

DCS



John C. Brons  
Senior Vice President  
Nuclear Generation

March 10, 1987  
IPN-87-014

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

Subject: Indian Point 3 Nuclear Power Plant  
Docket No. 50-286  
Inspection No. 50-286/86-21  
and Notice of Violation dated January 20, 1987

Reference: 1. Letter from Dr. Thomas E. Murley to  
Mr. J. C. Brons dated February 18, 1987

Dear Sir:

This letter provides the Authority's response to Inspection Report Number 50-286/86-21 and the subsequent Notice of Violation, dated January 20, 1987. The date for submitting this response was extended by Reference 1.

Attachment 1 to this letter addresses the points cited in the Notice of Violation. Enclosed is a check in the amount of fifty thousand dollars (\$50,000), for payment of the Civil Penalty imposed in connection with this violation.

Should you or your staff have any questions regarding this matter, please contact Mr. P. Kokolakis of my staff.

Very truly yours,

8703180369 870310  
PDR ADOCK 05000286  
Q PDR

A handwritten signature of John C. Brons in dark ink.  
John C. Brons  
Senior Vice President  
Nuclear Generation

Attachment

cc: Dr. Thomas E. Murley  
Regional Administrator  
U.S. Nuclear Regulatory Commission  
Region I  
631 Park Avenue  
King of Prussia, PA 19406

Resident Inspector's Office  
Indian Point Unit 3  
U.S. Nuclear Regulatory Commission  
Buchanan, NY 10511

11 IE: 14

Mr. J. M. Taylor, Director  
Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Mr. J. D. Neighbors, Sr. Proj. Mgr.  
PWR Project Directorate No. 3  
Division of PWR Licensing-A  
U.S. Nuclear Regulatory Commission  
7920 Norfolk Avenue  
Bethesda, MD 20014

In an effort to reduce the demands on the Control Room operators and utilize shift manpower more efficiently during plant startups, the RO-Rover assumed responsibility for performance of the Pre-Warmup check-off list. This inadvertently reduced the involvement and control of the Senior Reactor Operator in this crucial plant evolution.

Additionally, Plant Operating Procedures did not specifically address manipulation of the Containment Spray and Recirculation Pump control switches in a manner equivalent to other Engineered Safety Feature Pump switches although their importance with respect to the Technical Specifications is the same.

With respect to this event, the RO-Rover was performing the Pre-warmup check-off list in preparation for plant startup. Based on interviews with the involved parties, the operator apparently requested the Control Room operators to place the Containment Spray and Recirculation pump switches in automatic. The check-off list was completed for the pumps indicating their operability, however, the Control Room operators did not complete the requested manipulation of the control switches.

#### Corrective Actions - Immediate

Immediately upon identification of the mispositioned switches, operators placed the switches in automatic. The Pre-Warmup check-off list was performed and all equipment was demonstrated to be in its proper/required condition. Upper management at the plant was promptly apprised of the event and initiated an investigation. All shift crews were briefed on the incident prior to assuming their next watch stand.

#### Corrective Actions - Follow-Up

The follow-up corrective actions have addressed the administrative controls which govern the activities determined to be deficient in this event. Specifically, procedures which deal with plant operation during transient conditions (startup and shutdown) and shift relief and turnover were reviewed and revised to enhance the management controls and oversight on shift operation.

The plant heatup check-off list has been revised and now includes separate lists for pre-200°F and pre-350°F plant conditions. By treating these conditions separately, the operators cognizance of the equipment that must be operable during any particular transient condition or mode is enhanced.

The check-off lists for startup have also been revised to coordinate and reaffirm control by the Senior Reactor Operator and Shift Supervisor. This is accomplished by mandating that the particular check-off list be initiated, performed and completed by a Senior Reactor Operator. Furthermore, the Shift Supervisor is now required to review each major section of the completed check-off list. Both the Shift Supervisor and Senior Reactor Operator must complete the check-off list prior to the mode change. These changes improve the administrative controls in place during transient operations and address the contributing causes noted by the Inspector.



