

Mitman, Jeffrey

From: Galloway, Melanie *INR*
Sent: Thursday, December 24, 2009 11:46 AM
To: James, Lois; Mitman, Jeffrey
Subject: Thoughts on how to synthesize our discussions on Oconee flooding and adequate protection

Lois and Jeff,

I offer the following thoughts as my attempt to provide some structure on our completion of the adequate protection writeup to support an Order to Duke by Jan. 30, 2010.

1. In a discussion with Mark he had suggested that we write the AP writeup with generic applications in mind as this may need to be applied to other plants in the future. While a nice goal, I would like to suggest that we not focus on this at this time given the time-sensitive nature of the Oconee issue.
2. The AP writeup needs to clearly state, and then discuss each, the reasons why we have an AP issue. [note that while these are discussed, they are not structured this way so that the reader knows and can name them as our basis] The reasons are: a. complete lack of defense in depth and b. failure to meet our regulatory requirements regarding protecting the plant from flooding. And then overlaid both of these is that the issue, when assessing a. and b., represents a significant risk.

Again, this needs to be clearly stated and each point supported as the basis for the AP argument. Headings in the writup may help with this structuring.

3. The probability discussion needs to be expanded when discussing dam failure. We need to add why it's appropriate and correct to discuss all failure modes as part of this number.
4. We need to work in what we believe needs to be included in the Order. For example, the licensee must submit to us a sensitivity assessment of the reservoir water level, up to their calculation of the PMF level. This discussion would tie with the guidance which describes assessing dam failure at the most severe water level. Are there other items we believe Duke should submit? Include the case for them in the AP writeup.

Next, I give 2 approaches for the AP writeup. I am now tending toward the first but am not wedded to it.

First approach: Start out with external flooding as issue, initiating event frequency which includes all modes, then winnow out modes not to consider, so...

1. Include a robust technical discussion which defines why we do not consider seismic an AP issue--include Selim's assessment as the basis for that conclusion. We will need to leave a blank for DE to include the evaluation of why liquefaction as raised by 2007 fragility study is not an issue.
2. Leave a space for DE to provide a robust technical discussion of why OT is not an AP issue. They will need to refer to Rex's assessment and include it. [the seismic writeup will serve as an example of what needs to be included]
3. Include a background document to the AP writeup which includes our contrary views to item 2 above so decision makers have ready access to it when considering the AP piece. Note that our contrary views on OT would have to include a discussion of the PMF and conditional probability of dam failure noting given the dependency between the two, the conditional probability is fairly high.

Second approach: Start out with external flooding as issue, initiating event frequency which includes all modes but then only focus on random failures in the AP discussion so ...

1. Discussion of OT and seismic would be included only in the background document for decision makers consideration.

Lastly, we also need to begin to engage DE. There needs to be thought on what we need to convey. For instance, I think we need to define for them the big picture issues from the Nov. 30 Duke submittal that may include items (needs for additional information) for the Order (see above).

Our goal should be to have a revised writeup and to engage DE by Tuesday, Jan. 5.

Comments on my points above?

Melanie