

November 16, 1977

Dockets Nos. 50-3
50-247 ✓
and 50-286

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. 17 to Provisional Operating License No. DPR-5, Amendment No. 35 to Facility Operating License No. DPR-26 and Amendment No. 8 to Facility Operating License No. DPR-64 for the Indian Point Nuclear Generating Units Nos. 1, 2 and 3, respectively. These amendments consist of changes to the Technical Specifications for each license in response to your application transmitted by letter dated December 5, 1975, as amended May 21, 1976. As discussed with your staff, modifications have been made to your proposed changes to meet regulatory requirements.

These amendments (1) make clarifying editorial changes to the Unit 3 Appendix B Environmental Technical Specifications (ETS), (2) replace the Appendix B ETS for Units 1 and 2 with the revised Unit 3 ETS, and (3) delete those Appendix A radiological technical specifications for Unit 2 that are now included in the revised Appendix B.

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

Sincerely,

Robert W. Reid, Chief
Operating Reactors Branch #4.
Division of Operating Reactors

*See Enviro Rpts
for Appendix B*

Enclosures and cc:
See next page

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Enclosures:

1. Amendment No. 17 to
License No. DPR-5
2. Amendment No. 35 to
License No. DPR-26
3. Amendment No. 8 to
License No. DPR-64
4. Environmental Impact Appraisal/
Safety Evaluation
5. Notice/Negative Declaration

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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. 35
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) sworn to December 3, 1975, as amended May 21, 1976, 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.

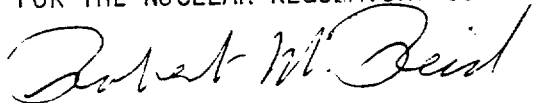
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-26 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 35, 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



Robert W. Reid, Chief
Operating Reactors Branch #4
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: November 16, 1977

ATTACHMENT TO LICENSE AMENDMENT NO. 35

FACILITY OPERATING LICENSE NO. DPR-26

DOCKET NO. 50-247

Revise Appendix A as follows:

<u>Remove Pages</u>	<u>Insert Pages</u>
i & ii	i & ii
3.9-1 - 3.9-14	3.9-1
4.1-1	4.1-1
Table 4.1-1 (2nd & 3rd pgs.)	Table 4.1-1 (2nd & 3rd pgs.)
Table 4.1-2 (6 pgs.)	Table 4.1-2 (2 pgs.)
4.10-1 - 4.10-4	4.10-1
Table 4.10-1	-
Table 4.10-2 (3 pgs.)	-
4.11-1 - 4.11-4	4.11-1
6-13	6-13

Changes on the revised pages are shown by marginal lines.

Page 2 of Table 4.1-1 is unchanged and is included for convenience only.

Revise Appendix B as follows:

Replace the entire Appendix issued August 9, 1973, with the attached revised Appendix.

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SECTION 3.9 deleted

SURVEILLANCE REQUIREMENTS

4.1 OPERATIONAL SAFETY REVIEW

Applicability

Applies to items directly related to safety limits and limiting conditions for operation.

Objective

To specify the minimum frequency and type of surveillance to be applied to plant equipment and conditions.

Specification

- a. Calibration, testing and checking of analog channels, and testing of logic channels shall be performed as specified in Table 4.1-1.
- b. Sampling and equipment tests shall be conducted as specified in Tables 4.1-2 and 4.1-3, respectively.
- c. Performance of any surveillance test outlined in these specifications is not immediately required if the plant condition is the same as the condition into which the plant would be placed by an unsatisfactory result of that test. Such tests will be performed before the plant is removed from the subject condition that has precluded the immediate need to run the test. If the test provisions require that a minimum higher system condition must first be established, the test will be performed promptly upon achieving this minimum condition. The following surveillance tests, however, must be performed without the above exception:

•Table 4.1-1	Items 3, 19, and 27
•Table 4.1-2	Items 1, 2, and 10
•Table 4.1-3	Items 2, 6, 7, 12, and 13

Basis

A surveillance test is intended to identify conditions in a plant that would lead to a degradation of reactor safety. Should a test reveal such a condition, the Technical Specifications require that either immediately, or after a specified period of time, the plant be placed in a condition which mitigates or eliminates the consequences of additional related casualties or accidents. If the plant is already in a condition which satisfies the failure criteria of the test, then plant safety is not compromised and performance of the test yields information that is not necessary to determine safety limits or limiting conditions for operation of the plant. The surveillance test need not be performed, therefore, as long as the plant remains in this condition. However, this surveillance test should be performed prior to removing the plant from the subject condition that has precluded the immediate need to run the

