

SAFETY EVALUATION REPORT

DIRECT TRANSFER OF LICENSES FOR AMERICAN CENTRIFUGE PLANT

AND LEAD CASCADE FACILITY DOCKET NOS. 70-7004 AND 70-7003

FROM USEC, INC. TO AMERICAN CENTRIFUGE OPERATING, LLC

1.0 INTRODUCTION

In a letter and application dated September 10, 2010 (publically available via Agencywide Documents Access and Management System (ADAMS) Accession No. ML102650185), USEC, Inc. (USEC) requested U.S. Nuclear Regulatory Commission (NRC) written consent to the direct transfer of licenses SNM-7003, for the American Centrifuge Lead Cascade Facility (Lead Cascade), and SNM-2011, for the American Centrifuge Plant (ACP), to a wholly owned limited liability company (LLC), American Centrifuge Operating, LLC (ACO). The NRC staff determined that these changes require prior approval in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 30.34(b), "Terms and conditions of licenses," 40.46, "Inalienability of licenses," 70.36, "Inalienability of licenses," and 95.19, "Changes to security practices and procedures."

2.0 BACKGROUND

USEC stated that, to facilitate project financing of the ACP, it is proceeding to establish the limited liability corporation structure described in Enclosure 1 of the application.¹ In accordance with 10 CFR 70.36, USEC requested NRC's consent to transfer control of the Lead Cascade and the ACP materials licenses from USEC to a subsidiary limited liability company, ACO, and approval of the proposed changes to the materials licenses shown in Enclosure 1. With NRC approval of the transfer request, USEC would then make conforming changes to the license applications to reflect ACO as the licensee. The request also included proposed administrative changes to Chapter 2 of the combined Lead Cascade and ACP security program to reflect the new licensee.

Enclosure 1 of the September 10, 2010, letter and application provided information in accordance with the guidance provided in NUREG-1556, Volume 15, "Guidance About Changes of Control and About Bankruptcy Involving Byproduct, Source, or Special Nuclear Materials Licenses," along with a detailed description, justification, and USEC's significance determination for the proposed changes associated with the corporate restructuring and requested transfer of the materials licenses to a USEC subsidiary.

Enclosure 2 of the September 10, 2010, letter and application provided proposed page changes for the security program. Enclosure 3 provided the certificate of formation for ACO, the proposed new licensee. Enclosure 4 identified proposed changes for the facility data and approval record for Facility Code 11560. Additionally, USEC submitted requests for foreign

¹ USEC had previously submitted an application for NRC consent to transfer control of the subject licenses from USEC to a wholly owned subsidiary on February 10, 2009, and supplemented the request on June 12, 2009. On November 25, 2009, USEC requested withdrawal of this licensing action from NRC review, and the NRC granted withdrawal of this licensing action on December 3, 2009.

ownership, control, or influence (FOCI) determinations for all the LLCs (see information on FOCI in the section below titled, “Analysis of Security Related Issues”) on September 24, 2010 (proprietary information/non-publicly available).

Because USEC requested to possess and use byproduct, source, and special nuclear material under the Lead Cascade and ACP licenses, the licenses were issued under 10 CFR Parts 30, 40 and 70. USEC is currently operating the Lead Cascade and possesses byproduct, source, and special nuclear material. USEC has not completed construction of the ACP, nor does USEC currently possess any radioactive material under the ACP license.

2.1 INFORMATION ON AFFILIATED SUBSIDIARIES

According to USEC, to facilitate financing the construction of ACP under the United States Department of Energy (DOE) loan guarantee program, to permit future expansion of, and to provide support to ACP, it has created the following four other entities affiliated with ACO:

- American Centrifuge Holdings, LLC (AC Holdings)
- American Centrifuge Enrichment, LLC (ACE)
- American Centrifuge Technology, LLC (ACT)
- American Centrifuge Manufacturing, LLC (ACM)

USEC stated that, while these entities would not possess any nuclear material or engage in any activities requiring licensing by the NRC, they may require access to classified information.² The following describes these affiliated entities. Figure 2 of USEC’s September 10, 2010, request depicted the full corporate structure, including these entities.

2.1.1 AMERICAN CENTRIFUGE HOLDINGS, LLC

Based on the information provided by USEC, AC Holdings is a direct wholly owned subsidiary of USEC. ACO (the proposed licensee), ACE, and ACT are wholly owned subsidiaries of AC Holdings. AC Holdings would own a 55 percent majority of ACM (a joint venture with Babcock & Wilcox Technical Services Group, Inc., which would own the remaining 45 percent). Together, these five companies would hold all the assets, rights, and obligations connected with the American Centrifuge Project. USEC stated that this corporate structure would accommodate any third party financing or other investment in the American Centrifuge Project and the future expansion of the project.

