



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555

July 15, 1992

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. M82760)

The Commission has issued the enclosed Amendment No. 156 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 January 30, 1992.

The amendment revises Technical Specification Section 3.14.b to delete the requirement to go to hot shutdown within 4 hours of receipt of a Hurricane Warning for a hurricane with winds in excess of 87 knots within 320 nautical miles of the site and Section 4.17 to increase the monitoring frequency of reports issued by the National Weather Service and the National Hurricane Center to at least every hour.

A copy of the related Safety Evaluation is enclosed. A Notice of Issuance will be included in the Commission's next regular biweekly Federal Register notice.

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. 156 to DPR-26
2. Safety Evaluation

cc w/enclosures:
See next page

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P PDR

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

Indian Point Nuclear Generating
Station Units 1/2

cc:

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New York, New York 10003

Regional Administrator, Region I
U. S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, Pennsylvania 19406

DATED: July 15, 1992

AMENDMENT NO. 156 TO FACILITY OPERATING LICENSE NO. DPR-26-INDIAN POINT UNIT 2

Docket File

NRC & Local PDRs

PDI-1 Reading

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R. Capra

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F. Williams

OGC-WF

D. Hagan, 3302 MNBB

G. Hill (4), P-137

Wanda Jones, P-130A

C. Grimes, 11/F/23

L. Cunningham, 10/D/4

ACRS (10)

OPA

OC/LFMB

PD plant-specific file

C. Cowgill, Region I

Plant File

cc: Plant Service list

July 15, 1992

Docket No. 50-247

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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. 156 to DPR-26
- 2. Safety Evaluation

cc w/enclosures:
See next page

*See previous concurrence

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DATE	7/15/92	07/15/92	06/12/92	07/06/92	7/15/92

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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. 156
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 January 30, 1992, 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. 156, 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, 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: July 15, 1992

ATTACHMENT TO LICENSE AMENDMENT NO. 156

FACILITY OPERATING LICENSE NO. DPR-26

DOCKET NO. 50-247

Revise Appendix A as follows:

Remove Pages

3.14-1
4.17-1

Insert Pages

3.14-1
4.17-1

3.14 HURRICANE ALERT

Applicability

Applies to a hurricane with winds in excess of 87 knots, when a Hurricane Warning has been issued for any coastal area south of Indian Point or east of Indian Point as far east as New Haven, Connecticut.

Objective

To define actions permitted after receipt of Hurricane Warnings.

Specifications

- 3.14.a If the National Weather Service issues a Hurricane Warning for a hurricane with wind in excess of 87 knots (approximately 100 mph) within 500 nautical miles of the facility, a prompt report shall be made to the NRC Incident Response Center within 1 hour of receipt of that Hurricane Warning. This notification is in lieu of the reporting requirements of 10 CFR 50.73.
- 3.14.b If the National Weather Service issues a Hurricane Warning for a hurricane with winds in excess of 87 knots within 320 nautical miles of the facility and a Hurricane Warning is in effect for any coastal area south of Indian Point or any coastal area east of Indian Point as far east as New Haven, Connecticut, the hurricane direction, translational velocity and average wind speed shall be monitored at least every hour. Appropriate action shall be taken to ensure that the plant is in the cold shutdown condition prior to arrival on site of a hurricane with winds in excess of 87 knots.

4.17 HURRICANE ALERT

Applicability

Applies to the monitoring requirements of a hurricane when Hurricane Warnings are issued for any coastal area south of Indian Point or as far east as New Haven, Connecticut.

Objective

To begin tracking a hurricane's movement for the purpose of taking the actions of Specification 3.14.

Specification

Upon receipt of Hurricane Warnings for the mid-Atlantic coast of the United States, reports issued by the National Weather Service and the National Hurricane Center shall be monitored at least every hour.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 156 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 January 30, 1992, The Consolidated Edison Company of New York, Inc. (the licensee) submitted a request for changes to the Indian Point Nuclear Generating Unit No. 2 Technical Specifications (TS). The requested changes would clarify the limiting conditions for operation (LCO) and monitoring frequency for a severe hurricane condition in the vicinity of Indian Point Unit No. 2. The requested changes would increase the frequency of monitoring reports issued by the National Weather Service and the National Hurricane Center upon receipt of Hurricane Warnings for the mid-Atlantic coast of the United States. The changes would also delete the requirement to be in the hot shutdown condition within 4 hours of receipt of a Hurricane Warning for a hurricane with winds in excess of 87 knots within 320 nautical miles of the facility with a Hurricane Warning in effect for any coastal area south of Indian Point or any coastal area east of Indian Point, as far east as New Haven, Connecticut. The requirement that appropriate action be taken to ensure that the plant is in the cold shutdown condition prior to arrival on site of a hurricane with winds in excess of 87 knots would remain in effect.

