



**NUCLEAR FUEL SERVICES, INC.**  
a subsidiary of The Babcock & Wilcox Company

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

**OFFICIAL USE ONLY**

21G-14-0071  
GOV-01-55-04  
ACF-14-0096

April 4, 2014

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

**OFFICIAL USE ONLY**

Document contains Circumvention of Statute  
information. Department of Energy approval  
required prior to public release.

R. Shackelford 4/4/2014  
Reviewed By

- Reference:
- 1) Docket No. 70-143; SNM License 124
  - 2) Letter from Mark P. Elliott to NRC, dated November 30, 2012, (21G-12-0245), Updated Decommissioning Funding Plan as Required by 10 CFR 70.25(e)(2)
  - 3) Letter from NRC to Mark P. Elliott, dated March 28, 2013, Request for Additional Information (RAI) Concerning Updated Decommissioning Funding Plan (TAC No. L33250)
  - 4) Letter from Mark P. Elliott to NRC, dated April 17, 2013 (21G-13-0088), Response to RAI Concerning Updated Decommissioning Funding Plan
  - 5) Letter from NRC to Mark P. Elliott, dated June 11, 2013, NFS Interim Approval of Decommissioning Cost Estimate Amount (TAC No. L33250)
  - 6) Letter from NRC to Richard J. Freudenberger, dated March 6, 2014, NFS RAI Concerning Updated Decommissioning Funding Instruments (TAC No. L33293)

**Subject: Financial Assurance Instruments to Support the Decommissioning Funding Plan**

Pursuant to recent conversations with members of your staff, and in response to the RAI (Reference 6), Nuclear Fuel Services, Inc. (NFS) hereby submits the remaining financial assurance documents for the NFS Site.

The financial assurance instruments contained herein guarantee that sufficient funds, in the amount specified in Reference 2, will be available when needed for decommissioning the NFS Site. Attachment 1 contains a summary of the methods of financial assurance in use and the corresponding instruments currently in place. Attachments 2, 3, 4, and 5 contain updated Statements of Intent and Standby Trust Agreements. Attachment 6 contains a Certification of Financial Assurance that has been prepared in conformance with the Consolidated NMSS Decommissioning Guidance (NUREG-1757, Vol. 3). Finally, Attachments 8 and 9 contain updated Letters of Credit for the NFS and AREVA facilities.

Attachments 2 and 3 are copies of the original documents that were submitted directly to NRC by DOE/Naval Reactors and DOE/NNSA under separate cover letters. Attachments 4, 5, 6, and

NMSSO1

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**When detached, handle this page as decontrolled.**

nuclear fuel services, inc., a subsidiary of The Babcock & Wilcox Company

Designate as  
original.  
Kevin Ramsey  
4/9/14

8 are originally signed documents. Attachment 9 is a copy of the original document that was previously submitted directly to NRC by Compass Bank.

**Attachment 6 contains sensitive information, is marked "Official Use Only" in accordance with 5 U.S.C. 552, and is not suitable for public release. Attachment 7 contains a redacted version of Attachment 6 that is suitable for public release.**

As mentioned above, Attachment 1 contains a summary of the methods of financial assurance in use and the corresponding instruments currently in place. Upon completion of your review, please return the financial assurance documents currently on file that have now been superseded and are no longer required. These documents include DOE Statements of Intent (dated 9/21/2011 and 8/11/2011); and Certification of Financial Assurance (dated 9/26/2011).

If you or your staff have any questions, require additional information, or wish to discuss this, please contact me, or Mr. Andrew Sabisch, Licensing and ISA Manager, at (423) 735-5030. Please reference our unique document identification number (21G-14-0071) in any correspondence concerning this letter.

