

June 9, 2000

EA 00-136

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 05000333/2000-003

Dear Mr. Colomb:

On May 20, 2000, the NRC completed an inspection at the James A. FitzPatrick Nuclear Power Plant. The results of this inspection were discussed on May 26, 2000, with Mr. O'Malley 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 five 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 five 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

Enclosure: Inspection Report 05000333/2000-003

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

Mr. Michael J. Colomb

3

Distribution w/encl: (VIA E-MAIL)

Nuclear Safety Information Center (NSIC)
 Region I Docket Room (with concurrences)
 H. Miller, RA (to M. Fudge)
 J. Wiggins, DRA (to G. Matakas)
 NRC Resident Inspector
 R. Barkley, DRP
 D. Holody, ED
 G. Matakas, ORA
 G. Meyer, DRP
 B. Platchek, DRP
 R. Urban, ORA

HQ Distribution w/encl: (VIA E-MAIL)

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
 W. Scott, NRR
 G. Vissing, NRR
 J. Wilcox, NRR
 Inspection Program Branch, NRR (IPAS)

DOCUMENT NAME: G:\BRANCH3\FitzPatrick\2000-003.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	RRasmussen		GMeyer						
DATE	06/8/00		06/8/00		06/ /00		06/ /00		06/ /00

OFFICIAL RECORD COPY

U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No.: 05000333

License No.: DPR-59

Report No.: 2000-003

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: April 2, 2000 to May 20, 2000

Inspectors: R. A. Rasmussen, Senior Resident Inspector
R. A. Skokowski, Resident Inspector
C. E. Sisco, Operations Engineer
J. H. Williams, Sr. Operations Engineer

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 05000333/2000-003

The report covered a seven-week period of resident inspection and a baseline inspection of the licensed operator requalification program by regional specialist inspectors. The significance of issues is indicated by their color (Green, White, Yellow or Red) and was determined by the Significance Determination Process (SDP) in Inspection Manual Chapter 0609 (see Attachment 1).

Initiating Events

Green. During the April 1, 2000, loss of main condenser vacuum, when operators decided to manually scram the reactor, they chose to trip the main turbine first, despite the absence of procedural steps to do this in the plant operating procedures. This finding was evaluated using the SDP and determined to be Green (of very low safety significance), because a turbine trip/reactor scram from 25% power is within the analyzed transients of the licensing basis and the action did not impact any mitigation system capabilities. The failure to follow plant operating procedures was a non-cited violation of NRC requirements. (Section 1R14)

Green. A solenoid-operated valve (SOV) had not been incorporated in the preventive maintenance program, which resulted in the degradation and failure of the solenoid valve seat. This SOV was located in the offgas recombiner system, and the SOV failure initiated the April 1, 2000, loss of a main condenser vacuum and subsequent reactor scram. This finding was evaluated using the SDP and determined to be Green (of very low safety significance), because the resulting reactor scram was within the analyzed transients of the licensing bases and the failure did not impact any mitigation system capabilities. The failure to include the offgas recombiner bypass valve SOV in the preventive maintenance program or otherwise evaluate the bases for not being included in the preventive maintenance program was a non-cited violation of NRC requirements. (Section 1R12)

Mitigating Systems

Green. Upon determining that the voltage to the reactor core isolation cooling (RCIC) system components was less than the minimum required, NYPA failed to initiate a deficiency and event report or evaluate the impact of condition on system operability. This finding was evaluated using the SDP and determined to be Green (of very low safety significance) because the RCIC system remained operable. However, the failure to enter this item into the corrective action system and assess equipment operability was a non-cited violation of NRC requirements. (Section 1R15)

Barrier Integrity

Green. NYPA did not adequately control a contractor performing testing of the standby gas treatment (SGT) system. The contractor did not perform the test with a NYPA controlled procedure, and deficiencies identified by the contractor were not entered into the NYPA corrective action program. In addition, NYPA personnel associated with this testing did not appear to be aware of these NYPA expectations. The SDP concluded that these findings were Green (very low safety significance) because the procedure used was adequate and the SGT system remained operable. However, the failures to adequately control procedures and to document conditions adverse to quality are both non-cited violations of NRC requirements. (Section 1R22)

