

November 17, 1999

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 50-333/99-08

Dear Mr. Colomb:

On October 18, 1999, the NRC completed an inspection at the James A. FitzPatrick Nuclear Power Plant. The results of this inspection were discussed on October 25, 1999, with Mr. Lindsey 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 six issues of low safety significance that 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, the failure to properly install emergency service water valve fasteners, the failure to maintain a drain plug in a cable spreading room drain, the failure to perform the required independent review of test data, missed surveillance testing of containment hydrogen/oxygen concentrations, and core spray system timers that exceeded required values, were determined to involve violations of NRC requirements, but because of the low safety significance the violations were not cited. If you contest these noncited violations, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, 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.

Michael J. Colomb

2

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. Should you have any questions regarding this report, please contact me at 610-337-5146.

Sincerely,

Original Signed by:

John F. Rogge, Chief
Projects Branch 2
Division of Reactor Projects

Docket No. 50-333

Enclosure: Inspection Report 50-333/99-08

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 - Engineering and Project Management
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
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, New York Power Authority
J. E. Gagliardo, Consultant, New York Power Authority
E. S. Beckjord, Consultant, New York Power Authority
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, Syracuse Peace Council
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

Distribution w/encl:

H. Miller, RA/J. Wiggins, DRA (1)
Nuclear Safety Information Center (NSIC)
PUBLIC
NRC Resident Inspector
Region I Docket Room (with concurrences)
J. Rogge, DRP
S. Barber, DRP
L. Harrison, DRP
R. Junod, DRP

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

M. Tschiltz, RI EDO Coordinator
E. Adensam, NRR
G. Vissing, NRR
C. See, NRR
Inspection Program Branch, NRR (IPAS)
R. Correia, NRR
DOCDESK

DOCUMENT NAME: G:\BRANCH2\FITZPATRICK\FITZ9908.WPD

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/JR for		JRogge/JR	
DATE	11/17/99		11/17/99	

OFFICIAL RECORD COPY

U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No.: 50-333

License No.: DPR-59

Report No.: 99-08

Licensee: New York Power Authority

Facility: James A. FitzPatrick Nuclear Power Plant

Location: Post Office Box 41
Scriba, New York 13093

Dates: August 29 to October 18, 1999

Inspectors: R. A. Rasmussen, Senior Resident Inspector
R. A. Skokowski, Resident Inspector
J. T. Furia, Senior Radiation Specialist
T. A. Moslak, Radiation Specialist
L. A. Peluso, Radiation Specialist

Approved by: J. F. Rogge, Chief
Projects Branch 2
Division of Reactor Projects

SUMMARY OF FINDINGS

James A. FitzPatrick Nuclear Power Plant NRC Inspection Report 50-333/99-08

The report covered a seven week period of resident inspection, and the results of announced inspections by three regional radiation safety inspectors.

Inspection findings were assessed according to potential risk significance, and were assigned colors of GREEN, WHITE, YELLOW, or RED. GREEN findings are indicative of issues that, while not necessarily desirable, represent little risk to safety. WHITE findings would indicate issues with some increased risk to safety, and which may require additional NRC inspections. YELLOW findings would be indicative of more serious issues with higher potential risk to safe performance and would require the NRC to take additional actions. RED findings represent an unacceptable loss of margin to safety and would result in the NRC taking significant actions that could include ordering the plant shut down. The findings, considered in total with other inspection findings and performance indicators, will be used to determine overall plant performance.

Mitigating Systems

- ! Green. The inspectors identified that the AB@emergency service water (ESW) supply isolation valve had questionable yoke mounting bolt thread engagement, and that no lock-washers were provided with these fasteners. The licensee determined that the condition was not in accordance with their installation requirements, declared the system inoperable, replaced the bolts and installed lock-washers. Subsequently, the licensee evaluated the as-found condition and determined that the valve would have been able to perform the intended safety function. The as-found condition had very low risk significance because, although the ESW system is the most risk-significant system at FitzPatrick according to the licensee's Individual Plant Examination, the valve was only considered degraded and it was still capable of performing the intended safety function. This issue was determined to be a non-cited violation. (Section 1R03)

