Stephen B. Bram
Vice President

Consolidated Edison Company of New York, Inc.
Indian Point Station
Broadway & Bleakley Avenue
Buchanan, NY 10511
Telephone (914) 737-8116

September 13, 1993

Re: Indian Point Unit No. 2
Docket No. 50-247

Document Control Desk
US Nuclear Regulatory Commission
Mail Station P1-137
Washington, DC 20555

SUBJECT: Request for Enforcement Discretion

On September 10, 1993 Consolidated Edison Company of New York, Inc. owner and operator of Indian Point Unit No. 2, requested enforcement discretion from the NRC as described and justified in the attached "Justification for Continued Operation (JCO) In Support of Enforcement Discretion". This JCO was reviewed and approved by the Station Nuclear Safety Committee for Indian Point Unit No. 2.

This request was made verbally and granted by the NRC on September 10, 1993. This letter serves to document the request. Con Edison appreciates the timely response of the NRC in this matter on Friday evening.

Should you have any questions regarding this matter, please contact Mr. Charles W. Jackson, Manager, Nuclear Safety and Licensing.

Very truly yours,

Attachment

9309290133 930913
PDR ADOCK 05000247
P PDR

A001
1/1

cc: Mr. Thomas T. Martin
Regional Administrator - Region I
US Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Mr. Francis J. Williams, Jr., Project Manager
Project Directorate I-1
Division of Reactor Projects I/II
US Nuclear Regulatory Commission
Mail Stop 14B-2
Washington, DC 20555

Senior Resident Inspector
US Nuclear Regulatory Commission
PO Box 38
Buchanan, NY 10511

ATTACHMENT

JUSTIFICATION FOR CONTINUED OPERATION

IN SUPPORT OF ENFORCEMENT DISCRETION

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
INDIAN POINT UNIT NO. 2
DOCKET NO. 50-247
SEPTEMBER, 1993

JUSTIFICATION FOR CONTINUED OPERATION (JCO)

IN SUPPORT OF A REQUEST FOR ENFORCEMENT DISCRETION

REQUIREMENT

Indian Point Unit No. 2 Technical Specification section 3.3.D.1 requires that "The reactor shall not be brought above cold shutdown unless: All required portions of the four WC & PPS (Weld Channel & Penetration Pressurization System) zones are pressurized at or above 47 psig." This technical specification allows a modification of this requirement as follows: Any one zone of the WC & PPS may be inoperable for a period not to exceed seven consecutive days. If the WC & PP System is not restored to an operable status within the time period specified, then: If the reactor is critical, it shall be brought to the hot shutdown condition utilizing normal operating procedures.

Technical Specification 3.0.1 requires that "in the event a Limiting Condition for Operation (LCO) and/or associated action requirements cannot be satisfied because of circumstances in excess of those addressed in the specification, the unit shall be placed in at least hot shutdown within the next 7 hours, and in at least cold shutdown within the following 30 hours unless corrective measures are completed that restore compliance to the LCO within these time intervals as measured from initial discovery or until the reactor is placed in a condition in which the LCO is not applicable."

WAIVER REQUEST

On September 10, 1993, Consolidated Edison requested enforcement discretion from Technical Specifications 3.3.D and 3.0.1 to allow continued operation of the unit for up to 24 hours with the Weld Channel and Penetration Pressurization System (WCPPS) inoperable.

BACKGROUND

Design

The Weld Channel and Penetration Pressurization System provides a means for continuously pressurizing the positive pressure zones incorporated into the containment penetrations and the channels over the welds in the steel inner liner and certain containment isolation valves in the event of a loss-of-coolant accident. Although no credit is taken for WCPPS operation in the calculation of offsite accident doses in accident analysis contained in the UFSAR, the WCPPS is designed as an engineered safety feature and is intended to provide assurance that the containment leak rate in the event of an accident is lower than that assumed in the accident analysis.