TABLE OF CONTENTS

SUMMARY OF FINDINGS	ii
TABLE OF CONTENTS	iv
Report Details	1
SUMMARY OF PLANT STATUS	1
1. REACTOR SAFETY	1
1R01 Adverse Weather	1
1R04 Equipment Alignments	1
1R05 Fire Protection	1
1R11 Licensed Operator Requalification	2
1R12 Maintenance Rule (MR) Implementation	2
1R13 Maintenance Risk Assessment and Emergent Work	4
1R14 Personnel Performance During Nonroutine Plant Evolutions and Events	4
1R15 Operability Evaluations	5
1R19 Post Maintenance Testing	6
1R22 Surveillance Testing	7
4. OTHER ACTIVITIES [OA]	8
4OA1 Identification and Resolution of Problems	8
4OA2 Performance Indicator Verification	8
4OA4 Other	9
4OA5 Meetings	10
PARTIAL LIST OF PERSONS CONTACTED	11
ITEMS OPENED, CLOSED, AND DISCUSSED	11
LIST OF ACRONYMS USED	12
APPENDIX 1	13

Report Details

SUMMARY OF PLANT STATUS

The plant operated at power with one unplanned power reduction. On April 1, 2000, during a planned power reduction to 30 percent for various maintenance activities, the reactor scrammed. Operators tripped the turbine generator based on indications of lowering condenser vacuum, which resulted in a reactor scram. This scram was considered uncomplicated and will be counted in the unplanned scrams performance indicator.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

1R01 Adverse Weather

a. Inspection Scope

On May 9 and 10, 2000, the inspectors reviewed the New York Power Authority (NYPA) procedures and preparations for forecasted severe thunderstorms.

b. Issues and Findings

There were no findings identified.

1R04 Equipment Alignments

a. Inspection Scope

The inspectors performed the following partial system walkdowns:

- Emergency service water (ESW) system A and offsite power during a period of planned maintenance on the B ESW train.
- RCIC system during a period of planned maintenance on high pressure coolant injection (HPCI) system.
- Residual heat removal (RHR) system, HPCI, RCIC, core spray (CS) system, emergency diesel generators (EDGs) A, B, D and offsite power during a period of planned maintenance on EDG C.

b. Issues and Findings

There were no findings identified.

1R05 Fire Protection

a. Inspection Scope

The inspectors focused on fire protection equipment during tours of the refuel floor. Also, the inspectors observed a fire drill performed on April 26, 2000.

b. Issues and Findings

There were no findings identified.

1R11 Licensed Operator Requalificationa. Inspection Scope

The following records were reviewed and activities observed to determine the effectiveness of the licensed operator requalification training (LORT) program:

- Review of operating history documentation from a sample of inspection reports, licensee event reports (LERs), deviation and event reports (DERs), and the plant issues matrix (PIM). The review also included FitzPatrick Individual Plant Examination (IPE) risk insights and the Risk-Informed Inspection Notebook for FitzPatrick.
- Review of a sample of the written and operating exams for licensed personnel for the years of 1999 and 2000, including remedial training activities.
- Observations of operating test administration to one shift crew and the facility's evaluation of crew and individual operator performance.
- Review of completed training feedback by students and management observation feedback forms for the two-year training cycle.
- Review of sample medical records, training attendance records, and documentation on maintaining an active license.

b. Issues and Findings

There were no findings identified.

1R12 Maintenance Rule (MR) Implementationa. Inspection Scope

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

- Evaluation for exceeding the plant level monitoring target of one automatic scram per 7000 critical hours.
- System function failures for RCIC, HPCI, RHR CS, and EDGs during a review of the safety system functional failure performance indicator.
- Functional failure classification of a offgas recombiner system solenoid valve that resulted in the April 1, 2000 reactor scram.

b. Issues and Findings

A SOV had not been incorporated in the preventive maintenance program, and resulted in the degradation and failure of the solenoid valve seat. This SOV was located in the offgas recombiner system and the SOV failure initiated the April 1, 2000, loss of main condenser vacuum and subsequent reactor scram. This finding was evaluated using the significance determination process (SDP) and determined to be Green (of very low safety significance), because the SOV failure initiated a reactor scram which was well within the licensing basis, and the failure did not impact any mitigation system capabilities. There were no findings related to the other maintenance rule evaluations reviewed.

