Centrus
Fueling the Future of Nuclear Power

February 3, 2022
ACO 22-0011

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

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

Supplement to American Centrifuge Operating, LLC's License Application and Supporting Documents for the American Centrifuge Plant (Enterprise Project Identification Number: L-2021-LLA-0125)

Dear Mr. Lubinski:

The purpose of this letter is to provide supplemental proposed changes to the U.S. Nuclear Regulatory Commission (NRC) for review and approval to address a Request for Additional Information (RAI) for American Centrifuge Operating, LLC's (ACO) license amendment request submitted by Reference 1.

On August 27, 2021 (Reference 2), NRC issued the initial set of RAIs with ACO responses being submitted on September 21, 2021 (Reference 3). Subsequently, ACO and NRC staff held various conference call discussions during January 2022 (Reference 4) to resolve the proposed wording of Materials License Condition 19. ACO has addressed the NRC's concerns and Enclosure 1 provides newly proposed changes to Materials License Condition 19 and are noted in track changes. The detailed description, justification, and ACO's significance determination submitted by Reference 1 remains unchanged.

ACO respectfully requests NRC complete their review and final approval on or before March 31, 2022.

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

Sincerely,

Kelly L Fitch

Kelly L. Fitch
Regulatory Manager

Enclosure: As stated

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NMSS

American Centrifuge Operating, LLC
3930 U.S. Route 23 South – P.O. Box 628
Piketon, OH 45661

References:

1. ACO 21-0028 from K.L. Fitch to J.W. Lubinski (NRC) regarding License Amendment Request for American Centrifuge Operating, LLC's License Application and Supporting Documents for the American Centrifuge Plant, dated June 30, 2021

2. Letter from Y. Faraz to K.L. Fitch (ACO) regarding Request for Additional Information – License Amendment Application for High Assay Low Enriched Uranium Demonstration Program Digitally Based Items Relied On For Safety, dated August 27, 2021

3. ACO 21-0052 from K.L. Fitch to J.W. Lubinski (NRC) regarding Response to Requests for Additional Information Related to License Amendment Request for the American Centrifuge Operating, LLC's License Application and Supporting Documents for the American Centrifuge Plant (Enterprise Project Identification Number: L-2021-LLA-0125, dated September 21, 2021

4. Memorandum from Y. Faraz (NRC) to J. Zimmerman (NRC) regarding Summary of January 4, 10 and 13, 2022, Telephone Calls with Centrus-American Centrifuge Operating, LLC Regarding Proposed License Condition 19 for the Digital Instrumentation and Control Items Relied On For Safety License Amendment Request, dated January 25, 2022

cc (without enclosure, unless otherwise noted):

M. Call, NRC HQ (Enclosure)
Y. Faraz, NRC HQ (Enclosure)
S. Harlow, DOE-NE
J. Hutson, Contract Support (Enclosure)
N. Pitoniak, NRC Region II
L. Pitts, NRC Region II (Enclosure)
D. Rahn, NRC HQ (Enclosure)
E. St. Clair, DOE Contract Support
J. Tobin, NRC HQ (Enclosure)
R. Womack, NRC Region II
T. Vukovinsky, NRC Region II

Enclosure 1 of ACO 22-0011

ACO's Supplemental Proposed Change to Materials License Condition 19

Information Contained Within
Does Not Contain
Export Controlled Information

Reviewing Official: #171

Date: 02/02/2022

Materials License Condition 19 proposed changes are depicted by the following method:

- ~~Blue Strikeout~~ - Identifies text to be removed
- Red underline – Identifies text to be added

~~Currently, there are no IROFS that have been specified as using~~ The licensee shall obtain Commission approval prior to implementing new digital technology within IROFS that use digital technology for previously approved process safety applications, or in any other IROFS of the facility. Such digital technology includes the use of software, firmware, microcode, Programmable Logic Controllers, and/or any digital device, including hardware devices which implement data communication protocols (such as fieldbus devices and Local Area Network controllers)~~., etc. Should the design of any IROFS be changed to include any of the preceding features, t~~The licensee shall also obtain Commission approval prior to implementing ~~the~~ a change~~(s)~~ to Commission-approved IROFS that incorporate digital technology which adds new or alters the characteristics of existing digital technology as described above.

~~The~~ Proposed licensee ~~design~~ digital technology change(s) shall comply with accepted best practices in software and hardware engineering, including software quality assurance controls as discussed in the Quality Assurance Program Description throughout the development process and the applicable guidance of the following industry standards and regulatory guides:

a. American Society of Mechanical Engineers (ASME) NQA-1-2008 with the NQA-1a-2009 Addenda, Part I, Requirement 3, "Design Control," Section 800, Requirement 11, "Test Control," and Part II, Subpart 2.7, "Quality Assurance Requirements for Computer Software for Nuclear Facility Applications."

b. Regulatory Guide 1.168, "Verification, Validation, Reviews, and Audits for Digital Computer Software Used in Safety Systems of Nuclear Power Plants," ~~Revision 1, February 2004~~ Revision 2, July 2013.

c. Regulatory Guide 1.169, "Configuration Management Plans for Digital Computer Software Used in Safety Systems of Nuclear Power Plants," ~~September 1997~~ Revision 1, July 2013.

d. Regulatory Guide 1.170, "~~Software~~ Test Documentation for Digital Computer Software Used in Safety Systems of Nuclear Power Plants," ~~September 1997~~ Revision 1, July 2013.

e. Regulatory Guide 1.172, "Software Requirement~~s~~ Specifications for Digital Computer Software and Complex Electronics Used in Safety Systems of Nuclear Power Plants," ~~September 1997~~ Revision 1, July 2013.

f. Regulatory Guide 1.173, "Developing Software Life-Cycle Processes for Digital Computer Software Used in Safety Systems of Nuclear Power Plants," ~~September 1997~~ Revision 1, July 2013.