



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
REGION II  
245 PEACHTREE CENTER AVENUE NE, SUITE 1200  
ATLANTA, GEORGIA 30303-1257

January 24, 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  
70-3103/2019-005

Dear Mr. Cowne:

This letter refers to the inspection conducted by the U.S. Nuclear Regulatory Commission (NRC) from October 1 through December 31, 2019, at the URENCO USA (UUSA) facility located in Eunice, New Mexico. The enclosed report presents the results of this inspection, which were discussed with you and members of your staff on October 10, 2019.

The inspection examined activities conducted under your license, as they related to public health and safety, to confirm compliance with U.S. NRC rules and regulations and the conditions of your license. The inspection area covered was evaluation of exercises and drills. Within this area, the inspection consisted of examinations of selected procedures and representative records, observations of activities, and interviews with personnel. No violations of more than minor significance were identified.

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

If you have any questions regarding this matter, please contact me at (404) 997-4664.

Sincerely,

**/RA/**

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

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

Enclosure:  
Inspection Report No. 70-3103/2019-005  
w/Attachment: Supplemental Information

cc w/ encl: Distribution via LISTSERV®

SUBJECT: LOUISIANA ENERGY SERVICES, LLC (LES), dba URENCO USA (UUSA) –  
NUCLEAR REGULATORY COMMISSION INTEGRATED INSPECTION REPORT  
70-3103/2019-005 dated January 24, 2019

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OFFICE	RII:DFFI	RII:DFFI	RII:DFFI	RII:DFFI	RII:DFFI	RII:DFFI	R:II DFFI
NAME	L. Cook	T. Sippel	L. Pitts	G.Goff	B. Adkins	K. McCurry	R.Williams
DATE	12/23/2019	12/11/2019	12/11/2019	12/11/2019	12/20/2019	12/18/2019	1/ 24 / 2020

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U. S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket No.: 70-3103

License: SNM-2010

Report No.: 70-3103/2019-005

Enterprise Identifier: I-2019-005-0067

Licensee: Louisiana Energy Services (LES), LLC

Facility: URENCO USA (UUSA)

Location: Eunice, NM

Inspection Dates: October 1 through December 31, 2019

Inspectors: T. Sippel, Fuel Facility Inspector (Section A.1)  
G. Goff, Fuel Facility Inspector (Sections A.1)  
K. McCurry, Fuel Facility Inspector (Sections A.1)

Approved: R. Williams, Chief  
Projects Branch 1  
Division of Fuel Facility Inspection

Enclosure

## **EXECUTIVE SUMMARY**

**Louisiana Energy Services, LLC (LES) dba URENCO USA (UUSA)  
Nuclear Regulatory Commission  
Integrated Inspection Report 70-3103/2019-005  
October 1 – December 31, 2019**

Regional inspectors from the U.S. Nuclear Regulatory Commission (NRC) conducted an announced inspection during normal shifts and in-office reviews. The inspectors observed safety-significant activities and equipment, walked-down the facility, interviewed licensee personnel, and reviewed facility documents.

### **Facility Support**

- No violations of more than minor significance were identified in the area of Evaluation of Exercises and Drills. (Section A.1)

### **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 (UUSA) 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. Facility Support**

1. Evaluation of Exercises and Drills (Inspection Procedure 88051)
  - a. Inspection Scope

The inspectors observed and evaluated the licensee's graded biennial exercise conducted on October 9, 2019, as well as the pre-exercise briefings and post-exercise hot washes and critiques involving both on-site and off-site participants to verify compliance with 10 CFR 70.22(i)(3)(xii), the site's Emergency Plan, and applicable procedures. The scenario included the simulation of a 48Y feed cylinder being dropped on a yard truck during offloading with the impact causing a fire and leading to the release of UF<sub>6</sub> from the cylinder through a damaged valve. Additionally, this scenario simulated an injured, contaminated, and unresponsive victim that required rescue and subsequent medical attention.

The inspectors reviewed the emergency exercise scenario, LES-19-115-NRC, "URENCO USA Emergency Preparedness 2019 Full Scale Exercise Scenario," and discussed the exercise objectives with licensee personnel to verify that the accident scenario was realistic and probable for the site as required by 10 CFR 70.22(i)(3)(xii). The inspectors walked-down the plant to verify that the licensee had not pre-staged equipment or prompts in anticipation of the exercise such that the scenario remained unknown to exercise participants, as required by 10 CFR 70.22(i)(3)(xii).

