September 12, 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'S FITZPATRICK REPORT 05000333/2000-005

Dear Mr. Colomb:

On August 19, 2000, the NRC completed an inspection at the James A. FitzPatrick Nuclear Power Plant. The results of this inspection were discussed on August 31, 2000, with you 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 NRC identified two findings that were evaluated under the risk significance determination process and were determined to be of very low safety significance (Green). These findings 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. Furthermore, the two findings were determined to involve violations of NRC requirements, but because of their very low safety significance, the violations are non-cited.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be placed in the NRC Public Document Room and will be available on the NRC Public Electronic Reading Room (PERR) link at the NRC home page, http://www.nrc.gov/NRC/ADAMS/index.html. Should you have any questions regarding this report, please contact me at 610-337-5211.

Sincerely,

/RA/

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

Docket No. 05000333
License No.: DPR-59

Enclosure: Inspection Report 05000333/2000-005

cc w/encl:
C. D. Rappleyea, Chairman and Chief Executive Officer
E. Zeltmann, President and Chief Operating Officer
R. Hiney, Executive Vice President for Project Operations
J. Knubel, Chief Nuclear Officer and Senior Vice President
H. P. Salmon, Jr., Vice President of Engineering
W. Josiger, Vice President - Special Activities
J. Kelly, Director - Regulatory Affairs and Special Projects
T. Dougherty, Vice President - Nuclear Engineering
R. Deasy, Vice President - Appraisal and Compliance Services
R. Patch, Director - Quality Assurance
G. C. Goldstein, Assistant General Counsel
C. D. Faison, Director, Nuclear Licensing, NYPA
C. Jackson, Con Edison
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
T. Judson, Central NY Citizen Awareness Network
F. Elmer, Sierra Club
S. Penn
B. Brown
S. Griffin, Chenango North Energy Awareness Group
T. Ellis
A. Slater, GRACE
C. Gagne
L. Downing
H. Hawkins, Syracuse Green Party
E. Smeloff, PACE Energy Project
C. Hehl, Incorporated
C. Terry
R. Toole
R. Schwarz

Distribution w/encl: **(VIA E-MAIL)**
Region I Docket Room (with concurrences)
H. Miller, RA
J. Wiggins, DRA
R. Rasmussen, SRI - NRC Resident Inspector
R. Barkley, DRP
D. Holody, EO
G. Meyer, DRP
C. O'Daniell, DRP
R. Urban, ORA
E. Adensam, NRR
R. Borchardt, OE
D. Dambly, OGC
T. Frye, NRR
J. Johnson, ADIP, NRR
C. See, NRR
J. Shea, RI EDO Coordinator
B. Sheron, ADPT, NRR
D. Thatcher, NRR
G. Vissing, NRR
J. Wilcox, NRR

DOCUMENT NAME: G:\BRANCH3\FitzPatrick\2000-005.wpd
After declaring this document "An Official Agency Record" it **will** be released to the Public.
To receive a copy of this document, indicate in the box: "**C**" = Copy without attachment/enclosure "**E**" = Copy with attachment/enclosure "**N**" = No copy

OFFICE	RI/DRP		RI/DRP		/					
NAME	RSkokowski		GMeyer							
DATE	09/7/00		09/12/00		09/ /00		09/ /00		09/ /00	

OFFICIAL RECORD COPY

U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No.:	05000333
License No.:	DPR-59
Report No.:	2000-005
Licensee:	Power Authority of the State of New York, doing business as the New York Power Authority (NYPA)
Facility:	James A. FitzPatrick Nuclear Power Plant
Location:	Post Office Box 41 Scriba, New York 13093
Dates:	July 2, 2000 to August 19, 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

IR 05000333/2000-005, on 07/02-08/19/2000; New York Power Authority, James A. FitzPatrick Nuclear Power Plant; Equipment Alignment, Post Maintenance Testing.

The report covers a seven-week period of inspection conducted by resident inspectors. This inspection identified two green issues, both of which were noncited violations (NCVs). The significance of issues is indicated by their color (green, white, yellow, red) and was determined by the Significance Determination Process (SDP) in Inspection Manual Chapter 0609 (see Attachment 1).

Mitigating Systems

Green. During a review of high pressure coolant injection (HPCI) maintenance records, the inspectors identified two NYPA-identified issues that potentially impacted HPCI operability, but had not been entered as Deficiency and Event Reports (DERs). Specifically, the issues included Problem Identifications (PIDs) written to document high resistance across a set of contacts involved with the HPCI system minimum flow valve and a HPCI exhaust drain pot switch that did not function properly. Both of these issues should have been entered into the DER system but were not. Additionally, although each issue was evaluated for operability, the inspectors considered the evaluations and associated actions inadequate.

