

January 31, 2000

Mr. Michael J. Colomb  
Site Executive Officer  
New York Power Authority  
James A. FitzPatrick Nuclear Power Plant  
Post Office Box 41  
Lycoming, New York 13093

SUBJECT: NRC INTEGRATED INSPECTION REPORT 05000333/1999010

Dear Mr. Colomb:

On January 8, 2000, the NRC completed an inspection at the James A. FitzPatrick Nuclear Power Plant. The results of this inspection were discussed on January 20, 2000, with Mr. Zaremba and other members of your staff. The enclosed report presents the results of that inspection.

This inspection was an examination of activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. Within these areas, the inspection consisted of a selected examination of procedures and representative records, observations of activities, and interviews with personnel.

The report discusses two issues of very low risk significance (GREEN). The issues of very low safety significance have been entered into your corrective action program and are discussed in the summary of findings and in the body of the attached Inspection Report. These issues, (1) the failure to promptly identify conditions adverse to quality and to take timely corrective actions to address such conditions, and (2) the failure to meet the Technical Specification requirements for the standby gas treatment system train B charcoal filter for approximately six months, were determined to involve violations of NRC requirements, but because of the low safety significance the violations were not cited.

Michael J. Colomb

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In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosures will be placed in the NRC Public Document Room. Should you have any questions regarding this report, please contact me at 610-337-5211.

Sincerely,

***Original Signed by:  
Glenn W. Meyer***

Glenn W. Meyer, Chief  
Projects Branch 3  
Division of Reactor Projects

Docket No. 05000333  
License No. DPR-59

Enclosure: Inspection Report 05000333/1999010

cc w/encl:

C. D. Rappleyea, Chairman and Chief Executive Officer  
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R. Hiney, Executive Vice President for Project Operations  
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R. Patch, Director - Quality Assurance  
G. C. Goldstein, Assistant General Counsel  
C. D. Faison, Director, Nuclear Licensing, NYPA  
G. Tasick, Licensing Manager  
T. Morra, Executive Chair, Four County Nuclear Safety Committee  
Supervisor, Town of Scriba  
C. Donaldson, Esquire, Assistant Attorney General, New York Department of Law  
P. Eddy, Electric Division, Department of Public Service, State of New York  
G. T. Goering, Consultant, NYPA  
J. E. Gagliardo, Consultant, NYPA  
E. S. Beckjord, Consultant, NYPA  
F. William Valentino, President, New York State Energy Research  
and Development Authority  
J. Spath, Program Director, New York State Energy Research and Development Authority  
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A. Slater, GRACE  
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**U.S. NUCLEAR REGULATORY COMMISSION**

**REGION I**

Docket No.: 05000333

License No.: DPR-59

Report No.: 1999010

Licensee: New York Power Authority (NYPA)

Facility: James A. FitzPatrick Nuclear Power Plant

Location: Post Office Box 41  
Scriba, New York 13093

Dates: November 29, 1999, to January 8, 2000

Inspectors: R. A. Rasmussen, Senior Resident Inspector  
R. A. Skokowski, Resident Inspector

Approved by: G. W. Meyer, Chief  
Projects Branch 3  
Division of Reactor Projects

## SUMMARY OF FINDINGS

James A. FitzPatrick Nuclear Power Plant  
NRC Inspection Report 05000333/1999010

The report covered a six-week period of resident inspection. The significance of issues is indicated by their color (GREEN, WHITE, YELLOW, RED) and was determined by the Significance Determination Process (SDP) in draft Inspection Manual Chapter 0609 (see Attachment 1).

### Mitigating Systems

- GREEN. Two examples existed of a Non-Cited Violation (NCV) of corrective action requirements associated with NYPA's failure to promptly identify conditions adverse to quality and to take timely corrective actions to address such conditions. Specifically, (1) following the identification by the inspectors that the surveillance testing for the High Pressure Coolant Injection (HPCI) system was inadequate to monitor HPCI governor control system performance due to the failure to incorporate vendor recommendations, it took NYPA approximately one month to incorporate this condition adverse to quality into their corrective actions program; and (2) the corrective actions for repeated failures of the HPCI electronic speed limiter setpoint to meet the as-found calibration acceptance criteria were not implemented for six weeks. These issues were determined to have very low risk significance because there was no impact on HPCI system operability. Nonetheless, the failure to identify and correct conditions adverse to quality is a violation of NRC requirements. These issues were two examples of a Non-Cited Violation. (Section 1R22)

