Indian Point 3
Nuclear Power Plant
P.O. Box 215
Buchanan, New York 10511

914-736-8000

New York Power Authority

March 22, 1996
IPN-96-036

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555

Subject: Indian Point 3 Nuclear Power Plant
Docket No. 50-286
License No. DPR-64
Reply to Notice of Violation 50-286/95-17

Dear Sir:

This letter provides, in Attachment I, the New York Power Authority's response to the subject Notice of Violation. The New York Power Authority agrees with the Notice of Violation contained in NRC Region I Inspection Report 50-286/95-17, dated February 12, 1996.

The commitments made by the New York Power Authority with this letter are contained in Attachment II.

Very truly yours,

Robert J. Barrett
Plant Manager
Indian Point 3 Nuclear Power Plant

Attachments

cc: See next page

010023

JE01

cc: Mr. Thomas T. Martin
Regional Administrator
Region I
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, Pennsylvania 19406-1415

Mr. Curtis J. Cowgill III, Chief
Projects Branch No. 1
Division of Reactor Projects
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, Pennsylvania 19406-1415

U.S. Nuclear Regulatory Commission
Resident Inspectors' Office
Indian Point 3 Nuclear Power Plant

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VIOLATION

During an NRC inspection conducted on December 12, 1995, through January 13, 1996, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," (60 FR 34381; June 30, 1995), the violation is listed as follows:

10 CFR 50, Appendix B, Section XVI, Corrective Actions, requires in part that for significant conditions adverse to quality, measures shall assure that the cause of the condition is determined and corrective actions taken to preclude repetition.

Contrary to the above, effective corrective actions were not taken in response to the July 1995 operation of the reactor coolant system at reduced pressure. The procedure change review effort performed in response to this event did not identify that a term procedure change (TPC) to station operating procedure (SOP)-RHR-1, revision 13, Residual Heat Removal System, had not been evaluated as required by 10 CFR 50.59. This TPC altered the method of cooling the reactor coolant system (RCS) as described in the final safety analysis report by allowing the closure of valve MOV-822A. The closure of this valve during RCS heatup on December 2, 1995, resulted in the lifting of relief valve AC-819A which failed to fully reseat, resulting in the undetected release of approximately 1300 gallons of CCW into the containment building.

This is a Severity Level IV violation (Supplement I)

RESPONSE TO THE VIOLATION

The New York Power Authority agrees with this violation that the need to do a 10CFR50.59 evaluation was not identified during the procedure review effort in response to the July 1995 event.

REASON FOR THE VIOLATION

NYPA has reviewed the circumstances surrounding this violation and concluded that it was due to personnel error. The reasons for this conclusion are explained below.

As part of the corrective action for the low pressure event (LER 95-014-00), an extent of condition review was performed for Operating Procedure revisions. The scope of review covered the period from July 26, 1993 to September 22, 1995. This period is the time when administrative procedure AP-3, "IP3 Procedure Preparation, Review and Approval," was revised to allow the use of an Intent/Applicability Determination screen to be used to determine if a 10CFR50.59 safety screen needed to be performed per procedure MCM-4, "Modification Control Manual Procedure." The preparation and review of nuclear safety evaluation screens and

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nuclear safety evaluations is governed by MCM 4, "Nuclear Safety and Environmental Impact Screens and Nuclear Safety Evaluations."

The procedural changes reviewed were selected using the Nuclear Information Management and Integrated Tracking System (NIMITS) database. A tabulation of each procedural revision with its associated description of the change was extracted from NIMITS for revisions that were entered during this time period.

Approximately 770 operating procedure revisions were reviewed, and those changes that appeared in the judgement of the reviewer likely to warrant a 10CFR50.59 safety screen were highlighted on the NIMITS printout. The procedure change file was then reviewed for those changes highlighted to determine if a 10CFR50.59 safety screen was performed or if the Intent/Applicability Determination screen provided additional information and appropriate justifications for not requiring a 10CFR50.59 safety screen in accordance with AP-3. If the justifications did not appear to support why a 10CFR50.59 safety screen was not required, than a new Intent/Applicability Determination screen was performed to provide the required justifications and/or a 10CFR50.59 safety screen was performed.

Based on the results of the procedure changes reviewed, the lead reviewer judged that the likelihood of a significant change not being properly addressed was low. Therefore, active Term Procedure Changes were not reviewed as part of this effort.

Term Procedure Change (TPC) 95-444 to revision 13 of SOP-RHR-1 was not active at the time of the review and was not identified as being incorporated into revision 14 of SOP-RHR-1. Therefore, it was not separately reviewed.

One of the procedure revisions identified for further review was System Operating Procedure SOP-RHR-1, Revision 14, for the Residual Heat Removal system. Three changes were identified against SOP-RHR-1, Revision 14, in the NIMITS printout. Two revisions dealt with procedural step changes for manipulating valves. One of the valves identified in both changes was valve 882, which subsequently was recognized as a typographical error in one of the change descriptions entered in NIMITS. Also, the format created a perception that the first change description was a continuation, therefore a misreading occurred when it was perceived to be part of the second change and only one change was highlighted.

