

May 25, 2021 ACO 21-0027

ATTN: Document Control Desk Mr. John W. Lubinski, Director Office of Nuclear Material Safety and Safeguards U.S. Nuclear Regulatory Commission Washington, DC 20555-0001

American Centrifuge Plant; Docket Number 70-7004; License Number SNM-2011

Issuance of Final Revision for American Centrifuge Operating, LLC's License Application and Supporting Documents – EPID Numbers: L-2020-LLA-0085 and L-2020-SPR-0009

INFORMATION TRANSMITTED HEREWITH IS PROTECTED FROM PUBLIC DISCLOSURE AS CONFIDENTIAL COMMERCIAL OR FINANCIAL INFORMATION AND/OR TRADE SECRETS PURSUANT TO 10 CFR 2.390 AND 9.17(a)(4) AND INFORMATION TRANSMITTED HEREWITH IS PROTECTED FROM

DISCLOSURE PURSUANT TO 10 CFR PART 810

Dear Mr. Lubinski:

The purpose of this letter is to provide the final revision to the License Application and Supporting Documents to the U.S. Nuclear Regulatory Commission (NRC) to support final approval of American Centrifuge Operating, LLC's (ACO's) License Amendment Requests for the High Assay Low Enriched Uranium (HALEU) Demonstration Program (References 1 through 4, as modified by supplemental proposed revisions noted by References 5 through 17, respectively). The final changes within these documents are depicted with revision bars in the right-hand margin.

The following documents are being submitted by enclosures of this letter:

Enclosure 1 provides the final revision for LA-3605-0001, License Application for the American Centrifuge Plant. As discussed within Reference 1, ACO proposed a new license condition to obtain prior NRC approval before transitioning to subsequent phases of operations as discussed within Section 1.1.8.2 of the License Application. ACO has re-evaluated the need for this proposed license condition and determined that it is no longer required; thereby, being removed from this revision of the License Application. As ACO has committed and conditioned under NRC's Materials License SNM-2011, Condition #24, changes to the facility

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Mr. John W. Lubinski May 25, 2021 ACO 21-0027, Page 2

or its processes are evaluated before the change is implemented. The evaluation of change determines, before the change is implemented, whether an application for amendment to the License Application is required to be submitted in accordance with 10 *Code of Federal Regulations* (CFR) 70.34. For changes that require NRC's pre-approval, ACO submits an amendment request to the NRC in accordance with 10 CFR 70.34 and 70.65. ACO's implementing procedures and brief summary of changes to the facility are annually inspected by the NRC. Therefore, the need for a second proposed license condition is un-necessary. Please note that Appendices A, C, and E of LA-3605-0001 were not revised under the HALEU Demonstration LAR and remain at the current issued revisions.

- Enclosure 2 provides the final revision for withheld Appendix B of LA-3605-0001
- Enclosure 3 provides the final revision for withheld Appendix D of LA-3605-0001⁰
- Enclosure 4 provides the final revision for withheld Appendix F of LA-3605-0001 v
- Enclosure 5 provides the final revision for LA-3605-0002, Environmental Report for the American Centrifuge Plant
- KEnclosure 6 provides the final revision for LA-3605-0003, Integrated Safety Analysis (ISA) Summary for the American Centrifuge Plant
- Enclosure 7 provides the final revision for LA-3605-0003A, Addendum 1 of the Integrated Safety Analysis (ISA) Summary for the American Centrifuge Plant – HALEU Demonstration
- Enclosure 8 provides the final revision for NR-3605-0003, Quality Assurance Program Description for the American Centrifuge Plant
- ✓ Enclosure 9 provides the final revision for NR-3605-0005, Fundamental Nuclear Material Control Plan for the American Centrifuge Plant
- V Enclosure 10 provides the final revision for NR-3605-0005B, Addendum 1 of the Fundamental Nuclear Material Control Plan for the American Centrifuge Plant – HALEU Demonstration

SP-3605-0042, Security Plan for the Physical Protection of Special Nuclear Material at the American Centrifuge Plant, will be submitted under separate cover ACO 21-0030. The following documents are being submitted under separate cover ACO 21-0031:

- LA-3605-0003G, (U) Classified Information Supporting Addendum 1 of the Integrated Safety Analysis
- LA-3605-0003AG, (U) Classified Information Supporting Addendum 1 of the Integrated Safety Analysis
- NR-3605-0005C, (U) Program for Precluding and Detecting Unauthorized Production/Enrichment and Diversion Activities for the HALEU Demonstration Centrifuge Facility

Please note that NR-3605-0005A, (U) Program for Precluding and Detecting Unauthorized Production/Enrichment and Diversion Activities for the American Centrifuge Plant was not revised under the HALEU Demonstration LAR and remain at the current issued revision.

