

DO NOT REMOVE



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555
December 30, 1976

*Asm-4 to
DPR-64*

Docket 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:

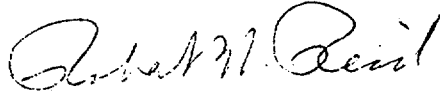
The Commission has issued the enclosed Amendment No. 14 to Provisional Operating License No. DPR-5 for the Indian Point Nuclear Generating Unit No. 1, Amendment No. 25 to Facility Operating License No. DPR-26 for Indian Point Nuclear Generating Unit No. 2, and Amendment No. 4 to Facility Operating License No. DPR-64 for Indian Point Nuclear Generating Unit No. 3. These amendments consist of changes to the Technical Specifications in response to your application sworn to December 28, 1976, and staff discussions.

The amendments revise the Technical Specifications of each license to be consistent with revised New York State environmental requirements on fish impingement (letter Langdon Marsh, New York State, to Carl L. Newman, dated December 23, 1976).

These revised fish impingement requirements do not involve significant new safety information of a type not considered by a previous Commission safety review of the facility. They do not involve a significant increase in the probability or consequences of an accident, do not involve a significant decrease in a safety margin, and therefore do not involve a significant hazards consideration. We have also concluded that there is reasonable assurance that the health and safety of the public will not be endangered by these actions.

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

Sincerely,



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

Enclosures:

1. Amendment No. 14 to DPR-5
2. Amendment No. 25 to DPR-26
3. Amendment No. 4 to DPR-64
4. Environmental Impact Appraisal
5. Federal Register Notice

cc w/enclosures: See next page

Consolidated Edison Company
of New York, Inc.

cc w/enclosure(s):

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Hendrick Hudson Free Library
31 Albany Post Road
Montrose, New York 10548

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Berlin, Roisman & Kessler
1025 15th Street, N.W., 5th Floor
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State of New York
Department of Law
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New York, New York 10047

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Natural Resources Defense
Council
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Croton-on-Hudson, New York 10520

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New York State Atomic Energy Council
New York State Department of Commerce
99 Washington Avenue
Albany, New York 12210

Honorable George Begany
Mayor, Village of Buchanan
188 Westchester Avenue
Buchanan, New York 10511

New York State Department of Commerce
ATTN: Staff Coordinator, New York
State Atomic Energy Council
99 Washington Street
Albany, New York 12210

Chief, Energy Systems
Analyses Branch (AW-459)
Office of Radiation Programs
U. S. Environmental Protection Agency
Room 645, East Tower
401 M Street, S.W.
Washington, D.C. 20460

U. S. Environmental Protection
Agency
Region II Office
ATTN: EIS COORDINATOR
26 Federal Plaza
New York, New York 10007

Edward J. Sack, Esq.
Law Department
Consolidated Edison Company
of New York, Inc.
4 Irving Place
New York, New York 10003

Richard C. King, Esq.
New York State Energy Office
Swan Street Building
Core 1, 2nd Floor
Empire State Plaza
Albany, New York 12223



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

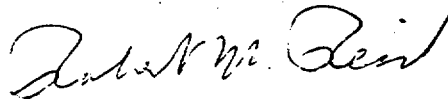
AMENDMENT TO PROVISIONAL OPERATING LICENSE

Amendment No. 14
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) sworn to December 28, 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.

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

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in cursive script, appearing to read "Robert W. Reid".

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

Attachment:
Changes to the Technical
Specifications

Date of Issuance: December 30, 1976

ATTACHMENT TO LICENSE AMENDMENT NO. 14

PROVISIONAL OPERATING LICENSE NO. DPR-5

DOCKET NO. 50-3

Replace the existing pages of the Appendix B Technical Specifications listed below with the attached revised pages bearing the same numbers. Changes on these pages are shown by marginal lines.

Pages

4-35

4-35a (new)

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 collected as determined in (i) above 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 shall be taken to reduce the number to below these levels. This limit shall apply to the total number of fish impinged at Unit Nos. 1, 2 and 3 together. The fish collected at Unit 1 shall not be included in the total station counts and shall not apply to the environmental protection conditions described in this paragraph when the submerged Weir Feasibility Study is being conducted.
- (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.