TABLE 4.1-1 (CONTINUED)

<u>Channel Description</u>	<u>Check</u>	<u>Calibrate</u>	<u>Test</u>	<u>Remarks</u>
10. Rod Position Bank Counters	S	N.A.	N.A.	With analog rod position
11. Steam Generator Level	S	R	M	
12. Charging Flow	N.A.	R	N.A.	
13. Residual Heat Removal Pump Flow	N.A.	R	N.A.	
14. Boric Acid Tank Level	W	R	N.A.	Bubbler tube rodded during calibration
15. Refueling Water Storage Tank Level	W	R	N.A.	
16. Boron Injection Tank Level	W	R	R	
17. Volume Control Tank Level	N.A.	R	N.A.	
18. (a) Containment Pressure	D	R	M	Wide range
(b) Containment Pressure	S	R	M	Narrow range
19. Process and Area Radiation Monitoring Systems	D	R	M	
20. Boric Acid Make-up Flow Channel	N.A.	R	N.A.	
21. Containment and Recirculation Sump Level	N.A.	N.A.	R	
22. Accumulator Level and Pressure	S	R	N.A.	
23. Steam Line Pressure	S	R	M	

TABLE 4.1-1 (CONTINUED)

<u>Channel Description</u>	<u>Check</u>	<u>Calibrate</u>	<u>Test</u>	<u>Remarks</u>
24. Turbine First Stage Pressure	S	R	M	
25. Logic Channel Testing	N.A.	N.A.	M	
26. Turbine Overspeed Protection Trip Channel (Electrical)	N.A.	R	M	
27. Control Room Ventilation	N.A.	N.A.	R	Check damper operation for acci- dent mode with isolation signal

NOTE: Specified intervals may be adjusted plus or minus 25% to accommodate normal test schedules.

S - Each Shift
 D - Daily
 W - Weekly

M - Monthly
 Q - Quarterly
 S.A. - Semi-annually
 P - Prior to each startup if not done previous week
 R - Each Refueling Shutdown, but not to exceed 18 months, except for the first fuel cycle.

NA - Not applicable

TABLE 4.1-2
FREQUENCIES FOR SAMPLING TESTS

	<u>Check</u>	<u>Frequency</u>	<u>Maximum Time Between Tests</u>
1. Reactor Coolant Samples	Gross Activity (1) Radiochemical (2) E Determination Tritium Activity F, Cl & O ₂	5 days/week (1) Monthly Semi-annually (3) Weekly (1) Weekly	3 days 45 days 30 weeks 10 days 10 days
2. Reactor Coolant Boron	Boron Concentration	Twice/week	5 days
3. Refueling Water Storage Tank Water Sample	Boron Concentration	Monthly	45 days
4. Boric Acid Tank	Boron Concentration	Twice/week	5 days
5. Boron Injection Tank	Boron Concentration	Monthly	45 days
6. Spray Additive Tank	NaOH Concentration	Monthly	45 days
7. Accumulator	Boron Concentration	Monthly	45 days
8. Spent Fuel Pit	Boron Concentration	Prior to Refueling	NA*
9. Secondary Coolant	Iodine-131	Weekly (4)	10 days
10. Containment Iodine- Particulate Monitor or Gas Monitor	Iodine-131 and Particulate Activity or Gross Gaseous Activity	Continuous When Operating at Power(5)	NA

TABLE 4.1-2 (Continued)

FREQUENCIES FOR SAMPLING TESTS

FOOTNOTES:

* NA- Not Applicable

- (1) A gross activity analysis shall consist of the quantitative measurement of the total radioactivity of the primary coolant in units of $\mu\text{Ci/cc}$.
- (2) A radiochemical analysis shall consist of the quantitative measurement of each radio-nuclide with half life greater than 30 minutes making up at least 95% of the total activity of the primary coolant.
- (3) \bar{E} determination will be started when the gross analysis indicates $> 10 \mu\text{Ci/cc}$ and will be redetermined if the primary coolant gross radioactivity changes by more than $10 \mu\text{Ci/cc}$ in accordance with Specification 3.1.D.
- (4) When the iodine-131 activity exceeds 10% of the limit in Specification 3.4.A, the sampling frequency shall be increased to a minimum of once each day.
- (5) Except as indicated in Specification 3.1.F.4.

