Stephen E. Quinn
Vice President

Consolidated Edison Company of New York, Inc.
Indian Point Station
Broadway & Bleakley Avenue
Buchanan, NY 10511
Telephone (914) 734-5340

June 26, 1995

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

Consolidated Edison Company of New York, Inc., owner and operator of Indian Point Unit No. 2, hereby requests enforcement discretion for the NRC as described and justified in the attached Justification for Continued Operation (JCO) in Support of a Request for Enforcement Discretion. This JCO has been reviewed and approved by the Station Nuclear Safety Committee for Indian Point.

We are requesting NRC's expeditious review of this request. It would be most beneficial if we could receive approval by June 27, 1995.

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

Very truly yours,

Stephen E. Quinn

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Attachment

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 A REQUEST FOR ENFORCEMENT DISCRETION

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
INDIAN POINT UNIT NO. 2
DOCKET NO. 50-247
JUNE, 1995

JUSTIFICATION FOR CONTINUED OPERATION (JCO)

IN SUPPORT OF A REQUEST FOR ENFORCEMENT DISCRETION

TECHNICAL SPECIFICATION REQUIREMENT

Indian Point Unit No. 2 Technical Specification section 3.3.F.2.a requires that "The reactor shall not be brought above 350°F unless two service water pumps with their associated piping and valves are operable on the designated non-essential header." Section 3.3.F.2.b requires that "When the reactor is above 350°F and one of the two service water pumps or any of its associated piping or valves is found inoperable, and a non-essential service water header that meets the requirements of 3.3.F.2.a cannot be restored within 24 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."

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."

Technical Specification 3.3.F.3 requires that "Isolation shall be maintained between the essential and non-essential headers at all times when the reactor is above 350°F except for a period of up to 8 hours when the header may be connected to facilitate safety related activities."

REQUEST

Consolidated Edison requests enforcement discretion from Technical Specifications 3.0.1, 3.3.F.2, and 3.3.F.3 to allow continued operation of the unit above 350°F for up to 80 hours with the non-essential service water header drained and inoperable and the only safety-related load (Component Cooling Water Heat Exchangers) normally supplied by the non-essential header to be supplied by the essential service water header via an interconnection of the essential and non-essential service water headers. In addition, this evolution as described in this request will not constitute a Notification of Unusual Event as described in the Emergency Plan.

JUSTIFICATION FOR CONTINUED OPERATION (JCO)

IN SUPPORT OF A REQUEST FOR ENFORCEMENT DISCRETION

BACKGROUND

Design

The service water system is designed to supply cooling water from the Hudson River to various heat loads in both the primary and secondary portions of the plant. Provision is made to ensure a continuous flow of cooling water to those systems and components necessary for plant safety either during normal operation or under abnormal and accident conditions. Sufficient redundancy of active and passive components is provided to ensure that cooling is maintained to vital loads for short and long periods.

Six vertical, centrifugal sump-type pumps, each having a capacity of 5000 gpm at 220 ft. total design head, supply service water to two independent discharge headers; each header may be supplied by three of the pumps. A rotary-type strainer is installed in the discharge of each pump. Each header is connected to an independent supply line. Either of the two supply lines can be used to supply the essential loads, with the other line capable of feeding the non-essential loads.

The essential loads are those which must have an assured supply of cooling water in the event of a loss of offsite power and/or a loss-of-coolant accident. The cooling water for these loads is supplied by the designated essential service water header. These loads include: containment recirculation fan coolers and motors, emergency diesel generators jacket water, instrument air compressor heat exchangers, radiation monitor sample coolers and service water pump strainer blowdown.

The non-essential loads are those which are supplied with cooling water from the designated non-essential service water header by manually starting a service water pump when required following a loss-of-coolant accident. These loads include the component cooling heat exchangers and service water pump strainer blowdown. Provision has been made so that conventional, nonsafety-related plant loads such as the turbine generator lube oil coolers and other non-safety related loads can be supplied from the Unit 1 river water system.

