CENTRAL FILES

POWER AUTHORITY OF THE STATE OF NEW YORK
INDIAN POINT NO. 3 NUCLEAR POWER PLANT
P. O. BOX 215 BUCHANAN, N. Y. 10511
TELEPHONE 914-739-8200

March 29, 1979
IP-NAP-4451

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

Boyce H. Grier, Director
Office of Inspection and Enforcement
Region I
U. S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, Pennsylvania 19406

Dear Mr. Grier:

In accordance with the Technical Specifications of Facility Operating License No. DPR-64, the following describes Reportable Occurrence LER-003/01T-0. This event is the type defined in Technical Specification 6.9.1.7 (h).

On March 28, 1979, the Power Authority was notified by our Nuclear Steam Supplier, the Westinghouse Electric Corporation, that a review of their safety analysis methodology for the single dropped rod indicates the potential for this event to lead to calculated DNB ratios less conservative than previously reported to the NRC Staff. This potential inconsistency arises from the assumption that the existing rod controller can potentially incorrectly measure the core average power level during certain rod drop events.

The problem is most relevant to three loop plants where the control signal is taken from a single sensor which could perceive a greater power reduction than is representative for the core and attempt to overcompensate on the subsequent control bank withdrawal. On many two and four loop plants, including Indian Point 3, the control signal is taken from the average of all NIS channels, reducing the probability that the above event would take place.

Westinghouse maintains, and the Power Authority concurs, that there are several mitigating effects that significantly reduce the consequences of this transient. Among these effects are: 1) The small amount of positive reactivity (typically less than 100 pcm and in the case of Indian Point 3, typically less than 30 pcm) maintained in the partially inserted control bank due to the severe axial offset requirements imposed by Technical Specifications. 2) The dropped rod assumed is the most limiting rod in terms of the resulting increase in $F_{\Delta h}$. The majority of rods, if dropped, would result in much lower increases in $F_{\Delta h}$. 3) Reduction in the power overshoot by use of actual

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moderator and doppler coefficients rather than the more limiting FSAR assumptions. 4) The FSAR analysis did not assume the operation of the over power rod block because it is control grade equipment. This block is expected to be in operation and would terminate rod motion when power increases beyond the preset limit. 5) The fact that in the case of Indian Point 3 a turbine runback would be initiated in the event of a dropped rod sensed by the excore detectors and/or the rod bottom bistable off the RPI.

It is the conclusion of the Power Authority that plant operation is sufficiently conservative not to warrant any changes at this time due to the postulated event. It should be noted that Westinghouse has proposed discussing this generic postulated transient with the staff. The outcome of these discussions will indicate future actions, if any.

Mr. T. Rebelowski, Resident Inspector, was notified on March 28, 1979, of the aforementioned circumstances. This letter constitutes the twenty-four hour written notification required by the Technical Specifications.

Very truly yours,

J. P. Bayne
Resident Manager

NAP/rbb

cc: Director of Nuclear Reactor Regulation (2 copies)
Office of Management Information and Program Control
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Resident Inspector T. Rebelowski

William J. Cahill, Jr.
Vice President

Consolidated Edison Company of New York, Inc.
4 Irving Place, New York, N Y 10003
Telephone (212) 460 3819

March 14, 1979

RE: Indian Point Units 1,2&3
Docket Nos. 50-3, 50-247 & 50-286
LER 79-012/04T-0

Mr. Boyce H. Grier, Director
Office of Inspection and Enforcement
Region I
U. S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA. 19406

Dear Mr. Grier

The attached Licensee Event Report 79-012/04T-0 "Anomalous Measurement Report", is hereby submitted in accordance with the requirements of Section 5.6.2.2 of the Environmental Technical Specification Requirements (ETSR). The event is of the type described in ETSR Section 5.6.2.2a. A more detailed report on this event is included as an attachment to the LER.

Three copies of this letter and attachment are enclosed as required.

Very truly yours

attach.
enc.

