



The Secretary of Energy
Washington, DC 20585

June 20, 2025

The Honorable Thomas A. Summers
Acting Chairman
Defense Nuclear Facilities Safety Board
625 Indiana NW, Suite 700
Washington, DC 20004

Dear Chairman Summers:

This letter is in response to the Defense Nuclear Facilities Safety Board (DNFSB or Board) letter dated December 6, 2024, regarding the implementation of Department of Energy (DOE) Standard (STD) 3009-2014, *Preparation of Nonreactor Nuclear Facility Documented Safety Analysis* [DSA], which raised questions concerning the application and use of DOE-STD-3009-2014 since its issuance.

DOE-STD-3009-2014 was prepared to consolidate and capture format and content improvements learned since the issuance of DOE-STD-3009-94. On a case-by-case basis, some DSAs have been revised to use DOE-STD-3009-2014 over the past decade. DOE maintains that our current safety basis documentation provides reasonable assurance of adequate protection of workers, the public, and the environment, regardless of the DOE-approved safe harbor version or alternate methodology used (e.g., DOE-STD-3009-94 Change Notice 3, DOE-STD-3009-2014, DOE-STD-1120-2005, DOE-STD-1120-2016) for DSA preparation. The enclosure provides DOE's response to the Board's questions.

The Department appreciates DNFSB's insights into our efforts to implement DOE-STD-3009-2014. If you have any questions, please contact Ms. Stephanie Martin, Acting Director, Office of Environment, Health, Safety and Security, at (202) 586-6740.

Sincerely,

A handwritten signature in black ink that reads "Chris Wright".

Chris Wright
Secretary of Energy

Enclosure

Implementation of Department of Energy (DOE) Standard (STD) 3009-2014, *Preparation of Nonreactor Nuclear Facility Documented Safety Analysis*

This report provides responses to the Defense Nuclear Facilities Safety Board's letter dated December 6, 2024, regarding the Department's implementation of DOE-STD-3009-2014 since its issuance. DOE-STD-3009-2014 is an acceptable methodology (also referred to as a "safe harbor" methodology) for preparation of a documented safety analysis (DSA) at DOE nonreactor nuclear facilities, which includes DOE Hazard Category 2 and 3 nuclear facilities. The list of available safe harbor methodologies is identified in Table 1 of 10 CFR Part 830, Subpart B, Appendix A. DOE-STD-3009-2014 is just one of many safe harbor methodologies available. If a DOE Hazard Category 2 or 3 nuclear facility meets the applicability of another safe harbor methodology specified in Table 1 of 10 CFR Part 830, Subpart B, Appendix A, or DOE approves an alternate methodology, that methodology may be used. DOE maintains that our current facility safety bases provide reasonable assurance of adequate protection of workers, the public, and the environment, regardless of the safe harbor or alternate methodology and version used (e.g., DOE-STD-3009-94 Change Notice 3, DOE-STD-3009-2014, DOE-STD-1120-2005, DOE-STD-1120-2016) for DSA preparation.

Item 1: DOE's plans to transition facility DSAs to DOE Standard 3009-2014, binned by timeframe (e.g., within one year, within three years, within five years).

The safe harbor methodologies that are identified in Table 1 of 10 CFR Part 830, Subpart B, Appendix A, are acceptable and meet the requirements¹ of 10 CFR Part 830, *Nuclear Safety Management*. DOE permits the contractor to propose the DSA preparation methodology, typically one of the safe harbor methodologies, most appropriate for the facility. The need to modify the currently approved safe harbor methodology, or switch to a different acceptable methodology, is evaluated on a case-by-case basis. There is no DOE-wide schedule or direction to update DSAs to DOE-STD-3009-2014.

Item 2: DOE's rationale for facilities that will not transition to DOE Standard 3009-2014 within 5 years.

The decision to transition the DSA of a facility from one safe harbor methodology to another is made on a case-by-case basis and ultimately approved by the Safety Basis Approval Authority. Rewriting a DSA is a time-consuming and costly endeavor and using DOE resources to arbitrarily transition a DSA from one safe harbor to another does not inherently improve the safety of that facility or improve adequate protection. DOE will continue to implement our lessons learned and continuous improvement processes to ensure facilities remain safe to operate and compliant with 10 CFR Part 830. When warranted, deliberate improvements have been made to facility DSAs, driven by strategic initiatives such as from Operating Experience documents.

¹ DOE has acknowledged an exception to this. DOE's "Implementation Plan to Address Defense Nuclear Facilities Safety Board Recommendation 2023-1 Onsite Transportation Safety" commits to Deliverable 2.a. a revised methodology for onsite transportation of nuclear hazard category 2 and 3 activities to ensure compliance with 10 CFR Part 830, Subpart B.

Where appropriate, changes to the safe harbor methodologies selected for DSA preparation will be considered.

Item 3: DOE’s plans to ensure wide and timely implementation of new safe harbors that strengthen safety requirements.

DOE’s position is that the currently identified safe harbor methods for DSA preparation listed in Table 1 of 10 CFR Part 830, Subpart B, Appendix A, are acceptable and meet the requirements² of 10 CFR Part 830, *Nuclear Safety Management*. DOE does not have a plan for complex-wide implementation of new safe harbors, as update decisions are ultimately approved on a case-by-case basis by the Safety Basis Approval Authority. If new safe harbor methods were developed because previous methods produced “unsafe” results, which do not adequately protect the public health and safety, the Department anticipates this would be clearly identified and remedial actions would be taken.

The safety basis includes both the documented safety analyses and hazard controls that provide reasonable assurance that a DOE nuclear facility can be operated safely. Therefore, simply switching to a different DSA safe harbor methodology version does not, by itself, strengthen or improve safety. Adequate protection is achieved through effective implementation of multiple hazard controls, including engineered and administrative controls, a comprehensive set of safety management programs, and an integrated safety management system.

² See Footnote 1.