



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION II
245 PEACHTREE CENTER AVENUE N.E., SUITE 1200
ATLANTA, GEORGIA 30303-1200

September 21, 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 COMMENCE ENRICHMENT OPERATIONS IN THE HIGH-ASSAY LOW-ENRICHED URANIUM DEMONSTRATION CASCADE MODULE TO PRODUCE CATEGORY II QUANTITIES OF SPECIAL NUCLEAR MATERIAL

Dear Mathew Snider:

This letter confirms the Nuclear Regulatory Commission's (NRC's) authorization to commence enrichment operations in the High-Assay Low-Enriched Uranium (HALEU) Demonstration Cascade module to produce category II quantities of special nuclear material (SNM) 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 UF₆ 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 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 Demonstration Cascade were constructed in accordance with license requirements. Specifically, the 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 only applies to the possession and use of source, byproduct and special nuclear material at the HALEU Demonstration Cascade as approved by the NRC.

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.

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

Sincerely,



Signed by Dudes, Laura
on 09/21/23

Laura A. Dudes
Regional Administrator

Docket No. 07007004
License No. SNM-2011

Enclosure:
As stated

cc w/ encl: Distribution via LISTSERV

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NAME	L. Pitts	R. Mathis	A. Masters	L. Dudes	
DATE	09/18/2023	09/19/2023	9/19/2023	9/21/2023	

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

Inspection Report Number	Program Areas Inspected	Public Report or Report Cover Letter*	ADAMS Accession Number
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
2023-407*	Physical Security	Cover Letter	ML23248A544
2023-408*	Material Control and Accounting	Cover Letter	ML23256A229

*Inspection reports containing “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.