BACKGROUND (CONTINUED)

Design (Continued)

Only two of the set of three service water pumps on the header designated the essential header are required immediately following a postulated loss-of-coolant accident. During the recirculation phase of the accident, one service water pump on the non-essential header will be manually started to supply the minimum cooling water requirements for the component cooling loop.

Description of the Circumstances Surrounding the Situation

On June 14, 1995, following startup of the unit from a refueling outage, it was determined that SWN-2-1 leaks by when closed. On June 22, 1995, with the plant at about 70% power it was determined that SWN-2 and SWN-2-2 also leak by when closed. These valves are 14 inch butterfly valves located in the discharge piping of their respective service water pump downstream of the Zurn strainer in the designated non-essential service water header. These valves are used to isolate the pump from its header to facilitate maintenance and testing on the pump or its strainer. Since there is no installed means of isolating these valves from the header, either freeze seals must be used or the entire header must be drained in order to enable repair.

The Indian Point Unit No. 2 Technical Specifications require the service water headers to be operable when the Reactor Coolant System (RCS) is above 350°F. Con Edison is proposing to perform the repair of the SWN-2 valves when the Reactor Coolant System is above 350°F when the Steam Generators are available to remove decay heat and the reactor power is less than 2% power. The licensee submits that it is preferable to perform this repair by draining the service water header rather than by installing fourteen inch freeze seals or by reducing RCS temperature below 350°F and placing the unit on the Residual Heat Removal (RHR) System (component cooling decay heat removal). However, since the repair evolution will take about 80 hours, it can only be done in conjunction with NRC-approved enforcement discretion. In order to ensure the availability of service water cooling to all safety-related loads, under the licensee proposal the service water cooling to the component cooling water heat exchanger which is normally supplied from the non-essential service water header would be supplied from the essential service water header for the duration of the repair evolution.

JUSTIFICATION FOR CONTINUED OPERATION (JCO)

IN SUPPORT OF A REQUEST FOR ENFORCEMENT DISCRETION

JUSTIFICATION

Safety Basis for the Request

The safety significance of this request is minimal since adequate service water flow will continue to be available for all safety-related loads which are normally supplied from both the essential and non-essential service water headers. This will be accomplished by supplying the service water cooling to the component cooling water heat exchanger from the essential service water header. Since the post accident safety-related loads normally supplied by the essential service water header can be adequately supplied by two service water pumps and since the post accident safety-related loads normally supplied by the non-essential service water header can be adequately supplied by one service water pump, three pumps will be adequate. This will be analytically verified prior to draining the non-essential header. At no time during this evolution will nonsafety-related loads be supplied from the essential service water header.

Performing this repair evolution when the Reactor Coolant System is above 350°F has the additional benefit of maintaining the Steam Generators available to remove decay heat. This allows the service water system to be removed from service at a time when the plant does not depend upon it for decay heat removal. Additionally, since the reactor core is at the beginning of life following a refueling outage, the decay heat load is expected to be minimal. Furthermore, the effects of post accident conditions are much less significant with the unit off-line and the reactor at hot zero power, than at full power.

This repair evolution will be performed with off-site power available. Should off-site power be lost during the evolution, the Emergency Diesel Generators (EDG's) have sufficient capacity to provide power to the service water pumps supplying the cooling loads as described in this request. These EDG's were recently tested satisfactorily.

An additional conservatism involves the actual service water temperature. The analysis associated with the Ultimate Heat Sink study assumed a river water temperature of 95°F. The actual river water temperature is about 73°F. This provides additional service water cooling effectiveness.

JUSTIFICATION (CONTINUED)

Compensatory Actions

During the period of time from the detensioning of the first stud on any of the SWN-2, SWN-2-1, or SWN-2-2 valves until the replacement valves are fully installed, blank flanges will be available for installation on short notice on the service water header side of the valves' flange to enable the non-essential header to be returned to service if called upon. This installation would, in the event of a loss-of-coolant accident, loss-of-offsite power or an essential service water pump malfunction be performed in accordance with pre-approved written instructions and be performed by personnel who have been trained on these instructions. This compensatory measure assumes that no more that two of the valves will be removed at any one time so that the remaining valve and its associated pump will be available for service if called upon.

