



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

January 2, 1979

Docket Nos. 50-3
and 50-247

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

Dear Mr. Cahill:

By letter dated April 20, 1977, LeBoeuf, Lamb, Leiby, and MacRae, as counsel for Consolidated Edison Company of New York, Inc. and the Power Authority of the State of New York, submitted an application to amend the Indian Point Station Environmental Technical Specifications. Your letter of December 30, 1977 revised this application. In response to your application, the Commission has issued the enclosed Amendment No. 20 to Facility License DPR-5 for the Indian Point Station, Unit No. 1 and Amendment No. 44 to Facility License No. DPR-26 for the Indian Point Nuclear Generating Plant, Unit No. 2.

These amendments revise the Environmental Technical Specifications to delete specific daily impingement limits and substitute a requirement that the limits established in the Section 401 Certificate issued by the State of New York, as they now exist or as they may be amended, will control. The corrective actions required will also be those established in the 401 Certificate. As a result of this amendment, you need not receive prior Commission approval before the amended impingement levels and corrective action requirements in the Certificate are implemented. The revised Technical Specification merely requires you to advise the Commission of any such amendments.

To assure that we become aware of any fish impingements that approach or exceed the level considered in our earlier NEPA review, we have added reporting requirements for high accumulated impingements (monthly and for 52 weeks). We have discussed these and other minor revisions with your staff and obtained their agreement.

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Mr. William J. Cahill, Jr.

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January 2, 1979

Copies of the Environmental Impact Appraisal and the Notice of Issuance/Negative Declaration are also enclosed.

Sincerely,



A. Schwencer, Chief
Operating Reactors Branch #1
Division of Operating Reactors

Enclosures:

1. Amendment Nos. 20 and 44
to DPR-5 and DPR-26
2. Environmental Impact Appraisal
3. Notice of Issuance/Negative Declaration

cc: w/enclosures
See next page

Consolidated Edison Company of
New York, Inc.

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January 2, 1979

cc: White Plains Public Library
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

DOCKET NO. 50-3

INDIAN POINT NUCLEAR GENERATING UNIT NO. 1

AMENDMENT TO PROVISIONAL OPERATING LICENSE

Amendment No. 20
License No. DPR-5

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 April 20, 1977, as revised December 30, 1977, 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.

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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:

B. Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 44, 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.

FOR THE NUCLEAR REGULATORY COMMISSION



A. Schwencer, Chief
Operating Reactors Branch #1
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: January 2, 1979



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

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. 44
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 April 20, 1977, as revised December 30, 1977, 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:

B. Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 44, 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.

FOR THE NUCLEAR REGULATORY COMMISSION



A. Schwencer, Chief
Operating Reactors Branch #1
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: January 2, 1979

ATTACHMENT TO LICENSE AMENDMENT NOS. 20 , 44 , AND 20

TO THE TECHNICAL SPECIFICATIONS

FACILITY OPERATING LICENSE NOS. DPR-5, DPR-26 AND DPR-64

DOCKET NOS. 50-3, 50-247, 50-286

Replace the following pages of the Appendix B Environmental Technical Specifications with the enclosed pages. The revised pages are identified by amendment numbers in the lower right corner. Since these Technical Specifications are presently common to all three Indian Point units, the amendment number applicable to each unit is listed on each page. Vertical lines in the right margin indicate the area of change associated with this amendment action.

Remove

4.1-16
4.1-18
4.1-19

Replace

4.1-16
4.1-18
4.1-19

4.0 ENVIRONMENTAL SURVEILLANCE AND SPECIAL STUDIES

4.1.2a(3) Specification (Continued)