These issues were evaluated using the SDP and determined to be Green (very low safety significance) because subsequent evaluation concluded that HPCI remained operable. The failure to enter these deficiencies into the DER system in accordance with NYPA procedures is a non-cited violation of NRC requirements. (Section 1R04)

Green. Ineffective corrective actions resulted on NCV 0500333/2000-004-003 associated with inadequate post maintenance test instructions, as evidenced by similar issues being subsequently identified with control room air-conditioning system post maintenance testing.

This failure to implement appropriate corrective actions was evaluated using the SDP and determined to be Green (of very low safety significance) because no examples were identified that resulted in safety system inoperability. The failure to take adequate corrective actions was a non-cited violation of NRC requirements. (Section 1R19)

TABLE OF CONTENTS

Report Details

SUMMARY OF PLANT STATUS

The plant operated at essentially full power with one unplanned power reduction. On August 14, 2000, operators reduced power to 50% in response to a seal failure on the B feedwater pump. After repairs to the pump were completed, power was restored to 100% on August 21.

1. REACTOR SAFETY
Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

1R04 Equipment Alignments

a. Inspection Scope

The inspectors performed a partial system walkdown of the control room panel of the emergency diesel generator during a period of a planned 115kV offsite power supply outage.

The inspectors also conducted a detailed system walkdown and inspection of the high pressure coolant injection system (HPCI). The HPCI system was chosen due to its risk significance and ongoing maintenance activities to HPCI which could have impacted system operability. The inspectors performed a detailed system walkdown and a review of maintenance records and corrective action system records.

b. Issues and Findings

During a review of HPCI maintenance records, the inspectors identified two NYPA-identified issues that could have potentially impacted HPCI operability, but were not entered as Deficiency and Event Reports (DERs). On November 1, 1999, Problem Identification (PID) 87243 was written to document high resistance across a set of contacts involved with the HPCI minimum flow valve. On July 30, 2000, PID 90709 was written to document a HPCI exhaust drain pot switch that failed to function properly. Both of these PIDs identified issues that should have been entered into the DER system. Additionally, although each issue had been evaluated for operability, the inspectors considered the evaluations and associated actions were not thorough or responsive to the potential safety significance. These issues were evaluated using the SDP and determined to be Green (of very low safety significance) because subsequent evaluation concluded that HPCI remained operable. There were no findings identified during the control room emergency diesel generator control walkdown.

In the case of the contacts with high resistance, NYPA's operability evaluation simply concluded that although the resistance was high, the switch was working. The evaluation provided no basis for long term operation. The corrective maintenance activity was listed as requiring HPCI out of service to perform the repair, but this repair had not been scheduled. The inspectors considered this approach to be inappropriate, in that the time to correct this deficiency could have been months but the long-term effect of this high contact resistance was not evaluated.

In the case of the drain pot level switch, the operability evaluation did not consider the excessive valve seat leakage on the HPCI steam admission valve, which caused the operation of this level switch to be more critical than normal. The leakage from the degraded steam admission valve necessitated the drain valve to operate about three times per shift. A failure of the switch could cause excess water in the steam line that could cause a malfunction of HPCI.

Subsequently, around August 1, 2000, NYPA took voltage readings across the minimum flow valve contacts and concluded that the contact resistance had improved and the switch was continuing to function. With respect to the level switch, a new DER was written to assure the issue of the cumulative effects of minor system degradations were adequately evaluated.

NYPA procedure AP-03.02, "Deviation and Event Reporting," Section 5.2, "Adverse Quality Condition DER," requires deficiencies that reasonably could affect nuclear safety to be entered into the DER system. Contrary to the above, the deficiencies with the HPCI minimum flow switch contact resistance and the sticking drain pot level switch were not entered into the DER system. The failure to follow procedures is a violation of Technical Specification 6.8.(A). These issues were evaluated using the SDP process and determined to be Green (of very low safety significance) because HPCI remained operable. This violation is being treated as a Non-Cited Violation (NCV), consistent with Section VI.A of the Enforcement Policy, issued on May 1, 2000 (65FR25368). The issues associated with this violation are in the NYPA corrective action system as DERs 00-03501, 00-03510 and 00-04105. **(NCV 05000333/2000-005-001)**

1R05 Fire Protection

a. Inspection Scope

The inspectors observed welding and grinding activities on the refueling floor, and toured the relay room and control room ventilation equipment area.

b. Issues and Findings

There were no findings identified.