Sincerely,

**NUCLEAR FUEL SERVICES, INC.**



Richard J. Freudenberger, Director  
Safety and Safeguards

JKW/pdj

- Attachment 1: Summary of NFS D&D Liability and Financial Assurance
- Attachment 2: Statement of Intent from DOE/Naval Reactors, dated 7/19/2013
- Attachment 3: Statement of Intent from DOE/NNSA, dated 9/4/2013
- Attachment 4: Standby Trust Agreement, Amendment 1, dated 3/13/2014
- Attachment 5: Standby Trust Agreement, Amendment 1, dated 3/13/2014
- Attachment 6: Certification of Financial Assurance
- Attachment 7: Redacted Version of Attachment 6
- Attachment 8: Amendment to Letter of Credit Number SB 22.493, dated 3/18/2014, D&D Cost Estimate Category - JV
- Attachment 9: Amendment 4 to Letter of Credit Number A 30271T, dated 10/9/2013, D&D Cost Estimate Category - NFS

Copy:  
Regional Administrator  
U.S. Nuclear Regulatory Commission, Region II  
245 Peachtree Center Avenue NE, Suite 1200  
Atlanta, GA 30303-1257

Mr. David Hartland  
Project Inspector  
U.S. Nuclear Regulatory Commission, Region II  
245 Peachtree Center Avenue NE, Suite 1200  
Atlanta, GA 30303-1257

✓ Mr. Kevin Ramsey  
Senior 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  
One White Flint North  
11555 Rockville Pike  
Rockville, MD 20852-2738

Mr. Charles Stancil  
Senior Resident Inspector  
U.S. Nuclear Regulatory Commission

**ATTACHMENT 1**

**Summary of NFS D&D Liability and Financial Assurance**

(1 page to follow)

# SUMMARY OF NFS D&D LIABILITY AND FINANCIAL ASSURANCE

As of March 20, 2014

D&D Cost Estimate Category Name	General Type of Contract(s)	Method(s) of Financial Assurance	Share of Estimate Value	Financial Assurance Documents
DOE	Government	1 Statement of Intent	~ \$375M	Letter from DOE/Naval Reactors dated 7/19/2013 (\$375M)
NFS	Commercial	1 Letter of Credit + 1 Statement of Intent + 1 Standby Trust Agreement	<u>Letter of Credit:</u> ~ \$13.5M  <u>Statement of Intent:</u> ~ 8.1M  Total: ~ \$21.6M	<u>Letter of Credit:</u> Amendment 4 to Compass Bank Letter of Credit No. A30271T, dated 10/9/2013 (\$13.5M)  <u>Statement of Intent:</u> Letter from DOE/NNSA dated 9/4/2013 (\$8.1M)  <u>Standby Trust Agreement:</u> Union Bank Trust Agreement dated 2/1/2013, Amendment 1 dated 3/13/2014
JV	Commercial	3 Letters of Credit (provided by AREVA for BLEU Complex facilities) + 1 Standby Trust Agreement	~ \$18.3M	<u>Letters of Credit:</u> Crédit Industriel et Commercial Letter of Credit No. SB22.401 and No. SB22.493, as amended (11.8M)  JPMorgan Chase Bank Letter of Credit No. TFTS-934413, dated 7/19/2011 (\$3.8M)  Amendment to SB22.493, dated 3/18/2014 (\$2.7M)  <u>Standby Trust Agreement:</u> Union Bank Trust Agreement dated 2/1/2013, Amendment 1 dated 3/13/2014
<b>TOTAL</b>			<b>~ \$415M</b>	

**ATTACHMENT 2**

Statement of Intent from DOE/Naval Reactors, dated 7/19/2013

(1 page to follow)



**Department of Energy**  
Naval Reactors Laboratory Field Office  
Post Office Box 1069  
Schenectady, New York 12301-1069

NRLFO:CON:13-108  
July 19, 2013

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


SUBJECT: U.S. DEPARTMENT OF ENERGY LIABILITY FOR  
DECONTAMINATION AND DECOMMISSIONING OF THE NUCLEAR FUEL  
SERVICES, INC. FACILITY IN ERWIN, TENNESSEE

Via Nuclear Fuel Services, Inc. (NFS) letter (21G-13-0150) dated June 26, 2013, NFS identifies that an updated decontamination and decommissioning (D&D) cost estimate in the amount of \$374,761,000 has been agreed to by the U.S. Nuclear Regulatory Commission (NRC). NFS' letter also requests that the U.S. Department of Energy (DOE) Contracting Officer provide assurance to the NRC regarding its knowledge of the updated estimate and confirmation that the contract identifies this obligation.

