

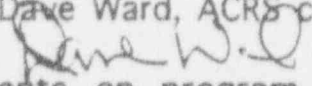
CT-2075

PDR 3/25/94

cc: Dean Houston

5/11/93

To: Hal Lewis, PRA subcommittee chairman
From: Dave Ward, ACRS consultant



Comments on program of the PRA Working Group:

1. A consistent definition of "core melt" should be developed for staff use. In practice, PRA practitioners use anything from a CMT > 2200 °F to "core on the floor". Those might cover a range of one or two -- or even three, factors of ten in probability.

2. Certification of PRA practice seems not a good idea. Rather that all engineers engaged in analysis of plant systems and technical issues should be educated to intelligently use PRA just as they use arithmetic, heat transfer, and mechanics.

3. The term "risk-based regulation" is increasingly used -- becoming fashionable. Clearly, all who use the term do not have the same thing in mind. It might mean a regulation or regulatory practice fashioned to include numerical risk or probabilistic criteria. Or, it might mean a regulation in the plain old vanilla style, but which is more explicitly based on risk concepts and estimates than are many of present regulations and regulatory practices. I favor the latter. I believe the world is not ready for the former.

4. Use of rules of thumb or clever algorithms to transform Level 1 risk calculations into Level 3 estimates is not a good idea. Containment performance is highly dependent on the specifics of system design and accident sequences. An important Level 3 issue deserves a Level 3 PRA. This may be necessary at times.

5. There was a good bit of discussion of this next point, but it was not resolved to my satisfaction: I agree that the process for screening and prioritization should be simpler and less demanding of resources than the process for resolving issues. However, the staff proposes [as best I could tell from the discussion] to ignore uncertainties in the screening process as one means of simplification. My concern is that, someday, an issue may arise whose entire impact is increased uncertainty -- not an increase in point estimate of risk. The screening process would miss it.

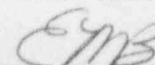
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There could, perhaps, be a step in the screening process wherein a qualitative question is asked; does this issue introduce an unusually large uncertainty? If the answer is yes, the issue gets a higher priority than it would otherwise.

6. The guidance for staff uses of PRA is not yet well-enough focused. The documentation and presentations to us were more an exposition of PRA for what seems, presumed to be, a relatively unlearned staff. If the PRA Working Group has come to the conclusion that the staff needs much education in PRA before they are ready to use it, they should say that and propose an education program. Then they should propose a program for proper use of PRA by an appropriately educated staff. The present program has too much mixing up of the two things.