



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION II
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ATLANTA, GEORGIA 30303-8931

[REDACTED]

December 1, 2006

Mr. D. B. Ferguson, Jr.
President & CEO
Nuclear Fuel Services, Inc.
P. O. Box 337, MS 123
Erwin, TN 37650

SUBJECT: LICENSEE PERFORMANCE REVIEW (LPR) OF LICENSED ACTIVITIES FOR
NUCLEAR FUEL SERVICES, (NFS) INC., DOCKET NUMBER 70-143

Dear Mr. Ferguson:

Managers and staff in our Region II office, the Office of Nuclear Material Safety and Safeguards, and the Office of Nuclear Security and Incident Response, completed a review of the Erwin facility's performance in conducting NRC-licensed activities. The review evaluated the facility's performance during the period beginning February 5, 2006, and ending October 13, 2006. This letter and the enclosure provide you with the results of our review, and will be used as a basis for establishing the NRC oversight program for your facility.

During this review period, NFS continued to maintain safety and security for its workers and the public. We recognize that the more significant issues in this LPR are based on findings early in the review period that may be affected by the results of an Alternate Dispute Resolution agreement. We also recognize that there were fewer NRC-identified violations later in the period when you had limited operations with salaried personnel who had been re-trained as operators and maintenance staff. Recognizing these unique circumstances, the NRC still has concern for the areas needing improvement noted in this report.

All of the areas needing improvement are repetitive of areas identified in the last LPR. Two of these resurfaced primarily from the Blended Low Enriched Uranium Preparation Facility (BPF) event of March 6, 2006. These areas are verification and implementation of equipment and controls identified in nuclear criticality safety analyses, and utilization of the problem identification and corrective action program. The other areas needing improvement are control of strategic special nuclear material, and engineering design, verification, and configuration control.

We have met several times in the past to discuss your progress in improving these areas, and we believe that continued improvements are warranted. Given the number, significance, and repetitiveness of these issues, the confidence normally provided through a robust safety program is not evident, indicating that actions are still necessary to provide additional assurance that facility operations will be conducted safely. These issues are also indicative that further action to improve your safety culture is warranted. In addition, the facility will be

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NFS

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challenged to improve performance as hourly staff return to work. Based on the performance information reviewed, the NRC will continue its increased review of these areas to verify that NFS management are taking the appropriate steps to improve safety and safeguards performance.

The results of our review will be discussed with you at your facility on January 9, 2007. The meeting will be closed to the public and will discuss the material in the enclosure, which pertains to sensitive unclassified information. During the meeting, we expect you to discuss your view of your performance in the same major areas that the NRC evaluated. We ask you to specifically address what actions you have taken, or are planning to take, to improve these program areas and the overall safety performance of the facility. In addition, we expect you to describe how your management will monitor the implementation and effectiveness of the actions to improve areas needing improvement identified in this letter.

As a result of our review of your performance, the NRC will continue heightened oversight of your licensed operations through inspections beyond those specified by the NRC's core inspection program. Also, the NRC may conduct the next LPR before the end of the normal 12-month period. By this time, NRC plans to have formed an oversight review panel for safety culture improvements at your facility that will play a key role in determining the appropriate LPR frequency.

This letter and the enclosed report contain sensitive unclassified information and will not be available for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS).

Questions and comments about NRC's review of NFS' performance should be referred to Mr. David Ayres, who can be reached by telephone at 404-562-4711.

Sincerely,

/RA/ V. McCree for

William D. Travers
Regional Administrator

Docket No. 70-143
License No. SNM-124

Enclosure: Licensee Performance Review
- Summary Outline

cc w/encl: (See page 3)

NFS

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**LICENSEE PERFORMANCE REVIEW
NUCLEAR FUEL SERVICES, INC.**

ASSESSMENT PERIOD: February 5, 2006 to October 13, 2006

The following is a summary of the performance of Nuclear Fuel Services, Inc., in the conduct of NRC licensed activities.

PERFORMANCE AREA: SAFETY OPERATIONS

This area is comprised of chemical safety, nuclear criticality safety (NCS), plant operations, and fire safety.

Program Areas Needing Improvement

- Verification and implementation of equipment and controls identified in NCS analyses
 - Failure to verify the proper installation of the tray dissolver filter enclosure drains prior to use of the system with fissile material (apparent violation (APV) 2006-006-02).
 - Failure to establish management measures for the tray dissolver drains which constituted a failure to meet the performance requirements of 10 CFR 70.61(d) for accident sequences related to handling fissile material (APV 2006-006-03).
 - Failure to have the solvent extraction room floor meet the performance requirements of 10 CFR 70.61(d) for accident sequences related to fissile solution accumulation (APV 2006-006-04).
 - Failure to assume in the NCS analysis for the tray dissolver system that fissile solution could be misdirected from the solvent extraction feed transfer line (APV 2006-006-05).

PERFORMANCE AREA: RADIOLOGICAL CONTROLS

This area is comprised of radiation protection (RP), environmental protection, waste management, and transportation.

Program Areas Needing Improvement

- No specific areas needing improvement were identified for radiological controls.



Enclosure

PERFORMANCE AREA: FACILITY SUPPORT

This area is comprised of maintenance and surveillance, training, emergency preparedness, and management controls.

Program Areas Needing Improvement

- Utilization of the problem identification and corrective action program
 - Failure to capture unusual conditions associated with yellow solutions in the enclosure in the corrective action program (APV 2006-006-08).
 - The licensee's corrective action system demonstrated adequate trending and input of items, but the trends also indicated inadequate response to certain recurring issues (inspection report (IR) 2006-007).
 - Failure of NFS management to make an NRC notification in accordance with timeliness requirements of 10 CFR 70, Appendix A (APV 2006-006-01).
 - Failure to maintain dual Criticality Accident Alarm System (CAAS) detector coverage at the waste water treatment facility (violation (VIO) 2006-205-01).
- Engineering design, verification, and configuration control
 - The use of a less-than-adequate configuration management system that failed to ensure that the safety impact of the partially installed and unisolated change was addressed per requirements of 10 CFR 70.72 is identified as an apparent violation (APV 2006-006-06).
 - Failure to provide adequate procedures for the operation of the enclosure components (APV 2006-006-07).
 - Failure to correctly implement the configuration control program during modification of an active engineered control, in that a failsafe feature of the explosive gas detection system was defeated. (VIO 2006-002-01).
 - The electrical schematics of active engineered controls were not typically placed under configuration control and relied solely on post-maintenance testing to verify the proper configuration (unresolved item (URI) 2006-02-02).
 - Weaknesses were identified in the licensee configuration management program (IR 2006-203).

This area is comprised of safety licensing.

- No specific areas needing improvement were identified for safety licensing.

This area is comprised of material control and accounting (MC&A), physical protection, and classified material/information security.
