



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
REGION II  
245 PEACHTREE CENTER AVENUE N.E., SUITE 1200  
ATLANTA, GEORGIA 30303-1200

July 28, 2020

Stephen Cowne, Chief Nuclear Officer  
and Compliance Manager  
URENCO USA  
P.O. Box 1789  
Eunice, NM 88231

**SUBJECT: LOUISIANA ENERGY SERVICES, LLC (LES), dba URENCO USA (UUSA) –  
NUCLEAR REGULATORY COMMISSION INTEGRATED INSPECTION REPORT  
70-3103/2020-002**

Dear Mr. Cowne:

This refers to the inspection conducted by the U.S. Nuclear Regulatory Commission (NRC) from April 1, 2020 through June 30, 2020, at the URENCO USA (UUSA) facility located in Eunice, New Mexico. During this period, the NRC implemented alternative ways to complete the core inspection program for your site in response to the public health emergency declared by the Secretary of Health and Human Services on January 31, 2020, and the National Emergency declared by the President of the United States on March 13, 2020, regarding the public health risks of the novel coronavirus (COVID-19) disease. On March 19, 2020, the NRC transitioned into a mandatory telework posture for all staff consistent with social distancing and travel recommendations issued to federal agencies. Consequently, the NRC Region II staff continues to evaluate how to best conduct inspections while balancing our determinations of reasonable assurance of adequate protection and ensuring the health and safety of inspectors and the public at large.

The enclosed report presents the results of the inspections, which were conducted through remote reviews. The inspectors reviewed activities as they relate to public health and safety, the common defense and security, and compliance with the Commission's rules and regulations, as well as the conditions of your license. The inspections covered the area of radiological controls. Within this area, regional inspectors reviewed procedures and representative records remotely and conducted telephonic interviews with site personnel. The results of this inspection were discussed with members of your staff at an exit meeting held on May 20, 2020.

Based on the results of this modified inspection, no violations of more than minor significance were identified.

The NRC will continue evaluating the guidelines and recommendations from federal and state authorities, along with the conditions of your facility, to determine when to resume inspection activities as normal. In the interim, the NRC plans to continue to conduct a combination of remote and onsite inspections as appropriate. The NRC will also maintain frequent communications with your staff to discuss regulatory compliance matters and gather information to inform the decisions about future inspections.

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) Section 2.390 of the NRC's "Rules of Practice and Procedure," a copy of this letter and enclosure will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's Agency-wide Document Access and Management System (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

Should you have any questions concerning this report, please contact Brannen Adkins of my staff at 404-997-4620.

Sincerely,

/RA/

Robert E. Williams Jr., Chief  
Projects Branch 1  
Division of Fuel Facility Inspection

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

Enclosure:  
NRC Inspection Report 70-3103/2020-002  
w/Attachment: Supplementary Information

cc: Distribution via LISTSERV®

SUBJECT: LOUISIANA ENERGY SERVICES, LLC (LES), dba URENCO USA (UUSA) –  
NUCLEAR REGULATORY COMMISSION INTEGRATED INSPECTION REPORT 70-  
3103/2020-002 dated July 28, 2020

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 SUNSI REVIEW COMPLETE 
  FORM 665  
 ATTACHED

OFFICE	RII:DFFI/PB1	RII:DFFI/PB1	RII:DFFI/PB2	RII:DFFI/PB1	RII:DFFI/PB1	RII:DFFI/PB1	
NAME	L. Cooke	M. Ruffin	R. Gibson	B. Adkins	L. Pitts	R. Williams	
DATE	07/17/2020	07/02/2020	06/05/2020	7/21/2020	7/22/2020	7/28/2020	

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**U. S. NUCLEAR REGULATORY COMMISSION**

**REGION II**

**INSPECTION REPORT**

Docket No.: 70-3103

License No.: SNM-2010

Report No.: 70-3103/2020-002

Enterprise Identifier: I-2020-002-0057

Licensee: Louisiana Energy Services (LES), LLC

Facility: URENCO USA (UUSA)

Location: Eunice, NM

Dates: April 1 through June 30, 2020

Inspectors: L. Cooke, Fuel Facility Inspector (Section A.1)  
R. Gibson, Senior Fuel Facility Inspector (Section A.2)  
M. Ruffin, Fuel Facility Inspector (Section A.3)

Approved by: Robert E. Williams Jr., Chief  
Projects Branch 1  
Division of Fuel Facility Inspection

## **EXECUTIVE SUMMARY**

Louisiana Energy Services, LLC (LES) dba URENCO USA (UUSA)  
NRC Integrated Inspection Report 70-3103/2020-002  
April 1 – June 30, 2020

Regional inspectors from the U.S. Nuclear Regulatory Commission (NRC), Region II Office, conducted remote inspections during normal shifts in the area of radiological controls. The inspectors performed a selective examination of licensee activities by interviewing licensee personnel and reviewing facility records.

