

Indian Point 3  
Nuclear Power Plant  
P.O. Box 215  
Buchanan, New York 10511  
914 736-8001



**New York Power  
Authority**

Joseph E. Russell  
Resident Manager

November 3, 1992  
IP3-NRC-92-083

License No. 50-286  
Docket No. DPR-64

Mr. James Lieberman, Director  
Office of Enforcement  
U.S. Nuclear Regulatory Commission  
Mail Stop 7H5  
Washington, DC 20555

**Re: NRC letter, T. Martin to NYPA, R. Beedle, "Notice of Violation and Proposed Imposition of Civil Penalty - \$100,000 (NRC Inspection Report No. 50-286/92-20)," dated September 24, 1992.**

Dear Mr. Lieberman:

The Authority has reviewed the Notice of Violation and provides its response in Attachment I to this letter.

In the Notice of Violation the NRC requested the following:

"In addition, your response should also address any broad actions, and attendant schedule, for strengthening the corrective action programs throughout the Indian Point 3 organization."

In response to your request, the violation responses address programmatic issues and plant hardware concerns.

In addition, the Authority has established a task force to review the entire work control/corrective action process at Indian Point Unit 3. This study will examine the level of integration among all the different organizations at IP3 affecting the work control process. The goal of this task force is to improve the work control process at IP3 and incorporate functional interfaces of the ROME (Reliable On-line Maintenance Environment software) system such as the preventive maintenance program, the surveillance program, cost accounting, manpower scheduling, outage scheduling and the PARIS (Power Authority Reporting and Information Systems) system. The final report will be completed by the end of November 1992.

050043

9211090060 921103  
PDR ADDCK 05000286  
Q PDR

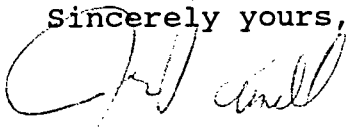
*Rec'd only copy of chel.*

*JEH*

Attached to this letter is a check for the Civil Penalty in the amount of \$100,000.

If you have any questions, please contact Mike Peckham at (914) 736-8041.

Sincerely yours,



Joseph E. Russell  
Resident Manager  
Indian Point 3  
Nuclear Power Plant

jer/br/rj  
attachments

cc: U.S. Nuclear Regulatory Commission (Original)  
Attn: Document Control Desk  
Mail Station P1-137  
Washington, DC 20555

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

Resident Inspector's Office  
Indian Point 3  
U.S. Nuclear Regulatory Commission  
P.O. Box 337  
Buchanan, NY 10511

**ATTACHMENT TO NOTICE OF VIOLATION AND  
PROPOSED IMPOSITION OF CIVIL PENALTY  
INSPECTION REPORT NO. 50-286/92-20**

**Violation I.A**

- A. 10 CFR 50.55a(g) requires, in part, that components shall meet the requirements of paragraph (g)(4) of this section and piping shall meet the requirements applicable to components which are classified as ASME Code Class 3.

10 CFR 50.55a(g)(4) requires, in part, that components which are classified as ASME Code Class 3 shall meet the requirements set forth in applicable editions of Section XI of the ASME Boiler and Pressure Vessel Code. The applicable edition of the Code is the 1983 Edition and Summer 1983 Addenda.

Section XI, Article IWD-4000 of the ASME Boiler and Pressure Vessel Code [1983 edition and summer 1983 addenda] provides the rules and requirements for repair of the pressure retaining boundary of Class 3 components. In IWD-4120, it requires the completion of code repairs of flaws (defects) in Class 3 components of light-water cooled power plants when the defects exceed the Acceptance Standards of Flaw Indication set forth in Article IWA-3000.

Contrary to the above, although the licensee identified, September 1991 and May 1992, through-wall leaks in certain ASME Code Class 3 piping, and those leaks constituted defects which exceeded the standards of flaw indication in IWA-3000, as of May 18, 1992, the licensee did not repair, or provide for replacement of, piping associated with those through-wall defects. The defects existed in ASME Code Class 3 service water system piping associated with (1) welds upstream of emergency diesel generator (EDG) outlet flow control valves 1176 and 1176A; (2) supply and return lines for the instrument air closed cooling system; and (3) the control room air conditioning service water supply line number 1224.

