

**SAFETY EVALUATION REPORT  
AREVA INTERNAL REORGANIZATION  
AND REQUEST FOR U.S. NUCLEAR REGULATORY COMMISSION  
CONSENT TO TRANSFER CONTROL OF LICENSES**

**LICENSE NUMBERS:** SNM-2015, SUA-672, XSNM3643, XSOU8780, and XSNM3722

**DOCKET NUMBERS:** 70-7015, 40-2259, 110-05864, 110-05211, and 110-06019

**LICENSEES:** AREVA Enrichment Services, LLC, and AREVA Inc.

**INTRODUCTION**

By letter dated July 25, 2016 (Agencywide Documents Access and Management System (ADAMS) Accession Number ML16207A715), AREVA Inc. submitted an application for U.S. Nuclear Regulatory Commission (NRC) consent to transfer several of its licenses. The application, which was submitted pursuant to Section 184 of the Atomic Energy Act of 1954 (AEA), as amended; Title 10 of the *Code of Federal Regulations* (10 CFR) 40.46, 10 CFR 70.36, and 10 CFR 110.51; and in accordance with the guidance in NUREG-1556, Volume 15, "Guidance About Changes of Control and About Bankruptcy Involving Byproduct, Source, or Special Nuclear Material Licenses" (NUREG-1556), Appendix E, also served as AREVA Inc.'s written notification to the NRC concerning a planned internal reorganization within the AREVA Inc. corporate structure in the U.S. This reorganization is scheduled to be implemented by January 1, 2017. Subsequently, by two letters dated August 22, 2016, AREVA Inc. submitted NRC Form 7, "*Application for NRC Export or Import License, Amendment, Renewal or Consent Request(s)*." Through these forms, which are an NRC administrative requirement for processing requests for processing export licenses, AREVA Inc. provided to supplement its July 25, 2016, submittal, AREVA Inc. requested to change the licensee name on the following licenses currently held by AREVA Inc.: (1) Export License XSNM3722, from AREVA Inc. to TN Americas, LLC (ADAMS Accession Number ML16239A127); and (2) Export License XSNM3643, from AREVA Inc. to TN Americas, LLC (ADAMS Accession Number ML16239A148). By letter dated August 23, 2016, AREVA Inc. submitted another NRC Form 7 requesting a change of the licensee name on Export License XSOU8780 from AREVA Inc. to AREVA Nuclear Materials, LLC (ADAMS Accession Number ML16239A157).

**SUMMARY OF REQUEST**

In its July 25, 2016, application, AREVA Inc. provided the following: (1) a description of its planned internal reorganization; (2) a description of its NRC-licensed facilities in the U.S.; (3) the licenses held by these facilities and how are they impacted by the reorganization; (4) an explanation of the licenses that are to be transferred; and (5) diagrams showing the company's corporate structure and NRC licensees. These diagrams included the company's current corporate structure and NRC licensees and the company's corporate structure and NRC licensees following the completion and implementation of the transfers.

In its submittal, AREVA Inc. states that, in support of its reorganization, NRC consent is requested for the following actions:

1. Indirect transfer of control of License SNM-2015 for the Eagle Rock Enrichment Facility (EREF) to be built in Bonneville County, Idaho, currently held by AREVA Enrichment Services, LLC (AES), which, after the completion of the reorganization, will be renamed as AREVA Nuclear Materials, LLC.
2. The direct transfer of control of NRC Materials License SUA-672, for the Lucky Mc uranium mill in Fremont County, Wyoming, from AREVA Inc. to AREVA Nuclear Materials, LLC. [As discussed later in this SER, this source material license governed the former Lucky Mc uranium mill, and the site is now used only to store uranium mill tailings. Accordingly, this licensed site will hereinafter be referred to as the Lucky Mc tailings site.]
3. The direct transfer of control of NRC Export License XSOU8780 from AREVA Inc. to AREVA Nuclear Materials, LLC.
4. The direct transfer of control of NRC Export Licenses XSNM3643 and XSNM3722 from AREVA Inc. to the new TN Americas, LLC.

AREVA Inc. also requested approval of conforming amendments to reflect the new name of the licensee for the EREF (i.e., AREVA Nuclear Materials, LLC) and the Lucky Mc tailings site (i.e., TN Americas, LLC), which will hold the licenses to be transferred.

### **DETAILED DISCUSSION OF AREVA'S SUBMITTAL**

In its July 25, 2016, submittal, AREVA Inc. provided simplified organization charts showing its organizational structure both before and after the planned reorganization is completed and implemented. These charts are simplified in that they only identify the AREVA entities that hold and/or will undergo a transfer of control of NRC licenses. The charts also indicate the intermediate and ultimate parent companies in the chain of ownership of these entities.

Figure 1 of AREVA Inc.'s submittal provides a simplified chart showing the current corporate structure of the AREVA family of companies. Under this structure, AREVA SA is shown as the top-tier parent company, with AREVA Holdings SAS and AREVA NP SAS as its subsidiaries. AREVA Inc., which currently holds the NRC Materials License SUA-672 for the Lucky Mc tailings site, the NRC Materials License SNM-1227 for the Richland, Washington, Fuel Manufacturing Facility, and the NRC Export Licenses XSNM3643, XSNM3722, and XSOU8780, is shown as a subsidiary of AREVA NP SAS (which owns 100 percent of the shares of AREVA Inc.). AES, the current holder of NRC Materials License SNM-2015 for the Eagle Rock Uranium Enrichment facility, and CB&I AREVA MOX Services, the holder of Construction Authorization (CA) Number CAMOX-001 for the mixed oxide fuel fabrication facility, are shown as subsidiaries of AREVA Inc. Based on the information provided by AREVA Inc. in its submittal, all of these NRC Material and Export Licenses would be transferred as a result of the planned reorganization. However, based on AREVA Inc.'s submittal, CA Number CAMOX-001 would not be transferred and would continue to be held by CB&I AREVA MOX Services after the reorganization.

