

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

April 28, 2000

Template - NRR-058

SUBJECT: INDIAN POINT NUCLEAR GENERATING UNIT NO. 2 RE: ISSUANCE OF
AMENDMENT REGARDING STEAM GENERATOR INSPECTION
REQUIREMENTS (TAC NO. MA8488)

Dear Mr. Blind:

The Commission has issued the enclosed Amendment No. ²⁰⁹ 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 March 17, 2000.

The amendment revises TSs associated with probes used in steam generator tube inspections, specifically TS Section 4.13.A.3.f. The proposed change would provide more flexibility in the type of probe used and reflects current technological advances in inspection equipment, while still maintaining the current 610-mil diameter probe restriction.

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/

Jefferey F. Harold, 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. ²⁰⁹ to DPR-26
2. Safety Evaluation

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DATE	04/25/00		04/26/00	4/19/2000	3/24/00	04/12/00

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

April 28, 2000

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Vice President, Nuclear Power
Consolidated Edison Company
of New York, Inc.
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Buchanan, NY 10511

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2. Safety Evaluation

cc w/encls: See next page

Indian Point Nuclear Generating Station
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

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. 209
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 March 17, 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. 209, 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 and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION



Marsha Gamberoni, Acting 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: April 28, 2000

ATTACHMENT TO LICENSE AMENDMENT NO. 209

FACILITY OPERATING LICENSE NO. DPR-26

DOCKET NO. 50-247

Replace the following page of the Appendix A Technical Specifications with the attached revised page. The revised page is identified by amendment number and contains marginal lines indicating the areas of change.

Remove Page

4.13-3

Insert Page

4.13-3

- c. **Unscheduled steam generator examinations shall be required in the event there is a primary to secondary leak exceeding technical specifications, a seismic occurrence greater than an operating basis earthquake, a loss-of-coolant accident requiring actuation of engineered safeguards, or a major steamline or feedwater line break.**
- d. **Unscheduled examinations may include only the steam generator(s) affected by the leak or other occurrence.**
- e. **In case of an unscheduled steam generator examination, the profilometry tensile strain criterion shall be the same as contained in the approved program for the last scheduled steam generator inspection.**

3. **Basic Sample Selection and Examination**

- a. **At least 12% of the tubes in each steam generator to be examined shall be subjected to a hot-leg examination.**
- b. **At least 25% of the tubes inspected in Specification 4.13.A.3.a above shall be subjected to a cold-leg examination.**
- c. **At least 20% of a random sample of tubes containing sleeves shall be subjected to an examination throughout the sleeved portion of the tube.**
- d. **Tubes selected for examination shall include, but not be limited to, tubes in areas of the tube bundle in which degradation has been reported, either at Indian Point 2 in prior examinations, or at other utilities with similar steam generators.**
- e. **Examination for deformation ("dents") shall be either by eddy current or by profilometry.**
- f. **Examination for degradation other than deformation shall be by eddy current techniques. A 700-mil diameter probe shall be used unless previous data indicates that a 700-mil diameter probe would not pass through the tube. If the 700-mil diameter probe cannot pass through the tube, the largest size probe that is expected to pass through the tube shall be used. In all cases a probe with at least a 610-mil diameter shall be used, except for the examination of the U-bends and the cold-legs of tubes in rows 2 through 5. For these examinations, a 540-mil diameter probe may be used, provided it is justified by profilometry measurement within the tensile strain criterion.**



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 209 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 March 17, 2000, Consolidated Edison Company of New York, Inc. (the licensee), submitted a request to modify the Technical Specifications (TSs) for Indian Point Nuclear Generating Unit No. 2 (IP2). The proposed amendment would revise TSs associated with probes used in steam generator tube inspections, specifically TS Section 4.13.A.3.f. The proposed change would provide more flexibility in the type of probe used and would reflect current technological advances in inspection equipment, while still maintaining the current 610-mil diameter probe restriction.

2.0 EVALUATION

Revised TS 4.13.A.3.f would read:

Examination for degradation other than deformation shall be by eddy current techniques. A 700-mil diameter probe shall be used unless previous data indicates that a 700-mil diameter probe would not pass through the tube. If the 700-mil diameter probe cannot pass through the tube, the largest size probe that is expected to pass through the tube shall be used. In all cases a probe with at least a 610-mil diameter shall be used, except for the examination of the U-bends and the cold-legs of tubes in rows 2 through 5. For these examinations, a 540-mil diameter probe may be used, provided it is justified by profilometry measurement within the tensile strain criterion.

The existing TS 4.13.A.3.f requires a 610-mil diameter probe be used if a 700-mil diameter probe cannot pass through the tube for other than the U-bends and cold-legs of tubes in rows 2 through 5, which allow the use of 540-mil diameter probes provided it is justified by profilometry measurement within the tensile strain criterion.

The licensee stated that the 700-mil/610-mil diameter probe requirement for steam generator tube inspection was incorporated in Amendment 81 (dated October 21, 1982). During that period of time, the steam generator channel head robotics for inspections were not as advanced as today's models and the options for probes were limited to 700-mil, 610-mil and 540-mil diameter sizes. Immediate gauging of the tube support plate intersections for restrictions was beneficial to determine if a tube required plugging early in the program to aid

the ALARA and the "production" aspects of the tube inspection. As time evolved, the robotics also evolved to reduce radiation exposure for the steam generator workers. With development and refinement of robotics, intermediate probe sizes were used to the maximum extent possible to allow the largest probe possible to inspect as much of the tube as possible. The larger the probe, the better the "fill factor" and better eddy current data from the probe.

The licensee also stated that with today's advancements, testing of the tubes with a 610-mil diameter probe is not necessary if data can be collected with a larger sized probe. In addition, requiring use of a 610-mil diameter probe after a larger diameter probe has supplied sufficient information is counterproductive to ALARA concerns and increases the inspection time with no additional benefit.

The NRC staff reviewed the licensee's submittal and agrees that the largest probe possible should be used to inspect the tubes. The proposed change requires that the largest size probe that is expected to pass through the tube be used, while retaining the minimum probe size allowed by the existing TS. The staff agrees that the testing of the tubes with a 610-mil diameter probe is not necessary if data can be collected with a larger sized probe. The staff concludes that the proposed changes are acceptable because the larger probe sizes specified will optimize the inspection results. In addition, the proposed change provides an improved inspection of the tubes compared to the existing TS.

3.0 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.

4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes surveillance requirements. The NRC staff has determined that the amendment involves no significant increase in 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 16230). 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.

5.0 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: R. Croteau

Date: April 28, 2000

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Sincerely,

Jefferey F. Harold, Project Manager, Section 1
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Docket No. 50-247

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