



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

June 7, 1993

Docket No. 50-247

Mr. Stephen B. Bram  
Vice President, Nuclear Power  
Consolidated Edison Company  
of New York, Inc.  
Broadway and Bleakley Avenue  
Buchanan, New York 10511

Dear Mr. Bram:

SUBJECT: ISSUANCE OF AMENDMENT FOR INDIAN POINT NUCLEAR GENERATING  
UNIT NO. 2 (TAC NO. M84990)

The Commission has issued the enclosed Amendment No. 163 to Facility Operating License No. DPR-26 for the Indian Point Nuclear Generating Unit No. 2. The amendment consists of changes to the Technical Specifications in response to your application transmitted by letter dated November 12, 1992, as supplemented on February 8, 1993, and April 23, 1993.

The amendment revises the Technical Specifications to delete requirements to demonstrate, by testing, that a redundant system/component is operable when a system/component is declared inoperable. The testing of alternate emergency diesel generators is deleted only if the emergency diesel generator is taken out of service for planned maintenance or testing.

A copy of our Safety Evaluation and Notice of Partial Withdrawal is also enclosed. Notice of Issuance will be published in the Commission's biweekly Federal Register Notice and the Notice of Partial Withdrawal will be published separately in the Federal Register.

Sincerely,

Francis J. Williams, Jr., Project Manager  
Project Directorate I-1  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 163 to DPR-26
2. Safety Evaluation
3. Notice of Partial Withdrawal

cc w/enclosures:  
See next page

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Mr. Stephen B. Bram  
Consolidated Edison Company  
of New York, Inc.

Indian Point Nuclear Generating  
Station Units 1/2

cc:

Mayor, Village of Buchanan  
236 Tate Avenue  
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Assistant Attorney General  
New York Department of Law  
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Senior Resident Inspector  
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4 Irving Place - 1822  
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DATED: June 7, 1993

AMENDMENT NO. 163 TO FACILITY OPERATING LICENSE NO. DPR-26-INDIAN POINT UNIT 2

Docket File  
NRC & Local PDRs  
PDI-1 Reading  
S. Varga, 14/E/4  
J. Calvo, 14/A/4  
R. Capra  
C. Vogan  
F. Williams  
OGC-WF  
D. Hagan, 3302 MNBB  
G. Hill (2), P1-37  
Wanda Jones, P-370  
C. Grimes, 11/F/23  
ACRS (10)  
OPA  
OC/LFMB  
Plant File  
C. Cowgill, Region I

cc: Plant Service list



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

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

DOCKET NO. 50-247

INDIAN POINT NUCLEAR GENERATING UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 163  
License No. DPR-26

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Consolidated Edison Company of New York, Inc. (the licensee) dated November 12, 1992, as supplemented on February 8, 1993, and April 23, 1993, 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. 163, 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 to be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

*Robert A. Capra*

Robert A. Capra, Director  
Project Directorate I-1  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: June 7, 1993

ATTACHMENT TO LICENSE AMENDMENT NO. 163

FACILITY OPERATING LICENSE NO. DPR-26

DOCKET NO. 50-247

Revise Appendix A as follows:

Remove Pages

3.2-2  
3.3-3  
3.3-5  
3.3-8  
3.7-2  
3.7-6  
3.7-7  
3.7-8

Insert Pages

3.2-2  
3.3-3  
3.3-5  
3.3-8  
3.7-2  
3.7-6  
3.7-7  
3.7-8

- C. During power operation, the requirements of 3.2.B may be modified to allow any one of the following components to be inoperable. If the system is not restored to meet the requirements of 3.2.B within the time period specified, the reactor shall be placed in the hot shutdown condition utilizing normal operating procedures. If the requirements of 3.2.B are not satisfied within an additional 48 hours, the reactor shall be placed in the cold shutdown condition utilizing normal operating procedures.
1. One of the two operable charging pumps may be removed from service provided a second charging pump is restored to operable status within 24 hours.
  2. The boric acid storage system (including the boric acid transfer pumps) may be inoperable provided the RWST is operable and provided that the boric acid storage system and at least one boric acid transfer pump is restored to operable status within 48 hours.
  3. One channel of heat tracing for the flow path from the boric acid storage system to the Reactor Coolant System may be out of service provided the failed channel is restored to an operable status within 7 days and the redundant channel is operable during that period.
  4. Both channels of heat tracing for the flow path from the boric acid storage system to the Reactor Coolant System may be out of service provided at least one channel is restored to operable status within 48 hours, the required flow path is shown to be clear of blockage, and the second channel is restored to operable status within 7 days.
- D. When RCS temperature is less than or equal to 305°F, the requirements of Table 3.1.A-2 regarding the number of charging pumps allowed to be energized shall be adhered to.

within the time period specified, the reactor shall be placed in the hot shutdown condition utilizing normal operating procedures. If the requirements of 3.3.A.1 are not satisfied within an additional 48 hours, the reactor shall be placed in the cold shutdown condition utilizing normal operating procedures.

