

From: Robert Palla *RP*
To: Jason Schaperow
Date: Fri, Aug 11, 2000 7:19 AM
Subject: Risk Metrics vs Time After Shutdown

In generating the curve Tim described yesterday I think the following would be reasonable:

1. Since the releases are driven by large seismic events, the general assumptions in NUREG-1150 regarding effectiveness of evacuation in a large seismic event should apply, i.e, no evacuation in first 24h, population is assumed to be outdoors, population is relocated at 24h. (The modelling is discussed further on p 4.2 of NUREG/CR-4551, Vol. 3, Rev.1, Part 1.)

2. For years 1 and 2 apply the above assumptions. For years 5 and 10 assume early evacuation, since after 5 years the time of release would be greater than 24h in the rapid draindown scenario. (I don't think that we can say this at 2 years and thus should stick with the no evacuation assumption for the 2 years case.) We will need to confirm with EP that the early evacuation assumption is valid for the 5 year case once we get the revised release timing estimates from Joe S.

3. Generate results for early fatalities, latent cancer fatalities, person-rem, interdiction area, condemned land area, and \$. The first 3 and the last parameters will be influenced by the evacuation assumptions, whereas the land area measures will be independent of this. Do you think "curies released" would be of any additional value or is this too abstract? Is it available from the MACCS2 standard output?

4. Report results for a 50 mile radius since that is what is used in regulatory analysis guidelines and environmental impact analyses, unless land would be interdicted/condemned at even greater distances, in which case we will need to address that separately.

Lets talk about this before proceeding.

CC: George Hubbard, Timothy Collins

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