- ! Green. Through a review of operational experience information, NYPA identified a long-standing degraded fire protection barrier in the cable spreading room. Specifically, the plug for the cable spreading room floor drain was discovered not installed. The drain plug was required by plant design and without it installed, the floor drain provided a vent path that would have degraded the effectiveness of the automatic carbon dioxide (CO₂) fire suppression system. This longstanding problem was determined to have had a very low risk significance after evaluating the alternative safe shutdown and additional firefighting capabilities which existed, a conservative assumption for medium degradation of the automatic CO₂ suppression system, and the low likelihood of a fire in the cable spreading room. This issue was determined to be a non-cited violation. (Section 1R05)

- ! Green. The inspectors observed engineers not complying with test procedure requirements. Specifically, the test data for a reactor water level response test was not being properly independently verified. Incorrect review of this test data could have

Summary of Findings (cont'd)

allowed continued operation with inadequate feedwater system response, a transient initiator. Additionally, the inspector noted that two levels of plant management, specifically directed by plant administrative procedures to oversee the performance of the test, failed to notice or correct the issue until prompted. This procedural non-compliance was determined to have very low risk significance because it did not result in a direct impact to equipment performance and only had the potential to compromise the value of the independent verification effort in identifying a problem that was missed by the first reviewer. This issue was determined to be a non-cited violation. (Section 1R19)

Radiation Safety

- ! Green. A contaminated pump was not evaluated for fixed and removable contamination on inaccessible surfaces prior to being shipped. The relevant procedure did not contain the appropriate level of detail to ensure compliance with the applicable regulation. This regulatory noncompliance had the potential for uncontrolled release of contaminated material but had very low risk significance because the issue did not involve package external radiation limits, package breach, the package certificate of compliance, burial site access, or emergency notifications. This issue was determined to be a non-cited violation. (Section 2PS2)

Other Activities

- ! Green. NYPA reported in LER 50-333/99-005, that a surveillance test to measure the containment hydrogen and oxygen levels was not completed as required due to personnel error and an equipment failure. Because hydrogen and oxygen levels remained within specification, this event was determined to have very low risk significance. The failure to perform the technical specification required surveillance testing is a violation of NRC requirements. This issue was determined to be a non-cited violation. (Section 4OA4.1)
- ! Green. NYPA reported in LER 50-333/99-007, that time delay for the automatic start function of both divisions of the core spray system exceed the values allowed by technical specifications. However, based on an evaluation of the as-found data, NYPA determined that the discrepancy would not have prevented the emergency diesel generators or the core spray system from completing the intended safety function. This issue had a very low risk significance since the discrepancy did not prevent the systems from performing the intended safety functions. This issue was determined to be a non-cited violation. (Section 4OA4.4)

Report Details

SUMMARY OF PLANT STATUS

The inspection period began with the unit at full power. A planned power reduction to approximately 50% power for main condenser water box cleaning was conducted on September 25, 1999. A reactor scram occurred on October 14, 1999, due to a faulty wire in a main generator protective circuit. The unit remained in cold shutdown for the remainder of the inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

1R01 Adverse Weather

a. Inspection Scope

Due to seasonal hurricane activity, the inspectors reviewed the NYPA procedures and preparations for hurricanes and high winds.

b. Observations and Findings

No actual hurricane or high wind conditions were actually experienced at the site. There were no findings identified and documented during these inspections.

1R03 Emergent Work

a. Inspection Scope

During a plant walkdown, the inspectors identified that emergency service water (ESW) Valve 101B, the supply isolation valve, had questionable yoke mounting bolt thread engagement, and that no lock-washers were provided with the fasteners. The inspectors reviewed the licensee's actions in response to this discrepancy.

