

Paul H. Kinkel
Vice President

Consolidated Edison Company of New York, Inc.
Indian Point Station
Broadway & Bleakley Avenue
Buchanan, NY 10511
Telephone (914) 734-5340
Fax: (914) 734-5923

May 12, 1998

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

Document Control Desk
U.S. Nuclear Regulatory Commission
Mail Station P1-137
Washington, D.C., 20555

Subject: Inservice Test Program Plan Review for Pumps and Valves
Program Scope Update.

Reference: 1) NRC Letter to Con Edison dated October 29, 1997.
2) Con Edison Letter to USNRC dated November 28, 1997.
3) NUREG-1482

In accordance with its commitment to the NRC, Con Edison provides the following information regarding the status of its ongoing review of the Indian Point Unit No. 2 Inservice Test (IST) Program. The process for performing the review, the actions taken to test components that were not previously incorporated in the program, and the schedule for performing required testing are presented. Additionally, testing requirements for various components that were subsequently added to the IST program based upon a recent NRC inspection are also addressed.

NRC Integrated Inspection Report 50-247/97-11 and Notice of Violation (Reference 1), identified several valves for inclusion in the IST Program. Based upon the inspection report, Con Edison added eight Instrument Air System, eleven Service Water System, and three Safety Injection System, valves to the IST Program. One valve (LCV-1130) recommended for inclusion was not added to the program. The Con Edison reply to the Notice of Violation (Reference 2) provided the justification for not including this valve. The inspection report also identified a number of valves that while included in the current IST Program, were not tested in accordance with the ASME/ANSI OM-10 inservice testing requirements. All of these valves have either been tested or are scheduled to be tested during the current maintenance outage. Two solenoid valves (SOV-1177 and SOV-1178) located in the Instrument Air Closed Cooling Water System cannot be tested in compliance with the stroke time requirements of OM-10,

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Paragraph 4.2.1.4. Accordingly, a relief request for an alternate testing method is attached. The NRC also indicated that a full flow test, applied to two parallel check valves in the Auxiliary Boiler Feedwater Pump minimum flow and cooling water lines (BFD-50 and BFD-68 respectively), measured a combined flow rate through both valves instead of each individually. Generic Letter 89-04 indicates that knowledge of total flow through multiple parallel paths does not provide verification of flow. However, the system configuration does not permit determination of the flow through each check valve independently and the system configuration is not susceptible to alteration. Accordingly, an alternative testing method for check valves BFD-50 and BFD-68 is contained in the attached relief request.

The reply to the Integrated Inspection Report and Notice of Violation (Reference 2) indicated that Con Edison would perform a re-evaluation of the IST program selection criteria and review the necessity for IST program scope revision. Con Edison has initiated an IST program review. The review is being performed in accordance with the requirements of ASME/ANSI OMa1988, Addenda to ASME/ANSI OM-1987, Parts 6 and 10. The review is intended to encompass all valves and pumps in the ASME and non-ASME support systems that provide safety-related functions to establish the basis for including or excluding components from the IST program. The review is also intended to establish testing requirements for each component included.

In conducting this review, all valves and pumps within systems categorized as Quality Group A, B, or C as shown on IP2 flow diagrams or identified as an engineered safeguard system or essential support system will be identified as candidates for inclusion in the program. Within each system boundary, all components in a portion of the system that is required to perform a specific function in shutting down and maintaining the reactor in a shutdown condition or in mitigating the consequences of an accident are to be evaluated for inclusion in the IST Program.

To date, the review has identified twenty-two (22) valves that are to be added to the IST program. Of the total added, four (4) valves have been designated as "B passive," but no additional testing is required. The remaining valves are either relief valves (5) or valves that are in safety-related flow paths (13). Two of the valves identified in the flow paths are Residual Heat Removal (RHR) System check valves that provide flow to one of the added relief valves. The flow through the check valves cannot be tested during RHR system operation but can be verified when the valves are exercised open during refueling operation. A relief request to test these valves during refueling and include them in the check valve disassembly program is attached. RHR check valve 741 was identified during the review as a valve to be tested. The valve was full flow tested during the 1997 refueling outage test of the RHR pumps. With the exception of the "B passive" valves, two check valves, and valve 741, all other valves identified to date, will be tested during the current maintenance outage. Due to the on-going nature of the review, it is intended that future components identified for inclusion will be tested as soon as feasible, but may be tested after resumption of plant operation. Components identified for inclusion subsequent to the resumption of plant operation will be evaluated as a "code noncompliance" per Generic Letter 91-18 and NUREG-1482.

The commitment contained in the reply to the Notice of Violation (Reference 2) was to complete the delineated corrective action prior to the 1999 outage. It is anticipated that the initial review of the IST program scope will be completed by the end of the third quarter of

1998. At the culmination of the initial effort, Con Edison will have reviewed all of the systems designated as ASME and non-AMSE support system and will have documented the inclusion or exclusion of all valves contained therein. Upon completion of this effort, Con Edison will revise, as required, and resubmit the IST program document identifying components added or deleted from the program as a result of the review, and will include relief requests and cold shutdown/refueling justifications.