2.1.2 AMERICAN CENTRIFUGE ENRICHMENT, LLC

In its September 10, 2010, request, USEC stated that ACE would be established to permit project financing of the construction of the ACP. ACE would be the borrower of any loans

² ACT would possess small quantities of nuclear material and would conduct testing at the K-1600 facility located in the East Tennessee Technology Park outside of Oak Ridge, TN, which is leased from DOE. These activities are currently regulated by DOE and would continue to be regulated by DOE.

obtained through the DOE loan guarantee program or from other sources of project-level financing. Following the transfer of assets to ACE by USEC, ACE would own the centrifuges and other equipment and materials related to the American Centrifuge Project. ACE would also have the customer contracts and the contracts for the construction of the ACP, as well as contracts with other vendors needed to complete deployment of the American Centrifuge Plant. These assets would be pledged as collateral for the DOE loan guarantee and other project level financing. As stated by USEC, ACE, its customers, and other contracting parties would hold the title to uranium. However, none of these entities would physically possess licensed material as part of the project. Under 10 CFR 40.21, "General license to receive title to source or byproduct material," and 10 CFR 70.20, "General license to own special nuclear material," all of these entities hold general licenses to receive title to, and own, source material and special nuclear material. USEC stated that ACE would purchase the centrifuges from ACM. ACE would also be party to agreements with ACO, under which ACO would operate and maintain the Lead Cascade and the ACP (including decontamination and decommissioning activities.) However, ACO, not ACE, would control the centrifuge machines, uranium, the Lead Cascade, the ACP, and any other licensed facilities and materials. Accordingly, USEC requested that the licenses be transferred to ACO. The transfer of licenses would be in accordance with 10 CFR 30.34(b), "Terms and conditions of licenses," 40.46, "Inalienability of licenses," 70.36, "Inalienability of licenses," and 95.19, "Changes to security practices and procedures."

2.1.3 AMERICAN CENTRIFUGE TECHNOLOGY, LLC

Based on the information provided by USEC, ACT would hold the intellectual property rights to the American Centrifuge technology and would continue the technology development activities now being conducted by USEC in Oak Ridge, TN. Also, ACT would be the owner of the Lead Cascade and would contract with ACO for its operation and maintenance.

2.1.4 AMERICAN CENTRIFUGE MANUFACTURING, LLC

In its request, USEC stated that ACM is a joint venture being formed by USEC and Babcock & Wilcox Technical Services Group, Inc. (B&W) to manufacture and assemble the centrifuge machines for the ACP. It would have manufacturing facilities in Oak Ridge, TN, and would assemble machines in an area of the X-7725 recycle and assembly building (RA Building). ACO would retain control of the area of the RA Building used by ACM and ACM would follow ACO's procedures and directions related to safety, security, and other activities under the licenses.

3.0 REGULATORY REQUIREMENTS AND GUIDANCE

The regulatory requirements governing the transfer, assignment or disposition of USEC's licenses are set forth in 10 CFR 30.34(b), 10 CFR 40.46, and 10 CFR 70.36. These sections include the following language:

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.

Additional regulatory requirements applicable to NRC's review of USEC's request are contained in 10 CFR 30.32, "Application for specific licenses," 30.35, "Financial assurance and recordkeeping for decommissioning," 40.31, "Application for specific licenses," 40.36, "Financial assurance and recordkeeping for decommissioning," 40.38, "Ineligibility of certain applicants," 51.22, "Criterion for categorical exclusion; identification of licensing and regulatory actions eligible for categorical exclusion or otherwise not requiring environmental review," 70.22, "Contents of applications," 70.23, "Requirements for the approval of applications," 70.25, "Financial assurance and recordkeeping for decommissioning," 70.40, "Ineligibility of Certain Applicants," 70.51, "Records requirements," 95.15, "Approval for processing licensees and others for facility clearance," 95.19, "Changes to security practices and procedures," and 140.13b, "Amount of liability insurance required for uranium enrichment facilities." Guidance on acceptance criteria is contained in NUREG-1556, "Guidance About Changes of Control and About Bankruptcy Involving Byproduct, Source, or Special Nuclear Materials Licenses."

4.0 USEC'S REQUEST AND NRC STAFF EVALUATION

USEC provided the information consistent with the guidance contained in NUREG-1556, Volume 15, to support this request to transfer licenses.

4.1 PROVIDE A COMPLETE DESCRIPTION OF THE TRANSACTION

- I. Provide a complete description of the transaction (transfer of stocks or assets, or merger). Indicate whether the name has changed and include the new name. Include the name and telephone number of a licensee contact who NRC may contact if more information is needed.