The details of the event are described in NYPA's LER 50-333/00-003, and the review of the operators' actions associated with this event is provided in Section 1R14 of this report.

On April 1, 2000, the reactor was operating at approximately 25% power while planned maintenance was in progress to repair a small leak on a main steam drain line pipe leak. This repair required the condenser air ejector recombiner to be removed from service. While the recombiner was being removed from service, the associated bypass valve failed closed, isolating the main condenser from the offgas system. This caused a lowering in main condenser vacuum and resulted in a reactor scram. NYPA determined that aging and embrittlement of the SOV seat resulted in excessive leakage, which prevented the bypass valve from opening. NYPA replaced the SOV and completed an evaluation of other SOVs in similar applications and identified five additional valves that were degraded, which were also replaced.

Later, NYPA performed a work history review of the bypass valve SOV and determined that this solenoid valve was not included in their preventive maintenance program. The valve had been installed for approximately 26 years, which greatly exceeded the site-standard replacement periodicity of ten years established for similar SOVs. NUMARC 93-01, "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," Revision 2, describes that items within the scope of the Maintenance Rule must be covered by the preventive maintenance program, unless evaluated as inherently reliable, acceptable as run to failure, or is classified as MR (a)(1). NYPA had classified this SOV as being within the scope of the Maintenance Rule, however, there was neither preventive maintenance nor evaluations per the guidance.

This finding was evaluated using the SDP and determined to be Green (of very low safety significance), because although the failure of the SOV initiated a reactor scram, the failure was well within the analyses of the licensing basis, and the resulting scram did not impact any mitigation system capabilities. 10 CFR 50.65, "Requirement for Monitoring the Effectiveness of Maintenance," Section (a)(2), states that monitoring as specified in paragraph (a)(1) is not required where it has been demonstrated that the performance or condition of a structure, system, or component (SSC) is being effectively controlled through the performance of appropriate preventive maintenance such that the SSC remains capable of performing its intended function. Contrary to this, NYPA failed to demonstrate that the performance of the offgas recombiner bypass valve SOV was being effectively controlled through the performance of appropriate preventive maintenance in that no preventive maintenance was being done on this component. Appropriate preventive maintenance for SOVs of this type would be to be replaced at a

periodicity much less than the service life of 26 years experienced by the offgas recombiner bypass SOV. 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 deficiencies associated with this violation are the NYPA corrective action system as DER 00-01200. **(NCV 05000333/2000-003-01)**

1R13 Maintenance Risk Assessment and Emergent Work

a. Inspection Scope

The inspectors reviewed the maintenance risk assessment associated with the following activities:

- Unplanned maintenance on the offgas recombiner system during planned maintenance on the B ESW train.
- Several changes to the work schedule that resulted from delaying an EDG C outage due to forecasted severe thunderstorms.
- Planned maintenance on the HPCI system.
- Several changes to the work schedule due to a steam leak in the turbine building and response to a subsequent ground on the 125 volts direct current (Vdc) electrical bus.

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:

- April 1, 2000, loss of main condenser vacuum and reactor scram.
- April 5 to 7, 2000 reactor and plant startup.
- April 7, 2000, loss of the B offgas process radiation monitor.
- April 8, 2000, recirculation pump runback.
- April 19, 2000, unexpected area radiation monitor alarm due to cleanup filter flushing.
- April 26, 2000, steam leak in the turbine building.

b. Issues and Findings

During the April 1, 2000 loss of main condenser vacuum, operators failed to manually scram the reactor prior to tripping the main turbine as required by the plant operating procedures. This finding was evaluated using the SDP and determined to be Green (of very low safety significance) because, although the failure to manually scram the plant was considered a contributor to a transient initiator, the failure did not impact any mitigation system capabilities. There were no findings related to the other operability evaluations reviewed.

