December 28, 2000

Mr. A. Alan Blind
Vice President, Nuclear Power
Consolidated Edison Company
of New York, Inc.
Broadway and Bleakley Avenue
Buchanan, NY 10511

SUBJECT: INDIAN POINT NUCLEAR GENERATING UNIT NO. 2 - RE: ISSUANCE OF AMENDMENT CONSISTING OF CHANGES TO THE DEGRADED VOLTAGE TRIP AND THE UNDER-FREQUENCY REACTOR TRIP SURVEILLANCE TESTS (TAC NO. MA6236)

Dear Mr. Blind:

The Commission has issued the enclosed Amendment No. 214 to Facility Operating License No. DPR-26 for the Indian Point Nuclear Generating Unit No. 2. The amendment consists of changes to the Technical Specifications (TSs) in response to your application transmitted by letter dated July 26, 1999, as supplemented by letter dated January 20, 2000.

The amendment consists of changes to the degraded voltage trip and the under-frequency reactor trip surveillance tests.

A copy of the related Safety Evaluation is enclosed. A Notice of Issuance will be included in the Commission's next regular biweekly Federal Register notice.

Sincerely,

/RA/

Patrick D. Milano, Senior Project Manager, Section 1
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-247

Enclosures: 1. Amendment No. 214 to DPR-26
2. Safety Evaluation

cc w/encls: See next page

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OFFICE	PM:PDI-1	LA:PDI-1	SC:PDI-1	EEIB *	OGC *
NAME	PMilano/	SLittle	A. Dromerick for MGamberoni	NTrehan	RHoefling
DATE	12/20/00	12/18/00	12/27/00	02/02/00	06/09/00

Official Record Copy

DATED: December 28, 2000

AMENDMENT NO. 214 TO FACILITY OPERATING LICENSE NO. DPR-26-INDIAN POINT NUCLEAR GENERATING UNIT NO. 2

PUBLIC
PDI-1 Reading
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S. Little
P.Milano
OGC
G. Hill (2), T-5 C3
W. Beckner, 013/H15
ACRS
J. Rogge, Region I
D. Thatcher

cc: Plant Service list

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

DOCKET NO. 50-247

INDIAN POINT NUCLEAR GENERATING UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 214
License No. DPR-26

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Consolidated Edison Company of New York, Inc. (the licensee) dated July 26, 1999, as supplemented January 20, 2000, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-26 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 214, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance to be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

A. Dromerick for M. Gamberoni

Marsha Gamberoni, Chief, Section 1
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: December 28, 2000

ATTACHMENT TO LICENSE AMENDMENT NO. 214

FACILITY OPERATING LICENSE NO. DPR-26

DOCKET NO. 50-247

Replace the following pages of the Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove Pages	Insert Pages
Table 3.5-3 Pages 1 through 4	Table 3.5-3 Pages 1 through 4
Table 4.1-1 Page 1 of 7	Table 4.1-1 Page 1 of 7
Table 4.1-1 Page 4 of 7	Table 4.1-1 Page 4 of 7

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 214 TO FACILITY OPERATING LICENSE NO. DPR-26

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

INDIAN POINT NUCLEAR GENERATING UNIT NO. 2

DOCKET NO. 50-247

1.0 INTRODUCTION

By letter dated July 26, 1999, as supplemented by letter dated January 20, 2000, Consolidated Edison Company of New York, Inc. (Con Ed) (the licensee) submitted a request for a license amendment to change the degraded voltage trip and the under-frequency reactor trip surveillance tests contained in Technical Specification (TS) Table 3.5-3, "Instrumentation Operating Conditions for Engineered Safety Features," Item 3.b and Table 4.4-1, "Minimum Frequencies for Checks, Calibrations and Tests of Instrument Channels," Items 8 and 29.b. For the degraded voltage trip, the proposed amendment would revise TS to specify detailed operator actions to be taken if the minimum conditions could not be met rather than simply stating "Cold Shutdown." The 6.9 kV underfrequency and reactor trip surveillance tests currently combine voltage and frequency testing under one item. The proposed TS amendment would separate the 6.9 kV voltage testing from the frequency testing and specify separate test requirements. In addition, the proposed TS amendment would require more frequent testing of the 480 volt emergency bus undervoltage reactor trip.

