Peter S. Winokur, Chairman Jessie H. Roberson, Vice Chairman Joseph F. Bader Sean Sullivan

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

Washington, DC 20004-2901



April 21, 2014

General Frank G. Klotz Administrator National Nuclear Security Administration U.S. Department of Energy 1000 Independence Avenue, SW Washington, DC 20585-0701

Dear General Klotz:

The Defense Nuclear Facilities Safety Board (Board) has been tracking an open issue regarding the integration of safety into the Uranium Processing Facility (UPF) design. The Board's concerns described in letters dated April 2, 2012, and August 26, 2013, and the National Nuclear Security Administration's (NNSA) subsequent actions to address those issues, were relevant to the full-scope UPF design. NNSA has since initiated efforts to develop alternatives to the UPF project that prioritize the transition of Building 9212 capabilities. The eventual UPF alternative could be significantly different and reduced in scope from the current design. Until the design of the alternative matures, it is unclear to what extent the Board's concerns will remain applicable.

In addition. NNSA has resolved the Board's concerns related to the UPF Project's approach to validating structural modeling assumptions for analyses and design. The Board identified these concerns in a September 6, 2012, letter to NNSA. On November 5, 2012, NNSA provided the Board with a plan to validate the UPF structural modeling assumptions and design techniques. Through successful implementation of the plan, the UPF Project team prepared a comprehensive list of modeling assumptions and a series of technically defensible studies to validate those assumptions needing additional justification. The Board believes that this new process for systematically validating modeling assumptions will be a valuable tool in future UPF design efforts.

Both of these issues will be closed in the Board's next Periodic Report to Congress on the Status of Significant Unresolved Issues Concerning the Design and Construction of Department of Energy Defense Nuclear Facilities. The Board will reassess issues associated with integration of safety into the UPF design as the design of the alternative progresses.

Sincerely,

Peter S. Winokur, Ph.D.

Chairman