

Private Fuel Storage, L.L.C.

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June 24, 1999

COMMITMENT RESOLUTION LETTER #7
DOCKET NO. 72-22 / TAC NO. L22462
PRIVATE FUEL STORAGE FACILITY
PRIVATE FUEL STORAGE L.L.C.

Reference: 1. PFS Letter, Donnell to Delligatti, Submittal of Commitment Resolution #4 Information, dated May 28, 1999.

In accordance with our June 22 and 23, 1999 telephone calls, Private Fuel Storage (PFS) submits the following resolution to NRC/CNWRA comments regarding the Private Fuel Storage Facility (PFSF) geotechnical program and the potential for impact of aircraft and air-delivered ordnance at the PFSF.

GEOTECHNICAL PROGRAM

The following requests for clarification and additional analyses of the cone penetration testing (CPT) data were generated during the 6/22/99 teleconference:

NRC Comments

1. The cone penetrometer testing (CPT) data that PFS submitted on May 28, 1999 (Reference 1) indicates that the soil classifications based on the CPT data include sandy silts, silty sands, and sands in the upper 25 to 30-ft layer, where PFS previously has reported that this layer consists of uniform silt, silty clay, and clayey silt. PFS should develop a map showing the areas where the sandier soils exist.
2. PFS should demonstrate that the revised profiles in the areas identified in Item 1 have an adequate factor of safety against a bearing capacity failure.
3. PFS should use the CPT data to calculate settlements based on Equation 6-16 or 6-17 of Lunne, Robertson, and Powell (1997), which were developed by Meyerhof and Schmertmann, respectively. These analyses need to include discussion of differential settlements and their relationship to the structural design of the cask storage pads.

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4. PFS should explain why the shear wave velocities reported in Appendix C of the CPT report (Reference 1) increase with depth to about 10 to 15 ft and then level off for the remainder of the upper 25 to 30 ft in the profile.
5. PFS should explain why the plots of "PHI" in Appendix G of the CPT (Reference 1) report do not agree with the values of "PHI" shown in the tables of dilatometer data in Appendix H of that report.

Reference: Lunne, T., Robertson, P. K., and Powell, J. J. M., CPT in Geotechnical Practice, Blackie Academic and Professional, 1997.

PFS Response

PFS will provide a report that responds to Items 1-5 identified above by June 30, 1999.

AIRCRAFT CRASHES & AIR-DELIVERED ORDINANCE AT THE PFSF

The NRC Staff requested the following clarifications and additional information during the 6/23/99 teleconference concerning the potential hazard posed to the PFSF by aircraft crashes and the use of air-delivered ordnance in the general region of Skull Valley, Utah.

NRC Comments

1. In accordance with section 3.5.1.6 of NUREG-0800, PFS should produce calculations showing the cumulative crash probability of all the aircraft (military and civilian) flying in Skull Valley, Utah near the PFSF site.
2. PFS should demonstrate that the structures, systems, and components important to safety at the PFSF can withstand the potential impact of light aircraft by virtue of being designed to withstand the impact of design basis tornado missiles. Alternatively, PFS can perform an analysis to demonstrate that the probability of light aircraft impacting the PFSF is low enough to be considered not credible.
3. PFS should produce documentation from the U.S. Air Force indicating that virtually all military aircraft that transit Skull Valley en route to using the Utah Test and Training Range (UTTR) are F-16s. The documentation should state specifically that the other types of aircraft listed by the Federal Aviation Administration as potentially using the UTTR do not fly through Skull Valley.
4. PFS should address, with respect to the potential hazard from aircraft crashes associated with air operations at Michael Army Airfield, the issue raised in the Lawrence Livermore National Laboratory Report, "Aircraft Crash Assessment of U.S. Nuclear Reactor Power Plant Sites Using the NRC Methodology," UCRL-JC-

128664 (February 20, 1998), that aircraft crashes associated with near-airport operations can occur up to 30 miles away from the airport.

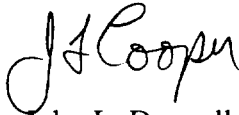
5. PFS should demonstrate, using documentation from the U.S. Air Force regarding the history of military air operations on and around the UTTR, that it is not credible that hung ordnance would strike the PFSF.
6. PFS should demonstrate, using documentation from the U.S. Air Force regarding the history of military air operations on and around the UTTR, that it is not credible that cruise missiles fired or tested on the UTTR would strike the PFSF.
7. PFS should demonstrate, using documentation from the U.S. Air Force regarding the history of military air operations on and around the UTTR, that it is not credible that air-to-air or air-to-ground munitions fired or dropped on the UTTR would strike the PFSF.

PFS Response

PFS will provide a report that responds to Items 1-7 identified above by June 30, 1999.

If you have any questions regarding this response, please contact me at 303-741-7009.

Sincerely,



John L. Donnell *for*
Project Director
Private Fuel Storage L.L.C.

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