USEC proposes to transfer control of materials licenses SNM-7003 (Lead Cascade) and SNM-2011 (ACP) (collectively the "licenses") to ACO. USEC indicated that it is requesting this action to facilitate financing under the DOE loan guarantee program and permit future expansion of the ACP. As stated by USEC, ACO is a limited liability company formed under the laws of the State of Delaware. ACO is a wholly owned subsidiary of American Centrifuge Holdings, LLC (AC Holdings), which is also a limited liability company formed under the laws of the State of Delaware. AC Holdings, as discussed in Section 2.1.1 in this SER, is a wholly owned subsidiary of USEC.³

USEC stated that ACO would hold the licenses for both the Lead Cascade and the ACP. ACO would be responsible for the operation, maintenance, and decommissioning of those facilities (including the disposition of wastes and depleted uranium resulting from operations). ACO would physically possess the licensed material and control the centrifuge machines and facilities. ACO would hold a sublease from USEC with respect to the licensed facilities in Piketon, Ohio. According to USEC, the workers necessary to operate the Lead Cascade and the ACP would be employed by, or loaned to, ACO or its qualified contractors.

USEC stated that following implementation of the proposed direct transfer of licenses, the new name, physical and postal addresses for the new licensee would be as follows:

³ Figure 1, in Enclosure 1 of the September 10, 2010, letter and application, illustrates the direct corporate ownership of ACO.

American Centrifuge Operating, LLC.
3930 U.S. Rt. 23 S.
P.O. Box 628
Piketon, OH 45661-0628

USEC provided the following name and telephone number of a licensee contact who NRC may contact if more information is needed:

Peter J. Miner, Director, Regulatory and Quality Assurance at 301-564-3470.

4.1.1 NRC STAFF EVALUATION

Based on the review of the information provided by USEC, the ACO, after the proposed transaction, would be the holder of NRC licenses SNM-7003, for the Lead Cascade, and SNM-2011, for the ACP. The NRC staff found that USEC adequately provided a complete and clear description of the transaction. The NRC staff concluded that the information provided by USEC is consistent with the guidance in NUREG-1556, Volume 15.

4.2 DESCRIBE ANY CHANGES IN PERSONNEL OR DUTIES

- II. Describe any changes in personnel or duties that relate to the licensed program. Include training and experience for new personnel.

USEC stated that there are no planned changes in personnel or duties associated with the proposed transfer of the licenses from the parent company, USEC, to the subsidiary company, ACO. At the time of transfer of the licenses, the Board of Control of ACO would be comprised of senior executive officers of USEC. Senior executives and managers described in the Lead Cascade and ACP license applications would remain the same. The qualifications, responsibilities, and authorities for managerial positions that have the principal responsibilities important to the licensed facilities and environmental, health, safety, safeguards, security, and quality would not change as a result of the proposed transfer.

4.2.1 NRC STAFF EVALUATION

Based on its review of the information provided by USEC, the NRC staff found that USEC adequately provided a description of the personnel, and associated duties, that relate to the licensed program. In the proposed transaction, ACO would keep the same personnel that USEC currently has for the safe operation of the facilities and there would be no personnel changes as a result of the proposed transaction. The NRC staff concluded that the information provided by USEC is consistent with the guidance in NUREG-1556, Volume 15.

4.3 DESCRIBE ANY OTHER CHANGES

- III. Describe any changes in the organization, location, facilities, equipment or procedures that relate to the licensed program.

In its September 10, 2010, request, USEC stated that there are no planned changes in the organization, location, facilities, equipment, or procedures related to the licensed programs associated with the transfer of control of the licenses. Additionally, no physical changes would be made to the Lead Cascade or ACP location, facilities or equipment, and there would be no technical changes in current programs or procedures, or in the day-to-day conduct of operations

of the facilities as a result of the proposed American Centrifuge Project restructuring. There would not be any changes in the use, possession, location, or storage of the licensed materials in connection with the transaction. Activities related to the NRC licensed program would remain the same before and after the transfer.

4.3.1 NRC STAFF EVALUATION

Based on its review of the information provided by USEC, the NRC staff found that USEC has provided adequate information describing changes in the organization, location, facilities, equipment or procedures that relate to the licensed program. Following the proposed transaction, there would be no changes in the location, equipment, and procedures related to the licensed program. The NRC staff concluded that the information provided by USEC is consistent with the guidance in NUREG-1556, Volume 15.

4.4 DESCRIBE THE STATUS OF THE SURVEILLANCE PROGRAM

- IV. Describe the status of the surveillance program (surveys, wipe tests, quality control) at the present time and the expected status at the time that control is to be transferred.

In its September 10, 2010, request, USEC stated that ACO would continue all licensed activities without interruption from and after the time of the planned restructuring. USEC also stated that there would be no change in the status of surveillance programs as a result of the American Centrifuge Project restructuring. Surveillance items and records would continue to be maintained the same as before the proposed license transfers, in accordance with applicable regulations, license conditions, and commitments.

4.4.1 NRC STAFF EVALUATION

Based on the review of the information provided by USEC, the NRC staff found that USEC provided adequate information describing the status of their surveillance programs before and after the license transfers are completed. The NRC staff concluded that there is reasonable assurance that surveys, wipe tests, quality control and all surveillance items and records would continue to be maintained by ACO as they were before the proposed license transfers are completed. Therefore, the NRC staff concluded that the information provided by USEC is consistent with the guidance in NUREG-1556, Volume 15.