The inspectors also reviewed emergent work associated with repairs to the residual heat removal system service water system strainer isolation valves.

b. Observations and Findings

During a walkdown of the plant, the inspectors identified that the ESW AB[®] supply isolation valve had questionable yoke mounting bolt thread engagement, and that no lock-washers were provided with these fasteners. Upon informing the licensee, the condition was determined not to be in accordance with the installation requirements. The discrepancy was entered into the corrective action program. Also, the licensee declared the system inoperable, replaced the bolts and installed lock-washers. Subsequent evaluation by the licensee concluded that although the thread engagement did not meet the installation

requirements stated in Procedure MP-059.40, it was adequate to ensure that the valve would perform its intended safety function. The inspectors reviewed this evaluation and considered it to be technically sound.

This issue was considered Green in the significance determination process (SDP) because, although the ESW system is the most risk-significant system at FitzPatrick according to the licensee's Individual plant examination (IPE), the valve was only considered degraded and it was still capable of performing the intended safety function. Nonetheless, the failure to install the valve in accordance with the installation instructions is a violation of 10CFR50 Appendix B, Criterion V, Instructions, Procedures, and Drawings, which requires activities affecting quality to be accomplished in accordance with instructions. This violation is considered a non cited violation, consistent with the Interim Enforcement Policy for pilot plants. This violation is in the licensee's corrective action program as Deviation Event Report (DER) 99-01585. **(NCV 50-333/99-08-01)**.

1R04 Equipment Alignments

a. Inspection Scope

During a period of time with the B residual heat removal (RHR) system out of service for planned maintenance, the inspector performed a partial system alignment check of the A RHR train.

b. Observations and Findings

There were no findings identified and documented during this inspection.

However, there were observations which were entered into the licensee's corrective action program for resolution. These observations were not considered violations. Observations included:

- ! Valve position indicators on the minimum flow isolation valves indicated incorrectly. The actual valve position was correct. Incorrect valve position indications could cause personnel reviewing system status to make incorrect assessments of the system configuration.
- ! A pressure switch which was retired in place was still valved into the system. A vent valve from this pressure switch did not have a vent cap. Leakage from this portion of the system could have affected a pressure transmitter which provides control room indication.
- ! A section of nylon braided rope was draped over a motor operated valve, a valve wrench was located on some conduit in the overhead, and a radiological boundary rope was tied to plant piping. These housekeeping issues do not meet NYPA plant standards.

- ! A pressure indicator isolation valve was labeled improperly. Improper labeling can lead to inadvertent component operation.

1R06 Flood Protection

a. Inspection Scope

Based on a review of the Updated Final Safety Analysis Report (UFSAR), the IPE and the Individual Plant Examination of External Events (IPEEE), external flooding at the FitzPatrick site was not considered a credible event. Therefore, the inspectors focused on internal flooding. The inspection included a walkdown of the areas in which flooding could have the greatest impact on risk. These areas included the relay room, the battery rooms and the crescent rooms. Additionally, the inspectors reviewed flooding-related procedures.

b. Observations and Findings

There were no findings identified and documented during this inspection.

1R05 Fire Protection

a. Inspection Scope

The licensee identified that the carbon dioxide (CO₂) fire suppression system for the cable spreading room was degraded due to a missing floor drain plug. The inspectors reviewed the circumstances associated with this issue and the impact that the degradation had on the safe shutdown capability of the plant.

b. Observations and Findings

Based on a problem at another facility regarding CO₂ leak paths via an improperly controlled drain system lineup, NYPA reviewed their drain systems for similar problems. During this review, NYPA identified that a plug, as indicated on a plant drawing, was missing from the floor drain located within the cable spreading room.

The cable spreading room has an automatic CO₂ fire suppression system. In the event of a fire, the missing drain plug would provide a leak path for the CO₂ fire suppression agent, and result in a reduced CO₂ concentration in the cable spreading room. The licensee's review concluded that the plug had been missing for a very long time. The inspectors considered the licensee's identification of this issue to be a good use of operational experience.

