

9/6/2024

ATTN: Document Control Desk Director Office of Nuclear Material Safety and Safeguards U.S. Nuclear Regulatory Commission Washington, DC 20555-0001

Louisiana Energy Services, LLC NRC Docket No. 70-3103

Subject: 60 Day Report for EN 57246 July 2024 Seismic Event

References 1) EN 57246, Alert Declaration – Seismic Activity Felt Onsite

On July 26, 2024, at 0853 MDT, Louisiana Energy Services (LES), dba Urenco USA (UUSA), made an Event Notification to the Nuclear Regulatory Commission (NRC) Operations Center in accordance with 10 CFR 70 Appendix A (b)(4), External Events. This notification was made due to vibratory ground motion felt in the Control Room and recognized as an earthquake. Pursuant to 10 CFR 70 Appendix A(b), the enclosure provides the written follow-up report.

Should there be any questions concerning this submittal, please contact Jim Rickman, Senior Licensing Specialist at 575.394.6558.

Respectfully,

Paul Lorskulsint Chief Nuclear Officer and Head of Compliance

Enclosure: EN 57246 60 Day Follow-up Report

CC:

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## **Enclosure**

## EN 57246 60 Day Follow-up Report

## 10 CFR 70.50(c)(1)

- (i) Caller's name, position title, and call-back telephone number;
  - The individual who reported Event Notification (EN) 57246 was Curtis Pankratz, Deputy Shift Manager. The call-back telephone number is 575-394-6175.
- (ii) Date, time, and exact location of the event;
  - The earthquake was detected on July 26, 2024, at 0830 MDT at Urenco USA in Eunice, New Mexico (Lea County). The earthquake occurred 17 km NNE of Hermleigh, TX.
- (iii) Description of the event:
  - At 0844 MDT on July 26, 2024, an Alert was declared at Urenco USA as
    the result of a detected seismic event. The vibratory ground motion was
    felt in the Control Room, recognized as an earthquake, and verified by
    field personnel. An Alert is the least significant emergency classification at
    the Urenco USA site.
  - The Headquarters Operations Officer was notified of the Alert at 0853 MDT. No radioactive release occurred and no structural damage was detected. A 5.1 magnitude earthquake occurred in western Texas with an epicenter 17 km NNE of Hermleigh, Texas. Plant personnel initiated walkdowns of the site.
  - (A) Radiological or chemical hazards involved, including isotopes, quantities, and chemical and physical form of any material released;
    - There were no radiological or chemical hazards involved or released.
  - (B) Actual or potential health and safety consequences to the workers, the public, and the environment, including relevant chemical and radiation data for actual personnel exposures to radiation or radioactive materials or hazardous chemicals produced from licensed materials (e.g., level of radiation exposure, concentration of chemicals, and duration of exposure);
    - There were no actual or potential health and safety consequences to workers, the public, or the environment. No unexpected exposure to radioactive materials or hazardous chemicals produced from licensed materials occurred.
    - Plant instrumentation detected no release during the event.
    - No contamination events occurred; therefore, no decontamination was necessary.
    - No dose alarms or dose rate alarms occurred during the response.

- The horizontal accelerations experienced due to this seismic event did not exceed the seismic design criteria for safety related structures and systems.
- (C) The sequence of occurrences leading to the event, including degradation or failure of structures, systems, equipment, components, and activities of personnel relied on to prevent potential accidents or mitigate their consequences: and
  - On July 26, 2024, at 0830 MDT, Operations felt ground movement in the Control Room, and Operations entered the earthquake response procedure. An Alert was declared in accordance with the UUSA procedure, and an event notification was transmitted to local and state officials as well as the NRC.
  - Three centrifuges crashed.
  - The Emergency Response Organization was activated.
  - Personnel were directed to evacuate from the buildings.
  - Plant instrumentation detected no release during the event and the building operators reported no signs of a release after touring their associated buildings.
  - The SBMs, CRDB, UBC Pad and autoclaves were inspected in accordance with site procedures and did not identify any damage.
  - The Alert was terminated on July 26, 2024, at 1435 MDT.
- (D) Whether the remaining structures, systems, equipment, components, and activities of personnel relied on to prevent potential accidents or mitigate their consequences are available and reliable to perform their function;
  - The structures, systems, equipment, components, and activities on site remained available and reliable to perform their function.
- (iv) External conditions affecting the event;
  - This event was the result of a 5.1 magnitude earthquake with an epicenter 17 km NNE of Hermleigh, Texas.
- (v) Additional actions taken by the licensee in response to the event;
  - None

- (vi) Status of the event (e.g., whether the event is on-going or was terminated);
  - The event has been terminated in accordance with the Emergency Plan.
- (vii) Current and planned site status, including any declared emergency class;
  - Three centrifuges were damaged at the time of the event. The damage has no safety consequences and did not result in a release.
  - Current plant status is operational with no remaining safety impacts from the event.
- (viii) Notifications, related to the event, that were made or are planned to any local, State, or other Federal agencies;
  - Notifications were made to the NRC, NM Dept of Homeland Security, NM Dept of Public Safety, Lea County Communications Authority, Andrews TX County Sheriff, and the TX State Operations Center, consistent with the event response procedures. No further notifications are planned.
- (ix) Status of any press releases, related to the event, that were made or are planned.
  - No press releases were made, and no press releases are planned.

## 10 CFR 70.50(c)(2)

- (ii) The probable cause of the event, including all factors that contributed to the event and the manufacturer and model number (if applicable) of any equipment that failed or malfunctioned;
  - The event was the result of a seismic event offsite. Per the USGS website, the earthquake was magnitude 5.1 and occurred in western Texas with an epicenter 17 km NNE of Hermleigh, Texas.
- (iii) Corrective actions taken or planned to prevent occurrence of similar or identical events in the future and the results of any evaluations or assessments; and
  - EP-3-0200-01, Classification of Emergency Events, has been revised to reduce the likelihood of an event declaration due to non-consequential seismic events.
- (iv) For licensees subject to Subpart H of this part, whether the event was identified and evaluated in the Integrated Safety Analysis.
  - Seismic events were identified and evaluated in the Integrated Safety Analysis as follows;

The UUSA Integrated Safety Analysis Summary (ISAS), Table 3.7-3, "External Events and Fire Accident Sequences and Risk Index" and Table 3.7-4 "External Events and Fire Accident Descriptions" list the potential accident sequences that were identified that could have consequences that exceed the performance criteria of 10 CFR 70.61 listed in Subpart H.

 Items Relied on For Safety (IROFS) necessary to prevent or mitigate event sequences that exceed 10 CFR 70.61 criteria have been identified and are described.

IROFS27c and IROFS27e structures are design features of UF6 containing structures to withstand the design basis seismic event that has a probability of occurrence of 1E-5. They include the Separations Building Modules, the Cylinder Receipt and Dispatch Building, the Interconnecting Corridor, and the Uranium Byproduct Cylinder Pad crane.

IROFS28 is a design feature to maintain product liquid sampling leak tight integrity during a design basis seismic event.

IROFSC23 is a design feature of centrifuges to minimize releases as a result of design basis seismic events to mitigate consequences to a low category.

IROFS39a, Limit Exposure by Requiring Evacuation of Area on Seismic Event. IROFS39a is identified as Preventative Safety Parameters for EE-SEISMIC-WORKER EVAC in Table 3.7-3.