### **Radiological Controls**

- No violations of more than minor significance were identified in the area of Radiation Protection. (Section A.1)
- No violations of more than minor significance were identified in the area of Effluent Control and Environmental Protection. (Section A.2)
- No violations of more than minor significance were identified in the area of Radioactive Waste Processing, Handling, Storage, and Transportation. (Section A.3)

### **Attachment**

Key Points of Contact  
List of Items Opened, Closed, and Discussed  
Inspection Procedures Used  
Documents Reviewed

## REPORT DETAILS

### Summary of Plant Status

The URENCO USA facility in Eunice, New Mexico enriches uranium hexafluoride (UF<sub>6</sub>) using gas centrifuge technology. During the inspection period, the licensee conducted routine plant operations.

#### A. Radiological Controls

##### 1. Radiation Protection (IP 88030, Appendix A) – Remote Inspection

###### a. Inspection Scope

The inspectors evaluated selected aspects of the licensee's Radiation Protection (RP) program as part of a remote inspection to verify that the program was implemented in accordance with Chapter 4 of the Safety Analysis Report (SAR), Title 10 of the Code of Federal Regulations (10 CFR) Part 20, and procedure RP-2-1000-01, "Radiation Protection Program," Revision (Rev.) 11, dated September 26, 2019.

The inspectors reviewed selected audits and assessments and interviewed RP personnel to verify that the licensee conducted audits of the RP program in accordance with section 11.5 of the SAR and that the program was reviewed at least annually to comply with 10 CFR 20.1101(c). The audits and assessments reviewed are listed in the Records section of the attachment to this report. The inspectors also reviewed the procedures and audit reports referenced to verify that the licensee-maintained records pertaining to the radiation protection program for three years after the records were made in accordance with 10 CFR 20.2102.

The inspectors reviewed organizational changes in the RP program by reviewing the current organizational chart and recent management changes, as well as interviewing staff, to verify that the RP staff met the requirements of Chapter 2 of the SAR and that the RP program functions were independent from Operations.

The inspectors reviewed safety-significant changes to procedures to verify that the changes did not diminish safety and complied with Chapter 4 of the SAR. The inspectors also reviewed the procedures to verify that they were reviewed at the frequency required by Chapter 11 of the SAR. The procedures reviewed are listed in the Procedures section of the attachment to this report.

The inspectors reviewed corrective action program (CAP) items and audit findings to verify whether the licensee identified radiation protection issues at an appropriate threshold and entered them into the CAP as required. The inspectors reviewed selected safety-significant events to verify that the licensee identified the issue in a timely manner, considered the extent of condition, prioritized the resolution of problems commensurate with their safety significance, and developed corrective actions to prevent recurrence. The CAP items reviewed are listed in the Condition Reports Reviewed section of the attachment to this report.

The inspectors reviewed training records and interviewed staff to verify that employees received training at the frequency specified in Chapter 11 of the SAR and as required by 10 CFR 19.12.

The inspectors also reviewed the new training qualifications and interviewed recently qualified staff to verify that the new qualifications met the requirements of Chapter 4 of the SAR.

The inspectors reviewed the Total Effective Dose Equivalent (TEDE) results to verify that all were less than the regulatory limit of 5 rem/year. The inspectors reviewed the 2019 Radiation Exposure Information Reporting System (REIRS) Dose Report to verify that the Lens Dose Equivalent and Shallow Dose Equivalent results were less than the regulatory limits of 15 and 50 rem/yr, respectively. The inspectors verified that records were maintained in accordance with 10 CFR 20.2106.

b. Conclusion

No violations of more than minor significance were identified.

2. Effluent Control and Environmental Protection (IP 88045) – Remote Inspection

a. Inspection Scope

The inspectors reviewed portions of the licensee's effluent control and environmental protection program as part of a remote inspection to verify that the program complied with Title 10 of the Code of Federal Regulations (10 CFR) Parts 20 and 70 and the license application. The inspectors reviewed environmental protection procedures listed in the Attachment that had been revised since the last inspection to verify that no safety significant changes were made without prior evaluation and approval.

