

NUCLEAR REGULATORY COMMISSION

[Docket No. 70-7003; NRC-2024-0048]

American Centrifuge Operating, LLC;

Lead Cascade Facility;

Termination of License;

Environmental Assessment and Finding of No Significant Impact

AGENCY: Nuclear Regulatory Commission.

ACTION: Notice; issuance.

SUMMARY: By letter dated November 2, 2023, American Centrifuge Operating, LLC (ACO), a subsidiary of Centrus Energy Corp. (Centrus), requested the U.S. Nuclear Regulatory Commission (NRC) terminate its Special Nuclear Material (SNM) License No. SNM-7003 for the American Centrifuge Lead Cascade Facility (LCF), located on a U.S. Department of Energy (DOE) reservation in Piketon, Ohio. ACO no longer needs to maintain its license SNM-7003. On January 5, 2024, the NRC accepted the license termination application for detailed technical review. The license termination would not change ACO's license SNM-2011 for the American Centrifuge Plant under which ACO is conducting the high-assay low-enriched uranium (HALEU) program at the Piketon facility.

DATES: The letter terminating the license SNM-7003 will be issued to ACO on **November 8, 2024.**

ADDRESSES: Please refer to Docket ID **NRC-2024-0048** when contacting the NRC about the availability of information regarding this action. You may obtain publicly available information related to this document using any of the following methods:

- **Federal Rulemaking Website:** Go to <https://www.regulations.gov> and

search for **NRC-2024-0048**. Address questions about Docket IDs in Regulations.gov to Stacy Schumann; telephone: 301-415-0624; email: Stacy.Schumann@nrc.gov. For technical questions, contact the individual listed in the “For Further Information Contact” section of this document.

- **NRC’s Agencywide Documents Access and Management System**

(ADAMS): You may obtain publicly available documents online in the ADAMS Public Documents collection at <https://www.nrc.gov/reading-rm/adams.html>. To begin the search, select “Begin Web-based ADAMS Search.” For problems with ADAMS, please contact the NRC’s Public Document Room (PDR) reference staff at 1-800-397-4209, at 301-415-4737, or by email to PDR.Resource@nrc.gov. For the convenience of the reader, instructions about obtaining materials referenced in this document are provided in the “Availability of Documents” section.

- **NRC’s PDR:** The PDR, where you may examine and order copies of publicly available documents, is open by appointment. To make an appointment to visit the PDR, please send an email to PDR.Resource@nrc.gov or call 1-800-397-4209 or 301-415-4737, between 8 a.m. and 4 p.m. eastern time (ET), Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Yawar Faraz, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, telephone: 301-415-7220, email: Yawar.Faraz@nrc.gov.

I. Introduction

The NRC issued SNM-7003 for the LCF on February 24, 2004. The LCF enriched uranium up to 10 weight percent in the isotope uranium-235. The LCF, which consisted of up to 240 operating centrifuges, was located in buildings leased by ACO from the DOE. The LCF’s centrifuges operated between 2006 and 2016 for the purpose

of obtaining and assessing performance data. The LCF operated in recycle mode; that is, no uranium hexafluoride (UF₆) product was withdrawn from the cascade for commercial purposes. Only small samples of products were removed for performance assessment. The LCF ceased operations in 2016. ACO decommissioned the LCF in 2017 and 2018: (1) ACO removed the UF₆ inventory from the centrifuges and process piping, decontaminated the LCF, and (2) ACO dismantled and appropriately disposed of the LCF equipment, under NRC-approved programs of the LCF. On January 5, 2018, ACO submitted its update to the decommissioning plan (DP) for the LCF to the NRC for review and approval. The updated DP contained ACO's proposed Release Criteria for unrestricted release under paragraphs 70.38(j) and (k) of part 70 of title 10 of the *Code of Federal Regulations* (10 CFR). On April 19, 2018, ACO submitted the Final Status Survey Report (FSSR) for the LCF to the NRC for review and approval. On August 7, 2018, the NRC approved ACO's DP for the LCF. On May 21-25, 2018, the NRC, with assistance of its contractor the Oak Ridge Institute for Science and Education, conducted an independent radiological confirmatory survey that included radiation floor and drain scans, direct radiation measurements, and smear sampling, of the LCF. An initial request was submitted by ACO to terminate the LCF license on August 9, 2018. As documented in its safety evaluation report issued in September 2019, the NRC found reasonable assurance that ACO had appropriately decommissioned the LCF in accordance with the requirements of 10 CFR part 20 "Standards for Protection Against Radiation" based on a thorough review of the FSSR and the results of the NRC staff's independent confirmatory survey.