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Mr. John W. Lubinski May 25, 2021 ACO 21-0027, Page 3

Enclosures 3, 6, 7, 9, and 10 contain Security-Related Information. Also, in accordance with the guidance provided by the U.S. Department of Energy (DOE), Enclosures 4, 9, and 10 contain Official Use Only information. Therefore, ACO requests these enclosures be withheld from public disclosure pursuant to 10 CFR 2.390(d)(1). Enclosures 2, 6, 7, 9, and 10 have been determined, in accordance with the guidance provided by the DOE, to contain Export Controlled Information and must be protected from disclosure per the requirements of 10 CFR Part 810. Additionally, Enclosures 4, 6, 7, 9, and 10 contain Proprietary and ACO requests these enclosures be withheld from public disclosure pursuant to 10 CFR 2.390(a)(4). An affidavit required by 10 CFR $\mathcal{2.390}(b)(1)(ii)$ is provided as Enclosure 11.

If you have any questions regarding this matter, please contact me at (740) 897-3859.

Sincerely,

Kelly L Jitch

Kelly L. Fitch Regulatory Manager

References:

- 1. ACO 20-0010 from K. Wiehle to J. Lubinski (NRC) regarding License Amendment Request for American Centrifuge Operating, LLC's License Application and Supporting Documents for the American Centrifuge Plant, dated April 22, 2020
- 2. ACO 20-0013 from K. Wiehle to J. Lubinski (NRC) regarding License Amendment Request for American Centrifuge Operating, LLC's License Application and Supporting Documents for the American Centrifuge Plant, dated May 7, 2020
- 3. ACO 20-0014 from K. Wiehle to J. Lubinski (NRC) regarding (U) License Amendment Request for American Centrifuge Operating, LLC's American Centrifuge Plant, dated May 7, 2020
- 4. ACO 20-0021 from K. Wiehle to J. Lubinski (NRC) regarding License Amendment Request for American Centrifuge Operating, LLC's License Application and Supporting Documents for the American Centrifuge Plant, dated June 23, 2020
- 5. ACO 20-0025 from K. Wiehle to J. Lubinski (NRC) regarding Resubmittal of Enclosure to License Amendment Request for American Centrifuge Operating, LLC's License Application and Supporting Documents for the American Centrifuge Plant, dated June 17, 2020

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Mr. John W. Lubinski May 25, 2021 ACO 21-0027, Page 4

- ACO 20-0029 from K. Wiehle to S. Atack (NRC) regarding Supplement to American Centrifuge Operating, LLC's Security Plan License Amendment Request – EPID #L-2020-SPR-0009, dated August 5, 2020
- ACO 20-0035 from K. Wiehle to J. Lubinski (NRC) regarding Response to NRC Staff Comments for American Centrifuge Operating, LLC's Fundamental Nuclear Material Control Plan, dated October 15, 2020
- ACO 20-0036 from K. Wiehle to J. Lubinski (NRC) regarding Response to Requests for Additional Information Related for American Centrifuge Operating, LLC's License Amendment Request (Enterprise Project Identification Number: L-2020-LLA-0085), dated October 14, 2020
- 9. ACO 20-0038 from K. Wiehle-Fitch to S. Atack (NRC) regarding Supplement to American Centrifuge Operating, LLC's Security Plan License Amendment Request EPID #L-2020-SPR-0009, dated December 29, 2020
- ACO 20-0039 from K. Wiehle to J. Lubinski (NRC) regarding Proposed Changes for Additional Information Related for American Centrifuge Operating, LLC's License Amendment Request (Enterprise Project Identification Number: L-2020-LLA-0085), dated October 19, 2020
- 11. ACO 20-0050 from K. Wiehle-Fitch to J. Lubinski (NRC) regarding (U) Supplemental Proposed Changes for American Centrifuge Operating, LLC's License Amendment Request (Enterprise Project Identification Number: #L-2020-LLA-0085), dated December 17, 2020
- ACO 20-0051 from K. Wiehle-Fitch to J. Lubinski (NRC) regarding Supplemental Proposed Changes for American Centrifuge Operating, LLC's License Amendment Request (Enterprise Project Identification Number: #L-2020-LLA-0085), dated December 17, 2020
- 13. ACO 21-0002 from K. Wiehle-Fitch to J. Lubinski (NRC) regarding Supplemental Response to NRC Staff Comments for American Centrifuge Operating, LLC's Fundamental Nuclear Material Control Plan, dated January 14, 2021
- ACO 21-0010 from K. Fitch to S. Atack (NRC) regarding Supplement to American Centrifuge Operating, LLC Security Plan License Amendment Request – EPID #L-2020-SPR-0009, dated February 26, 2021