4.5 SAFE AND EFFECTIVE DECOMMISSIONING OF THE FACILITY

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

In its September 10, 2010, letter, USEC confirmed that all records concerning the safe and effective decommissioning of the Lead Cascade and ACP facilities would be transferred to ACO and would remain available after the transfer of the licenses are completed.

In association with the request to transfer licenses, USEC also provided a draft, unexecuted decommissioning financial assurance instrument for the Lead Cascade, for NRC's review. USEC stated that ACO would provide the same surety bond amount as provided by USEC's financial assurance instrument for decommissioning of the Lead Cascade. The amount of the

surety bond to be provided by ACO equals the estimated amount required for decommissioning of the Lead Cascade, as originally approved by NRC staff on January 20, 2010 (see NRC approval letter via ADAMS Accession No. ML100131366).

Additionally for the Lead Cascade, license condition 15 of SNM-7003 states:

No later than every three years the licensee shall update the Decommissioning Funding Plan and provide it to the NRC for review. After resolution of any NRC comments, the licensee shall submit final executed copies of the financial assurance instruments.

With regards to the ACP license, there is currently no licensed material on-site. Accordingly, financial assurance is not currently required. However, license condition 16 of SNM-2011 states:

USEC shall provide final copies of the proposed financial assurance instruments to NRC for review at least six months prior to the planned date for obtaining licensed material, and provide to NRC final executed copies of the reviewed financial assurance instruments prior to the receipt of licensed material. The amount of the financial assurance instrument shall be updated to current year dollars and include any applicable changes to the decommissioning cost estimate. The decommissioning cost estimate shall include an update to USEC Analysis of Depleted Uranium Disposal Costs for the ACP. To develop this update, USEC shall coordinate with DOE to determine necessary changes to the DOE contractor's depleted uranium cost estimate utilized as input to the USEC specific analysis.

License condition 17 of SNM-2011 states:

The initial and subsequent updated Decommissioning Funding Plan (DFP) cost estimates, up to the time of full capacity operations, and revised funding instruments shall be provided annually and shall provide full funding for decontamination and decommissioning of the full-size facility, except:

- (1) The cost estimate for decontamination and removal of the centrifuges shall be provided on an annual forward-looking basis based on planned incremental enrichment capacity increases; and
- (2) The cost estimate for depleted uranium byproduct generation shall be provided on a projected annual forward-looking basis. The decommissioning cost estimate shall include an update to USEC's Analysis of Depleted Uranium Disposal Costs for the ACP. To develop this update, USEC shall coordinate with DOE to determine necessary changes to the DOE contractor's depleted uranium cost estimate utilized as input to the USEC specific analysis.

Once full capacity operation is achieved, the licensee shall provide cost estimates for depleted uranium byproduct generation on an annual forward-looking basis and cost estimates for decontamination and decommissioning the remainder of the facility at intervals not to exceed 3 years, consistent with the requirements of 10 CFR 40.36(d) and 10 CFR 70.25(e).

The DFP cost estimates shall be provided to NRC for review, and subsequently, after resolution of any NRC comments, final executed copies of the financial assurance instruments shall be provided to NRC.

USEC stated that all of the current license conditions will carry forward to ACO under the proposed transfer of licenses. See Section 4.6 of this SER for additional information.

4.5.1 NRC STAFF EVALUATION

Based on the review of the information provided by USEC on the safe and effective decommissioning of the facility, the NRC staff found that the information provided by USEC adequately confirms that all records concerning the safe and effective decommissioning of the facilities would be transferred to ACO as required under 10 CFR 70.51(b), after the proposed transfer of licenses are completed. The NRC staff concluded that the information provided by USEC is consistent with the guidance in NUREG-1556, Volume 15.

The NRC staff completed its review of the draft decommissioning financial assurance instrument for the Lead Cascade on December 30, 2010 (publically available via ADAMS at ML103630057), and determined that the draft decommissioning financial assurance instrument was acceptable, with one condition. Prior to the execution of the new surety bond, USEC must submit a draft of the entire surety bond for NRC staff review. The draft of the surety bond must state the company that would underwrite the bond. Therefore, condition #1 of the order issued to USEC regarding the proposed transfer of licenses (EA-11-013) states:

USEC will obtain NRC approval on the revised financial assurance instruments for decommissioning of the Lead Cascade facility.

Based on its review of the draft decommissioning financial assurance instrument for the Lead Cascade and the carrying forward of license conditions 16 and 17 for the ACP, the NRC staff found that the proposed licensee continues to be consistent with previous license conditions, as well as the requirements of 10 CFR 30.32, 30.35, 40.31, 40.36, and 70.25. Therefore, the NRC staff concluded that USEC continues to provide for safe and effective decommissioning of the facilities.

4.6 TRANSFEREE WILL ABIDE BY ALL CONSTRAINTS

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

In its September 10, 2010, request, USEC stated that ACO would abide by all constraints, conditions, requirements, and commitments of USEC's present licenses. With regard to any open inspection items, USEC stated that ACO would assume full responsibility for such items and any resulting NRC actions.

4.6.1 NRC STAFF EVALUATION

In the proposed transaction, ACO would assume full responsibility for any open inspection items and any resulting NRC actions and ACO would abide by all constraints, conditions, requirements and commitments of USEC's present licenses. Additionally, condition #2 of the order issued to USEC regarding the proposed transfer of licenses (EA-11-013) states:

ACO, as stated in the request, will abide by all commitments and representations previously made by USEC with respect to the license.

Based on the review of the information provided by USEC, the NRC staff found that there would be no changes in USEC's licensed program and that ACO's licensed program would continue to be the same as USEC's, except for the licensee's name change, after the transfer of the licenses to ACO is completed. The NRC staff concluded that the information provided by USEC is consistent with the guidance in NUREG-1556, Volume 15.

5.0 FINANCIAL QUALIFICATIONS

Under 10 CFR 70.23(a)(5), where the nature of the proposed activities require consideration by the Commission, the applicant must appear to be financially qualified to engage in proposed activities in accordance with the regulations in Part 70.

ACO receives its financing through operating and management agreements from ACE. ACE receives its financing through USEC (capital infusion obligations), loans and related agreements, and, once operations of the ACP commences, revenues generated from the sale of enriched uranium.

ACE would be the provider of funds, through operating and management contracts to ACO, for the operation of the Lead Cascade and the construction and operation of the ACP. Expenditures related to the facilities, including any related cost over-runs, would be paid by AC Enrichment from a variety of sources, including existing and projected capital infusion from USEC's operations and loans.

Lead Cascade is operating, so the costs for construction do not need to be considered. The financial qualifications for Lead Cascade were considered during the review of the original license (publically available via ADAMS at ML063320578) and no changes have occurred since, nor are any changes proposed in the transfer of licenses.

USEC's financial operations and construction cost estimate for the ACP were described and evaluated by the NRC staff in NUREG-1851, "Safety Evaluation Report for the American Centrifuge Plant in Piketon, Ohio." Additionally, license condition 15 of SNM-2011 would carry forward in the proposed transfer of licenses:

Construction of each incremental phase of the ACP shall not commence before funding for that increment is available or committed. Of this funding, USEC must have in place before constructing such increment, commitments for one or more of the following: equity contributions from USEC, affiliates and/or partners, along with lending and/or lease arrangements that solely or cumulatively are sufficient to ensure funding for the particular increment's construction costs. USEC shall make available for Nuclear Regulatory Commission (NRC) inspection, documentation of both the budgeted costs for such phase and the source of funds available or committed to pay those costs.

Operation of the ACP shall not commence until USEC has in place either: (1) long term contracts lasting five years or more that provide sufficient funding for the estimated cost of operating the facility for the five year period; (2) documentation of the availability of one or more alternative sources of funds that provide sufficient funding for the estimated cost of operating the facility for five years; or (3) some combination of (1) and (2).

5.1 NRC STAFF EVALUATION

Based on the NRC staff's review described in NUREG-1851, the NRC staff concluded that the applicant provided a reasonable construction cost estimate for the ACP and a reasonable approach for financing the construction and operation of the plant. No changes in financial qualifications have occurred since the original licensing, nor are any proposed in the transfer of licenses. Consistent with previous NRC staff findings in NUREG-1851, and license condition 15 of SNM-2011, the NRC staff found the proposed licensee provides reasonable assurance of securing the necessary financial resources needed for constructing the ACP and operating both the Lead Cascade and ACP. Therefore, the NRC staff concluded that the applicant appears to be financially qualified to build the ACP and operate both facilities, in accordance with 10 CFR 70.23(a)(5).

6.0 LIABILITY INSURANCE

Under 10 CFR 140.13b, "Amount of liability insurance required for uranium enrichment facilities," a uranium enrichment facility is required to carry liability insurance to cover public claims arising from any occurrence, within the U.S. that causes, within or outside the U.S., bodily injury, sickness, disease, death, loss of, or damage to, property, or loss of use of property arising from the radioactive, toxic, explosive, or other hazardous properties of chemicals containing licensed material.

The Lead Cascade is a laboratory-scale test and demonstration facility designed and used for experimental or analytical purposes only. 10 CFR 140.3(m)(1) excludes laboratory scale facilities from the definition of a "uranium enrichment facility." As such, under 10 CFR 140.13b, public liability insurance is not required.

According to the lease agreement with DOE, USEC is indemnified under Section 170d of the *Atomic Energy Act (AEA)* for liability claims arising out of any occurrence within the United States, causing, within or outside the United States, bodily injury, sickness, disease, or death, or loss of or damage to property, or loss of use of property, arising out of or resulting from the radioactive, toxic, explosive, or other hazardous properties of chemical compounds containing source or special nuclear material (SNM) arising out of activities under the lease.