DOE's prime contract DE-NR00007 with NFS contains special clauses covering the DOE's contractual liability for D&D through its completion. However, pursuant to these clauses, the estimated cost and funding for the D&D work is negotiated into the contract on an annual basis. While DOE is aware of long-term estimates for this work, the above estimate is not referenced in the contract.

Historically, the NRC has accepted DOE's contract clauses as assurance of DOE's long-term liability for its portion of the costs of the D&D work at Erwin, Tennessee. The DOE's contractual liability for D&D of the NFS Erwin, Tennessee facility under the referenced contract is virtually unchanged from prior years.

If you need any additional information, you may contact M. Z. Pastor at (518)395-6375.

Sincerely,  
  
J. P. Maletta, Director  
Contracts Division

cc:  
W. K. Wilkerson, NFS  
D. A. Delwiche, NRLFO

NM5520

**ATTACHMENT 3**

Statement of Intent from DOE/NNSA, dated 9/4/2013

(1 page to follow)



**U.S. Department of Energy**  
NNSA Production Office  
Post Office Box 2050  
Oak Ridge, Tennessee 37831-8009



September 4, 2013

Mr. Kevin M. Ramsey, Project Manager  
Fuel Manufacturing Branch  
Division of Fuel Cycle Safety and Safeguards  
U.S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, DC 20555

Dear Mr. Ramsey:

**REFERENCE: DOCKET NO. 70-143; SNM LICENSE 124**

Reference: Letter from W. Keith Wilkerson, NFS to Peter Newby, AREVA NP Inc.,  
dated August 13, 2013

The purpose of this communication is to provide assurance that we are aware of the recent update to the cost estimate that supports the decommissioning liability under the DOE/TVA Interagency Agreement (IA) DE-SA09-01SR18976. Pursuant to the IA, Article 14, Paragraph C, DOE confirms the obligation to share the decontamination and decommissioning costs with the Tennessee Valley Authority (TVA). DOE's commitment shall be limited to equipment and facilities used solely for processing and blending down of the 13,300 KgU of HEU as specified in the agreement. We further acknowledge the currently estimated value as it relates to the scope of work under contract referenced above is approximately \$8,076,000.

If you need any additional information you may contact me at (865) 241-3917, email [connie.bayless@npo.doe.gov](mailto:connie.bayless@npo.doe.gov), or courier mail to:

Connie D. Bayless, Contracting Officer  
National Nuclear Security Administration Production Office  
Post Office Box 2050  
Oak Ridge, Tennessee 37831

Sincerely,

Connie D. Bayless  
Contracting Officer  
NNSA Production Office, Y-12

cc:  
Paul Mulcahy, TVA  
W. Keith Wilkerson, NFS  
Mark P. Elliott, NFS  
Kevin Ramsey, NRC  
B. Wright, 301BCR, MS 8019, B&W Y12  
Becky Eddy, NPO-70

**ATTACHMENT 4**

Standby Trust Agreement, Amendment 1, dated 3/13/2014

(2 pages to follow)

AMENDMENT No. 1  
To  
Trust Agreement Dated February 1, 2013  
By And Between  
Nuclear Fuel Services, Inc. (as "Grantor")  
And  
Union Bank, N.A. (as "Trustee")  
(the "Trust Agreement")

WHEREAS the amount of financial assurance required for licensed activities set forth in the Trust Agreement has been revised;

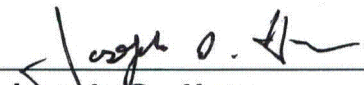
NOW THEREFORE, the parties to the Trust Agreement hereby agree to replace Schedule A of the Trust Agreement with the Schedule A attached hereto.

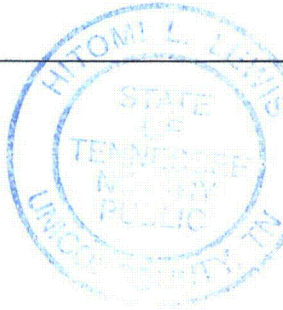
All other provisions of the Trust Agreement remain unchanged.

