

# CATEGORY 1

## REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

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 FACIL: 72-0022 Model: Private Fuel Storage Facility,  
 AUTH. NAME AUTHOR AFFILIATION  
 PARKYN, J. D.  
 RECIP. NAME RECIPIENT AFFILIATION  
 DELLIGATTI, M. Office of Nuclear Material Safety & Safeguards

DOCKET #  
07200022

*See  
12 RAs*

SUBJECT: Forwards calculations performed in support of Private Fuel Storage Facility SAR & Environ Rept submitted in 970620 application for license to construct & operate ISFSI on Skull Valley Indian Reservation in Tooele, UT.

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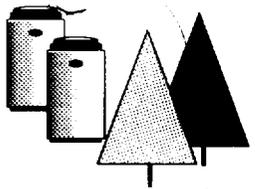
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72-22



*Private Fuel Storage, LLC*

P.O. Box C4010, La Crosse, WI 54602-4010  
John D. Parkyn, Chairman of the Board

July 14, 1997

Mr. Mark Delligatti, Project Manager  
Spent Fuel Project Office  
Office of Nuclear Material Safety and Safeguards  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

**SUBJECT: Private Fuel Storage, LLC**  
**Docket No. 72-22**  
**Submittal of Calculation Package**

By letter dated June 20, 1997, the Private Fuel Storage, LLC, submitted an application for a license to construct and operate an Independent Spent Fuel Storage Installation at a site located on the Skull Valley Indian Reservation in Tooele County, Utah. The application included a Safety Analysis Report, Environmental Report, and other required documents in accordance with 10 CFR 72.

Pertinent calculations performed in support of the Private Fuel Storage Facility SAR and ER are enclosed. Table 1 is a listing of the enclosed calculations. This includes vendor calculations that are specific to the PFSF. Non-site specific calculations for Holtec's HI-STORM (Docket No. 72-1014) and Sierra Nuclear's TranStor (Docket No. 72-1023) storage cask systems are addressed in their respective SARs and/or calculation packages.

In addition to the enclosed calculations, we will be submitting other site specific calculations over the next several weeks. Please contact us if you have any questions or require any further information regarding the enclosed calculations.

Sincerely,

John D. Parkyn  
Chairman of the Board  
Private Fuel Storage, LLC



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Enclosure: Private Fuel Storage Facility Calculation Package (2 volumes)

*Change all distribution 1/2  
to Mr. [unclear] only  
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## Table 1

### CALCULATION PACKAGE - VOL I

#### Storage Pad Parameters and Storage Cask Stability Calculations:

1. **Development of Soil and Foundation Parameters in Support of Dynamic SSI Analysis**  
Geomatrix Calculation No. 05996.01-G(P05)-1; 3/31/97; QA Cat. I
2. **Deterministic Ground Motion Calculations for Skull Valley, UT**  
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International Civil Engineering Consultants Calculation No. 05996.01- SC(PO17)-1; 6/20/97; QA Cat. I
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5. **Evaluation of Concrete Pad Target Hardness**  
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6. **Calculation of Holtec Cask Impact Load and Sliding Distance**  
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#### Geotechnical Calculations:

7. **Document Bases for Recommended Values of Dynamic Soil Properties and Coefficient of Subgrade Reaction**  
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8. **The PMF and the 100-yr Flood Flow at the Access Road Crossing and the PFSF Site**  
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## CALCULATION PACKAGE - VOL II

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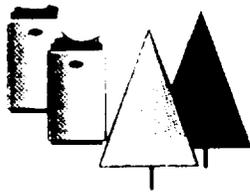
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16. **Summary of On-Site Meteorological Data**  
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- 22. Private Fuel Storage SKYSHINE II ISFSI Dose Rate Calculation (4,000 Casks)**  
SNC Calculation No. PFS01.10.02.03, Rev. 0; 4/10/97; QA Cat. I



*Private Fuel Storage, LLC*

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*John Delligatti*

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

**Calculation Package**

**Volume I**

**Private Fuel Storage Facility**

**Docket No. 72-22**

**Skull Valley Indian Reservation**

**Tooele County, Utah**

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