

**From:** Jason Schaperow *RES*  
**To:** Robert Palla  
**Date:** Thu, Aug 3, 2000 4:41 PM  
**Subject:** Comments on Appendix 4B

Per our discussion, I did one calculation reducing the power level to 2440 MWt. The consequences are a factor of 1.2 and 1.3 lower for societal dose and cancer fatalities, respectively. The power level is a factor of 1.4 lower. I have added this one calculation to the results you requested for 50 miles.

**CC:** Charles Tinkler, George Hubbard, John Flack, Ti...

*I-80*

August 3, 2000

**Results of Release Fraction Sensitivities  
(95% evacuation, Surry Population Density)**

Case	Release Fraction							Mean Consequences within 50 miles	
	I,Cs	Ru	Te	Ba	Sr	Ce	La	Societal Dose (person-rem)	Cancer Fatalities
Base		2x10 <sup>-5</sup>						3.16x10 <sup>6</sup>	1,700
45a	1	1	.02	.01	.01	.01	.01	1.14x10 <sup>7</sup>	10,600
45b	.75	.75	.02	.01	.01	.01	.01	1.00x10 <sup>7</sup>	9,320
13 <sup>a</sup>		2x10 <sup>-5</sup>						2.81x10 <sup>6</sup>	1,370
46a <sup>a</sup>	1	1	.02	.01	.01	.01	.01	7.04x10 <sup>6</sup>	6,970
46b <sup>a</sup>	.75	.75	.02	.01	.01	.01	.01	6.29x10 <sup>6</sup>	5,860
56b <sup>a,b</sup>	.75	.75	.02	.01	.01	.01	.01	5.10x10 <sup>6</sup>	4,420

<sup>a</sup>Based on evacuation before release.

<sup>b</sup>Based on Surry power level of 2440 Mwt (others were based on Susquehanna power level of 3441 MWt).