Figure 2 of AREVA Inc.'s submittal provides a simplified organization chart showing the corporate structure after the proposed reorganization is completed and implemented. Under this new corporate structure, AREVA SA would remain as the top-tier parent company, with AREVA Holdings SAS and AREVA NP SAS as subsidiaries as they currently exist. AREVA Inc. would continue to be a subsidiary of AREVA NP SAS. The new AREVA Nuclear Materials, LLC (formerly AES before the reorganization) is shown as a subsidiary of AREVA Holdings, SAS, and would become the license holder for (1) NRC Special Nuclear Material (SNM) License SNM-2015 for the EREF (currently held by AES); (2) NRC Source Material License SUA-672 for the Lucky Mc tailings site (currently held by AREVA Inc.); and (3) NRC Export License XSOU8780 (currently held by AREVA Inc.). Figure 2 also shows the newly created company TN Americas, LLC, and CB&I/AREVA MOX Services, LLC, as subsidiaries of AREVA Nuclear Materials, LLC.

In its submittal, AREVA Inc. further states that, in the reorganization, its current ownership would remain unchanged, and that it would continue to hold its SNM license and several export licenses. AREVA Inc. also states that there will be no direct or indirect transfer of control of its SNM License SNM-1227, or of its related NRC Export Licenses XSNM3747, XSNM3551, XSNM3697, XSNM3741, XSOU8835, and XSOU8833, all of which are held by AREVA Inc. in connection with its Fuel Manufacturing Facility in Richland, Washington. In addition, AREVA Inc. noted that it owns a minority, 30 percent (30%), non-controlling interest in CB&I/AREVA MOX Services, LLC, which holds CA Number CAMOX-001 for the Mixed Oxide Fuel Fabrication Facility. AREVA Inc. also states that its ownership interests in CB&I/AREVA MOX Services, LLC, would be transferred to AREVA Nuclear Materials, LLC, but that this transfer would not affect CB&I's controlling 70 percent (70%) interest in MOX Services. In this regard, AREVA Inc. requested that the NRC confirm that the proposed reorganization does not involve any transfer of control of CA Number CAMOX-001 that would need NRC's prior consent pursuant to 10 CFR 70.36.

## **NRC STAFF EVALUATION OF AREVA'S SUBMITTAL**

### **REGULATORY FRAMEWORK**

The NRC staff's evaluation of AREVA Inc.'s submittal is based on guidance in NUREG-1556, Volume 15, "*Guidance About Changes of Control and About Bankruptcy Involving Byproduct, Source, or Special Nuclear Materials Licenses*," dated November 2000, and Regulatory Issue Summary (RIS) 2008-19 "*Lessons-Learned from Recent 10 CFR Part 70 License-Transfer Application Reviews*," dated August 2008, and regulations pertaining to specific licenses in 10 CFR Parts 30, 40, 70, and 110.

On September 8, 2016, pursuant to 10 CFR 2.1301, the NRC published its notice (ADAMS Accession Number ML16243A193) of receipt of AREVA Inc.'s July 25, 2016, license transfer application in the *Federal Register*, (81 FR 62180).

Definition of a Change of Control:

NUREG-1556, Volume 15, Appendix E, defines control as:

Control of a license is in the hands of the person or persons who are empowered to decide when and how that license will be used. That control is to be found in the person or persons who, because of ownership or authority explicitly delegated by the owners, possess the power to determine corporate policy and thus the direction of the activities under the license.

NUREG-1556 sets forth the criteria that the NRC uses to determine if consent to a license transfer is required pursuant to AEA Section 184 and the referenced NRC regulations. For the licenses set forth above that require such consent, the NUREG-1556 criteria are addressed below. In this regard and as discussed above, the following proposed license transfers are being reviewed by the NRC:

- Indirect transfer of control of SNM License SNM-2015;
- Direct transfer of control of Source Material License SUA-672 for the Lucky Mc tailings site; and
- Direct transfer of control of Export Licenses XSNM3643, XSNM3722 and XSOU8780.

REGULATORY REQUIREMENTS

The following 10 CFR regulations apply to the transfer of control of the NRC licenses at issue here.

10 CFR 40.46 Inalienability of licenses

- (a) No license issued or granted pursuant to the regulations in this part shall be transferred, assigned or in any manner disposed of, either voluntarily or involuntarily, directly or indirectly, through transfer of control of any license to any person, unless the Commission shall after securing full information, find that the transfer is in accordance with the provisions of this act, and shall give its consent in writing.
- (b) An application for transfer of license must include:
- (1) The identity, technical and financial qualifications of the proposed transferee; and
  - (2) Financial assurance for decommissioning information required by § 40.36 or Appendix A to this part, as applicable.

10 CFR 70.36 Inalienability of licenses

- (a) No license granted under the regulations in this part and no right to possess or utilize special nuclear material granted by any license issued pursuant to the regulations in this part shall be transferred, assigned or in any manner disposed of, either voluntarily or involuntarily, directly or indirectly, through transfer of control of any license to any person unless the Commission shall after securing full information,

find that the transfer is in accordance with the provisions of the Act, and shall give its consent in writing.

(b) An application for transfer of license must include:

- (1) The identity, technical and financial qualifications of the proposed transferee; and
- (2) Financial assurance for decommissioning information required by § 70.25.

#### 10 CFR 110.50 Terms

(d) A specific license may be transferred, disposed of or assigned to another person only with the approval of the Commission by license amendment.

#### 10 CFR 110.51 Amendment and renewal of licenses

(a) Amendments

- (1) Applications for amendment of a specific license shall be filed on NRC Form 7 in accordance with §§ 110.31 and 110.32 and shall specify the respects in which the licensee desires the license to be amended and the grounds for such amendment.

#### Initial Review of AREVA Inc.'s July 2016 Application

Following receipt of AREVA Inc.'s July 25, 2016, application, the NRC staff conducted an initial administrative review and determined that the application contained sufficient information to begin a more detailed technical review. This determination was documented in a letter to AREVA Inc. dated August 31, 2016 (ADAMS Accession No. ML16243A499).

