

Docket No. 50-247

JAN 24 1976

Consolidated Edison Company
of New York, Inc.
ATTN: Mr. William J. Cahill, Jr.
Vice President
4 Irving Place
New York, New York 10003

Gentlemen:

The Commission has issued the enclosed Amendment No. 18 to Facility Operating License No. DPR-26 for the Indian Point Nuclear Generating Unit No. 2. This amendment consists of changes to the Technical Specifications in response to your request dated November 6, 1975.

The amendment revises the provisions of the Technical Specifications to change the time when corrective action would be required to reduce the number of fish collected during the impingement monitoring program.

Copies of the related Environmental Evaluation and the Federal Register Notice also are enclosed.

Sincerely,

Voss A. Moore, Assistant Director
for Environmental Projects
Division of Site Safety
and Environmental Analysis

Enclosures:

1. Amendment No. 18
2. Environmental Evaluation
3. Federal Register Notice

cc w/enclosures: See next page

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*Called F. Gray 1/24/76
for verbal concurrence - Gek*

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Consolidated Edison Company

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cc w/enclosures:

Leonard M. Trosten, Esquire
LeBoeuf, Lamb, Leiby and MacRae
1757 N Street, N. W.
Washington, D. C. 20036

Honorable George E. Begany
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Anthony Z. Roisman, Esquire
Berlin, Roisman & Kessler
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New York State Office
of Planning Services
488 Broadway
Albany, New York 12207

Edward J. Sack, Esquire
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Tri-State Regional Planning
Commission
100 Church Street
New York, New York 10007

S. Chasis, Esquire
Natural Resources Defense Council
15 West 44th Street
New York, New York 10036

cc w/enclosures & copy of
ConEd's ltr dtd 11/6/75

Commissioner of Commerce
New York Department of Commerce
112 State Street
Albany, New York 12207

Dr. William E. Seymour
Staff Coordinator
New York State Atomic Energy Council
New York State Department of Commerce
99 Washington Street
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Honorable Louis J. Lefkowitz
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2 World Trade Center
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Mr. Paul Arbesman
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Honorable Paul S. Shemin
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Mr. Neill Thomasson
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J. Bruce MacDonald, Esquire
New York State Atomic
Energy Council
State Department of Commerce
99 Washington Avenue
Albany, New York 12210

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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. 18
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 November 6, 1975, 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.
2. Accordingly, the license is amended by a change to the Technical Specifications as indicated in the attachment to this license amendment.

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3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

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Voss A. Moore, Assistant Director
for Environmental Projects
Division of Site Safety
and Environmental Analysis

Attachment:
Changes to the
Technical Specifications

Date of Issuance: JAN 24 1976

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ATTACHMENT TO LICENSE AMENDMENT NO. 18

FACILITY OPERATING LICENSE NO. DPR-26

DOCKET NO. 50-247

Replace existing page 4-35 of the Appendix B Technical Specifications with the attached revised page 4.35. The change on that page is shown by a marginal line.

4.0 ENVIRONMENTAL SURVEILLANCE PROGRAMS

the impinged fish population shall be performed to estimate species number, size and weight. Such subsampling will consist of measuring and weighing at least 10% of the total impinged population of each species. Species selected for subsampling will be representative of the range of sizes collected in the trash basket. The monitoring program shall consist of washing down the fixed screens at least once per day and running all travelling screens approximately 15-30 minutes during each 8-hour shift. The estimated number and species of fish washed off the fixed screens which do not enter the forebay shall be estimated each day and recorded separately. Running the travelling screens at the time the fixed screens are raised and backwashed shall be carried out.