The NRC inspectors used the fire protection SDP to understand the potential risk significance on safe shutdown (SSD) capability. Phase two of the SDP was performed to determine the significance of this finding. The inspectors determined from the guidance provided in Appendix H of the SDP, that the CO₂ suppression system had a medium level of degradation, the fire barriers had a low level of degradation, and the fire brigade effectiveness had a medium level of degradation. Additionally, the condition existed for more than 30 days. The inspectors evaluated the initiating event likelihood for a fire in the

cable spreading room with the remaining SSD mitigating capability and determined that the likelihood was low. In addition, the inspector noted the licensee had administrative procedures in place to provide compensatory measures when a mitigation system is removed from service. Based on this evaluation, the issue had a very low safety significance. Therefore, the inspectors considered this problem to be within the licensee response band (green). Nonetheless, the failure to control the fire protection system configuration in accordance with the plant drawings is a violation of the NYPA license, regarding the fire protection program. Specifically, the NYPA operating license requires the fire protection program to be subject to the requirements of 10CFR50 Appendix B, of which Criterion V, Instructions, Procedures, and Drawings, requires activities affecting quality to be in accordance with drawings. This violation is considered a non-cited violation, consistent with the Interim Enforcement Policy for pilot plants. This violation is in the NYPA corrective action program as DER 799-1569. **(NCV 50-333/99-08-02)**.

1R09 Inservice Testing

a. Inspection Scope

The inspectors reviewed inservice testing associated with the residual heat removal (RHR) system service water pumps, and containment isolation valves in the reactor building closed loop cooling system.

b. Observations and Findings

There were no findings identified and documented during these inspections.

1R11 Licensed Operator Requalification

a. Inspection Scope

The inspectors observed licensed operator performance in the simulator during a plant emergency preparedness exercise.

b. Observations and Findings

There were no findings identified and documented during this inspection.

1R12 Maintenance Rule (MR) Implementation

a. Inspection Scope

The inspectors reviewed the MR implementation related to a failure of a containment isolation valve in the reactor core isolation cooling (RCIC) system, a failure of the A-containment atmosphere dilution (CAD) system, and a failed flood detector in the high pressure coolant injection (HPCI) room.

b. Observations and Findings

There were no findings identified and documented during these inspections.

1R13 Maintenance Work Prioritizationa. Inspection Scope

The inspectors reviewed maintenance work prioritization activities associated with a planned plant down power for maintenance activities, and for actions taken following testing which indicated the reactor feedwater control system was not responding to feedwater level transients in an optimal fashion.

b. Observations and Findings

There were no findings identified and documented during these inspections.

1R15 Operability Evaluationsa. Inspection Scope

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

- ! A failure of a low pressure coolant injection (LPCI) power inverter breaker to manually close.
- ! An evaluation for operation with a floor plug removed in the reactor building which leads to the torus room.
- ! Operability of the core spray and residual heat removal system timing logic.
- ! Operability of the residual heat removal service water with a degraded manual valve operator.
- ! Operability of various area unit coolers with elevated lake temperature.

b. Observations and Findings

There were no findings identified and documented during these inspections.

1R16 Operator Work-Aroundsa. Inspection Scope

The inspectors reviewed operator work-arounds related to manual actions required to supply emergency service water (ESW) cooling to some components following a loss of normal cooling. The inspector also reviewed the entire list of operator work-arounds and the licensee's procedure for determining impact for the aggregate effect of work-arounds.

b. Observations and Findings

There were no findings identified and documented during these inspections.

1R19 Post Maintenance Testing

a. Inspection Scope

On October 7, 1999, the inspector observed testing which was conducted to verify proper system response following full implementation of feedwater flow instrumentation modifications. Modification M1-96-061, installed the Feedwater Flow Ultrasonic Monitoring System (LEFM). Test TST-55, Feedwater Level Control Transient Test, was performed to verify the performance of the feedwater control system.

The inspectors also observed testing performed following maintenance activities on the residual heat removal system service water strainers.

b. Observations and Findings

The LEFM modification improved the ability to measure the reactor feedwater flow rate. Reactor feed flow is a key parameter used to calculate actual reactor power. With this improved capability, NYPA was able to increase the power output of the facility due to reduced error margins in the power calculation. This power increase was approximately 1.5 percent. As part of this modification, NYPA conducted testing to verify the feedwater control system responded properly at the new power level.