As previously mentioned in this notice, ACO initially requested termination of the LCF license on August 9, 2018. ACO withdrew its license termination request on June 27, 2019, after the DOE contracted with ACO to demonstrate the production of

HALEU. ACO was authorized to install the HALEU cascade under the NRC-approved programs, such as those described in the classified matter and computer network security plans, that were part of the LCF license, SNM-7003. In accordance with SNM-7003, no radioactive material was brought onsite after the LCF was decommissioned. ACO sought to operate the HALEU cascade under an amendment to license, SNM-2011, to allow use of SNM for the purpose of producing HALEU at the Piketon site. On June 12, 2023, the NRC approved the introduction of UF₆ into the HALEU cascade under the ACO license for the ACP, SNM-2011. Therefore, ACO no longer needs to maintain the LCF license SNM-7003 to perform the HALEU program.

On November 2, 2023, ACO submitted a second application to terminate the LCF license and on January 5, 2024, the NRC staff accepted the submission for detailed technical review. As the final step in its decommissioning of the LCF, ACO submitted Form 314, "Certificate of Disposition of Materials," to the NRC by letter dated April 25, 2024. The NRC staff finds ACO's certification that all licensed material within the LCF has been adequately dispositioned, in accordance with 10 CFR 70.38(j)(1).

II. License Termination

The termination of NRC licenses issued under 10 CFR part 70 is governed by 10 CFR 70.38, "Termination of license." As noted, ACO: (1) permanently ceased principal activities under SNM-7003 in 2016 and (2) has not carried out principal activities with radioactive material under the LCF license for a period of 24 months. The NRC staff found reasonable assurance that ACO had appropriately decommissioned the LCF and appropriately certified that all licensed material under SNM-7003 had been adequately dispositioned. The NRC staff published those findings in its safety evaluation report of September 2019. The Commission grants ACO's request to terminate SNM-7003. The NRC staff will present its findings in the LCF License Termination Approval

letter, to be issued to ACO on the date of this notice. This license termination will be effective upon ACO's acknowledgement of receipt of the NRC's termination letter.

III. Environmental Assessment

License termination is a Federal action that requires an environmental assessment (EA) under 10 CFR 51.21, "Criteria for and identification of licensing and regulatory actions requiring environmental assessments." The NRC prepared the following EA for the license termination.

Description of the Proposed Action

The NRC is terminating license SNM-7003 because the LCF is no longer in use and has been decommissioned as described in this notice. In 2018, the NRC staff prepared an EA for the NRC's review and approval of a decommissioning plan (DP) for the LCF submitted by the licensee in January 2018. The 2018 EA determined that decommissioning of the LCF as described in the DP would not significantly affect the quality of the human environment. The NRC staff issued that EA and a finding of no significant impact (FONSI) on August 1, 2018. Due to the time elapsed between the publication of the 2018 EA and FONSI and the date of the current license termination request, the NRC staff conducted an environmental review to confirm the staff's findings and consult with state agencies on the current license termination request.

Need for the Proposed Action

The license should be terminated because the LCF is no longer in use and has been completely decommissioned in accordance with NRC requirements for unrestricted release in 10 CFR 20.1402.

