72-22

January 7, 2004

Mr. Mark Delligatti Senior Project Manager Spent Fuel Project Office Office of Nuclear Material Safety and Safeguards U.S. Nuclear Regulatory Commission 11555 Rockville Pike Rockville MD. 20852

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Private Fuel Storage, L.L.C. Page References for Response to NRC Staff Second Request for Additional Information Regarding the Private Fuel Storage Consequence Analysis (TAC L21150)

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

References: 1. Response to NRC Staff Second Request for Additional Information Regarding Private Fuel Storage's Analysis of the Potential Consequences of an F-16 Aircraft Crashing into the Proposed Private Fuel Storage Facility And the Responses to the Staff's August 15, 2003 Request for Additional Information (Dec. 9, 2003)

References: 2. Benchmarking of HI Storm Concrete Material in LS-DYNA For Aircraft Engine Impact Analysis at PFS, Holtec Report No: HI-2033043 (June 24, 2003)

As requested, Private Fuel Storage, L.L.C. (PFS) is hereby providing page references for documents it cited in its responses to the NRC Staff's second Request for Additional Information (RAI) regarding PFS's analyses of the consequences of an F-16 aircraft crashing into the proposed Private Fuel Storage Facility (Reference 1). The enclosed documentation setting forth the references, and also being sent to the Licensing Board and the parties, consists only of page references; thus, it does not contain any Safeguards Information.

As requested, PFS is also providing the Staff the electronic computer input files for the Benchmarking Report, which likewise does <u>not</u> contain any Safeguards Information.

MMSSOI

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

Sincerely,

John L. Donnell, Project Director Private Fuel Storage L.L.C.

cc:

Michael C. Farrar, Esq. (1 copy) Dr. Jerry R. Kline (1 copy) Dr. Peter S. Lam (1 copy) Sherwin E. Turk, Esq. (1 copy) Denise Chancellor, Esq. (2 copies)

TABLE PROVIDING ADDITIONAL REFERENCES TO PFS RESPONSES TO SECOND SET OF RAIS (Material Other than Holtec Cask Analyses)				
RAI Response or At- tachment Page & Line.	Phrase for which a Reference is being Added.	The Phrase with the Added Reference.		
Page 5; Introduction and Summary, line 11.	"for each angle interval [Insert Ref.]"	"for each angle interval (Cornell Report, Table V-4)"		
Page 6; Introduction and Summary, line 3.	"in the Cornell Report [Insert Ref.]."	"in the Cornell Report (pp. 45-47)."		
Page 27; Response to RAI-5A, line 6.	"transportation and storage casks occur [Insert Ref.]."	"transportation and storage casks occur (PFS Sept 4 2003 Responses to First RAI Set, RAI-12, p. 28)."		
Page 28; Cont. Response to RAI-5A, line 2.	"less than that at column line 5 (Case II) <b>[Insert Ref.]</b> ,"	"less than that at column line 5 (Case II). Calculation 59056-SC- 06, p. 17."		
Page 28; Cont. Response to RAI-5A, line 4.	"maximum displacement was 0.15 feet. [Insert Ref.]"	"maximum displacement was 0.15 feet. Calculation 59056-SC-05, p. 15."		
Page 28; Cont. Response to RAI-5A, line 7.	"displacement was found to be 0.486 feet. [Insert Ref.]"	"displacement was found to be 0.486 feet. Calculation 59056-SC- 06, p. 17."		
Page 30; Cont. Response to RAI-5D, lines 1-2.	"7,430 kips. [Insert Ref.]"	"7,430 kips. <u>See</u> Holtec Report, Fig. 13."		
Page 57; Response to RAI-11B, footnote 2, line 2.	"behind the row of casks. [In- sert Ref.]"	"behind the row of casks. <u>See</u> Fig. B-1a."		
Page 61; Cont. Response to RAI-11C, lines 8-9.	"(tops: 0.230 E-7, sides: 3.53 E-7). [Insert Ref.]."	"(tops: 0.230 E-7, sides: 3.53 E-7). See above, pp. 6, 22 & n.3."		
Page 61; Addendum to Burdeshaw Report, line 5.	"430 KTAS. [Insert Ref.]."	"430 KTAS. Burdeshaw Report, p. 13."		

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Page 61; Addendum to Burdeshaw Report, line 10.	"Burdeshaw Report [Insert Ref.],"	"Burdeshaw Report (pp. 10-11),"
Att. 1, page 3, line 36.	"Skull Valley Type Events data set [Insert Ref.]);"	"Skull Valley Type Events data set (pp. 1-7));"
Att. 1, page 3, line 37.	"estimation of impact angle [Insert Ref.]);"	"estimation of impact angle (pp. 58-62));"
Att. 1, page 4, line 1.	"accident impact speeds [In- sert Ref.]);"	"accident impact speeds (pp. 7- 8));"
Att. 1, page 4, line 2.	"impact speeds and angles [In-sert Ref.])."	"impact speeds and angles (p. 57))."
Att. 1, page 5, lines 3-4.	"CTB Report [Insert Page Ref.]."	"CTB Report (p. 2)."
Att. 1, page 6, line 7.	"CTB Report [Insert Page Ref.]."	"CTB Report (p. 3)."
Att. 1, page 6, line 13.	"CTB Report [Insert Page Ref.];"	"CTB Report (p. 3);"
Att. 1, page 10, line 31.	"Cornell Report [Insert Page Ref.]."	"Cornell Report (pp. 1-4)."
Att. 1, page 11, line 7.	"Cornell Report [Insert Page Ref.]."	"Cornell Report (p. 5)."
Att. 1, page 11, line 17.	"Cornell Report [Insert Page Ref.]."	"Cornell Report (p. 11)."
Att. 1, page 11, line 23.	"Cornell Report [Insert Page Ref.]."	"Cornell Report (p. 12)."
Att. 1, page 12, lines 5- 6.	"Cornell Report [Insert Page Ref.]."	"Cornell Report (p. 17)."
Att. 1, page 12, line 21.	"Cornell Report [Insert Page Ref.]."	"Cornell Report (pp. 26-27)."
Att. 1, page 12, line 25.	"Cornell Report [Insert Page Ref.]."	"Cornell Report (p. 27)."