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Mr. John W. Lubinski May 25, 2021 ACO 21-0027, Page 5

- 15. ACO 21-0011 from K. Fitch to J. Lubinski (NRC) regarding Supplemental Proposed Changes for American Centrifuge Operating, LLC's License Amendment Request (Enterprise Project Identification Number: #L-2020-LLA-0085), dated March 17, 2021
- 16. ACO 21-0014 from K. Fitch to J. Lubinski (NRC) regarding Response to Requests for Additional Information Related for American Centrifuge Operating, LLC's License Amendment Request (Enterprise Project Identification Number: #L-2020-LLA-0085), dated April 1, 2021
- 17. ACO 21-0018 from K. Fitch to S. Atack (NRC) regarding Supplement to American Centrifuge Operating, LLC Security Plan License Amendment Request EPID #L-2020-SPR-0009, dated May 6, 2021

cc (without enclosures, unless otherwise noted):

- J. Keith Everly, NRC HQ (Enclosures via NRC SharePoint)
- Y. Faraz, NRC HQ (Controlled Copy)

S. Harlow, DOE NE

J. Hutson, DOE NE (Enclosures via NRC SharePoint)

M. McCune, DOE NE

N. Pitoniak, NRC Region II (Enclosures via NRC SharePoint)

L. Pitts, NRC Region II (Controlled Copy)

K. Shears, DOE NE

E. St. Clair, DOE-NE (CONTR)

R. Womack, NRC Region II (Enclosures via NRC SharePoint)

T. Vukovinsky, NRC Region II (Enclosures via NRC SharePoint)

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Enclosure 11 of ACO 21-0027

Affidavit

Information Contained Within Does Not Contain Export Controlled Information

Reviewing

 Official:
 #1014

 Date:
 05/24/2021

AFFIDAVIT OF LARRY B. CUTLIP SUPPORTING APPLICATION TO WITHHOLD FROM PUBLIC DISCLOSURE CERTAIN INFORMATION PROVIDED TO NRC IN LETTER ACO 21-0027

I, Larry B. Cutlip, of American Centrifuge Operating, LLC (ACO), having been duly sworn, do herby affirm and state:

- I have been authorized by ACO to review the information owned by ACO which is referenced herein relating to ACO's final revision to the U.S. Nuclear Regulatory Commission's (NRC) in relation to the License Amendment Requests for the American Centrifuge Plant (ACP) - High Assay Low Enriched Uranium (HALEU) Demonstration Program (NRC Materials License SNM-2011), which ACO seeks to have withheld from public disclosure pursuant to section 147 of the Atomic Energy Act (AEA), as amended, 42 U.S.C. § 2167, and 10 CFR 2.390(a)(4), and 9.17(a)(4), and (b) apply for the withholding of such information from public disclosure by the Nuclear Regulatory Commission (NRC) on behalf of ACO.
- 2. Consistent with the provisions of 10 CFR 2.390(b)(4) of the Commission's regulations, the following is furnished for consideration by the Commission in determining whether the information sought to be withheld from public disclosure should be withheld.
 - i. The information sought to be withheld from public disclosure is owned and has been held in confidence by ACO.
 - ii. The information is of a type customarily held in confidence by ACO and not customarily disclosed to the public. ACO has a rational basis for determining the types of information customarily held in confidence by it and, in that connection, utilizes a system to determine when and whether to hold certain types of information in confidence. The application of that system and the substance of that system constitute ACO policy and provide the rational basis required. Under that system, information is held in confidence if it falls in one or more

of several types, the release of which might result in the loss of an existing or potential competitive advantage, as follows:

- a) The information reveals the distinguishing aspects of a process (or component, structure, tool, method, etc.) where presentation of its use by any of ACO's competitors without license from ACO constitutes a competitive economic advantage over other companies.
- b) It consists of supporting data, including test data, relative to a process (or component, structure, tool, method, etc.), the application of which data secures a competitive economic advantage (e.g., by optimization or improved marketability).
- c) Its use by a competitor would reduce their expenditure of resources or improve their competitive position in the design, manufacture, shipment, installation, assurance of quality, or licensing a similar product.
- d) It reveals cost or price information, production capacities, budget levels, or commercial strategies of ACO, its customers or suppliers.
- e) It reveals aspects of past, present, or future ACO or customer funded development plans and programs of potential commercial value to ACO.
- f) It contains patentable ideas, for which patent protection may be desirable.
- g) It reveals information concerning the terms and conditions, work performed, administration, performance under or extension of contracts with its customers or suppliers.
- iii. There are sound policy reasons behind the ACO system which include the following:
 - a) The use of such information by ACO gives ACO a competitive advantage over its competitors. It is, therefore, withheld from disclosure to protect the ACO competitive position.
 - b) It is information, which is marketable in many ways. The extent to which such

information is available to competitors diminishes ACO's ability to sell products and services involving the use of the information.

