RAS 5227 72-22-ISFSI- Applicant Exhibit YY- Rec'd 5/2/02

STONE & WEBSTER ENGINEERING CORPORATION

CALCULATION TITLE PAGE

*SEE INSTRUCTIONS ON REVERSE SIDE

DRAFT

A 5010 64 (FRONT)

CLIENT & PROJECT	PAGE 1 OF 65
Private Fuel Storage, LLC / PFSF at Skull Valley	Plus 16 Attachment Pgs.

CALCULATION TITLE (Indicative of the Objective):

FINITE ELEMENT ANALYSIS OF CANISTER TRANSFER BUILDING

QA CATEGORY (✓)

☑ I – NUCLEAR SAFETY RELATED

☐ II ☐ III ☐ _____ OTHER

CALCULATION IDENTIFICATION NUMBER				OPTIONAL WORK PACKAGE NO.
J.O. OR W.O NO	DIVISION & GROUP	CURRENT CALC. NO.	OPTIONAL TASK CODE	
05996.02	Structural	SC-6	–	–

* APPROVALS – SIGNATURE & DATE			REV. NO OR NEW CALC NO	SUPERSEDES * CALC. NO OR REV. NO.	CONFIRMATION * REQUIRED (✓)	
PREPARER(S)/DATE(S)	REVIEWER(S)/DATE(S)	INDEPENDENT REVIEWER(S)/DATE(S)			YES	NO
T.M. Snyder 11/25/98	William D. Oyestra WILLIAM D. OYESTRA 12/4/98	Sean Chen 12/4/98	0	NA	✓ see pg. 7	
T.M. Snyder	DRAFT	DRAFT	1	0		

DISTRIBUTION*

GROUP	NAME & LOCATION	COPY SENT (✓)	GROUP	NAME & LOCATION	COPY SENT (✓)
RECORDS MGT. FILES (OR FIRE FILE IF NONE)	Job Book (R4.2) Fire File	Orig. –	ID	DOCKETED USNRC 2003 JAN 13 AM 10:26 OFFICE OF THE SECRETARY RULEMAKINGS AND ADJUDICATIONS STAFF	

Template = SECY-028

SECY-02

NUCLEAR REGULATORY COMMISSION

Docket No. ____ Official Exh. No. YY

In the matter of PFS

Staff ____	IDENTIFIED ✓
Applicant ✓	RECEIVED ✓
Intervenor ____	REJECTED ____
Other ____	WITHDRAWN ____
DATE 5-2-02	Witness ____
Clerk Amp	

ATTACHMENT No. 6

The purpose of this Attachment is to find the differential vertical displacement of the CTB base mat caused by vertical earthquake loads. Results will be used in the testimony of Bruce E. Ebbeson on Section D of Unified Contention L/QQ before the Atomic Safety and Licensing Board.

The load combination with the full vertical earthquake is LC 1. This combination also includes 40% of the maximum N-S and E-W seismic loads, as well as dead and live loads. Displacement along the building centerline in the N-S direction (along column line D), and in the E-W direction along column line 6 will be plotted, and difference between the maximum and minimum displacements calculated. See pages 6-2 and 6-3 for these plots.

N-S Direction:

Maximum vertical displacement = .033094 feet

Minimum vertical displacement = .019479 feet

Differential vertical displacement = (0.033094-0.019479)(12 in/ft) = 0.163 inches

E-W Direction:

Maximum vertical displacement = .035367 feet

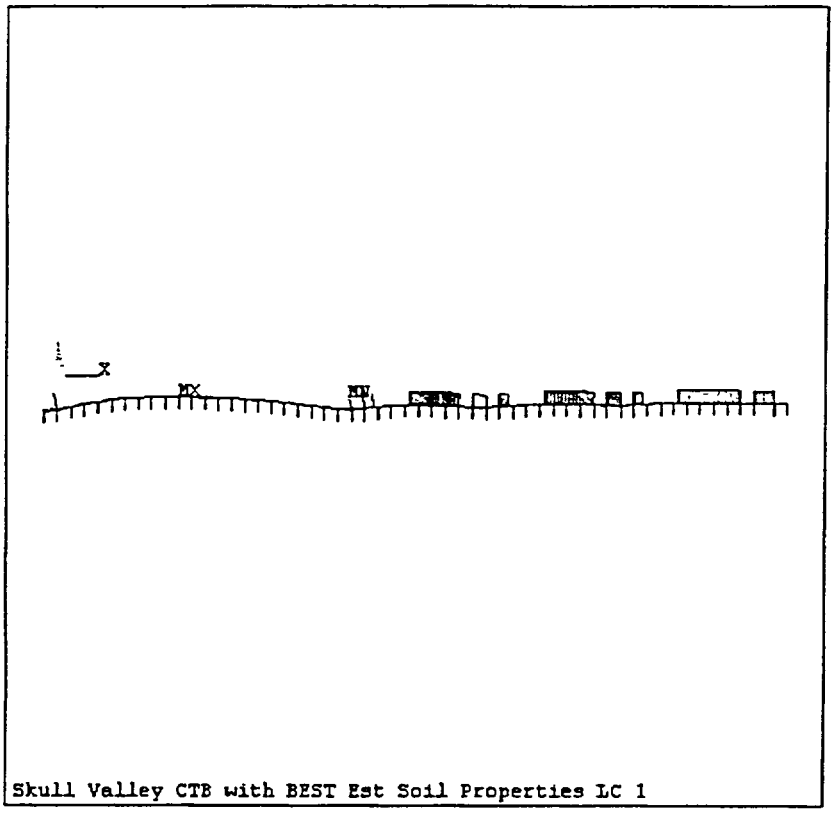
Minimum vertical displacement = .007579 feet

Differential vertical displacement = (0.035367-0.007579)(12 in/ft) = 0.333 inches.

It should be noted that these values are conservative because:

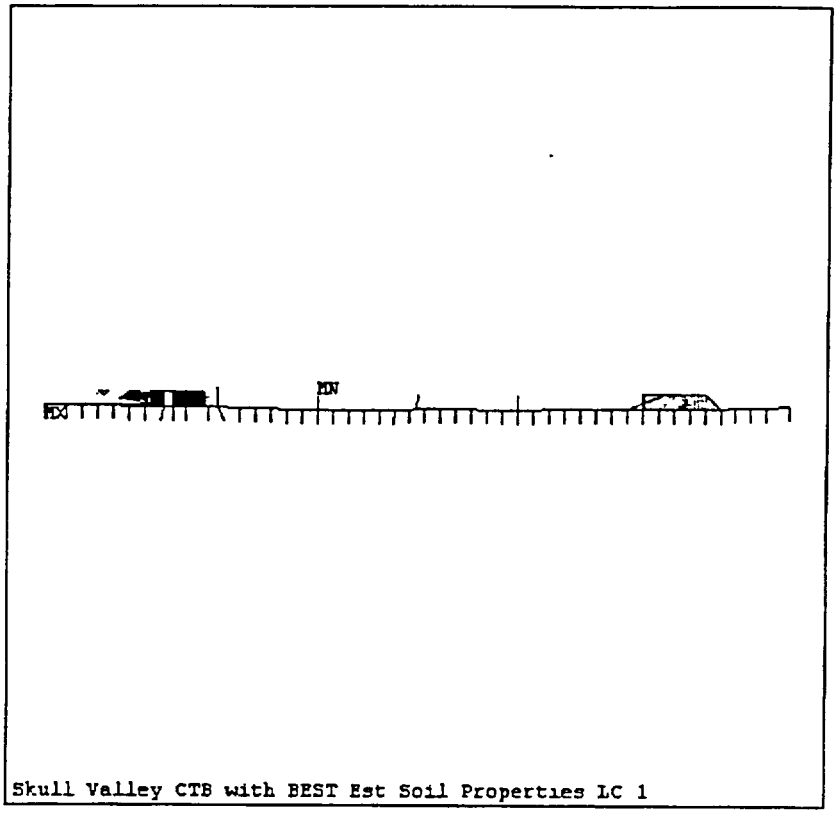
- They contain contribution from the dead and live loads
- They contain rigid body rotations caused by the horizontal seismic loads.

ATTACHMENT No. 6



SECTION CUT OF BASE MAT ALONG D-LINE
VIEW FACING WEST
(99' < Z < 103')
(-6' < Y < 6')

ATTACHMENT No. 6



SECTION CUT OF BASE MAT ALONG 6-LINE
VIEW FACING NORTH
(-6' < Y < 6')
(X = 135')