CC: Mr. Harold R. Denton, Director (17 copies)
Office of Nuclear Reactor Regulation
c/o Distribution Services Branch, DDC,ADM
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Mr. T. Rebelowski, Resident Inspector
U. S. Nuclear Regulatory Commission
P. O. Box 28
Buchanan, N. Y. 10511

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NRC FORM 366 (7-77)

U. S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

CONTROL BLOCK: (1) (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

01 | NY1PS2 (2) | 00-00000-00 (3) | 41111 (4) | (5)

LICENSEE CODE — LICENSE NUMBER — LICENSE TYPE — CAT

CON'T

01 | REPORT SOURCE X (6) | 05000247 (7) | 021379 (8) | 031479 (9)

DOCKET NUMBER — EVENT DATE — REPORT DATE

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 | Teledyne Isotopes, our contracting laboratory, provided Con Edison

03 | with a report on 2/13/79, that the activity of our precipitation

04 | sample taken from Eastview on 1/2/79 exceeded ten times the control

05 | station level. This event did not have any environmental consequences

06 | attributable to plant operations at Indian Point.

07 |

08 |

09 | SYSTEM CODE XX (11) | CAUSE CODE X (12) | CAUSE SUBCODE Z (13) | COMPONENT CODE ZZZZZZ (14) | COMP. SUBCODE Z (15) | VALVE SUBCODE Z (16)

(17) LER/RO REPORT NUMBER: EVENT YEAR 79 | — | SEQUENTIAL REPORT NO. 012 | / | OCCURRENCE CODE 04 | REPORT TYPE T | — | REVISION NO. 0

ACTION TAKEN Z (18) | FUTURE ACTION Z (19) | EFFECT ON PLANT Z (20) | SHUTDOWN METHOD Z (21) | HOURS (22) 0000 | ATTACHMENT SUBMITTED Y (23) | NPRD-4 FORM SUB. N (24) | PRIME COMP. SUPPLIER Z (25) | COMPONENT MANUFACTURER Z999 (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 | The anomalous sample activity was determined to be caused by tritium

11 | releases from a source other than Indian Point. The New York State

12 | Department of Environmental Conservation investigated a manufacturer

13 | in the vicinity of Eastview station, which has since modified their

14 | installation to prevent a recurrence of this problem.

15 | FACILITY STATUS Z (28) | % POWER 100 (29) | OTHER STATUS (30) NA | METHOD OF DISCOVERY D (31) | DISCOVERY DESCRIPTION (32) Notification by contracting Lab.

16 | ACTIVITY RELEASED Z (33) | CONTENT OF RELEASE Z (34) | AMOUNT OF ACTIVITY (35) NA | LOCATION OF RELEASE (36) NA

17 | PERSONNEL EXPOSURES NUMBER 000 (37) | TYPE Z (38) | DESCRIPTION (39) NA

18 | PERSONNEL INJURIES NUMBER 000 (40) | DESCRIPTION (41) NA

19 | LOSS OF OR DAMAGE TO FACILITY TYPE Z (42) | DESCRIPTION (43) NA

20 | PUBLICITY ISSUED N (44) | DESCRIPTION (45) NA

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NRC USE ONLY

NAME OF PREPARER: Steven Masciulli PHONE: 212 460-3384

PO 617-926

Consolidated Edison Company of New York, Inc.
Indian Point Nos. 1, 2, & 3
Docket Nos. 50-03, 50-247 & 50-286
Attachment to LER

This report of an anomalous measurement at one of our environmental sampling locations in the vicinity of Indian Point Station is being made as a "followup" to the telephone report made by Mr. Steven Masciulli on February 13, 1979, to the Region I office of Inspection and Enforcement. These actions were taken in accordance with the Environmental Technical Specification Requirements (ETSR), for Indian Point Unit Nos. 1, 2, & 3, Section 5.6.2.2.