2.0 EVALUATION

The licensee bases its request on a review of historical hurricane tracking data for the eastern coast of the United States as well as local wind history and current hurricane tracking techniques. Historical meteorological tracking data for the North Atlantic area illustrate the tendency for hurricanes to move towards the northeast as they pass through the mid-Atlantic United States coastal area. In the 104 year period (1886-1991), only four hurricanes have passed within a 70 mile radius of New York City, which is approximately 40 miles south of Indian Point. These four hurricanes tracked over the Atlantic, recurved toward the northeast and passed east of the Indian Point area. For hurricanes tracking east of the Indian Point area, wind speeds experienced at the site would be less than the maximum winds reported in the hurricane because the stronger winds generally occur in the northeast sector of the hurricane; to the right of the hurricane movement. Any hurricanes tracking west of the site would have diminished in intensity due to the overland travel

which reduces the energy input, and by the increase in frictional forces due to the mountainous terrain surrounding the site.

Hurricane tracking along the eastern United States is accomplished by utilizing data from aircraft reconnaissance, surface based weather radar and satellite information enabling a continuous track of the hurricane to be presented, along with supplemental information on its intensity.

Indian Point is located in an area where the local topography has a significant effect on the wind regime. During periods of strong pressure gradient fields, as observed in hurricanes, the mountainous terrain affects the wind patterns by creating a mechanical disturbance to the wind flow. Vegetation surrounding the area will also reduce the magnitude of the wind speed compared to open flat terrain. Because the Indian Point site is located over 40 miles north of New York Harbor, inland from the Atlantic Ocean, wind speeds reported over the ocean will be reduced due to the frictional effect of the underlying terrain as the air flows overland. The maximum wind speed ever recorded at Central Park (approximately 4 miles inland) in New York City was 70 mph.

Amendment No. 83 to the Facility Operating License, dated December 23, 1982, required the licensee to monitor approaching hurricanes and to have the plant in cold shutdown prior to a hurricane with winds in excess of 87 knots arriving on-site. This requirement was based on a licensee identified potential risk which may result from hurricane damage to safety related structures, systems, and components. The licensee's proposed amendment retains this requirement. To approve the proposed change the staff must be satisfied that the requirement for cold shutdown can be achieved in a timely manner with the anticipatory hot shutdown deleted.

The TS will still contain the requirement for prompt reporting to the NRC of any hurricane with winds in excess of 87 knots, within 500 nautical miles of the facility. This provides approximately 1 day advance NRC notification at which time the staff will monitor events concurrent with licensee activities. In addition, the TS will now require more frequent monitoring as the licensee starts to track the hurricane. When the hurricane is 320 nautical miles from the site an improbable translational speed of 35 knots would place the maximum speed winds at the site in about 8 hours. The current TS would require the licensee to be in hot shutdown within 4 hours with 4 hours remaining to achieve cold shutdown if the hurricane tracked directly to the site while maintaining wind speeds in excess of 87 knots. The licensee considers this to be highly improbable based on historical data and the site terrain. With the hurricane 320 nautical miles from the site the licensee proposes to track the hurricane more closely to avoid the need to take the unit off the line, if possible, but if conditions of wind speed and tracking direction require it, to proceed to the shutdown condition in order to achieve cold shutdown in a timely manner.

The staff has reviewed the proposed TS changes and agrees that based on more frequent monitoring and improved tracking and predictive capabilities, the licensee has the capability to track the hurricane in a manner which could achieve the timely cold shutdown requirement when needed and still avoid

unnecessary shutdowns during a time when maintaining power output could be in the interest of the public health and safety. It is noted that the maximum sustained wind speed at the Indian Point site during the previous two major hurricanes which required hot shutdown did not exceed 15 mph.

3.0 SUMMARY

The staff accepts the licensee's justification for deleting the hot shutdown requirement. The requirement to avoid potential damage to safety related structures, systems, and components by achieving cold shutdown prior to a hurricane with winds in excess of 87 knots arriving on-site is retained as a TS requirement. With closer tracking, the staff concludes that timely cold shutdown can still be achieved while providing the opportunity to avoid unnecessary shutdowns and we, therefore, find the proposed TS changes to be acceptable.

4.0 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.

5.0 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 9440). 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.

6.0 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:
Francis J. Williams, Jr.

Date: July 15, 1992