- c) Use by our competitors would put ACO at a competitive disadvantage by reducing their expenditure of resources at ACO expense.
- d) Each component of proprietary information pertinent to a particular competitive advantage is potentially as valuable as the total competitive advantage. If competitors acquire components or proprietary information, any one component may be the key to the entire puzzle, thereby depriving ACO of a competitive advantage.
- e) Unrestricted disclosure would jeopardize the position of prominence of ACO in the world market, and thereby give a market advantage to the competition of those countries.
- f) The ACO capacity to invest corporate assets in research and development depends upon the success in obtaining and maintaining a competitive advantage.
- iv. The information is being transmitted to the Commission in confidence and, under the provisions of 10 CFR Section 2.390, it is to be received in confidence by the Commission.
- v. The information sought to be protected is not available in public sources or available information has not been previously employed in the same original manner or method to the best of our knowledge and belief.
- 3. The proprietary information sought to be withheld is contained within Enclosures 4, 6, 7, 9, and 10 of letter ACO 21-0027. Specifically, Enclosure 4 provides the final revision for withheld Appendix F of LA-3605-0001; Enclosure 6 provides the final revision for LA-3605-0003, *Integrated Safety Analysis (ISA) Summary for the American Centrifuge Plant;* Enclosure 7 provides the final revision for LA-3605-0003A, *Addendum 1 of the Integrated Safety Analysis (ISA) Summary for the American Centrifuge Plant HALEU Demonstration;* Enclosure 9

provides the final revision for NR-3605-0005, *Fundamental Nuclear Material Control Plan for the American Centrifuge Plant*; and Enclosure 10 provides the final revision for NR-3605-0005B, *Addendum 1 of the Fundamental Nuclear Material Control Plan for the American Centrifuge Plant – HALEU Demonstration*. These enclosures provide detailed types of accidents, computer calculations, descriptions, diagrams, and specifics to the Nuclear Material Control and Accountability (NMC&A) Program needed for the deployment of ACO's HALEU Demonstration Program and American Centrifuge Plant; therefore, determined to be proprietary.

Public disclosure of this proprietary information is likely to cause substantial harm to the competitive position of ACO because it may enhance the ability of competitors to position and provide similar products. Moreover, disclosure of the information may provide insights into the design of ACO's American Centrifuge technology, including structures, systems, and components categorized as Export Controlled Information.

Further, this information has substantial commercial value as follows:

- The development of the information described in part is the result of applying many hundreds of person-hours and the expenditure of thousands of dollars on design and analysis activities to achieve the information that is sought to be withheld; and
- In order for a competitor of ACO to duplicate the information sought to be withheld, a similar process would have to be undertaken and a significant effort and resources would have to be expended.

Moreover, disclosure of this information may provide insights into the ACO's NMC&A Program for Special Nuclear Material categorized as Security-Related Information, Official Use Only (Exemption 7, Law Enforcement), and Export Controlled Information. Therefore, Enclosures 9 and 10 should also be withheld from public disclosure pursuant to 10 CFR 2.390(d)(1) and 10 CFR Part 810. Further the deponent sayeth not.

Larry B. Cutlip, having been duly sworn, hereby confirms that I am the Senior Vice President, Field Operations of American Centrifuge Operating, LLC, that I am authorized on behalf of ACO to review the information attached hereto and to sign and file with the U.S. Nuclear Regulatory Commission this affidavit and the attachments hereto, and that the statements made and matters set forth herein are true and correct to the best of my knowledge, information, and belief.

Larry B. Cutlip

On this 24th day of May 2021, Larry B. Cutlip personally appeared before me, is known y me to be the person whose name is subscribed to within the instrument and acknowledged that he executed the same for the purposes therein contained.

In witness hereof I hereunto set my hand and official seal.

Robin Yochum()State of Ohio Notary PublicMy commission ends February 6, 2022



ROBIN YOCHUM Notary Public - State of Ohlo

My Commission Expires

February 06, 2022