This Amendment No. 1 shall be administered, construed and enforced according to the laws of the State of New York.

IN WITNESS WHEREOF, this Amendment No. 1 is effective as of March 13, 2014.


NUCLEAR FUEL SERVICES, INC., as Grantor

  
By: Joseph G. Henry  
Its: President  
Seal:

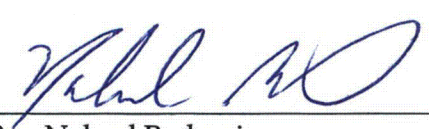


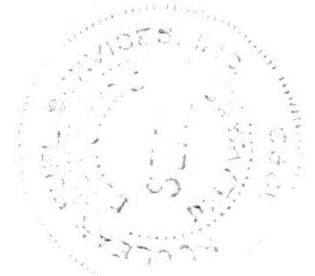
**ACKNOWLEDGEMENT**

State of TENNESSEE, County of UNICOI  
I certify the attester of this document  
personally appeared before me, and is  
either known by me or provided visual  
verification of their identity to me, and  
executed their legal signature on this  
document on this the 2nd day of

April, 2014.  
  
NOTARY PUBLIC  
My Commission Expires: June 29, 2016

UNION BANK, N.A., as Trustee

  
By: Nabeel Badawi  
Its: Assistant Vice President



## SCHEDULE A

**This Agreement demonstrates financial assurance for the following cost estimates or prescribed amounts for the following licensed activities:**

### U.S. NUCLEAR REGULATORY COMMISSION LICENSE NUMBER

SNM-124

### NAME AND ADDRESS OF LICENSEE

Nuclear Fuel Services, Inc.  
1205 Banner Hill Road  
Erwin, TN 37650

### ADDRESS OF LICENSED ACTIVITY

Nuclear Fuel Services, Inc.  
1205 Banner Hill Road  
Erwin, TN 37650

### COST ESTIMATE FOR REGULATORY ASSURANCES DEMONSTRATED BY THIS AGREEMENT

Building 301	\$6,577,000
Building 333	\$4,419,000
<u>Building 440</u>	<u>\$2,554,000</u>
Grand Total	\$13,550,000

Letter of Credit No. A30271T, issued by Compass Bank: \$13,550,000

The cost estimate listed here was last adjusted and approved by the NRC on June 11, 2013.

**ATTACHMENT 5**

Standby Trust Agreement, Amendment 1, dated 3/13/2014

(2 pages to follow)

AMENDMENT No. 1  
To  
Trust Agreement Dated February 1, 2013  
By And Between  
Nuclear Fuel Services, Inc. (as "Grantor")  
And  
Union Bank, N.A. (as "Trustee")  
(the "Trust Agreement")

WHEREAS the amount of financial assurance required for licensed activities set forth in the Trust Agreement has been revised;

NOW THEREFORE, the parties to the Trust Agreement hereby agree to replace Schedule A of the Trust Agreement with the Schedule A attached hereto.

All other provisions of the Trust Agreement remain unchanged.

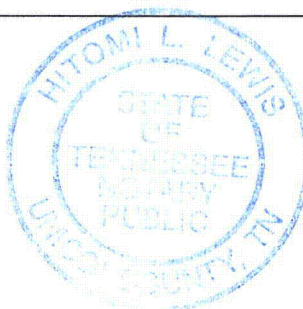
This Amendment No. 1 shall be administered, construed and enforced according to the laws of the State of New York.

IN WITNESS WHEREOF, this Amendment No. 1 is effective as of March 13, 2014.