The details of the event are described in NYPA's LER 50-333/00-003, and the cause of the event is provided in Section 1R12 of this report. On April 1, 2000, the reactor was operating at approximately 25% power while planned maintenance was in progress to

repair a small leak on a main steam drain line pipe. This repair required the condenser air ejector recombiner to be removed from service. While the recombiner was being removed from service, the associated bypass valve failed closed, isolating the main condenser from the offgas system. This caused a lowering in main condenser vacuum. The operators entered the associated abnormal operating procedure (AOP)-31, "Loss of Condenser Vacuum." The vacuum continued to trend downward, and eventually degraded to the "manual turbine trip required region" as described in Figure 1 of AOP-31. At this time the senior reactor operator (SRO) assumed that reactor power was low enough such that the automatic reactor scram associated with a turbine trip had been bypassed, and ordered the turbine to be tripped. Upon initiation of the turbine trip, an automatic reactor scram occurred, and the operators took the appropriated actions in accordance with their procedures.

Based on the inspectors' review of AOP-31, the inspectors determined that the operators actions were not in accordance with the procedure, because although vacuum degraded to the manual turbine trip required region as specified in Figure 1 of the AOP, the text of the procedure specifies that the operators scram the reactor first and then trip the turbine. The failure to follow the procedure is a violation of Technical Specification (TS) 6.8.(A). This finding was evaluated using the SDP and determined to be Green (of very low safety significance), because the resulting turbine trip/reactor scram was well within the analyses of the licensing basis, and the action did not impact any mitigation system capabilities. 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 deficiencies associated with this violation are entered into the NYPA corrective action system as DER 00-01862. **(NCV 05000333/2000-003-02)**

1R15 Operability Evaluations

a. Inspection Scope

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

- Operability of RCIC following the identification that the calculated minimum voltage for RCIC support equipment was lower than the minimum acceptable for the loss of coolant accident (LOCA) coincident with a loss of offsite power (LOOP) and station blackout (SBO) scenarios.
- Operability of RHR following the identification of higher than expected system pressure in the standby condition.
- Operability of the leading edge flow monitor (LEFM) following the receipt of an associated high gain alarm.
- Operability of control rod 02-19 following triple notching observed during plant startup.
- Operability of containment following the identification of main steam isolation valve (MSIV) packing leakoff to the reactor building sump.

b. Issues and Findings

Upon determining that the voltage to RCIC system components was less than the minimum required, NYPA failed to initiate a deficiency and event report (DER) or evaluate the impact of the condition on system operability. This finding was evaluated using the significance determination process and determined to be Green (of very low safety significance) because the RCIC system remained operable. There were no findings related to the other operability evaluations reviewed.

In October 1999 NYPA determined that during the LOCA coincident with a LOOP and SBO scenarios, voltage available to the RCIC system condensate and barometric condenser vacuum pumps was less than the established minimum acceptable values. Upon identification of the deviations, NYPA initiated action commitment tracking system (ACTS) items to evaluate the quality assurance (QA) category of the two pumps and to address the voltage concern. However, no DER was initiated at that time, and as a result no operability evaluation was completed. On April 5, 2000, the system engineer identified that no DER was written to address this deviation, and initiated DER 00-01239 so that operability could be properly assessed.

The operability evaluation resulting from DER 00-01239 concluded that the RCIC barometric condenser vacuum pump was not required for the operability of the RCIC, however, the condensate pump was required. Consequently, NYPA analyzed the impact of the low voltage condition on RCIC condensate pump and determined that it was still capable of performing the intended safety function (operable) at the lower voltages. The inspectors reviewed this analysis and found it to be technically sound.

The October 1999 failure to enter the deviation associated RCIC system voltage into DER system as required by NYPA administrative procedure AP-3.02, "Deviation and Event Analysis", is a violation of 10CFR50, Appendix B, Criterion XVI, "Corrective Actions." 10CFR50, Appendix B, Criterion XVI, "Corrective Actions," requires conditions adverse to quality be identified and documented. This finding was evaluated using the SDP and determined to be Green (of very low safety significance) because the RCIC system remained operable. 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 deficiencies associated with this violation are in the NYPA corrective action system as DER 00-01269. **(NCV 05000333/2000-003-03)**

1R19 Post Maintenance Testing

a. Inspection Scope

The inspector reviewed the following post maintenance testing:

- Retest of HPCI valve 23MOV14 after the HPCI valve work was aborted to allow HPCI system restoration for reasons of other emergent work.
- Retest of the reactor water recirculation system following the scoop tube stop adjustment.

