HLWYM HEmails

From: Keith Compton
Sent: Tuesday, May 08, 2007 8:03 AM
To: Christopher Grossman
Cc: Bret Leslie
Subject: Fwd: RE: ACTION: please document in an email the path forward of this afternoon's meeting

Chris,

I would recommend use of the median because it is already listed in the usersuppliedcdf values and the change to the input file should therefore take only a few minutes, far less than the time that we have already spent discussing this issue. I just did it myself to verify that it takes less than five minutes to make the changes; one would need to add whatever time is necessary to document the SCR. I would disagree with the assertion that the values do not cause any problems with the code. As we discussed at length, sampling these parameters significantly increases the minimum number of realizations required by the LHS sampler, which results in wasted staff time waiting for realizations to be completed (on the order of 30-45 min of wasted time per run).

Keith

>>> Christopher Grossman 05/07/2007 7:12 PM >>>
Any comments?

>>> James Winterle <jwinterle@cnwra.swri.edu> 05/07/2007 6:59 PM >>>
Chris,

Regarding item 4. I would also like to give you a last change at the option of doing nothing, since the values are already described in the user guide and do not cause any problems with the code.

Assuming NRC wants us to make the change, we will have to initiate a new SCR. Also, Don Hooper wanted to know if he should use the 50th percentile (median) value or if we need to calculate the mean, which would require doing a spreadsheet calculation to get the weighted average of values in the CDF for each parameter. I did a quick check of the Kd for uranium and the difference was pretty large: i.e., median value = 33 ; weighted average = 607. The median also seems to be approximately equal to the mode for these parameters, so I am tending to suggest the we use the median value. Let me know how NRC wants us to proceed.

--Jim

-----Original Message-----
From: Christopher Grossman [mailto:CJG2@nrc.gov]
Sent: Monday, May 07, 2007 4:23 PM
To: Bret Leslie
Cc: Jim Winterle; Andy Campbell; Brittain Hill; Timothy McCartin
Subject: Re: ACTION: please document in an email the path forward of this afternoon's meeting

Bret-

Based on my notes from the meeting, the following path forward is documented for each question below:

Q1. Dosimetry. No further questions remain.

Q2. Two issues:
Issue 1) Truncation of ASHREMOB Look-up Table (LUT) below 120 g/m2. This results in approximately 10% smaller estimate of dose with little-to-no efficiency gain in code runs. CNWRA will add truncated portion back to LUT. Supplemental validation testing will be conducted to ensure the range below the threshold doesn't result in any glitches with the TPA code.
Issue 2) Apparent skewness of variability in LUT. Britt provided a comparison between legacy TEPHRA output and TPA 5.1 BetaU Tephra output (from the LUT). He raised pertinent questions regarding skewness of the variability of HLW incorporated in ash for a given ash deposit and the adequacy of samples at the high end of ash deposits and HLW incorporation. To date, a clear understanding of the causes for the differences has not materialized. Unfortunately, Britt's plots don't directly equate because of changes to the source term casting some uncertainty over a direct comparison. In the legacy TEPHRA runs, the number of WPs was sampled directly by TEPHRA. The LUT reports only per MTU. Britt is checking (today, hopefully) to see if his legacy data reports MTU ejected for each data point so we can normalize legacy data to 1 MTU for a more transparent comparison. If this information is not available, additional TEPHRA runs could be necessary to compare which CNWRA indicated could require around 1 month to complete. We agreed that the current LUT format allows the flexibility to evaluate a range of consequences but that the Users Guide should adequately caution the user to ensure a representative sampling to capture consequences (e.g., Seismic). If additional TEPHRA runs are needed, this would be updated post-acceptance of the code in order to maintain the current schedule. We will meet next Wed. to follow-up.

Q3. No resolution. Dick was not available to discuss today.

Q4. CNWRA will change ASHRMOVO Kds in tpa.inp to constants set at the mean value of the current distributions and document the value and the fact its the mean of a distribution in the tpa.inp table for ASHRMOVO.

Chris

>>> Bret Leslie 05/07/2007 4:28 PM >>>

Chris,
For each of the items discussed on ASHRMOVO and ASHREMOB, it would be helpful for me to understand what is our path forward. I understand everything was not resolved and that we will need to meet again on next Wednesday (5/16). I want to very carefully track and document the status of the outstanding issues. I have requested that Jim Winterle track down and provide the QA documentation of the version of the TEPHRA code that was used to generate the lookup table currently used in TPA Version 5.1 beta.

Is there anything else I need to do?

thanks,
bret

Hearing Identifier: HLW_YuccaMountain_Hold_EX
Email Number: 217

Mail Envelope Properties (Keith.Compton@nrc.gov20070508080313)

Subject: Fwd: RE: ACTION: please document in an email the path forward of this afternoon's meeting
Sent Date: 5/8/2007 8:03:13 AM
Received Date: 5/8/2007 8:03:13 AM
From: Keith Compton

Created By: Keith.Compton@nrc.gov

Recipients:
"Bret Leslie" <Bret.Leslie@nrc.gov>
Tracking Status: None
"Christopher Grossman" <Christopher.Grossman@nrc.gov>
Tracking Status: None

Post Office:

Files	**Size**	**Date & Time**
MESSAGE	4997	5/8/2007 8:03:13 AM

Options
Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received: