

January 3, 2000

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

**SUBJECT: MID-CYCLE PERFORMANCE REVIEW AND INSPECTION PLAN -  
JAMES A. FITZPATRICK NUCLEAR POWER PLANT**

Dear Mr. Colomb:

On December 13, 1999, the NRC staff reviewed the plant performance of James A. FitzPatrick Nuclear Power Plant during June 1 - November 30, 1999, as reflected in the performance indicators and inspection results, in order to integrate performance information and to plan for inspection activities at your facility through July 31, 2000. The purpose of this letter is to inform you of our plans for future inspections at your facility so that you will have an opportunity to prepare for these inspections and to inform us of any planned inspections which may conflict with your plant activities.

Our review of performance at the James A. FitzPatrick Nuclear Power Plant noted that all performance indicators (PIs) and inspection areas were green (licensee response band), with the exception of the white (increased regulatory response band) PI for the high pressure coolant injection (HPCI) safety system unavailability performance indicator for the mitigating systems cornerstone. In addition, on December 29, 1999, we issued inspection report 05000333/99009 which contains the staff determination that the HPCI unavailability constituted a significant inspection finding per the NRC's significance determination process (SDP). Because the SDP characterization pertains to the same underlying issue as the performance indicator, the NRC considers this to be a single issue within a cornerstone. Additionally, consistent with pilot plant programmatic inspection requirements, the NRC is planning a supplemental inspection to review your long term corrective actions for this event.

The NRC has also identified a trend in the cross-cutting area of human performance. Although this trend has not resulted in any significant reductions in the margins of safety, we are providing it to enhance your station's performance in this important cross-cutting area. This human performance trend relates primarily to weaknesses in engineering and technical support performance. These weaknesses included testing of the HPCI system that contributed to system unavailability, system walkdowns that missed a number of material condition issues, entry of items into the corrective action system, and delays in ensuring that relevant issues were adequately communicated to operators. This issue does not require additional inspection and we will continue to monitor activities in this area through routine execution of the baseline inspection program.

Mr. Michael J. Colomb

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This letter advises you of our planned inspection effort resulting from the James A. FitzPatrick Nuclear Power Plant mid-cycle performance review. Enclosure 1 lists the scheduled inspections that are planned through July 31, 2000. The inspection plan is provided to minimize the resource impact on your staff, and to allow for scheduling conflicts and personnel availability to be resolved in advance of inspectors arriving onsite. Routine resident inspections are not listed due to their ongoing and continuous nature. The last few months of the inspection plan are tentative and will be revised at the end-of-cycle performance review in April 2000, which we expect to issue to you in May 2000.

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 (PDR). If circumstances arise which cause us to change this inspection plan, we will contact you to discuss the change as soon as possible. Please contact John Rogge at 610-337-5146 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

Original Signed by:

A. Randolph Blough, Director  
Division of Reactor Projects

Docket No. 05000333  
License No. DPR-59

Enclosures: 1. James A. FitzPatrick Nuclear Power Plant Inspection/Activity Plan  
2. Plant Issue Matrix

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Mr. Michael J. Colomb

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FITZPATRICK  
Inspection / Activity Plan  
01/01/2000 - 07/31/2000