### Barrier Integrity

- GREEN. On October 14, 1999, NYPA determined that the standby gas treatment system train B charcoal filter had been unable to meet the Technical Specification (TS) requirements for approximately six months. The failure to meet the Technical Specification requirements was determined to have very low risk significance (GREEN) using the SDP, because the changes in charcoal filter efficiency had little impact on the large early release frequency. The failure to meet technical specifications, a violation of NRC requirements, was determined to be a Non-Cited Violation. (Section 4OA4.1)

## Report Details

### **SUMMARY OF PLANT STATUS**

The inspection period began with the unit at full power. On November 30, 1999, reactor power was reduced to approximately 35 percent due to problems with the B reactor feed pump speed controller. On December 2, the plant was returned to full power operation. On December 31, reactor power was reduced to 80 percent as a precaution for the year 2000 transition. Power was returned to 100 percent on January 1, 2000 and remained at full power for the remainder of the period.

#### **1. REACTOR SAFETY**

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

##### 1R03 Emergent Work

###### a. Inspection Scope

The inspectors reviewed NYPA's actions associated with the following emergent work items:

- A considerable oil leak identified in the High Pressure Coolant Injection (HPCI) hydraulic governor control system.
- A failed attempt to manually transfer the Uninterruptable Power Supply (UPS) to the alternate power source during preparations for preventive maintenance on the UPS motor generator sets.

###### b. Observations and Findings

There were no findings identified.

##### 1R04 Equipment Alignments

###### a. Inspection Scope

The inspectors verified the alignment of the A core spray system while the B core spray was out of service for planned maintenance.

###### b. Observations and Findings

There were no findings identified.

1R05 Fire Protection

a. Inspection Scope

The inspectors reviewed fire protection equipment during inspections of the emergency diesel generator and emergency switchgear rooms.

b. Observations and Findings

There were no findings identified.

1R12 Maintenance Rule (MR) Implementation

a. Inspection Scope

The inspectors reviewed the implementation of 10 CFR 50.65 (MR) as related to the following:

- Tracking of HPCI system unavailability.
- Evaluation for exceeding the plant level monitoring target of two scrams per 7000 critical hours.
- Actions taken for recurring failures of the A containment air dilution tank rupture disk.

b. Observations and Findings

There were no findings identified.

1R13 Maintenance Work Prioritization and Control

a. Inspection Scope

The inspectors reviewed the prioritization and control of activities associated with:

- Planned maintenance of the D emergency diesel generator.
- Planning and contingency actions taken for the year 2000 transition.

b. Observations and Findings

There were no findings identified.

### 1R15 Operability Evaluations

#### a. Inspection Scope

The inspectors reviewed operability determinations associated with the following plant equipment degradations:

- Operability of the Emergency Service Water (ESW) system after a system relief valve failed to lift within the specified tolerances during testing.
- Operability of the Reactor Core Isolation Cooling (RCIC) system after the system was exposed to pressures in excess of design pressure during operations in response to the May 1, 1998 scram.
- Operability evaluation due to observations of an indication of decreasing core flow.

#### b. Observations and Findings

There were no findings identified.

### 1R19 Post Maintenance Testing

#### a. Inspection Scope

The inspector reviewed and observed portions of the following post maintenance testing:

- Testing performed following troubleshooting and repair activities associated with an oil leak which was identified on the HPCI hydraulic governor control system.
- Testing performed following planned maintenance on the A core spray system.

#### b. Observations and Findings

There were no findings identified.

### 1R22 Surveillance Testing

#### a. Inspection Scope

The inspectors reviewed corrective actions associated with problems related to HPCI system testing described in NRC Inspection Report (IR) 05000333/1999009 including testing of the system governor control, and the repeated failures of the HPCI electronic speed limiter setpoint to meet the as-found calibration acceptance criteria.

b. Observations and Findings

The inspectors identified two examples of a Non-Cited Violation of the corrective action requirements associated with NYPA's failure to promptly identify conditions adverse to quality and to take timely corrective actions to address such conditions.

First, NYPA failed to identify and incorporate into their corrective action program, inadequacies associated with their test program for HPCI. In February 1990 NYPA documented test inadequacies and recommendations based on their review of General Electric (GE) Service Information Letter (SIL) 336, Revision 1, "Surveillance Testing Recommendations for HPCI and RCIC Systems," dated December 8, 1989. On approximately November 15, 1999, the inspectors identified and brought to NYPA's attention that they had failed to incorporate these recommendations. However, this condition adverse to quality was not entered into the corrective action program until December 13, 1999, after the issue was discussed at the NRC exit meeting for IR 05000333/1999009.