It is estimated that at any time during the repair evolution the blank flanges will be able to be installed in the non-essential service water header within one hour. This is an acceptable compensatory action since the non-essential header is designed to provide cooling to the component cooling water heat exchanger during the recirculation phase of a loss-of-cooling accident (LOCA), which is later on in the postulated accident. In this case, the essential service water header will provide cooling to the component cooling water heat exchanger immediately, during the injection phase of the LOCA. Additionally, the design basis for starting a non-essential service water pump during a loss-of-cooling accident currently assumes manual action.

Duration of the Request

This request for enforcement discretion from Technical Specifications 3.0.1, 3.3.F.2 and 3.3.F.3 to allow continued operation of the unit above 350°F for up to 80 hours is being made to facilitate repair of the discharge valves (SWN-2, SWN-2-1 and SWN-2-2) for Service Water Pump Nos. 21, 22 and 23. It is estimated that draining the non-essential header will take about 24 hours, valve repairs will take about 36 hours and filling and venting of the non-essential header will take about 8 hours. This leaves a time margin of about 12 hours for any potential contingency.

JUSTIFICATION (CONTINUED)

Duration of the Request (Continued)

Licensee submits that the duration of the enforcement discretion is justified in that safety-related loads which are normally supplied cooling flow from both the essential and non-essential service water headers will continue to be supplied adequate flow from the three essential service water pumps during the entire repair evolution. Additionally, the compensatory action described above will enable the non-essential service water header to be closed up and able to be re-established within one hour.

Public Health and Safety Implications

The granting of this request would not adversely affect public health and safety since adequate protection will be provided through compensatory measures and design features as described above. This request does not involve an unreviewed safety question or significant hazards consideration. This determination is based upon the following:

1. Since adequate service water flow will continue to be available for all safety-related loads which are normally supplied from both the essential and non-essential service water headers and since the compensatory measures described above can be implemented in a reasonably short time, the safety-related functions of the service water system will continue to be available to mitigate the consequences of the postulated accidents previously evaluated in final safety analysis report. Therefore, there will be no increase in the probability or consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report.

2. Since adequate service water flow to the safety-related service water cooling loads will continue to be available, there will not be any new or different kind of active component failures other than those previously evaluated in the final safety analysis report. Therefore, the possibility of a new or different kind of accident or malfunction than any previously evaluated will not be created.

JUSTIFICATION (CONTINUED)

Public Health and Safety Implications (Continued)

3. Since this evolution will be conducted when the reactor is at hot zero power, the effects of post accident conditions are much less significant than at full power. The total number of service water pumps available on the essential service water header will be consistent with that required by the accident analysis and with that specified in the Technical Specification basis. Therefore, the margin of safety as defined in the basis for any technical specification will not be reduced.

Environmental Consequences

This request for enforcement discretion will not result in an increase in the consequences of an accident previously evaluated. Therefore, this evolution with not result in any adverse or irreversible environmental consequences.

STATION NUCLEAR SAFETY COMMITTEE REVIEW

This request for enforcement discretion and its justification was reviewed by the Station Nuclear Safety Committee and determined not to constitute an unreviewed safety question.

CONCLUSION

This request for enforcement discretion from Technical Specifications 3.0.1, 3.3.F.2 and 3.3.F.3 to allow continued operation of the unit above 350°F for up to 80 hours with the non-essential service water header drained and inoperable and the only safety-related load (Component Cooling Water Heat Exchangers) normally supplied by the non-essential header to be supplied by the essential service water header via an interconnection of the essential and non-essential service water headers is justified. This conclusion is based on the compensatory actions to be taken, the safety significance of the evolution, the duration of the request, the absence of a significant hazards consideration or an unreviewed safety question, the significant advantage of the proposed repair evolution compared to the alternatives and the conclusion that the request does not involve irreversible environmental consequences.