



DEPARTMENT OF ENERGY

DOE Response to Defense Nuclear Facilities Safety Board Recommendation 2023-1, Onsite Transportation Safety

AGENCY: Office of Environment, Health, Safety and Security, Department of Energy.

ACTION: Notice.

SUMMARY: On January 26, 2024, the Defense Nuclear Facilities Safety Board issued Recommendation 2023-1, *Onsite Transportation Safety*, to the Department of Energy (DOE). In accordance with the Atomic Energy Act of 1954, as amended, the Secretary of Energy's response to the Recommendation is provided in this notice.

DATES: Comments, data, views, or arguments concerning the Secretary's response are due on or before **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

ADDRESSES: Please send comments to: Defense Nuclear Facilities Safety Board, 625 Indiana Avenue NW, Suite 700, Washington, DC 20004.

FOR FURTHER INFORMATION CONTACT: Mrs. Zahira Cruz-Perez, Office of the Departmental Representative to the Defense Nuclear Facilities Safety Board, Office of Environment, Health, Safety and Security, U.S. Department of Energy, 1000 Independence Avenue SW, Washington, DC 20585, or telephone number (301) 903-0200, or e-mail *Zahira.Cruz-Perez@hq.doe.gov*.

SUPPLEMENTARY INFORMATION: On January 26, 2024, the Defense Nuclear Facilities Safety Board issued Recommendation 2023-1, *Onsite Transportation Safety*, to the Department of Energy. In accordance with section 315(c) of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2286d(c)), the Secretary of Energy's response to the Recommendation is printed in full at the conclusion of this notice.

Signing Authority

This document of the Department of Energy was signed on May 20, 2024, by Mark Do, Acting Departmental Representative to the Defense Nuclear Facilities Safety Board, Office of Environment, Health, Safety and Security, pursuant to delegated authority from the Secretary of Energy. That document with the original signature and date is maintained by DOE. For administrative purposes only, and in compliance with requirements of the Office of the Federal Register, the undersigned DOE Federal Register Liaison Officer has been authorized to sign and submit the document in electronic format for publication, as an official document of the Department of Energy. This administrative process in no way alters the legal effect of this document upon publication in the *Federal Register*.

Signed in Washington, DC on May 21, 2024.

Treena V. Garrett,
Federal Register Liaison Officer,
U.S. Department of Energy.

May 3, 2024

The Honorable Joyce L. Connery
Chair
Defense Nuclear Facilities Safety Board
625 Indiana Avenue NW, Suite 700
Washington, DC 20004

Dear Chair Connery:

I appreciate the Defense Nuclear Facilities Safety Board's (DNFSB or Board) continued support to the Department of Energy (DOE or Department), including the National Nuclear Security Administration (NNSA), in the safe operation of our facilities. The Department received Board Recommendation 2023-1, *Onsite Transportation Safety*, dated January 26, 2024, which was published in the Federal Register on February 8, 2024.

DOE reviewed the recommendation's findings in which the DNFSB partially addressed the Department's comments to the Draft Recommendation. I accept Recommendation 2023-1¹ and agree with the Board that greater flexibility is needed to address Sub-Recommendation 3.a. The Department shares the Board's view regarding continuous improvement of our nuclear safety regulatory framework and safety basis methodology to ensure reasonable assurance of adequate protection of workers, the public, and environment in a manner that meets our shared objective of continued safe, effective, and efficient execution of our mission. We look forward to working with the Board and DNFSB staff as we prepare the Implementation Plan.

If you have any questions, please contact Gregory Hatchett, NNSA Deputy Associate Administrator for Enterprise Stewardship, whom I have assigned as the Responsible Manager for this recommendation, at (202) 586-6443.

Sincerely,
Jennifer Granholm

Enclosure

¹ The Department accepts this recommendation, recognizing that the *Atomic Energy Act of 1954*, as amended (AEA), authorizes the Board to conduct safety reviews and make recommendations for the Department's defense nuclear facilities to the extent consistent with its enabling legislation under the AEA.

Enclosure
Department of Energy Response to Defense Nuclear Facilities Safety Board
Recommendation 2023-1, *Onsite Transportation Safety*

The Department of Energy (DOE or Department) has evaluated and accepts Defense Nuclear Facilities Safety Board (DNFSB or Board) Recommendation 2023-1, *Onsite Transportation Safety*. Below is a response to each sub recommendation outlined in Recommendation 2023-1. Regarding Sub-Recommendation 3.a, DOE appreciates the Board’s recognition of the need for “greater flexibility in identifying corrective actions to preclude recurrence of the safety issues.”

SUB-RECOMMENDATION 1: LANL Transportation Safety Document

Sub-Recommendation 1.a. *Revise the LANL TSD to address the safety concerns identified in this Recommendation and to comply with a revised safe harbor methodology per sub-Recommendation 2.a.*

The Department of Energy’s National Nuclear Security Administration (DOE/NNSA) Los Alamos Field Office (NA-LA) approved a revised Los Alamos National Laboratory (LANL) Transportation Safety Document (TSD) Documented Safety Analysis (DSA) for onsite transfers and Technical Safety Requirements (TSRs) on August 10, 2023, with two conditions of approval requiring LANL to address additional comments in the 2023 and 2024 annual update. DOE/NNSA continues to work with LANL as they address the conditions of approval and demonstrate that workers, members of the public, and the environment are adequately protected during onsite transfers. Once DOE has completed Recommendation 2.a., LANL will revise their DSA following the new methodology.

DOE accepts Sub-Recommendation 1.a.

Sub-Recommendation 1.b. *Ensure compensatory safety measures remain in place until implementation of the LANL TSD revised per sub-Recommendation 1.a above.*

By elevating the compensatory safety measures to TSRs, NA-LA has ensured the controls cannot be changed without DOE approval. As identified by the DNFSB, Safety Basis Approval Authorities and Safety Basis Review Teams can change and even reduce commitments from previous approvals and reviews. Therefore, DOE commits to ensuring the approved safety basis maintains the elevated controls until LANL re-writes the DSA and TSRs following a revised methodology.

DOE accepts Sub-Recommendation 1.b.

SUB-RECOMMENDATION 2: Onsite Transportation Directives

Sub-Recommendation 2.a. *Rewrite DOE safe harbors for onsite transportation—DOE Order 460.1D, Hazardous Materials Packaging and Transportation Safety, and DOE Guide 460.1-1, Implementation Guide for Use with DOE O 460.1A, Packaging and Transportation Safety—to:*

- i. Provide requirements and guidance to ensure TSDs comply with all applicable 10 CFR 830 safety basis requirements including requirements related to accident evaluation and hazard controls.*
- ii. Include robust evaluation criteria to ensure TSDs demonstrate that safety controls are effective at reducing risk.*

iii. Include implementation guidance for restricting public access to transportation routes, and controlling onsite traffic, during onsite transportation of radioactive materials.

DOE will revise the DSA methodology for onsite transfers to ensure compliance with 10 CFR Part 830, Subpart B, *Safety Basis Requirements*.

DOE accepts Sub-Recommendation 2.a.

Sub-Recommendation 2.b. Change DOE Standard 1104, Review and Approval of Nuclear Facility Safety Basis and Safety Design Basis Documents, to incorporate requirements and guidance for DOE review and approval of TSDs.

Once the methodology in 2.a is complete, DOE will revise DOE-STD-1104, *Review and Approval of Nuclear Facility Safety Basis and Safety Design Basis Documents*, as appropriate for reviewing and approving DSAs and TSRs for onsite transfers.

DOE accepts Sub-Recommendation 2.b.

Sub-Recommendation 2.c. Conduct an extent of condition review of TSDs for DOE sites with defense nuclear facilities to identify any near-term actions necessary to ensure safety until the safe harbors are revised and implemented.

DOE will compile extent of condition work already completed at DOE sites and will conduct an extent of condition review of DSAs and TSRs for onsite transfers at remaining DOE sites with Defense Nuclear Facilities to determine if any near-term actions are necessary to ensure safety until the revised methodology is issued and implemented. As part of the review, DOE will evaluate the variation between DSAs/TSRs to understand how the current methodology is being implemented to identify potential issue(s) that could inform actions necessary for Sub-Recommendation 2.a.

DOE accepts Sub-Recommendation 2.c.

SUB-RECOMMENDATION 3: DOE Oversight

Sub-Recommendation 3.a. Perform an independent causal analysis for the safety issues identified in this Recommendation, including the effectiveness of DOE oversight of contractor TSDs, DOE's management of its onsite transportation directives, and DOE's evaluation of and actions in response to the safety issues identified in prior Board correspondence on onsite transportation safety. Identify and implement corrective actions to address appropriate causal analysis results that preclude recurrence of the safety issues.

Pending the outcome of the extent of condition review performed in Sub-Recommendation 2.c., DOE will identify and implement applicable corrective actions. DOE agrees with the DNFSB on the need for greater flexibility in identifying these corrective actions to preclude recurrence of the safety issues.

DOE accepts Sub-Recommendation 3.a.

