

Stephen E. Quinn
Vice President

Consolidated Edison Company of New York, Inc.
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Telephone (914) 734-5340

November 8, 1995

Re: Indian Point Unit No. 2
Docket No. 50-247
LER 95-21-00

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

The Attached Licensee Event Report LER 95-21-00 is hereby submitted in accordance with the requirements of 10 CFR 50.73.

Very truly yours,



Attachment

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

Mr. Francis J. Williams, Jr., 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

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LICENSEE EVENT REPORT (LER)

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 20585, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1) **Indian Point Unit No. 2** DOCKET NUMBER (2) **05000247** PAGE (3) **1 OF 04**

TITLE (4) **Plant Shutdown Due to Entry into Technical Specification 3.0.1**

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)
10	09	95	95	021	00	11	08	95		05000

OPERATING MODE (9) **N** THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)

20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
20.405(a)(1)(i)	50.38(c)(1)	50.73(a)(2)(v)	73.71(c)
20.405(a)(1)(ii)	50.38(c)(2)	50.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
20.405(a)(1)(iii)	<input checked="" type="checkbox"/> 50.73(a)(2)(iii)	50.73(a)(2)(vii)(A)	
20.405(a)(1)(iv)	50.73(a)(2)(iii)	50.73(a)(2)(vii)(B)	
20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME **Richard Louie, Engineer** TELEPHONE NUMBER **914 734-5678**

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
B	E K H X		W 1 2 0	Yes					

SUPPLEMENTAL REPORT EXPECTED (14) YES (If yes, complete EXPECTED SUBMISSION DATE) NO

EXPECTED SUBMISSION DATE (15) **03 01 96**

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

On October 9, 1995 at 0245 hours, with the plant at 100% power, the restrictions of Technical Specification 3.0.1 were triggered as a result of Component Cooling Water Pump 21 (21CCP) being out of service for maintenance coincident with Emergency Diesel Generator 23 (23EDG) being declared inoperable. 21CCP was removed from service for a planned modification on October 3, 1995. This activity initiated a 14-day Limiting Condition for Operation pursuant to Technical Specification 3.3.E.2.a. 23EDG was declared inoperable on October 9 when it was discovered that the engine lubrication oil was discolored, which is indicative of water contamination. Accordingly, Technical Specification 3.0.1 required that a plant shutdown be initiated. The plant was brought off line on October 9 at 0944 hours, and cooldown was initiated. With cooldown in progress, repairs to 23EDG were completed and determined to be acceptable on October 9 at 2350 hours. Plant startup was then initiated. The health and safety of the public were not affected by this event.

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

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
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TEXT (If more space is required, use additional NRC Form 368A's) (17)

PLANT AND SYSTEM IDENTIFICATION:

Westinghouse 4-Loop Pressurized Water Reactor

IDENTIFICATION OF OCCURRENCE:

Plant Shutdown Due to Entry into Technical Specification 3.0.1

EVENT DATE:

October 9, 1995

REPORT DUE DATE:

November 8, 1995

REFERENCE:

Significant Occurrence Reports (SOR) 95-689 and 95-696

PAST SIMILAR OCCURRENCES:

None

DESCRIPTION OF OCCURRENCE:

On September 27, 1995, Con Edison personnel observed that the lubrication oil level for 23EDG was abnormally high. Since the oil was also discolored, a sample was obtained for chemical analysis. This analysis confirmed the presence of water contamination. The source of the water infiltration was determined to be from degraded tubes within the diesel lube oil cooler, which allowed service water into the lube oil crankcase. All tubes within 23EDG lube oil cooler were subjected to an eddy current examination. Six out of a total 326 tubes within the tube bundle of 23EDG lube oil cooler were found to have worn to their minimum allowable wall thickness limit. These tubes were plugged. 23EDG was returned to service on September 29, 1995.

On October 3, 1995 21CCP had been taken out of service for a planned modification. At that time Technical Specification 3.3.E.2.a was entered resulting in a 14-day Limiting Condition for Operation. On October 9, 1995 it was discovered that the engine lubrication oil level for 23EDG

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was abnormally high and that the oil was discolored, which is indicative of water contamination.

23EDG was taken out of service and declared inoperable. Technical Specification 3.7.B.1 would have allowed plant operation to continue for seven days provided that 138 kV and 13.8 kV sources of offsite power were available and that the remaining diesel generators and the engineered safety features associated with those diesel generator buses were operable. However, with 21CCP still out of service an engineered safety feature associated with one of the operable diesel generators was inoperable. Accordingly, the plant entered Technical Specification 3.0.1 and a plant shutdown and cooldown was initiated. Investigation subsequently determined that a tube leak had developed in the lube oil cooler for 23EDG. All equipment was subsequently repaired and returned to service on October 9 at 2350 hours. A plant startup was then initiated.

ANALYSIS OF OCCURRENCE:

On September 27, 1995, Con Edison personnel observed that the lubrication oil level for 23EDG was abnormally high. Since the oil was also discolored, a sample was obtained for chemical analysis. This analysis confirmed the presence of water contamination. The source of the water infiltration was determined to be from degraded tubes within the diesel lube oil cooler, which allowed service water into the lube oil crankcase. All tubes within 23EDG lube oil cooler were subjected to an eddy current examination. Six out of a total 326 tubes within the tube bundle of 23EDG lube oil cooler were found to have worn to their minimum allowable wall thickness limit. These tubes were plugged. The total number of plugged tubes were well within the design cooling capacity of the lube oil cooler. 23EDG was returned to service on September 29, 1995.

On October 3, 1995, Technical Specification 3.3.E.2.a was entered to begin work on 21CCP, resulting in a 14-day Limiting Condition for Operation. The work activity consisted of replacement of the existing 21CCP with a pump featuring a new design split mechanical seal.

On October 9, 1995, while modifications to 21CCP were ongoing, Con Edison personnel again observed the lubrication oil level for 23EDG to be discolored and abnormally high. Because Technical Specification 3.7.B.1 requires that the remaining diesel generators and the engineered safety features associated with those diesel generator buses be operable, the plant entered Technical Specification 3.0.1 and a plant shutdown began. Investigation revealed that another tube had developed a leak allowing water to infiltrate into the diesel lube oil crankcase.

CAUSE OF OCCURRENCE:

The cause of this event is attributed to the failure of a tube in 23EDG lube oil cooler occurring coincident with a planned modification to 21CCP which rendered it out of service.

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		YEAR 9 5	SEQUENTIAL NUMBER — 0 2 1	REVISION NUMBER — 0 0	0 4	OF 0 4

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

CORRECTIVE ACTION:

The immediate corrective action taken was to plug the degraded tubes within the lube oil cooler. The cause of the excessive tube wear in 23EDG lube oil cooler is pending investigation. The tube bundle for 23EDG lube oil cooler will be replaced with a spare by November 30, 1995. Lack of a specific test standard from original installation of these coolers in September 1993, reduced the probability of discerning all tube degradation during the eddy current examination that took place after the September 27th occurrence. Eddy current testing has been performed on the spare tube bundle scheduled to be installed using a specially prepared standard. This testing provides a baseline inspection for the entire heat exchanger tube bundle. Lube oil and jacket water coolers on the remaining diesels will be similarly examined by January 31, 1996. The removed tube bundle from 23EDG lube oil cooler will be examined and analyzed to determine the cause of the premature failure of the tube material. At that time, appropriate actions will be taken to prevent recurrence of this event. A supplemental LER will be provided following completion of our investigation.