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:

- Reactor protection system functional test and calibration.
- Standby gas treatment (SGT) system filter inspection and test.

b. Issues and Findings

NYPA did not adequately control a contractor performing testing of the SGT system. The contractor did not perform the test with a NYPA controlled procedure, and deficiencies identified by the contractor were not entered into the NYPA corrective action program. In addition, NYPA personnel associated with this testing did not appear to be aware of these NYPA management expectations. The SDP concluded that these findings were Green (very low safety significance), because the procedure used was adequate and the SGT system remained operable. However, the failure to adequately control procedures and the failure to document conditions adverse to quality are both violations of NRC requirements. There were no findings related to the other surveillance tests reviewed.

On April 18, 2000, the inspector observed a NYPA contractor in the field performing technical specification required surveillance testing without a controlled procedure. 10CFR50, Appendix B, criterion VI, "Document Control," requires measures to control procedures. NYPA administrative procedure AP-2.04, "Control of Procedures," requires that NYPA review and approve vendor procedures, and document this on a cover sheet that is attached to procedures used in the plant. NYPA had reviewed and approved this revision of the contractor procedure, but the contractor supplied his own copy outside of NYPA's control system which lacked the proper documentation. NYPA personnel assisting the contractor were not aware of the requirements and did not take appropriate actions when questioned in the field. Subsequent review by NYPA determined that the procedure used was technically adequate, and the weak document control was documented as DER 00-01443.

When the B SGT filter train was opened for inspection, the contractor pointed out damage to the downstream high efficiency particulate filter. The damage appeared to have involved previous physical impact that resulted in a torn wire mesh screen and an abrasion to the filter. The contractor stated that he was familiar with the damage from a previous inspection and that the damage did not impact the ability of the SGT system to pass the required tests. However, the inspector verified that NYPA had not entered the damage into their corrective action system or evaluated the damage for operability. NYPA administrative procedure AP-3.02, "Deviation and Event Analysis," requires that adverse quality conditions be entered into the DER system. 10CFR50, Appendix B, Criterion XVI, "Corrective Actions," requires conditions adverse to quality be identified and documented. Subsequent review by NYPA concluded that the SGT system remained operable, and this finding was documented as DER 00-01456.

The failure to adequately control contractors can lead to a loss of quality control to safety systems. The inspectors used SDP to evaluate the failure to control the contractor procedure and the failure of the contractor to enter the damaged filter into the DER system. The SDP concluded that these findings were Green (very low safety

significance) because the procedure used was adequate and the SGT system remained operable. However, the failure to adequately control procedures and the failure to document conditions adverse to quality are both violations of NRC requirements. These violations are being treated as non-cited violations, consistent with Section VI.A of the Enforcement Policy, issued on May 1, 2000 (65FR25368). The deficiencies associated with these violations are in the NYPA corrective action system as DERs 00-01443 and 00-1456. **(NCV 05000333/2000-003-04 and NCV 05000333/2000-003-05)**

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 1R15 - The failure to enter an equipment deficiency into the corrective action program. This failure to appropriately employ the corrective action program delayed the performance of an operability determination for approximately six months.
- Section 1R22 - Items identified by a contractor were not entered into the NYPA corrective action system and were not evaluated by NYPA for operability. This demonstrated weak problem identification.

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

4OA2 Performance Indicator Verification

a. Inspection Scope

The inspector verified the accuracy of the safety system functional failures (SSFF) performance indicator (PI) information submitted by NYPA for the period of January through December 1999, by reviewing LERs, DERs, operator logs, maintenance rule information and system health reports associated with applicable systems.

b. Issues and Findings

Based on the inspectors' review, two potential discrepancies were identified. Specifically, the inspectors identified two incidences where NYPA did not report under 10CFR50.72 and 50.73 cases when an event or condition alone could have prevented the fulfillment of the safety function of a system needed to remove residual heat, and since the SSFF PI is based on the items reported through the LER system, NYPA did not include these events in their PI submittal. Both cases involved the RCIC system, specifically:

- On June 22, 1999, the containment isolation function of the RCIC steam emission valve was determined to be inoperable, and to maintain containment integrity the valve was electrically closed and deactivated until the repairs were completed. While the valve was closed and deactivated, RCIC was not capable of removing residual heat. (DER 99-01091)
- On August 18, 1999, during a surveillance test, the RCIC governor control valve experienced binding, and the system was declared inoperable and repaired. During this time RCIC was not capable of removing residual heat. (DER 99-01426)