BACKGROUND (CONTINUED)

Design

A regulated supply of clean and dry compressed air from either of the plant's 100-psig compressed air systems located outside the containment is supplied to all containment penetrations and inner liner weld channels. The system continuously maintains a pressure in excess of containment design pressure during all reactor operations, thereby ensuring that there will be no out-leakage of the containment atmosphere through the penetrations and liner welds during an accident.

The primary source of air for this system is the instrument air system. Two instrument and control air compressors are used, although only one is required to maintain pressurization at the maximum allowable leakage rate of the pressurization system. The station air compressor acts as a backup to the instrument and control air compressors for added reliability.

A standby source of gas pressure for the system is provided by a bank of three nitrogen cylinders. The associated nitrogen system is designed to automatically deliver nitrogen to the WCPPS in the event of a failure of the normal and backup air supply systems during periods when the system is in operation. This ensures reliable pressurization under both normal and accident conditions.

Containment penetration and liner weld channels are grouped into four independent zones to simplify the process of locating leaks during operation. Each such zone is served by its own air receiver and pressure control valve. In the event that all normal and backup air supplies are lost, each of the four pressurization system zones continues to be supplied with air from its respective air receiver. Each of the air receivers is sized to supply air to its pressurized zone for a period of at least 4 hr., based on a leakage rate of 0.2 percent of the containment free volume per day.
If the receivers become exhausted before normal and backup air supplies can be restored, nitrogen from the bank of pressurized cylinders can be supplied to the affected zones. The nitrogen bank is sized to provide a 24 hr. supply of gas to the system, again based on a total leakage rate from the pressurization system of 0.2 percent of the containment free volume in 24 hr.

BACKGROUND (CONTINUED)

Description of the Identified Condition

On September 10, 1993, during a review resulting from a previously identified and reported condition associated with nitrogen backup pressure control valves for the Auxiliary Feedwater System, a condition was identified which could render the WCPPS air receiver and nitrogen backup system inoperable in the event of loss of the normal and backup air supply systems. Since these features are an integral part of the design of the WCPPS system, the WCPPS was declared inoperable, resulting in the entry of the plant into Technical Specification 3.0.1 at 5:15 pm on Sept. 10, 1993. Shortly thereafter, the NRC was contacted verbally with a request for enforcement discretion to allow continued operation for up to twenty-four hours. This request was subsequently granted.

Each of the four zones of WCPPS was designed with a pressure control valve located downstream of the air receiver and the source of nitrogen backup. These pressure control valves are designed to regulate the downstream pressure to that which exists in the dome of the regulator. The sensing line to the dome received air pressure from the instrument air system up stream of each air receiver through an adjustable pressure regulator independent of the WCPPS. Thus, in the event of a loss of instrument air or its backup, the pressure control valves in each of the four zones of WCPPS would have maintained proper WCPPS pressure as instrument air pressure slowly decreased. When Instrument Air pressure decreases to below 52 psig, the regulator then controls WCPPS pressure to the instrument air pressure value until the regulator closes at zero air pressure. The closure then isolates its air receiver and source of nitrogen backup. Although a bypass line and valve is installed around each of the pressure control valves enabling manual control of the weld channel system under these conditions, the design was intended to provide automatic control. Therefore the WCPPS was declared inoperable.

BACKGROUND (CONTINUED)

Description of the Modification

A modification was designed to reroute the sensing line to an instrument tap upstream of the pressure control valve and down stream of the air receiver. The air receiver or the standby source of nitrogen would now supply pressure to the dome of the pressure control valve through the adjustable pressure regulator. This restored the design of the system to automatically maintain pressurization of weld channels and penetrations in the event of a failure of the normal and backup air supply systems. This modification was subsequently completed and tested by 8:25 pm on September 10, 1993.

JUSTIFICATION

Compensatory Actions

During the period of time in which the WCPPS was declared inoperable, a Nuclear Plant Operator (NPO) was stationed at the bypass valves around the pressure control valves. The NPO was given instructions to manually regulate the pressure of the WCPPS in the event of a Loss of Coolant Accident and a failure of the normal and backup air supply systems.