TST-55 specifically required two engineers to independently verify the test data. However, the inspector observed the first verifier helping the second verifier perform the evaluation. This activity negated the purpose of the independent verification of this test data. Incorrect review of this test data could have allowed continued operation with inadequate feedwater system response, a transient initiator. The inspector brought this to the attention of the senior line manager overseeing the test evolution. The evaluation was stopped and a third engineer was brought in to make an independent evaluation. However, the inspector noted that two levels of plant management specifically directed by plant administrative procedures to oversee the performance of the test, failed to notice or correct the issue until prompted.

The inspector noted that the above issue was not entered into the corrective action program until prompted by the inspector the following day. The failure to follow test procedure TST-55, was a violation of Technical Specification 6.8, Procedures, and an example of a lapse in management oversight. This procedural non-compliance was

determined to have very low risk significance because it did not result in a direct impact to equipment performance and only had the potential to compromise the value of the independent verification effort in identifying a problem missed by the first reviewer. Therefore, this finding was considered Green in the significance determination process. This violation is considered a non cited violation (NCV), consistent with Interim Enforcement Policy for pilot plants. This violation is in the licensee-s corrective action program as DER 99-01942. **(NCV 50-333/99-08-03)**

1R22 Surveillance Testing

a. Inspection Scope

The inspectors observed control rod scram time testing, performance testing of area unit coolers, and testing of the low pressure coolant injection (LPCI) system logic.

b. Observations and Findings

There were no findings identified and documented during these inspections.

1EP01 Drill, Exercise, and Actual Events

a. Inspection Scope

The inspectors observed the performance of an emergency preparedness drill on October 4, 1999. Inspectors conducted observations at several of the emergency facilities and in the simulator control room.

b. Observations and Findings

There were no findings identified and documented during these inspections.

2. **RADIATION SAFETY**

Cornerstones: Public Radiation Safety

2PS1 Gaseous and Liquid Effluent

a. Inspection Scope

The inspection of the licensee-s liquid and gaseous effluents control program included:

- ! Reviewing the most recent Radiological Effluent Release Report (dated August 26, 1999)
- ! Conducting walkdowns of the liquid and gaseous treatment and release systems

- ! Reviewing the calibration and maintenance records for the liquid and gaseous effluent monitors
- ! Reviewing ventilation system surveillance tests, including filter performance verifications
- ! Reviewing calibration records for count room instruments utilized in the radiological effluents program, and
- ! Reviewing performance indicators, self-assessments and audits of the radiological effluents technical specification (RETS) program.

b. Observations and Findings

There were no findings identified and documented during these inspections. The licensee has made no liquid radiological effluent releases in 1999. Gaseous effluent releases are made on a continuing basis while the plant is operating.

2PS2 Radioactive Material Processing and Shipping

a. Inspection Scope

Records were reviewed for shipments of contaminated equipment and solid waste to verify that the material was properly classified, packaged, and shipped. Technicians were observed preparing a shipment of dewatered resin for transport to a processing facility. Relevant procedures, sample results, and records were reviewed to verify that scaling factors for hard-to-detect radio nuclides were appropriately developed. A Quality Assurance audit and various surveillances of radwaste processing and transportation activities were reviewed to verify that identified problems were entered into the corrective action program for resolution. A walkdown of liquid-to-solid radwaste processing systems was conducted to verify compliance with the FSAR and process control program.

b. Observations and Findings

The licensee identified that a shipment of a contaminated pump, made in March 1999, was not properly characterized as a surface contaminated object. No evaluation was performed of the combined removable and fixed contamination on inaccessible surfaces of the components, as required by 10 CFR 71.4, prior to making the shipment. Only contamination on accessible surfaces was evaluated in classifying the shipment. The licensee entered this oversight into the corrective action program and suspended all shipments of surface contaminated objects until the appropriate guidance has been incorporated into procedures. The licensee has concluded that the relevant procedures do not contain the appropriate level of detail and quality of direction to ensure compliance with the applicable regulations in all packaging and transportation scenarios. Measures to improve overall procedure quality were being evaluated. Using the Significance Determination Process, this regulatory noncompliance represented a Green finding, in

that, the issue did not involve package external radiation limits, package breach, the package certificate of compliance, burial site access, or emergency notifications. The issue had the potential for uncontrolled release of contaminated material. This violation of 10 CFR 71.4 is considered a non cited violation (NCV), consistent with Interim Enforcement Policy for pilot plants. This violation is in the licensee-s corrective action program as DER 99-01403. **(NVC 50-333/99-08-04)**