4.0 ENVIRONMENTAL SURVEILLANCE PROGRAMS

- (v) A study of the effectiveness of a submerged weir in reducing impingement is to be performed as described in References 4.1-26 and 4.1-27. The NRC shall be notified within 24 hours of initiation of the test. The maximum duration of it shall be 180 days. The tasks (Task 1 and Task 2) in Reference 4.1-26 a do not apply and are replaced by the following:

Task - Monitor fish impingement at Unit No. 1 for twenty three-day periods (60 days total), alternating periods with and without partially blocked intakes. The flow rate through Unit No. 1 intake shall be maintained constant during the study. The study will be terminated prior to 180 days only if the data collected show that the blockage is not effective in reducing impingement, or if the total number of fishes impinged on any one day exceeds 6,000. Fish impingement shall be monitored in accordance with Environmental Technical Specifications.



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

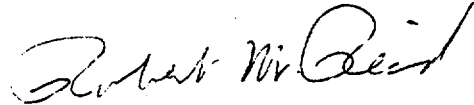
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 25
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 28, 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.

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

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in cursive script, appearing to read "Robert W. Reid".

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

Attachment:
Changes to the Technical
Specifications

Date of Issuance: December 30, 1976

ATTACHMENT TO LICENSE AMENDMENT NO. 25

FACILITY OPERATING LICENSE NO. DPR-26

DOCKET NO. 50-247

Replace the existing pages of the Appendix B Technical Specifications listed below with the attached revised pages bearing the same numbers. Changes on these pages are shown by marginal lines.

Pages

4-35

4-35a (new)

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 collected as determined in (i) above 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 shall be taken to reduce the number to below these levels. This limit shall apply to the total number of fish impinged at Unit Nos. 1, 2 and 3 together. The fish collected at Unit 1 shall not be included in the total station counts and shall not apply to the environmental protection conditions described in this paragraph when the submerged Weir Feasibility Study is being conducted.
- (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.

4.0 ENVIRONMENTAL SURVEILLANCE PROGRAMS

- (v) A study of the effectiveness of a submerged weir in reducing impingement is to be performed as described in References 4.1-26 and 4.1-27. The NRC shall be notified within 24 hours of initiation of the test. The maximum duration of it shall be 180 days. The tasks (Task 1 and Task 2) in Reference 4.1-26 do not apply and are replaced by the following:

Task - Monitor fish impingement at Unit No. 1 for twenty three-day periods (60 days total), alternating periods with and without partially blocked intakes. The flow rate through Unit No. 1 intake shall be maintained constant during the study. The study will be terminated prior to 180 days only if the data collected show that the blockage is not effective in reducing impingement, or if the total number of fishes impinged on any one day exceeds 6,000. Fish impingement shall be monitored in accordance with Environmental Technical Specifications.



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

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

POWER AUTHORITY OF THE STATE OF NEW YORK

DOCKET NO. 50-286

INDIAN POINT NUCLEAR GENERATING UNIT NO. 3

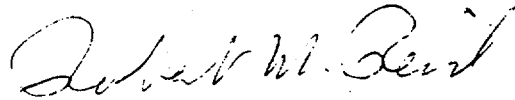
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 4
License No. DPR-64

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Consolidated Edison Company of New York, Inc. and the Power Authority of the State of New York (the licensees) sworn to December 28, 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.

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

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in cursive script, appearing to read "Robert W. Reid".

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

Attachment:
Changes to the Technical
Specifications

Date of Issuance: December 30, 1976

ATTACHMENT TO LICENSE AMENDMENT NO. 4

FACILITY OPERATING LICENSE NO. DPR-64

DOCKET NO. 50-286

Revise the Appendix B Technical Specifications as follows:

Remove Page

4.1-16

Insert Page

4.1-16

The change on this page is shown by a marginal line.

4.0 ENVIRONMENTAL SURVEILLANCE AND SPECIAL STUDIES

4.1.2a(3) Specification (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) If the number of fish collected as determined in (ii) above 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 shall be taken to reduce the number to below these levels. This limit shall apply to the total number of fish impinged at Unit Nos. 1, 2 and 3 together. (Fish impingement numbers are subject to the evaluation required under Reporting Requirements (d)(1) Page 4.1-18). The fish collected at Unit 1 shall not be included in the total station counts and shall not apply to the environmental protection conditions described in this paragraph when the submerged Weir Feasibility Study is being conducted.
- (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.