A. Impingement Monitoring Program (continued)

- (ii) All fish will be collected from each traveling screen washing at Indian Point on a daily basis. Total numbers and weights of white perch, striped bass and Atlantic tomcod (during the spawning season) will be recorded for each unit daily. Sub-samples will be taken of all other species to establish a numbers-weight relationship. An estimate of total numbers shall be derived by recording total weight by species and converting to total numbers using the numbers-weight relationship. Fishes will be collected from each screen individually and an estimate made of the percentage (on a weight basis) of the total collected by screen. For those species selected for subsampling a representative range of sizes shall be sampled. The fixed screens shall be washed at least once per day. The traveling screens shall be run at the time the fixed screens are raised and back-washed. The estimated number and species of fish washed off the fixed screens which do not enter the forebay shall be estimated.
- (iii) (a) The site wide limits for collected fish shall be those specified in the State of New York 401 Certificate as amended. The actions required in the event those limits are exceeded shall be those specified in the State of New York 401 Certificate as amended. Inasmuch as these limits and actions are subject to further amendment by the State of New York, the licensee shall notify the NRC on the Prompt schedule of receipt of all amendments of the 401 Certificate applicable to this facility.
- (iv) The causes of fish impingement shall be evaluated, including the magnitude of the approach and intake velocity. During the first 180 days after issuance of license for operation of Unit No. 3, the water velocity profile across the outer (traveling) screens, as was required for Units Nos. 1 and 2, shall be determined. Velocity determinations shall be made at full flow and reduced flow and shall include measurements from at least two intake forebays.

Reporting Requirements (Continued)

- (b) The licensee shall submit to the Region I Office of Inspection and Enforcement and a copy to the Director of Office of Nuclear Reactor Regulation by the 10th working day of the following month, a monthly report tabulating the daily records of fish collection at the Indian Point Facility. The report shall include the daily number, species breakdown, and total weights, and describe any corrective action taken to comply with Specification (iii) to keep the fish loss within the limits of the specification.
- (c) Records of daily fish kills and reportable kills in Specifications (ii) and (iii) shall be kept and summarized in monthly reports for inspection and submitted in accordance with (b) above.
- (d) By the end of the 6th month after spring recapture for the first full year class following the beginning of commercial operation of Unit No. 3, the licensee shall submit a report to the NRC describing the following:
 - (1) The ecological significance of the effects of fish impingement on population density, size, abundance, and diversity of the fisheries of the river as a function of plant operating variables. The evaluation program shall include a review of the parameters investigated in Sections 4.1.2a(1) and (4) and consideration of fish impingement experience at Units Nos. 1, 2 and 3 for the first 12 months following the beginning of operation of Unit No. 3. These shall include biological monitoring and population dynamics of selected fish movements and other ecological parameters. Environmental factors such as temperature, river flow, salinity and plant operational variables which influence the extent of fish impingement shall be evaluated.
 - (2) The effectiveness of the air bubblers at Units Nos. 1 and 2, reduced flow, and other operating procedures to reduce these impingement losses.
 - (3) The adequacy of this Specification 4.1.2a(3) and need for the implementation of any proposed design changes (e.g., common intake system).
- (e) If the total number of fish collected in any 52 consecutive weeks exceeds 5 million, the licensee shall submit a Prompt Report to the NRC and, based on NRC review of the follow-up report submitted by the licensee, shall take such additional corrective action as the NRC may direct.
- (f) If the total number of fish collected in any one calendar month exceeds 1/2 million, the licensee shall submit an analysis in the next regular monthly report evaluating the cause of the high collections and specifying measures to be taken to minimize these collections. As part of this submittal the licensee shall provide an assessment of the significance of the number of fish collected for the previous 52 weeks.

4.0 ENVIRONMENTAL SURVEILLANCE AND SPECIAL STUDIES

Bases

Monitoring of impinged fish at the Indian Point Station will assure that the majority of fish killed will be identified and enumerated. The identification, counting and length-weight data obtained for all impinged fish of importance will assure documentation for expected fish losses resulting from normal three Unit operation. (References 4.1-12 and 4.1-13.)

The limits on fish impingement (Specification (iii)) are established subject to revision based on the Station's operating experience and on the licensee's continuing efforts to reduce impingement and to evaluate the ecological significance of the losses.

The impingement losses of striped bass, white perch and other fish of importance will be compared with values obtained from previous fish kills at the Station since the mid-1960s. In addition, impingement data will aid in determining any effects of impingement on population levels, species abundance and diversity of the Hudson River fishery. Impingement of fish at maximum established rates in Specification (iii) for periods up to several days should not be considered to imply adverse effects on the fishery; rather it should be considered as indicative of a sufficient change from past experience to warrant corrective action to reduce the number impinged until further definitive information is available on the impact of impingement losses on the fishery. Results of intake flow reduction by the Station during the wintertime and operation of the air bubbler curtains shall be evaluated in terms of their feasibility to reduce impingement. Studies of the fishery will indicate whether fish losses currently being experienced at the Station are compatible with maintaining the existing species composition of the fishery and population numbers. Specific studies described in Section 4.1.2a(4) on the ecology of the existing fishery are continuing in order to evaluate (1) the significance of limits of impingement and (2) methods of further reducing the loss of fish at the plant. Thus, these studies will permit a more definite assessment of the biological significance of impingement losses at the intake screens.