During the original licensing review of the ACP, as documented in NUREG-1851, the NRC staff imposed license condition 14 of SNM-2011 on USEC to allow for NRC's confirmation of USEC's liability insurance or DOE's indemnification of the ACP. License condition 14 states:

USEC Inc. (USEC) shall provide to the Commission, at least 120 days prior to the planned date for obtaining licensed material, documentation of any liability insurance required to be obtained by USEC under its lease with DOE for the ACP by that time or, alternatively, the status of USEC's efforts to obtain any such liability insurance. During the time that USEC Inc. is engaged in efforts to obtain liability insurance, USEC shall provide the Commission with status reports regarding those efforts. The status reports shall be submitted at a frequency of at least once every six months following issuance of a license. USEC shall notify the Commission within 30 days upon receiving notification of denial or approval of commercial liability insurance for the ACP. If commercial liability insurance is required to be obtained under its lease with DOE, within 60 days of receiving notification of approval of commercial liability insurance, USEC Inc. shall provide proof of liability insurance coverage and a justification, for Commission review

and approval, if USEC Inc. is proposing to provide less than \$300 million of liability insurance coverage.

6.1 NRC STAFF EVALUATION

As of February 7, 2011, the sublease agreement, between DOE and USEC, for ACO had not yet been finalized. Before the license amendments associated with the proposed transfer of licenses can be authorized, NRC staff will confirm DOE's indemnification of ACO or have ACO provide proof of its liability insurance for the ACP in accordance with 10 CFR 140.13b. The NRC staff expects this information to be included in the sublease for ACO. Therefore, condition #3 of the order issued to USEC regarding the proposed transfer of licenses (EA-11-013) states:

USEC will provide to the NRC, a copy of the executed facilities subleasing agreement(s) naming ACO as the tenant and clarifying DOE indemnification, before the transfer is completed.

Based on its review of the information provided by USEC, license condition 14 of SNM-2011 carrying forward, and the relevant condition stated in the order, the NRC staff concluded that the proposed licensee will provide the required liability protection in accordance with 10 CFR 140.13(b).

7.0 ENVIRONMENTAL REVIEW

NRC regulations in 10 CFR 51.22, "Criterion for categorical exclusion; identification of licensing and regulatory actions eligible for categorical exclusion or otherwise not requiring environmental review," provides a list of actions excluded from an environmental review required by the National Environmental Policy Act. Specifically, 10 CFR 51.22(c)(21) states the following:

Approvals of direct or indirect transfers of any license issued by NRC and any associated amendments of license required to reflect the approval of a direct or indirect transfer of an NRC license.

7.1 NRC STAFF EVALUATION

The NRC staff has determined that the proposed action is a direct transfer of licenses. Therefore, the proposed action is categorically excluded under 10 CFR 51.22(c)(21) and, as such, neither an environmental assessment, nor an environmental impact statement is required for this action.

8.0 ANALYSIS OF SECURITY RELATED ISSUES

8.1 FOREIGN OWNERSHIP, CONTROL, OR INFLUENCE

In accordance with 10 CFR 95.15, USEC submitted a letter dated September 24, 2010, requesting a FOCl determination for ACO, the proposed new holder of the licenses. The NRC, in consultation with DOE's Oak Ridge Office of Security and Emergency Management, reviewed the Certificate Pertaining to Foreign Interests (SF 328), and supporting documentation submitted by USEC.

8.1.1 NRC STAFF EVALUATION

The NRC staff determined that no foreign entity will have control over USEC or ACO. In particular, no foreign entity or persons would have access to restricted data, national security information including USEC or ACO classified technology. Furthermore, the NRC staff has reviewed the information submitted by USEC in accordance with 10 CFR 95.15, including the proposed corporate structure and corporate governance documents and determined that no foreign entity will have sufficient control of stock or sufficient presence on the Board of Directors of USEC or ACO to exercise control over restricted data or national security information. Accordingly, the NRC staff has determined that no foreign interest would have the ability to direct or decide matters affecting the management or operations of that company such that it would pose an undue risk to national security. This conclusion was based on NRC staff's determination that no foreign entity would have control over ACO, or its determinations, or have access to national security information and restricted data.

8.2 PROPOSED CHANGES TO SECURITY PROGRAM

In its September 10, 2010, request, USEC submitted proposed changes to the Lead Cascade and ACP combined Security Program, in accordance with 10 CFR 95.19. The proposed changes included changing the licensee's name from USEC Inc. to American Centrifuge Operating, LLC. USEC indicated that all other aspects of the combined Security Program would remain the same and be implemented by ACO.

8.2.1 NRC STAFF EVALUATION

The NRC staff reviewed the proposed changes and determined that the proposed changes were administrative and editorial in nature, and are being made to reflect the new licensee's name. The NRC staff determined that the proposed changes would not have any adverse impacts on public health and safety, security, or the environment and, therefore, the proposed changes are approved in accordance with 10 CFR 95.19.

