Mitman, Jeffrey

From: Galloway, Melanie INRC
Sent: Tuesday, December 22, 2009 4:59 PM
To: Mitman, Jeffrey INRC
Cc: James, Lois; Ferrante, Fernando
Subject: RE: Seismic Values

I agree. I have discussed with Lois the idea that this info may fit into any strategy we come up with in terms of how we engage DE on the content/approach to the adequate protection writeup and Order. Please discuss with her and think of how this might have utility. Thanks.

From: Mitman, Jeffrey INRC
Sent: Tuesday, December 22, 2009 2:40 PM
To: Galloway, Melanie
Cc: James, Lois; Ferrante, Fernando
Subject: Seismic Values

Melanie, I miss spoke on the phone today regarding the seismic initiating event frequency for Jocassee. The number I quoted to you, ~1E-5/year, is wrong. The correct number from a draft of the RES report is shown below in the table. The bottom line is 4E-7 per year. This value, though characterized in the RES report as a hypothetical analysis on a hypothetical plant in the Southeast US, was actually based on the recent (2007) detailed fragility analysis of the Jocassee Dam. This fragility analysis gives us the conditional dam failure probability for each peak ground acceleration (pga) bin in the table below. The "bin frequencies" in the table below come from the seismic hazard curves for the Southeast US.

Goutam has questioned the adequacy of this 2007 fragility report based on its liquefaction analysis. I'm not qualified to offer an opinion one-way or another on its adequacy.

The bottom line on this is with a frequency 4E-7 per year, seismic in my opinion is not worth fighting over.

Jeff

Site 3: Southern USA

	pga range	Bin frequency	Conditional Dam Failure Probability	Dam Failure Frequency
Bin-1	0.05g - 0.3g	1.17E-04	2.85E-04	3.3E-08
Bin-2	0.3g - 0.5g	4.26E-06	2.75E-02	1.2E-07
Bin-3	0.5g - 1.0g	1.51E-06	1.31E-01	2.0E-07
Bin-4	> 1.0g	2.43E-07	3.37E-01	8.2E-08
	Sum =	1.23E-04		**4.3E-07**

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