ATTACHMENT I

IP-2 TECHNICAL SPECIFICATION
PROPOSED PAGE REVISIONS

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
INDIAN POINT UNIT NO. 2
DOCKET NO. 50-247
DECEMBER, 1991

c. Hydrogen and oxygen supplies shall not be connected to the hydrogen recombiner units except under conditions of an accident or those specified in Specification 4.5.C.1.

2. During power operation, the requirements of 3.3.G.1 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 3.3.G.1 within the time specified, the reactor shall be placed in the hot shutdown condition utilizing normal operating procedures.

a. One hydrogen recombiner unit or its associated flow path, or oxygen supply system or control system may be inoperable for a period not to exceed thirty days, provided the other recombiner unit and the post-accident containment venting system are operable.

b. The post-accident containment venting system may be inoperable for a period not to exceed thirty days provided that both hydrogen recombiners are operable.

H. CONTROL ROOM AIR FILTRATION SYSTEM

1. The control room air filtration system shall be operable at all times when containment integrity is required.

2. From the date that the control room air filtration system becomes and remains inoperable for any reason, operations requiring containment integrity are permissible only during the succeeding 3.5 days. At the end of this 3.5 days period, if the conditions for the control room air filtration system cannot be met, the reactor shall be placed in the hot shutdown condition utilizing normal operating procedures. If the conditions are not satisfied within an additional 48 hours, the reactor shall be placed in the cold shutdown condition utilizing normal operating procedures.

3. Two independent toxic gas detection systems, each capable of detecting chlorine, anhydrous ammonia ~~and hydrogen cyanide,~~ shall be operable at all times except as specified in 3.a, 3.b, or 3.c below. The alarm/trip setpoints for ~~each toxic gas system~~ the chlorine and anhydrous ammonia gas detection systems shall be adjusted to actuate at a toxic gas concentration of less than or equal to 3.5 ppm and 25 ppm, respectively.

   a. With one toxic gas detection system inoperable, restore the inoperable detection system to operable status within 7 days.

   b. If 3.a above cannot be satisfied within the specified time, then, within the next 6 hours, initiate and maintain operation of the control room ventilation system in the recirculation mode of operation.

   c. With both toxic gas detection systems inoperable for any one toxic gas, within one hour initiate and maintain operation of the control room ventilation in the recirculation mode of operation.

I. CABLE TUNNEL VENTILATION FANS

1. The reactor shall not be made critical unless the two cable tunnel ventilation fans are operable.

2. During power operation, the requirement of 3.3.I.1 may be modified to allow one cable tunnel ventilation fan to be inoperable for seven days, provided the other fan is operable.

Basis

The normal procedure for starting the reactor is, first, to heat the reactor coolant to near operating temperature by running the reactor coolant pumps. The reactor is then made critical by withdrawing control rods and/or diluting boron in the coolant(1). With this mode of start-up, the energy stored in the reactor coolant during the approach to criticality is substantially equal to that during

The post-accident venting system is used only in the absence of hydrogen recombiners and only when absolutely necessary. From the standpoint of minimizing offsite radiation doses, the optimum starting time for the venting system, if needed, is the latest possible time after the accident. Consistent with this philosophy, the selected venting initiation point of 3 percent hydrogen maximizes the time period before venting is required while at the same time allows a sufficient margin of safety below the lower flammability limit of hydrogen.

The control room air filtration system is designed to filter the control room atmosphere for intake air and/or for recirculation during control room isolation conditions. The control room system is designed to automatically start upon control room isolation. Control room isolation is initiated either by a safety injection signal or by detection of high radioactivity in the control room. If the control room air filtration system is found to be inoperable, there is no immediate threat to the control room and reactor operation may continue for a limited period of time while repairs are being made. If the system cannot be repaired within 3.5 days, the reactor is placed in the hot shutdown condition.

