actuated by the plant's nuclear side Nuclear Plant Operator (NPO), a nonlicensed operator.
- Combustible loading in the area consists of only electrical cables.

A similar event has been reported in LER 93-005-02.