- (ii) If the number of fish of all sizes and species killed exceeds 5000 per day for seven consecutive days or the number of fish of all sizes killed exceeds 15,000 per day for three consecutive days immediate corrective action shall be taken to reduce the number killed to below these levels.
- (iii) The causes of fish impingement shall be evaluated, including the magnitude of the approach or intake velocity. During the first 180 days after issuance of an operating license for steady-state power, the water velocity profile across the fixed screens shall be characterized in a manner similar to that provided by the licensee in testimony in the ASLB hearing (Reference 4.1-23). Velocity determinations shall be made at full flow and reduced flow and shall include measurements from at least four intake forebays, one forebay area at the north and one at the south, and two in the middle of the intake structure. Measurement at each forebay shall be made as close as possible to the outer fixed screens and include at least four determinations over a tidal cycle (high and low tide shall be included). The results of the velocity profile study shall be submitted in the first semi-annual operating report for Unit No. 2 operation and shall include a detailed description of the study, methodology, procedures used, results and locations of the effects on the fishery.
- (iv) Operational experience of the air bubbler to prevent fish from being attracted to the intake screens and the effectiveness to reduce impingement by other fish protection devices shall be documented and evaluated in the semi-annual operating report. Operating procedures shall be developed for air bubblers to obtain the optimum mode of performance for meeting the intended purposes of keeping fish away from the intake screens.

Amendment No. 18

Date:

JAN 24 1976

ENVIRONMENTAL IMPACT APPRAISAL
BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 18 TO DPR-26

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

INDIAN POINT NUCLEAR GENERATING UNIT NO. 2

INTRODUCTION

On November 6, 1975, Consolidated Edison requested an amendment to the Environmental Technical Specifications (ETS) contained in Appendix B of Operating Licenses No. DPR-26 and DPR-5.

The request was to change the ETS limits on the number of fish that can be collected at the circulating water system intake screens and, hence, change the point in time at which corrective action would be undertaken.

Paragraph (ii), p.4-35 of the ETS for Indian Point Units 1 and 2 currently read as follows:

- (ii) If the number of fish of all sizes and species killed exceeds 5000 per day for three consecutive days or the number of fish of all sizes killed in a single day exceeds 15,000, immediate corrective action shall be taken to reduce the number killed to below these levels.

Consolidated Edison's request is to change this paragraph to read as follows (changes underlined):

- (ii) If the number of fish of all sizes and species killed exceeds 5000 per day for seven consecutive days or the number of fish of all sizes killed exceeds 15,000 per day for three consecutive days immediate corrective action shall be taken to reduce the number killed to below these levels.

However, Unit No. 3 will soon begin to contribute to the impingement picture and an evaluation of the proposed change should consider this contribution.

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The ETS for Unit No. 3 has a corresponding paragraph (iii, p. 4.1-16 ETS, IP-3) which reads as follows:

- (iii) If the number of fish collected as determined in (ii) above exceeds 5,000 per day for three consecutive days or such number in a single day exceeds 15,000, immediate corrective action shall be taken to reduce the number to below these levels. This limit shall apply if either Unit No. 2 or Unit No. 3 is operating separately or in combination with Unit No. 1. If, however, both Units Nos. 2 and 3 are operating (with or without Unit No. 1), and three or more circulating water pumps are operating at either Unit No. 2 or Unit No. 3 simultaneously with four or more circulating water pumps operating at the other Unit, such corrective action need not be taken until the numbers exceed 10,000 and 30,000 respectively. (Fish impingement numbers are subject to the evaluation required under Reporting Requirements (d)(1) page 4.1-18).

Because the ETS for Unit No. 3 were written to encompass all three Indian Point plants ultimately, this assessment includes all three units.

DISCUSSION

A summary of the impingement problem may be found in the Final Environmental Statement for Indian Point, Unit 3 which recaps the history and significance of the problem (Section V-D.2.a) and will not be repeated here. Section V-D.2.d(3)(c)(vi) of the same document discusses the potential reduction of fish species other than striped bass. On the average, the fish impinged have been white perch, 70.7%; clupeids, 12.8%; tomcod, 8.3% and striped bass 3.1%; 2.9% are other species. However, at times the proportions may differ radically from the average.

The staff's position (FES, IP-3) with respect to the potential impact of Indian Point Units Nos. 1, 2 and 3 operating with once-through cooling on fish populations in the Hudson River Estuary other than striped bass is as follows:

- (1) the species of greatest concern are white perch, tomcod, alewife, blueback herring, and anchovy;
- (2) the entrainment and impingement impact of Indian Point together with that of Bowline, Lovett, Roseton, and Danskammer will probably reduce the standing crops of young-of-the-year and adult of each of these species;
- (3) the reductions are not expected to be irreversible.

