

2/7/2023

Attn: Document Control Center
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Louisiana Energy Services, LLC
NRC Docket Number: 70-3103

- Subject: Response to Apparent Violations in Inspection Report 07003103/2022-007; EA-22-086
- Reference: 1) Letter from Anthony D. Masters (NRC) to W. Padgett (UUSA), U.S. Nuclear Regulatory Commission Division of Fuel Facility Inspection; Urenco USA-NRC Inspection Report 07003103-2022007 and Apparent Violations, December 8, 2022 (IN-22-083-NRC, ML22341A606)
- 2) Request for Pre-decisional Enforcement Conference for Apparent Violations, NRC Inspection Report 07003103-2022007; EA-22-086, December 16, 2022 (LES-22-157-NRC, ML22350A709)
- 3) PEC Request Rescission and Request for Response Extension, January 19, 2023 (LES-23-018-NRC, ML23019A349)

In Reference 1, the NRC informed Louisiana Energy Services, LLC ("LES"), also dba Urenco USA ("UUSA"), of two apparent violations. UUSA previously requested a Pre-decisional Enforcement Conference (PEC) in Reference 2 in response to NRC's Reference 1 Inspection and Apparent Violations. UUSA has requested a rescission, Reference 3, of the PEC and an extension to respond to NRC.

Enclosures 1 provides the written response to the two apparent violations identified in Reference 1.

Should there be any questions regarding this submittal, please contact Chris Schwarz, Licensing and Performance Assessment Manager at 575.394.5783.

Respectfully,

**Wyatt
Padgett**



Digitally signed by Wyatt Padgett
Date: 2023.02.07 15:57:45 -07'00'

Wyatt Padgett
Compliance Manager

- Enclosure: 1) Written response to the two apparent violations: Apparent Violation I AV 07003103/2022007-01 and Apparent Violation II AV 07003103/2022007-02

LES-23-022-NRC



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ENCLOSURE 1**Written response to the two apparent violations: Apparent Violation I AV 07003103/2022007-01 and Apparent Violation II AV 07003103/2022007-02****I. Apparent Violation I AV 07003103/2022007-01, Failure to meet performance requirements in 10 CFR 70.61(b) by not establishing IROFS barriers****1) The Reason for the Apparent Violation or, if Contested, the Basis for Disputing the Apparent Violation**

The violation is a failure to meet the performance requirements of 10 CFR 70.61 (b) by establishing IROFS50b and IROFS50c prior to the introduction of construction vehicles into the Controlled Access Area (CAA). UUSA self-identified this issue and entered it into the UUSA accredited Corrective Action Program (CAP).

On March 7, 2022, a Shift Manager was inspecting the barriers in preparation for declaring IROFS50b and IROFS50c as Operable. As the Shift Manager began inspection of the barriers, he identified several construction vehicles parked in the area to the west of the planned construction site for new chilled water equipment. The vehicles were inappropriately in the vicinity of an Area of Concern and the IROFS had not yet been declared operable.

Upon the discovery of the vehicles, the vehicles were ordered to be removed from the CAA. This action, however, was contrary to the Operating Requirements Manual (ORM) for IROFS50b and IROFS50c, because removing the vehicles from the CAA required them to be operated.

As the facility ended construction activities in 2016, the implementation of IROFS50b and IROFS50c also ended. Reestablishment of the boundaries was being conducted in order to facilitate a construction project scheduled to be completed west of the Central Utilities Building and in the vicinity of an Area of Concern (SBM1001).

The proximate cause, as determined by a Root Cause Evaluation, was that less than adequate change management occurred in 2016 for ending the "Operate while Construct phase" leaving inadequate management measures to control an inactive IROFS. The inadequate management measures led to a poor implementation and reactivation of IROFS50b and 50c when re-establishing these controls.

2) The Corrective Steps That Have Been Taken and the Results Achieved

In response to the conditions found, UUSA took the following actions:

- Verbal & Formal Stop Work issued, March 7, 2022
- Ceased all staging and construction activities involving construction equipment
- Ordered the procurement and installation of IROFS50b and IROFS50c barriers for all potential areas of concern
- Required the re-qualification of involved individuals
- Revised the IROFS Implementing Procedures
- Revised the ORMs
- Implemented line of sight controls for vehicle access to the CAA

- Performed an Extent of Condition on IROFS50 series to ensure compliance. The Extent of Condition identified the operability condition of IROFS50b and IROFS50c

3) The Corrective Steps That Will be Taken

All corrective steps for this event have been completed.

