

April 11, 2007

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 76 - EXTENSION OF  
SAFEGUARDS CONDITION SG-4.34 (TAC L32603)

Dear Ms. Moore:

In response to your amendment request, dated January 5, 2007, and pursuant to Part 70 to Title 10 of the Code of Federal Regulations, Materials License SNM-124 is hereby amended to extend the expiration date of Safeguards Condition SG-4.34. Accordingly, Safeguards Condition SG-4.34 has been revised to read as follows:

SG-4.34 Notwithstanding the commitment in Section 4.7.1 of the Fundamental Nuclear Material Control (FNMC) Plan identified in Condition SG-5.1 to perform certain receipt verification measurements of strategic special nuclear material, the licensee shall have five (5) additional days to fulfill the above stated commitment relative to the shipment of high-enriched uranium identified in the January 5, 2007, request letter. This condition automatically expires on April 30, 2008.

In addition, the license has been revised to reflect Revision 5 to your Physical Protection Plan for Category I High-Enriched Uranium. The Nuclear Regulatory Commission accepted this change by letter dated December 27, 2006 (ML060460081).

Accordingly, Safety Condition S-1 has been revised to include the dates of October 18, 2006, and January 5, 2007.

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

If you have any questions regarding this matter, please contact Matt Bartlett of my staff at (301) 415-5754, or via e-mail to [mab11@nrc.gov](mailto:mab11@nrc.gov).

This letter and its enclosures contain sensitive, unclassified information, and will therefore be deemed Official Use Only. They will not be placed in the Public Document Room nor will they be publicly available in the Nuclear Regulatory Commission's Agencywide Documents Access and Management System (ADAMS).

Sincerely,

/RA/

Gary S. Janosko, Deputy Director  
Fuel Facility Licensing Directorate  
Division of Fuel Cycle Safety  
and Safeguards  
Office of Nuclear Material Safety  
and Safeguards

Docket No.: 70-143  
License No.: SNM-124  
Amendment 76

Enclosures:

1. Materials License SNM-124
2. Safeguards Evaluation Report

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Sincerely,

/RA/

Gary S. Janosko, Deputy Director  
Fuel Facility Licensing Directorate  
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**Closes TAC L32603**

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<b>OFC</b>	FMB	FMB	FMB	FMB	FFLD
<b>NAME</b>	Mbartlett /kmr for/	KRamsey	VCheney	PHabighorst	GJanosko
<b>DATE</b>	04/09/07	04/09/07	04/09/07	04/10/07	04/11/07

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[REDACTED]

DOCKET: 70-143

LICENSEE: Nuclear Fuel Services, Inc.  
Erwin, Tennessee

SUBJECT: SAFEGUARDS EVALUATION REPORT: SUBMITTAL DATED JANUARY 5,  
2007, REQUEST TO EXTEND SAFEGUARDS LICENSE CONDITION SG-4.34

1.0 BACKGROUND

By cover letter dated January 5, 2007, Nuclear Fuel Services, Inc. (NFS) requested an amendment to renew the previously issued Safeguards License Condition SG-4.34. This license condition automatically expires on April 30, 2007. NFS has requested this amendment to authorize a time extension to complete certain receipt verification measurements for shipments of strategic special nuclear material (SSNM). When approved, the amendment would relieve the licensee from the commitment in Section 4.7.1 of its Fundamental Nuclear Material Control Plan (Plan). The staff considered this amendment request in accordance with the provisions of 10 CFR 70.34.

2.0 DISCUSSION

The extension request addresses shipments of SSNM containers, conducted by the Department of Energy Office of Secure Transportation (OST). The OST scheduling issues related to the transport of SSNM and the need for the license condition in 2007 are the same as previous years. Due to the limited availability of secure transport and schedule constraints, the licensee must maintain the capability to accommodate larger than usual quantities of material for each shipment, received in a compressed time frame. NFS is pursuing additional staffing and equipment to increase their capability to perform the required receipt activities. Therefore, the licensee requests additional time to perform the gross weight checks associated with the larger shipment quantities.

However, Section 4.7.1 of NFS's Plan contains the commitment that "incoming containers of HEU are gross weighed within five (5) working days, excluding weekends and holidays, of the time the material is received." Therefore, a time extension has been requested for the past three years for the receipt of this material, and to modify the requirements to accommodate the receipt measurement activities. A further extension will accommodate similar material receipts and schedules occurring at the facility during 2007 through April 30, 2008. In the request letter, NFS stated that the containers of SSNM, received from the secure transport shipments, will be physically verified for container numbers and tamper-indicating devices.

Enclosure 2

[REDACTED]

[REDACTED]

Once verified, the material will be placed into vault storage until gross weighing is performed. "Category 1A" designated material will be gross weighed within five (5) working days, excluding weekends and holidays, from the time the material is placed in vault storage. "Category 1B" designated material will be gross weighed within ten (10) working days, excluding weekends and holidays, from the time the material is placed in vault storage. The staff found that the proposed practices for handling the materials during receipt activities are acceptable. The staff also found that the request is necessary and appropriate to allow NFS sufficient time to fulfill all initial verification measurement requirements for the shipments.

### 3.0 ENVIRONMENTAL REVIEW

The staff has determined that the changes requested are related to safeguards matters, which are categorically excluded from the requirements to prepare a site-specific environmental assessment. Therefore, in accordance with 10 CFR 51.22(c)(12), neither an environmental assessment nor an environmental impact statement is warranted for this action.

### 4.0 CONCLUSION

The staff concludes that granting NFS's request for completing the verification measurements for shipments of SSNM is justified and warranted, and will not reduce the effectiveness of the safeguards program. Therefore, the staff recommends extending the expiration date and revising SG-4.34 to read as follows:

SG-4.34 Notwithstanding the commitment in Section 4.7.1 of the Fundamental Nuclear Material Control (FNMC) Plan identified in Condition SG-5.1 to perform certain receipt verification measurements of strategic special nuclear material, the licensee shall have five (5) additional days to fulfill the above stated commitment relative to the shipment of high-enriched uranium identified in the January 5, 2007, request letter. This condition automatically expires on April 30, 2008.

### PRINCIPAL CONTRIBUTORS

Michael F. Kelly  
Thomas N. Pham  
Matt Bartlett