Environmental Impacts of the Proposed Action

The NRC staff reassessed the potential for the license termination to affect environmental resources and worker and public health and safety. As described in this

notice, the NRC staff confirms its findings from the September 2019 safety evaluation report that the LCF could be released for unrestricted use. No radioactive material has been brought onsite under the LCF license SNM-7003 since that time and only the administrative act of terminating the license remains. The NRC staff confirms its previous determination that the proposed license termination would not affect land use; historic or cultural resources; visual or scenic resources; air quality; geology or soils; water resources; ecological resources; socioeconomics; noise; traffic or transportation; public or worker health and safety; or waste management.

Environmental Impacts of the Alternatives to the Proposed Action

As an alternative to the proposed action, the staff considered the “no-action” alternative. Under the no-action alternative, the NRC would deny ACO’s request for license termination. This alternative is not reasonable because licensed activities are no longer occurring under license SNM-7003, and the facility is decommissioned. As such, no purpose exists for the license to remain in effect.

Agencies and Persons Consulted

The NRC staff provided the draft EA to the State of Ohio for review. The NRC received no comments on the EA.

Section 106 of the National Historic Preservation Act (NHPA) requires Federal agencies to consider the effects of their undertakings on historic properties. The proposed license termination is not a type of activity that has the potential to cause effects on any historic properties that may be present. Therefore, in accordance with 36 CFR 800.3(a)(1), the NRC has no further obligation under section 106 of the NHPA. Nevertheless, on September 20, 2024, the NRC staff notified the Ohio State Historic Preservation Office of the proposed license termination.

Section 7 of the Endangered Species Act (ESA) requires that, prior to taking a proposed action, Federal agencies determine whether the proposed Federal action may affect endangered or threatened species or their critical habitats. The proposed license termination has no potential to affect any special status species or habitats. Therefore, no consultation is required under Section 7 of the ESA.

IV. Finding of No Significant Impact

The NRC staff prepared this EA as part of its review of the proposed action. On the basis of this EA, the NRC finds that there are no significant environmental impacts from the license termination, and that preparation of an environmental impact statement is not warranted. Accordingly, the NRC determined that a FONSI is appropriate. In accordance with 10 CFR 51.32(a)(4), this FONSI incorporates the EA set forth in this notice by reference.

V. Availability of Documents

The documents identified in this notice are available to interested persons through ADAMS.

DOCUMENT DESCRIPTION	ADAMS ACCESSION NUMBER OR FEDERAL REGISTER NOTICE
Letter to S. Toelle of Centrus: Approval of License Amendment Request to Remove Authorization to Enrich Uranium at the American Centrifuge Lead Cascade Facility, dated December 23, 2016.	ML16330A249
Letter to J. Zimmerman of NRC and Affidavit: Submittal of Revision to the Decommissioning Plan [update] for the American Centrifuge Lead Cascade Facility, dated January 5, 2018.	ML18025B308
Enclosures 1, 2 and 3: DP-2605-0001, Decommissioning Plan for the American Centrifuge Lead Cascade Facility, dated January 4, 2018.	ML18025B310
Letter to J. Zimmerman of NRC: Submittal of Final Status Survey Report for the American Centrifuge Lead Cascade Facility Decommissioning Project, dated April 19, 2018.	ML18145A130