The control room ventilation system is equipped with ~~a~~ toxic gas detection systems consisting of redundant monitors capable of detecting chlorine, anhydrous ammonia, ~~and hydrogen cyanide.~~ These toxic gas detection systems are designed to isolate the control room from outside air upon detection of toxic concentration of the monitored gases in the control room ventilation system. The operability of the toxic gas detection systems provides assurance that the control room operators will have adequate time to take protective action in the event of an accidental toxic gas release. Selection of the gases to be monitored and the setpoint established for the monitors are based on the results described in the Indian Point Unit No. 2 Control Room Habitability Study dated ~~May, 1981.~~ June 10, 1991.

The cable tunnel is equipped with two temperature-controlled ventilation fans. Each fan has a capacity of 21,000 cfm and is connected to a 480v bus. One fan will start automatically when the temperature in the tunnel reaches 100°F. Under the worst conditions, i.e., loss of outside power and all the Engineered Safety Features in operation, one ventilation fan is capable of maintaining the tunnel temperature below 104°F. Under the same worst conditions, if no ventilation fans

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ATTACHMENT II

SAFETY ASSESSMENT

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
INDIAN POINT UNIT NO. 2
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Description of Change

The changes that are proposed for Technical Specification 3.3.H.3 and Technical Specification Basis 3.3 would modify the Control Room Air Filtration System Technical Specification to reflect changes made to the toxic gas detection monitors. Specifically, the proposed technical specification amendment deletes the requirement to monitor hydrogen cyanide and increases the existing anhydrous ammonia monitor alarm/trip setpoint from 3.5 ppm to 25 ppm. The proposed technical specification changes follow the guidance and intent of NUREG-0737 Item No. III.D.3.4 "Control Room Habitability Requirements," Regulatory Guides 1.78, "Assumptions for Evaluating the Habitability of a Nuclear Power Plant Control Room During a Postulated Hazardous Chemical Release" and 1.95, "Protection of Nuclear Power Plant Control Room Operators Against an Accidental Chlorine Release."

Background

NUREG-0737 Item No. III.D.3.4, "Control Room Habitability Requirements," requires that control room operators be adequately protected against the effects of an accidental release of toxic gases. As a result of a habitability study performed for Indian Point 2 (IP-2) in May of 1981, Con Edison committed to installing a toxic gas detection system to monitor anhydrous ammonia, chlorine and hydrogen cyanide at the outside make-up air intake of the IP-2 control room. In a letter dated January 27, 1982, the NRC concluded that IP-2 meets the requirements of NUREG-0737 Item No. III.D.3.4.

While evaluating proposed replacement monitors, we determined that ammonia and chlorine gas are the only known potential threats to the IP-2 Control Room. Based upon the original habitability study performed in May of 1981, only one facility was identified within a five-mile radius of IP-2 which stored hydrogen cyanide chemicals. That facility ceased operations and the property was sold in January of 1988. In May of 1990, we received written confirmation from the new owners, that all chemicals belonging to the former owners were indeed removed from that facility, including hydrogen cyanide.

Subsequently, a new habitability study was performed to confirm that no new sources of hydrogen cyanide in addition to any other hazardous chemicals were introduced to this area since 1981. Based upon the results of this new habitability study, completed in June, 1991, there are no stationary or mobile hazardous sources of hydrogen cyanide within the five mile radius area of IP-2. Therefore, it is concluded that the need to monitor hydrogen cyanide is no longer necessary. The proposed Technical Specification amendment deletes the requirement to monitor hydrogen cyanide.

The proposed Technical Specification amendment also increases the present alarm/trip setpoint for anhydrous ammonia from 3.5 ppm to 25 ppm. This change would allow the alarm/trip setpoint to be adjusted to actuate at a concentration less than or equal to 25 ppm, which is the Threshold Limit Value - Time Weighted Average (TLV-TWA) for anhydrous ammonia. The American Conference of Government Industrial Hygienists (ACGIH) defines the TLV-TWA as the time weighed average concentration for a normal 8 hour work day and a 40 hour work week, to which nearly all workers may be repeatedly exposed, day after day, without adverse effect.