#### Requests for Additional Information (RAIs) and AREVA Inc.'s Responses

In conducting its detailed review, the NRC staff identified additional information that was needed before final action could be taken. On September 2, 2016, the NRC staff held a conference call with AREVA representatives to request clarification of certain information contained in the July 25, 2016, application, and suggested that AREVA review RIS 2008-19, "Lessons-Learned from Recent 10 CFR Part 70 License-Transfer Applications Reviews" (specifically, the information in the first, second, and fourth paragraphs on page 5 of 7). This information calls for proof that a new entity is incorporated, that all decommissioning financial assurance instruments be held in the transferee's name before the license is transferred, and that financial statements for any company involved in a transfer show the financial position of the company before and after the proposed transfer. The NRC staff documented the discussions during the September 2, 2016, telephone call in an electronic communication under ADAMS Accession Number ML16259A095. Following the September 2, 2016, phone call, via electronic communication dated September 4, 2016, AREVA Inc. provided its response to the NRC staff's questions raised during the call. This response can be found under ADAMS Accession Number ML16259A096.

By letter dated September 15, 2016 (see ADAMS Accession Numbers ML16259A124 and ML16259A125), and as a follow-up to the September 2, 2016, phone call, the NRC staff, pursuant to 10 CFR 70.36(b), requested that AREVA Inc. provide financial statements, certificates of incorporation, and financial assurance documents stating the new names of the companies that would hold the following licenses if the transfers are approved:

- a. License SNM-2015 for the Eagle Rock Enrichment Facility.
- b. License SUA-672 for the Lucky Mc tailings site (currently held by AREVA, Inc.).
- c. Export License XSOU8780 (currently held by AREVA Inc.).
- d. Export Licenses XSNM3643 and XSNM3722 (currently held by AREVA, Inc.).

By letter dated September 16, 2016 (ADAMS Accession Number ML16263A305), AREVA Inc. submitted its response to the RAI, provided the requested documents. These documents included amended certificates, from the State of Delaware, of formation of both AREVA Nuclear Materials LLC and TN America LLC, and a fair market value report by Duff & Phelps as of June 30, 2016, for TN Americas, LLC.

In regards to decommissioning, reclamation and long-term surveillance issues, the RAI response included a Certification from AREVA's Corporate Treasurer indicating that: (1) AREVA Inc. maintains, as financial assurance for the Lucky Mc tailings site, an Irrevocable Letter of Credit issued by Credit Industriel et Commercial Bank ("CIC"), New York Branch, in favor of the U.S. Nuclear Regulatory Commission (the "NRC"), continuously maintained in an amount not less than \$834,954 for the purpose of complying with 10 CFR Part 40, Appendix A, Criteria 9 and 10, until a replacement is authorized by the NRC (the "Letter of Credit"); (2) upon approval of the transfer of License SUA-672 from AREVA Inc. to AREVA Nuclear Materials, LLC, by the NRC, AREVA Inc. will ask the Credit Industriel et Commercial Bank (CIC) to change the name of the indemnitor on the Letter of Credit to AREVA Nuclear Materials, LLC; (3) upon this change, CIC will provide NRC with a copy of the amended Letter of Credit; and, (4) as required by the License, the Letter of Credit is now and will be continuously maintained in favor of NRC throughout the License transfer process and thereafter until a replacement is authorized by the NRC.

## 1. AREVA'S CURRENT CORPORATE STRUCTURE

The NRC staff evaluated the information provided by AREVA Inc. in its July 25, 2016, submittal regarding the current corporate structure of the AREVA family of companies. The discussion below summarizes the NRC staff analysis and findings, based on the factual information provided by AREVA Inc.

- AREVA SA

AREVA SA currently is the ultimate parent company of the NRC-licensed entities. It is a company organized under the laws of France, and the intermediate parent company of AREVA Inc. This company holds no NRC licenses.

- AREVA Holdings SAS

AREVA Holdings SAS is a subsidiary of AREVA SA. Similar to its parent company, AREVA Holdings SAS holds no NRC licenses.

- AREVA NP SAS

AREVA NP SAS is also a subsidiary of AREVA SA and, like AREVA Holdings SAS, it holds no NRC licenses. AREVA NP SAS is AREVA Inc.'s parent company.

- AREVA Inc.

AREVA Inc. is an NRC licensee. Under the current AREVA corporate structure, AREVA Inc. is a subsidiary of AREVA NP SAS (which owns 100 percent of the shares of AREVA Inc.).

AREVA Inc. currently holds the NRC licenses listed below [**NOTE:** concerning this list, in its submittal, AREVA Inc. only requested NRC consent to the direct transfer of the licenses marked with an asterisk(\*); see the discussion under AREVA's Corporate Structure After Reorganization section below]:

- 1) Materials License SUA-672 for the former Lucky Mc uranium mill\* (the site is now used only to store uranium mill tailings)
- 2) Materials License SNM-1227 for the Richland, Washington Fuel Manufacturing Facility
- 3) Export License XSNM3643\*
- 4) Export License XSNM3722\*
- 5) Export License XSNM3747
- 6) Export License XSNM3551
- 7) Export License XSNM3697
- 8) Export License XSNM3741
- 9) Export License XSOU8780\*
- 10) Export License XSOU8835
- 11) Export License XSOU8833

AREVA Inc. is also the parent company of the currently existing AREVA Enrichment Services, LLC (AES). As part of the proposed reorganization, AES would be renamed as AREVA Nuclear Materials, LLC. AREVA Inc. is also the parent company of CB&I AREVA MOX Services, LLC. In its July 25, 2016, submittal, AREVA Inc. stated that, after the reorganization is completed and implemented, it would have no subsidiaries.