**ACKNOWLEDGEMENT**

NUCLEAR FUEL SERVICES, INC., as Grantor

By: Joseph G. Henry  
Its: President  
Seal:

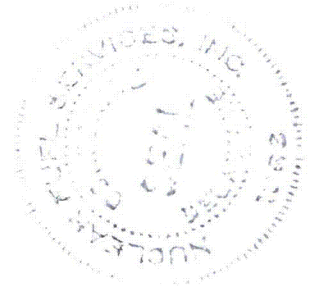


State of TENNESSEE, County of UNICOI  
I certify the attester of this document  
personally appeared before me, and is  
either known by me or provided visual  
verification of their identity to me, and  
executed their legal signature on this  
document on this the 2nd day of

April, 2014.  
Hitomi L. Lewis  
NOTARY PUBLIC  
My Commission Expires: June 29, 2016

UNION BANK, N.A., as Trustee

By: Nabeel Badawi  
Its: Assistant Vice President



## SCHEDULE A

**This Agreement demonstrates financial assurance for the following cost estimates or prescribed amounts for the following licensed activities:**

### U.S. NUCLEAR REGULATORY COMMISSION LICENSE NUMBER

SNM-124

### NAME AND ADDRESS OF LICENSEE

Nuclear Fuel Services, Inc.

1205 Banner Hill Road

Erwin, TN 37650

### ADDRESS OF LICENSED ACTIVITY

Nuclear Fuel Services, Inc.

1205 Banner Hill Road

Erwin, TN 37650

### COST ESTIMATE FOR REGULATORY ASSURANCES DEMONSTRATED BY THIS AGREEMENT

Buildings 510, 520, and 530:	\$18,265,000
Letter of Credit No. SB22.401, issued by Crédit Industriel et Commercial:	\$ 3,133,975
Letter of Credit No. SB22.493, issued by Crédit Industriel et Commercial:	11,345,345
Letter of Credit No. TFTS-934413, issued by JPMorgan Chase Bank:	<u>3,785,680</u>
Grand Total	\$18,265,000

The cost estimate listed here was last adjusted and approved by the NRC on June 11, 2013.

21G-14-0071  
GOV-01-55-04  
ACF-14-0096

**ATTACHMENT 7**

**Redacted Version of Attachment 6**

Certification of Financial Assurance

(1 page to follow)

**CERTIFICATION OF FINANCIAL ASSURANCE**

PRINCIPAL: Nuclear Fuel Services, Inc.  
1205 Banner Hill Road  
Erwin, Tennessee 37650

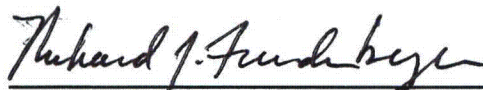
NRC Materials License SNM-124  
Docket No. 70-143  
Nuclear Fuel Services, Inc.  
1205 Banner Hill Road  
Erwin, Tennessee 37650

ISSUED TO: U.S. Nuclear Regulatory Commission

I certify that Nuclear Fuel Services, Inc. is licensed to possess the following types of unsealed special nuclear materials licensed under 10 CFR 70 in the following amounts:

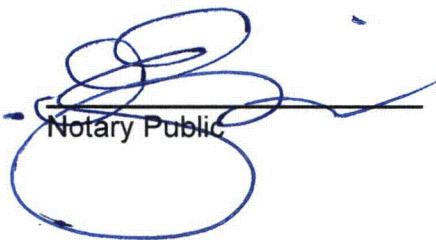
\_\_\_\_\_ of uranium-235, with uranium enriched up to 100 weight percent in the uranium-235 isotope which may contain up to an average of \_\_\_\_\_ of plutonium per gram of uranium, \_\_\_\_\_ of fission products per gram of uranium, and \_\_\_\_\_ of transuranic materials (including plutonium) per gram of uranium as contaminants.

I, Richard J. Freudenberger, also certify that financial assurance in the amount of \$414,653,000 has been obtained for the purpose of decommissioning as prescribed by 10 CFR Part 70.

  
\_\_\_\_\_  
Richard J. Freudenberger  
Director, Safety and Safeguards

4/4/14  
\_\_\_\_\_  
Date

I certify the above named person appeared before me and executed this document on this the 4 day of April, 2014.