Basis for "No Significant Hazards Considerations" Determination

The Commission has provided guidance concerning the application of the standards for determining whether a "Significant Hazards Consideration" exists by providing examples in 51 FR 7751 (Dated March 6, 1986). Example (vi) of the Commission's Examples of Amendment that are considered not likely to involve significant hazards considerations relates to a change which either may result in some increase to the probability or consequences of a previously - analyzed accident or may reduce in some way a safety margin, but where the results of the the change are clearly within all acceptable criteria with respect to the system or component specified in the Standard Review Plan. This is the case with the proposed changes to Technical Specification 3.3.H.3 and Technical Specification Basis 3.3 with respect to the toxic gas detection systems.

In accordance with the requirements of 10 CFR 50.92, the proposed changes to Technical Specification 3.3.H.3 is deemed not to involve a "Significant Hazards Consideration" because operation of Indian Point Unit No. 2 in accordance with this change would not:

1) Involve a significant increase in the probability or consequences of an accident previously evaluated.

   The proposed changes do not involve a significant increase in the probability or consequences of a previously analyzed accident. 10 CFR 50 Appendix A, General Design Criteria (GDC) 19 requires that a control room be provided from which actions can be taken to operate the nuclear power unit safely under normal conditions and to maintain it in a safe condition under accident conditions. The accident postulated is the discharge of a hazardous chemical in sufficient quantity to render the control room uninhabitable. The original habitability study performed in 1981, identified three hazardous chemicals within a 5 mile radius of IP-2 required to be monitored. This study provided the basis for the existing toxic gas monitoring system.

The new habitability study performed in 1991, supersedes the previously performed study. The results of this new study confirm that the need to monitor hydrogen cyanide is no longer necessary. Therefore, the proposed change to delete the requirement to monitor hydrogen cyanide does not increase the probability or consequences of a previously analyzed accident, because the probability of a hydrogen cyanide accident has actually decreased.

The proposed change to the anhydrous ammonia alarm/trip setpoint from 3.5 ppm to 25 ppm does not involve a significant increase in the probability or consequences of a previously analyzed accident. The proposed increase of the setpoint is at a value which is recognized by the American Conference of Government Industrial Hygienists as the Threshold Limit Value time weighed average concentration at which all workers may be repeatly exposed, day after day, without adverse effect. Therefore, the proposed change to increase the anhydrous ammonia alarm/trip setpoint does not significantly increase the probability or consequences of a previously analyzed accident.

2) Create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed changes do not create the possibility of a new or different kind of accident. The deletion of the hydrogen cyanide monitor and the increase of the alarm/trip monitor setpoint for anhydrous ammonia do not affect the storage or the use of any hazardous chemicals.

3) Involve a significant reduction in a margin of safety.

The proposed changes do not involve a significant reduction in a margin of safety. The deletion of the hydrogen cyanide monitor does not reduce any margin of safety since the requirement to detect hydrogen cyanide has been eliminated. The increase of the alarm/trip monitor setpoint for anhydrous ammonia does not significantly reduce the margin of safety since the new setpoint is at the Threshold Limit Value time weighed average concentration at which all workers may be exposed, day after day, without adverse effect.

Based upon the above discussion, Con Edison has determined that the proposed changes to Technical Specification 3.3.H.3 and Technical Specification Basis 3.3 with respect to the toxic gas detection system are similar to Example (vi) and do not involve a "Significant Hazards Consideration."

Therefore, since these proposed changes to Technical Specification 3.3.H.3 and Technical Specification Basis 3.3 satisfy the criteria specified in 10 CFR 50.92, are similar to examples for which "No Significant Hazards Consideration" exist, are not similar to examples for which "Significant Hazards Consideration" exists, Con Edison has determined that these changes do not involve a "Significant Hazards Consideration."

The proposed changes to Technical Specifications 3.3.H.3 and Technical Specification Basis 3.3 have been reviewed by the Indian Point Unit No. 2 Station Nuclear Safety Committee and by the Con Edison Nuclear Facilities Safety Committee. Both committees concur that these proposed changes do not represent a "Significant Hazards Considerations".