

LES-21-162-NRC
December 10, 2021



Attn: Document Control Desk
Director
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 for Revision for Urenco USA (UUSA) MCNP6
Validation Report (LAR 21-03)

Reference: 1. LES-18-089-NRC, LAR 18-04 Addition of MCNP6 for Nuclear Criticality
Safety Analysis

Pursuant to the requirements of SNM-2010 License Condition 25, License Condition 30,
and in accordance with 10 CFR 70.34, Louisiana Energy Services, LLC, also dba Urenco
USA (UUSA), hereby requests a revision to the existing UUSA MCNP6 Validation Report
and an amendment to the UUSA Safety Analysis Report (SAR).

In Reference 1, UUSA submitted a License Amendment Request (LAR) identifying a
revision to the Nuclear Criticality Safety Validation Report to include use of the MCNP6
(version 1.0) computer code for criticality applications at UUSA in addition to the existing
licensed criticality code of MONK8A. The proposed changes in this LAR are only related to
MCNP6 and:

- revises the range of uranium enrichment evaluated in the UUSA MCNP6 Validation
Report to support increasing the U-235 enrichment licensed limit from 5.5 weight
percent (wt%) U-235 to up to 10 wt% U-235 and allows additional flexibility for
potential further enrichment increases for future activities
- adds critical benchmarks containing Boron Carbide (B_4C) absorber rods to
accommodate potential future analyses for 30B-X cylinders
- removes Attachment B containing the MCNP input files and relocates them into the
UUSA MCNP6 User Guide

UUSA considers the information provided in Enclosures 1, 2 and 3 of this license
amendment as proprietary and requests that the information be withheld from public
disclosure in accordance with 10 CFR 2.390(a)(4). Enclosure 4 provides an affidavit
supporting this request.

Enclosure 1 provides a description, technical analysis, basis, and safety significance of the
proposed change. Enclosure 2 provides applicable portions of the License Basis
Documents proposed to be revised with the changes annotated on each page. Enclosure 3
provides the revised UUSA MCNP6 Validation Report for the proposed uranium enrichment
and other referenced changes.

UUSA appreciates the efforts of the NRC staff in supporting the review and approval of
this important amendment in a timely manner. Should there be any questions concerning
this submittal please contact Wyatt Padgett, Compliance and Licensing Manager, at 575-
394-5257.

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Respectfully,



Paul Lorskuisint
Chief Nuclear Officer

- Enclosures:
- 1) Description of Proposed Changes (LAR-21-03)
 - 2) Markup Pages to License Basis Documents (Safety Analysis Report and ISA Summary)
 - 3) Urenco USA (UUSA) MCNP6 Validation, NCS-REP-002-05
 - 4) Affidavit

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Cc:

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Enclosure 4

Affidavit

Enclosure 4

Affidavit

I, Paul Lorskulsint, being duly sworn, state that I am the Chief Nuclear Officer for Louisiana Energy Services (LES), dba Urenco USA (UUSA); that I am authorized on the part of said company to sign and file with the Nuclear Regulatory Commission ("NRC") this document; and that all statements made and matters set forth herein are true and correct to the best of my knowledge, information, and belief:

1. LES wishes to have withheld from public disclosure the following documents:
 - Enclosure 1 Description of Proposed Changes (LAR-21-03)
 - Enclosure 2 Markup Pages to Licensing Basis Documents
 - Enclosure 3 Urenco USA (UUSA) MCNP6 Validation, NCS-REP-002-05
2. The information contained in the document cited in 1 above for which exemption from public disclosure is requested is proprietary information related to commercial aspects of the Urenco USA Facility. LES requests that this information be exempt from disclosure pursuant to the provisions in 10 CFR Part 2.390(a)(4).
3. Public disclosure of the information in the above enclosure to this submittal has the potential to result in substantial harm to the competitive position of LES, provide valuable business information to competitors of LES which they could duplicate without having to expend their own resources to develop, and reduce or foreclose the availability of profit opportunities.
4. The information stated in this affidavit has been submitted in accordance with the applicable parts of 10 CFR 2.390 and the guidance contained in NUREG-1556, Vol. 20, Appendix C.4.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on 12/10/21 by: [Signature]
[Date] [Signature]

Paul Lorskulsint
Chief Nuclear Officer
Louisiana Energy Services, LLC

I certify the above named person appeared before me and executed this document on this 10th day of December, 2021.

Veronica Romero
Notary Public
My commission expires: June 16, 2024



OFFICIAL SEAL
Verónica Romero
NOTARY PUBLIC
STATE OF NEW MEXICO

My Commission Expires 6/16/2024