National Nuclear Security Administration

Department of Energy
National Nuclear Security Administration
Washington, DC 20585

November 18, 2011

The Honorable Peter S. Winokur
Chairman
Defense Nuclear Facilities Safety Board
625 Indiana Avenue, NW, Suite 700
Washington, D.C. 20004

Dear Mr. Chairman:

This letter fulfills the commitment made in a letter to you on February 28, 2011, that stated the National Nuclear Security Administration (NNSA) would keep you informed about the disposition of a set of proposals from the Los Alamos National Laboratory (LANL) to reduce costs of the Chemistry and Metallurgy Research Building Replacement (CMRR) Project. The set of proposals was forwarded to NNSA for consideration via a letter from LANL, dated December 20, 2010. From the set of proposals, four items were identified in your February 8, 2011, letter to the Administrator as being relevant to the Board. You had expressed concerns about these four items because no technical basis was presented to justify them. Three of the four items were rejected by NNSA as documented in a memorandum from the Federal Project Director to LANL on August 4, 2011. The only remaining item open for consideration was the option to decrease the excavation level of CMRR by approximately fifty feet and obviate the need for removal of large amounts of material. This letter informs you of the disposition of this last remaining proposal.

NNSA has reviewed the proposal and understands that decreasing the excavation level will save money and result in lesser environmental impacts without undermining the ability of the facility to meet all of its geotechnical performance requirements. The understanding was presented in the Amended Record of Decision for the CMRR Project, signed by the Administrator on October 11, 2011:

> Geotechnical reviews performed for this Shallow Excavation Option concluded that the substrate is sufficiently strong to withstand the weight of the proposed CMRR-NF, such that intolerable amounts of seismically- and non-seismically-induced settlement and lateral shifting of the foundation would not occur. The allowable bearing pressure of the soil is much greater than the pressure caused by the buildings. Both the Deep and the Shallow Excavation options require the same sets of safety controls and the SEIS (Supplemental Environmental Impact Statement) analysis indicates that they are expected to result in similar offsite environmental consequences. However, the Shallow Excavation Option reduces risk and provides some reductions in construction impacts and cost without affecting other building design requirements.

The Record of Decision, while recognizing some advantages for the shallow excavation option and documenting its technical acceptability, leaves open the ultimate selection of the excavation depth. The decision would be made during the final design phase when more complete engineering data are available. Your staff will be able to follow the evolution of the final design processes and be kept appraised on the decision about excavation depth.

If you have any questions, please contact me or Mr. Michael A. Thompson, Assistant Deputy Administrator, Infrastructure and Construction, at (202) 586-5670.

Sincerely,

Donald L. Cook
Deputy Administrator
for Defense Programs

cc: T. D'Agostino, NA-1
M. J. Campagnone, HS-1.1
D. Nichols, NA-SH-1
M. Thompson, NA-16
J. McConnell, NA-17
P. Rhoads, NA-17
W. White, NA-171
J. Michele, NA-164
K. Smith, LASO
H. Le-Doux, LASO