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Att. 1, page 12, line 32.	"Cornell Report [Insert Page Ref.];"	"Cornell Report (p. 28);"
Att. 1, page 13, line 28.	"Cornell Report [Insert Page Ref.]."	"Cornell Report (pp. 26-27)."
Att. 1, page 13, line 34.	"Cornell Report [Insert Page Ref.];"	"Cornell Report (pp. 27-28);"
Att. 1, page 13, line 39.	"Cornell Report [Insert Page Ref.]."	"Cornell Report (pp. 30-32)."
Att. 1, page 14, line 29.	"Cornell Report [Insert Page Ref.]."	"Cornell Report (pp. 43-45)."

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TABLE PROVIDING ADDITIONAL HOLTEC CASK ANALYSES REFERENCES TO PFS RESPONSES TO SECOND SET OF RAIS				
RAI Response or At- tachment Page & Line.	Phrase for which a Reference is being Added.	The Phrase with the Added Reference.		
Page 10; Response to RAI-2B, line 5.	"(from the previous response [Insert Ref.])"	"(from the previous response, i.e., PFS Sept. 5, 2003 Response to RA Nos. 6 and 22 of Set 1, Figure RAI 6-3)"		
Page 36; Response to RAI-7C, lines 2-3.	In the analyses previously submitted using VisualNastran [Insert Ref.],"	"In the analyses previously submit- ted using VisualNastran (HI- 2033045 p. 26),"		
Page 37; Response to RAI-7D, line 4.	"In HI-2033045 [Insert Page Ref.],"	"In HI-2033045 (pp. 39, A13-16)"		
Page 37; Response to RAI-7D, line 4.	"in the PFS [Insert Response Date] responses to RAI set 1 [Insert RAI/Page Ref.],"	"in the PFS Sept. 4, 2003 responses to RAI set 1 (RAI-13, pp. 30-31),"		
Page 37; Response to RAI-7D, line 8.	"in HI-2033045 [Insert Page Ref.],"	"in HI-2033045 (see pp. A13-16),"		
Response to RAI-8B, Page 41, line 11.	"in HI-2033045 [Insert Page Ref.]"	"in HI-2033045 (pp. 35-36, 44)"		
Response to RAI-8B, Page 41, lines 11-12.	(and in its [Insert Response Date] responses to the first set of RAIs [Insert Page Ref.])"	"(and in its Sept. 4, 2003 responses to the first set of RAIs, pp. 9, 33)"		
Att. 1, page 6, n. 9.	"Holtec Structural Report [In- sert Ref.]."	"Holtec Structural Report, pp. 41- 42 (discussion of side impacts only)."		
Att. 1, page 7, line 9.	"Holtec Structural Report [In- sert Ref.]."	"Holtec Structural Report, pp. 31, 38-39."		
Att. 1, page 7, line 12.	"Holtec Structural Report [In- sert Ref.]."	"Holtec Structural Report, pp. 14- 16."		
Att. 1, page 7, Cask Top Impact Evalua- tion, line 2.	"Holtec Structural Report [In- sert Ref.]."	"Holtec Structural Report, pp. 31, 42-43 (discussion of top impacts only)."		

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Att. 1, page 8, line 4.	"Holtec Structural Report [In- sert Ref.];"	"Holtec Structural Report, p. 43;"
Att. 1, page 9, Modeling Issues, line 3-4.	"Holtec Structural Report [In- sert Ref.];"	"Holtec Structural Report, pp. 24, 33;"
Att. 1, page 9, Modeling Issues, line 9.	"Holtec Structural Report [In- sert Ref.]"	"Holtec Structural Report, pp. 24"
Att. 1, page 9, n. 11.	"Holtec Report [Revise Name & Insert Ref.]."	"Holtec Structural Report, pp. 26- 27, 55."
Att. 2, page 3, Case 1 – Aircraft Impact at Cask Mid-Height Be- tween Ribs, line 12.	"in HI-2033045 [Insert Page Ref.]."	"in HI-2033045 (see pp. 41)."
Att. 2, page 4, line 10	"in HI-2033045 [Insert Page Ref.]."	"in HI-2033045 (see pp. 41-42)."
Att. 2, page 5, line 2 from bottom of page.	"in HI-2033045 [Insert Page Ref.]."	"in HI-2033045 (see pp. 94)."
Att. 3, page 1, line 17	"HI-2033045 (see pp. ** [In- sert Page Ref.])"	"HI-2033045 (see pp. 14-16, 31, 38-39)"

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