



Entergy Nuclear Northeast
Entergy Nuclear Operations, Inc.
Indian Point Energy Center
295 Broadway, Suite 1
P.O. Box 249
Buchanan, NY 10511-0249

March 1, 2002

Re: Indian Point Unit No. 2
Docket No. 50-247
LER 2002-001-00
NL-02-023

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Mail Stop O-P1-17
Washington, DC 20555-0001

Dear Sir:

The attached Licensee Event Report 2002-001-00 is hereby submitted in accordance with the requirements of 10 CFR 50.73.

There are no commitments contained in this letter.

Sincerely,

A handwritten signature in black ink that reads "Fred Dacimo".

Fred Dacimo
Vice President - Operations
Indian Point 2

Attachment

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

Mr. Patrick D. Milano, Senior Project Manager
Project Directorate I
Division of Licensing Project Management
U.S. Nuclear Regulatory Commission
Mail Stop O-8-C2
Washington, DC 20555

Senior Resident Inspector
U.S. Nuclear Regulatory Commission
PO Box 38
Buchanan, NY 10511

IE22

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

APPROVED BY OMB NO. 3150-0104 EXPIRES 06/30/2001

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, Unit 2

DOCKET NUMBER (2)

05000247

PAGE (3)

1 OF 5

TITLE (4)

While Preparing for Maintenance Activities Personnel Error Results in Two Emergency Diesel Generators Inoperable

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
01	06	2002	2002	-001-	00	03	01	2002		05000
									FACILITY NAME	DOCKET NUMBER
										05000
									FACILITY NAME	DOCKET NUMBER
										05000

OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)			
N		20.2201(b)	20.2203(a)(2)(v)	50.73(a)(2)(i)	50.73(a)(2)(viii)
POWER LEVEL (10)	100	20.2203(a)(1)	20.2203(a)(3)(i)	X 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)	X 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

TELEPHONE NUMBER (Include Area Code)

Richard Louie, Licensing Engineer

(914) 734-5678

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).	X	NO
---	---	----

EXPECTED SUBMISSION DATE (15)

MONTH	DAY	YEAR

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

On January 6, 2002, at approximately 1730 hours, while performing an independent verification of tagging operations prior to planned maintenance activities on 23 Emergency Diesel Generator (EDG) [EIIIS:EK], an individual performing the verification mistakenly actuated the overspeed trip lever for 21EDG. This condition resulted in the unavailability of both 21 and 23EDGs, and placed the plant in a shutdown action statement per Technical Specification 3.0.1. The individual immediately recognized the error, and initiated corrective actions to restore 21EDG to operable condition. 21EDG was returned to service in less than five minutes, and the action statement of Technical Specification 3.0.1 was subsequently exited. At the time, the plant was at 100 percent power, and normal offsite power feeders were available. No injuries to plant personnel, damage to any equipment, or adverse safety implications to the public occurred as a result of this event. The EDG system is designed such that any two of the three dedicated power trains are capable of supplying the minimum engineered safety features loads, assuming the single failure of one power train or EDG. This report is submitted pursuant to 10 CFR 50.73(a)(2)(v) as a condition that alone could have prevented the fulfillment of the safety function of a structure or system needed to mitigate the consequences of an accident, and 10 CFR 50.73(a)(2)(ii) as a condition that resulted in the nuclear power plant being in an unanalyzed condition that significantly degraded plant safety.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENT IAL NUMBER	REVISI ON NUMBE	
Indian Point, Unit 2	05000247	2002	-001-	00	2 OF 5

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

PLANT AND SYSTEM IDENTIFICATION

Westinghouse 4-Loop Pressurized Water Reactor

EVENT IDENTIFICATION

While Preparing for Maintenance Activities Personnel Error Results in Two
Emergency Diesel Generators Inoperable

EVENT DATE

January 6, 2002

REFERENCES

Condition Reporting System Number: 200200192

PAST SIMILAR EVENTS

LER 2001-002, 1999-018, 1997-016

EVENT DESCRIPTION

On January 6, 2002, at approximately 1730 hours, while performing an independent verification of tagging operations prior to planned maintenance activities on 23 Emergency Diesel Generator (EDG), an individual performing the verification mistakenly actuated the overspeed trip lever for 21EDG. This condition resulted in the unavailability of both 21 and 23EDGs, and placed the plant in a shutdown action statement per Technical Specification 3.0.1. The individual immediately recognized the error, and initiated corrective actions to restore 21EDG to operable condition. Control room personnel were immediately aware of this condition having received a "Diesel Generator Trouble" alarm actuation. The overspeed trip lever was reset, the alarm was cleared, and 21EDG was returned to operable status in less than five minutes. The action statement of Technical Specification 3.0.1 was subsequently exited. 23EDG remained inoperable as initially intended for maintenance activities. With 23EDG unavailable the limitations of Technical Specification 3.7.B.1.a remained in effect. At the time, the plant was at 100 percent power, and normal offsite power feeders were available. No injuries to plant personnel, damage to any equipment, or adverse safety implications to the public occurred as a result of this event.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENT IAL NUMBER	REVISI ON NUMB	
Indian Point, Unit 2	05000247	2002	-001	00	3 OF 5

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

EVENT DESCRIPTION (Continued)

The EDG system is designed such that any two of the three dedicated power trains are capable of supplying the minimum engineered safety features loads, assuming the single failure of one power train or EDG. This report is submitted pursuant to 10 CFR 50.73(a)(2)(v) as a condition that alone could have prevented the fulfillment of the safety function of a structure or system needed to mitigate the consequences of an accident, and 10 CFR 50.73(a)(2)(ii) as a condition that resulted in the nuclear power plant being in an unanalyzed condition that significantly degraded plant safety. At the time, it was believed that no notifications pursuant to 10 CFR 50.72 were necessary, because although two EDGs were unavailable, one EDG power train would have been adequate to provide power for a safe and orderly plant shutdown in the event of a loss-of-offsite electrical power. Subsequent review determined that a single EDG power train would not have been adequate under design basis accident conditions.