SECTION 4.10 and

Tables 4.10-1 & 4.10-2

Deleted

SECTION 4.11 deleted

Amendment No. 35

4.11-1

6.9 REPORTING REQUIREMENTS

ROUTINE AND REPORTABLE OCCURRENCE REPORTS

6.9.1 Information to be reported to the Commission, in addition to the reports required by Title 10, Code of Federal Regulations, shall be in accordance with the Regulatory Position in Revision 4 of Regulatory Guide 1.16, "Reporting of Operating Information - Appendix "A" Technical Specifications".

SPECIAL REPORTS

6.9.2 Special reports shall be submitted to the Director of Region 1, Office of Inspection and Enforcement within the time period specified for each report. These reports shall be submitted covering the activities identified below pursuant to the requirements of the applicable reference specification:

- a. Each containment integrated leak rate test shall be the subject of a summary technical report including results of the local leak rate tests since the last report. The report shall include analyses and interpretations of the results which demonstrate compliance in meeting the leak rate limits specified in the Technical Specifications.
- b. A report covering the X-Y xenon stability tests within three months upon completion of the tests.
- c. To provide the Commission with added verifications of the safety and reliability of the pre-pressurized Zircaloy-clad nuclear fuel, a limited program of non-destructive fuel inspections will be conducted. The program shall consist of a visual inspection (e.g., underwater TV, periscope, or other) of the two lead burnup assemblies in each region during the first, second, and third refueling shutdowns. Any condition observed by this inspection which would lead to unacceptable fuel performance may be the object of an expanded surveillance effort. If another domestic plant which contains pre-pressurized fuel of a similar design reaches fuel exposures equal to or greater than at Indian Point Unit, No. 2, and if a limited inspection program is or has been performed there, then the program may not have to be performed at Indian Point Unit No. 2. However, such action requires approval of the Nuclear Regulatory Commission. The results of these inspection will be reported to the Nuclear Regulatory Commission.



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

ENVIRONMENTAL IMPACT APPRAISAL AND SAFETY EVALUATION

BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 17 TO LICENSE NO. DPR-5,

AMENDMENT NO. 35 TO LICENSE NO. DPR-26,

AND AMENDMENT NO. 8 TO LICENSE NO. DPR-64

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

INDIAN POINT NUCLEAR GENERATING UNITS NOS. 1, 2 AND 3

DOCKETS NOS. 50-3, 50-247, AND 50-286

Introduction

By letter dated December 5, 1975, as revised by letter dated May 21, 1976, Consolidated Edison Company of New York, Inc. (Con Ed) proposed that the Environmental (Appendix B) Technical Specifications for Indian Point Units Nos. 1 and 2 be amended to be consistent with the Unit No. 3 Technical Specifications. The Unit No. 3 Technical Specifications were specifically worded to apply to all three units but at present are in effect for Unit No. 3 only.

We have reviewed the proposed Appendix B Technical Specifications for Units Nos. 1 and 2 and found that the requirements were generally the same as those now in effect at Unit No. 3. We have evaluated those proposed changes which differed from those previously evaluated and approved as part of the issuance of the Indian Point Unit No. 3 operating license.

We evaluated proposed Technical Specifications on thermal discharges, chemical effluents, chemical effluent monitoring, entrainment monitoring and fish impingement monitoring. In addition, we made editorial changes in the Appendix B Technical Specifications for Unit No. 3 for the purpose of clarification. These editorial changes were discussed with and agreed to by Con Ed.

Con Ed also proposed the deletion of certain radiological Technical Specifications from Appendix A for Units Nos. 1 and 2 as they will now be included in the Appendix B Technical Specifications. We have evaluated these proposed deletions.

