Enclosure 2

May 7, 2001

Mr. John D. Parkyn
Chairman of the Board
Private Fuel Storage, LLC
3200 East Avenue South
La Crosse, WI 54602-0817

SUBJECT: MARCH 30, 2001, LICENSE APPLICATION AMENDMENT

Dear Mr. Parkyn:

The purpose of this letter is twofold: to discuss the Nuclear Regulatory Commission (NRC) staff's concerns regarding the Private Fuel Storage, Limited Liability Company (PFS) license application (LA) amendment, as submitted on March 30, 2001 (and supplemented with calculation packages and letters during the succeeding two weeks), and to request that you attend a management meeting on May 30, 2001, on this subject. The NRC staff believes that the LA amendment does not contain sufficient information to permit a complete and adequate technical review. The staff will not be able to complete its review or formulate a schedule for the development of a supplement to the Safety Evaluation Report (SER) for the proposed PFS facility until all missing information has been submitted. The failure to submit a complete and accurate license application amendment necessarily impacts the schedule for completion of the licensing process, and is likely to impact the schedule for the adjudicatory proceedings before the Atomic Safety and Licensing Board.

As part of our acceptance review of the LA amendment, the staff held a noticed public meeting with PFS on April 18, 2001, in San Antonio, TX. The meeting was held at the offices of the staff's technical assistance contractor, the Center for Nuclear Waste Regulatory Analyses (CNWRA). Enclosed is a list of information not included in the LA amendment which the staff, with the assistance of the CNWRA, identified during the San Antonio meeting. As discussed at the meeting, the staff expects that PFS, expanding upon its April 16, 2001, letter will develop a document discussing all of the changes being proposed in the LA amendment and summarizing the effect of the changes, with supporting bases, on the adequacy of the design. This discussion should demonstrate that PFS considered the need to integrate all new and changed information into all appropriate parts of the license application. This document should be submitted in addition to the information and data described in the enclosure. PFS has provided some of the information identified in the April 18, 2001, meeting in the May 1, 2001, letter from John Donnell of your staff. However, we believe that a significant amount of analytical and supporting information must still be submitted, to address all of the concerns identified and communicated by the staff at the San Antonio meeting, in the meeting summary dated April 25, 2001, and in this letter.

To ensure that we bring timely closure to the safety review, I believe that it would be useful for us to hold the management meeting on May 30, 2001, here at NRC headquarters in Rockville, Maryland. This will be a noticed public meeting. The meeting will provide us with an opportunity to review the progress made to date on the revisions to the LA amendment, as well

as any other outstanding questions related to the completion of the SER supplement and publication of the Final Environmental Impact Statement (and its relationship to the information presented in the LA amendment).

Please be prepared to tell us at the management meeting, your schedule for providing the information necessary to complete the LA amendment submittal. This will allow for appropriate schedule and resource planning by the staff and its contractors. Upon receipt of all of the identified information, we will establish a new review schedule

If you have any questions regarding this letter, or the upcoming management meeting, please contact Mr. Mark Delligatti of my staff at (301) 415-8518.

Sincerely,
/RA/ original signed by /s/
E. William Brach, Director
Spent Fuel Project Office
Office of Nuclear Material Safety
and Safeguards

Docket No.: 72-22

Enclosure: Information missing from License Application Amendment

cc: Service Lists
Dr. A. Chowdhury, CNWRA
Mr. G. Zimmerman, ORNL

DATA NEEDED FOR THE COMPLETION OF THE PFS LA AMENDMENT

Seismic Hazard Analysis:

The following data is needed to complete a review of the new seismic hazard attenuation results submitted in the PFS LA Amendment:

1. Deaggregated hazard curves (mean and fractiles) for horizontal and vertical ground motion for each attenuation and site response model at all 16 frequencies.

2. Site velocity measurements, the 30 random property models (all parameters - shear wave velocity, damping, modulus reduction ratio as a function of shear strain), results of simulations, and input spectra (earthquake magnitude and distance matrix of inputs).

3. Results of the soil structure interaction calculations - spectral ratio or free field vs. building structural foundation (top) motion.

4. Confirmation from Bay Geophysical's experts that the new shear wave velocities will not alter their conclusions regarding the shallow seismic reflection profiles.

5. Complete description of the site soil characterization update including:

    a. site data,
    b. discussion of the site investigation timeline,
    c. complete description of the evolution of the site model, noting parameters that have remained constant as well as those that have changes,
    d. suite of sensitivity results that show the ramifications of changing from a "soil" model to a "rock" model,
    e. sensitivity results to demonstrate the sensitivity (or insensitivity) of the weighting factor (empirical vs. model).

6. Complete revised hazard analysis report (or at least a complete section 6).

7. Well data for soil below 30 ft.

8. More site specific data (i.e., beyond the one existing deep well) for the soil between 30 ft and the Tertiary strata or provide an analysis that shows that the applicant has captured the uncertainty of the soil properties sufficiently such that any new information will not again significantly change the ground motions (i.e., sensitivity study of the site response model that would incorporate the variability of the soil parameters expected for this site).

Soil Engineering:

1. A site plan showing location of any new borings and test pits used to support PFS analyses.

2. Logs for any new borings or test pits used to support PFS analyses.

3. Revised analyses of the stability of the storage pads to include a clear identification of the potential failure modes and failure surfaces, and the material strengths required to

satisfy the regulatory requirement, considering the critical failure modes and failure surfaces.

Design of Facility:

Storage Pads

1. Assessment of the edge effects on the stability of the Storage Pads under new seismic loads.

Cask Transfer Building

1. General description of the major structural elements of the CTB. This should include the reinforced concrete walls, columns, roof, and slab and the structural steel elements including the roof support beams.

2. New calculation package (SC) for Design of Tornado Doors on cells in canister transfer building (CTB).

3. New SC for Design of roof steel members.

4. Updated letter from Ederer, Incorporated on impact of new seismic levels.

5. Updated G(B)-11 Dynamic Settlements of the soils underlying the site.

6. Updated SC-4 Impedance Functions for CTB.

7. Assessment of the design changes to the slab in terms of load transfer from the walls to the slab and resulting loads on soils. Emphasis should be on the pad areas extending beyond the building walls.

8. Assessment of fire impact on the new design of the CTB.

9. Assessment of the drop of a cask onto the slab of the CTB.