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Since the major concern with respect to striped bass is one of entrainment rather than impingement, the major concern here is the white perch and, to a lesser extent, species other than striped bass.

The limits on impingement were set conservatively on data obtained prior to 1974. Recently (telephone conversation between W. J. Cahill and G. W. Knighton, January 24, 1976) the total population estimate for 1974 (young-of-the-year class) for white perch was obtained which appeared to indicate that the population had risen substantially. Other data used in the evaluation were obtained from Texas Instruments Annual Reports to Consolidated Edison (reports for 1973 and 1974).

In brief, the population estimates show wide fluctuations and wide ranges in confidence limits. However, the proportion of fish impinged is near predictions and there is no reason to conclude that the population has continued its downward trend suspected by the first two years' data. In fact, the data for 1973 and 1974 appear to show an upward trend. In the staff's opinion, the variability cannot be attributable to the power plant and there is insufficient data to conclude that there is a trend one way or another away from a mean value.

Further, the staff attempted to find some correlation between impingement, population size and fraction of fish impinged. No correlation or other obvious relationship was found. However, from the data available, the fraction of the total estimated population which had been impinged was always less than ten per cent.

Thus, the lack of definitive evidence of a declining population and the generally small fraction impinged leads to the possibility that ETS limits may be raised without causing irreversible harm.

From a cost-benefit standpoint, the evidence is strong. In the application for amendment, the applicant points out that a fish kill which occurred November 1 - 5, 1975 amounted to 282.6 lbs. The fish were 2 - 4 inches long, with an estimated market value of \$5.65 (assuming they could have been sold).

The power reduction to 220 MWe(net) on a typical day increases the daily cost of electricity to consumers by \$300,000.

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CONCLUSION

On the basis of the available data and the analysis set forth above, the staff concludes that there is little possibility of harm in raising the impingement limits in the ETS for Indian Point Units 1, 2 and 3.

The staff recommends that the applicant's application to change the ETS for Indian Point Units 1 and 2 be approved. Having made this conclusion, the Commission has further concluded that no environmental impact statement for the proposed action need be prepared and that a negative declaration to this effect is appropriate.

R. Geckler

R. Geckler, Environmental Project Manager
Environmental Projects Branch 1
Division of Site Safety
and Environmental Analysis

George W. Knighton

George W. Knighton, Chief
Environmental Projects Branch 1
Division of Site Safety
and Environmental Analysis

JAN 24 1976

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UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-247

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY
OPERATING LICENSE

AND NEGATIVE DECLARATION

Notice is hereby given that the U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 18 to Facility Operating License No. DPR-26 issued to Consolidated Edison Company of New York, Inc. which revised Technical Specifications for operation of Indian Point Nuclear Generating Unit No. 2, located in Buchanan, Westchester County, New York. The amendment is effective as of its date of issuance.

The amendment revises the provisions of the Technical Specifications to change the time when corrective action would be required to reduce the number of fish collected during the impingement monitoring program.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations to 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment is not required since the amendment does not involve a significant hazards consideration.

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The Commission has prepared an environmental impact appraisal for the revised Technical Specifications and has concluded that an environmental impact statement for this particular action is not warranted because there will be no environmental impact attributable to the proposed action other than that which has already been predicted and described in the Commission's Final Environmental Statement for Indian Point Nuclear Generating Unit No. 2 published in September 1972 and that a negative declaration to this effect is appropriate.

For further details with respect to this action, see (1) the application for amendment dated November 6, 1975, (2) Amendment No. 18 to License No. DPR-26 and (3) the Commission's Environmental Impact Appraisal. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C. and at the Hendrick Hudson Free Library, 31 Albany Post Road, Montrose, New York 10548.

A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Office of Nuclear Reactor Regulation.

Dated at Rockville, Maryland this *24th* day of *January*, 1976.

FOR THE NUCLEAR REGULATORY COMMISSION


George W. Knighton, Chief
Environmental Projects Branch 1
Division of Site Safety
and Environmental Analysis