

From: Jason Schaperow , *RES*
To: cgt
Date: Tue, Jun 15, 1999 3:14 PM
Subject: Re: TWG Mtg. on Wednesday

The following is an e-mail message from Goutam Bagchi to Vonna Ordaz regarding accident management for severe spent fuel pool accidents. I thought you might be interested.

Jason

>>> Goutam Bagchi 06/15 2:30 PM >>>

Tomorrow I have about 45 minutes available for the meeting you requested. I am very much interested in discussing the protective measures, if any, that can be taken to prevent zirconium fire. The PRA study on FFU has identified several initiating events that pose risk to the public. However, most of these hazardous events can be guarded against by fairly simple and perhaps inexpensive protective measures. A catastrophic failure of the spent fuel pool due to a seismic event does not seem to have a simple protective measure, although the initiating earthquake would have a frequency of less than $10E-5$ per reactor year for most reactor sites, a few may have a greater frequency. Other than sharpening the pencil on seismic hazard estimate, might there be a strategy of creating a spray mist such that in the event of a complete pool draining event, there will not be any zirconium fire due to effective heat dissipation? I am also a little confused as to why the strategy of foam spray would be effective in the long run, since the foam will prevent the dissipation of the decay heat by blocking the flow path for cooling by air circulation. I can understand that the foam can prevent oxidation of the zirconium and stop the heat output from the oxidation reaction. Nevertheless, my concern is that in the long run, the decay heat will raise the zirconium temperature and melt the radiation barrier. Anyhow, I would like to be able to discuss these issues before my time is up in tomorrow's meeting..

Thank you,
Goutam Bagchi

>>> Vonna Ordaz 06/15 8:26 AM >>>
Technical Working Group Members,

There have been quite a few changes in the past couple of weeks after we briefed management on the preliminary results of the TWG effort. I would like to meet with everyone on **Wednesday, June 16th at 10:30am** to share the latest direction that we're taking on the TWG paper, upcoming workshops, and any future work that we may be involved in. Please let me know if you won't be able to attend. I'll let you know the location when I find a conference room.

Thanks,

Vonna

C/896