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**DEFENSE NUCLEAR FACILITIES
SAFETY BOARD**

Washington, DC 20004-2901



March 17, 2017

The Honorable James Richard Perry
Secretary of Energy
U.S. Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585-1000

Dear Secretary Perry:

The Defense Nuclear Facilities Safety Board congratulates you on your confirmation as Secretary of Energy. We look forward to a positive and productive working relationship with you and your leadership team as the Department of Energy carries out its important and challenging missions.

Congress established the Board in 1988; our mission is to provide independent analysis, advice, and recommendations to inform the Secretary of Energy in providing adequate protection of public health and safety at DOE's defense nuclear facilities. A brief summary of some of our current nuclear safety oversight activities is provided for your information in the enclosure to this letter.

We welcome the opportunity to introduce ourselves and discuss the Board's work at your earliest convenience.

Sincerely,

A handwritten signature in black ink, appearing to read "Sean Sullivan", written over a horizontal line.

Sean Sullivan
Chairman

Enclosure

c: Mr. Joe Olencz

ENCLOSURE

Examples of the Board's Nuclear Safety Oversight Activities

The Board reviews site-specific and cross-cutting nuclear safety issues which may impact the adequate protection of public health and safety at defense nuclear facilities over which the Board has purview. Highlights of our nuclear safety oversight are summarized below:

Emergency Preparedness and Response. The Board's most recent recommendations to DOE—including Recommendation 2014-1, *Emergency Preparedness and Response*, and Recommendation 2015-1, *Emergency Preparedness and Response at Pantex*—identified deficiencies in emergency management programs at defense nuclear facilities. We will continue to evaluate the effectiveness of site emergency preparedness and response programs as well as DOE's ability to coordinate and oversee those activities.

Aging Infrastructure. DOE relies on defense nuclear facilities that are at or near the end of their intended life to carry out national security missions as well as legacy waste storage and cleanup. Age-related degradation and equipment obsolescence negatively impact the safety and operability of such facilities. We will continue to assess DOE's efforts to mitigate the risks posed by aging defense nuclear facilities and to develop replacement capabilities where needed.

Design and Construction Projects. We are engaged in nuclear safety oversight of the design and construction of more than a dozen new defense nuclear facilities. New facilities such as the Uranium Processing Facility at the Y-12 National Security Complex are needed to transition hazardous work out of aged facilities that lack modern safety structures, systems, and components. We are continuing to assess DOE's work to resolve safety issues with the Waste Treatment and Immobilization Plant and associated facilities needed to disposition more than 50 million gallons of high-level waste (HLW) at Hanford.

Los Alamos National Laboratory (LANL) Plutonium Facility. Since 2009, the Board has sent multiple communications to DOE on safety at the LANL Plutonium Facility. We are evaluating DOE's work to characterize and remedy deficiencies in the seismic performance of the facility structure; address deficiencies in the facility safety basis and fire suppression system; and reduce risk by reducing the quantity of radioactive material on the first floor of the facility. We plan to hold a public hearing later this spring to discuss these topics with DOE.

Waste Isolation Pilot Plant (WIPP). The Board provided close oversight as DOE undertook extensive recovery actions and resumed waste disposal at WIPP after an accident shut the facility down for nearly three years. We now are evaluating DOE's actions to prevent such an accident in the future by applying new Waste Acceptance Criteria at WIPP and ensuring operational rigor at waste generating sites.

Cleanup Sites. We are monitoring the HLW disposition effort at the Savannah River Site, including startup of the Salt Waste Processing Facility, replacement of the melter in the Defense Waste Processing Facility, and repair of a HLW evaporator that was shut down after a leak last year. At Hanford, we are monitoring the safety of the decommissioning and demolition (D&D) of the Plutonium Finishing Plant as well as the generation of lessons learned from that work to apply in future D&D of other major facilities at Hanford and at other sites.