



~~Security Related Information~~
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August 29, 2024

Attn: Document Control Desk
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Louisiana Energy Services, LLC
NRC Docket No. 70-3103

Subject: License Amendment Request to Raise Enrichment Limit to the Licensed Limit for LEU+ Recycling and Support Systems (LAR-24-01)

- References:
- 1) LES-21-0020-NRC, Notice of Intent for UUSA plan to submit License Amendment Requests for changes to License Condition 6B and Enrichment Limit, dated 1 April 2021 (ML21096A120)
 - 2) Summary of June 16, 2021 Public Meeting to Discuss a Proposed Increase in the Enrichment Limit for Louisiana Energy Services, dated 28 June 2021 (ML21175A075)
 - 3) Summary of August 9, 2023, Pre-application Meeting with Urenco USA regarding a Forthcoming License Amendment Request for Low Enriched Uranium Plus, dated 18 September 2023 (ML23258A092)
 - 4) LES-23-0130-NRC, License Amendment Request for Changes to License Conditions and Raise Enrichment Limit to Less Than 10 Weight Percent for LEU+ Production Systems (LAR-23-02), dated 30 November 2023 (ML23334A122)
 - 5) Summary of May 15, 2024, Hybrid Partially Closed Pre-application Meeting with Urenco USA regarding License Amendment Request 24-01 for approval to use existing Recycling and Support Systems to process Low Enriched Uranium Plus, dated 21 June 2024 (ML24170A766)

Pursuant to the requirements of Materials License SNM-2010, License Condition 30 and 10 CFR 70.72(d)(1), and in accordance with 10 CFR 70.34, Louisiana Energy Services, LLC (LES), dba Urenco USA (UUSA), hereby requests an amendment to Materials License SNM-2010.

In Reference 1, UUSA notified the Nuclear Regulatory Commission (NRC) of its intent to increase the enrichment limit identified in Materials License SNM-2010. UUSA held public

Enclosures 2, 4 and 5 transmitted by this letter contain Proprietary and/or Security-Related information. When these Enclosures are detached, this letter is decontrolled.



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meetings with the NRC (References 2 and 3) to discuss the Low Enriched Uranium Plus (LEU+) Project and the planned licensing approach. In those meetings, UUSA indicated the licensing approach would consist of two separate License Amendment Requests (LARs), the first for increasing the enrichment level for production systems, followed by a second LAR for raising enrichment for necessary installed support systems (i.e., recycling and decontamination systems).

In Reference 4, UUSA submitted a LAR for raising the enrichment level for production systems, along with other proposed changes to the Materials License that support increased enrichment production at the UUSA facility. That LAR did not include the use of on-site recycling and support systems; however, it proposed interim control measures for segregation and storage of LEU+ exposed components removed from production systems in order for LEU+ production to occur earlier.

In Reference 5, UUSA held a hybrid Partially Closed pre-application meeting with the NRC to discuss the scope, structure and general contents of this LAR and to address any questions during the meeting.

This amendment request proposes an increase of the enrichment limit to the licensed limit proposed in Reference 4 for those on-site recycling and support systems and the removal of interim controls established for segregation and storage of LEU+ exposed components which have been removed from production systems. Additionally, this LAR proposes a change to Materials License SNM-2010 that prohibits use of the recycling and support systems identified in this LAR for LEU+ material until after LAR approval and the NRC conducts a readiness review for these recycling and support systems and also proposes a 60 day notification period for the readiness review prior to planned implementation of this LAR.

Shipments and transportation of LEU+ will be considered in a separate licensing action, as necessary.

Enclosure 1 provides an affidavit whereby UUSA considers the information provided in Enclosures 2, 4 and 5 as Proprietary and Security-Related information, and requests that the information be withheld from public disclosure in accordance with 10 CFR 2.390 and the guidance from NRC RIS-2004-11 and NRC RIS-2005-31 Revision 1, Enclosure 2, Appendix 1. Enclosure 2 provides the descriptions and supporting references of the proposed changes for the on-site recycling and support systems of LEU+, bases for the changes, and safety significance of the proposed changes. Included in Enclosure 2 are the interim controls to be removed that were previously implemented to ensure segregation between LEU+ exposed removed components and the on-site recycling and support systems.

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Enclosure 3 contains the mark-up pages of the Safety Analysis Report (SAR), Enclosure 4 contains the mark-up pages of the Integrated Safety Analysis Summary (ISAS), Enclosure 5 contains a version of the ISAS with the changes incorporated into the document and Enclosure 6 contains the environmental information discussion for this LAR. The provided mark-ups in this submittal for the License Basis Documents (LBDs) are based on the text submitted for LAR 23-02 (Reference 4) and any subsequent related LBD text changes based on NRC Requests for Additional Information or Requests for Supplemental Information submitted during the NRC review of LAR 23-02.

UUSA respectfully requests the review and approval of this LAR by May 2025. UUSA appreciates the efforts of NRC staff in supporting this review and wishes to support the review by conducting post-submittal meetings with the staff to address any questions to assist in the review. Post-submittal meetings will be coordinated through the NRC Project Manager. If you have any questions regarding this LAR, you may contact Chris Schwarz, Licensing Manager, at 575-394-5783.

Respectfully,

A handwritten signature in blue ink, appearing to be 'PL', is written over a faint blue circular stamp.

Paul Lorskulsint
Chief Nuclear Officer

- Enclosures:
- 1) Affidavit
 - 2) Description of Proposed Changes for Increased Enrichment for On-site Recycling and Support Systems (LAR 24-01)
 - 3) Mark-up Pages to the Safety Analysis Report
 - 4) Mark-up Pages to the Integrated Safety Analysis Summary
 - 5) Integrated Safety Analysis Summary with changes incorporated
 - 6) Environmental Information

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