- AREVA Enrichment Services, LLC (AES)

AES currently holds the NRC license for the proposed EREF, which was applied for by AES on December 30, 2008. Following its review of the application, the NRC issued AES License SNM-2015 in October 2011, authorizing the construction and operation of

the EREF. The construction of this facility is currently on hold. Under the current AREVA corporate structure, AES is a subsidiary of AREVA Inc.

In its July 25, 2016, submittal, AREVA Inc. stated that, after the reorganization, AES would be renamed as AREVA Nuclear Materials, LLC, which, in turn, would become a subsidiary of AREVA Holdings SAS. As such, AREVA Inc. requested NRC consent to the direct transfer of SNM License SNM-2015.

- CB&I/AREVA MOX Services, LLC (MOX Services)

MOX Services currently holds CA Number CAMOX-001 for the mixed oxide (MOX) fuel fabrication facility, authorizing the construction of the facility on the U.S. Department of Energy's (DOE's) Savannah River Site (SRS) near Aiken, South Carolina. The CA was issued by the NRC on March 30, 2005, following its review of MOX Services' February 28, 2001, Construction Authorization Request regarding the MOX Fuel Fabrication Facility (MFFF) at the SRS. Construction of the MFFF started in 2007.

AREVA Inc. owns a minority, 30 percent (30%), non-controlling interest in MOX Services. As part of the proposed action, AREVA Inc.'s ownership interests in MOX Services would be transferred to AREVA Nuclear Materials, LLC. In its July 25, 2016, submittal, AREVA Inc. stated that this transfer would not affect CB&I's controlling 70 percent (70%) interest in MOX Services and, as such, AREVA Inc. requested that the NRC confirm that the proposed reorganization does not involve any transfer of control of CA Number CAMOX-001 that would need NRC's prior consent pursuant to 10 CFR 70.36.

## 2. AREVA'S CORPORATE STRUCTURE AFTER REORGANIZATION AND LICENSE TRANSFERS

NUREG-1556, Volume 15 provides guidance on the information needed to be included in transfer of control applications including:

- A clear description of the transaction to include, but not limited to, any transfer of stocks, assets, or mergers;
- New name of licensed organization or statement that no name change has occurred; and
- New licensee contact and telephone number (if applicable).

In accordance with this guidance, in its July 25, 2016, submittal, AREVA Inc. provided the following information for NRC's review to describe the company's reorganization.

### Description of Transaction

The information below describes the proposed transaction, which involves a change in the corporate structure of the AREVA family of companies after the proposed reorganization is



completed and implemented, as well as a description of the license transfers that will be involved, as discussed in AREVA Inc.'s submittal and subsequent responses to the NRC staff RAIs.

- AREVA SA

AREVA SA is currently the top-tier parent company and following the planned reorganization, it will remain as such. AREVA SA does not hold any NRC licenses. Accordingly, no NRC action is needed regarding this company.

- AREVA Holdings SAS

AREVA Holdings SAS is an intermediate French parent company (i.e., a subsidiary of AREVA SA) and also holds no NRC licenses. While the current reorganization plan is to have AREVA Holdings SAS become the parent company of AREVA Nuclear Materials, LLC, other options are still being considered, including creating another intermediate company that would own AREVA Nuclear Materials, LLC. If another corporate entity is later identified, the NRC will be informed. AREVA Holdings SAS holds no NRC licenses, therefore, no NRC action is needed regarding this company.

- AREVA NP SAS

AREVA NP SAS is wholly-owned by AREVA SA and holds no NRC licenses. Therefore, no NRC action is needed regarding this company.

- AREVA Inc.

As previously discussed in this report, AREVA Inc. is wholly-owned by AREVA NP SAS. AREVA Inc. holds 11 NRC licenses. As stated by AREVA Inc. in its submittal, there would be no changes to the relationship between these two companies after the reorganization.

As described below, AREVA Inc. requested NRC consent for the following transactions, which pertain to 4 of its 11 NRC licenses (as previously listed in this report):

- Direct transfer of control of NRC Materials License SUA-672, for the Lucky Mc Uranium Mill, from AREVA Inc. to AREVA Nuclear Materials, LLC (AES' new name after the reorganization);
- Direct transfer of control of NRC Export License XSOU8780 from AREVA Inc. to AREVA Nuclear Materials, LLC (AES' new name after the reorganization); and
- Direct transfer of control of NRC Export Licenses XSNM3643 and XSNM3722 from AREVA Inc. to the new TN Americas, LLC.

Based on AREVA Inc.'s description of the transactions after the reorganization is completed and implemented, AREVA Inc. would have no corporate subsidiaries and would continue to hold the following NRC Materials and Export Licenses:

- a. Materials License SNM-1227 for the Richland, Washington Fuel Manufacturing Facility.
- b. Export License XSNM3747.
- c. Export License XSNM3551.
- d. Export License XSNM3697.
- e. Export License XSNM3741.
- f. Export License XSOU8835.
- g. Export License XSOU8833.

- AES

AES holds NRC Materials License SNM-2015 for the EREF and is currently wholly-owned by AREVA Inc. As a result of the proposed reorganization, AES would change its corporate name to AREVA Nuclear Materials, LLC, which would be wholly-owned by an intermediate French parent company that in turn would be wholly-owned by AREVA SA. It is currently planned that the intermediate French parent company would still be AREVA Holdings SAS, but other options are being evaluated. If another entity is identified, AREVA Inc. will inform the NRC.

The transfer of the ownership interest to an intermediate French parent company would constitute an indirect transfer of control of AES's license. AREVA Inc. requested that the NRC consent to the indirect transfer of control of Materials License SNM-2015 from AES to AREVA Nuclear Materials, LLC, and that the NRC, accordingly issue conforming license amendments, pursuant to 10 CFR 70.36, in order to reflect the new name of the licensee, AREVA Nuclear Materials, LLC.