I. Environmental Impact Appraisal

A. Maximum ΔT Across Circulating Water System (CWS) (2.1.1.1)

The Final Environmental Statement (FES) for Unit No. 3 dated February 1975, states that the temperature rise of the circulating water for all three units operating at full flow and full heat rejection rate will vary between 12.6°F and 16.3°F. The existing Technical Specifications for all units allow reduced flow rates for deicing purposes during pump outages and to reduce impingement rates. The temperature increase for all three units according to the Unit No. 3 FES will vary between 22.0°F and 27.1°F under full heat rejection rates and reduced flow rates (60% of full flow). Accordingly, the Unit No. 3 specifications allow 17°F during full flow and 28°F during reduced flow operation. The limits in the existing Units Nos. 1 and 2 Technical Specifications are 15°F for full flow and 25°F for reduced flow. Unit No. 3 operating alone, however, can cause a temperature rise of 17°F at full flow and full heat rejection rate. Since the three units discharge into a common canal, it is not feasible to have different limits for each unit. The Unit No. 3 FES evaluated the impact of the operation of the entire station and found these limits acceptable. Although the Unit No. 3 FES was written for the purpose of satisfying NEPA requirements with regard to the licensing of Unit No. 3, it does evaluate the impact of operation of all three units. As this Technical Specification amendment will be within the limits of the Unit No. 3 FES, we find the environmental impact of this action acceptable.

B. Maximum Discharge Temperature (2.1.2.1)

The discharge port water temperature limit in the existing Unit Nos. 1 and 2 Technical Specifications is 96°F, and the proposed Technical Specification limit is 98°F. Both of these limits were determined based on the maximum ambient river temperature of 79°F and the ΔT at which the station will operate. As Unit No. 3 operating alone will cause the ΔT to be two degrees greater than that of Units Nos. 1 and 2 operating alone, a two degree increase in the maximum discharge temperature is required. The value of the maximum discharge temperature limit is established to protect the aquatic populations from high temperature releases. Although the species distributions are fairly well known in the vicinity of Indian Point, an exact critical upper temperature limit cannot be established on

the basis of the species alone. The approach taken here is to keep the upper limit as low as practicable from the standpoint of operation of the station. Since all three units have a common discharge canal, different limits for each unit are not feasible. The Unit No. 3 FES evaluated the impact of operation of all three units at this higher discharge temperature for an interim period until cooling towers are installed and found it to be acceptable. Although the Unit No. 3 FES was written for purposes of licensing actions involving Unit No. 3, the evaluation made there was for the entire station. On this basis we find that this proposed amendment is acceptable.

C. Section 2.3.1, Chlorination of the Circulating System

The requirements of the respective ETS for Units Nos. 1 and 2 and Unit No. 3 are generally the same. The differences that do exist in the two sets of ETS concern the total duration of chlorination allowed at the station, the frequency of release, and the allowable release concentration.

The chlorination specification proposed for adoption by Units Nos. 1 and 2 is presently written in such a way as to apply to all three units at the site. Its adoption for Units Nos. 1 and 2 will result in residual chlorine discharges from the site for up to 9 hours per week total. However, the allowable weekly frequency of chlorination of up to three periods (of up to one hour's duration) per week remains the same as presently authorized under the Units Nos. 1 and 2 ETS. This chlorination schedule has been reviewed and found acceptable by the NRC staff in the Unit No. 3 FES, Section V.C.2.a.(3). Therefore, there will be no additional environmental impact or any unreviewed environmental impact resulting from this change.

The proposed change will permit a maximum of two chlorination periods of up to one hour each to occur during a twenty-four hour period. This limitation would apply to the Indian Point Nuclear Generating Station and not to each individual unit separately. The existing limitation for Units Nos. 1 and 2 together restricts the total time for chlorination to one hour during any twenty-four hour period. With the addition of the Unit No. 3 cooling water discharge (which will be chlorinated), to the combined Units Nos. 1 and 2 discharge as presently allowed under the ETS, the receiving water biota will be exposed to the same chlorination stress as that which would be experienced under adoption of the proposed ETS change.

The proposed change will also provide an additional limitation on residual chlorine discharges from Units Nos. 1 and 2 by requiring that concentrations of total residual chlorine be limited to an average value of 0.2 ppm as measured at the confluence of the discharge canal and the Hudson River. Adoption of this change for Units Nos. 1 and 2 only has the potential to reduce environmental impact from the situation allowed under the present Units Nos. 1 and 2 ETS.