Pending development of information from the General Ecological Survey (Section 4.1.2a(1)), and Special Studies (Section 4.1.2a(4)), this specification provides a mechanism for: (1) limiting the number of fish impinged at the Station, (2) providing the NRC's staff with a means of being kept currently advised of the number of fish being collected at the intake screens, and (3) determining what further methods can be developed to reduce impingement.

The limits provided in Specification (iii) will aid in the development of operating procedures and corrective actions to be taken to minimize the Station's impact on the fishery resources.



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

ENVIRONMENTAL IMPACT APPRAISAL
FOR
INDIAN POINT UNIT NOS. 1, 2 AND 3
TECHNICAL SPECIFICATION CHANGES

Introduction and Background

The NRC staff has had repeated difficulties with the common Indian Point Environmental Technical Specifications (ETS) which deal with fish impingement. This is primarily because we have explicitly incorporated conditions and limitations specified in the State of New York's 401 Certification into the ETS. Also the ETS were structured to impose conditions and limitations deemed necessary as a result of the NRC's NEPA review. Our NEPA review was based on total impingement over a whole year; whereas the State limits are expressed on a daily impingement basis. To date we have been using a daily rate to assess compliance with the ETS in an attempt to also be consistent with the requirements of the State. This has led to administrative problems because, on a few occasions when the overall Indian Point station impingement counts approached the ETS limits, the State has, on short notice, changed the 401 limits. When this has happened, we have made corresponding changes to the ETS limits of these plants within a matter of hours to avoid the administrative problem of the licensees of Units 1, 2 and 3 being in non-conformance to an existing NRC license requirement.

Section 4.1.2a(3)Aiii of the existing Environmental Technical Specifications for Indian Point Units 1, 2 and 3 places limits on the total allowable number of fish impinged at these units in a single day. If the number of impinged fish exceeds 10,000 per day for seven consecutive days, or 30,000 per day for three consecutive days, or 40,000 in a single day immediate corrective action must be taken to reduce the daily impingement rate below these levels. These limits explicitly incorporate the exact wording of the 401 Certification. Besides satisfying the State's requirements, ETS Section 4.1.2a(3)Aiii also has been used to satisfy the results of our NEPA review. That review estimated the upper limit to be five million fish per year and found this level acceptable for once-through cooling pending implementation of closed cycle cooling.

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In summary, existing ETS 4.1.2a(3)Aiii has been a problem because (1) it sets much more restrictive limits than those evaluated in our NEPA review (the limits are on a daily basis instead of a yearly basis as we assessed under the NEPA review) and (2) whenever the State of New York has changed its 401 Certification limits, NRC has undertaken an environmental impact appraisal of those changes prior to making conforming ETS limit changes.

The proposed amendment contains provisions [in ETS Section 4.1.2a(3) Reporting Requirements paragraph (e) and (f)] for prompt reporting if more than five million fish are impinged in any continuous 52 week period and monthly reporting if fish impingement exceeds 500,000 fish in any one calendar month. Timely reporting and assessment by the licensee, should either of these impingement levels be exceeded, is a sufficient basis for allowing the NRC staff to determine whether the plant is continuing to operate within the conditions assessed during our NEPA review.

Section 4.1.2a(3)Aiii would be revised to recognize that 401 Certificate limits must still be met by the licensee, and that the specific limits and corrective actions are to be dictated by the 401 Certificate not the ETS.

In performing our review of the proposed amendment certain changes were discussed with and agreed to by the licensee.