Safety Significance of Request

The safety significance of this request is minimal since the accident analyses in the UFSAR do not rely on the operation of the weld channel pressurization system to demonstrate compliance with 10 CFR 100. Also, the failure of the normal and backup air supplies during this twenty-four hour period is considered highly unlikely. In addition to the Instrument Air Compressors and the Station Air Compressors, two air compressors powered from Indian Point Unit No. 1 electric power supplies are available to supply air to the WCPPS. In the event of a loss of power to the station, Indian Point Unit No. 2 procedures provide for emergency power from the Emergency Diesel Generators to be restored to the Instrument Air Compressors within about 5 minutes.

JUSTIFICATION (CONTINUED)

Duration of the Request

The request for enforcement discretion from Technical Specifications 3.3.D and 3.0.1 to allow continued operation of the unit for up to 24 hours with the Weld Channel and Penetration Pressurization System inoperable was made to provide time to effect the described modification to the WCPPS system. This modification restored the design of the system to automatically maintain pressurization of weld channels and penetrations in the event of a failure of the normal and backup air supply systems. This twenty-four hour time period allowed the modification to be implemented without imposing an unnecessary transient upon the plant.

The duration of the enforcement discretion was justified in that the accident analyses contained in the UFSAR do not rely on the operation of the weld channel pressurization system to demonstrate compliance with 10 CFR 100. In addition other means were available to supply air to the WCPPS. Furthermore, a total loss of power to the plant was considered unlikely during the twenty-four hour time period because the three Emergency Diesel Generators and two Gas turbines were fully operable and the Con Edison electrical grid was stable.

Significant Hazards Consideration

The request does not involve a significant hazards consideration since:

1. There will be no significant increase in the probability or consequences of an accident previously evaluated.

   The accident analyses set forth in the UFSAR do not rely on the operation of the weld channel and penetration pressurization system to demonstrate compliance with 10 CFR 100. In addition, the 10 CFR 50 Appendix J Integrated Leak Rate Test is performed to show that containment leakage under post-accident conditions is within requirements with no credit available for the WCPPS. Therefore the inoperability of the system can have no effect on the probability or consequences of a previously evaluated accident.

JUSTIFICATION (CONTINUED)

Significant Hazards Consideration (Continued)

2. The possibility of a new or different kind of accident from any previously analyzed has not been created.

   As discussed above, since the UFSAR accident analysis and containment leak rate testing are performed with no consideration of the existence of the Weld Channel and Penetration Pressurization System, the inoperability of the system cannot create the possibility of any new accident.

3. There will be no significant reduction in the margin of safety.

   The operation of the unit for twenty-four hours with the Weld Channel and Penetration Pressurization System inoperable because of the unavailability of features designed to maintain WCPPS pressurization in the event of a failure of normal and backup air supplies does not significantly reduce the plant's margin of safety. This is because no credit was taken for the operation of WCPPS in the calculation of offsite accident doses in the event of an accident. No other safeguards systems are dependent on the operation of this system. Therefore, the analyzed accident conditions and doses would continue to apply without interruption throughout the period in question

Environmental Consequences

Although the WCPPS does provide assurance that the containment leak rate in the event of an accident is lower than that assumed in the accident analysis, no credit was taken for WCPPS operation in the calculation of offsite accident doses. Therefore, we conclude that the inoperability of the WCPPS for twenty-four hours because of the unavailability of features designed to maintain WCPPS pressurization in the event of a failure of normal and backup air supplies does not result in any adverse or irreversible environmental consequences.

CONCLUSION

This request for enforcement discretion from Technical Specifications 3.3.D and 3.0.1 to allow continued operation of the unit for up to 24 hours with the WCPPS inoperable because of the unavailability of features designed to maintain WCPPS pressurization in the event of a failure of normal and backup air supplies is justified. This conclusion is based on the compensatory actions taken, the safety significance of the condition, the duration of the request, the absence of a significant hazards consideration, and the conclusion that the request does not involve irreversible environmental consequences.