Table 1-4

Design-Basis Earthquake Input on the Top Surface of an ISFSI Pad

Horizontal g-Level in Each of Two Orthogonal Directions	Horizontal g-Level Vector Sum	Corresponding Vertical g-Level (Upward)
0.222 g	0.314 g	1.00 x 0.222 g = 0.222 g
0.235 g	0.332 g	0.75 x 0.235 g = 0.176 g
0.24 g	0.339 g	0.667 x 0.24 g = 0.160 g
0.25 g	0.354 g	0.500 x 0.25 g = 0.125 g

4. For HI-STAR 100 casks stored horizontally, the following inequality shall ~~must~~ be satisfied:

$$\frac{H_{CGH}}{B} \leq \frac{(1-\varepsilon G)}{2G}$$

where H_{CGH} is the center of gravity height of the horizontal cask above the ISFSI pad, B is the width of the supporting structure, G is the zero period acceleration seismic amplifier in horizontal direction, and ε is ratio of the vertical acceleration multiplier.

If the above inequality cannot be satisfied for a particular site, then a 3-D time history analysis may be performed to demonstrate stability of HI-STAR 100 overpack in horizontal storage configuration.

In all cases, H_{CGH} must not exceed 72 inches.

5~~4~~. The analyzed flood condition of 13 fps water velocity and a height of 656 feet of water (full submergence of the loaded cask) are not exceeded.

6~~5~~. The potential for fire and explosion shall be addressed, based on site-specific considerations. This includes the condition that the on-site transporter fuel tank will contain no more than 50 gallons of combustible transporter fuel.

7~~6~~. The cask storage pads shall be verified by analysis to limit cask deceleration during both the design basis drop and the non-mechanistic tipover event to ≤ ~~60~~ 60 g's at the top of the MPC fuel basket. Analyses shall be performed using methodologies consistent with those described in the HI-STAR FSAR.

8~~7~~. In cases where engineered features (i.e., berms, shield walls) are used to ensure that the requirements of 10CFR72.104(a) are met, such features are to be considered important to safety and must be evaluated to determine the applicable Quality Assurance Category.

Table 1.1-1 (Page ~~16~~ 17 of ~~16~~17)

~~III. MPC MODEL: MPC-68F (continued)~~
IV. MPC MODEL MPC-32

A. Allowable Contents

1. Uranium oxide, PWR INTACT FUEL ASSEMBLIES, listed in Table 1.1-2, and meeting the following specifications:

a. Cladding type:	Zircaloy (Zr) as specified in Table 1.1-2 for the applicable fuel assembly array/class. SS clad assemblies are not allowed for storage in the MPC-32
b. Initial enrichment:	As specified in Table 1.1-2 for the applicable fuel assembly array/class.
c. Decay heat per assembly	An assembly decay heat as specified in Table 1.1-4 for the applicable post-irradiation cooling time.
d. Post-irradiation cooling time and average burnup per assembly	An assembly post-irradiation cooling time and and average burnup as specified in Table 1.1-5.
e. Nominal fuel assembly length:	< 176.8 inches
f. Nominal fuel assembly width:	< 8.54 inches
g. Fuel assembly weight:	< 1,680 lbs (including non-fuel hardware)