2PS3 Radiological Environmental Monitoring Program

a. Inspection Scope

The inspector reviewed the radiological environmental monitoring program (REMP), including the meteorological monitoring program (MMP) by examining TS and UFSAR requirements; associated procedures of the REMP and MMP; the 1997 and 1998 Annual Environmental Operating Reports; frequency and type of samples and analysis; annual land use census; interlaboratory comparison program; calibration and maintenance of REMP sampling equipment; and calibration and maintenance of meteorological instrumentation.

b. Observations and Findings

There were no findings identified and documented during these inspections.

4. **OTHER ACTIVITIES [OA]**

4OA1 Identification and Resolution of Problems

a. Inspection Scope

The inspector reviewed licensee self-assessments, audits, equipment logbooks, and problem reports affecting environmental sampling, sample analysis, and meteorological monitoring instrumentation.

b. Observations and Findings

There were no findings identified and documented during these inspections.

4OA2 PI Verification of RETS/ODCM Radiological Effluent Occurrence

a. Inspection Scope

The inspector reviewed performance indicator (PI) data submitted by NYPA in the area of RETS/ODCM Radiological Effluent Occurrence. The data reviewed represented a sampling of records from January 1, 1998 through August 31, 1999.

b. Observations and Findings

There were no findings identified and documented during this inspection.

40A4 Other.1 (Closed) LER 50-333/99-005: Missed Surveillance Test Due to Inoperable Containment Hydrogen/Oxygen Analyzera. Inspection Scope

The inspector performed an onsite review of the event documented in LER 50-333/99-005.

b. Observations and Findings

LER 50-333/99-005, reported a missed technical specification surveillance test due to an inoperable containment hydrogen/oxygen analyzer. Specifically, Technical Specification 4.7.A.6.a requires that the primary containment oxygen concentration be verified once each week. This was not accomplished from April 18, 1999, to May 6, 1999, due to two events which impacted the system. First, the system was switched off following a surveillance test on April 18, 1999. Second, a flow switch was sticking which provided indication that the system was operating even with it secured. NYPA determined that the cause of this event involved human error and an equipment malfunction. Corrective actions addressed the human error and strengthened the surveillance procedures to identify malfunctioning equipment.

The containment hydrogen/oxygen analyzer provides indication that containment hydrogen and oxygen levels are within required limits during normal operation and post accident. Following the discovery of the mis-positioned switch, operators verified that hydrogen and oxygen levels were within specification. Therefore, the risk of this event was evaluated and determined to have very low risk significance (Green). The failure to perform the technical specification required surveillance testing is a violation of NRC requirements. This violation is considered a non cited violation, consistent with the Interim Enforcement Policy for pilot plants. This violation is in the licensee's corrective action program as DER-99-00733. **(NCV 50-333/99-008-05)**

.2 (Closed) LER 50-333/99-006: Low Pressure Coolant Injection (LPCI) Mode of Residual Heat Removal (RHR) System Inoperable Due to a Loss of Automatic Startup Capability of RHR Pumps. This event was discussed in NRC Inspection Report 50-333/99-006. No new issues were revealed during an onsite review of this LER..3 (Closed) LER 50-333/98-015-02: Logic System Functional Test Inadequacies. Revision 2 of this LER was submitted due to a change in the completion dates for corrective actions. No new issues were revealed during an onsite review of this LER revision.

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

a. Inspection Scope

The inspectors performed an onsite review of the circumstances associated with the event described in the Licensee Event Report (LER).

b. Observations and Findings

During surveillance testing, the time delays for both AA@ and AB@ Core Spray pumps start interlock relays exceeded the values required by technical specification (TS). This condition rendered both divisions of core spray inoperable. Subsequently NYPA recalibrated the relays, which restored the operability of core spray. NYPA determined that the event was caused by inappropriately evaluating drift during the establishment of the calibration tolerance. The as-found delays times exceeded the specification maximum allowed 11.6 seconds by 0.25 and 0.93 seconds for AA@ and AB@ core spray pumps timers respectively. NYPA analyzed the event, and based on the as-found delay times concluded that condition would not have adversely impacted the ability of the emergency diesel generators (EDGs) to perform the intended safety function, nor would it have prevented the core spray system from meeting the loss-of-coolant-accident (LOCA) analysis assumptions.