Before the emergency exercise, the inspectors observed the controller/evaluator, player, and simulation cell participant briefings to verify that personnel were informed of their duties and responsibilities for the exercise while maintaining confidentiality of the exercise scenario, as required by EP-3-0300-03, "Drills and Exercises." The inspectors observed the controller briefing and associated slides to verify emergency preparedness personnel gave proper instructions to controllers on not coaching players, handling injects, conducting hot washes, simulating actions, and exercising safety in accordance with EP-3-0300-03.

At the initiation of the emergency exercise, the inspectors observed licensee staff and managers in the control room to verify that the licensee assessed the accident scenario, analyzed plant conditions, made necessary announcements over the public address system, and classified the event as a site area emergency in accordance with EP-3-0200-01, "Classification of Emergency Events," and Section 3.0, "Classification and Notification of Accidents," of the Emergency Plan. The inspectors also observed this activity to verify that the initial off-site notifications to state and local agencies as well as

the NRC were within the time periods specified in Section 3.2 of the Emergency Plan (15 minutes and 1 hour, respectively) and contained the information required by EP-3-0200-02, "Emergency Notification," Sections 5.3, 5.4, and 5.5.

The inspectors observed the activation of the emergency operations center (EOC) to verify that all required positions were fully staffed in accordance with the Emergency Plan. The inspectors remained in the EOC to determine whether off-site protective action recommendations implemented by the EOC were appropriate for the accident scenario and in accordance with the Emergency Plan. The inspectors observed onsite communications to workers to verify consistency with the protective action recommendations implemented by the EOC, and that communications were conducted in accordance with EP-3-0200-02, Section 5.1.3. The inspectors observed accountability reports to verify that occupational workers evacuated, or sheltered-in-place as directed by protective actions implemented by the EOC. The inspectors also observed simulated calls by the Joint Information Center to inform the EOC that the initial and updated press releases were issued by the licensee's emergency organization communicators in accordance with EP-3-0200-13, "Emergency Public Information."

The inspectors also observed EOC activities and communications to verify that the Emergency Director (ED) maintained command and control of the EOC such that it was able to serve as the center for communications and decisions as required by EP-3-0300-03, Section 3.5. The inspectors reviewed the off-site dose assessment conducted by the dose assessor using the Radiological Assessment System for Consequence Analysis (RASCAL) software to verify that the assessments were accurate based on the information known and used conservative assumptions to account for information that was not known at that time. The inspectors observed communications from the technical support, security, health and safety, and environmental coordinators to verify that EOC response personnel assessed impacts in their areas in accordance with the checklists provided in EP-3-0200-11, "Emergency Operation Center Operations," and that the ED used the information received (i.e., dose assessment, radiation survey results, environmental monitoring results, accountability checks, etc.) during the assessment of the accident scenario. The inspectors observed the ED create a recovery plan outline, assign a recovery coordinator, and obtain NRC and State concurrence to terminate the emergency in accordance with EP-3-0200-07, "Recovery and Termination."

The inspectors observed the fire brigade leader respond to the scene of the accident to fill the role of the incident commander in accordance with Section 5.1, "Activation of the Emergency Response Organization," of the Emergency Plan. The inspectors observed the establishment of the incident command post and the arrival of the licensee's emergency response team and the off-site emergency responders (fire, hazardous materials (HAZMAT) personnel, police, and medical services) to verify that the licensee-maintained command and control of the specific-event scene response, including coordinated action with the off-site emergency responders. The inspectors observed the licensee and off-site emergency responders plan emergency response actions to verify that the actions were appropriate for the exercise scenario and did not expose rescuers to life-threatening conditions as required by Section 5.4.1.4 of the Emergency Plan.

The inspectors observed members of the off-site emergency response teams donning the Level 1 (fully enclosed) personal protective equipment as required by Sections 5.4.1.4, 5.4.1.5, and 9.1 of the Emergency Plan, for the simulated accident. The

inspectors observed simulated search and rescue activities, fire extinguishment, mitigation activities (patching the damaged cylinder), and communications during these activities to verify that the licensee tested the emergency response organization's ability to carry out these actions to meet the criteria for exercises in Section 7.3, "Drills and Exercises," of the Emergency Plan. The inspectors also observed licensee staff qualified in radiation protection survey the simulated victim for contamination, accompany him off-site, and provide support to medical staff to verify that the licensee performed these activities as required by Section 5.6 of the Emergency Plan.

