

*Private Fuel Storage, L.L.C.*

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November 19, 1999

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

A meeting was held on November 16, 1999 in Salt Lake City, UT between Private Fuel Storage (PFS), Stone and Webster (S&W), and the NRC/CNWRA to discuss several geotechnical issues, as well as questions regarding the aircraft and ordinance crash hazard assessment for the Private Fuel Storage Facility (PFSF). After considerable discussion on both topics, it was determined that PFS would take the action outlined below to resolve outstanding issues.

**GEOTECHNICAL**

PFS will issue an amendment to the License Application by December 10, 1999 that will provide the following information:

- PFS will revise the SAR to expand the explanation of how the results of the cone penetration tests (CPT) were interpreted by ConeTec, Inc to determine the soil behavior types (SBT) that are presented in their report (ConeTec, 1999). The SBTs, which are functions of the tip resistance values and friction ratios, were determined based on a soil behavior type classification chart (presented on page 9 of their report) that was developed based primarily on saturated uncemented soils. The SBTs reported by ConeTec for the site soils are biased towards the sandier soil types because these soils are partially saturated and cemented. Both of these factors result in higher tip resistance values and lower friction ratios than would be the case for saturated uncemented soils. PFS will demonstrate that by applying the results from the other tests performed specifically for the purpose of classifying the soil types (Atterberg limit testing, direct shear tests, and triaxial shear tests) the CPT data can be correlated to the previously reported soil classifications.

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- PFS will revise the SAR to provide 13 additional foundation profiles, similar to Figure 2.6-5, showing the results of the soil borings and CPTs. These profiles will use the measured  $Q_t$  from the CPTs to further distinguish layering within the upper 25 to 30-ft depth of the profiles and will use the classifications determined based on Atterberg tests of the soil samples obtained in the borings to identify soil types.
- PFS will revise the SAR to include a discussion on the use of cement to stabilize the layer of eolian silt existing at the ground surface at the site such that it is suitable for use as base material beneath and between the cask storage pads. The discussion will be similar to that provided in PFS letter, Donnell to U.S. NRC, Submittal of Commitment Resolution Letter #19 Information, dated October 15, 1999, but it will address the following key issues in greater detail:
  1. Revision of Figure 4.2-7 to show the design with the cask storage pads founded on and within the soil-cement.
  2. Provide a description of the standard, industry-accepted field and laboratory testing program that will be utilized to design the soil-cement mix necessary to develop the required strength within the soil-cement and between the concrete pad and the soil-cement.
  3. Include a commitment to perform this standard, industry-accepted testing during detailed facility design.
  4. Provide technical justification including published references demonstrating that a bond exists between the concrete storage cask pad and the soil-cement that resists sliding of the pad during a seismic event.
  5. Provide a description of standard construction techniques that are used to obtain this bond.

## References

ConeTec, 1999, Cone penetration testing report, Private Fuel Storage Facility, prepared for Stone and Webster Engineering Corp., Denver, CO, 2 volumes.

## AIRCRAFT AND ORDINANCE CRASH HAZARD ASSESSMENT

PFS will consolidate all the previous submittals on this issue into one consolidated report that contains the latest information as well as the clarifications requested during the November 16, 1999 meeting. PFS will provide this report to the NRC Staff by November 24, 1999. Future modifications, if any, to PFS's analysis of aircraft crash hazards will be incorporated in an update to this consolidated report.

PFS has obtained access to the area planning guide for military training routes for North and South America, DoD Flight Information Publication AP/1B, 4 NOV 1999. By

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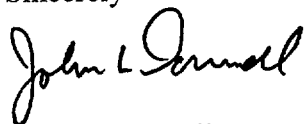
November 24, PFS will provide and discuss material from the guide relevant to nuclear facilities as it may apply to the PFSF.

The discussion provided in SAR Chapter 2 on hazards from aircraft crashes will be updated by December 10, 1999 to include the latest information and to reference the new consolidated report on hazards from aircraft crashes.

PFS is still investigating further the use of Army multiple launch rocket systems on Dugway Proving Ground. We have submitted a Freedom of Information Act request to Dugway asking for information on that subject and is also pursuing information by other means. Upon receiving relevant information, PFS will provide it to the NRC Staff.

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

Sincerely



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Private Fuel Storage L.L.C.

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