

**From:** Goutam Bagchi , *NRD*  
**To:** Vonna Ordaz , *NRD*  
**Date:** Wed, Apr 7, 1999 2:10 PM  
**Subject:** Re: Spent Fuel Pool Structures

I appreciate your suggestions - they are all excellent. I like to emphasize that our overall approach needs to be **risk informed** and not risk based. This is an important distinction. As long as security around the spent fuel pool area is equivalent or there are physical barriers providing a level of protection similar to that of an operating plant, one could attempt to establish the likelihood of a catastrophic failure of the pool. Anyway, this is not a big factor. This topic is a place holder and we can simply defer the discussions until later.

On your Point # 3, I have reviewed the RG (3.49) and the ANSI standard (57.7), they are both about a decade old. The RG does not even endorse the site parameters. The water basin type pools rely on active cooling and the ANSI standard rules out the consideration of total loss of water as a possible design basis event. It appears to me that the water basin type pools need hands on care, whereas our mission is to find a less hands on basis to examine the need for EP etc. You want me to compare the structural integrity, but there is just not enough information to do that. Do you have structural drawings? Please note that it took a study of a BWR and a PWR spent fuel pool to determine the HCPLF value of each structure. I have a strong feeling that the wet basin pools would come out somewhat weaker in structural integrity. I am mindful of the fact that walls and slabs of wet basin pools are likely to be thick for shielding purposes. I do not plan to do anything until I know more about the structural details of the wet basin pools.

Vonna Ordaz 04/07 11:37 AM >>>  
Goutam,

Thank you for providing your outline. It gives me a better idea of what exactly you plan on addressing. Diane and I reviewed your outline and we have the following comments:

1. On the two areas where you mention "safeguards," you can indicate that there are safeguards concerns, but we will not be addressing them for the technical basis that we have to come up with before June. After speaking to Glenn Kelly, it's evident that we do not normally do risk assessments on safeguards issues, and it will take a larger effort to address it. We may include it as an area where we need further review and analysis beyond the June deadline (Output #2).
2. Under hazards to consider, you mentioned heavy load drop accidents. You may want to speak to Brian Thomas from SPLB, who is our heavy loads person. He may be able to give you some insights in this area.
3. An item that we would like for you to consider is the comparison of the structural integrity of operating reactor spent fuel pools to the wet-basin independent spent fuel storage installations (ISFSIs) since we are exploring design considerations and controls of the wet-basin ISFSIs as part of this Working Group effort. You may want to coordinate with Diane Jackson, who also has the SFPO contacts for the ISFSIs. If you would like a copy of the RGs and the ANSI standard related to wet-basin ISFSIs, I can provide them to you.

Thank you again for your support,

Vonna

Thank you,

*B/1114*