**Response to Violation I.A**

The Authority agrees with the violation.

The root cause of this violation is the ineffective communication of standards and directions for monitoring, reporting, evaluating, and repairing through-wall leaks in ASME code class 3 piping. This led to the improper characterization of the leaks in the Service Water System (SWS). Individuals within the work control process incorrectly prioritized the Service Water System piping leaks.

A weakness in follow-up activities associated with generic letters not requiring a response was also identified.

**ATTACHMENT TO NOTICE OF VIOLATION AND  
PROPOSED IMPOSITION OF CIVIL PENALTY  
INSPECTION REPORT NO. 50-286/92-20**

The following corrective actions have been completed:

- The leaks identified have been repaired in accordance with ASME code requirements.
- Inspection records for code class 3 piping in the plant were reviewed and no throughwall leaks were identified.
- Administrative procedures were revised to provide proper direction concerning the repair of code class 3 piping.

The revisions include:

- Establishing controls to have a plant significant occurrence report written upon identifying throughwall leaks in code class 1, 2, 3 piping to ensure management attention and initiate the reportability process.
- Categorize throughwall leaks in code class 1, 2, 3 for proper scheduling and prioritization of repair in the IP3 work control program.
- Controls to establish accountability and direction to verify repairs and perform engineering evaluations.

The following corrective actions are in progress:

- An improved generic letter implementation/review program is in the process of being developed and will be completed by November 30, 1992.
- An independent audit by Quality Assurance (QA) of IP3's implementation of a sample of generic letters not requiring responses has been done. The final report will be issued by November 30, 1992.

ATTACHMENT TO NOTICE OF VIOLATION AND  
PROPOSED IMPOSITION OF CIVIL PENALTY  
INSPECTION REPORT NO. 50-286/92-20

Violation I.B

- B. 10 CFR Part 50, Appendix B, Criterion XVI Corrective Action, requires, in part, that measures shall be established to assure that conditions adverse to quality, such as failures, deficiencies and deviations, are promptly identified and corrected.

Contrary to the above, conditions adverse to quality existed at the Indian Point Unit 3 facility, and the conditions were not promptly identified and/or corrected to preclude repetition, as evidenced by the following examples:

1. On January 17, 1991, inadequate corrective action was taken when the licensee initiated a temporary modification which removed the high differential pressure (D/P) control room alarm for the service water system Zurn strainers, and placed the strainers on an automatically-timed backwash (27 minutes every eight hours); without addressing the degraded operational condition of the service water Zurn strainers which included the inoperability of four out of six local strainer D/P indicators (one had a one-year old deficiency tag, one was missing, one was isolated by an operating order and one was indicating 90 pounds of pressure with the pump off). In addition, prompt corrective action was not taken when the inoperability of three out of six automatic backwash control valves (one with a deficiency tag dated February 1992, and two with deficiency tags dated March 1992) were identified, nor were deficiencies concerning the manual strainer backwash procedure being utilized by plant operators corrected.
2. Although the licensee was aware, as of January 1992 (via the findings of NRC Inspection No. 50-286/91-26), of recurring discrepancies associated with surveillance test data, such as the failure to correctly evaluate emergency diesel generator surveillance test data in November 1991, the licensee did not effectively address the weaknesses in the surveillance review process, as evidenced by the following examples:
  - a. On February 11, 1992, Surveillance Tests 3PT-Q58, "Backup Service Water Pump Operational Test", was performed which contained a math error in the calculation of pump differential pressure for both pumps that resulted in the recorded differential pressure being approximately 45 psi lower than actual; and

ATTACHMENT TO NOTICE OF VIOLATION AND  
PROPOSED IMPOSITION OF CIVIL PENALTY  
INSPECTION REPORT NO. 50-286/92-20

- b. Surveillance Test 3PT-M35, "Service Water Pump Operational Test", performed on February 1 and May 9, 1992, utilized the wrong data (i.e., velocity versus displacement) and entered it in the table used for the pump operability determinations.

