

[REDACTED]

June 6, 2006

Ms. B. Marie Moore, Vice President  
Safety and Regulatory  
Nuclear Fuel Services, Inc.  
P.O. Box 337, MS 123  
Erwin, TN 37650

SUBJECT: NUCLEAR FUEL SERVICES, INC. - AMENDMENT 71 - ONE-TIME  
EXEMPTION FROM PHYSICAL INVENTORY DEADLINE (TAC L31947)

Dear Ms. Moore:

In accordance with your application dated April 13, 2006, and pursuant to Parts 70 and 73 to Title 10 of the Code of Federal Regulations (CFR), Materials License SNM-124 is hereby amended to grant a one-time exemption from the deadline for completing and reporting the physical inventory of [REDACTED] (Blended Low-Enriched Uranium Preparation Facility). Accordingly, a new Safeguards Condition SG-4.35 has been added to read as follows:

SG-4.35 Notwithstanding the requirements of 10 CFR 74.59(f)(1) and Section 4.5.1 of the facility's Fundamental Nuclear Material Control Plan, Nuclear Fuel Services, Inc. (NFS) may report the results of the May 12, 2006, inventory for [REDACTED] (Blended Low-Enriched Uranium Preparation Facility) within 45 days of the date of the letter informing NFS that the U.S. Nuclear Regulatory Commission (NRC) has no objection to restarting operations addressed in Confirmatory Action Letter No. 02-06-003 dated March 18, 2006.

In addition, the license has been revised to reflect Revision 3 of the North Site Decommissioning Plan. We accepted this revision in our letter dated May 18, 2006 (ML061290069). Accordingly, Safety Condition S-1 has been revised to include the dates of April 13 and May 2, 2006.

All other conditions of this license shall remain the same.

Enclosed are copies of the revised Materials License SNM-124 (Enclosure 1), and the Safeguards Evaluation Report (Enclosure 2).

If you have any questions regarding this matter, please contact Kevin Ramsey of my staff at (301) 415-7887, or by e-mail, to [kmr@nrc.gov](mailto:kmr@nrc.gov).

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B. Moore

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Sincerely,

/RA/

Robert C., Pierson, Director  
Division of Fuel Cycle Safety  
and Safeguards  
Office of Nuclear Material Safety  
and Safeguards

Docket No.: 70-143  
License No.: SNM-124  
Amendment 71

Enclosures:

1. Materials License SNM-124
  2. Safeguards Evaluation Report
- [REDACTED]

B. Moore

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**Closes TAC L31947**

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[REDACTED]

DOCKET: 70-143

LICENSEE: Nuclear Fuel Services, Inc.  
Erwin, Tennessee

SUBJECT: SAFEGUARDS EVALUATION REPORT: LETTER DATED APRIL 13, 2006,  
INVENTORY EXEMPTION REQUEST FOR THE BLENDED LOW-ENRICHED  
URANIUM PREPARATION FACILITY

## 1.0 BACKGROUND

By letter dated April 13, 2006, Nuclear Fuel Services, Inc., (NFS) requested a one-time exemption from reporting the May 2006 strategic special nuclear material inventory results for the Blended Low-enriched Uranium (BLEU) Preparation Facility [REDACTED] within 45 days after the May 12, 2006, start of ending inventory, as required in 10 CFR 74.59(f)(1) and Section 4.5.1 of the NFS Fundamental Nuclear Material Control (FNMC) Plan. Currently, the BLEU Preparation Facility is in a safe-shutdown mode, in accordance with Confirmatory Action Letter No. 02-06-003 dated March 18, 2006. Processing in [REDACTED] was shut down without the usual material processing/clean-out that is required as part of a measured physical inventory. NFS is currently in the process of conducting an operational readiness review (ORR), the completion of which, along with the restart of operations, is expected to occur on or before June 20, 2006. After completion of the ORR, the BLEU Preparation Facility must operate for a minimum of two weeks, to process the material in [REDACTED], to a form suitable to conduct a measurable physical inventory. NFS requests that the [REDACTED] inventory reporting date be extended until 45 days after the completion of the ORR and the processing/inventory process cleanout resumes, the date of which is not now specifically known.

## 2.0 DISCUSSION

The licensee attached tamper-indicating devices on the material in [REDACTED], consistent with the requirements of CAL No. 02-06-003 for NFS to: (1) maintain the BLEU Preparation Facility shutdown until after NFS completed its investigation of the March 7, 2006, inadvertent material transfer event; (2) develop corrective actions; (3) discuss the items with the NRC as specified in the letters from NFS to the NRC dated March 15 and March 16, 2006; and (4) obtain the NRC's authorization to restart the facility. The BLEU Preparation Facility was examined by the NRC staff during a visit to the facility on May 1-2, 2006, during which time the NRC observed the measures undertaken by NFS to secure the material in [REDACTED]. By maintaining the BLEU Preparation Facility in safe shutdown mode since shortly after the March 7 event, and by adequately protecting the material in [REDACTED] during the shutdown, the inventory time clock is essentially frozen for the material in [REDACTED]. In essence, the time period between the shutdown (shortly after the event of March 7, 2006) and the restart of operations (expected to

[REDACTED]

[REDACTED]

occur on or before June 20, 2006), can essentially be ignored for inventory purposes, since no processing that would lead to an inventory difference will have taken place in the BLEU Preparation Facility. In addition, the material form in [REDACTED] cannot be appropriately inventoried until the BLEU Preparation Facility has been in operation for a period of time (a minimum of two weeks) to permit the material to be processed to a form suitable to conduct a measurable physical inventory.

### 3.0 ENVIRONMENTAL REVIEW

The staff prepared an Environmental Assessment (EA) for this action in accordance with 10 CFR Part 51. The EA concluded that this action would have no significant impact on the environment. On May 26, 2006, a finding of no significant impact was published in the *Federal Register* (71 FR 30451).

### 4.0 CONCLUSION

Upon review of the inventory exemption request, the staff has determined that the one-time exemption to 10 CFR 74.59(f)(1) and Section 4.5.1 of the facility's FNMC Plan for the BLEU Preparation Facility is acceptable and continues to provide an effective Material Control and Accountability program at NFS. Accordingly, approval of the NFS inventory exemption request is recommended.

In addition, Safeguards License Condition SG-4.35 of Materials License SNM-124 should be added to incorporate the one-time exemption, to read as follows:

SG-4.35 Notwithstanding the requirements of 10 CFR 74.59(f)(1) and Section 4.5.1 of the facility's Fundamental Nuclear Material Control Plan, NFS may report the results of the May 12, 2006, inventory for [REDACTED] (Blended Low-Enriched Uranium Preparation Facility) within 45 days of the date of the letter informing NFS that NRC has no objection to restarting operations addressed in Confirmatory Action Letter No. 02-06-003 dated March 18, 2006.

### PRINCIPAL CONTRIBUTORS

Michael F. Kelly  
Thomas N. Pham  
Kevin Ramsey