2.0 BACKGROUND

The changes to Tables 3.5-3, Item 3.b and Table 4.4-1, Item 29.b are a result of the event discussed in Licensee Event Report (LER) 1999-006-00, "Plant Operation in Condition Prohibited by Technical Specification," which discussed the degraded voltage testing. The NRC Safety Evaluation issued in 1981 (Amendment No. 74) approved monthly testing of the undervoltage alarm relays and refueling interval testing for the degraded voltage relays. In 1982, the licensee made a commitment to NRC staff to test the degraded voltage relays monthly and to revise the TSs accordingly. In 1984, the licensee implemented a modification to provide for the installation of a test switch to bypass the degraded voltage relays during testing and revised procedures to provide monthly testing of the degraded voltage relays. The licensee did not propose any TS change to require testing.

The change to Table 4.4-1, Item 8 is the result of a reevaluation of Generic Letter 96-01, "Testing of Safety-Related Logic Circuits," as discussed with respect to underfrequency testing in LER 1998-009-01, "Deficiencies Identified in Surveillance Procedures for Testing of Safety-Related Logic." It was noted that the test of the underfrequency reactor trip did not include the reactor coolant pump (RCP) breaker control circuit. The underfrequency relays were tested, but the

output contacts of these relays in the RCP circuit were not tested. Also, the RCP breaker contacts that input the reactor protection system (RPS) logic were not tested.

By letter dated July 26, 1999, the licensee requested approval of the proposed TS changes to fulfill the commitments made in LER 1999-006-00, and LER 1998-009-01. By letter dated January 20, 2000, the licensee provided supplementary information that did not change the initial proposed no significant hazards consideration determination in support of proposed TS amendment consisting of changes to the degraded voltage trip and the underfrequency reactor trip surveillance tests.

3.0 EVALUATION

3.1 Technical Specification Change on Degraded Voltage Testing

During the performance of the surveillance test, "480 Volt Undervoltage Alarm," a test switch that opens the trip coil circuit of the associated 480 V bus supply breaker is actuated. This permits actuation of the degraded voltage relays without tripping the associated 480 V bus supply breaker. However, when the test switch is actuated, both degraded voltage channels (each channel consists of one degraded voltage relay) are bypassed. TS Table 3.5-3 Item No. 3.b requires at least one degraded voltage relay channel be operable, otherwise, operator action must be taken to bring the plant to a cold shutdown. The proposed change would allow the licensee to perform monthly testing of the degraded voltage relays without bringing the plant to a cold shutdown. In Table 3.5-3, Item 3.b, the licensee has requested a change to the required operators' actions if the minimum conditions could not be met. The change is to delete the Operator Action of "Cold Shutdown" and replace it with a detailed Operator Action via a note. This note is being added in lieu of the "Cold Shutdown" statement in the existing TS Table 3.5-3, Item 3.b. The note states:

(a) If the 138 kV source of offsite power and the 13.8 kV source of offsite power are available:

1) Both channels may be inoperable on one bus for a period not to exceed 72 hours;

2) If one channel is inoperable after 72 hours, place the inoperable channel to trip;

3) If both channels are inoperable after 72 hours, proceed to a cold shutdown.

(b) If the 138 kV source of offsite power or the 13.8 kV source of offsite power is not available:

1) If one channel is inoperable, place the inoperable channel to trip;

2) If both channels are inoperable, proceed to a cold shutdown.