4) The Date When Full Compliance was Achieved

Full compliance was achieved on March 7, 2022 when the vehicles were removed from within the CAA. The final action, a revision to the ORMs was completed on Oct, 25 2022.

II. Apparent Violation II AV 07003103/2022007-02, Loss of IROFS50b and 50c independence

1) The Reason for the Apparent Violation or, if Contested, the Basis for Disputing the Apparent Violation

The second violation is a failure to meet the performance requirements of 10 CFR 70.61 (b) by failing to maintain the independence of IROFS50b and IROFS50c. UUSA self-identified this issue and entered it into the UUSA accredited Corrective Action Program.

UUSA reestablished IROFS50b and IROFS50c around Areas Of Concern to alert the operator of any vehicle in the proximity to UF6 cylinders as a result of EN55770 and EN55802. Vehicle breaches into the IROFS50b and IROFS50c were performed per written procedures and training as historically written.

On June 21, 2022, a UUSA manager was performing a routine management safety observation and observed an activity that indicated independence of the IROFS was not being maintained.

The IROFS50b and IROFS50c barriers had an open breach which facilitated the movement of cylinders from the Cylinder Receipt and Dispatch Building to the UBC Storage Pad. When a breach exists, the barrier is replaced with an individual to provide notification to the vehicle operator. Only one individual was performing the administrative action for both IROFS to allow a breach of the barriers.

As only a single individual was designated to act as a flagger for the IROFS barrier breach, the independence of IROFS50b and IROFS50c was not being maintained and the performance requirement of 10 CFR 70.61 was not being met.

The Apparent Cause, as determined by a Detailed Apparent Cause Evaluation, is less than adequate change management of the IROFS50 series through multiple revisions, resulting in a loss of independence of the IROFS. Minor changes over a 3 year window of time took what was once a robust protective measure and reduced the level of performance that was needed.

2) The Corrective Steps That Have Been Taken and the Results Achieved

In response to the conditions found, UUSA took the following actions:

- Verbal & Formal Stop Work was issued for all breaches, June 21, 2022
- Completed revisions to operating procedures to ensure the independent protective measure for IROFS50a, IROFS50b, IROFS50c and IROFS50h.
- Completed additional revisions to Change Management Process to add or clarify steps, including refining and streamlining the Inter-Departmental Review process and requirements.
- Training for Logistics and Operations personnel was performed for the IROFS50 series.
- Performed IROFS50 series training needs analysis to ensure that consistent training material is developed and implemented for Logistics Personnel and depending on analysis create new action for creation of training material.

3) The Corrective Steps That Will be Taken

All corrective steps for this event have been completed.

4) The Date When Full Compliance was Achieved

Full compliance was achieved on June 21, 2022 when the verbal stop work was issued and the barriers were reestablished. The final action, a revisions to the Change Management Process was completed on Nov, 11 2022.

III. Additional Considerations

There are additional Safety Considerations that apply to these Apparent Violations. Accident sequence OC2-1, which IROFS50b and IROFS50c prevents, is not credited with any of the protective functions of IROFS27e.

IROFS27e is specific, credited Design Features of the SBM, CRDB Shell and the UBC Storage Pad Crane. The buildings were designed to withstand, without collapse, extreme events. These extreme events include seismic, tornado, high wind, roof snow load, roof ponding and site flooding due to local intense precipitation events, to ensure a chemical release does not exceed the 10 CFR 70.61 performance requirements.

IROFS27e structures, although not credited to withstand the impacts identified in accident sequence OC2-1, are robust and designed with significant strength to resist collapse. IROFS27e exists for all areas that are protected by IROFS50b and IROFS50c.

Further, UUSA has been reevaluating its design safety basis as site infrastructure was completed and has plans to modify its requirements and IROFS50b and IROFS50c. UUSA intends to submit this in a future license amendment request.

In the case of Apparent Violation I AV 07003103/2022007-01, failure to meet performance requirements in 10 CFR 70.61(b) by not establishing IROFS barriers, the vehicles were a significant distance from the Area of Concern, greater than 100 yards.