

Peter S. Winokur, Chairman  
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**DEFENSE NUCLEAR FACILITIES  
SAFETY BOARD**

Washington, DC 20004-2901



July 17, 2013

The Honorable Ernest J. Moniz  
Secretary of Energy  
U.S. Department of Energy  
1000 Independence Avenue, SW  
Washington, DC 20585-1000

Dear Secretary Moniz:

The Defense Nuclear Facilities Safety Board (Board) is responding to former Secretary Chu's March 27, 2013, letter assessing public and worker protection for a seismic collapse scenario at the Los Alamos National Laboratory Plutonium (LANL) Facility (PF-4). In that letter, Secretary Chu concluded that PF-4 can continue to operate safely, provide its confinement safety function, and meet the Department of Energy's (DOE) quantitative safety objectives in DOE's Nuclear Safety Policy (DOE Policy 420.1).

The Board does not agree with the methodology used by the LANL contractor for the seismic analysis upon which Secretary Chu based his conclusions. Consequently, the Board does not agree with the National Nuclear Security Administration's (NNSA's) conclusion that these modeling results demonstrate compliance with DOE standards for confinement integrity following a design basis earthquake. The Board communicated its concerns with this analysis in the summer of 2012 and suggested the need to perform a more representative "alternate" analysis to account for the very large vertical excitations that the structure would be subjected to during the design basis earthquake. The Board is encouraged that DOE is performing the "alternate" analysis to improve the safety posture of the facility and increase the margin between loss of confinement and the onset of collapse.

This alternate analysis is already in progress, but the Board has not formally received the schedule for its completion. The Board is monitoring progress and awaits the final analysis results. Pursuant to 42 U.S.C. § 2286b(d), the Board requests within 45 days of receipt of this letter a schedule outlining the path to complete the alternate analysis.

Sincerely,

Peter S. Winokur, Ph.D.  
Chairman

c: Mr. Bruce Held  
Mrs. Mari-Jo Campagnone