

James A. FitzPatrick  
Nuclear Power Plant  
P.O. Box 41  
Lycoming, New York 13093  
315-342-3840



May 31, 1996  
JAFP-96-0226

Michael J. Colomb  
Plant Manager

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Mail Station P1-137  
Washington, D.C. 20555

SUBJECT: **James A. FitzPatrick Nuclear Power Plant**  
**Docket No. 50-333**  
**Reply to Notice of Violation**  
**NRC Inspection Report 50-333/96-02**

Gentlemen:

In accordance with the provisions of 10 CFR 2.201, Notice of Violation, the Authority submits a response to the notice transmitted by your letter dated May 3, 1996. Your letter refers to the results of the routine resident safety inspection conducted by Messrs. G. Hunegs and R. Fernandes from February 18, 1996 to April 6, 1996 at the James A. FitzPatrick Nuclear Power Plant.

Attachment I provides the description of the violation, reason for the violation, the corrective actions that have been taken and the results achieved, corrective actions to be taken to avoid further violations, and the date of full compliance.

Attachment II provides a summary of the commitments contained in this submittal.

If you have any questions, please contact Mr. Arthur Zaremba at (315) 349-6365.

Very truly yours,

A handwritten signature in cursive script, appearing to read "Michael J. Colomb".

MICHAEL J. COLOMB

STATE OF NEW YORK  
COUNTY OF OSWEGO  
Subscribed and sworn to before me  
this 31<sup>st</sup> day of May 1996

9606040450 960531  
PDR ADOCK 05000333  
Q PDR

A handwritten signature in cursive script, appearing to read "Tammy L. Calkins".  
NOTARY PUBLIC

cc: next page

Handwritten initials "JEO" in the right margin.  
TAMMY L. CALKINS 4985563  
Notary Public, State of New York  
Qualified in Oswego County  
Commission Expires 8/19/97

cc: Regional Administrator  
U. S. Nuclear Regulatory Commission  
475 Allendale Road  
King of Prussia, PA 19406

Office of the Resident Inspector  
U. S. Nuclear Regulatory Commission  
P.O. Box 136  
Lycoming, NY 13093

Ms. K. Cotton, Acting Project Manager  
Project Directorate I-1  
Division of Reactor Projects-I/II  
U. S. Nuclear Regulatory Commission  
Mail Stop 14 B2  
Washington, DC 20555

Attachments:

- I. Reply to a Notice of Violation
- II. Summary of Commitment

**Attachment I to JAFP-96-0226  
Reply to Notice of Violation 96-02  
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**Violation**

Technical Specification 6.8.A.1 requires that written procedures and administrative policies shall be established, implemented, and maintained that meet or exceed the requirements and recommendations of Section 5 of American National Standards Institute (ANSI) 18.7-1972, "Facility Administrative Policies and Procedures."

Section 5 of ANSI 18.7-1972 requires, in part, that facility rules and instructions shall be established pertaining to maintenance that can affect the performance of safety-related equipment and that maintenance that can affect the performance of safety-related equipment shall be properly pre-planned and performed in accordance with written procedures which conform to applicable codes, standards, specifications and criteria.

Administrative Procedure (AP)-05.06, "System Internal Cleanliness and Foreign Material Exclusion\*," establishes requirements for maintaining system and component cleanliness during modification, maintenance, operations, and refueling activities. These requirements include administrative controls and techniques established to define practices while working to minimize the introduction of foreign material into systems.

Contrary to this, on February 26, 1996, requirements for maintaining system and component cleanliness were not met in that foreign material was found in the pneumatic supply lines and pilot solenoid valves for the safety/relief valves which revealed that previous system maintenance was not properly performed.

This is a Severity Level IV Violation (Supplement 1).

**Admission or Denial of the Alleged Violation**

The Authority agrees with this violation.

**Reasons for the Violation**

The cause of this violation was inadequate methods used by Mechanical Maintenance personnel to remove debris following maintenance activities on small bore tubing. Additionally, the Authority procedure for system internal cleanliness and foreign material exclusion (AP-05.06) did not contain specific requirements and criteria for flushing of systems following maintenance activities with the potential to introduce foreign material into plant components and systems.