The tripping of the 480V bus will be bypassed for the duration of the test of the degraded voltage relays (typically no more than 10 minutes). Only one 480V bus will be tested (with the bypass) at a time. If a degraded voltage condition should occur during the test with no safety injection (SI), the degraded voltage 480V bus trip is delayed for 3 minutes by design to allow the station auxiliary transformer tap changers to recover voltage. The operator would be aware of a degraded voltage condition by the undervoltage alarm relay, which is set at a higher level than the degraded voltage relays (94% vs. 88% of 480V) and would stop the test. If the degraded voltage relay setpoint is reached during the test, the three other 480V buses will trip, all three emergency diesel generators (EDGs) will start and there will be an alarm, "Sustained UV Safeguard Bus Trip" in the Control Room. The procedure for this alarm calls for the operator to trip the 480V bus if it has not tripped (such as due to the testing) and to load the bus. If a degraded voltage condition should occur during the test with a safety injection signal, the output breaker of the EDG would trip. The bus would remain on offsite power with the degraded voltage condition. Under these circumstances, the Emergency Operating Procedures direct the Operator to manually trip the 480V bus and load it to the EDG. This should occur within approximately 10 minutes of the SI. The other three 480V buses would be automatically loaded to the EDGs to shut down the reactor safely.

To reflect the above change, the licensee has revised the check frequency from N.A. (Not Applicable) to S (Shift - twice per day) in Table 4.1-1, Item 29.b, "480V Emergency Bus Undervoltage (Degraded Voltage)" and the test frequency from "R#" (refueling - once per 24 months) to "M" (monthly). The staff considers the proposed change to Table 4.1-1, Item 29.b acceptable because the increased testing frequency will adequately demonstrate that the system can perform its intended function. The staff also notes that this change is similar to the TS currently existing at Indian Point Unit 3.

Based on the short duration of the bypass and the alarms and procedures available to the operator during the time the bypass is in place, we conclude that the test can be safely performed during power operation. Therefore, the change to TS Table 3.5-3 is acceptable.

3.2 Technical Specification Change on Underfrequency Reactor Trip Testing

In Table 4.1-1, Item 8, "6.9 kV Voltage and Frequency," the testing frequency was "Q" (quarterly) with its own remark that stated, "Reactor Protection circuits only." The change is to split Item 8 into Item 8.a, "6.9 kV Voltage" and Item 8.b, "6.9 kV Frequency." For Item 8.a, there are no remarks. For Item 8.b, the testing frequency is now split into two portions namely a "Q" (quarterly) portion and an "R#" (refueling - once per 24 months) portion. The "Q" portion has a remark that states, "underfrequency relay actuation only." The "R#" portion has a remark that states, "The full test including RCP breaker trip upon underfrequency relay actuation and reactor trip logic relay actuation upon tripping of the RCP breaker."

The operability of the underfrequency relays and auxiliary relays that are in a 2 out of 4 bus logic arrangement is presently tested quarterly. The reactor trip logic relays that are actuated by the RCP breaker contacts are presently tested on a monthly alternating train basis. Only, the interposing relays that trip the RCP breakers on the 2 out of 4 logic, as well as the RCP breaker actuation and the RCP breaker contacts (which were not previously tested on a periodic basis) are being proposed for testing on a refueling basis. The interposing relays that trip the RCP breakers, the RCP breaker actuation, and the RCP breaker contacts cannot be tested with the

unit on line. The licensee states that the intervals for the present quarterly and alternate monthly tests will remain as is.

With the new testing, the TS Trip Actuation Device Operational Testing (TADOT) is satisfied by the present and proposed tests for underfrequency reactor trip, because all portions of the underfrequency reactor trip circuit will be tested at least once every refueling cycle which the staff considers an adequate test frequency to demonstrate that the system can perform its intended function. Therefore, the change is acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the New York State official was notified of the proposed issuance of the amendment. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes surveillance requirements. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (65 FR 10565). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: N. K. Trehan

Date: December 28, 2000

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