- Lucky Mc Uranium Tailings Site

The former uranium mill that was located at this site was demolished, and decontamination of the mill was completed in December 2004. The NRC licensee (PMC and, later, AREVA Inc.) continued to conduct a groundwater monitoring program at the site. Requirements in Title II of the Uranium Mill Tailings Radiation Control Act of 1978, as amended, and its implementing regulations in 10 CFR 40.28, apply at this site. AREVA Inc. identified an open issue regarding the fee associated with the 10 CFR 40.28 general license regarding the long-term care and surveillance of the site, as discussed further below.

In June 2008, the NRC issued a license amendment to remove two offsite wells from the approved groundwater monitoring network. In February 2009, the NRC staff received, for review, the DOE's draft Long-Term Surveillance Plan (LTSP) for the site (ADAMS Accession Number ML090400197). A preliminary final LTSP (ADAMS Accession Number ML12006A279) was submitted to the NRC in December 2011. The LTSP explains how DOE will fulfill the 10 CFR 40.28 requirements as the long-term custodian of the site including inspecting, monitoring, conducting maintenance, fulfilling annual and other reporting requirements, and maintaining records pertaining to the site. It is anticipated that the site's ownership would be transferred to DOE by the end of 2017.

On June 27, 2013, the NRC issued, "Order Approving Transfer and Change of Control and License Amendment of SUA-672, Pathfinder Mines Corporation, Lucky Mc Tailings Site

(Docket Number 40-2259).” Under that Order, the NRC approved the direct transfer of control of this license from PMC to AREVA NC Inc. Subsequently, as part of the AREVA reorganization in the fall of 2013, AREVA NC Inc. was dissolved, and AREVA Inc. became the licensee.

In its July 25, 2016, submittal, AREVA Inc. stated that it intends to transfer NRC Source Materials License SUA-672 for the Lucky Mc mill tailings site from AREVA Inc. to AREVA Nuclear Materials, LLC (AES’s new name after the reorganization), pursuant to 10 CFR 40.36. AREVA Inc. also stated that AREVA Nuclear Materials, LLC, would hold the license until it is terminated by the NRC, at which time the DOE would become the general licensee under 10 CFR 40.28. AREVA Inc. requested that NRC issue a conforming amendment to reflect the new name of the licensee, AREVA Nuclear Materials, LLC, and further stated that, once the fee issue is addressed, NRC Source Material License SUA-672 would be terminated.

#### Export Licenses to Be Transferred to AREVA Nuclear Materials, LLC

AREVA Inc. holds Export Licenses XSNM3643, XSNM3722, and XSOU8780, and it has identified that these licenses are associated with activities that will be transferred to AREVA Nuclear Materials, LLC, and its planned subsidiary to be named TN Americas, LLC. Therefore, AREVA Inc. requests that NRC consent to the direct transfer of these licenses from AREVA Inc. to TN Americas, LLC, and issue conforming amendments pursuant to 10 CFR 110.51 in order to reflect the new name of the licensees (i.e., “AREVA Nuclear Materials, LLC” in Export License XSOU8780, and “TN Americas, LLC” in Export Licenses XSNM3643 and XSNM3722).

- TN Americas, LLC

In its July 25, 2016, submittal, AREVA Inc. describes this company as a newly created company that would become a subsidiary of AREVA Nuclear Materials, LLC (AES’s new name after the reorganization). In its submittal, AREVA Inc. requests NRC consent for the direct transfer of NRC Export Licenses XSNM3643 and XSNM3722, from AREVA Inc. to TN Americas, LLC.

- MOX Fuel Fabrication Facility

As stated above, AREVA Inc. owns a 30 percent (30%) interest in MOX Services. As part of the proposed action, this 30 percent (30%) interest would be transferred to AREVA Nuclear Materials, LLC. This transfer would not affect CB&I’s controlling 70 percent (70%) interest in MOX Services. Therefore, AREVA Inc. requests that NRC confirm that the proposed reorganization does not involve any transfer of control of CA Number CAMOX-001 that would need NRC’s prior consent pursuant to 10 CFR 70.36.

### 3. CONTACT INFORMATION

As part of its description of the transaction, and in accordance with the guidance in NUREG-1556, Volume 15, Appendix E, AREVA Inc. provided the following licensee contact information should more information be needed:

For AREVA Nuclear Materials, LLC and TN Americas, LLC:

Tom Pennington  
7475 Wisconsin Ave., Suite 1100  
Bethesda, MD 20814  
[Tom.Pennington@areva.com](mailto:Tom.Pennington@areva.com)  
301-841-1690

For AREVA Inc.:

David Royer  
3315 Old Forest Road  
Lynchburg, VA 24501  
[dm.royer@areva.com](mailto:dm.royer@areva.com)  
434-832-4937

#### 4. CHANGES OF PERSONNEL

As recommended in NUREG-1556, Volume 15, AREVA Inc. provided the following information regarding any changes in personnel or duties that relate to the NRC-licensed programs affected by the proposed action, including training and experience of individuals having control over licensed activities.

According to AREVA Inc., as a result of the planned reorganization, there would be no changes in personnel or duties that relate to the licensed programs for any of the affected licensees. The radiation safety officers, authorized users or any other persons identified on the licenses or license applications as having responsibility for radiation safety or who are authorized to use licensed material -- including members of the licensees' Boards of Directors -- would remain the same. Though the Lucky Mc license would be transferred directly to AES, the new licensee would not make any changes to the current personnel. There would be no new training required, because there would be no new personnel.

#### 5. CHANGES OF LOCATION, EQUIPMENT AND PROCEDURES

NUREG-1556, Volume 15 recommends that license transfer applications include a detailed description of any changes in the licensees' location(s) of use, facility description, equipment or procedures (i.e., changes in operating or emergency procedures) that would normally require a license amendment. In its submittal, AREVA Inc. stated that, as a result of the planned reorganization, there would be no changes in organization, location, facilities, equipment or procedures that relate to the licensed program for any of the affected NRC licenses.

