Peter S. Winokur, Chairman
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DEFENSE NUCLEAR FACILITIES SAFETY BOARD

Washington, DC 20004-2901



February 28, 2011

The Honorable Steven Chu Secretary of Energy U. S. Department of Energy 1000 Independence Avenue, SW Washington, DC 20585-1000

Dear Secretary Chu,

The Defense Nuclear Facilities Safety Board (Board) is concerned about the lack of viable disposition paths for fissile materials and other excess nuclear materials held by the Department of Energy (DOE). This concern has become more acute in light of the recent suspension of dissolver operations at the H-Canyon facility at the Savannah River Site.

The H-Canyon facility (including HB-Line) has proven to be an effective and valuable asset for safely processing fissile materials over several decades. DOE still holds excess fissile and other nuclear materials (numbering in the hundreds of thousands of items, including the fuel in L Basin), many of which need to be stabilized or processed to avoid extended storage conditions that pose safety risks to facility workers and, in some cases, the public. DOE's Nuclear Material Inventory Assessment suggests that approximately 40,000 items are to be processed through the H-Canyon facility. A similar number of items do not have established disposition paths; for some of these items, the H-Canyon facility is the only disposition path certain to be viable.

Apart from the statutory requirement that the Secretary of Energy continue operations of the H-Canyon facility and maintain it in a "high state of readiness," the Board believes premature shutdown of the H-Canyon facility could have significant unintended safety consequences due to the orphaning of unprocessed materials. DOE may be compelled to undertake expensive, time-consuming, and hazardous efforts to process unstabilized materials. Until DOE clearly identifies credible alternative disposition paths for its fissile materials and other excess nuclear materials, the Board strongly supports the ongoing disposition of fissile materials at the H-Canyon facility.

Peter S. Winokur, Ph.D. Chairman

c: The Honorable Thomas P. D'Agostino The Honorable Inés R. Triay Mrs. Mari-Jo Campagnone

¹ Section 3137 of the National Defense Authorization Act for Fiscal Year 2001 (Public Law 106-398), as amended by Section 3115 National Defense Authorization Act for Fiscal Year 2004 (Public Law 108-136).