



■ 1205 banner hill road ■ erwin, tn 37650 ■ phone 423.743.9141  
■ www.nuclearfuelservices.com

21G-09-0127  
GOV-01-55-04  
ACF-09-0253  
August 28, 2009

Director  
Office of Nuclear Material Safety and Safeguards  
U.S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, DC 20555

- References:
- 1) Docket No. 70-143; SNM-124
  - 2) Application for Renewal of Special Nuclear Material (SNM) License 124, dated June 30, 2009 (21G-09-0104)
  - 3) Letter from the NRC; Timely Renewal Status and Non-Acceptance of License Renewal Application, dated August 7, 2009 (TAC L32830)

**Subject: Response to Request for Additional Information Concerning License SNM-124 Renewal Application**

Dear Sir:

Nuclear Fuel Services, Inc. (NFS) hereby submits the following information with regard to the letter dated August 7, 2009, from Mr. Kevin M. Ramsey (Reference 3) identifying additional information required to continue review of the Application for Renewal of Special Nuclear Material (SNM) License 124, (Reference 2). The Attachment to this letter includes the Title, Current Revision Number, and Date of each program/document that is considered part of the license renewal application as required by 10 CFR 70.22(b), 10 CFR 70.22(g through m), and 10 CFR 70.65(b).

Section 11.8 of the application (Other QA Elements) will be resubmitted with additional information for your review by September 18, 2009.

If you or your staff have any questions, require additional information, or wish to discuss this, please contact me, or Mr. Rik Droke, Licensing and Compliance Director, at (423) 743-1741. Please reference our unique document identification number (21G-09-0127) in any correspondence concerning this letter.

Sincerely,

**NUCLEAR FUEL SERVICES, INC.**

A handwritten signature in black ink that reads 'BMM Moore'.

B. Marie Moore  
Director of Safety and Regulatory

DMG/pdj  
Attachment

NMSS01

Regional Administrator  
U.S. Nuclear Regulatory Commission  
Region II, Atlanta Federal Center  
61 Forsyth Street, SW, Suite 23T85  
Atlanta, GA 30303

Mr. Manuel Crespo  
Project Inspector  
U.S. Nuclear Regulatory Commission  
Region II, Atlanta Federal Center  
61 Forsyth Street, SW, Suite 23T85  
Atlanta, GA 30303

Mr. Kevin Ramsey  
Project Manager  
Fuel Manufacturing Branch  
Fuel Facility Licensing Directorate  
Division of Fuel Cycle Safety and Safeguards  
Office of Nuclear Material Safety and Safeguards  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Mr. Stephen Burris  
Senior Resident Inspector  
U.S. Nuclear Regulatory Commission

**Attachment**

Response to Request for Additional Information Concerning  
License SNM-124 Renewal Application  
4 pages to follow

**Attachment**  
**RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION CONCERNING**  
**LICENSE SNM-124 RENEWAL APPLICATION**

**NRC Comment #1**

**The provisions of 10 CFR 70.22(b) require that your application contain a full description of the program for control and accounting of special nuclear material (SNM). Your application failed to provide this information or reference a document that is considered part of your application.**

NFS Response to #1

The current approved program document for control and accounting of strategic special nuclear material (SNM) is "Fundamental Nuclear Material Control Plan" and consists of:

- General Discussion, Revision 8, dated April 2005
- Section 1, Process Monitoring, Revision 24, dated November 2008
- Section 2, Item Monitoring, Revision 8, dated August 2006
- Section 3, Alarm Resolution, Revision 9, dated November 2008
- Section 4, QA & Accounting, Revision 17, dated June 2007
- Annex A, Revision 6, dated June 2007
- Annex B, Revision 1, dated August 1998
- Annex C, Revision 1, dated August 1998
- Annex D, Revision 3, dated June 2007

The current approved program document for control and accounting of SNM of low strategic significance is "Fundamental Nuclear Material Control Plan for SNM of Low Enriched Uranium" and consists of:

- Section 1, Revision 6, dated January 2008
- Section 2, Revision 4, dated August 2004
- Section 3, Revision 8, dated January 2008 (Revision 9, dated July 2009, was submitted for your information on July 31, 2009, under 10 CFR 70.32)
- Section 4, Revision 6, dated August 2006
- Section 5, Revision 4, dated January 2005
- Section 6, Revision 5, dated August 2006
- Section 7, Revision 2, dated January 2002
- Section 8, Revision 3, dated January 2005 (Revision 4, dated July 2009, was submitted for your information on July 31, 2009, under 10 CFR 70.32)
- Section 9, Revision 1, dated February 1993
- Annex, Revision 6, dated January 2008 (Revision 7, dated July 2009, was submitted for your information on July 31, 2009, under 10 CFR 70.32)

The current approved program document for control and accounting of SNM during curtailed SSNM activities is "Fundamental Nuclear Material Control Plan for Periods of Limited HEU Processing Activities" and consists of:

- General Discussion, Revision 1, dated October 1994
- Section 1, Revision 1, dated October 1994
- Section 2, Revision 1, dated October 1994
- Section 3, Revision 1, dated October 1994
- Section 4, Revision 0, dated February 1994

#### **NRC Comment #2**

**The provisions of 10 CFR 70.22(g) require that your application contain a description of the plan for physical protection of SNM in transit, and a safeguards contingency plan for threats, thefts, and sabotage of SNM in transit. Your application failed to provide this information or reference a document that is considered part of your application.**

#### NFS Response to #2

These requirements are addressed in the following program documents:

- "Physical Protection Plan for Protection of Category II Moderate Enriched Uranium," NFS-SEC-SP-02, Revision 0, dated October 4, 2007
- "Physical Security Plan for SNM of Low Strategic Significance," NFS-SEC-C3-PSP, Revision 2, dated May 26, 2004

Transportation Condition TR-1.2 of SNM-124 (Reference 1) also addresses exemptions related to this topic.