- a. One safety injection pump may be out of service, provided the pump is restored to operable status within 24 hours and the remaining two pumps are operable.
  - b. One residual heat removal pump may be out of service, provided the pump is restored to operable status within 24 hours and the other residual heat removal pump is operable.
  - c. One residual heat removal heat exchanger may be out of service provided that it is restored to operable status within 48 hours.
  - d. Any valve required for the functioning of the system during and following accident conditions may be inoperable provided that it is restored to operable status within 24 hours and all valves in the system that provide the duplicate function are operable.
  - e. Deleted
  - f. One refueling water storage tank low-level alarm may be inoperable for up to 7 days provided the other low-level alarm is operable.
3. When RCS temperature is less than or equal to 305°F, the requirements of Table 3.1.A-2 regarding the number of safety injection (SI) pumps allowed to be energized shall be adhered to.

- d. The spray additive tank and its associated piping, valves and eductors may be inoperable during normal reactor operation for a period not to exceed 72 hours provided both containment spray pumps and the five fan cooler units are operable.

C. ISOLATION VALVE SEAL WATER SYSTEM (IVSWS)

1. The reactor shall not be brought above cold shutdown unless the following requirements are met:
  - a. The IVSWS shall be operable.
  - b. The IVSW tank shall be maintained at a minimum pressure of 52 psig and contain a minimum of 144 gallons of water.
2. The requirements of 3.3.C.1 may be modified to allow any one of the following components to be inoperable at any one time:
  - a. Any one header of the IVSWS may be inoperable for a period not to exceed seven consecutive days.
  - b. Any valve required for the functioning of the system during and following accident conditions may be inoperable provided it is restored to an operable status within seven days and all valves in the system that provide a duplicate function are operable.
3. If the IVSWS System is not restored to an operable status within the time period specified, then:
  - a. If the reactor is critical, it shall be brought to the hot shutdown condition utilizing normal operating procedures. The shutdown shall start not later than at the end of the specified time period.

- a. One of the three operable component cooling pumps may be out of service provided the pump is restored to operable status within 14 days.
- b. An additional component cooling pump may be out of service provided a second pump is restored to operable status within 24 hours.
- c. One auxiliary component cooling pump may be out of service provided the pump is restored to operable status within 24 hours and the other pump is operable.
- d. One component cooling heat exchanger or other passive component may be out of service for a period not to exceed 48 hours provided the system may still operate at design accident capability.

F. SERVICE WATER SYSTEM

1. DESIGNATED ESSENTIAL HEADER

- a. The reactor shall not be above 350°F unless three service water pumps with their associated piping and valves are operable on the designated essential header.
- b. When the reactor is above 350°F and one of the three service water pumps or any of its associated piping or valves is found inoperable, and an essential service water header that meets the requirements of 3.3.F.1.a. cannot be restored within 12 hours, the reactor shall be placed in the hot shutdown condition within the next 6 hours and subsequently cooled below 350°F using normal operating procedures.

2. DESIGNATED NON-ESSENTIAL HEADER

- a. The reactor shall not be above 350°F unless two service water pumps with their associated piping and valves are operable on the designated non-essential header.

B. During power operation, the following components may be inoperable:

1. Power operation may continue for seven days if one diesel is inoperable provided the 138 kV and the 13.8 kV sources of offsite power are available and the remaining diesel generators and the engineered safety features associated with these diesel generator buses are operable. If the diesel generator became inoperable due to any cause other than planned maintenance or testing, the remaining diesel generators shall be tested to ensure operability.
2. Power operation may continue for 24 hours, if the 138 kV or the 13.8 kV source of power is lost, provided the three diesel generators are operable. This operation may be extended beyond 24 hours provided the failure is reported to the NRC within the subsequent 24-hour period with an outline of the plans for restoration of offsite power.
3. If the 138 kV power source is lost, in addition to satisfying the requirements of Specification 3.7.B.2 above, the 6.9 kV bus tie breaker control switches 1-5, 2-5, 3-6, and 4-6 in the CCR shall be placed in the "pull-out" position and tagged to prevent an automatic transfer of the 6.9 kV buses 1, 2, 3 and 4.
4. One battery may be inoperable for 24 hours provided the other batteries and four battery chargers remain operable with one battery charger carrying the dc load of the failed battery's supply system.
5. One battery charger may be inoperable for 24 hours provided the following conditions are satisfied:
  - a. The other three battery chargers and their associated batteries are operable; and
  - b. The affected battery shall have the Specification 4.6.C.1 surveillance initiated within one hour of the time the battery charger is determined to be inoperable and the surveillance shall be repeated every eight hours thereafter to determine battery

operation of two diesels for at least one hundred and twelve hours at the minimum load for engineered safeguards. Commercial oil supplies and trucking facilities exist to assure deliveries within one day's notice.