#### 6. SURVEILLANCE RECORDS

NUREG-1556, Volume 15 recommends that, prior to the approval of a change of control, license transfer applications should include a review of the status of all applicable surveillance requirements and records (i.e., calibrations, leak tests, area surveys, wipe tests, training, quality control, and related records). This should include an indication of whether

the surveillance program is current and if it will be current at the time of transfer. In accordance with the guidance in NUREG-1556, Volume 15, AREVA Inc. stated that the surveillance programs for the affected NRC licenses are up to date and are expected to be up to date at the time that control is to be transferred. All required surveillances have been performed, documented and reviewed, as required.

#### 7. DECOMMISSIONING AND RELATED RECORDS TRANSFERS

NUREG-1556, Volume 15 recommends that license transfer applications include: (1) information that ensures the proper transfer and maintenance of records important to the safe and effective decommissioning of facilities involved in licensed activities, and (2) a description of the status of the licensed facility with regard to ambient radiation levels and fixed and/or removable contamination as a result of NRC licensed activities. The application should confirm that the transferee accepts full responsibility for the decommissioning of the site, including any contaminated facilities and equipment.

In its submittal, AREVA Inc. stated that AES (i.e., AREVA Nuclear Materials, LLC, after completion of the reorganization), as an existing NRC licensee that would retain its license for the EREF, would continue to retain decommissioning records in accordance with NRC requirements. Decommissioning records for the Lucky Mc uranium mill would be transferred to AREVA Nuclear Materials, LLC. These records include documentation of surveys of ambient radiation levels and fixed and/or removable contamination, including methods and sensitivity. AREVA Nuclear Materials, LLC, would have full responsibility for the decommissioning of its sites, including any contaminated facilities and equipment. AREVA Nuclear Materials, LLC would assume full responsibility for the Lucky Mc uranium mill licensed activities and financial obligations, including payment of the long-term surveillance fee, when agreed upon.

#### 8. TRANSFEREE'S COMMITMENT TO ABIDE BY THE TRANSFEROR'S COMMITMENTS

In its submittal, AREVA Inc. stated that AES (AREVA Nuclear Materials, LLC, after completion of the reorganization), the transferee for the Lucky Mc uranium mill license and Export Licenses XSNM3643, XSNM3722 and XSOU8780, would abide by all constraints, conditions, requirements and commitments of the transferor. This commitment includes open inspection items and enforcement actions as applicable.

#### 9. FINANCIAL ASSURANCE FOR DECOMMISSIONING, RECLAMATION AND LONG-TERM SURVEILLANCE

In its submittal, AREVA Inc. stated that AES (AREVA Nuclear Materials, LLC, after completion of the reorganization) would continue to comply with the requirements relating to financial assurance for Decommissioning in License Condition 21 of NRC Materials License SNM-2015 for the EREF, as amended. In its response to the NRC staff's September 15, 2016, RAI, AREVA Inc. reconfirmed this information by restating that the EREF does not require financial assurance until it is constructed per the same license condition.

With respect to the Lucky Mc tailings site, as required under 10 CFR 40.36, Financial assurance and recordkeeping for decommissioning, the current financial surety arrangement

consists of an Irrevocable Standby Letter of Credit issued to AREVA NC Inc. on behalf of PMC in the amount of \$834,954 in favor of the NRC. Pursuant to the NRC's June 27, 2013, Order, upon closing of the Ur-Energy transaction directed by the order, AREVA NC Inc. provided "written proof that an Irrevocable Letter of Credit in the amount of \$834,954 or an amount equal to the most recent NRC-approved financial assurance cost estimate, whichever is greater, and a standby trust has been established to satisfy the requirements of 10 CFR Part 40, Appendix A, Criterion 9, for the future decontamination and decommissioning of the Lucky Mc facilities [i.e, the tailings site]. The Letter of Credit shall be continuously maintained in an amount approved by the NRC for the purpose of complying with 10 CFR Part 40, Appendix A, Criterion 9, until a replacement is authorized by the NRC." This was provided by letter dated December 17, 2013 (non-public), which also indicated that the closing of the transfer would be December 20, 2013.

With respect to the NRC Export Licenses held by AREVA Inc., in its response to the NRC staff's September 15, 2016, RAI, the applicant stated that the export licenses do not require decommissioning financial assurance.

## 10. FINANCIAL QUALIFICATIONS

In its response to the NRC staff's September 15, 2016, RAI, AREVA Inc. stated that both AREVA Nuclear Materials, LLC, and TN Americas, LLC would be financially sound companies with ample assets and a backlog of business to ensure long-term sustainability in the market place. Further, the applicant provided a Fair Market Value Report by Duff & Phelps as of June 30, 2016, which indicates that TN Americas LLC has a fair market value of \$235 million, but that AREVA Enrichment Services has a fair market value of negative \$65 million (see related information on this issue below).

### **NRC STAFF FINDINGS**

Based on its review of (1) the NRC regulations pertaining to specific licenses in 10 CFR Parts 40, 70, and 110, (2) the information provided in accordance with the guidance in NUREG-1556, Volume 15, "*Guidance About Changes of Control and About Bankruptcy Involving Byproduct, Source, or Special Nuclear Materials Licenses*," dated November 2000, and (3) RIS 2008-19 "*Lessons-Learned from Recent 10 CFR Part 70 License-Transfer Application Reviews*," dated August 2008, the NRC staff makes the following findings and conclusions:

1. In accordance with 10 CFR 40.46, and 70.36, the NRC staff concludes that AREVA Inc. has provided sufficient information warranting the NRC's consent to:
  - a. The indirect transfer of control of SNM License SNM-2015 for the EREF currently, held by AES, which, after the completion of the reorganization, would be renamed as AREVA Nuclear Materials, LLC.
  - b. The direct transfer of control of Source Material License SUA-672 for the Lucky Mc tailings site, from AREVA Inc. to AREVA Nuclear Materials, LLC.
2. In accordance with 10 CFR 110.50 and 110.51, the NRC staff concludes that AREVA Inc. has provided sufficient information warranting the NRC's consent to:

- a. The direct transfer of control of Export License XSOU8780 from AREVA Inc. to AREVA Nuclear Materials, LLC, and
  - b. The direct transfer of control of Export Licenses XSNM3643 and XSNM3722 from AREVA Inc. to the new TN Americas, LLC.
3. In accordance with the guidance in NUREG-1556, Volume 15, the NRC staff concludes that AREVA Inc. has:
- a. Adequately described the proposed company reorganization and entailed license transfers.
    - 1) Confirmed that, as a result of the planned reorganization, there will be no changes in personnel or duties that relate to the licensed program for any of these licensees, including radiation safety officers, authorized users or any other persons identified on the licenses or license application as having responsibility for radiation safety or authorized to use licensed material, including the AREVA Inc. and licensee Boards of Directors.
  - b. Confirmed that, as a result of the planned reorganization, there will be no changes in organization, location, facilities, equipment or procedures that relate to the licensed program for any of the licenses impacted by this transaction.
  - c. Provided adequate information describing the status of the licensee's facilities, equipment, radiation safety programs (including any known contamination and whether decontamination will occur prior to transfer), status of calibrations, leak tests, area surveys, wipe tests, training, quality control, and related records. The NRC staff also determined that AREVA Inc.'s surveillance programs for the licenses to be transferred are up to date and are expected to be up to date at the time that control is transferred and that all required surveillances have been performed, documented and reviewed, as required.
  - d. Adequately provided information regarding changes to decommissioning funding plans that would be made as a result of the company's reorganization and licenses transferred, and confirmed that financial assurance documents and any other financial assurance instruments associated with the licenses will be held in the transferee's name before the licenses are transferred. The NRC staff further finds that AREVA Inc. has committed to, and will, within 30 days from the date after the company's reorganization is completed, submit financial instruments reflecting the above-referenced changes, as required by 10 CFR 30.35(f).

The NRC staff also finds that AREVA Inc.'s September 16, 2016, RAI response meets (1) the 10 CFR 70.25 financial assurance for decommissioning requirements, and (2) the 10 CFR 70.36(b)(2) license transfer provision that references the 10 CFR 70.25 requirements.

In regard to its financial qualifications, in its September 16, 2016, RAI response, AREVA Inc. stated that both AREVA Nuclear Materials, LLC, and TN Americas, LLC, will be financially sound companies with ample assets and a backlog of business to ensure long-term sustainability in the market place. Further, AREVA Inc. provided a Fair Market Value Report by Duff & Phelps as of June 30, 2016, which indicates TN Americas LLC has a fair market value of \$235 million. The same report, however, shows AES as having a current fair market value of negative \$65 million. Nonetheless, the NRC staff determined that this negative market value for AES is not a reason for disapproving AREVA Inc.'s request because the EREF (1) is consolidated within the AES's financial statements, (2) has not yet been constructed, and (3) is not yet generating any income. Pursuant to Condition 21 of Special Nuclear Material License SNM-2015 for the EREF, financial qualifications are addressed prospectively and the Condition prescribes the information that must be provided prior to constructing the facility, as well as the timing for providing that information. As such, the NRC staff concludes that the information provided by AREVA Inc. in its September 16, 2016, RAI response meets: (1) the 70.25 financial assurance for decommissioning requirements, and (2) the 10 CFR 70.36(b)(2) license transfer provision that references the 10 CFR 70.25 requirements.

Condition 27 of the Lucky Mc license (Source Material License SUA-672) requires AREVA Inc. to maintain an NRC-approved financial surety arrangement, consistent with 10 CFR 40, Appendix A, Criteria 9 and 10, adequate to cover the estimated clean-up costs, if accomplished by a third party, including costs related to the reclamation of any tailings or waste disposal areas, ground water restoration as warranted, and the long-term surveillance fee. In fulfillment of this condition, by letter dated August 29, 2016 (ADAMS Accession No. ML16252A272), AREVA Inc. submitted its updated surety estimate for the site to the NRC. The NRC staff conducted its review of AREVA Inc.'s submittal and concluded that the updated surety bond adequately cover the costs for decommissioning and decontamination of the site, and that the long term surveillance fee has been adjusted using an acceptable 15 percent (15%) contingency factor, consistent with the latest available Consumer Price Index information for July 2016. Therefore, the NRC staff concludes that the updated surety estimate is adequate and satisfies the 10 CFR Part 40, Appendix A, Criterion 9 and 10 requirements.

- e. Confirmed that all records concerning the safe and effective decommissioning of the facilities will be transferred to the transferee or to NRC, as appropriate, including documentation of surveys of ambient radiation levels and fixed and/or removable contamination, including methods and sensitivity.

In this regard, the NRC staff concluded that AES (i.e., AREVA Nuclear Materials, LLC, after completion of the reorganization), as an existing NRC licensee that will retain its license for the EREF, will continue to retain decommissioning records in accordance with NRC requirements. Decommissioning records for the Lucky Mc uranium mill will be transferred to AREVA Nuclear Materials, LLC. These records include documentation of surveys of ambient radiation levels and fixed and/or removable contamination, including methods and sensitivity. The NRC staff also concluded that AREVA Nuclear Materials, LLC, will have full responsibility for the



decommissioning of its sites, including any contaminated facilities and equipment, and that it will assume full responsibility for the Lucky Mc license (NRC Materials License SUA-672), including payment of the long-term surveillance fee, when agreed upon.

- f. Confirmed that the transferee will abide by all constraints, conditions, requirements, representations, and commitments of the transferor or that the transferee will submit a complete description of the proposed licensed program.

In this regard, the NRC staff concluded that, as stated in AREVA Inc.'s July 25, 2016, submittal, AREVA Nuclear Materials, LLC, the transferee for NRC Materials License SNM-2015 for the EREF, NRC Materials License SUA-672 for the Lucky Mc tailings site, and for Export License XSOU8780, and TN Americas, LLC, the transferee for Export Licenses XSNM3643 and XSNM3722, will abide by all constraints, conditions, requirements and commitments of the transferor. This commitment includes open inspection items and enforcement actions as applicable.