Data on the likely impact of the chlorination procedures proposed for Units Nos. 1 and 2 is presented in the progress report of the Hudson River Ecosystem Studies: Effects of Temperature and Chlorine on Entrained Hudson River Organisms¹. These studies examined the effects of temperature and residual chlorine, both singly and in combination. The studies were conducted in the laboratory and at Unit No. 2 on aquatic organisms at various trophic levels. (These studies were required as part of the existing Units Nos. 1 and 2 ETS). These studies indicate that, when the "standard plant chlorination value" of 0.5 ppm total residual chlorine is achieved at the condenser (half) outlet, levels of total residual chlorine present in the discharge canal and in the mixing zone in the river are sufficiently low to not adversely affect the receiving water biota after either chronic or acute exposures. These studies were performed for indigenous Hudson River aquatic species and included both plume entrainment (i.e., plume transit) and discharge canal exposures. Therefore, we have determined that adopting the Unit No. 3 limits for residual chlorine at Units Nos. 1 and 2 will not result in an unacceptable environmental impact nor an impact not previously evaluated by the NRC staff (see IP-3 FES, Sec. V. D.2.c.(3)).

D. Section 2.3.2, Corrosion Inhibitors

The proposed change to the Limiting Conditions for Operating of this section would result in a more restrictive limitation on the discharge of chromium from Units Nos. 1 and 2. That is, the proposed change would limit the maximum concentration of both trivalent and hexavalent forms of chromium to 0.05 ppm and the total annual release of these two forms to 100 lbs/yr, whereas, the existing ETS for Units Nos. 1 and 2 limit only the hexavalent form to 0.05 ppm and allow annual releases to reach 11,000 lbs per year. Thus, the proposed change will result in a reduction in potential impact resulting from the discharge of this toxic metal.

E. Section 2.3.3, Other Chemicals Which Affect Water Quality

The proposed ETS change would impose different effluent limitations on some parameters in the Units Nos. 1 and 2 discharge, would delete the limitations on other parameters and would add additional parameters to be controlled. Our assessment of the environmental impacts of these proposed changes is discussed below:

The existing ETS for Units Nos. 1 and 2 require that lithium hydroxide be limited to a concentration of 0.001 mg/l at the confluence of the discharge canal and the Hudson River. The proposed change would allow these same concentrations to reach 0.01 mg/l. The FES for Unit No. 2, Sections III.E.3.a.(1), V.B, V.D.1.c and Appendix V-1, evaluated chemical discharges resulting from the operation of Units Nos. 1 and 2. It specifically considered a concentration of lithium hydroxide of up to 0.01 mg/l in the discharge canal and concluded that this level would not result in unacceptable environmental impact or unacceptable impact on water use of the Hudson River. Therefore, we conclude that this change in the ETS will not result in an unacceptable impact nor an impact not previously evaluated by the NRC staff.

The proposed change would allow the pH of the discharge from Units Nos. 1 and 2 to vary between 6.0 and 9.0, inclusive, which is less restrictive than the existing ETS range of 6.5 to 8.5, inclusive. The U. S. Environmental Protection Agency, in its publication Quality Criteria for Water², recommends a water quality standard for pH of 6.5 to 9.0, inclusive, for the protection of aquatic life in an estuarine environment. Also recommended is the avoidance of rapid fluctuations in pH due to waste discharges. The EPA has also published Effluent Limitations and Guidelines for the Steam Electric Generating Point Source Category³. These regulations describe minimum standards of performance for the industry for the protection of aquatic species in and on the receiving water body. The guideline for pH is the range 6.0 to 9.0, inclusive, which corresponds to the range proposed for Units Nos. 1 and 2 (already in effect for Unit No. 3). The rationale for this effluent limitation is that unacceptable harm to the receiving water biota due to differences in discharge and receiving water pH is not likely because of the available buffering capacity of most natural waters.

We evaluated the discharge of those chemicals likely to cause an alteration in the pH of the discharge (Unit No. 2 FES, Appendix V-1). The results of our evaluation indicated that changes in pH would not affect the aquatic biota of the receiving water, due to the buffering capacity of the cooling water. These results were supported by pH measurements made during releases of chemicals from Unit No. 1. Therefore, we conclude that this change will not result in unacceptable environmental impact nor an impact not evaluated in the FES.