Enclosure 1: DP-2605-0002, Revision 0, Final Status Survey Report for the American Centrifuge Lead Cascade Facility Decommissioning Project, dated April 19, 2018.	ML18145A131
Enclosure 3: Appendix B of the FSSR, Final Status Surveys [Redacted], dated April 13, 2018.	ML18145A132
Enclosure 4: Appendix C of the FSSR, RESRAD-BUILD Evaluations, dated April 13, 2018.	ML18145A133
Letter to J. Smith of NRC: Independent Confirmatory Survey Results for the Lead Cascade Facility, dated August 16, 2018.	ML18233A343
NRC Letter to Ohio Department of Health Providing Draft Environmental Assessment for the American Centrifuge Lead Cascade Facility Decommissioning Plan, dated June 12, 2018.	ML18130A472
Email and Letter from Ohio Department of Health Indicating No Comments on the Draft Environmental Assessment for the Approval of the Decommissioning Plan for the American Centrifuge Lead Cascade Facility, dated July 6, 2018.	ML18193A742 (Package)
Final Environmental Assessment for the Decommissioning Plan for the American Centrifuge Lead Cascade Facility in Piketon, Ohio, dated July 2018.	ML18204A294
<i>Federal Register</i> Notice for Issuance of Environmental Assessment and Finding of No Significant Impact, issued July 26, 2018.	(83 FR 37530) ML18200A089
Letter to S. Toelle of Centrus: NRC Approval of Decommissioning Plan for the American Centrifuge Lead Cascade Facility, dated August 7, 2018.	ML18192B477
Enclosure 1: Safety Evaluation Report on Centrus Energy Corp. Amendment Request for Approval of American Centrifuge Lead Cascade Facility Decommissioning Plan and Associated Supporting Documents, dated August 7, 2018.	ML18192B644
Enclosure 3: NRC Form 374 - Redacted Amendment 15 to License SNM-7003 for American Centrifuge Operating, LLC, dated August 7, 2018.	ML18192B828
ACO Transmittal Letter to the NRC for Termination of American Centrifuge Lead Cascade Facility NRC Materials License, dated August 9, 2018.	ML18249A298
Letter to D. Fosson of ACO: NRC Inspection Report No. 07007003/2018001 (DNMS) - American Centrifuge Operating LLC, Lead Cascade Facility, dated September 12, 2018.	ML18260A122
Letter to M. Dapas of NRC: Termination of American Centrifuge Lead Cascade Facility NRC Materials License, dated August 9, 2018.	ML18249A298

Letter to J. Lubinski of NRC: American Centrifuge Lead Cascade Facility Withdrawal of Request to Terminate the American Centrifuge Lead Cascade NRC Materials License, dated June 27, 2019.	ML19186A272
Letter to K. Wiehle of ACO: Approval of Centrus Energy Corp Final Status Survey Report and Request to Cancel Its Decommissioning Funding Instrument for the American Centrifuge Lead Cascade Facility, dated September 23, 2019.	ML19228A096
Enclosure 1 - Safety Evaluation Report on Centrus Energy Corp. Request for Review and Approval of American Centrifuge Lead Cascade Facility Final Status Survey Report and Request for Termination of Decommissioning Funding, dated September 23, 2019.	ML19228A097
Enclosure 2: NRC Form 374 - Amendment 16 of License (Public), dated September 23, 2019.	ML19228A098
Letter to J. Lubinski of NRC [License Termination Request]: American Centrifuge Lead Cascade Facility; Docket Number 70-7003; License Number SNM-7003, dated November 2, 2023.	ML23311A313
Email to K. Fitch of ACO: Acceptance for Detailed Review Email for Centrus/ACO's Request to Terminate its Lead Cascade Facility License SNM-2003, January 5, 2024.	ML24008A015
Letter to J. Lubinski of NRC: American Centrifuge Lead Cascade Facility - Submittal of NRC Form 314, Certificate of Disposition of Materials, dated April 25, 2024.	ML24135A205
Memorandum to S. Lav of NRC: Adequacy of ACO's Form 314 Certification, dated April 25, 2024; dated September 19, 2024.	ML24260A089
Email to State of Ohio Requesting Review of EA for Proposed Lead Cascade Facility License Termination, dated September 20, 2024.	ML24284A321
Email to Ohio SHPO re: EA for Proposed Lead Cascade Facility License Termination, dated September 20, 2024.	ML24284A322
Response from State of Ohio re: EA for Lead Cascade Facility License Termination, dated October 8, 2024.	ML24284A318

Letter to K. Fitch of ACO: License Termination Package for Special Nuclear Materials License Number SNM-7003 For The American Centrifuge Lead Cascade Facility, dated November 2024.	ML24283A205 (Package)
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Dated: November 5, 2024.

For the Nuclear Regulatory Commission

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Shana Helton, Director,
Division of Fuel Management,
Office of Nuclear Materials Safety
and Safeguards.