The inspectors observed hot washes and staff critiques of the emergency exercise to verify that critiques were conducted soon after the exercise to identify deficiencies and recommendations for improvement as required by Section 5.4 of EP-3-0300-03 and Section 7.4, "Exercise Critiques," of the Emergency Plan. The inspectors reviewed corrective action program entries (see "Condition Reports Reviewed" in Section 4 of the attachment) to determine whether the licensee documented the items discussed after the emergency exercise in the corrective action program for tracking and implementation as per EP-3-0300-03 Section 5.4.

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 October 10, 2019, to K. Fili, Managing Director UUSA, and President and CEO Louisiana Energy Services (LES), LLC and staff. Proprietary information was discussed during the inspection but is not included in this report.



## SUPPLEMENTAL INFORMATION

### 1. KEY POINTS OF CONTACT

<u>Name</u>	<u>Title</u>
A. Bixenman	Licensing Specialist
J. Dahlin	Acting EH&S Manager

### 2. INSPECTION PROCEDURES USED

IP 88051                                      Evaluation of Exercises and Drills

### 3. DOCUMENTS REVIEWED

#### Records:

Emergency Plan, Rev. 26a  
LES-19-115-NRC, URENCO USA Emergency Preparedness 2019 Full Scale Exercise Scenario  
URENCO USA Emergency Preparedness Drill Report

#### Procedures:

EP-3-0200-01, Classification of Emergency Events, Rev. 8, dated December 19, 2018  
EP-3-0200-01-F-1, Emergency Director Turnover Briefing Form, Rev. 8, dated December 19, 2018  
EP-3-0200-02, Emergency Notification, Rev. 22, dated November 18, 2019  
EP-3-0200-04, Environmental Monitoring and Sampling, Rev. 6, dated July 7, 2016  
EP-3-0200-06, Assembly and Personnel Accountability, Rev. 10  
EP-3-0200-07, Recovery and Termination, Rev. 4, dated February 14, 2017  
EP-3-0200-11, Emergency Operations Center Operations (EOC Briefing Format Attachment 4), Rev. 7, dated November 21, 2017  
EP-3-0200-11-F-1, Emergency Director Checklist, Rev. 7, dated November 21, 2017  
EP-3-0200-11-F-2, Technical Support Coordinator Checklist, Rev. 7, dated November 21, 2017  
EP-3-0200-11-F-3, HS&E Coordinator Checklist, Rev. 7, dated November 21, 2017  
EP-3-0200-11-F-6, Community Relations Coordinator Checklist, Rev. 7, dated November 21, 2017  
EP-3-0200-11-F-4, Security Coordinator Checklist, Rev. 7, dated November 21, 2017  
EP-3-0200-11-F-7, Emergency Operations Center Operations (EOC Briefing Worksheet), Rev. 7, dated November 21, 2017  
EP-3-0200-13, Emergency Public Information Plan, Rev. 0, dated June 6, 2017  
EP-3-0300-03, Drills and Exercises, Rev. 5, dated November 13, 2017  
OP-3-2000-02, Fire Response, Rev. 18, dated June 4, 2019  
RP-3-3000-06-F-1, Dosimetry File Information, Rev. 11, dated November 30, 2017  
RP-3-3000-17, Dosimetry Requirements for Off-Site Responders, Rev. 3, dated November 29, 2017

#### Condition Reports Written as a Result of the Inspection:

EV 133639, NRC Observation 1 2019 EPX Inspection  
EV 133640, NRC Observation 2 2019 EPX Inspection  
EV 133641, NRC Observation 3 2019 EPX Inspection  
EV 133642, NRC Observation 4 2019 EPX Inspection

EV 133643, NRC Observation 5 2019 EPX Inspection  
EV 133644, NRC Observation 6 2019 EPX Inspection  
EV 133645, NRC Observation 7 2019 EPX Inspection

Condition Reports Reviewed:

EV 133621, Failure to meet Exercise Objective  
EV 133622, Partially met exercise objective  
EV 133623, Partially met exercise objective  
EV 133625, Partially met exercise objective  
EV 134784, Security Comments from NRC Evaluated Full Scale Exercise  
EV 134785, Procedure reviews recommended in NRC Evaluated Full Scale Exercise comments  
EV 134788, Miscellaneous Areas for Improvement comments from NRC Evaluated Full Scale EX  
EV 134789, Areas for Improvement comments for IT from the NRC Evaluated Full Scale Exercise  
EV 134790, Training Areas for Improvement comments from NRC Evaluated Full Scale Exercise

Other Documents:

2019 Evaluated Exercise Controller/Evaluator Briefing, given October 8, 2019  
2019 Evaluated Exercise Player Briefing, given September 30, 2019 and October 8, 2019  
2019 Evaluated Exercise Sim-Cell Controller Briefing, given October 8, 2019