Stephen B. Bram
Vice President

Consolidated Edison Company of New York, Inc.
Indian Point Station
Broadway & Bleakley Avenue
Buchanan, NY 10511
Telephone (914) 737-8116

April 4, 1990

Re: Indian Point Unit No. 2
Docket No. 50-247
LER 90-01-00

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

The attached Licensee Event Report LER 90-01-00 is hereby submitted in accordance with the requirements of 10 CFR 50.73.

Very truly yours,

Attachment

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

Mr. Donald S. Brinkman, Senior Project Manager
Project Directorate I-1
Division of Reactor Projects I/II
US Nuclear Regulatory Commission
Mail Stop 14B-2
Washington, DC 20555

Senior Resident Inspector
US Nuclear Regulatory Commission
PO Box 38
Buchanan, NY 10511

IE22
1/1

NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Indian Point Unit No. 2	0 5 0 0 0 2 4 7	1 OF 0 4

TITLE (4)

Overpressurization System Logic

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 5	2 9	8 9	9 0	— 0 0 1	— 0 0	0 4	0 4	9 0		0 5 0 0 0
										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 366A)
		20.405(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
		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	TELEPHONE NUMBER
John McCann	AREA CODE 9 1 4 5 2 6 — 5 5 8 0

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	
A	A B	P Z R	X 9 9 9	N							

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

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

A review of plant operating data conducted in March 1990 revealed that on May 31, 1989, with the reactor at 0% power while filling and venting the Reactor Coolant System (RCS), the plant entered a condition that required the Overpressure Protection System (OPS) to be fully operable. Due to an isolated transmitter, the minimum OPS channel redundancy required by Technical Specifications was not satisfied. Since the OPS was still functional albeit with less than the required channels, there was minimal impact on plant safety.

PLANT AND SYSTEM IDENTIFICATION:

Westinghouse 4-loop Pressurized Water Reactor: 900 MWE

IDENTIFICATION OF OCCURRENCE:

All channels in the OPS were not fully operable due to an isolated transmitter. While this condition existed the plant status changed to a condition where all channels were required to be operable by the Technical Specification.

EVENT DATE:

May 31, 1989

REPORTABILITY DETERMINATION DATE:

March 5, 1990

REPORT DUE DATE:

April 4, 1990

REFERENCES:

SOR No. 89-311

PAST SIMILAR OCCURRENCE:

None

DESCRIPTION OF OCCURRENCE:

On May 28, 1989, while the RCS was in a drained down condition for maintenance, watch personnel discovered a reactor coolant leak on the RCS loop 21 hot leg level indicating tube sensing line. The line was isolated and the indicating tube was lined up to the loop 21 intermediate leg. This action also isolated transmitter PT-413 which provides 1 out of 3 pressure inputs to the OPS. This action ultimately resulted in exceeding the Technical Specification minimum degree of redundancy requirement, by reducing the analog channel trip logic from a 2 out of 3 logic to a 2 out of 2 logic. This was not a deviation at the time, since plant conditions met the requirements of Technical Specification Table 3.1.A-2 (SI pump in pullout, Pressurizer level less than 30% of span and RCS pressure less than 80 psig). A work order was issued and the leak, which was determined to be between valve 954A and valve 4138 of RCS loop 21 hot leg sensing line, was repaired.

DESCRIPTION OF OCCURRENCE: (continued)

On May 31, 1989 at about 1608 hours RCS fill and vent was initiated while the OPS channel was isolated. Plant conditions were still within Technical Specification requirements. However, at around 2035 hours of May 31, the pressurizer level increased beyond 30% of span with OPS still isolated, thus violating the Technical Specifications at that point.

On June 1, 1989, at about 0045 hours, the head vent valves were closed and RCS nitrogen pressurization was started. At that time plant personnel noted that pressure channel PT-413 was not tracking up and discovered that it had been isolated. Immediate action was taken to trip the affected channel and thus place the OPS system in the more conservative 1 out of 2 logic which satisfies the Technical Specification minimum degree of redundancy requirements. The OPS was inoperable for a period of about 5 hours from 2035 hours on May 31 until about 0130 hours on June 1, 1989.

ANALYSIS OF OCCURRENCE:

This report is being made pursuant to 10 CFR 50.73 (a)(2)(i)(c) which "requires reporting of any deviation from the plant's Technical Specifications..." The event occurred while the plant was in the cold shutdown condition and was discovered as the initial steps were being taken to return the unit to service. Consequently the safety implications were relatively minor in that the duration of the event was short and RCS pressure was low (<80 psig) when the event was recognized. The remaining channels of OPS would have actuated to provide relief protection if required.

CAUSE OF OCCURRENCE:

The isolation of the leak that occurred in the tubing leading to the RCS level indicating instrument, also resulted in the isolation of PT-413. This instrument isolation was not reviewed prior to changing the plant operating configuration (i.e., increasing pressurizer level).

CORRECTIVE ACTION:

When it was discovered that the OPS transmitter PT-413 was isolated, the associated channel was immediately tripped through the insertion of a "dummy" high pressure signal, which placed the OPS logic in the 1 out of 2 configuration that satisfied the Technical Specification minimum degree of redundancy requirement.

As a training measure to help preclude recurrence of this or similar events, a copy of the Station Event Report was placed in Required Reading for plant operators. Additionally, an Operations Administrative Directive (OAD-28) issued in November, 1989, requires a formal "Equipment Deficiency Screening "to be performed by the Watch Engineer. This screening would have helped prevent this occurrence if the program had been in effect in May, 1989.