Mitman, Jeffrey

From: James, Lois
Sent: Friday, December 04, 2009 7:36 AM
To: Galloway, Melanie; Skeen, David
Cc: Wilson, George; Khanna, Meena; Mitman, Jeffrey; Cunningham, Mark; Hiland, Patrick
Subject: RE: OUO - Security Related Information

To All:

Knowing I am new to this issues, I would like to pose a question or a thought:

From my experience and knowledge, we usually ask the licensee to justify why something is or is not appropriate for consideration. It seems that we, the NRC, are taking that responsibility on by making the call that overtopping is not a credible event. My analogous example would be seismic. All plants must consider seismic, even if we, NRC, agree that the plant is not in a high risk seismic area. The licensee must provide some documentation to demonstrate that they are not in a high seismic area.

From: Galloway, Melanie
Sent: Friday, December 04, 2009 7:21 AM
To: Skeen, David
Cc: Wilson, George; Khanna, Meena; Mitman, Jeffrey; James, Lois; Cunningham, Mark; Hiland, Patrick
Subject: RE: OUO - Security Related Information

I would appreciate an opportunity to discuss. I am available next week.

From: Skeen, David
Sent: Wednesday, December 02, 2009 3:41 PM
To: Galloway, Melanie
Cc: Wilson, George; Khanna, Meena; Mitman, Jeffrey; James, Lois; Cunningham, Mark; Hiland, Patrick
Subject: RE: OUO - Security Related Information

~~**Official Use Only - Security Related Information**~~

Thanks, Melanie.

I appreciate the work that Jeff did in putting together the table.

At this point, the technical staff believes that the parameters in Case 2 envelope the breach size that the NRC staff calculated using the Froelich equation. Case 2 results in a flood height of 18 ft at the SSF.

I understand that our 3 hydrologists, including NRO, have determined that overtopping is not a likely scenario for the Jocassee Dam - even if an antecedent storm is considered and the spillway gates and turbines are assumed to fail. DE is no longer pursuing overtopping as a failure mode for Jocassee.

We still have some questions about the Keowee and Little River dam parameters used in Case 2,that we are pursuing with the licensee, but we agree that parameters used for the Jocassee failure are reasonable. I would be glad to stop by with George and Meena to discuss details with you further, if you like.

By the way - I would like to ask for DRA's help with another item regarding the external flooding issue. George has asked for Jeff Mittman's help in dusting off the backfit analysis, since we may have to pursue an adequate protection backfit, if duke does not agree to take corrective action for external flooding. I know Jeff worked on the earlier draft, and his help would be invaluable. Thanks for your consideration.

B-46

Dave

From: Galloway, Melanie
Sent: Wednesday, December 02, 2009 7:11 AM
To: Cunningham, Mark; Skeen, David
Cc: Wilson, George; Khanna, Meena; Mitman, Jeffrey; James, Lois
Subject:

Jeff Mitman put together the attached table as a means to organize the information we know about what the licensee has considered in evaluating a Jocassee Dam failure based on presentations to date. It may prove useful during today's meeting with Duke.

It is interesting to note that the most severe 1D case, after being based on reasonable inputs of Duke's own choosing, is not considered further. This case results in 15 additional height of flood water at Keowee. While we don't know how this added height at Keowee translates to flood height at the SSF, it is not unreasonable to assume that it might be more than a few feet, or enough to flood the SSF.

With this being a deterministic analysis, it is not clear how we are eliminating possible scenarios--again determined based on reasonable input defined by Duke.