If a diesel generator is out of service due to planned maintenance or testing, testing of the remaining diesel generators is not required. In this case, testing is not required because a planned emergency diesel generator maintenance or testing outage does not directly affect the availability or reliability of the remaining emergency diesel generators and is not indicative of a potential failure in the remaining emergency diesel generators.

One battery charger shall be in service on each battery so that the batteries will always be at full charge in anticipation of a loss-of-ac power incident. This ensures that adequate dc power will be available for starting the emergency diesel generators and other emergency uses.

The plant can be safely shut down without the use of offsite power since all vital loads (safety systems, instruments, etc.) can be supplied from the emergency diesel generators.

Any two of three diesel generators, the station auxiliary transformer or the separate 13.8 to 6.9 kV transformer are each capable of supplying the minimum safeguards loads and therefore provide separate sources of power immediately available for operation of these loads. Thus, the power supply system meets the single failure criteria required of the safety systems.

Three (3) gas turbine generators are directly available to the Indian Point site. One is located onsite (GT-1) and two additional units are located at the adjacent Buchanan Substation (GT-2 and GT-3). One gas turbine generator is more than adequate to provide an additional contingency of backup electrical power for maintaining the plant in a safe shutdown condition. The specified gas turbine generator minimum fuel inventory of 54,200 gallons assures that one gas turbine generator will be capable of supplying more than the maximum electrical load for the Indian Point Unit No. 2 alternate safe shutdown power supply system (i.e., 750 kW) for at least three (3) days. Commercial oil supplies and trucking facilities exist to assure deliveries of additional fuel oil within one day's notice.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 163 TO FACILITY OPERATING LICENSE NO. DPR-26

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

INDIAN POINT NUCLEAR GENERATING UNIT NO. 2

DOCKET NO. 50-247

## 1.0 INTRODUCTION

By letter dated November 12, 1992, as supplemented on February 8, 1993, and April 23, 1993, the Consolidated Edison Company of New York (the licensee) submitted a request for changes to the Indian Point Nuclear Generating Unit No. 2, Technical Specifications (TS). The requested changes would revise Technical Specifications (TS) 2.3 (CHEMICAL AND VOLUME CONTROL SYSTEM), 3.3A (SAFETY INJECTION AND RESIDUAL HEAT REMOVAL SYSTEMS), 3.3.C (ISOLATION VALVE SEAL WATER SYSTEM), 3.3.E (COMPONENT COOLING SYSTEM), and 3.7 (AUXILIARY ELECTRICAL SYSTEMS), to delete the current requirements to demonstrate, by testing, that a redundant system/component is operable when a system/component is declared inoperable. In the case of the Emergency Diesel Generators (EDGs), in TS 3.7 (AUXILIARY ELECTRICAL SYSTEMS), the testing of the alternate EDGs would be eliminated only when the inoperability is due to planned maintenance and testing. Inoperability due to other reasons would require testing of the alternate EDGs. The February 8, 1993, letter provided additional TS Basis pages which should have been included in the November 12, 1992, submittal. These pages changed because text shifted from previous pages. The April 23, 1993, letter withdrew the proposed change to the definition of OPERABLE-OPERABILITY since it was not a necessary change. The February 8, 1993, and April 23, 1993, submittals did not change the initial proposed no significant hazards consideration and were not outside the scope of the original Federal Register notice.

## 2.0 EVALUATION

The requirement to demonstrate the operability, by testing, of a redundant system/component when a system/component is declared inoperable is a typical requirement that was included in technical specifications when Indian Point Unit No. 2 was granted its operating license. However, based on further operating experience, the NRC staff subsequently dropped such testing requirements. Testing of redundant systems/components is not required in the NRC's Standard Technical Specifications nor in recently issued technical specifications. Deletion of such testing requirements was implemented by the NRC staff since the added operability assurance provided by such testing is not sufficient to justify the loss of safety function during the test, provided the periodic surveillance testing is current and that there are no

known reasons to suggest that the redundant system/component is inoperable. The periodic surveillance tests and the proposed verifications that the redundant systems/components are operable are sufficient to demonstrate the operability of the redundant system/component. Therefore, the proposed changes to delete demonstration of operability by testing of redundant system/components are acceptable. In the case of the EDGs, the testing of the alternate EDGs would be eliminated only when the inoperability is due to planned maintenance or testing. Inoperability due to other reasons would still require testing of the alternate EDGs. The changes to the EDG specifications regarding testing of the alternate EDGs will be consistent with the Standard Technical Specifications and are therefore acceptable.

