



Consolidated Edison Company of New York, Inc.
Indian Point Station
Broadway & Bleakley Avenue
Buchanan, New York 10511-1099

July 31, 1998

Re: Indian Point Unit No. 2
Docket No. 50-247
LER 98-02-01

Document Control Desk
US Nuclear Regulatory Commission
Mail Station P1-137
Washington, DC 20555-0001

The attached Licensee Event Report LER 98-02-01 is hereby submitted in accordance with the requirements of 10 CFR 50.73

Very truly yours,

A. Alan Blind
Vice President

Attachment

cc: Mr. Hubert J. Miller
Regional Administrator-Region I
US Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Mr. Jefferey F. Harold, Project Manager
Project Directorate I-1
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US Nuclear Regulatory Commission
Mail Stop 14B-2
Washington, DC 20555

Senior Resident Inspector
US Nuclear Regulatory Commission
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Buchanan, NY 10511

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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 (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Indian Point No. 2	DOCKET NUMBER (2) 0 5 0 0 0 2 4 7	PAGE (3) 1 OF 04
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TITLE (4)
Overpressure Protection System Inoperable Due to Supports Found in Degraded Condition

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		DOCKET NUMBER(S)																	
0	3	0	2	9	8	9	8	-	0	0	2	-	0	1	0	4	0	2	9	8	NONE	0	5	0	0	0		

OPERATING MODE (9) N	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR§: (Check one or more of the following) (11)											
POWER LEVEL (10) 0 0 0	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 (Specify in Abstract below and in Text, NRC Form 336A)		
	20.405(a)(1)(iii)			50.73(a)(2)(i)			50.73(a)(2)(viii)(A)					
	20.405(a)(1)(iv)			X 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 Richard T. Louie, Senior Engineer	TELEPHONE NUMBER
	AREA CODE: 9 1 4 7 3 4 - 5 6 7 8

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)

<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE) <input checked="" type="checkbox"/> NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR

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

On March 2, 1998, with the plant at cold shutdown, Con Edison personnel were performing an inspection of various small-bore piping, and tubing located within the vapor containment building. Various discrepancies were identified, including instrumentation tubing and tubetrack which were found to have missing and/or improperly mounted supports. At the time of these discoveries, it was uncertain whether these conditions adversely affected the operability of their respective systems, structures, or components. Initial review of the as-found conditions for instrument tubing associated with pressure transmitters PT-402 and PT-413 did not appear to satisfy design requirements. These pressure transmitters provide reactor coolant system loop pressure measurement and perform various safety-related functions. Specifically, PT-413 provides input to the overpressure protection system (OPS) which is required to be operable per Technical Specification 3.1.A.4. As a result of the degraded conditions affecting PT-413, the OPS was declared inoperable. An immediate notification was made in accordance with 10 CFR 50.72 (b). The health and safety of the public were not affected by this event.

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

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		YEAR 9 8	SEQUENTIAL NUMBER - 0 0 2	REVISION NUMBER - 0 1	2 OF 0 4	

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

PLANT AND SYSTEM IDENTIFICATION:

Westinghouse 4-Loop Pressurized Water Reactor

IDENTIFICATION OF OCCURRENCE:

Overpressure Protection System Inoperable Due to Supports Found In Degraded Condition

EVENT DATE:

March 2, 1998

REPORT DUE DATE:

April 2, 1998

REFERENCE:

Condition Identification and Tracking System (CITRS) No. 98-E01000, E01082, E01262, E01423, E01493, E01627, E01631, E01675, E01721, E01884, E01941, E05791

PAST SIMILAR OCCURRENCES:

None

DESCRIPTION OF OCCURRENCE:

On March 2, 1998, with the plant at cold shutdown, Con Edison personnel were performing an inspection of various small-bore piping, and tubing located within the vapor containment building. A number of instrumentation tubing and tubetrack were found to have missing and/or improperly mounted supports. At the time of these discoveries, it was uncertain whether these conditions adversely affected the operability of their respective systems, structures, or components. Initial review of the as-found conditions of instrument tubing for pressure transmitters PT-402 and PT-413 did not appear to satisfy design requirements. These pressure transmitters provide reactor coolant system loop pressure measurement and perform various safety-related functions. PT-402 provides indication of reactor coolant system loop pressure in the control room, and provides inputs to the reactor vessel level indication system, and the post-accident saturation margin monitor. PT-402 also provides a permissive signal which prevents the opening of residual heat removal system valve 730 when it is not desired. PT-413 provides

