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 3	0 5 0 0 0 2 8 6	1 OF 0 2

TITLE (4)

Inadvertent SI Actuation

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 1	2 1	8 5	8 5	— 0 0 1	— 0 0	0 2	2 0	8 5		0 5 0 0 0
										0 5 0 0 0

OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
N		20.402(b)	20.405(c)	X 50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10)		20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
1 0 0		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)	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 Anderson	AREA CODE 9 1 4 — 7 3 9 - 8 2 0 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	
X	B D	P S V	A 6 1 0	Y							

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)

On January 21, 1985, a unit trip and Safety Injection (SI) actuation occurred as a result of low voltage on two out of four instrument buses. The reactor was at 100 percent power at the time of the actuation. Investigation determined that a ground had developed on bus 32, decreasing its voltage. In an attempt to correct this condition, the control room operators mistakenly switched bus 31 to backup power. The momentary voltage drop as bus 31 switched to backup power concurrent with the existing low voltage on bus 32, caused the trip and SI actuation. Since the reactor coolant system was at normal pressure, no water was injected.

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(9-83)

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Indian Point Unit 3	0 5 0 0 0 2 8 6	8 5	— 0 0 1	— 0 0	0 2 OF 0 2

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

At 2349 hours on January 21, 1985, a unit trip and a Safety Injection (SI) actuation occurred as a result of low voltage on two instrument buses concurrently. The reactor was at 100 percent power at the time of the trip. Since the reactor coolant system was at normal pressure, no water was injected.

Investigation determined that a ground had developed in the coil of solenoid valve SOV-1195, an isolation valve in the Weld Channel and Penetration Pressurization System. Since SOV-1195 is powered by instrument bus 32, the ground caused a drop in bus 32 voltage from 130 volts to approximately 40 volts. The control room operators correctly identified instrument channel 1 (which is powered by bus 32) as the affected channel. Plant procedure directs the operators to stop the turbine runback, which was in progress, and to monitor the failed instrument bus voltage. The operators reacted to this situation by attempting to restore normal voltage to the affected instrument bus. In an attempt to correct the low voltage condition, the power supply for instrument bus 31 was mistakenly switched to the backup power supply. The existing low voltage on bus 32 concurrent with the momentary voltage drop on bus 31, as it was switched to backup power, resulted in a unit trip and a safety injection actuation.

Although normally required by an SI actuation, No. 31 safety injection pump and No. 33 emergency diesel generator did not start and valve 822A did not open. This occurred since only SI Train B actuated. Due to the momentary voltage drop on bus 31 combined with voltage on bus 32 never being decreased to zero, only certain logic relays de-energized or "dropped out". These relays do not observe identical drop-out voltages thereby causing completed matrices on only Train B and no actuation of Train A. All safeguard equipment associated with Train B SI started as required.

After replacing the failed solenoid coil, surveillance test 3PT-M14A "Safety Injection System Logic Channel Functional Test, SI Channel A" was performed to verify the operability of SI Train A. The results were satisfactory. The control room operators on shift during this transient were reinstructed by the Operations Superintendent in the proper procedure for this type of event. All other licensed operators will be reinstructed in this event during the normal operator requalification program. The unit was synchronized to the bus at 0758 hours on January 23, 1985.

No similar events have been reported in an LER to date.

Indian Point 3
Nuclear Power Plant
P.O. Box 215
Buchanan, New York 10511
914 739.8200

New York Power Authority

February 20, 1985
IP-FWG-375

Docket No. 50-286
License No. DPR-64

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

Dear Sir:

The attached Licensee Event Report LER 85-001-00 is hereby submitted in accordance with the requirements of 10CFR50.73. This event is of the type defined in Paragraph 50.73(a)(2)(iv).

Very truly yours,

John C. Brons
Resident Manager

FWG/bam
Attachment

cc: Dr. Thomas Murley
Regional Administrator
Region 1
U. S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, Pennsylvania 19406

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