Response to Violation I.B.1

The Authority agrees with the violation.

The root cause of this violation is the ineffective analysis and prioritization of identified plant deficiencies. The work control program lacks the controls to evaluate the combined effect of system deficiencies on the condition of the system as a whole.

The following corrective actions have been completed:

- The subject deficiencies in the Zurn strainer area have been corrected.
- The temporary modification has been updated and a safety evaluation supported a determination of no unreviewed safety questions.
- The engineering for a modification to restore the alarm function has been completed and will be installed by December 31, 1992.

To ensure operability of all plant systems, management personnel have been assigned to be system managers. System managers are responsible to perform system walkdowns to verify operability and evaluate the effect of deficiencies on the system. Preliminary walkdowns were completed on September 22, 1992. All systems were verified operable.

An additional walkdown was performed using the NRC Inspection Manual as a guideline and included completing a report of the impact of the following items on operability:

- plant identified deficiencies
- work requests
- temporary modifications
- inspection of components
- support systems
- outstanding PMs
- Quality Assurance non-conformance reports

Eighty-four percent of the reports have been completed (157 of 188 reports). By November 20, 1992 the reports will be completed and

**ATTACHMENT TO NOTICE OF VIOLATION AND  
PROPOSED IMPOSITION OF CIVIL PENALTY  
INSPECTION REPORT NO. 50-286/92-20**

a list of priority action items for resolution will be developed from the reports. By December 20, 1992 a schedule to resolve the items will be completed.

System managers will be replaced by permanent system engineers. Staffing of the system engineering positions will be completed by March 31, 1993.

Each business day, the IP3 station identifies a top five problem list. The list is developed by the Operations Manager based upon plant safety concerns. A meeting among department managers ensures communication and action to resolve the concerns.

**Response to Violation I.B.2**

The Authority agrees with the violation.

The root cause and corrective action of the previous event were revisited and an additional peer review of surveillance data has been initiated.

Just prior to the issuance of this response an error was identified in a surveillance test that was not detected during the review process after these corrective actions were taken. This event is being investigated to resolve this concern. Upon completion of the investigation, the corrective actions will be submitted to the NRC.

**Violation I.C**

- C. 10 CFR 50.59 states, in part, that changes may be made to the facility as described in the safety analysis report without prior NRC approval unless the proposed change involves an unreviewed safety question. It further states that records must be maintained that include a written safety evaluation which provides the bases for the determination that the change does not involve an unreviewed safety question. In addition, Plant Administrative Procedure 13, established pursuant to Technical Specification 6.8.1, requires review of 10 CFR 50.59 evaluations, by the Plant Operating Review Committee.

Contrary to the above, the licensee made changes to the facility prior to the completion of a written safety evaluation, or with an inadequately written safety evaluation, to provide a basis that the change did not involve an unreviewed safety question. Specifically:

1. FSAR Section 9.6.1, Service Water System, notes that each service water header is supplied by three service water pumps, each with an automatic, continuous, rotary-type

**ATTACHMENT TO NOTICE OF VIOLATION AND  
PROPOSED IMPOSITION OF CIVIL PENALTY  
INSPECTION REPORT NO. 50-286/92-20**

strainer (Zurn) in the pump discharge to remove solids. However, the safety evaluation written on January 17, 1991, for the removal of the automatic backwash feature of the Zurn strainers and the strainer high D/P control room alarm, was inadequate in that it did not reflect actual plant conditions. The safety evaluation stated that the Zurn strainers would automatically backwash as a function of time and that local D/P indicators could be used to monitor the strainers and verify any service water system low pressure alarms. These statements did not reflect plant conditions in that four out of six local strainer D/P indicators were inoperable when the safety evaluation was written and three of the six automatic backwash valves subsequently became inoperable and the safety evaluation was not appropriately revised. Accordingly, the licensee did not provide an adequate basis for the determination that the changes did not involve an unreviewed safety question.