Both of these factors contributed to the personnel error made when reviewing the change description. Only one of two changes was highlighted as needing a 10CFR50.59 safety screen. A new 10CFR50.59 safety screen was performed for the change that was highlighted, the screen concluded that a Safety Evaluation was not required. The third procedure change was not deemed to require any further review.

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OTHER DEFICIENCIES ASSOCIATED WITH THIS EVENT

Subsequent to the identification of the missed 10CFR50.59 safety screen for the change to SOP-RHR-1, Revision 14, a new safety screen was performed. In performing the 10CFR50.59 safety screen on January 11, 1996 for SOP-RHR-1, the reviewers considered the operating modes of the Component Cooling and RHR systems discussed in the FSAR, as well as the design basis of the systems. The conclusions that a nuclear safety evaluation was not needed was based on an understanding of the FSAR that isolating flow to one heat exchanger was permissible because only one train was needed for cooldown. Also that the isolated heat exchanger would remain available and flow could be re-established, if needed, from the Control Room.

FSAR Section 9.3 states that "the cooldown rate of the reactor coolant and the component cooling water heat exchanger outlet temperature are controlled by regulating the flow through the tube side of the residual heat exchangers. Two remotely operated control valves, downstream of the residual heat exchangers, are used to control flow. Manual throttle valves are used to control component cooling water flow to the residual heat removal heat exchangers and service water flow to the component cooling water heat exchangers. The outlet water temperature of the component cooling heat exchangers is controlled manually by throttling the service water throttle valves."

The FSAR also notes that the effect of having only one pump and one heat exchanger available is the reduction of reactor coolant temperature at a lower rate. The FSAR states "If one of the pumps and /or one of the heat exchangers is not operative, safe operation or safe cooldown of the plant is not affected; however, the time for cooldown is extended." Therefore RCS cooldown can also be accomplished with only one RHR heat exchanger while using the manual throttle valves for temperature control.

While it is now recognized that shutting AC-MOV-822 (A or B) is technically incorrect, it was not apparent to the reviewers that isolating one heat exchanger to better control RCS temperature violates the FSAR.

Because the methodology to allow the use of these valves to be shut for temperature control was subject to interpretation, a 10CFR50.59 Safety Evaluation should have been performed. This would likely have resulted in a different conclusion regarding the acceptability of the proposed temperature control method.

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CORRECTIVE ACTIONS TAKEN

1) A re-review was conducted of the NIMITS printout for the period from July 26, 1993 to September 22, 1995. The re-review covered the changes posted against the procedures highlighted for further review. This review did not identify any similar oversights.

2) AP-3 was revised in October 1995 to require an MCM-4 safety screen to be performed for all procedure revisions and TPC's except for minor editorial changes.

3) Selection of qualified safety reviewers was made more stringent.

4) Review of Term Procedure Changes (approximately 176) for adequacy of safety reviews that were in effect on January 26 1996 was completed. No significant issues were identified.

5) System Operating Procedure (SOP)-RHR-1 was revised to remove the step that allowed the operation of valves AC-MOV-822A and AC-MOV-822B for temperature control.

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CORRECTIVE ACTIONS THAT WILL BE TAKEN TO AVOID FURTHER VIOLATIONS

1) Review of Term Procedure Changes that have been incorporated into procedures between September 22, 1995 and January 26, 1996, to determine if a 10CFR50.59 safety screen is warranted will be completed by April 15, 1996.

2) Review of procedure revisions (approximately 30) made between September 22, 1995 and October 16, 1995, to determine if a 10CFR50.59 safety screen is warranted will be completed by April 15,1996.

3) The specifics regarding why a 10CFR50.59 was deemed to be required for the shutting of AC-MOV-822A or B, will be developed into a case study to qualify safety reviewers. The case study will be issued to qualified safety reviewers.

THE DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

SOP-RHR-1 was changed, in compliance with our 10CFR50.59 implementing procedures on December 7, 1995. This revision removed the alternative that allowed operation of 822A/822B for temp control.

The other corrective actions described in this reply are expected to prevent recurrence of this type of event.

LIST OF COMMITMENTS

Number	Commitment	Due
IPN-96-036-01	Term Procedure Changes that have been incorporated into procedures between September 22, 1995 and January 26, 1996 will be reviewed to determine if a 10CFR50.59 safety screen is warranted.	April 15, 1996
IPN-96-036-02	Procedure revisions made between September 22, 1995 and October 16, 1995, will be reviewed to determine if a 10CFR50.59 safety screen is warranted.	April 15,1996
IPN-96-036-03	The specifics regarding why a 10CFR50.59 was deemed to be required for the shutting AC-MOV-822A or B and the consequences will be developed into a case study to qualify safety reviewers. The case study will be issued to qualified safety reviewers.	April 15, 1996