



Private Fuel Storage, L.L.C.

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COMMITMENT RESOLUTION LETTER #38
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PRIVATE FUEL STORAGE FACILITY
PRIVATE FUEL STORAGE L.L.C.

In accordance with our February 5, 2002 conference call, Private Fuel Storage (PFS) submits the following resolution to NRC questions and comments regarding the stability analysis performed by PFS for the cask storage pads.

NRC Question/Comment

S&W calculation 05996.02-G(B)-04, Revision 9, entitled "Stability Analysis of Cask Storage Pads," was submitted to the NRC on July 27, 2001. A portion of this calculation (pages 36-45) addresses sliding stability of the pads assuming resistance is based on only frictional resistance along the base plus passive resistance acting on the free body. PFS should provide a discussion in the SAR that briefly summarizes the results of this section of the calculation.

PFS Response

The discussion on sliding stability of the cask storage pads in SAR Chapter 2, Section 2.6 will be updated to include the following:

As part of the stability analysis of the cask storage pads (SWEC 2001b), a calculation was performed to check cask storage pad sliding due to the design basis ground motion for the hypothetical case that assumes that resistance to sliding is provided only by frictional resistance along the base of the pads plus passive resistance. This analysis demonstrates that even if the cohesion of the underlying soils is ignored along the interface between the pads and cement treated soil and the underlying soils, the resulting displacement of the pads would be minimal. Assuming the cask storage pads are founded directly on a layer of cohesionless soils with an obviously conservative value of the friction angle, the resulting factor of safety is less than the

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criterion of 1.1 for sliding stability due to the design basis ground motion. The relative displacement of the pads was estimated for this case using Newmark's method of estimating displacements of embankments and dams due to earthquakes.

The results of this calculation indicate that displacement of the cask storage pad would range from approximately 2 inches to 6 inches. Even if the pads were to experience horizontal displacements of this magnitude, there would be no safety consequence to the pads or casks, since the pads and casks do not rely on any external "Important to Safety" connections. The impact of potential movement of the cask storage pads during a seismic event on the stability of the HI-STORM storage casks is addressed in SAR Chapter 8, Section 8.2.

The discussion of the HI-STORM cask stability analysis in SAR Chapter 8, Section 8.2 will be updated to include the following:

A formal evaluation (Reference 82) has been performed for PFS by Holtec International to assess the impact of potential movement of the cask storage pads during a seismic event on the HI-STORM storage casks. This evaluation concludes that any sliding of the pad relative to the underlying soil has the beneficial effect of reducing or eliminating cask movements relative to the pad.

This information will be added to the PFS SAR as appropriate in the next SAR update/revision. If you have any questions regarding this response, please contact me at 303-741-7009.

Sincerely,



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Project Director
Private Fuel Storage L.L.C.

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