



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
REGION II  
245 PEACHTREE CENTER AVENUE N.E., SUITE 1200  
ATLANTA, GEORGIA 30303-1200

June 12, 2023

Mathew Snider  
General Manager/Operations Manager  
American Centrifuge Operating, LLC  
3930 U.S. Route 23 South  
P.O. Box 628 Mail Stop 7560  
Piketon, OH 45661

**SUBJECT: AMERICAN CENTRIFUGE OPERATING, LLC - AMERICAN CENTRIFUGE  
PLANT – DOCKET NO. 70-7004, AUTHORIZATION TO INTRODUCE  
URANIUM HEXAFLUORIDE INTO THE HIGH-ASSAY LOW-ENRICHED  
URANIUM DEMONSTRATION CASCADE MODULE**

Dear Mathew Snider:

This letter confirms the Nuclear Regulatory Commission's (NRC's) authorization to introduce uranium hexafluoride (UF<sub>6</sub>) into the High-Assay Low-Enriched Uranium (HALEU) Demonstration Cascade modules at the American Centrifuge Plant (ACP) located in Piketon, Ohio. This authorization is pursuant to the provisions of Part 70, Paragraph 70.32(k) and 10 CFR 40.41(g) of Title 10 of the Code of Federal Regulations (CFR) that states, "No person may commence operation of a uranium enrichment facility until the Commission verifies through inspection that the facility has been constructed in accordance with the requirements of the license." Additionally, license condition 11 of the American Centrifuge Operating, LLC., American Centrifuge Plant Materials License (SNM-2011) requires, in part, that introduction of UF<sub>6</sub> into any module of the ACP, including the HALEU Demonstration cascade, shall not occur until the Commission completes an operational readiness and management measures verification review. This review is to verify that management measures that ensure compliance with the performance requirements of 10 CFR Section 70.61 have been implemented and confirms that the facility has been constructed and will be operated safely and in accordance with the requirements of the license.

This NRC authorization is based on the results of construction, quality assurance, and operational readiness inspections of various aspects of the HALEU Demonstration Cascade, as described in the inspection reports listed in the Enclosure. The NRC staff determined that the systems, structures, and components designed to support safe operation of the HALEU cascade were constructed in accordance with the requirements of your license. Specifically, our inspections provided: (1) reasonable assurance that the design, construction, and implementation of items relied on for safety (IROFS) will protect against natural phenomena and the consequences of potential accidents, (2) verification that the Quality Assurance Program was adequately implemented during construction, and (3) verification that the construction of the IROFS was completed in accordance with the documents comprising the license and the Integrated Safety Analysis Summary.

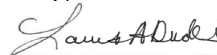
The publicly available inspection reports and report cover letters for non-public reports that describe the construction, quality assurance, and operational readiness inspections of the HALEU Demonstration Cascade are accessible through the NRC's public electronic reading room, Agencywide Document Access and Management System (ADAMS), at <http://www.nrc.gov/reading-rm/adams.htm> via the accession numbers listed in the Enclosure.

Please note that this authorization does not authorize enrichment of uranium 235 above the Category III limits defined in 10 CFR 70.4. Additionally, this authorization only applies to the HALEU Demonstration Cascade, and it does not apply to processes or components associated with future phases of facility operations.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," this document may be accessed through ADAMS on the internet at [www.nrc.gov/reading-rm/adams.htm](http://www.nrc.gov/reading-rm/adams.htm).

Should you have any questions concerning this letter, please contact Mr. Leonard Pitts at 404-997-4708.

Sincerely,



Signed by Dudes, Laura  
on 06/12/23

Laura A. Dudes  
Regional Administrator

Docket No. 07007004  
License No. SNM-2011

Enclosure:  
As stated

cc w/ encl: Distribution via LISTSERV

SUBJECT: AMERICAN CENTRIFUGE OPERATING, LLC - AMERICAN CENTRIFUGE PLANT – DOCKET NO. 70-7004, AUTHORIZATION TO INTRODUCE URANIUM HEXAFLUORIDE INTO THE HIGH-ASSAY LOW-ENRICHED URANIUM DEMONSTRATION CASCADE MODULE Dated June 12, 2023

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ADAMS ACCESSION NUMBER: ML23163A168

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NAME	L. Pitts	R. Williams	A. Masters	L. Dudes	
DATE	06/12/2023	06/09/2023	06/12/2023	06/12/2023	

**OFFICAL RECORD COPY**

**Construction, Quality Assurance, and Operational Readiness Inspection Reports for the  
American Centrifuge Plant - HALEU Demonstration Cascade**

<b>Inspection Report Number</b>	<b>Program Areas Inspected</b>	<b>Public Report or Report Cover Letter*</b>	<b>ADAMS Accession Number</b>
2021-006	Construction and Quality Assurance	Public Report	ML21130A343
2021-009	Operational Safety, Radiation Protection, Nuclear Criticality Safety, Permanent Plant Modifications, Fire Protection, and Effluent Control and Environmental Protection	Public Report	ML22026A367
2023-007	Operational Safety, Radiation Protection, Nuclear Criticality Safety, Permanent Plant Modification, and Fire Protection	Public Report	ML23128A350
2023-405	Material Control and Accounting	Cover Letter*	ML23128A357
2023-406	Physical Security	Cover Letter*	ML23152A276

\* These reports enclosures contain "Security Related Information" and will not be made publicly available in accordance with 10 CFR 2.390 (d)(1). The ADAMS Accession Number for the associated public cover letter is provided.