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indication of reactor coolant system loop pressure in the control room, and provides input to the overpressure protection system (OPS). Per Technical Specification 3.1.A.4, the OPS is required to be operable whenever the reactor coolant system temperature is less than or equal to 305 degrees F. Since the plant was at cold shutdown the OPS was required to be operable. Due to the degraded condition of the instrument tubing for PT-413, the OPS was declared inoperable.

All degraded supports identified during the inspection efforts were subsequently evaluated to determine their impact on the operability of any safety-related equipment. A total of 528 deficiencies were identified. A significant number of these degraded supports involved the instrument air system supply to various air-operated components located in the vapor containment building. A number of these deficiencies were determined to have the potential to adversely affect the operability of safety-related equipment; however, all of these items have been corrected as of the date of this supplement.

ANALYSIS OF OCCURRENCE:

Following identification of the degraded instrument tubing and tubetrack supports, a preliminary operability assessment was performed to determine if the supports or tubing could perform their function under design load conditions. Based upon the assessment of the as-found conditions it was determined that the OPS was inoperable. The instrument tubing and tubetrack supports for PT-402 and PT-413 are Seismic Class I. Subsequent engineering analyses were performed. These analyses confirmed the initial determination that the as-found conditions of the instrument tubing affecting PT-413 adversely affected the operability of the OPS when it was required to be operable.

CAUSE OF OCCURRENCE:

This event was initiated by an inspection of various small-bore piping, and tubing located within the vapor containment building. The degraded condition of the instrumentation tubing and tubetrack supports was determined to affect instrumentation required for control room indication and OPS operation. The as-found degraded tubing for PT-413 led to the conclusion that the OPS was inoperable resulting in the plant being in a condition outside its design basis.

All of the degraded supports, hangers, and instrument tubing found damaged in the vapor containment during the inspections, were caused by some combination of incomplete or incorrect procedures, inadequate procedural compliance, and substandard levels of workmanship. A majority of the discrepancies found involved supports on equipment that constitute an interference item when performing maintenance activities on major system components. An example of this would be the removal of a gauge and air line tubing to enable replacement of a reactor coolant pump motor. Such activities would occur every refueling outage. Supports and

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		9	8	-	0	0	2	-	0	1	4	OF	0	4

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hangers were removed because they obstructed other work and then they were either not restored or not correctly restored. Ninety-nine of the identified items involved Instrument Air System tubing. Much of the originally-installed copper tubing in this system has been upgraded with stainless steel tubing. The modification documentation used to perform this replacement work was determined to be vague and generic in describing the location requirements for the hanger supports. Maintenance procedures did not specify requirements for the removal or restoration of interference items to support maintenance activities. No policy or procedure existed to monitor the status of equipment previously retired in place.

CORRECTIVE ACTION:

Immediately upon the identification of these degraded instrument tubing and tubetrack supports, a preliminary operability assessment was made based upon the as-found conditions. As a result of Technical Specification 3.1.A.4, it was determined that the OPS was inoperable resulting in the plant being in a condition outside design basis. The appropriate 10CFR50.72 notification was subsequently made. All of the degraded hangers and supports located in the vapor containment that were discovered during this inspection have been corrected.

To prevent a repetition of this type of event, the following corrective actions are being or will be performed:

- 1) Revise maintenance procedures to require that interference items removed to support maintenance activities be restored to their as-found condition.
- 2) Revise maintenance procedures to require that if piping supports have to be removed to support maintenance that the appropriate system engineer is consulted prior to support removal.
- 3) Revise the design specifications to incorporate appropriate hanger and support installation criteria.
- 4) Require senior plant management to perform additional field inspections to ensure adequate oversight of station material condition.
- 5) Require that retired system equipment within a system boundary receive the same level of attention as active equipment during system engineer walkdown inspections.

It is intended that these corrective actions will be completed on or before September 1, 1998.