Through discussions with members of the NYPA licensing department, the inspectors ascertained that NYPA did not report these findings because even though the RCIC system was designed to remove residual heat for certain events and is required by their technical specifications, the system was not credited to remove residual heat in the Final Safety Analysis Report (FSAR) safety analysis or the LOCA analysis. The inspectors noted however, that NYPA's position was contrary to the guidance provided in NUREG-1022, "Event Reporting Guidelines 10 CFR 50.72 and 50.73," Revision 1, which states, "If the plant's safety analysis considered RCIC as a system needed to remove residual heat (e.g., it is in the Technical Specifications) then its failure is reported under this criterion [50.72(b)(2)(iii)/50.73(a)(2)(v)]; otherwise, it is not reportable under this section of the rule." Similar concerns have been recently identified at other nuclear facilities and the Office of Nuclear Reactor Regulation (NRR) is evaluating the reporting requirements with respect to RCIC. Therefore, this finding will remain open pending completion of the NRR review and subsequently evaluation by the inspectors. (URI 05000333/2000-003-06)

40A4 Other

- .1 (Closed) LER 50-333/00-003: Reactor Scram Due to Manual Trip of the Main Turbine. This LER was reviewed and the significant findings were described in Sections 1R12 and 1R14 of this report. Based on the on-site review of this finding, the LER is closed.
- .2 (Closed) LERs 50-333/99-015, and 50-333/99-015-01: Traversing Incore Probe (TIP) Containment Isolation Ball Valve Open Without Automatic Containment Isolation Capability. These LERs pertained to a minor finding and were closed during an onsite review.

4OA5 Meetings

Exit Meeting Summary

On May 26, 2000, the inspectors presented the inspection results to Mr. O'Malley and other members who acknowledged the findings presented.

During the exit, five 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.

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

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

URI 05000333/2000-003-06: Potential PI discrepancies involving the failure to report failures of RCIC.

Opened and Closed

NCV 05000333/2000-003-01: The failure to properly implement the maintenance rule for the offgas recombiner bypass valve SOV.

NCV 05000333/2000-003-02: Operators failed to follow plant procedures by not scrambling the reactor on a loss of a condenser vacuum.

NCV 05000333/2000-003-03: Failure to implement the corrective action program.

NCV 05000333/2000-003-04: Failure to adequately control contractors performing testing.

NCV 05000333/2000-003-05: Failure to implement the corrective action program for contractor identified deficiencies.

Closed

LER 50-333/00-003-00: Reactor Scram Due to Manual Trip of the Main Turbine

LER 50-333/99-015-00: Traversing Incore Probe Containment Isolation Ball Valve Open Without Automatic Containment Isolation Capability

LER 50-333/99-015-01: Traversing Incore Probe Containment Isolation Ball Valve Open Without Automatic Containment Isolation Capability

LIST OF ACRONYMS USED

ACTS	Action Commitment Tracking System
AOP	Abnormal Operating Procedure
CFR	Code of Federal Regulations
CS	Core Spray
DER	Deficiency and Event Report
EDG	Emergency Diesel Generator
ESW	Emergency Service Water
FSAR	Final Safety Analysis Report
HPCI	High Pressure Coolant Injection
IPE	Individual Plant Examination
LEFM	Leading Edge Flow Monitor
LER	Licensee Event Report
LOCA	Loss of Coolant Accident
LOOP	Loss of Offsite Power
LORT	Licensed Operator Requalification Training
MR	Maintenance Rule
MSIV	Main Steam Isolation Valve
NCV	Non-Cited Violation
NRC	Nuclear Regulatory Commission
NRR	Nuclear Reactor Regulation
NYPA	New York Power Authority
PI	Performance Indicator
PIM	Plant Issues Matrix
QA	Quality Assurance
RCIC	Reactor Core Isolation Cooling
RHR	Residual Heat Removal
SBO	Station Black Out
SDP	Significance Determination Process
SGT	Standby Gas Treatment
SOV	Solenoid Operated Valve
SRO	Senior Reactor Operator
SSC	System Structure Component
SSFF	Safety System Functional Failure
TIP	Traversing Incore Probe
TS	Technical Specification
URI	Unresolved Item
Vdc	Volts Direct Current

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

- 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 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>.