From:

Diane Jackson NEG Robert Palla

To: Date:

Thu, Aug 31, 2000 1:51 PM

Subject:

Re: g's for FEMA (and ourselves)

I think "early" and "late" are good labels. We just were equating "early evac" to "with EP" and "good ad hoc EP" and "late" as "no EP." It seemed that we that were defining successful ad hoc as equal to "10 hours" and equal to "with EP" which was equated to "early evacuation." All of these things are not necessarily equal. Even with EP, evacuation may not occur early.

I don't think we need to redefine terms but need to be more aware of how they are being used. That was really my point.

Diane

>>> Robert Palla 08/31 11:38 AM >>>

The early and late evacuation terms stem from the RES consequence input, and I thought were fairly straightforward concepts. I feel uncomfortable defining the evacuation in terms of the event in which it occurs, e.g., for a short term event, such as a cask drop that leads to rapid pool draining, you might optimistically assume an early evacuation or pessimistically assume a late evacuation, thus your terms might be confusing.

Re: your example with early fatalities, be aware that all of the early fatalities occur close in (within 10 miles as shown in Tables 4 and 5 of RES's latest input on consequences), and that "late evacuation" the way it was used in the consequence calculations assumed that the release was over when the evacuation begins (no one is moving during the release). If people are moving during the release I would characterize this as a late evacuation in our terms. The result you cite (95 early fatalities) is consistent with the results from our late evacuation case.

Does this help clarify or do you still think we need to redefine terms?

Re: the questions for FEMA, I spoke with Bill Huffman fllowing the meeting and he plans to draft a letter. I think that your questions #2 and #3 will be covered but not #1.

>>> Diane Jackson 08/30 4:29 PM >>>

From the meeting today, I think we have been categorizing/labeling our calculations incorrectly.

"Early evacuation" is really "long-term (boil down) event evacuation" - Everyone moves out of the EPZ before the release starts.

and

"late evacuation" is really "short term event evacuation" - People are moving during the release.

Today, if people were moving using full EP and it was during the release (which is possible), in a 100 mile radius, there could be 95 early fatalities from a zirc fire.

FOR NRC:

1) Are the consequences for "late"/ short-term event evacuation acceptable?

FOR FEMA:

- 1) What actions are assumed to take place for full EP? (15 minutes to notify offsite; 15 minutes for offsite to alert(?) public; evacuation begins before release starts?; establish EOF?)
- 2) What alternative actions have to take place to make an ad hoc evacuation equivalent to a planned

evacuation? (e.g., notification without alerting, route alerting)

3) What is a reasonable amount of time to allow for ad hoc evacuation actions such that they are equivalent to a planned evacuation? (e.g., additional 45 minutes for notification without prior alert; time for route alerting)

Diane

CC:

George Hubbard, Timothy Collins