  
\_\_\_\_\_  
Notary Public



My commission expires:

7/30/14

**ATTACHMENT 8**

Amendment to Letter of Credit Number SB 22.493, dated 3/18/2014  
D&D Cost Estimate Category - JV

(1 page to follow)

## AMENDMENT

**Crédit Industriel et Commercial**

520 Madison Avenue  
New York, NY 10022  
Phone (212) 715-4400  
Rapifax: (212) 715-4477  
SWIFT: CMCIUS33

**DOCUMENTARY LETTER OF CREDIT—IRREVOCABLE**NEW YORK CREDIT NO. **SB 22.493**DATE OF ISSUE  
May 12, 2004OPENING BANK'S NUMBER  
- - - - -ADVISING / OPENING DATE  
- - - - -

BENEFICIARY

UNITED STATES NUCLEAR  
REGULATORY COMMISSION  
Washington, D.C. 20555

By order of: Nuclear Fuel Services, Inc.  
1205 Banner Hill Rd.,  
Erwin, TN 37650

For Account of: Framatome ANP, Inc.

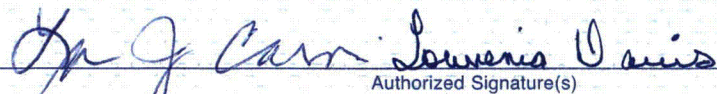
THIS AMENDMENT IS TO BE CONSIDERED AS PART OF THE ABOVE  
CREDIT AND MUST BE ATTACHED THERETO.

THE ABOVE MENTIONED CREDIT IS AMENDED AS FOLLOWS

- The name of the Account Party, wherever it appears in the Letter of Credit, is amended to read as follows:  
**Areva Inc.**
- The amount of this Credit is **increased** by US\$2,620,000.00 making total amount available US\$11,345,345.00 (United States Dollars Eleven Million Three Hundred Forty Five Thousand Three Hundred Forty Five and 00/100) Maximum effective March 18, 2014.
- Please send us by fax your agreement to this amendment on the attached copy to the attention of the Letter of Credit Department, Fax No. (212) 715-4477.

ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.

March 18, 2014

  
Authorized Signature(s)

**ATTACHMENT 9**

Amendment 4 to Letter of Credit Number A 30271T, dated 10/9/2013  
D&D Cost Estimate Category - NFS

(1 page to follow)

**AMENDMENT TO LETTER OF CREDIT NO. A30271T**

**OCTOBER 9, 2013**

**APPLICANT:**

**NUCLEAR FUEL SERVICES, INC. ("NFS")  
1205 BANNER HILL ROAD  
ERWIN, TENNESSEE 37650**

**BENEFICIARY:**

**U.S. NUCLEAR REGULATORY COMMISSION  
11545 ROCKVILLE PIKE  
ROCKVILLE, MD 20852-2738**

**RE: NRC LICENSE NO. SNM-124, DOCKET NO. 70-143**

**AMENDMENT NO.: FOUR (4)**

**GENTLEMEN:**

**PLEASE BE ADVISED THAT THE SUBJECT LETTER OF CREDIT HAS BEEN AMENDED AS FOLLOWS:**

**INCREASE THE AMOUNT OF THE LETTER OF CREDIT BY USD3,774,000.00 (THREE MILLION SEVEN HUNDRED SEVENTY-FOUR THOUSAND AND 00/100 UNITED STATES DOLLARS) TO A NEW TOTAL AMOUNT OF USD13,550,000.00 (THIRTEEN MILLION FIVE HUNDRED FIFTY THOUSAND AND 00/100 UNITED STATES DOLLARS).**

**THIS AMENDMENT IS TO BE CONSIDERED AS PART OF THE ABOVE CREDIT AND MUST BE ATTACHED THERETO.**

**ALL OTHER TERMS AND CONDITIONS OF THE CREDIT REMAIN UNCHANGED.**

**THIS CREDIT IS SUBJECT TO THE UNIFORM CUSTOMS AND PRACTICE FOR DOCUMENTARY CREDITS 2007 REVISION, INTERNATIONAL CHAMBER OF COMMERCE PUBLICATION NO. 600.**

**COMPASS BANK**

  
**Authorized Signature**

**OR**

**COPY**