On February 13, 1979, Teledyne Isotopes, our contracting laboratory, reported a tritium level in a precipitation sample which exceeded ten times the control station value. The sample obtained at Eastview, located 15 miles southeast of Indian Point, was found to contain $3.96 \pm 2.4 \times 10^{-6}$ uCi/ml of tritium as determined by gas analysis. The sample obtained from Roseton, the control station, located 20 miles north of Indian Point, had a tritium activity of $1.2 \pm 0.9 \times 10^{-7}$ uCi/ml. Both samples were continuously collected over the entire month of December and were retrieved from the field on January 2, 1979. All precipitation samples were sent to Teledyne Isotopes for analysis on January 4, 1979. Upon receipt of these results Teledyne Isotopes was asked to perform a confirmatory reanlaysis of the Eastview sample. The results of the reanalysis will be forwarded in an update report when they are received. An investigation was performed to determine the cause of this anomalous measurement.

A review of precipitation analyses for the past few years shows tritium levels consistently at the 10-7 uCi/ml level at all locations, with no increasing trends noted. There are three other precipitation sampling points almost in a direct line, between Indian Point and Eastview; Air Monitor House onsite, Furnace Dock 3.5 miles southeast, and Croton Point 7.5 miles south southeast. Although each of these stations is closer to Indian Point, none indicated tritium levels in excess of 6.7×10^{-7} uCi/ml, which is a factor of six less than that observed at Eastview. This indicates that the source of tritium at Eastview is not related to plant operation at Indian Point and instead may be caused by some local activity, since the effect was not observed at other stations.

Releases at Indian Point Station during the period of concern were consistent with those which have been observed in the past and exhibited no abnormalities which would account for the anomalous measurements. Since typically many isotopes are released from the plant, we would expect to see several of them in the Eastview sample in quantities comparable to their releases. However, only tritium was observed in the sample, indicating that its source was something other than plant operations at Indian Point.

Therefore, it is concluded that the tritium detected in the rain water from Eastview was not due to plant operations at Indian Point. This is the third consecutive month that tritium in rain water from Eastview has been detected at this level. However, Con Edison has been advised that the New York State Department of Environmental Conservation has identified the source as a local manufacturer, which has since modified their installation to prevent any further recurrence of this problem.

POWER AUTHORITY OF THE STATE OF NEW YORK
INDIAN POINT NO. 3 NUCLEAR POWER PLANT
P. O. BOX 215 BUCHANAN, N. Y. 10511
TELEPHONE: 914-739-8200

March 12, 1979
IP-FWG-4302

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

Boyce H. Grier, Director
Office of Inspection and Enforcement
Region 1
U.S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, Pennsylvania 19406

Dear Mr. Grier:

The attached Licensee Event Report LER 79-001/03L-0 is hereby submitted in accordance with the requirements of Technical Specification 6.9.1. This event is of the type defined in 6.9.1.8. (b) of the Technical Specification. Three copies of this letter and attachment are enclosed as required.

Very truly yours,

J. P. Bayne
Resident Manager

FWG/rbb

cc: Director of Nuclear Reactor Regulation
Attn: William McDonald, Director (3 copies)
Office of Management Information & Program Control
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Office of Inspection and Enforcement (30 copies)
c/o Distribution Services Branch, DDC, ADM
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

George T. Berry, Executive Director
Power Authority of the State of New York
10 Columbus Circle
New York, New York 10019

Resident Inspector T. Rebelowski
George Wilverding, NYO
P. W. Lyon, NYO
James Davis (SRC), NYO

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LICENSEE EVENT REPORT

CONTROL BLOCK: (1) (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

01 | NYIPS3 (2) | 00-00000-00 (3) | 41111 (4) | (5)
LICENSEE CODE (9–14) | LICENSE NUMBER (15–25) | LICENSE TYPE (26–30) | CAT (57–58)

CON'T 01 | REPORT SOURCE L (6) | 05000286 (7) | 021179 (8) | 031279 (9)
DOCKET NUMBER (61–68) | EVENT DATE (69–74) | REPORT DATE (75–80)

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 While operating at 100 percent power, a high dew point and air leakage
03 on breaker 2-6 associated with feeder 95331 was noticed by the System
04 Operator. In order to preclude possible breaker damage, breaker 2-6
05 was opened with its load removed. In order to accomplish this, both
06 138KV feeders 95331 and 95332 breakers to IP-3 were opened, thus
07 depriving 6.9KV buses 5 and 6 from being energized by the 138KV
08 feeders, as required by Technical Specification 3.7.A.2.