The inspectors reviewed the previous two semi-annual effluent reports from 2019 to verify that the report contained the information required by 10 CFR 70.59. The inspectors interviewed licensee staff and reviewed the public dose assessment to verify that the total dose to the individual likely to receive the highest dose from the licensed operation did not exceed the regulatory limits during 2019. The inspectors reviewed calculations, source data, and calibration records of instruments used to monitor effluents to verify the accuracy of licensee source data and calculations.

The inspectors reviewed a sample of records for liquid effluent discharges in 2019 and 2020 to verify all results did not exceed the effluent concentration values in 10 CFR 20, Appendix B, Table 2. The inspectors also reviewed samples of recent monthly records for liquid effluent discharges from the liquid process to the balance tanks, and sample records of ground water to Pond 1 to verify that the radioactive concentration in these discharges did not exceed the federal regulatory limits and licensee action levels. The inspectors reviewed the airborne portion of the public dose assessment to verify that the result was in compliance with the As Low As Reasonably Achievable (ALARA) constraint required by 10 CFR 20.1101(d). The inspectors also reviewed sewer sample radiological results to determine compliance with 10 CFR 20.2003 limits.

The inspectors reviewed recent audits and self-assessments of the environmental protection program to verify that the reviews were in accordance with Section 11.5 of the Safety Analysis Report (SAR), and procedure QA-3-2000-01, Revision 22. The inspectors reviewed corrective action program entries documenting the audit findings to verify that the issues identified in the audits were entered into the licensee's corrective action program in accordance with the SAR.

The inspectors reviewed selected entries from the licensee's corrective actions program to verify that environmental-related conditions were promptly identified and entered into the program. The inspectors reviewed selected corrective action records to verify the licensee performed the required level of investigation and resolved the conditions consistent with the requirements of the SAR. The records reviewed are listed in the attachment.

The inspectors also reviewed procedures and laboratory analyses of environmental samples to verify that the licensee was performing environmental monitoring in accordance with section 9.2.2 of the SAR. Specifically, the inspectors reviewed these records to verify that the samples were being taken at the frequencies required by Section 9.2.2.1 of the SAR.

b. Conclusion

No findings of more than minor significance were identified.

3. Radioactive Waste Processing, Handling, Storage, and Transportation (IP 88035) – Remote Inspection

a. Inspection Scope

The inspectors evaluated as part of a remote inspection whether the licensee had established, maintained, and implemented procedures in accordance with license requirements and quality assurance programs in order to verify compliance with the requirements of 10 CFR Part 20 and 10 CFR Part 61 as applicable to low-level radioactive waste form, classification, stabilization, and shipment manifests/tracking.

The inspectors reviewed procedures related to radioactive waste and interviewed staff to verify currently approved procedures were in use and that personnel affected by any changes were informed in a timely manner.

The inspectors reviewed the quality assurance program for radioactive waste management to verify the licensee was performing audits as required per 10 CFR 20, Appendix G. The findings from these audits were reviewed to verify they were entered into the licensee's corrective action program for resolution as required by the license application.

The inspectors reviewed the licensee's program for classifying low-level radioactive waste and mixed waste to verify compliance with 10 CFR 61.55 and 10 CFR 20, Appendix G. Specifically, the inspectors reviewed the licensee's program for classifying waste by interviewing staff and reviewing records relating to waste since the last inspection to verify the waste form met the requirements of 10 CFR 61.56 and 10 CFR 20, Appendix G and the records showed the waste was properly packaged.

The inspectors reviewed the licensee's procedures for preparing waste shipments and tracking radioactive shipments to verify they were in accordance with license requirements. Specifically, the inspectors verified that the procedures addressed how radioactive waste was to be labeled and that the procedures specified which actions should be taken if the shipments did not reach the intended destination in the time specified.



In addition, the inspectors reviewed the procedures for placement, inspection and repackaging of radioactive waste. The inspectors reviewed records of radioactive waste shipments conducted since the last inspection and interviewed staff to verify the licensee was characterizing, surveying, packaging, shipping, and tracking the waste in accordance with the license application.

The inspectors reviewed the training requirements for radiological waste workers to verify the training addressed the various aspects of radiological waste handling, packaging, storage, and preparation for shipment. The inspectors also reviewed the training records of select radiological waste workers to verify they were qualified, and their training was maintained current.

b. Conclusion

No violations of more than minor significance were identified.

