

From: Goutam Bagchi, *NAN*
To: George Hubbard
Date: Wed, May 10, 2000 4:00 PM
Subject: Re: GT Response to ACRS on SFP Risk for Decommissioning Plants

The ACRS letter recommends uncertainty analysis in its Recommendation# 3. This implies an integrated uncertainty analysis of the risk for all the initiating events. Since seismic is dominating, we would have to conduct an uncertainty analysis for seismic. Bob Kennedy's estimate is a mean failure value which takes uncertainty into account - it is not a best estimate value. I do not see what additional insight we can gain by further uncertainty analysis. Uncertainty in the hazard cannot be reduced any further without launching a large program lasting several years. Uncertainty in fragility is already accounted for. We may decide to use $6X1E-6$ instead of $3X1E-6$. This would leave us with three sites and we can then examine the HCLPF value we want.

I would like to meet with Glenn, Bob Rothman, you and Gareth tomorrow at 7:45 AM in Room O-11B2 to come to a consensus on the approach we would take on this seismic issue.

Thank you,
Goutam
301-415-3305

>>> George Hubbard 05/10 11:45 AM >>>

Based on my notes from our meeting on the ACRS letter on April 19, 2000, we need input for our response to the ACRS in the areas provided below. Let me know if you see things differently

Our schedule is for our response to the ACRS to be to Gary by May 19. Therefore, Diane and I need input no later than **FIRST THING Monday** so that we can put the response together and start getting concurrences. If possible we would like to have your input this week. Please note that people I need input from are in bold below. I would like Gareth, Mark, Joe, and Glenn to take the lead in pulling together the information and getting the information to us. Glenn, can you take the lead in working with Goutam in providing words on seismic conservatism? (We may just want to say we will provide further discussion in the final report).

To help I attached the slides we used at the TA brief.

Diane will be doing the first draft but be sure and provide you input to me also.

Thanks for your help

Basic Questions to Address relative to ACRS Letter

1. What is the effect of ACRS issues on frequency of fuel uncover/zirconium fire?
2. Is the proposed pool performance guideline (LERF - 1×10^{-5}) of acceptable?
3. Do we still believe we have 10 hours after fuel uncover to take evacuation actions before having a zirconium fire?
4. Can we truly walk away from the plant after 5 years of decay time considering a zirconium fire?

Prepare response to ACRS with following points:

Question #1 Answer: No, provide reasons why frequency is not affected - input to George by Gareth/ Mike

Question #2 Answer: PPG using LERF criteria is acceptable - explain why - input to George by Mark /Charlie

4/17

Issues to address: With or without ruthenium consequences are similar to operating reactor LERF

Based on findings of study, values at decommissioning plants are way below LERF values

Discuss that we will include the additional analysis on ruthenium and the implications of it in the final report.

Discuss that we will include data for 95% (vs 99.5% previously used) evacuation efficiency in final version of report.

Discuss potential for confirmatory research and/or ongoing research relative to plume and decrepitation (fines).

Discuss land contamination as policy issue.

Question #3 Answer: 10 hours is an acceptance time for ad hoc protective actions - input to George by Joe/Farouk/Chris

Provide data from ANL in response stating why hydride formation and other phenomena don't change 10 hours.

Discuss that additional discussion on concerns will be put in final report.

Is this an area for confirmatory research???????

Question #4 Answer: Discuss that chances for zirc fire after five 5 years is remote and why we believe 5 years is good. - Input to George by Joe/Glenn

Discuss that additional data will be put in final report, including additional work on partial drain down.

Acknowledge that we will look at performing confirmatory research. (Is this right ??????)

Attendees:

Mark Rubin Gareth Parry Mike Cheok
Goutam Bagchi Glenn Kelly Joe Staudenmeier
Chris Boyd Farouk Eltawila Charlie Tinkler
Joe Murphy Rich Barrett John Hannon
Gary Holahan George Hubbard

George Hubbard
2870

CC: Diane Jackson, Glenn Kelly, Nilesh Chokshi, Rob...