



May 17, 2016  
ACO 16-0018

ATTN: Document Control Desk  
Mr. Scott Moore, Acting Director  
Office of Nuclear Material Safety and Safeguards  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

**American Centrifuge Lead Cascade Facility  
Docket Number 70-7003; License Number SNM-7003**

**License Amendment Request – Revision to License Application for the American Centrifuge Lead Cascade Facility and Request for Approval to Downgrade Licensed Activities to Limited Operations – Security-Related Information**

**INFORMATION TRANSMITTED HERewith IS PROTECTED FROM PUBLIC  
DISCLOSURE AS CONFIDENTIAL COMMERCIAL OR FINANCIAL INFORMATION  
AND/OR TRADE SECRETS PURSUANT TO 10 CFR 2.390(d)(1)**

Dear Mr. Moore:

**Purpose**

The purpose of this letter is to request in accordance with 10 *Code of Federal Regulations* (CFR) 70.34 the U.S. Nuclear Regulatory Commission (NRC) review and approve the proposed amendment to the American Centrifuge Lead Cascade Facility (Lead Cascade) License Application to revise Table 1.2-2, “Authorized Uses of NRC-Regulated Materials”. Additionally, American Centrifuge Operating, LLC (ACO) requests to downgrade license activities to Limited Operations for purposes of an appropriate 10 CFR Part 171 annual fee determination.

**Background**

On March 2, 2016 (Reference 1), ACO notified the NRC, in accordance with 10 CFR 70.38 (d) (2), of Centrus Energy Corp.’s decision to permanently cease operation at the Lead Cascade and to terminate the Lead Cascade’s Materials License (SNM-7003) following decontamination and decommissioning activities.

**Discussion**

This License Amendment Request removes enrichment as an authorized activity at the Lead Cascade. This request also serves as an application to downgrade for purposes of an appropriate 10 CFR Part 171 annual fee determination for the remaining Lead Cascade NRC licensed activities from

~~Document transmitted herewith contains  
Security-Related Information — Withhold Under 10 CFR 2.390~~  
When separated from the Enclosure 1, this cover letter is uncontrolled

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the Gas Centrifuge Enrichment Demonstration fee category to a category that appropriately reflects its remaining limited operations.

To support this change in category, ACO notes that all centrifuges have been de-inventoried and are at rest. Gas inventory in process headers has also been evacuated. Finally, the feed cart has been shut down and declared inoperable to prevent any future UF<sub>6</sub> addition. No further gas centrifuge enrichment demonstration operations will be conducted.

The proposed changes will revise License Application Table 1.2-2 to remove enrichment from the authorized uses of NRC-regulated materials at the Lead Cascade.

Enclosure 1 to this letter provides a more detailed description, justification for the proposed change, and ACO's determination that the proposed change associated with this request is not significant.

Enclosure 2 of this letter contains the proposed changes to Table 1.2-2 of the License Application for the Lead Cascade.

Enclosure 1 contains Security-Related Information; therefore, ACO requests this enclosure be withheld from public disclosure pursuant to 10 CFR 2.390(d)(1).

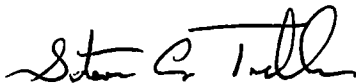
#### **Action**

ACO respectfully requests NRC review and approval of the proposed changes contained within Enclosure 2 and removal from the Gas Centrifuge Enrichment Demonstration fee category and placement into the Limited Operations fee category. ACO notes that an analogous request was submitted and approved for the Paducah Gaseous Diffusion Plant (Reference 2).

#### **Contact**

If you have any questions regarding this matter, please contact me at (301) 564-3250 or John Corrado at (740) 897-2887.

Sincerely,



Steven A. Toelle  
Director, Regulatory Affairs

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Enclosures: As Stated

cc (without enclosures unless otherwise noted):

J. Downs, NRC HQ  
T. Grice, NRC HQ  
K. Kline, NRC HQ  
L. Pitts, NRC Region II (Enclosures)  
O. Siurano-Perez, NRC HQ (Enclosures)  
M. Sykes, NRC Region II  
T. Vukovsky, Region II

References:

1. Letter ACO 16-0010 from S.A. Toelle to NRC regarding Notification of Cessation of Principal Activities at the American Centrifuge Lead Cascade Facility, dated March 02, 2016
2. Letter GDP 14-0001 from S.A. Toelle to NRC regarding Certificate Amendment Request – SAR Table 1-4, Authorized Uses of NRC-Regulated Materials, and Application to Downgrade, dated January 17, 2014

**Enclosure 2 of ACO 16-0018**

**Proposed Changes to Table 1.2-2 of the  
License Application for the American Centrifuge Lead Cascade Facility**

**Information contained within  
does not contain  
Export Controlled Information**

**Reviewer: J. Lockwood  
Date: 05/09/2016**

**Table 1.2-2**  
**Authorized Uses of NRC-Regulated Materials**

Material Class	Authorized Use
A. Source Material, Element 92	<ol style="list-style-type: none"> <li data-bbox="505 406 1235 438">1. <del>Enrichment of uranium up to 10 percent enrichment by weight <sup>235</sup>U</del></li> <li data-bbox="505 449 1388 502">2. Receipt, storage, inspection, and acceptance sampling of cylinders containing uranium</li> <li data-bbox="505 512 1365 544">3. Filling and storage of cylinders of natural uranium and uranium depleted in <sup>235</sup>U</li> <li data-bbox="505 555 1388 619">4. Cleaning and inspection of cylinders used for the storage and transport of source material</li> <li data-bbox="505 629 1388 693">5. Storage of process wastes containing uranium and other contaminants and decay products</li> <li data-bbox="505 704 1354 736">6. Process, characterize, package, or store low-level radioactive and mixed wastes</li> <li data-bbox="505 746 1388 810">7. Radiation protection, process control and environmental sample collection, analysis, and operation checks</li> <li data-bbox="505 821 1154 853">8. Maintenance, repair, and replacement of process equipment</li> <li data-bbox="505 863 1219 895">9. Heating cylinders and feeding contents <del>into the centrifuge process</del></li> <li data-bbox="505 906 824 938">10. Transfer between cylinders</li> </ol>

**Table 1.2-2 (continued)**  
**Authorized Uses of NRC-Regulated Materials**

<b>Material Class</b>	<b>Authorized Use</b>
B. Special Nuclear Material	<ol style="list-style-type: none"><li>1. Filling and storage of cylinders containing uranium enriched up to 10 percent by weight <math>^{235}\text{U}</math></li><li>2. Nondestructive testing and analyses of process streams</li><li>3. Cleaning and inspection of cylinders used for the storage and transport of special nuclear material</li><li>4. Storage of process wastes containing uranium and other contaminants and decay products</li><li>5. Process, characterize, package, or store low-level radioactive and mixed wastes</li><li>6. Radiation protection, process control and environmental sample collection, analysis, instrument calibration, and operation checks</li><li>7. Maintenance, repair, and replacement of process equipment</li><li>8. Heating cylinders and feeding contents <del>into the centrifuge process</del></li></ol>