Units	Inspection Activity	Title	No. of Staff on Site	No. assigned to Procedure	Planned Dates Start	Planned Dates End	Inspection Type
	<b>71111.21 - SAFETY SYS DESIGN AND PERF CAPABILITY</b>		6				
1	IP 71111.21	Safety System Design and Performance Capability (M)		4	02/14/2000	02/18/2000	Other Routine
1	IP 71111.21	Safety System Design and Performance Capability (M)		4	02/28/2000	03/03/2000	Other Routine
	<b>71330 - SECURITY</b>		2				
1	IP 71130.01	Access Authorization		2	02/21/2000	02/25/2000	Other Routine
1	IP 71130.02	Access Control		2	02/21/2000	02/25/2000	Other Routine
	<b>71152 - PROBLEM IDENTIFICATION AND RESOLUTION</b>		7				
1	IP 71152	Identification and Resolution of Problems		1	03/06/2000	03/10/2000	Other Routine
1	IP 71152	Identification and Resolution of Problems		5	03/27/2000	03/31/2000	Other Routine
	<b>95001 - HPCI WHITE - REACTOR SAFETY</b>		1				
1	IP 95001	Supplemental Inspection For One Or Two White Inputs In A Strategic Performan		1	04/03/2000	04/07/2000	Other Routine
	<b>71111.11 - DRS L.O. REQUAL INSPECTION</b>		2				
1	IP 71111.11	Licensed Operator Requalification (M,B)		2	04/17/2000	04/21/2000	Other Routine
	<b>71114 - EP PROGRAM REVIEW</b>		3				
1	IP 71114.02	Alert and Notification System Testing		1	04/24/2000	04/28/2000	Other Routine
1	IP 71114.03	Emergency Response Organization Augmentation Testing, Identification, and R		1	04/24/2000	04/28/2000	Other Routine
1	IP 71114.04	Emergency Action Level Changes		1	04/24/2000	04/28/2000	Other Routine
	<b>71111.07 - HEAT SINK</b>		1				
1	IP 71111.07	Heat Sink Performance (I,M)		1	05/08/2000	05/12/2000	Other Routine

This report does not include INPO and OUTAGE activities.  
This report shows only on-site and announced inspection procedures.

## United States Nuclear Regulatory Commission Revised Oversight Process PLANT ISSUE MATRIX

By Cornerstone

Region 1  
FITZPATRICK

Date	Source	ID	Type	Cornerstone	Significance Determination	Item Title Item Description/Significance
10/22/1999	1999011	NRC	FIN			<b>ERROR IN DRILL EXERCISE AND PERFORMANCE (DEP).</b>  During this inspection, errors were identified in the PI data submitted to the NRC. It was noted that the licensee was not using the guidance in NEI 99-02, Regulatory Assessment Performance Indicator Guideline, for the collection of data for DEP PI statistics. Specifically, the licensee was not counting the notification of PARs in the statistics. The licensee's method for determining the statistics was such that inclusion of the PAR notification opportunity would have improved the score in this area. There was no change in the assessment color. Concerns with this error are minimal and the licensee has stated that the method will be corrected for future data. However, because these errors were not significant in that no change in the NRC's action would have resulted from this data, and was not willful, this is a minor violation not subject to formal enforcement action.
<b>Dockets Discussed:</b> 05000333 FITZPATRICK						
10/18/1999	1999008-01	NRC	NCV	Mitigating Systems	Green	<b>FAILURE TO PROPERLY INSTALL AN EMERGENCY SERVICE WATER VALVE FASTENERS.</b>  The inspectors identified that the "B" 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)
<b>Dockets Discussed:</b> 05000333 FITZPATRICK						
10/18/1999	1999008-02	Licensee	NCV	Mitigating Systems	Green	<b>FAILURE TO CONTROL THE FIRE PROTECTION SYSTEM CONFIGURATION.</b>  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 long-standing problem was determined to have had a very low risk significance after evaluating the alternative safe shutdown and additional fire fighting 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. (1R05)
<b>Dockets Discussed:</b> 05000333 FITZPATRICK						
10/18/1999	1999008-03	NRC	NCV	Mitigating Systems	Green	<b>FAILURE TO PERFORM INDEPENDENT ENGINEERING VERIFICATION.</b>  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 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)
<b>Dockets Discussed:</b> 05000333 FITZPATRICK						
10/18/1999	1999008-06	Licensee	NCV	Mitigating Systems	Green	<b>FAILURE TO ADEQUATELY ESTABLISH THE CORE SPRAY TIMER CALIBRATION TOLERANCES.</b>  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 4OAA.4)

