

May 26, 1999

NOTE TO: Glenn Kelly
Mike Cheok

FROM: Ed Thom

SUBJECT: SFP RISK-ASSESSMENT

(1) Tornadoes

I re-read NUREG/CR-2944 and have revised (corrected - revised areas based on path length and width variations, and F-class based on wind speed variations) the tornado probabilities:

PLEASE UPDATE WRITEUP (table and text):

>F0	3.0×10^{-5} per year	
>F1	2.9×10^{-5} per year	
>F2	1.1×10^{-5} per year	- Support system damage value
>F3	2.9×10^{-6} per year	
>F4	5.3×10^{-7} per year	- Pool damage value
>F5	3.1×10^{-8} per year	

(FYI: Data and plot attached)

(2) Heavy loads

I am inclined to believe that the appropriate values (based on revisit to NUREG-0612, and as written) to be:

Case 1,2:	NUREG-0612 (single-failure proof handling system) 2.5×10^{-6} per year pool failure (and 2.0×10^{-7} wall failure)
Case 3:	NUREG-0612 (non-single-failure proof handling system) 1.5×10^{-5} per year pool failure (and 3.0×10^{-6} wall failure)

The provided writeup is based on 200 loads per year and includes load path while I think the current values only consider 10 loads per year and 0.1 failure with a 1.5×10^{-5} (NUREG-0612 (single-failure proof handling system)) drop per lift and 1.5×10^{-4} (None NUREG-0612 (non-single-failure proof handling system)) drop per lift.

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