#### **NRC Comment #3**

**The provisions of 10 CFR 70.22(h) require that your application contain a physical security plan for formula quantities of SNM. Your application failed to provide this information or reference a document that is considered part of your application.**

#### NFS Response to #3

The current approved program document is "Physical Protection Plan," NFS-SEC-SP-01, Revision 7, dated November 4, 2008. Revision 8, dated June 18, 2009, has been submitted for your review and approval under 10 CFR 70.34.

#### **NRC Comment #4**

**The provisions of 10 CFR 70.22(i) require that your application contain an emergency plan or an evaluation showing that a plan is not required. Your application failed to provide this information or reference a document that is considered part of your application.**

NFS Response to #4

The current approved program document is "Emergency Plan," NFS-GH-903, Revision 13, dated March 2009, (effective date May 14, 2009). This document was submitted for your information on June 1, 2009, under 10 CFR 70.32.

**NRC Comment #5**

**The provisions of 10 CFR 70.22(j) require that your application contain a safeguards contingency plan for formula quantities of SNM. Your application failed to provide this information or reference a document that is considered part of your application.**

NFS Response to #5

The current approved program document is "Safeguards Contingency Response Plan," NFS-SEC-SP-04, Revision 1, dated March 30, 2006.

**NRC Comment #6**

**The provisions of 10 CFR 70.22(k) require that your application contain a physical security plan for SNM of moderate and low strategic significance. Your application failed to provide this information or reference a document that is considered part of your application.**

NFS Response to #6

The current approved program documents are:

- "Physical Protection Plan for Protection of Category II Moderate Enriched Uranium," NFS-SEC-SP-02, Revision 0, dated October 4, 2007
- "Physical Security Plan for SNM of Low Strategic Significance," NFS-SEC-C3-PSP, Revision 2, dated May 26, 2004

**NRC Comment #7**

**The provisions of 10 CFR 70.22(l) require that your application address how Safeguards Information will be protected in accordance with 10 CFR Part 73. Your application failed to provide this information or reference a document that is considered part of your application.**

NFS Response to #7

The current approved program document is "Procedure for Control of Safeguards Information," NFS-SEC-080, Revision 1, dated March 29, 2007.

### **NRC Comment #8**

**The provisions of 10 CFR 70.22(m) require that your application contain a full description of the program to protect classified information in accordance with 10 CFR Parts 25 and 95. Your application failed to provide this information or reference a document that is considered part of your application.**

#### NFS Response to #8

The current approved program document is form "Contract Security Classification Specification (CSCS)," NRLFO-08-161, dated August 2008.

### **NRC Comment #9**

**The provisions of 10 CFR 70.65(b) require that your application contain copies of all integrated safety analysis summaries. Your application failed to provide this information or reference documents that are considered part of your application.**

#### NFS Response to #9

The current approved documents are:

- NFS Site ISA Summary, Revision 6, dated January 2009
- BLEU Preparation Facility ISA Summary, Revision 6, dated January 2009
- Building 310 Warehouse ISA Summary, Revision 3, dated January 2009
- BLEU Project Oxide Conversion & Effluent Processing Buildings ISA Summary, Revision 3, dated January 2006; replacement page 300 of 319, dated January 2008; and replacement pages 303 and 304 of 319, dated January 2009
- BLEU Project Uranyl Nitrate Building ISA Summary, Revision 6, dated January 2007
- Building 100 NDA Laboratory ISA Summary, Revision 0, dated October 2004
- Building 300 Warehouse ISA Summary, Revision 1, dated January 2008
- Building 110B, 110D, and 131 Laboratory ISA Summary, Revision 2, January 2008
- CDL ISA Summary (license amendment), Revision 1, dated February 2009
- CDL ISA Summary (non-license amendment), Revision 0, dated May 2009
- 300 Complex Production Areas 100 – 900 ISA Summary, Revision 5, dated January 2009
- 300 Complex Recovery ISA Summary, Revision 5, dated January 2009
- 300 Complex Support Systems ISA Summary, Revision 5, dated January 2009
- Waste Water Treatment Facility ISA Summary, Revision 5, dated January 2009
- Building 105 Laboratory ISA Summary, Revision 5, dated January 2009

### **NFS Additional Response (10 CFR 73.46 and Appendix B to Part 73 – Security Training Plan)**

The current approved program document is "NFS Site Security Training Plan," Revision 1, dated March 2006. Revision 2, dated November 25, 2008, has been submitted for your review and approval under 10 CFR 70.34.