By letter dated April 23, 1993, the licensee requested a withdrawal of a portion of the proposed changes. The licensee requested that Technical Specification 1.3, Definition of OPERABLE-OPERABILITY, remain as is since the proposed change was a clarification which was determined to be unnecessary. We find this acceptable. A Notice of Partial Withdrawal will be published in the Federal Register.

### 3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the New York State official was notified of the proposed issuance of the amendment. The State official had no comments.

### 4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (57 FR 61109). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

## 5.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor:  
F. Williams

Date: June 7, 1993

UNITED STATES NUCLEAR REGULATORY COMMISSION  
CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.  
DOCKET NO. 50-247  
INDIAN POINT NUCLEAR GENERATING UNIT NO. 2  
NOTICE OF PARTIAL WITHDRAWAL OF APPLICATION FOR  
AMENDMENT TO FACILITY OPERATING LICENSE

The United States Nuclear Regulatory Commission (the Commission) has granted the request by the Consolidated Edison Company of New York, Inc. (Con Edison) to withdraw a portion of their November 12, 1993, application, for a proposed amendment to Facility Operating License DPR-26 for the Indian Point Nuclear Generating Unit No. 2, located in Westchester County, New York.

The proposed amendment involved a change to the Technical Specifications to eliminate the need for testing of the alternate train of a safety system when one train is inoperable and, in the case of the emergency diesel generators, to eliminate the need for alternate train testing only when an emergency diesel generator is out of service for planned maintenance or testing requirements. The proposed amendment would also change Section 1.3, definition of OPERABLE-OPERABILITY, to include a discussion of the determination of Operability. This change was in support of the elimination of alternate train testing requirements.

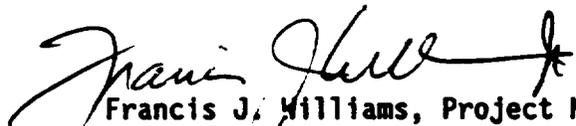
On April 23, 1993, the licensee submitted a letter to the NRC requesting withdrawal of a proposed change. It was determined that the expansion of the definition of OPERABLE-OPERABILITY was not necessary with regard to the elimination of the alternate train testing requirements and it was therefore requested that the definition not be changed.

The Commission has previously issued a Notice of Consideration of Issuance of Amendment to Facility Operating License, Proposed No Significant Hazards Consideration Determination, and Opportunity for a Hearing which was published in the FEDERAL REGISTER on December 23, 1992 (57 FR 61109).

For further details with respect to this action, see the application for amendment dated November 12, 1992, as supplemented on February 8, 1993, and the licensee's letter dated April 23, 1993, which withdrew this portion of the application for license amendment. The above documents are available for public inspection at the Commission's Public Document Room, 2120 L Street, NW., Washington, DC 20555, and at the local public document room located at White Plains Public Library, 100 Martine Avenue, White Plains, New York 10610.

Dated at Rockville, Maryland, this 7th day of June 1993.

FOR THE NUCLEAR REGULATORY COMMISSION

  
Francis J. Williams, Project Manager  
Project Directorate I-1  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

June 7, 1993

Mr. Stephen B. Bram  
Vice President, Nuclear Power  
Consolidated Edison Company  
of New York, Inc.  
Broadway and Bleakley Avenue  
Buchanan, New York 10511

Dear Mr. Bram:

SUBJECT: ISSUANCE OF AMENDMENT FOR INDIAN POINT NUCLEAR GENERATING  
UNIT NO. 2 (TAC NO. M84990)

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The amendment revises the Technical Specifications to delete requirements to demonstrate, by testing, that a redundant system/component is operable when a system/component is declared inoperable. The testing of alternate emergency diesel generators is deleted only if the emergency diesel generator is taken out of service for planned maintenance or testing.

A copy of our Safety Evaluation and Notice of Partial Withdrawal is also enclosed. Notice of Issuance will be published in the Commission's biweekly Federal Register Notice and the Notice of Partial Withdrawal will be published separately in the Federal Register.

Sincerely,

Original signed by:

Francis J. Williams, Jr., Project Manager  
Project Directorate I-1  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Enclosures:

- 1. Amendment No. 163 to DPR-26
- 2. Safety Evaluation
- 3. Notice of Partial Withdrawal

cc w/enclosures:

See next page

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5/17/93	5/17/93	5/20/93	5/20/93	6/7/93	1/1