2. FSAR Section 9.6.1, Service Water System, notes that three backup service water pumps provide cooling water from the discharge canal in the unlikely event that a storm-driven vessel damaged the service water intake structure.

However, the number 37 service water pump motor (one of the three backup service water pumps) was removed from service by means of a temporary modification on July 26, 1990, without an adequate safety evaluation. The safety evaluation was inadequate in that it did not consider possible damage to the service water intake structure from storm-driven vessels that originated from sources other than the moth-balled fleet of World War II naval vessels (now removed). Accordingly, the evaluation did not provide adequate bases for the determination that the modification did not involve an unreviewed safety question.

**Response to Violation I.C**

The Authority agrees with the violation.

The root cause is that the IP3 temporary modification process lacked clarity and accountability. The following corrective actions have been completed:

- The two temporary modifications identified, the Zurn strainer and backup service water pump, have been reevaluated and no unreviewed safety questions were



ATTACHMENT TO NOTICE OF VIOLATION AND  
PROPOSED IMPOSITION OF CIVIL PENALTY  
INSPECTION REPORT NO. 50-286/92-20

identified.

The following corrective actions are planned:

- The procedure associated with the screening process for safety evaluations will be revised to meet the guidelines of NSAC-125 by December 1, 1992
- Revise the temporary modification procedure by December 1, 1992 to:
  - Establish the department manager responsible for presenting the temporary modification to PORC with a completion date, and ensuring permanent repairs are scheduled for outages.
  - Ensuring that temporary modifications that exceed the completion date will be presented to PORC and justified by the department manager for extension. This includes the impact of changing plant conditions on the safety evaluations.
  - The Technical Services Manager will make a quarterly status report to PORC on the status of all Temporary Modifications.
  - Establish accountability for tracking these activities.
  - The Operations department will be accountable to ensure proper completion and distribution of temporary modifications.

**ATTACHMENT TO NOTICE OF VIOLATION AND  
PROPOSED IMPOSITION OF CIVIL PENALTY  
INSPECTION REPORT NO. 50-286/92-20**

**Violation II**

10 CFR Part 50, Appendix B, Criterion XVI Corrective Action, requires, in part, that measures shall be established to assure that conditions adverse to quality, such as failures, deficiencies and deviations, are promptly identified and corrected.

Contrary to the above, in September 1988, the licensee identified a condition adverse to quality related to leakage from the letdown line relief valve, but as of July 9, 1992, had not taken adequate corrective action. The action taken by the licensee to increase the control room alarm setpoint from 130 F to 210 F in 1988 was inadequate in that: (1) FSAR Section 6.7.2 identified the valve as designed for essentially zero leakage at normal system operating pressure, and no effective action was taken to terminate the leakage, and (2) the Operations Department noted on September 20, 1988 that a safety evaluation had not been conducted for the setpoint change, and technical services did not perform the evaluation until October 3, 1991. Further, the 1991 evaluation noted that the relief valve should be repaired or replaced so that it operated properly, but the licensee had not scheduled replacement or repair of the valve during the next outage.

**Response to Violation II**

The Authority agrees with the violation.

The root cause for this violation is inadequate temporary modification and setpoint control procedures.

The following corrective actions are being taken:

- The temporary modification was reevaluated and there was no safety significance.
- An engineering analysis has been completed, including temperature trending, and heat conduction calculations.
- Specify and purchase a replacement valve.
- An administrative procedure for setpoint control was implemented on June 8, 1990. This procedure resolves the concern for setpoint controls in 1988.
- The temporary modification procedure was revised to require that setpoint changes be documented by a temporary modification, completed February 2, 1992.
- The request for engineering services procedure was

**ATTACHMENT TO NOTICE OF VIOLATION AND**  
**PROPOSED IMPOSITION OF CIVIL PENALTY**  
**INSPECTION REPORT NO. 50-286/92-20**

revised and provides a new form which allows a more extensive characterization of the request. This prompts the author to answer an up front evaluation of the safety significance.