B. Exit Meeting

The inspection scope and results were presented to members of the licensee's staff at various meetings throughout the inspection period and were summarized on May 20<sup>th</sup> to Steve Cowne and staff. Proprietary information was discussed but not included in the report.

## SUPPLEMENTAL INFORMATION

### 1. KEY POINTS OF CONTACT

#### Licensee personnel

<u>Name</u>	<u>Title</u>
J. Barraza	Chemistry Analyst I
J. LaGabed	Recycling Supervisor
S. Magill	Deco and Recycling Manager
J. Miller	Chemistry Manager
J. Rickman	Licensing Specialist III
B. Saucedo	Environmental Specialist
K. Slavings	RP Supervisor

### 2. INSPECTION PROCEDURES USED

88030	Radiation Protection (Appendix A)
88045	Effluent Control and Environmental Protection
88035	Radioactive Waste Processing, Handling, Storage, and Transportation

### 4. DOCUMENTS REVIEWED

#### Records:

2018-A-03-009, Urenco USA Environmental Compliance Audit, dated April 19, 2018  
2019 Semi-Annual Groundwater Sampling Analyses  
2019-S-09-006, Radioactive Liquid Waste Shipment Surveillance, Revision (Rev.) 0, dated December 10, 2019  
2019 REIRS Dose Report, dated March 18, 2020  
2019-A-03-005, UUSA NQA-1 Audit, Rev. 1, dated April 26, 2019  
2019-A-12-020, Report for UUSA Radiation Protection Program NQA-1 Audit, Rev. 0, dated January 11, 2020  
2020-S-02-001, Surveillance of Recycling-Related IROFS Requirements Flowdown, Rev. 0, dated March 10, 2020  
Annual ALARA Report, CY 2019, Rev. 1  
Audit 2019-A-04-006, Radioactive Waste Management NQA-1 Audit, Rev. 1, dated June 6, 2019  
CA-3-1000-09, 2019 Radiation Protection Self-Assessment, Rev. 12, dated March 06, 2019  
NMED Semi-Annual Discharge Report 04/01/19 to 09/30/19  
NMED Semi-Annual Discharge Report 10/01/19 to 03/31/20  
Radiation Protection Bioassay Program Qualification Card, Rev. 0  
Radiation Protection External Dosimetry Program Qualification Card, Rev. 0  
Radiation Protection Instrument Program, Rev. 0  
Radiation Protection Radiological Shipments Qualification Card, Rev. 0  
Radiation Protection Respirator Program Qualification Card, Rev. 0  
Radiation Protection Releases/Emergency Qualification Card, Rev. 0  
Radiation Protection Source Program Qual Card, Rev. 0  
Radiation Protection Technician Qualification Card, Rev. 2, dated March 16, 2020  
Radiation Safety Committee Meeting Minutes, dated April 24, 2020  
Radiation Safety Committee Meeting Minutes, dated November 05, 2019  
Radiation Safety Committee Meeting Minutes, dated September 24, 2019

RP-RPTQC, Radiation Protection Qualification Card for Tiffany Creed, dated November 19, 2019  
SA-2019-006, Environmental Self Assessment, dated December 12, 2019  
SA-2019-020, Assessment of Deco and Recycling IROFS Training, dated October 2019  
Safety Analysis Report, Rev. 46  
SGS Cal-Ver-2019s, Calibration Verification URENCO SGS, dated August 7, 2019  
TQ-3-0100-12-F-1, Training Guidelines—Creed, dated April 24, 2020  
UUSA Organization Chart, Managing Director Direct Reports, dated April 02, 2020  
UUSA Radiation Protection Task Qualified Individual, Rev. 1, dated July 15, 2016  
WO 1000342324 CRDB: 2018 Radwaste Shipment, dated July 3, 2018  
WO 1000377736 CRDB: 2019 Liquid Radwaste Shipment, dated May 6, 2019  
WO 1000401413 1100: 2MA1 HF Monitor Live Zero, dated July 25, 2019  
WO 1000403727 CRDB: 565-2MA1 Live Zero, dated August 09, 2019  
WO 1000403780 CRDB: 562-2MA2 Not Ok Alarm, dated August 10, 2019  
WO 1000404209 Weekly RCRA Inspection, dated October 23, 2019  
WO 1000408691 Weekly RCRA Inspection, dated December 4, 2019  
WO 1000408693 3M: Inventory Rad Waste Containers, dated November 15, 2019  
WO 1000413975 1MA3 Override Switch Not Working, dated October 18, 2019  
WO 1000414418 1MA3 HF Status Not OK Alarm, dated October 26, 2019  
WO 1000416250 Water in HF Monitor, dated November 4, 2019  
WO 1000418240 Alpha Calibration 1001&1002, dated January 01, 2020  
WO 1000418241 Alpha Calibration 1003&1004, dated January 01, 2020  
WO 1000418242 Alpha Calibration CRDB, dated January 01, 2020  
WO 1000418243 Alpha Calibration 1005, dated January 01, 2020  
WO 1000422166 Weekly RCRA Inspection, dated February 26, 2020  
WO 1000422172 Weekly RCRA Inspection, dated April 8, 2020  
WO 1000422176 3M: Inventory Rad Waste Containers, dated February 15, 2020