This issue was considered Green in the significance determination process because although the core spray timers were found outside the TS values, the condition would not have prevented the timers from accomplishing the intended safety function. Nonetheless, the failure to adequately establish the core spray timer calibration tolerances was a violation of 10 CFR Part 50 Appendix B, Criterion III, ADesign Control,@ which requires measures established to ensure suitability of application of processes essential to safety related functions of structures, systems, and components. This violation is considered a Non-Cited Violation (NCV), consistent with the Interim Enforcement Policy for the pilot plants. This violation is in the licensee-s corrective action program as LER 99-07. **(NCV 50-333/99-07-06).**

4OA5 Meetings

Exit Meeting Summary

The inspectors presented the inspection results to Mr. D. Lindsey and other members of licensee management on October 25, 1999. The licensee acknowledged the findings presented. No proprietary information was identified.

ATTACHMENT 1

PARTIAL LIST OF PERSONS CONTACTED

Licensee

M. Abramski, Licensing Engineer
G. Brownell, Licensing Engineer
G. Bregg, Instrumentation and Control Manager
P. Brozenich, Operations Manager
M. Colomb, Site Executive Officer
R. Converse, General Manager Maintenance (Acting)
J. Flaherty, Quality Assurance Manager
B. Gorman, Environmental Supervisor, J. A. FitzPatrick Environmental Laboratory
W. Hamblin, Chemistry Supervisor
B. Horning, Shift Manager
A. Jarvis, General Supervisor, Chemistry
D. Lindsey, Plant Manager
A. McKeen, Radiological and Environmental Services Manager
E. Mulcahey, General Supervisor, Radiological Engineering
W. O'Malley, General Manager Operations
T. Phelps, Radiological Supervisor, Shipping & Decon
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 50-333/99-08-01: The failure to install an emergency service water valve in accordance with the installation instructions.

NCV 50-333/99-08-02: The failure to control the fire protection system configuration in accordance with the plant drawings.

NCV 50-333/99-08-03: The failure to perform independent engineering verification as required by the procedure.

NCV 50-333/99-08-04: The shipment of a contaminated pump, made in March 1999, was not properly characterized as a surface contaminated object.

NCV 50-333/99-08-05: The failure to properly verify containment hydrogen/oxygen levels as required by technical specifications.

NCV 50-333/99-08-06: The failure to adequately establish the core spray timer calibration tolerances.

Closed

LER 50-333/98-015-02: Logic System Functional Test Inadequacies.

LER 50-333/99-005: Missed Surveillance Test Due to Inoperable Containment Hydrogen/Oxygen Analyzer.

LER 50-333/99-006: Low Pressure Coolant Injection (LPCI) Mode of Residual Heat Removal (RHR) System Inoperable Due to a Loss of Automatic Startup Capability of RHR Pumps.

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

LIST OF ACRONYMS USED

CAD	Containment Atmosphere Dilution
DER	Deficiency and Event Report
ESW	Emergency Service Water
IPE	Individual Plant Exam
IPEEE	Individual Plant Exam of External Events
LEFM	Feedwater Flow Ultrasonic Monitoring System
LER	Licensee Event Report
LPCI	Low Pressure Coolant Injection
NCV	Non-Cited Violation
NRC	Nuclear Regulatory Commission
NYPA	New York Power Authority
RCIC	Reactor Core Isolation Cooling
REMP	Radiological Environmental Monitoring Program
RETS	Radiological Effluent Technical Specifications
RHR	Residual Heat Removal
SDP	Significance Determination Process
SSD	Significance on Safe Shutdown
TS	Technical Specification
UFSAR	Updated Final Safety Analysis Report