EVENT ANALYSIS

The expectations and requirements for conducting independent verifications are identified in Operations Administrative Directive (OAD)-6, "Equipment Status Control." These requirements were recently revised such that those individuals performing independent verifications could not participate in the specific equipment tagout activities. Furthermore, concurrent verification while tagging out equipment is not acceptable. Thus, it is expected that independent verifications be conducted upon the completion of the specific tagout activities.

As part of the tagout activities for 23EDG, a Nuclear Plant Operator (NPO) was directed to disable the auto start capability of the EDG by setting its overspeed trip lever to the tripped position. This was performed by the NPO as expected, and confirmed via illumination of the local control panel indication light. The position of the EDG overspeed reset lever is also an observable indication of the tripped status of the engine. Upon completion of the aforementioned tagout activities, the individual performing the independent verification wanted to confirm the status of 23EDG and proceeded to pull the overspeed lever; however, the overspeed trip lever on 21EDG was mistakenly actuated. The cause for this event is human performance related has been attributed to:

1. Inadequate implementation of self-checking techniques such as "STAR."
2. Misunderstanding of the appropriate method to confirm and verify component positions during independent verifications.
3. Lack of component labeling sufficient to create a mental barrier preventing crossing over to active systems or trains.

With the exception of 23EDG having been declared inoperable, there were no other structures, systems, or components which were inoperable at the start of the event and that contributed to the event.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENT IAL NUMBER	REVISI ON NUMB	
Indian Point, Unit 2	05000247	2002	-001	00	4 OF 5

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

10 CFR 50.72 Notification

This event is reportable pursuant to 10 CFR 50.72(b)(3)(v)(D) as, "Any event or condition that at the time of discovery could have prevented the fulfillment of the safety function of structures or systems that are needed to mitigate the consequences of an accident." However, at the time, it was believed that no notifications pursuant to 10 CFR 50.72 were necessary, because although two EDGs were unavailable, one EDG power train would have been adequate to provide power for a safe and orderly plant shutdown in the event of a loss-of-offsite electrical power. Upon further review it was determined that a single EDG power train would not have been adequate under design basis accident conditions. In hindsight, an eight-hour report notification pursuant to 10 CFR 50.72(b)(3)(v) was warranted.

EVENT SAFETY SIGNIFICANCE

This event was potentially significant because it resulted in the unavailability of two of the three EDGs. The design basis of the EDG system assures that any two of the three power trains and dedicated EDGs are capable of supplying the minimum engineered safety feature loads, assuming a single failure of one power train or EDG. However, because the actual time period that both EDGs were unavailable was no greater than five minutes, this event had minimal actual safety implications. The unavailability of the two EDGs for the brief period of time prior to restoration of 21EDG resulted in an incremental core damage probability (ICDP) of approximately $6E-9$.

CORRECTIVE ACTIONS

Immediate corrective actions taken were to reset 21EDG's overspeed trip lever, clear the trouble alarm, and return 21EDG to operable status. As a result of this event, the following corrective actions have been, or will be implemented.

1. Each Shift Manager will review this event, its safety significance, and re-enforce the need to utilize self-checking techniques with their operating crews. (Completed)
2. Upgrade labeling of the EDGs. (Due Date: May 15, 2002)
3. Evaluate the adequacy of labeling on other similarly located equipment. (Due Date: May 15, 2002)
4. Revise procedures as necessary to require the use of barrier tape as an aid to restrict access to operable equipment whenever work activities involve closely located similar equipment. (Due Date: May 15, 2002)

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
Indian Point, Unit 2	05000247	YEAR	SEQUENT IAL NUMBER	REVISI ON NUMB	5 OF 5
		2002	-001	00	

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

PREVIOUS OCCURRENCES

A review of previous occurrences that involved the same underlying concern or reason (i.e., human performance, component operation related) as this event was performed. Three events were identified, and reported to the NRC in the following LERs:

LER 2001-002-00: This LER reported that on February 14, 2001 during surveillance testing of 480 volt Bus 3A undervoltage relays, a technician performing the test was required to hold a switch in the bypass position while two test buttons were being pressed. That particular switch was not held in the "test" position as required by procedure, resulting in a trip of the breaker feeding the bus under test and the autostart of the EDGs.

LER 1999-018-00: This LER reported that on October 6, 1999 during the implementation of a temporary facility change, maintenance personnel incorrectly disconnected wires from the load side of a fuse instead of the line side. This rendered control of the Bus 2A supply and load breakers inoperable for approximately one minute. During this interval, Bus 2A degraded voltage actuation channels were inoperable due to lack of 125 volt DC power.

LER 1997-016-00: This LER reported that on July 2, 1997 during the conduct of maintenance activities, a mechanic working on 480 volt Breaker 52/2AT5A inadvertently depressed the trip button for Breaker 52/2AT3A. This inadvertently de-energized 480 volt Bus 3A, which actuated the undervoltage logic automatically starting the EDGs.