

From: Diane Jackson, *NKK*
To: Frank Akstulewicz, Glenn Kelly, Joseph Staudenme... *NKK*
Date: Mon, Jul 10, 2000 2:42 PM
Subject: SFP accident timing and probability table

Glenn and Joe -

As a followup to the meeting last week between, Frank, Glenn and George, please find attached a table summarizing important parameters for SFP accidents.

As best as possible, please fill in the boxes...

Glenn, on the probabilities and
Joe, on the 3 (or 5) boxes on timing
...for each of the four types of events

Based on latest Jason's e-mail, I filled in the consequences. From Table 2 of Jason's e-mail, I used the values for 100% ruthenium release with Surry's density and 99.5% evacuation. I assume this is after one year. Is this the correct case to use? Jason also ran cases using 95% evac and increasing release fractions for other radionuclides.

Thanks, Diane

CC: GTH

Q1201

DECOMMISSIONING PLANT SFP EVENT TIMING AND FREQUENCY SUMMARY MATRIX

ONE YEAR AFTER FINAL SHUT DOWN		Slow draindown with off-site power	Slow draindown without off-site power	Fast draindown from seismic	Fast draindown from heavy load drop
Time to recover (event initiation to 3 feet above fuel)					
Time to fire after fuel uncover with ventilation (2 bldg vol/hr)	Full uncry				
	Partial uncry				
Time to fire after fuel uncover without ventilation	Full uncry				
	Partial uncry				
Early Consequences (best estimate)	with Evac	0.132			
	without Evac	95.3			
Late Consequences (best estimate)	with Evac	6,300			
	without Evac	9,150			
Frequency of Event		4.4 E-8	1.4 E-7	<4.5 E-6	2.0 E-7
Problems					
Positives					

DECOMMISSIONING PLANT SFP EVENT TIMING AND FREQUENCY SUMMARY MATRIX

FIVE YEARS AFTER FINAL SHUT DOWN		Slow draindown with off-site power	Slow draindown without off-site power	Fast draindown from seismic	Fast draindown from heavy load drop
Time to recover (Beginning of event to 3 feet above fuel)					
Time to fire after fuel uncover with ventilation (2 bldg vol/hr)	Full uncover				
	Partial uncover				
Time to fire after fuel uncover without ventilation	Full uncover				
	Partial uncover				
Early Consequences (best estimate)	with Evac				
	without Evac				
Late Consequences (best estimate)	with Evac				
	without Evac				
Frequency of Event					
Problems					
Positives					