From: "Sprung, Jeremy L" <jlsprun@sandia.gov>
To: "White, Bernard" <bhw@nrc.gov>
Date: 10/25/02 12:59PM
Subject: Phone topic writeups

Bernie:

Here as promised is a writeup of the topics that we discussed during our phone call this morning. Please tell us which of these proposed approaches are approved as is or with added NRC guidance (as is appropriate) and also specify where a formal contract modification will be needed (revised SOW from NRC and a revised response to the SOW from us).

Jetliner Crash Report Schedule

We will send Boeing our jetliner model next week. If they take several weeks to review it, we won't have comments until mid November. If their comments are specific to a and don't require extensive changes to our model, we might be ready to start rerunning our jetliner crash calculations at by the last week in November, which might mean we could complete them by the end of the first week in December. That would give us two and a half weeks before the Christmas break to rewrite the current draft of our jetliner report. So the optimistic scenario is next draft by 20 December 2002 (many Sandians will take the two days before Christmas as vacation; so in effect we will be shutting down for the Christmas break by 20 December). Conversely, if Boeing takes three weeks to get back to us and (to avoid providing specific engineering data) provides recommended changes to our model that apply to a "generic" large jetliner, then it will probably take at least a week of work and probably two weeks of elapsed time to decide how to apply the recommendations for a "generic" large jetliner to our model. Rerunning the calculations would then take a week, and rewriting two more weeks. So given that Sandia closes for the week from Christmas to New Year's day, we wouldn't get our next draft to you until 13 January 2003.

Scenario/Cask Pairs for Analysis

The attached MS Word file contains a table which lists the casks in your Vulnerability Project SOW across the top or the table and the proposed threats down the left side of the table. To plan the schedule for Tasks 3 through 8 and also to decide what additional computational support we need to acquire by placement of contracts, we need to develop with you the combinations of a cask and a threat that we are going to analyze. Task Numbers have been placed in the table to indicate cask/scenario pairs already specifically called out in your SOW and in our response to that SOW. An X in the table indicates a cask/scenario pair that we propose should be analyzed.

MACCS Analyses

Stephanie Bush-Goddard and David Chanin have been discussing three types of work that would support the performance of consequence calculations for the Vulnerability Study: (1) Updated costs for cleanup of contaminated land and buildings, (2) review of the customery input used in MACCS that is not related to dosimetry or health effects (e.g., plume rise, wind borne transport, and dry and wet particle deposition parameters; structure shielding and evacuation parameters; washoff, runoff, and food pathway

Portions Ex 2

E53

	Spent Fuel Casks						Other RAM Transport Packages						
	Storage				Transport								
	HI-STORM	NUHOMS 32P	TN-68	VSC-24[a]	NAC-UMS	NAC-NLI-1/2	Unspecified	A-0109	BUSS	UNC-2901[a]	CI-20WC-2	CNS	TRUPACT
Impact													
Jetliner	1.1	X			1.4								
Fall from bridge					X								
Collision[d]						X							
Crush		X											
Small Plane					1.5	1.5	1.6						
Truck													
Barge					X						X[c]		
Fire													X[f]
												X[f]	
			X		X			X[e]	X				

- For , the delivery vehicle doesn't affect the CTH calculation.
- a. This package can carry U_3O_8 powder which can be dispersed easily but poses little dose hazard because U is an alpha emitter.
- b.
- c. on package with Pu in pipe overpacks.
- d. The Co metal in this package might be dispersed by
- e.
- f. Deliberate collision of another vehicle into any of these packages is not likely to lead to significant dispersal of contents.
- g. We believe this package is very similar to the HI-STORM cask and thus analysis will yield no new information.