Second, the corrective actions for repeated failures of the HPCI electronic speed limiter setpoint to meet the as-found calibration acceptance criteria were not completed in a timely manner. Corrective actions developed in response to Deficiency Event Report (DER) 99-2409, initiated on November 1, 1999, described weekly monitoring of the HPCI flow controller calibration. However, NYPA failed to implement this corrective action until December 6, 1999, approximately six weeks after the corrective action was initiated.

These issues were considered to have very low risk significance (GREEN) using the Significance Determination Process (SDP) phase 1 evaluation, because there was no impact to the operability of the system. Nonetheless, the failure to identify and correct these conditions is a violation of 10 CFR 50 Appendix B, Criterion XVI, "Corrective Action," which requires, in part, that conditions adverse to quality be promptly identified and corrected. This violation is considered a Non-Cited Violation, consistent with the Interim Enforcement Policy for pilot plants. The issues associated with this violation are in the corrective action program as listed above. **(NCV 05000333/1999010-01)**

**4. OTHER ACTIVITIES [OA]**

4OA1 Identification and Resolution of Problems

Findings regarding the identification and resolutions of problems were identified and described in Section 1R22 of this report.

4OA2 Performance Indicator Verification

a. Inspection Scope

The inspector reviewed the performance indicators for HPCI system unavailability. The inspector reviewed records for the period of January 1, 1997, through December 31, 1999.

b. Observations and Findings

There were no findings identified.

4OA4 Other

.1 (Closed ) LER 50000333/19990009: Standby Gas Treatment System Train B Charcoal Efficiency Less than Required.

a. Inspection Scope

The inspector reviewed the Licensee Event Report (LER) and verified the replacement and testing of the standby gas treatment system charcoal filter.

b. Observations and Findings

On October 14, 1999, NYPA determined that the standby gas treatment system train B charcoal filter had been unable to meet the Technical Specification (TS) requirements for approximately six months. The cause of this event was the failure of personnel to recognize and respond to an unsatisfactory laboratory report.

Technical Specification 4.7.c requires that the charcoal filter absorption capability be demonstrated once per year. NYPA procedure RP-RESP-30.02 requires the filter efficiency to equal or exceed 99.8 percent. Test results received on May 17, 1999, reported an efficiency of 99.4 percent. However, this deficiency was not identified by NYPA until October 14, 1999. Upon identification, NYPA entered the appropriate Technical Specification limiting condition for operation (LCO) and replaced the charcoal filter.

Calculations performed by NYPA concluded that an efficiency of 99.0 percent would have been adequate to meet the design basis safety function. Therefore, the failure to meet the Technical Specification requirements was determined to have very low risk significance using the SDP (GREEN), because the changes in charcoal filter efficiency had little impact on the large early release frequency. However, the failure to meet technical specifications represented a violation of NRC requirements, and was determined to be a Non-Cited Violation, consistent with the Interim Enforcement Policy for pilot plants. This violation is in the corrective action program as Deviation Event Report (DER) 99-02027. **(NCV 05000333/1999010-02).**

.2 (Closed) LER 50-333/99-007-01: Both Trains of Core Spray Inoperable Due to Out of Tolerance Time Delay in the Pump Start Interlock Relays. This event and the original LER were discussed in NRC Inspection Report 50-333/99-008. The only change provided in this LER supplement was the scheduled corrective action completion date. No new issues were revealed during an in-office review of this LER.

- .3 (Closed ) LER 50-333/99-011: High Pressure Coolant Injection System Inoperable Due to Higher Than Normal Turbine Speed. This event was discussed in NRC Inspection Report 50-333/99-009. No new issues were revealed during an onsite review of this LER.

4OA5 Meetings

Exit Meeting Summary

On January 20, 2000, the inspectors presented the inspection results to Mr. A. Zaremba and other members who acknowledged the findings presented.

During the exit, two issues of very low risk significance were discussed that were determined to be non cited violations (NCVs). Should NYPA elect to contest these NCVs, a written response within 30 days of the date of this Inspection Report, with the basis for their denial, should be sent to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555-0001; with copies to the Regional Administrator, Region I; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, D.C. 20555-0001; and the NRC Resident Inspector at the FitzPatrick facility.

The inspectors asked the NYPA personnel whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

Public Meeting

On January 6, 2000, the NRC conducted a public meeting in the town of Oswego to discuss the new NRC inspection program being piloted at the FitzPatrick plant. Members of the public and media were in attendance.