Should you or your staff have any concerns regarding this matter, please contact Mr. Charles W. Jackson, Manager, Nuclear Safety & Licensing.

Very truly yours,

Paul Michel

Attachment

C: Mr. Hubert J. Miller
Regional Administrator-Region I
US Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Mr. Jefferey F. Harold, 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
IST PROGRAM RELIEF REQUEST

Consolidated Edison Company of New York, Inc.
Indian Point Unit No. 2
Docket No. 50-247
May 1998

RELIEF REQUEST BASIS

SYSTEM:

IACC, Instrument Air Closed Cooling

VALVE:

SOV-1177, SOV-1178

FUNCTION:

These valves are in the cooling supply lines to the Instrument Air Aftercooler and the Instrument Air Compressor Bearings. Their function is to open to provide cooling water when the Instrument Air compressors are in service.

TEST REQUIREMENT:

OM-10, Para. 4.2.1.4 (Stroke Time)

BASIS FOR RELIEF:

These valves have no control switches and no indicating lights. They are solenoid operated from a direct wired signal from contact closure on the Instrument Air Compressor Motor control circuit. When the Instrument Air Compressor starts, its associated cooling water supply solenoid valve opens. When the motor stops, the cooling water is no longer necessary and the solenoid valve closes. The solenoid valves are verified to open and close based on the presence of cooling flow in the "bulls-eye" type flow indicators.

Historically, solenoid valve operation has been that they either function correctly or do not operate at all. Solenoid timing has not proven to be an indicator of valve degradation. Nominal solenoid stroke time is less than two seconds and therefore change in stroke time compared to a reference is not required per OM-10, Para. 4.2.1.8.e.

ALTERNATIVE TESTING:

These valves will be exercised quarterly based on the presence and cessation of flow when the Instrument Air Compressors are started and stopped. These valves are stroke tested but timing will be not performed.

REFERENCE:

None-This is a new relief request for valves added to the IST Program.

RELIEF REQUEST BASIS

SYSTEM:

RHR, Residual Heat Removal

VALVE:

829A, 829B

FUNCTION:

The function of these check valves is not specifically defined in the UFSAR. Check valves are to prevent reverse flow. When pressure in the RHR system during RHR operation is higher than the CVCS purification system pressure, check valves are not needed. When the plant is not on RHR, these valves can prevent letdown flow through valves 4055 and HCV-133. For potential RHR overpressurization events, the function of these check valves is to direct water to RV-1836, then to the PRT, to relieve RHR overpressurization.

Another function of these check valves limits cross communication between RHR headers.

TEST REQUIREMENT:

OM-10, Para. 4.3.2 (Exercise)

BASIS FOR RELIEF:

These valves are exercised open during refueling operation to provide routine clean-up of the RCS water. The purification system is only placed in service if the RCS pressure is less than 50 psig. This precludes exercising the check valve quarterly. There is no practical test method to prove valve closure on cessation or reversal of flow.

ALTERNATIVE TESTING:

These check valves will be nominally exercised open during refueling by normal operation of RHR Purification. The valves will be included in the Check Valve Sample Disassembly/Inspection Program at Refueling frequency in accordance with NRC Generic Letter 89-04.

REFERENCE:

None-This is a new relief request for valves added to the IST Program.

RELIEF REQUEST BASIS

SYSTEM:

AFW, Auxiliary Feedwater System

VALVE:

BFD-50, BFD-68

FUNCTION:

The function of these check valves is not specifically defined in the UFSAR.

The function of the Steam-Driven Feedwater Pump Recirculation Check Valve (BFD-50) is to prevent damage to 22 Auxiliary Feedwater Pump by opening to provide > 80 gpm recirculation flow. The function of the Steam-Driven Feedwater Pump Bearing Cooling Water Return Check Valve (BFD-68) is to prevent damage to 22 Auxiliary Feedwater Pump by opening to provide adequate cooling flow to maintain the bearings below 160 degrees F.

Another function of these check valves is to limit reverse flow from the motor-driven auxiliary feedwater pump discharge recirculation return flow paths and from the condensate return line to the Condensate Storage Tank.

TEST REQUIREMENT:

OM-10, Para. 4.3.2 (Exercise)

BASIS FOR RELIEF:

The check valves will be nominally exercised open and closed during testing of 22 Auxiliary Feedwater Pump. The current testing is adequate to determine that there is enough flow through the common return to assure a minimum total auxiliary feedwater pump recirculation flow of 80 gpm. There is no practical test method to prove full valve opening on pump operation or closure on cessation or reversal of flow.

ALTERNATIVE TESTING:

The valves will be included in the Check Valve Sample Disassembly/Inspection Program at Refueling frequency in accordance with NRC Generic Letter 89-04.

REFERENCE:

None-This is a new relief request for valves added to the IST Program.