## United States Nuclear Regulatory Commission Revised Oversight Process PLANT ISSUE MATRIX

By Cornerstone

Region 1  
 FITZPATRICK

Date	Source	ID	Type	Cornerstone	Significance Determination	Item Title Item Description/Significance
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08/28/1999	1999007-01	NRC	NCV	Mitigating Systems	Green	<b>FAILURE TO ADEQUATELY ESTABLISH THE RHR LOW FLOW SWITCH SETPOINTS.</b>  The inspectors identified that instrument uncertainties were not adequately incorporated into the residual heat removal system minimum flow valve setpoint analysis. Subsequently, the licensee identified additional discrepancies, which, in total, caused the setpoint to be inadequate to ensure pump protection during low flow conditions. The inspectors also noted that ineffective communications between the engineering and operations departments resulted in the shift manager using incorrect information as part of the bases for initially justifying system operability.
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This issue was considered to have very low risk significance because the loss of RHR pump low flow protection was only credible during certain loss-of-coolant-accident conditions, which have a low probability of occurring.

07/17/1999	1999006	NRC	FIN	Mitigating Systems	Green	<b>EMERGENCY DIESEL GENERATOR EQUIPMENT FAILURES</b>  The failure of the circulating lube oil pump for the "A" emergency diesel generator (EDG), and a subsequent relay failure during the post-maintenance test were evaluated for overall plant risk. These equipment failures, which resulted in emergency diesel generator inoperability, were determined to be green using the significance determination process.
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To determine the safety significance of this event, the inspectors considered unavailability, the other equipment unavailable during the period, and success paths for a loss-of-offsite-power (LOOP) at the FitzPatrick Station as described in the licensee's Individual Plant Examination (IPE), and concluded that the increase in risk was very low.

07/17/1999	1999006-01	NRC	NCV	Mitigating Systems	Green	<b>FAILURE TO INITIATE A DEFICIENCY REPORT</b>  Mechanics altered the design of a safety bus control power fuse block and did not document the non-conformance. The fuse block manufacturer required grease on the fuse block contacts to prevent a loss of function due to corrosion. This grease was omitted during the assembly process and the omission was not entered into the corrective action system for resolution. The failure to initiate a deficiency report was contrary to station procedures, which require a DER to be initiated for conditions adverse to quality, and was a violation of NRC requirements.
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The failure of this fuse clip could have resulted in a loss of one of the two plant safety electrical supply busses. The significance of this issue was considered very low because it did not have an immediate impact on equipment performance.

07/17/1999	1999006-02	NRC	NCV	Mitigating Systems	Green	<b>FAILURE TO ADEQUATELY CONTROL THE CONFIGURATION OF THE HPCI SYSTEM</b>  The inspectors identified approximately 25 minor discrepancies during a walkdown of the HPCI system. The large number of discrepancies co-existing on a single safety system represents a lapse in control of the system configuration and a violation of NRC requirements. Furthermore, the inspectors noted that it took the licensee an excessive amount of time, approximately two weeks, to enter most of the discrepancies into their corrective action program.
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However, because the discrepancies did not impact equipment operability the issue had a very low risk significance as determined by the significance determination process.

10/18/1999	1999008-05	Licensee	NCV	Barrier Integrity	Green	<b>FAILURE TO PROPERLY VERIFY CONTAINMENT HYDROGEN/OXYGEN LEVELS.</b>  NYP&A 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 40A4.1)
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## United States Nuclear Regulatory Commission Revised Oversight Process PLANT ISSUE MATRIX