**PARTIAL LIST OF PERSONS CONTACTED**Licensee

P. Brozenich, Operations Manager  
M. Colomb, Site Executive Officer  
R. Converse, Tactical Assessment Coordinator  
J. Flaherty, Quality Assurance Manager  
D. Kieper, General Manager Maintenance  
D. Lindsey, Plant Manager  
W. O'Malley, General Manager Operations  
K. Pushee, Radiological Protection Supervisor  
D. Ruddy, Director Design Engineering  
G. Tasick, Licensing Manager  
A. Zaremba, General Manager Support Services

**ITEMS OPENED, CLOSED, AND DISCUSSED**Opened

None

Opened and Closed

NCV 05000333/1999010-01: The failure to promptly identify conditions adverse to quality and to take timely corrective actions to address such conditions.

NCV 05000333/1999010-02: The failure to meet the Technical Specification requirements for the standby gas treatment system train B charcoal filter for approximately six months.

Closed

LER 50-333/99-009: Standby Gas Treatment System Train B Charcoal Efficiency Less than Required

LER 50-333/99-007-01: Both Trains of Core Spray Inoperable Due to Out of Tolerance Time Delay in the Pump Start Interlock Relays.

LER 50-333/99-011: High Pressure Coolant Injection System inoperable Due to Higher Than Normal Turbine Speed.

**LIST OF ACRONYMS USED**

|      |                                    |
|------|------------------------------------|
| CFR  | Code of Federal Regulations        |
| DER  | Deficiency and Event Report        |
| ESW  | Emergency Service Water            |
| GE   | General Electric                   |
| HPCI | High Pressure Coolant Injection    |
| IR   | Inspection Report                  |
| LER  | Licensee Event Report              |
| MR   | Maintenance Rule                   |
| NCV  | Non-Cited Violation                |
| NRC  | Nuclear Regulatory Commission      |
| NYPA | New York Power Authority           |
| RCIC | Reactor Core Isolation Cooling     |
| SDP  | Significance Determination Process |
| SIL  | Service Information Letter         |
| TS   | Technical Specification            |
| UPS  | Uninterruptable Power Supply       |

## ATTACHMENT 1

# NRC's REVISED REACTOR OVERSIGHT PROCESS

The federal Nuclear Regulatory Commission (NRC) revamped its inspection, assessment, and enforcement programs for commercial nuclear power plants. The new process takes into account improvements in the performance of the nuclear industry over the past 25 years and improved approaches of inspecting safety performance at NRC licensed plants.

The new process monitors licensee performance in three broad areas (called strategic performance areas): reactor safety (avoiding accidents and reducing the consequences of accidents if they occur), radiation safety (protecting plant employees and the public during routine operations), and safeguards (protecting the plant against sabotage or other security threats). The process focuses on licensee performance within each of seven cornerstones of safety in the three areas:

### Reactor Safety

- Initiating Events
- Mitigating Systems
- Barrier Integrity
- Emergency Preparedness

### Radiation Safety

- Occupational
- Public

### Safeguards

- Physical Protection

To monitor these seven cornerstones of safety, the NRC uses two processes that generate information about the safety significance of plant operations: inspections and performance indicators. Inspection findings will be evaluated according to their potential significance for safety, using the Significance Determination Process, and assigned colors of GREEN, WHITE, YELLOW or RED. GREEN findings are indicative of issues that, while they may not be desirable, represent very low safety significance. WHITE findings indicate issues with low to moderate safety significance, which may require additional NRC inspections. YELLOW findings are more serious issues with substantial safety significance and would require the NRC to take additional actions. RED findings represent issues with high safety significance with an unacceptable loss of safety margin and would result in the NRC taking significant actions that could include ordering the plant shut down.

Performance indicator data will be compared to established criteria for measuring licensee performance in terms of potential safety. Based on prescribed thresholds, the indicators will be classified by color representing incremental degradation in safety: GREEN, WHITE, YELLOW, and RED. The color for an indicator corresponds to levels of performance that may result in increased NRC oversight (WHITE), performance that results in definitive, required action by the NRC (YELLOW), and performance that is unacceptable but still provides adequate protection to public health and safety (RED). GREEN indicators represent performance at a level requiring no additional NRC oversight beyond the baseline inspections.

The assessment process integrates performance indicators and inspection so the agency can reach objective conclusions regarding overall plant performance. The agency will use an Action Matrix to determine in a systematic, predictable manner which regulatory actions should be taken based on a licensee's performance. As a licensee's safety performance degrades, the NRC will take more and increasingly significant action, as described in the matrix. The NRC's

actions in response to the significance (as represented by the color) of issues will be the same for performance indicators as for inspection findings.

More information can be found at: <http://www.nrc.gov/NRR/OVERSIGHT/index.html>.