The Plant Operating Procedures (POP) for startup and shutdown also have been reviewed and revised. The procedures have been revised to address the Containment Spray and Recirculation pumps in a manner equivalent to the Safety Injection pumps. The startup POP now specifically addresses the operability requirements of the Containment Spray and Recirculation pumps during cold shutdown and hot shutdown conditions and includes a requirement for the operator to sign off that the pumps are operable. The instructions addressing the high head safety injection pumps also have been clarified. These changes add another level of administrative control on plant operations during transient conditions. Associated procedures for control of the cooldown process have been similarly revised.

The Authority has taken steps to improve the Control Room environment and reduce the demands on the operators attention. Measures have been implemented to better control access to the control room operators. The hierarchy within the Control Room is firmly established and the activities peripheral to operations such as surveillance testing, research activities and casual interactions have been limited.

The foregoing revisions to administrative controls and operating practices are believed to be comprehensive and are intended to establish an environment that will prevent a similar occurrence in the future. In addition, the Authority has taken action to enhance controls on shift turnover procedures as described in the following paragraph. These steps are intended to provide assurance that if such an event occurred again it would be detected at the next watch relief.

The Authority has revised the Shift Relief and turnover procedure to specifically require the oncoming Senior Reactor Operator and Shift Supervisor to review individual Control Room panels and document the same on the Shift Relief and Turnover Checklist. Prior to being relieved of his shift, the Senior Reactor Operator will prepare a Shift Relief and Turnover checklist for review by the oncoming shift Senior Reactor Operator and Shift Supervisor. These changes will enhance the administrative controls currently in place for shift turnover and further elevate the operator's attention to detail.

#### Summary

All corrective actions described herein have been completed.

The Authority considers the actions to be comprehensive and appropriate to enhance the level of oversight of shift activities by shift management. The changes will promote an increased awareness to detail above that which is already prevalent. The changes to plant operating procedures and check-off lists provide multiple layers of administrative control which will ensure the equipment required by the Indian Point 3 Technical Specifications is operable at the appropriate time during plant transient operations.

## ATTACHMENT 1

### Violation

Technical Specification Limiting Conditions for Operation 3.3.A.1.d and 3.3.B.1.b respectively require that the reactor shall not be heated up above the cold shutdown condition (i.e., the reactor coolant system average temperature shall not exceed 200°F) unless one of the two recirculation pumps and both containment spray pumps together with the associated piping and valves are operable.

At approximately 1:30 a.m. on September 2, 1986, the reactor was heated up above the cold shutdown condition (i.e., the reactor coolant system temperature exceeded 200°F) and, at the time, both recirculation pumps and containment spray pumps were inoperable, and remained inoperable until 7 a.m. on that same day, because of the fact that the pump control switches in the control room were in the stop pullout position rather than the auto position as required.

The condition represented a violation of the referenced Technical Specifications.

### Response

To the extent the containment spray pumps and recirculation pumps are considered inoperable when their control switches are not in the automatic position, the Authority admits that Technical Specifications 3.3.A.1.d and 3.3.B.1.b were not adhered to for a period of approximately six hours during the plant heatup on September 2, 1986.

Plant safety was never compromised during this event since both sets of pumps were functional as demonstrated by surveillance testing and capable of manual operation for the control room. Indication was also available to the control room operators which would have prohibited continued heatup of the plant above 350°F with the control switches for the Containment Spray and Recirculation pumps in the non-automatic condition.

### Reasons for Violation

The violation of Technical Specifications during plant heatup can best be described as a reduction in administrative control on the part of the shift management as afforded by procedures. Several factors contributed to this reduction in control. The governing check-off list combined conditions necessary to exceed 200°F and other conditions necessary to exceed 350°F. Also, the incorporation of an additional licensed operator on shift who is normally assigned duties outside the control room in response to item I.A.1.3 of NUREG-0737 had some effect. This position, designated the Reactor Operator - Rover (RO-Rover), was qualified to perform equipment manipulations and hence perform check-off lists. The RO-Rover, however, is not considered a control room position.