09 SYSTEM CODE EA (11) | CAUSE CODE E (12) | CAUSE SUBCODE B (13) | COMPONENT CODE CKTBRK (14) | COMP. SUBCODE A (15) | VALVE SUBCODE Z (16)

(17) LER/RO REPORT NUMBER: EVENT YEAR 79 | — | SEQUENTIAL REPORT NO. 001 | / | OCCURRENCE CODE 03 | REPORT TYPE L | — | REVISION NO. 0

ACTION TAKEN B (18) | FUTURE ACTION Z (19) | EFFECT ON PLANT Z (20) | SHUTDOWN METHOD Z (21) | HOURS (22) 0000 | ATTACHMENT SUBMITTED Y (23) | NPRD-4 FORM SUB. N (24) | PRIME COMP. SUPPLIER N (25) | COMPONENT MANUFACTURER W120 (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 While feeders were de-energized, diesel generators assumed the
11 480V load requirements in accordance with Technical Specification
12 3.7.B.2. A subsequent investigation indicated gasket leak in
13 Westinghouse type C-A breaker. Repairs were effected, and both
14 feeder and breaker were returned to service.

15 FACILITY STATUS E (28) | % POWER 100 (29) | OTHER STATUS (30) NA | METHOD OF DISCOVERY A (31) | DISCOVERY DESCRIPTION (32) Operator Observation

16 ACTIVITY RELEASED Z (33) | CONTENT OF RELEASE Z (34) | AMOUNT OF ACTIVITY (35) NA | LOCATION OF RELEASE (36) NA

17 PERSONNEL EXPOSURES NUMBER 000 (37) | TYPE Z (38) | DESCRIPTION (39) NA

18 PERSONNEL INJURIES NUMBER 000 (40) | DESCRIPTION (41) NA

19 LOSS OF OR DAMAGE TO FACILITY TYPE Z (42) | DESCRIPTION (43) NA

20 PUBLICITY ISSUED N (44) | DESCRIPTION (45) NA

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NRC USE ONLY

NAME OF PREPARER Floyd W. Gumble PHONE: 914-939-8200 X217

GPO 917-926

ATTACHMENT I

Docket No. 50-286
LER 79-001/03L-0

Power Authority of the
State of New York

The plant was operating at 100 percent power.

On February 11, 1979, at 0120 hours the System Operator notified the Control Room Operator of a high dew point and air leakage signal on breaker 2-6 associated with feeder 95331. This feeder is a source of supply for the auxiliary 138KV feed to 6.9KV buses 5 and 6. It was necessary to remove the breakers from service to correct the problem and prevent breaker damage. However, opening the affected breaker while supplying load is not advisable with the indicated condition since it could be damaged. It was, therefore, necessary to remove all loads for 138KV feeder 95331 prior to opening breaker 2-6.

All three diesel generators were run to verify operability, in accordance with the requirements of Technical Specification 3.7.B.2, and generators Nos. 32 and 33 assumed the 480V load requirements for buses 5 and 6, which were previously being fed from outside power. Breakers ST-5 and ST-6 (normal feed to bus 5 and 6, respectively) were opened and GT-35 and GT-36 were closed to provide power to the 6.9KV buses through the gas turbine sub-station transformer. The District Operator opened breaker 5-6, thereby removing load from 95331 138KV feeder. With load removed, breaker 2-6 was then opened. At 0154 hours, breaker 5-6 was reclosed, and GT-35 and GT-36 opened. ST-5 and ST-6 were reclosed and 480V buses were transferred back to their normal feed. All three generators were then secured and returned to their standby mode. Outside 138KV power to the 6.9 KV buses was thereafter supplied from feeder 95332 which meets the requirements of Technical Specification 3.7.A.2. Neither feeder 95331 nor 95332 had been supplying 6.9KV buses for a period of 34 minutes. However, this is well within the 48-hour limit allowed by Technical Specifications.