1R07 Heat Sink Performance

a. Inspection Scope

The inspectors reviewed maintenance and testing activities associated with the heat sink capacity of the emergency service water system (ESW). The inspectors observed cleaning of the HPCI area unit cooler, and performance testing following restoration of the unit cooler. The inspectors also reviewed inspections performed on the control room air-conditioning system to assure the system would be able to perform as described in the final safety analysis report using ESW as the heat sink.

b. Issues and Findings

There were no findings identified.

1R12 Maintenance Rule (MR) Implementation

a. Inspection Scope

The inspectors reviewed the implementation of the Maintenance Rule (MR) as related to the following:

1. Evaluation of HPCI component issues.
2. Actions planned to address air operated valve performance issues which were contributors to the white performance indicator for unplanned power changes.

b. Issues and Findings

There were no findings identified.

1R13 Maintenance Risk Assessment and Emergent Work

a. Inspection Scope

The inspectors reviewed the maintenance risk assessments associated with the following emergent work activities:

- B core spray pump timer being out of calibration.
- Reactor core isolation cooling (RCIC) flow controller problems.
- Trip of a reactor protection system (RPS) electrical protection assembly (EPA) circuit breaker.
- B feedwater pump seal failure.

Additionally, the inspectors observed portions of the troubleshooting associated with the RPS EPA breaker trip.

b. Issues and Findings

There were no findings identified.

1R14 Personnel Performance During Nonroutine Plant Evolutions and Events

a. Inspection Scope

The inspectors reviewed operators' performance during the following nonroutine events:

- July 3, 2000, trip of a RPS EPA circuit breaker.
- August 14, 2000, B feedwater pump seal failure and associated power reduction to 50%.

b. Issues and Findings

There were no findings identified.

1R15 Operability Evaluations

a. Inspection Scope

The inspectors reviewed operability determinations associated with the core spray pump B operability and technical evaluation for revised tolerances and increased frequency of testing.

b. Issues and Findings

There were not findings identified.

1R17 Permanent Plant Modifications

a. Inspection Scope

The inspectors performed walkdowns of the construction activities ongoing for the independent spent fuel storage installation project. The inspectors observed rebar placement, concrete form construction, and concrete pouring. The inspectors also reviewed NYPA's actions in response to minor problems associated with contractor control on this project.

b. Issues and Findings

There were no findings identified.

1R19 Post Maintenance Testing

a. Inspection Scope

The inspectors reviewed the following post maintenance testing:

- RCIC
- Adjustments to the reactor building crane
- Cleaning of the HPCI area unit cooler
- Preventive maintenance to the control room air-conditioning system

The inspectors also reviewed the corrective actions associated with NCV 05000333/2000-004-003 (DER 00-02625).

b. Issues and Findings

The inspectors determined that ineffective corrective actions resulted on NCV 0500333/2000-004-003 associated with inadequate post maintenance test instructions, as evidenced by similar issues being identified with the post maintenance testing for the control room air-conditioning system. These ineffective corrective actions were

evaluated using the SDP and determined to be Green (of very low safety significance) because no examples were identified that resulted in safety system inoperability. There were no issues identified with the other tests reviewed.

On July 18, 2000, the NRC issued an NCV 05000333/2000-004-003, for several examples of inadequate post work testing. This issue had been entered into the NYPA corrective action system as DER 00-02625, on June 23, 2000. On July 19, 2000, similar issues were identified on the post work test instructions for the control room air-conditioning system. Specifically, Work Request (WR) 99-07003-01, post work testing for 70AHU-3A, specified verification of proper operation, but failed to provide the critical attributes or acceptance criteria. This issue was identified by the inspectors and corrected prior to NYPA performing the test. Following the identification of this issue, NYPA briefed operations personnel on the need to assure test documentation is detailed enough to document the adequacy of the retest.

The inspectors reviewed the actions taken for DER 00-02625, and found that NYPA had addressed the specific examples noted by the inspectors, but had not taken any further immediate corrective actions to assure ongoing test activities met the requirements. However, the inspectors did note that an evaluation of long term corrective actions was ongoing by NYPA. The failure to take timely corrective actions was a violation of 10CFR50, Appendix B, Criterion XVI, “Corrective Action,” which requires the prompt correction of conditions adverse to quality. This failure to implement appropriate, timely corrective actions was determined to be Green (of very low safety significance) because no examples were identified that resulted in safety system inoperability. This violation is being treated as a Non-Cited Violation, consistent with Section VI.A of the Enforcement Policy, issued on May 1, 2000 (65FR25368). The issues associated with this violation are in the NYPA corrective action system as DERs 00-03202 and 00-04106. **(NCV 05000333/2000-005-002)**

1R20 Refueling and Outage Activities

a. Inspection Scope

The inspectors reviewed procedures and observed portions of the new fuel inspections, channeling, storage and tracking.

b. Issues and Findings

There were no findings identified.

