

To Vonna 4/28/99

What we need from Goutam Bagchi:

1. Family of fragility curves (or typical fragility curve) for BWR and PWR spent fuel pools.
2. Fragilities or capacities of BWR and PWR spent fuel pools to withstand various heavy load drops including girders and dry casks.
3. Discussion of the consequences of these drops with respect to leak rates (e.g., does a cask drop in the middle of the pool or on top of a fuel assembly have a high potential to create a hole in the pool of 3 square feet? Could the hole actually be much larger? What are some of the worst places a cask or girder could be dropped in a BWR or PWR spent fuel pool?)
4. Discussion of what spent fuel pool failure due to a seismic event means. Is the water drained in less than an hour? Is it a small leak? Is it not defined? If not, what can be said about the correlation of potential leak rates (hole sizes?) and the size of the earthquake (e.g., with respect to peak ground acceleration or some other parameter)?
5. Frequency of capped pipe failing and creating a large leak.

*He is talking about real, catastrophic failure
Lower 1/2 pool
portion of pool completely compromised.*

B/150