The source of the foreign material intrusion was determined to be installation of new fittings on the Safety/Relief Valve pilot solenoid valve connections, and replacement of tubing on pilot solenoid valves, performed during the 1994-1995 refueling outage. The activity involved cutting of the Nitrogen supply tubing with either a hacksaw or aluminum oxide grinding wheel. Deburring tools were used on the tube ends during assembly of the new fittings. Attempts were made to remove foreign material generated using manual means (Tubing was wiped out with tack cloth and Q-tips), however, a flush was not performed following these maintenance activities.

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Corrective Actions That Have Been Taken

- The Drywell nitrogen system was blown down and sampled at all Safety Relief Valve (SRV) locations and at other appropriate locations in the system to ensure, to the extent practical, that foreign material in the system was removed, and to establish a cleanliness benchmark for the system.
- An independent analysis was performed on the foreign material recovered during the assessment of the nitrogen supply system. The data obtained was used as input into determining the source of material intrusion. Analysis included microscopic examination to determine physical characteristics, and laboratory analysis to determine material composition.
- Maintenance personnel were briefed on proper FME controls and flushing/blowdown of tubing following evolutions that could generate foreign material.
- A programmatic assessment was performed on the foreign material exclusion (FME) program. This assessment included:
  - Review of FME practices during the 1994-1995 refuel outage SRV work.
  - Administrative review of the program and procedures to ensure all commitments are met, and identify potential improvements to the program.
  - Review of selected work packages from the February 1996 forced outage to determine if proper FME controls were established and adhered to.
  - Review of the FME program against others in the industry.
- The FME Program, as defined in AP-05.06, "System Internal Cleanliness and Foreign Material Exclusion\*," has been revised to include additional guidance regarding flushing of systems following evolutions where debris has been introduced. This guidance includes specific requirements and acceptance criteria for flushing of systems. The Program revision also includes improved guidance on determining system cleanliness level requirements.
- Maintenance Department first line supervisors and Central Planning personnel were trained on the additional guidance contained in AP-05.06. Additional briefings on the new procedure revision were held with Maintenance and Instrument and Control personnel as part of the weekly department meeting.
- Personnel responsible for introducing debris into the system through their activities have been counselled.

**Results Achieved**

The source of the foreign material intrusion has been determined and internal cleanliness of the drywell nitrogen supply system has been reestablished. Several improvements have been incorporated into a new revision to AP-05.06, "System Internal Cleanliness and Foreign Material Exclusion\*." Maintenance personnel have been briefed on proper FME controls and flushing/blowdown of tubing, and have been trained on the requirements contained in the new revision to AP-05.06. The briefing and training has increased worker awareness of the importance of implementing proper FME practices during maintenance activities.

**Corrective Actions to be Taken**

- Additional training in improved FME procedures and methods will be performed for all Mechanical Maintenance and appropriate Construction Services Craft personnel prior to the start of the next refueling outage. (Planned Completion Date: October 28, 1996)
- An assessment of the effectiveness of the corrective actions will be performed by the Maintenance Department. (Planned Completion Date: August 1, 1996)
- A review of work packages planned for the upcoming refueling outage will be performed to ensure that the improved AP-05.06 guidance is implemented. (Planned Completion Date: October 28, 1996)

**Date When Full Compliance Will be Achieved**

Full compliance was achieved upon implementation of the improved procedural guidance of AP-05.06 on May 28, 1996.

Attachment II to JAFP-96-0226

Summary of Commitments

Page 1 of 1

Number	Commitment	Due Date
JAFP-96-0226-01	Additional training in improved FME procedures and methods will be performed for all Mechanical Maintenance and appropriate Construction Services Craft personnel.	Oct 28, 1996
JAFP-96-0226-02	An assessment of the effectiveness of the corrective actions will be performed by the Maintenance Department.	Aug 1, 1996
JAFP-96-0226-03	A review of work packages planned for the upcoming refueling outage will be performed to ensure that the improved AP-05.06 guidance is implemented.	Oct 28, 1996