An investigation showed that fault lay in the manway for breaker 2-6, where a gasket leak was found. The Westinghouse CA-type breaker was subsequently repaired, and breaker 2-6 and feeder 95331 were returned to service.

Reactor performance was not affected by this incident. No similar events have been recorded to date.

POWER AUTHORITY OF THE STATE OF NEW YORK
INDIAN POINT NO. 3 NUCLEAR POWER PLANT
P. O. BOX 215 BUCHANAN, N. Y. 10511
TELEPHONE: 914-739-8200

March 2, 1979
IP-FWG-4271

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

Boyce H. Grier, Director
Office of Inspection and Enforcement
Region 1
U. S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, Pennsylvania 19406

Dear Mr. Grier:

The attached Licensee Event Report LER 79-002/03L-0 is hereby submitted in accordance with the requirements of Technical Specification 6.9.1. This event if of the type defined in 6.9.1.8. (b).of the Technical Specification. Three copies of this letter and attachment are enclosed as required.

Very truly yours,

J. P. Bayne

FWG/rbb

cc: Director of Nuclear Reactor Regulation
Attn: William McDonald, Director (3 copies)
Office of Management Information & Program Control
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Office of Inspection and Enforcement (30 copies)
c/o Distribution Services Branch, DDC, ADM
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Mr. George T. Berry
Executive Director
Power Authority of the State of New York
10 Columbus Circle
New York, New York 10019

Resident Inspector T. Rebelowski
George Wilverding, NYO
P. W. Lyon, NYO
James Davis (SRC), NYO

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NRC FORM 366
(7-77)

LICENSEE EVENT REPORT

CONTROL BLOCK: [ ] (1) (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

| | | |

ATTACHMENT 1

Docket No. 50-286
LER 79-002/03L-0

Power Authority of the
State of New York

The plant was operating at 100 percent power in the steady state.

On February 5, 1979, an increase in the gaseous activity in the PAB was observed. Subsequent investigation showed this to be due to the leakage of the No. 32 charging pump plunger. At this point, pump No. 32 was isolated and secured, and charging pump No. 31 was activated to serve in its place. Charging pump No. 33 was also out of service for maintenance purposes, but was repaired and restored to service within the time limit (24 hours) required by Technical Specification 3.2.C.1.

The plunger and packing for Union Pump (2 7/16X5) QX-300 Quintuplex were subsequently replaced, and charging pump No. 32 was returned to operable state.

The activity release, which escaped into the PAB, was 5.5X10-9 curie of noble gas and 5.5X10-8 curie of particulate matter. These values are below the limits designated by Technical Specification 2.4.2.f (Appendix B). These limits are 0.5 curie for noble gas and 0.02 curie for radioiodine.

Similar events occurred on October 27, 1978 (LER 78-034/03L-0), April 16, 1978 (LER 78-008/03L-0), September 30, 1977 (R.O.-77-3-14(B) and R.O.-77-3-15(B)) and December 16, 1977 (R.O. 77-3-19(B)). Performance of the reactor was not affected by this incident.

William J. Cahill, Jr.
Vice President

Consolidated Edison Company of New York, Inc.
4 Irving Place, New York, N Y 10003
Telephone (212) 460-3819

January 11, 1979

RE: Indian Point Units 1,2&3
Docket Nos. 50-3,50-247 &
50-286
LER 78-038/04T-0

Mr. Boyce H. Grier, Director
Office of Inspection and Enforcement
Region I
U. S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA. 19406

Dear Mr. Grier

The attached Licensee Event Report 78-038/04T-0, "Anomalous Measurement Report", is hereby submitted in accordance with the requirements of Section 5.6.2.2 of the Environmental Technical Specification Requirements (ETSR). The event is of the type described in ETSR Section 5.6.2.2a. An in depth report on this event is included as an attachment to this LER.

Three copies of this letter and attachment are enclosed as required.

Very truly yours

William J. Cahill, Jr.

attachment
enc.

CC: Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
c/o Distribution Services Branch, DDC,ADM
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Mr. T. Rebelowski, Resident Inspector
U. S. Nuclear Regulatory Commission
P. O. Box 38
Buchanan, N.Y. 10511

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