Evaluation

The limiting condition for operation (LCO) on total numbers per day was established to assure that the total number of fish impinged per year would be within the two to five million we considered during our NEPA review. We further restricted these limits to explicitly incorporate the 401 Certificate conditions. Proposed paragraphs (e) and (f) of the Reporting Requirements of ETS Section 4.1.2.a(3) will assure prompt notification and analysis of the staff's upper bound value should it be exceeded. Based on operating experience to date, there is good reason to believe that the total annual impingement will stay well below this upper bound value used in our NEPA review as reflected in our Unit No. 3 Final Environmental Statement. The actual number of fishes impinged in the years 1973, 1974, 1975, 1976 and 1977 are significantly less than this upper bound value of five million per year and the data

indicate with a high degree of statistical certainty that the total yearly impingement levels will be well below five million fish.

The present ETS limits set on fish impingement cause problems because the limits are applicable on a daily basis. Experience has shown that, for most days of the year, the daily fish impingement rate is far below the daily limit. However, there will occasionally be several days of high impingement. This usually occurs when a given species is moving into or out of the estuary or when extreme weather conditions occur. Review of impingement monitoring data over the past several years indicates that these occasional peaks do not significantly contribute to the impingement impact on the population. During the 1973-75 period approximately 89% of the fish were impinged at a rate of less than 10,000 per day. There were only 15 days during this three year period when this daily rate was exceeded. Thus, we find that the NRC's ability to confirm that Units 1, 2 and 3 fish impingement is within the scoping level assessed in our NEPA review (Unit No. 3 FES) does not require assessment of daily peaks but rather requires confirmation that accumulated impingements (monthly, 52 weeks) remain well below the levels our FES was based upon. Accordingly, we find elimination of explicit 401 Certificate impingement levels and action requirements to be acceptable.

Conclusion for Negative Declaration

We have reviewed the proposed Environmental Technical Specification changes associated with this amendment. We have found that the environmental impact of operation of Indian Point Unit Nos. 1, 2 and 3 under these specification changes will be no greater than that evaluated in the Final Environmental Statement for Unit No. 3, that the changes will not significantly affect the quality of the human environment, and that a Negative Declaration is appropriate.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendments do not involve a significant increase in the probability or consequences of accidents previously considered and do not involve a significant decrease in a safety margin, the amendments do not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Date: January 2, 1979

UNITED STATES NUCLEAR REGULATORY COMMISSIONDOCKET NOS. 50-3, 50-247 AND 50-286CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.POWER AUTHORITY OF THE STATE OF NEW YORKNOTICE OF ISSUANCE OF AMENDMENTS TO OPERATING LICENSESAND NEGATIVE DECLARATION

The U. S. Nuclear Regulatory Commission (the Commission) has issued to Consolidated Edison Company of New York Inc. (Con Ed), Amendment No. 20 to Provisional Operating License No. DPR-5 for Indian Point Nuclear Generating Unit No. 1, and Amendment No. 44 to Facility Operating License No. DPR-26 for the Indian Point Nuclear Generating Unit No. 2 and has issued to the Power Authority of the State of New York, Amendment No. 20 to Facility Operating License No. DPR-64 for Indian Point Nuclear Generating Unit No. 3. These amendments revised Technical Specifications for operation of Indian Point Unit Nos. 1, 2 and 3 located in Buchanan, Westchester County, New York. The amendments are effective as of the date of issuance.

These amendments revise the provisions in the Environmental Technical Specifications dealing with fish impingement to delete specific daily limits and to provide that the limits established by the State of New York in its Section 401 Certification, as they now exist or as they may be amended, will control. The revised Specifications also require reporting to the Commission high annual and monthly impingement levels.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act),

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and the Commission's regulations. The Commission has made appropriate findings as required by the Act and the Commission's regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

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 action other than that which has already been predicted and described in the Commission's Final Environmental Statement for the facility.


For further details with respect to this action, see (1) the applications for amendments transmitted by letters dated April 20, 1977 and December 30, 1977, (2) Amendment No. 20 to License No. DPR-5, (3) Amendment No. 44 to DPR-26, (4) Amendment No. 20 to DPR-64, and (5) 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 White Plains Public Library, 100 Martine Avenue, White Plains,

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New York. A copy of items (2) through (5) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Operating Reactors.

Dated at Bethesda, Maryland, this 2nd day of January, 1979.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in cursive script, appearing to read "A. Schwencer".

A. Schwencer, Chief
Operating Reactors Branch #1
Division of Operating Reactors