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

ENVIRONMENTAL IMPACT APPRAISAL BY THE
OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 14 TO LICENSE NO. DPR-5,
AMENDMENT NO. 25 TO LICENSE NO. DPR-26, AND
AMENDMENT NO. 4 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 application sworn to December 28, 1976, Consolidated Edison Company of New York, Inc. submitted proposed changes to the Environmental Technical Specifications, Appendix B to Licenses DPR-5, DPR-26, and DPR-64. Specifically, these changes are to permit an increase in the allowable fish impingement rate at the intakes of Units 1, 2, and 3. The changes are to Specification VI(ii) in the Unit 1-2 Technical Specifications and to Specification 4.1.2a(3)(iii) in the Unit 3 Technical Specifications. On December 23, 1976 the New York State Department of Environmental Conservation issued a change to its 401 certification that permitted an increase in the allowable fish impingement rate to the rate now proposed by Consolidated Edison Company.

Background

The Indian Point Appendix B Environmental Technical Specifications include limits on the allowable number of fish impinged at the station. If the number of impinged fish exceeds 5,000 per day for three consecutive days or 15,000 in any single day for combined impingement at Units 1 and 2 or for Unit 3, immediate corrective action must be taken to reduce impingement to below these numbers. This change would allow impingement of up to 10,000 fish per day for seven consecutive days, 30,000 per day for three consecutive days, or 40,000 for a single day for total impingement at Units 1, 2, and 3 before corrective action must be taken.

Evaluation

Consolidated Edison estimated that the annual fish kills at Indian Point Units 1 and 2 intakes will be less than one million per year with Unit No. 3 operational. We had previously estimated the possible fish kill at the station to be between two and five million per year (FES Unit No. 3) which we found to be an acceptable impact. The latest data for Indian Point Unit No. 2 indicate, however, that the numbers being impinged per year are hundreds of thousands rather than millions. The limiting condition for operation (LCO) on total numbers per day was established to assure that the total number of fish impinged per year is within the limits of our prediction of two to five million. The actual numbers of fishes impinged in the years 1973, 1974, or 1975 are significantly (almost an order of magnitude) less than our upper limit estimate of five million per year. The 1976 data collected to date indicate impingement rates consistent with the previous years.

The licensee has requested this change because on occasion they have been forced to reduce power or shutdown to reduce impingement and because the State of New York has amended its 401 certification. The corrective action occurs, however, very infrequently; thus changing this LCO will not make a significant difference in the total yearly impingement numbers for the station. During the 1973-75 period approximately 89% of the fish that were impinged were impinged when the daily rate was less than 10,000. The total number of days during this three year period when the daily impingement rate was greater than 10,000 was 15. The largest daily rate that occurred during these 15 days was 18,063. Although large numbers of fish may be impinged on each of these 15 days, the total number is not significant when compared to the total number impinged when the daily rates are low. For example, if it is conservatively assumed that the 15 days occur in one year and 60,000 fish are impinged on each of these days, the total number of fish impinged during the high impingement days equals 900,000 fish. The 1973-75 data indicate that during the rest of the year the impingement is expected to accumulate to 570,000. These two numbers representing an extreme case, equal a total yearly impingement of 1,470,000 fish, well below our upper limit of five million, and thus our previous analysis (FES Unit No. 3) is still valid.

In our opinion, the more restrictive daily impingement rate limits are not required in view of the low level of impact to the fishery.

Conclusion

On the basis of the foregoing analysis, it is concluded that there will be no significant environmental impact attributable to the proposed action. 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.

Dated: December 30, 1976

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. 14 to Provisional Operating License No. DPR-5 for Indian Point Nuclear Generating Unit No. 1, and Amendment No. 25 to Facility Operating License No. DPR-26 for 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. 4 to Facility Operating License No. DPR-64 for Indian Point Nuclear Generating Unit No. 3. These amendments revised Technical Specifications for operation of the Indian Point Nuclear Generating Units located in Westchester County, New York. The amendments are effective as of the date of issuance.

The amendments revise the Technical Specifications of each license to be consistent with revised New York State environmental requirements which increase the allowable daily limits on fish impingement.

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.

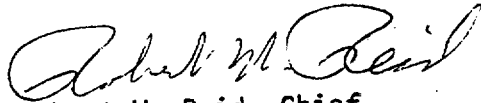
For further details with respect to this action, see (1) the application for amendments sworn to December 28, 1976, (2) Amendment No. 14 to License No. DPR-5, (3) Amendment No. 25 to License No. DPR-26, (4) Amendment No. 4 to License No. DPR-64, and (5) the Commission's related Environmental Impact Appraisal. 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) 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.

- 3 -

Dated at Bethesda, Maryland, this 30th day of December 1976.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in dark ink, appearing to read "Robert W. Reid". The signature is fluid and cursive, with the first and last names being more prominent.

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