#### INIMICALITY REVIEW

The NRC staff finds that neither the NRC's regulations, nor the AEA, prohibit the issuance of a materials license to a licensee that is wholly or majority owned by a foreign parent company. For a materials license, the NRC must find that its issuance would not be inimical to the common defense and security or to the health and safety of the public (see 10 CFR 40.32(d), and § 69, 42 U.S.C. § 2099, of the AEA).

In conducting its inimicality review of AREVA Inc.'s July 2016 submittal, the NRC staff considered whether a French corporation's direct control of the Lucky Mc tailings site in the United States would be inimical (adverse or hostile) to the common defense and security or the public health and safety. In this regard, NRC Materials License SUA-672 only authorizes the possession of source material and byproduct material (specifically, uranium and 11.e(2) byproduct material). This license does not authorize the possession or use of SNM without first obtaining a specific license for such purposes from the NRC. At the Lucky Mc tailings site, all decommissioning activities regarding the former uranium mill have been completed, and there are ongoing discussions being held between AREVA Inc. and the DOE on the Long-Term Surveillance Plan required under 10 CFR 40.28. When the Long-Term Surveillance Plan is approved by the NRC, the site will be fully transferred to the stewardship of DOE as the general licensee under 10 CFR 40.28. As such, the NRC staff concludes that, for the reasons discussed above, transferring NRC Source Materials License SUA-672, from AREVA Inc. to AREVA Nuclear Materials, LLC, will not be inimical to the common defense and security or public health and safety.

With respect to the EREF, at the conclusion of the initial licensing proceedings for the facility the NRC staff determined that any foreign ownership, control or influence (FOCI) mitigation measures placed on AES would provide no additional benefit to the National Security of the United States (see NUREG-1951, Safety Evaluation Report for the Eagle Rock Enrichment Facility in Bonneville County, Idaho (ADAMS Accession Number ML102710296). Further, the NRC staff now finds that the recommendation made by the DOE to the NRC by letter dated March 31, 2005, regarding URENCO's National Enrichment Facility in New Mexico (ADAMS

Accession Number ML050980235) is relevant here. Specifically, the considerations that supported the waiving of the FOCI requirement for FOCI mitigation associated with the granting of a facility security clearance to URENCO also apply to the EREF. This finding is based on the fact that both URENCO and AES use, or will use, the same classified technology supplied by the same entity (i.e., Enrichment Technology Company Limited).

Since the information and technology that will be classified as restricted data in the U.S. are already owned and controlled by the European Governments and the foreign-controlled companies associated with URENCO and AREVA, this information and technology are only being classified under U.S. law by the fact that it's being introduced into the U.S. The NRC has considered whether the operation of the EREF could generate new restricted data, not otherwise available to the European Governments or their nationals. All of the parties associated with URENCO and AREVA agree that little, if any, new restricted data would be created if the EREF is later built and operated.

For the reasons indicated above, the NRC staff concludes that consent to the transfers of AREVA Inc.'s and AES' NRC Materials and AREVA Inc.'s Export licenses, as described throughout this report, would not be inimical to the common defense and security or public health and safety. With regard to the EREF, since, on March 20, 2012, AES was issued a non-possessing facility security clearance (FCL) pursuant to 10 CFR Part 95, as required under 10 CFR 95.17, within 30 days after the transfer of its license for the EREF has been completed, AES (i.e., AREVA Nuclear Materials, LLC after the reorganization is completed and implemented) must report to the NRC the changes affecting items related to their FOCI. AES (i.e., AREVA Nuclear Materials, LLC, the FCL holder) is also required to, pursuant to 10 CFR 95.19, update or affirm its Standard Practice Procedures Plan every 5 years. This update is due in March 2017.

## ENVIRONMENTAL REVIEW

This proposed action is not subject to the NRC's environmental review requirements, pursuant to 10 CFR 51.22(c)(21), as it is within a category of actions that the NRC has determined does not individually or cumulatively have a significant effect on the human environment.

## CONCLUSION AND STAFF RECOMMENDATION

Based on the findings discussed above, the NRC staff concludes that AREVA Inc.'s requests regarding the proposed license transfers are in accordance with the NRC's license transfer requirements in 10 CFR 40.46, 70.36, 110.50(d), and 110.51(a)(1), and may therefore be granted. Specifically, this conclusion regards: (1) the indirect transfer of control of SNM License SNM-2015 (i.e., simply a company name change) regarding the EREF, from AREVA Enrichment Services, LLC, to AREVA Nuclear Materials, LLC; (2) the direct transfer of control of Source Material License SUA-672 for the Lucky Mc tailings site, from AREVA Inc. to AREVA Nuclear Materials, LLC; (3) the direct transfer of control of Export License XSOU8780, from AREVA Inc. to AREVA Nuclear Materials, LLC; and, (4) the direct transfer of control of Export Licenses XSNM3643 and XSNM3722 from AREVA, Inc. to the newly created subsidiary of AREVA Nuclear Materials, LLC, TN Americas, LLC.

With regard to CA Number CAMOX-001, the NRC staff finds that the transfer of AREVA's ownership interests in MOX Services to AREVA Nuclear Materials, LLC, will not affect CB&I's controlling 70 percent (70%) interest in MOX Services. As such, the NRC confirms that the proposed reorganization does not involve any transfer of control of CA Number CAMOX-001 that would need NRC's prior consent pursuant to 10 CFR 70.36.

In addition, the NRC staff concludes that the proposed AREVA corporate structure and license transfers will not be inimical to the common defense and security, or to the health and safety of the public. The NRC staff finds that the licensed facilities and materials will continue to be used and operated in accordance with the NRC's regulations and in a manner that ensures the common defense and security and the public health and safety. Therefore, based on the NRC staff findings and conclusions discussed above, AREVA Inc.'s July 25, 2016, request for NRC consent to license transfers should be approved.

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