Procedures:

EN-2-1010-02, Radiological Effluent Monitoring Program, Rev. 3, dated March 23, 2020  
EN-2-1010-03, Environmental Regulatory Requirements, Rev. 4, dated March 23, 2020  
EN-3-2020-02, Media Sampling, Rev. 6, dated June 03, 2019  
EN-3-3010-02, Alpha Monitor (ABPM 201S) Calibration, Rev. 5, dated April 21, 2020  
EN-3-3020-02, Mac Giver HF-2 Calibration, Rev. 3, dated April 02, 2020  
RP-2-1000-01, Radiation Protection Program, Rev. 11, dated September 26, 2019  
RP-3-1000-01, ALARA Engineering and TEDE ALARA Evaluation, Rev. 9, dated September 26, 2019  
RP-3-1000-04, Radiation Safety Committee, Rev. 0, dated March 17, 2020  
RP-3-2000-01, Radiation Work Permits, Rev. 16, dated March 17, 2020  
RP-3-2000-02, Radiological Postings and Access Controls, Rev. 16, dated November 13, 2019  
RP-3-5000-01, Radioactive Material Shipment Surveys, Rev. 11, dated October 29, 2019  
RW-2-1000-01, Waste Acceptance Program, Rev. 8, dated November 18, 2019  
RW-3-1000-01, Waste Management, Rev. 9, dated November 19, 2019  
RW-2-1000-01, Waste Acceptance Program, Rev. 8, dated November 18, 2019  
RW-3-1000-01, Waste Management, Rev. 9, dated November 19, 2019  
RW-3-1000-09, Radioactive Waste Container Setup, Handling and Disposition, Rev. 17, dated November 18, 2019  
RW-3-1000-13, Shipping Radioactive and Mixed Waste, Rev. 5, dated February 12, 2019  
RW-3-1000-17, Operation of Hydraulic Drum Crusher/Compactor Model HDC-900-IDC, Rev. 3, dated March 4, 2020

RW-3-2000-01, LECTS Slab Tank Operations, Rev. 15, dated November 18, 2019

RW-3-2000-03, LECTS Bulk Storage Tank Operations, Rev. 6, dated November 4, 2019

RW-3-2000-04, LECTS Fill Station Operations, Rev. 4, dated October 31, 2019

RW-3-3000-12, Operation of the Segmented Gamma Scanner, Rev. 4, dated April 6, 2020

UUSA Recycling Technician Qualification Standard, Rev. 1

RW-3-4000-01, Startup, Shutdown, and Operation of the SCDT, Rev. 9, dated November 18, 2019

RW-3-4000-02, Startup, Operation and Shutdown of the Multi-Functional Decontamination Train, Rev. 17, dated March 30, 2020

QA-3-2000-01, Quality Assurance Audit, Rev 22

Quality Assurance Program Description, Rev. 41, dated November 26, 2018

Condition Reports Reviewed:

EV 120009, EV131765, EV131766, EV131767, EV131768, EV131769, EV131770, EV 131813, EV 131821, EV132096, EV133436, EV133516, EV 133537, EV 134927, EV 135074,

EV 136211, EV136556, EV136557, EV136559, EV136560, EV136561, EV136562, EV 136992, EV 137138, EV 137139, EV 137549, EV 137592, EV 137659, EV137720

Other Documents:

2020 1Q Running List RWD-20200215

Energy Solutions License UT 2300249

Energy Solutions License UT 2300478

Kevin Slavings Resume

Radiation Protection KPIs April 2020

Recycling and RP Org Chart 3-31-2020

RPT Task Qualification List

Steve Magill Resume