ATTACHMENT A

PROPOSED TECHNICAL SPECIFICATION CHANGES

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
INDIAN POINT UNIT NO. 2
DOCKET NO. 50-247
JANUARY, 1992

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.

ATTACHMENT B

SAFETY ASSESSMENT

AND

BASIS FOR NO SIGNIFICANT HAZARDS DETERMINATION

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
INDIAN POINT UNIT NO. 2
DOCKET NO. 50-247
JANUARY, 1992

SAFETY ASSESSMENT

The proposed Technical Specification change simplifies and revises a limiting condition for operation (LCO) for a severe hurricane condition in the vicinity of Indian Point Unit No. 2 (IP-2). This proposed change resulted from 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 data illustrate the following characteristics for most North Atlantic hurricanes.

- Tropical storms generally diminish in intensity as they proceed northward, and the wind speed is always reduced as the storm moves onto land because of the frictional effects of the terrain and the unavailability of moisture on land.

- Hurricanes generally track east of IP-2.

- Maximum hurricane winds generally do not occur near the center or to the west of the storm path but rather to the northeast.

Our review indicated the benefit of remaining at normal operation if hurricane sustained surface winds in excess of 87 knots will not impact the site, even though the hurricane is within 320 nautical miles of the plant. A summary of that review is included in this Safety Assessment.

Hurricane Tracking History

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 intense hurricanes have passed within a seventy mile radius of New York City, which is approximately forty 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 Techniques

Hurricane tracking along the eastern United States is accomplished by utilizing data from aircraft reconnaissance, surface based weather radar and satellite information. Coastal National Weather Service radar, which has a maximum range of 230 nautical miles, permits detailed positioning of hurricanes along the Atlantic coast. This data base is supplemented by reconnaissance aircraft flights into the hurricane and by satellite imaging of cloud formations. This information enables a continuous track of the hurricane to be presented, along with supplemental information on its intensity. In addition, National Weather Service meteorological observation stations along the east coast of the United States routinely report wind direction and National Weather Service wind speed data which can be interrogated by computer.

Local Wind History

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 forty miles north of New York Harbor, inland from the Atlantic Ocean, wind speeds reported over the oceans will be reduced due to the frictional effect of the underlying terrain as the air flows overland. This factor is evident from winds recorded during hurricane Hazel (10/15/54) where speeds in Battery Park, NYC at 454 MSL were 113 mph while comparable winds speed data at Central Park (approximately four miles inland) did not exceed 40 mph at the surface. The highest speed ever recorded during a hurricane at Central Park was 70 mph during the passage of Hurricane Donna (9/12/60). In Hurricane Gloria (9/27/85), maximum wind speeds reported at La Guardia Airport, NYC were 55 mph, whereas Indian Point recorded a peak gust of 34 mph at 10 meters. Sustained surface winds at Indian Point during Hurricanes Gloria and Bob (8/19/91) did not exceed 15 mph.

BASIS FOR NO SIGNIFICANT HAZARDS DETERMINATION

In accordance with the requirements of 10 CFR 50.92, the proposed technical specification changes are deemed to involve no significant hazards consideration because operation of Indian Point Unit No. 2 (IP-2) in accordance with these changes would not:

(1) Involve a significant increase in the probability or consequences of an accident previously evaluated, since the unit is required to be in the same shutdown status prior to arrival of winds on-site with sufficient intensity to threaten plant structures. The original IP-2 Hurricane Technical Specification requirement was requested by NRC as a result of its review of the IPSSS and was issued as Amendment No. 83 to the IP-2 Operating License on December 23, 1982. The original basis and intent of the issued Safety Evaluation with Amendment No. 83 are not degraded by the changes proposed in the enclosed application, since under both Amendment No. 83 and the proposed specification, plant shutdown is required prior to arrival of sustained surface winds exceeding 87 knots on site. Furthermore, the proposed specification would avoid possible unnecessary cycling of the plant which might occur under the present specification in instances where there is essentially no probability that hurricane sustained surface winds exceeding 87 knots will impact the site. The proposed technical specification change would continue to require a prompt report in the event of a hurricane and action to ensure that the plant is in a cold shutdown condition prior to arrival on site of hurricane sustained surface winds in excess of 87 knots. Therefore, these changes cannot increase the probability or consequences of an accident previously evaluated,

(2) Create the possibility of a new or different kind of accident from any accident previously evaluated for the same reasons described in Item (1), although safety may be enhanced to some extent by the avoidance of unnecessary cycling of the unit, and

(3) Involve a significant reduction in a margin of safety. The safety-related aspects of the existing Technical Specification text and that proposed one remain the same, inasmuch as the plant must be in a cold shutdown condition prior to arrival of sustained surface winds exceeding 87 knots on site. The margin of safety is actually increased somewhat since unnecessary cycling of the plant will likely be precluded. Adherence to the existing technical specification resulted in such cycling on Sept. 27, 1985 and Aug. 19, 1991 for Hurricanes Gloria and Bob, respectively, when sustained surface winds at the site were no stronger than 15 MPH.

The proposed changes have been reviewed by both the Station Nuclear Safety Committee and the Con Edison Nuclear Facilities Safety Committee. Both Committees concur that the proposed changes do not represent a significant hazards consideration and will not cause any change in the types or an increase in the amounts of effluents or any change in the authorized power level of the facility.