



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
SAM NUNN ATLANTA FEDERAL CENTER  
61 FORSYTH STREET, SW, SUITE 23T85  
ATLANTA, GEORGIA 30303-8931

January 30, 2008

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 Security and Incident Response, and the Office of Nuclear Material Safety and Safeguards, completed a review of the Nuclear Fuel Services, (NFS) Inc.'s performance in conducting NRC-licensed activities. The review evaluated performance during the period of July 29, 2007, through December 31, 2007. This letter and the enclosure provide 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. However, the NRC noted an upward trend in the number of procedural violations identified during this review period, including eight violations in a five month period. This increase in violations appears to be an indicator of declining regulatory performance in this area.

The review revealed the need for improvement in management oversight to ensure adherence to operational, radiological protection, and engineering procedures. This area for improvement is particularly noteworthy as it is a longstanding area needing attention at NFS, as indicated by two of the previous three LPRs. Moreover, for the remaining LPR period in which NRC did not identify this as an area needing improvement, your facility was not running at full capacity. At least one of these procedure violations involve failure to adhere to procedures implemented as a corrective action following the March 2006 incident involving the spill of high enriched uranium solution. In light of NFS' plan for significant expansion of the Blended Low Enriched Uranium facility in 2008, this area for improvement will continue to be a focus of NRC oversight. NFS' continued challenges in this area further underscore the importance of success in your ongoing efforts to improve in both human performance and the related components of safety culture.

In addition, the NRC identified management oversight of planning and quality of licensing requests as another program area needing improvement. Several requests were ineffectively planned or of inadequate quality.

Based on the above, the NRC will continue to monitor your performance through enhanced oversight activities beyond the core inspection program. Also, the NRC will conduct the next LPR in approximately six months.

D. Ferguson, Jr.

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The results of our performance review will be discussed with you at a meeting open to the public on February 28, 2008. During the meeting, we expect you to provide your perspective on the facility's performance in the five major program areas described in the enclosure, including any specific actions you have taken, or plan to take, to improve your performance in these areas, as well as the overall safety performance of the facility. In that regard, the NRC invites you to provide any insights from your ongoing safety culture assessment as they relate to the areas identified in this LPR.

In accordance with 10 CFR 2.390 of NRC's "Rules of Practice," this document may be accessed through the NRC's public electronic reading room, Agency-Wide Document Access and Management System (ADAMS) on the Internet at <http://www.nrc.gov/reading-rm/adams.html>.

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

Sincerely,

*/RA/*

Victor M. McCree  
Acting Regional Administrator

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

Enclosure: Licensee Performance Review  
- Summary Outline

cc w/encl:  
B. Marie Moore, Vice President, Safety and Regulatory Management  
Nuclear Fuel Services, Inc.  
P. O. Box 337, MS 123  
Erwin, TN 37650

Timothy Lindstrom, General Manager  
Nuclear Fuel Services, Inc.  
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L. Edward Nanney, Director  
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cc w/encl: (Cont'd on page 3)

D. Ferguson, Jr.

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(cc w/encl: cont'd)  
William D. Lewis, Mayor  
Town of Erwin  
211 N. Main Avenue  
P.O. Box 59  
Erwin, TN 37650

Gregg Lynch, Mayor  
Unicoi County  
P. O. Box 169  
Erwin, TN 37650

Johnny Lynch, Mayor  
Town of Unicoi  
Unicoi, TN 37692

Distribution w/encl:

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PUBLICLY AVAILABLE       NON-PUBLICLY AVAILABLE       SENSITIVE       NON-SENSITIVE

ADAMS:  Yes    ACCESSION NUMBER: \_\_\_\_\_

OFFICE	RII: DFFI	RII: DFFI	RII: DFFI	RII: ORA	HQ: NMSS	HQ: NSIR		
SIGNATURE	/RA/	/RA/	/RA/	/RA/	Via Email	Via Email		
NAME	MCrespo	CPayne	DCollins	CCasto	MWeber	PHolohan		
DATE	01/24/2008	01/24/2007	01/25/2008	01/29/2008	1/18/08	01/28/2008		
E-MAIL COPY?	YES    NO	YES    NO	YES    NO	YES    NO	YES    NO	YES    NO	YES    NO	YES    NO

**LICENSEE PERFORMANCE REVIEW  
NUCLEAR FUEL SERVICES, INC. (NFS)  
ASSESSMENT PERIOD: July 29, 2007 to December 31, 2007**

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**

- No specific areas needing improvement were identified for safety operations

**PERFORMANCE AREA: RADIOLOGICAL CONTROLS**

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

**Program Areas Needing Improvement**

- No specific areas needing improvement were identified for radiological controls

**PERFORMANCE AREA: FACILITY SUPPORT**

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

**Program Areas Needing Improvement**

- Management oversight to ensure adherence to operational, radiological protection, and engineering procedures
  - Failure to follow procedure due to the storage and use of flexible pipe sections without formal approval from the nuclear criticality safety group. (VIO 2007-208-01)
  - Failure to properly implement criticality alarm response procedures following a false alarm. (VIO 2007-008-02)
  - Two examples of failing to follow procedures: one involving the use of an unapproved work request for operations, and the other which led to the contamination and a slight chemical exposure of an operator. (VIO 2007-008-03)

Enclosure

- Three examples of failing to follow Special Work Permits (SWPs) by not using the appropriate personnel protective equipment. (VIO 2007-008-01)
- Failure to document and properly implement radiological decontamination procedures. (VIO 2007-008-04)
- Two examples of failing to follow SWP radiological control requirements. (VIO 2007-009-02)
- The licensee implemented operational procedure changes without the required reviews and training. (VIO 2007-006-03)
- The licensee failed to implement the "toll-gate" process that requires documented design goals and meetings to determine the requirements for engineering projects. (VIO 2007-009-03)

## **PERFORMANCE AREA: SPECIAL TOPICS (LICENSING ACTIVITIES)**

This area is comprised of facility licensing activities.

### **Program Areas Needing Improvement**

- Management oversight of planning and quality of licensing requests

Several recent licensing requests have not adequately supported the licensee's desired operational needs. Ineffective planning and quality resulted in documents that required multiple changes before providing sufficient information to support NRC's licensing activities. Examples include the following:

- The request to increase its possession limit for high-enriched uranium. (TAC L32637)
- The three revisions of the Fundamental Nuclear Material Control Plan for high-enriched uranium submitted in July, November, and December 2007. (TACs L32644, L32656 and L32662)
- The major revision of the Physical Security Plan for high-enriched uranium. (TAC L32648)
- The request to establish a Chief Nuclear Officer. (TAC L32647)

**PERFORMANCE AREA: SAFEGUARDS**

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

**Program Areas Needing Improvement**

- No specific areas needing improvement were identified for safeguards.