9.0 DISPOSITION OF WRITTEN COMMENTS

On January 4, 2011, the NRC staff held a public meeting in Piketon, Ohio, to discuss the NRC's process for reviewing USEC's request to transfer licenses. During this meeting, the Southern Ohio Neighbors Group (SONG) submitted written comments, regarding the transfer of licenses, to the NRC. SONG's comments were received after the due date for receipt of comments provided in the November 17, 2010, Federal Register Notice on USEC's request to transfer licenses. Nevertheless, as described below, the NRC considered these comments to the maximum extent practicable. A complete text of the comments is publicly available via ADAMS at ML110250361. As discussed below, several comments raised issues outside the scope of the NRC staff's review of USEC's request to transfer licenses.

In its review of the transfer of licenses, the NRC staff considered if the proposed corporate restructuring and direct transfer of control of the current licenses would affect the qualifications of the proposed licensee to hold the licenses. The NRC staff also considered if the transactions are otherwise consistent with applicable laws, as well as regulations and orders issued by the Commission.

One comment (comment 1) stated that USEC's Lead Cascade has failed to demonstrate commercial viability of their centrifuge technology. The NRC regulates licensed activities to

ensure that public health and safety and the environment are adequately protected. The NRC is not responsible for ensuring that a licensee's technology is commercially viable. Accordingly, this comment is outside the scope of the NRC's review of USEC's request to transfer licenses.

Several comments (comments 2, 6, and 8) discussed USEC's pursuit of alternate technologies, past failures in developing these technologies, and rapid closure of the Portsmouth gaseous diffusion plant. The NRC regulates licensed activities to ensure that public health and safety and the environment are adequately protected. USEC's selection of a specific technology is a business decision that is outside the scope of the NRC's review of USEC's request to transfer licenses.

One comment (comment 3) raised concern over USEC's attempts to evade financial responsibilities for a project that is anticipated to fail. In accordance with Commission regulations, the NRC evaluates an applicant or licensee's financial integrity to ensure that it has the funds to adequately build the facility, to safely operate the facility, and to ensure clean up of the site and dispose of all radioactive wastes once licensed activities are terminated. With respect to the NRC staff's review of USEC's request to transfer licenses, as described in Sections 4.5 and 5 of this SER, the NRC staff determined that USEC has adequate funding for the construction, operation, and decommissioning of the ACP and Lead Cascade.

Two comments (comments 4 and 5) raised concerns regarding the market demand for enriched uranium and the worldwide developments on uranium enrichment. The comments appear to address the viability of the ACP project given the competition in the uranium enrichment market. The NRC evaluated the uranium enrichment market demands in its Environmental Impact Statement (EIS) for the ACP (Section 1.3 of NUREG-1834, "Environmental Impact Statement for the Proposed American Centrifuge Plant in Piketon, Ohio"), which was prepared in accordance with the National Environmental Policy Act (NEPA). As explained in Section 7.0 of this SER, an environmental assessment is not required for the proposed transfer of licenses, since the action is categorically excluded under 10 CFR 51.22(c)(21). Further, as noted in the NRC staff's responses above, a licensee's business decisions and commercial viability are outside the scope of the NRC staff's review of a request to transfer licenses. Thus, the need for the facility or market demand for enriched uranium is outside the scope of the NRC's review of USEC's request to transfer licenses.

One comment (comment 7) raised concerns about allegedly falsified dosimetry reports at Piketon, Ohio. This comment appears to refer to a legacy issue from when DOE was the sole regulator of the Portsmouth site. The NRC started its regulatory oversight of the facility in March 1997. Since then, the NRC has continuously monitored licensed activities at the site by conducting inspections to ensure licensed activities are performed safely and in accordance with Commission rules, regulations, and orders, and that public and worker health and safety and the environment are protected. Since 1997, the NRC has routinely conducted Licensee Performance Reviews (LPR), through which the NRC has evaluated USEC's performance and compliance with NRC regulations. This same process would continue for ACO.

One comment (comment 9) raised concerns relating to the USEC lease at Piketon for the ACP project, because the lease lacks a termination clause, DOE's compliance with the National Historic Preservation Act (NHPA), and states that, although NRC cannot regulate DOE, it has an obligation to review these issues. During consideration of the original ACP license application, as described in Chapter 1 of NUREG-1851, the NRC staff reviewed the terms of the leasing agreement between USEC and DOE to ensure that the agreement would have no adverse impact on any USEC activities subject to the NRC's jurisdiction. The review included

an analysis of the indemnification provisions contained in the DOE-USEC lease agreement. As discussed above in Section 6.1, for the purposes of the NRC staff's review of this license transfer request, the NRC staff will review the terms of the proposed sub-lease agreement to ensure that the indemnification provisions of the original lease would carry forward in the sub-lease to ACO. The NRC has no authority to review the propriety of DOE's lease with USEC because it lacks a termination clause. Accordingly, this issue is outside the scope of the NRC's review of this request to transfer licenses. The comment also stated that DOE has failed to comply with the National Historic Preservation Act (NHPA). The NRC has no authority to regulate or review DOE's compliance with the NHPA. Accordingly, the issue of DOE's compliance with the NHPA is outside the scope of the NRC's review of USEC's request to transfer licenses.