1R22 Surveillance Testing

a. Inspection Scope

The inspectors reviewed procedures and observed portions of testing related to the following surveillance tests:

- ST-8K, Inservice inspection (ISI) of the service water system piping to the control room air-conditioning system.
- ST-19C, safety related unit cooler performance testing.

b. Issues and Findings

There were no findings identified.

1R23 Temporary Modifications

a. Inspection Scope

The inspectors reviewed documentation and performed a walkdown inspection of temporary heat exchangers installed to cool packing leakoff from the main steam isolation valves. This temporary modification (00-027) was installed to prevent leakage from the main steam isolation valve packing from steaming into the reactor building sump and causing excess moisture in the standby gas treatment system.

b. Issues and Findings

There were no findings identified.

4. OTHER ACTIVITIES [OA]

4OA1 Identification and Resolution of Problems

Inspection findings in previous sections of this report also had implications regarding NYPA's identification, evaluation, and resolution of problems as follows:

- Section 1R04 - deficiencies associated with the HPCI system not entered into the DER system and incomplete evaluation of the operability of these issues.

- Section 1R17 - corrective actions to address non-cited violation 05000333/2000-0004-003 associated with inadequate post maintenance test instructions, as evidenced by inadequate post maintenance test instructions following control room air-conditioning maintenance.

Additional items associated with NYPA's corrective action program were reviewed without findings.

4OA2 Performance Indicator Verification

a. Inspection Scope

The inspectors reviewed the data related to unplanned power changes per 7000 critical hours. This indicator was reported as White in the last quarterly report by NYPA.

b. Issues and Findings

There were no findings identified.

4OA5 Meetings

Exit Meeting Summary

On August 31, 2000, the inspectors presented the inspection results to Mr. Colomb and other members of NYPA's management who acknowledged the findings presented and did not contest any of the inspectors' conclusions. Additionally, the inspectors confirmed that none of the information reviewed by the inspectors was considered proprietary.

During the exit, two findings of very low safety 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 the 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, and the NRC Resident Inspector at the FitzPatrick facility.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

M. Colomb, Site Executive Officer
R. Devercelly, Operations Training Manager
J. Flaherty, Quality Assurance Manager
D. Kieper, General Manager Maintenance
D. Lindsey, Plant Manager
R. Locy, Nuclear Training Manager
W. O'Malley, General Manager Operations
K. Pushee, Radiological Protection Supervisor
P. Russell , Operations Manager
G. Tasick, Licensing Manager
G. Thomas, Director Design Engineering
A. Zaremba, General Manager Support Services

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None

Opened and Closed

NCV 05000333/200-005-001: Failure to enter HPCI deficiencies into the DER system as required by site procedure.

NCV 05000333/200-005-002: Inadequate immediate corrective actions taken for previous identified post maintenance test deficiencies.

Closed

None

LIST OF ACRONYMS USED

CFR	Code of Federal Regulations
DER	Deficiency and Event Report
EPA	Electrical Protection Assembly
ESW	Emergency Service Water
FSAR	Final Safety Analysis Report
HPCI	High Pressure Coolant Injection
ISI	Inservice Inspection
kV	Kilovolt
LER	Licensee Event Report
MR	Maintenance Rule
NCV	Non-Cited Violation
NRC	Nuclear Regulatory Commission
NYPA	New York Power Authority
PI	Performance Indicator
PID	Problem Identification
PIM	Plant Issues Matrix
QA	Quality Assurance
RCIC	Reactor Core Isolation Cooling
RPS	Reactor Protection System
SDP	Significance Determination Process
TS	Technical Specification
WR	Work Request

APPENDIX 1

NRC's REVISED REACTOR OVERSIGHT PROCESS

The federal Nuclear Regulatory Commission (NRC) recently 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 and assessing 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	Radiation Safety	Safeguards
● Initiating Events	● Occupational	● Physical Protection
● Mitigating Systems	● Public	
● Barrier Integrity		
● Emergency Preparedness		

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 that are of low to moderate safety significance. YELLOW findings are issues that are of substantial safety significance. RED findings represent issues that are of high safety significance with a significant reduction in safety margins.

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 varying levels of performance and incremental degradation in safety: GREEN, WHITE, YELLOW, and RED. GREEN indicators represent performance at a level requiring no additional NRC oversight beyond the baseline inspections. WHITE corresponds to performance that may result in increased NRC oversight. YELLOW represents performance that minimally reduces safety margins and requires even more NRC oversight. And RED indicates performance that represents a significant reduction in safety margins but still provides adequate protection to public health and safety.

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. 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. As a licensee's safety performance degrades, the NRC will take more and increasingly significant action, which can include shutting down a plant, as described in the Action Matrix.

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