Department of Energy
National Nuclear Security Administration
Washington, DC 20585

December 21, 2007

The Honorable A. J. Eggenberger
Chairman
Defense Nuclear Facilities Safety Board
625 Indiana Avenue, N.W., Suite 700
Washington, DC 20004-2901

Dear Mr. Chairman:

In a letter dated August 18, 2006, former Administrator Brooks responded to your request for information regarding the National Nuclear Security Administration's (NNSA) plans for handling the staging, assessment, and disposition of a damaged U.S. Nuclear Weapon and Improvised Nuclear Device (IND). In subsequent meetings between Defense Nuclear Facilities Safety Board (DNFSB) representatives and my office, the DNFSB requested additional information on NNSA's plans for preparing the G-Tunnel for the limited possibility that it will be used for the disposition of an IND.

The NNSA has determined that the G-Tunnel does not meet the definition of a nuclear facility for Department of Energy Emergency Response-identified specific operations and will no longer treat the Tunnel as such. The NNSA will carefully balance the limited probability of an interdicted IND scenario with the benefits of G-Tunnel upgrades and the costs associated with implementation. With the limited possibility that the G-Tunnel will be used in the disassembly of an IND and uncertainties surrounding the circumstances of such use, it is our intent to address appropriate life safety and mission-related facility upgrade issues that are prudent to pursue.

- NNSA will continue to prepare for the potential use of the G-Tunnel for the disassembly and technical nuclear forensics support of an IND. The alacrity of the side-by-side disassembly and forensics operations will be of paramount priority, given the critical nature to national security of such an activity. Several life safety upgrades have been identified for the G-Tunnel that will require significant investment. The life safety issues are identified in the "Facility Safety Plan for U12g Tunnel" (Enclosure 1). We will continue to assess these upgrades to determine the proper scope and prioritization.

- It will also be prudent to pursue improvements that will enhance the ability of the facility to complete any assigned mission and improve the overall safety for operations involving an IND. A program of evaluating potential facility upgrades to determine the relative contribution to the mission completion capability has been initiated. The benefit of each

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upgrade with respect to carrying out the facility mission will be evaluated. The "White Paper on Evaluating Proposed U12g Facility Upgrades" (Enclosure 2) describes how facility hazards will be analyzed.

We will continue to analyze the hazards of the G-Tunnel and develop appropriate controls, conduct interagency drills and exercises, and implement specific upgrades to the G-Tunnel to improve both the overall safety posture and the ability of the facility to support a successful mission outcome. We believe these actions are in keeping with the G-Tunnel's mission to serve as a non-nuclear training and transitional facility that *may*, in an extremely unlikely event, under emergency circumstances, be used for the disposition of an IND.

Beginning in Fiscal Year 2008, the NNSA has established a six-year funding profile to address these infrastructure upgrades. The actual length of time to complete these upgrades will, of course, be dictated by the actual costs. The schedule is to complete the cost and risk/benefit assessment on the issues identified in the Documented Safety Analysis Implementation Plan by April 2008. At that time, a comprehensive project plan will be developed that addresses both life safety and facility safety upgrades and prioritizes potential improvements based on the cost and risk reduction they would provide.

Hopefully, the aforementioned synopsis of NNSA's plan to move forward with the G-Tunnel improvements clarifies your understanding. We will continue to work with the DNFSB as we move forward with our plans for the G-Tunnel.

If you have any questions please contact Mr. Thomas Black, Director, Office of National Technical Nuclear Forensics on 301-903-7314.

Sincerely,

Joseph J. Krol
Associate Administrator for
Emergency Operations

Enclosures

cc: Gerald Talbot, NSO
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