One comment (comment 10) concerned the newly formed subsidiary's ability to manage a \$4 billion project, repay a \$2 billion federal loan, and finance decommissioning costs. The NRC staff considered USEC's financial management in regards to the safety aspects of the construction and operation of the facilities. See Section 5 of this SER for more information. USEC's financial management of non-safety related issues is outside the scope of the NRC's review of this request to transfer licenses. In regards to the federal loan, it is the understanding of the NRC staff that DOE is currently considering USEC's application for a loan guarantee for the ACP. It is DOE's (or any other loan provider's) responsibility to determine the appropriate risk in making a loan to USEC. The evaluation of such risk is outside the scope of the NRC staff's review of USEC's request to transfer licenses. As described in the above section titled "Safe and Effective Decommissioning of the Facility," the NRC staff performed a complete evaluation of the decommissioning funding for the proposed transfer of licenses. The NRC staff found that the information provided by USEC adequately confirms that all records concerning the safe and effective decommissioning of the facilities would be transferred to ACO as required under 10 CFR 70.51(b), after the proposed license transfers are completed.

Additional comments, titled "Top Ten Misconceptions about USEC and the ACP," were received. The NRC concluded that these comments repeated the same concerns raised by the comments addressed above and raised no additional concerns relevant to the licensing action currently under consideration. Accordingly, the NRC has already addressed these concerns in its responses given above.

10.0 CONCLUSION

Based on the NRC's staff review of the information provided in USEC's request for NRC written consent to transfer material licenses for the Lead Cascade (SNM-7003), and the ACP (SNM-2011), from USEC to ACO, the NRC staff determined that, consistent with 10 CFR 70.23(a)(12) and NUREG-1556, Volume 15, USEC has adequately provided the necessary information to approve USEC's request to transfer licenses. The NRC staff found that USEC has adequately:

- described the transaction;
- described any changes in personnel or duties related to the licensed program;
- described any changes in the organization, location, facilities, equipment or procedures related to the licensed program;
- described the status of the surveillance program (surveys, wipe tests, quality control) at the present time and the expected status at the time that control is to be transferred;

- provided confirmation that all records concerning the safe and effective decommissioning of the facility would be transferred to ACO in accordance with 10 CFR 70.51(b); and
- provided confirmation that the transferee would abide by all constraints, conditions, requirements and commitments of the transferor.

With regards to the decommissioning of the facilities, the NRC staff found that the proposed licensee continues to be consistent with previous license conditions, as well as the requirements of 10 CFR 30.32, 30.35, 40.31, 40.36, and 70.25. Therefore, the NRC staff concluded that USEC continues to provide for safe and effective decommissioning of the facilities.

With regards to financial qualifications, the NRC staff determined the proposed licensee provides reasonable assurance of securing the necessary financial resources needed for constructing the ACP and operating both the Lead Cascade and ACP. Therefore, the NRC staff found that the applicant is financially qualified to build the ACP and operate both facilities, in accordance with 10 CFR 70.23(a)(5).

With regards to liability insurance, based on its review of the information provided by USEC, license condition 14 of SNM-2011 carrying forward, and the relevant condition stated in the order, the NRC staff concluded that the proposed licensee will provide the required liability protection in accordance with 10 CFR 140.13(b).

With regards to environmental impacts of the proposed transfer of licenses, the NRC staff determined that the proposed action meets the requirements for a categorical exclusion under 10 CFR 51.22(c)(21).

With regards to the FOCI determination, the NRC staff determined that no foreign entity will have control over USEC, ACO, or its determinations, nor will have access to restricted data. Therefore, the proposed transfer of licenses is in accordance with 10 CFR 95.15.

With regards to the changes to the security program, the NRC staff determined that the proposed changes were administrative and editorial in nature, and would not have any adverse impacts on public health and safety, security, or the environment. Therefore, the proposed changes are approved in accordance with 95.19.

In conclusion, the NRC staff determined that the proposed transfer of licenses would not have any adverse impact on the public health and safety, or be inimical to the common defense and security, as the licensed facilities and materials would continue to be used and operated in accordance with the NRC's regulations. Based on its review and evaluation of the information provided by USEC, the NRC staff finds that the proposed transfer, of SNM-7003 and SNM-2011, is acceptable, consistent with the requirements of the AEA and 10 CFR 30.34(b), 40.46, and 70.36, and therefore, should be approved pursuant to 10 CFR 30.34(b), 40.46, and 70.36, and be subject to the conditions described herein.

Principal Contributors: Michael A. Dusaniwskyj, James R. Downs, Osiris Siurano
ADAMS Accession Number: **ML103630748**