By Cornerstone

Region 1  
FITZPATRICK

Date	Source	ID	Type	Cornerstone	Significance Determination	Item Title	Item Description/Significance
07/17/1999	1999006-03	NRC	NCV	Barrier Integrity	Green	<b>ADMINISTRATIVE PROCEDURES PROBLEMS CAUSED OPERATOR NON-ADHERENCE</b>	The inspectors identified a problem in a NYPA administrative procedure which resulted in operators not adhering to written operating procedures. This administrative procedure resulted in a misunderstanding by the licensed operators of the requirements of their licenses with regard to procedure compliance and of the requirements of 10CFR50.54(X). This issue was previously identified and was not adequately resolved by the licensee. The failure to take appropriate corrective actions following an NRC-identified deficiency is a violation of 10CFR50, Appendix B, Criterion XVI, "Corrective Action."
<b>Dockets Discussed:</b> 05000333 FITZPATRICK							
Operators not complying with plant procedures could have resulted in the inoperability of plant safety systems. This potential inoperability of plant safety systems had a very low risk significance as determined by the significance determination process.							
07/17/1999	1999006	NRC	FIN	Occupational Radiation Safety	Green	<b>CONTROL ROD CHANGEOUT EXCEEDED PROJECTED DOSE</b>	The actual collective dose for the control rod (CRD) changeout, performed during the 1998 refueling outage, exceeded the projected dose by greater than 50%. The initial dose projection only addressed ancillary tasks and did not include the dose (approximately 5 person-rem) for removing and installing the CRDs.
<b>Dockets Discussed:</b> 05000333 FITZPATRICK							
Using the SDP, the dose accrued for CRD changeout (10,019 person-rem) represented an issue with very low risk significance, in that, the actual dose exceeded the projected dose (4,800 person-rem) by more than 50%, the three year rolling average for Fitzpatrick was greater than 240 person-rem, actual job dose was greater than 10 person-rem but less than 60 person-rem, and this finding represented a single occurrence meeting the SDP criteria.							
10/18/1999	1999008-04	NRC	NCV	Public Radiation Safety	Green	<b>THE SHIPMENT OF A CONTAMINATED PUMP WAS NOT PROPERLY CHARACTERIZED.</b>	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)
<b>Dockets Discussed:</b> 05000333 FITZPATRICK							
07/17/1999	1999006-04	NRC	URI	Miscellaneous	N/A	<b>LICENSEE SUBMITTED PERFORMANCE INDICATOR (PI) DATA DISCREPANCIES</b>	A discrepancy was identified through the review of licensee submitted performance indicator (PI) data. The error, identified by the NRC, was in not reporting a plant power change under the "Unplanned Power Changes per 7000 Critical Hours" PI. The error did not result in a change of indicator color and was corrected in a subsequent submittal. This item remains unresolved while the NRC evaluates errors in the PI data submittal.
<b>Dockets Discussed:</b> 05000333 FITZPATRICK							
07/17/1999	1999006-06	NRC	URI	Miscellaneous	N/A	<b>LICENSEE SUBMITTED PERFORMANCE INDICATOR (PI) DATA DISCREPANCIES.</b>	A discrepancy was identified through the review of licensee submitted performance indicator (PI) data. The error, identified by NYPA, was in not reporting an occurrence under the "Occupational Exposure Control Effectiveness" PI. The error did not result in a change of indicator color and was corrected in a subsequent submittal. This item remains unresolved while the NRC evaluates errors in the PI data submittal. This is part of URI 99-06-04.
<b>Dockets Discussed:</b> 05000333 FITZPATRICK							

# United States Nuclear Regulatory Commission Revised Oversight Process PLANT ISSUE MATRIX

By Cornerstone

## Legend

Type Codes:

AV	Apparent Violation
FIN	Finding
NCV	NonCited Violation
URI	Unresolved Item
VIO	Violation

ID Codes:

NRC	NRC
Self	Self-Revealed
Licensee	Licensee

AVs are apparent violations of NRC Requirements that are being considered for escalated enforcement action in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Action" (Enforcement Policy), NUREG-1600. However, the NRC has not reached its final enforcement decision on the issues identified by the AVs and the PIM entries may be modified when the final decisions are made.

URIs are unresolved items about which more information is required to determine whether the issue in question is an acceptable item, a deviation, a nonconformance, or a violation. A URI may also be a potential violation that is not likely to be considered for escalated enforcement action. However, the NRC has not reached its final conclusions on the issues, and the PIM entries may be modified when the final conclusions are made.