



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001**

August 22, 2019

Mr. Ricardo Medina, Acting Manager  
Licensing and Performance Assessment  
Louisiana Energy Services, LLC  
P.O. Box 1789  
Eunice, NM 88231

**SUBJECT: LICENSE AMENDMENT REQUEST 18-04 ADDITION OF MCNP6 FOR  
NUCLEAR CRITICALITY SAFETY ANALYSIS (ENTERPRISE PROJECT  
IDENTIFIER: L-2018-LLA-0270)**

Dear Mr. Medina:

In accordance with your amendment request dated September 13, 2018 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML18262A215), Louisiana Energy Services, LLC, doing business as URENCO USA (UUSA), requested the addition of the MCNP6 (Version 1.0) computer code for criticality applications at UUSA. The new computer code would require a revision to the existing nuclear criticality safety validation report and an amendment to the UUSA Safety Analysis Report (SAR) pursuant to the requirements of Special Nuclear Material (SNM)-2010 License Condition 25 and in accordance with the Title 10 of the *Code of Federal Regulations* (10 CFR) 70.34, "Amendment of licenses."

The Nuclear Regulatory Commission (NRC) staff reviewed the September 13, 2018 submittal and initially found the submittal acceptable. However, it was later determined that additional information was required to support the review, thus a request for additional information (RAI) was issued on January 8, 2019, (ADAMS Accession No. ML18353A957). Based upon the six RAI questions, UUSA addressed the questions and provided an updated SAR and supporting validation calculations on February 6, 2019, (ADAMS Accession No. ML19042A149). In a closed meeting with UUSA representatives on March 19, 2019, the staff discussed the need for specific clarifications and stated SAR limits in UUSA's previously submitted response. In letters dated April 11, 2019 (ADAMS Accession No. ML19106A162), and June 25, 2019 (ADAMS Accession No. ML19182A049), UUSA submitted the final supplementary information to support NRC's March 19, 2019 request.

In conclusion, the NRC staff has completed the supplementary information review and determined that granting the request for the MCNP6 (Version 1.0) computer code is acceptable for criticality calculations at the UUSA facility and is not detrimental to the public health and safety. Based upon the enclosed Safety Evaluation Report, UUSA has updated the SAR with the proper detailed validations and clarifications which is in accordance with Materials License SNM-2010 Condition No. 30.

This letter and the enclosed amendment closes efforts under Enterprise Project Identification No. L-2018-LLA-0270.

In accordance with Title 10 of the *Code of Federal Regulations*, 2.390, "Public inspections, exemptions, requests for withholding," of the NRC's "Agency Rules of Practice and Procedure," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of the NRC's ADAMS.

ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room). If you have any questions regarding this matter, please contact Mr. Karl Sturzebecher at 301-415-8534, or via email at [Karl.Sturzebecher@nrc.gov](mailto:Karl.Sturzebecher@nrc.gov).

Sincerely,

**/RA/**

Jacob I. Zimmerman, Chief  
Fuel Facility Licensing Branch  
Division of Fuel Cycle Safety, Safeguards,  
and Environmental Review  
Office of Nuclear Material Safety  
and Safeguards

Docket No. 70-3103  
License No. SNM-2010

Enclosures:

1. (ML19186A253) Safety and Safeguards  
Evaluation Report for LAR 18-04, Addition of  
MCNP6 for Nuclear Criticality Safety Analysis
2. (ML19182A050) Safety Analysis Report Markup

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**DATED:** August 22, 2019

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