The proposed change would result in the deletion of controls on two parameters, sodium hydroxide (10 ppm max), and sulfuric acid (10 ppm max), which are of significance in the Units Nos. 1 and 2 discharge because of their potential to alter the pH of the cooling water (Unit No. 2 FES, Appendix V-1). As indicated in the discussion for pH above, release of these chemicals in the concentrations anticipated by plant design and operation were not expected to produce any effects on the aquatic biota of the Hudson River. Actual operating experience at Unit No. 1 has confirmed this assessment. Therefore, we conclude that the deletion of these limits will not result in an unacceptable environmental impact nor an impact not assessed by the NRC staff in the FES for Unit No. 2.

Another limitation to be deleted from the Units Nos. 1 and 2 ETS under the proposed change is the 5 ppm maximum limit on soda ash (i.e., sodium carbonate). This discharge was evaluated in the Unit No. 2 FES (Appendix V-1 and Section V.D.1.c.) and found to be at a level that was an order of magnitude below the minimum toxic level reported for the chemical. Therefore, we found that there was no potential for adverse environmental impact in the receiving waters from this chemical. We conclude that the deletion of this limitation will not result in an unacceptable environmental impact nor an impact not assessed by the NRC staff in the FES for Unit No. 2.

The final set of proposed changes for this section of the Units Nos. 1 and 2 ETS involve the deletion of the discharge limitation of 0.05 ppm maximum hexavalent chromium and its replacement by a 0.05 ppm limitation on total chromium. Our assessment of the impact of this proposed change is presented above under Section 2.3.2, Corrosion Inhibitors. This change will not result in increased environmental impact.

F. Section 2.3.4, Hydrogen Ion

The proposed change to the Units Nos. 1 and 2 ETS for this section would increase the allowable pH range of the circulating water discharge from a range of 6.5 to 8.5, inclusive, to a range of 6.0 to 9.0, inclusive. The assessment of the environmental impact of this change is presented above, under Section 2.3.3, Other Chemicals that Affect Water Quality. This change will not result in increased environmental impact.

G. Proposed Changes to Monitoring Requirements

Section 3.3.1, Chlorination of the Circulating Water System

This section of the existing ETS for Units Nos. 1 and 2 requires the amperometric method of analysis be used for the determination of total residual chlorine. The proposed change would allow the licensee to use any method for this measurement that is approved by the American Society for Testing and Materials (ASTM) or Standard Methods (the amperometric method is but one of several methods approved by these references). However, the proposed change would require that the method used have the same accuracy (± 0.1 ppm) and precision (± 0.05 ppm) as presently required by the ETS for Units Nos. 1 and 2. Therefore, the additional flexibility permitted by the proposed change remains limited in accuracy and precision to that determined by the NRC staff as necessary for demonstration of compliance with the Limiting Condition for Operation. We conclude that there will be no increased environmental impact from this change.

Section 3.3.2, Corrosion Inhibitors

The proposed change to this section would require the licensee to use a method of analysis approved by ASTM or Standard Methods. The existing requirement simply states "using a standard method of analysis". The proposed change would clarify the intent of the specification and would remove the ambiguity of the requirement. There will be no increased environmental impact resulting from this change.

Section 3.3.4, Hydrogen Ion

The proposed change would delete the separate requirement to sample the circulating water discharge pH during discharge of regenerant wastes at both 1 m and 3 m depths and to calculate the pH change in the circulating water both before and after discharge of the regenerant wastes. It would be replaced by a requirement to measure the pH of the discharge from the Neutralization Facility during discharge of regenerant or other wastes.

We conclude that monitoring of the regenerant waste stream at its source, along with the monitoring of the well mixed (with respect to the regenerant wastes and cooling waters) and well buffered discharge canal waters required under ETS Section 2.3.1 and 3.3.1 will provide sufficient assurance that the objective of limiting the pH range of the station's discharge to that compatible with aquatic life will be met.

H. Entrainment (4.1.2a(2))

There are no phytoplankton entrainment monitoring programs in the proposed combined Technical Specifications. Our examination of the data collected to date revealed that no significant adverse impacts have occurred because of phytoplankton entrainment, and we have concluded that it is no longer necessary to continue monitoring in this area.

Both the existing and the proposed Technical Specifications require that entrainment effects on young fishes be studied. The proposed Technical Specifications require that losses of "certain fish species" be investigated, whereas the existing Technical Specifications require that adverse effects on "existing" populations be studied. This change does not represent a change in sampling or monitoring, but it does represent a change in the degree of data analysis. We conclude that the data analysis will be adequate to detect any significant impacts of the type that the program was designed to monitor and that this change is acceptable.

I. Impingement, 4.1.2a(3)

The changes to this Technical Specification are relatively minor and represent a change in the method of impingement subsampling. The existing Technical Specification requires that at least 10% of the total impingement count of each species be weighed. The proposed Technical Specification allows estimates of the total numbers impinged for each species to be made by applying a number-weight relationship to the daily total weight, except for Striped bass, White perch, and Atlantic tomcod where daily counts will be made of these. This change will not affect the ability of the monitoring program to detect significant problems in this area, and the change is therefore acceptable.

Conclusions and Basis for Negative Declaration

On the basis of the foregoing analysis, we conclude that there will be no significant environmental impact attributable to the proposed action other than has already been predicted and described in the FES's for these Units. Having made this conclusions, we further conclude that no environmental impact statement for the proposed action need be prepared and that a negative declaration to this effect is appropriate.

II. Safety Evaluation of Proposed Deletion of Certain Radiological Technical Specifications from Appendix A for Units Nos. 1 and 2

The licensees' proposed deletion of certain radiological Technical Specifications from Appendix A for Indian Point Unit No. 2 is acceptable because these specifications will now be included in Appendix B. No changes or deletions in Appendix A for Unit No. 1 are required as Unit No. 1 is shutdown and the appropriate deletions of radiological requirements in Appendix A have already been made.

The licensee has provided a cross-reference between the Technical Specifications to be deleted in Appendix A and the radiological requirements proposed to be included in Appendix B. The proposed revisions to Appendix A will eliminate duplications in Appendices A and B. Where the proposed requirements for Appendix B are different than those in Appendix A, we have determined that the proposed requirements are at least as conservative as those in Appendix A with respect to public health and safety.

Conclusion on Safety

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 these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Dated: November 16, 1977

1. Consolidated Edison Company of New York; Hudson River Ecosystem Studies - Effects of Temperature and Chlorine on Entrained Hudson River Organisms; Progress Report for 1975 prepared by Institute of Environmental Medicine, New York University Medical Center; June 1976.
2. U. S. Environmental Protection Agency; Quality Criteria for Water; 1976.
3. U. S. Environmental Protection Agency; 40 CFR 423, Steam Electric Generating Point Source Category Effluent Guidelines and Standards; FR Vol. 39, No. 196, October 8, 1974.

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

The U. S. Nuclear Regulatory Commission (the Commission) has issued to Consolidated Edison Company of New York, Inc. (Con Ed), Amendment No. 17 to Provisional Operating License No. DPR-5 for the Indian Point Nuclear Generating Unit No. 1, and Amendment No. 35 to Facility Operating License No. DPR-26 for the Indian Point Nuclear Generating Unit No. 2, and has issued to Con Ed and the Power Authority of the State of New York, Amendment No. 8 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 Units Nos. 1, 2 and 3 located in Buchanan, Westchester County, New York. The amendments are effective as of the date of issuance.

These amendments (1) make clarifying editorial changes to the Unit 3 Appendix B Environmental Technical Specifications (ETS), (2) replace the Appendix B ETS for Units 1 and 2 with the revised Unit 3 ETS, and (3) delete those Appendix A radiological technical specifications for Unit 2 that are now included in the revised Appendix B.

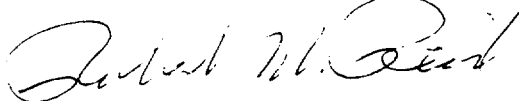
The application for the amendments complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendments. Prior public notice of these amendments was not required since the amendments do 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 significant environmental impact attributable to the action, other than that which has already been predicted and described in the Commission's Final Environmental Statements for these facilities.

For further details with respect to this action, see (1) the application for amendments transmitted by letter dated December 5, 1975, as amended May 21, 1976, (2) Amendment No. 17 to License No. DPR-5, (3) Amendment No. 35 to License No. DPR-26, (4) Amendment No. 8 to License No. DPR-64, and (5) the Commission's related Environmental Impact Appraisal/Safety Evaluation. 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, 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 16th day of November 1977.

FOR THE NUCLEAR REGULATORY COMMISSION



Robert W. Reid, Chief
Operating Reactors Branch #4
Division of Operating Reactors