

HLWYM HEmails

From: Randall Fedors
Sent: Wednesday, August 29, 2007 1:47 PM
To: Chandrika Manepally
Subject: Re: DD Effects on Temperature

Some rambling, though probably not helpful comments to consider:

Use of low-probability seismic MSTHM results for all seismic events in TSPA can lead to how much error? 100 C at some specific time seems large. But eventually the WP will go through the correct temperature regime; plus the duration may be longer in the localized corrosion window (thus possibly conservative). Shifting the environments a few thousand years does not seem important, unless something else is happening that won't happen later. So what that their model is not realistic, and that they're getting T and RH wrong at any particular time - are these time shifts in regimes important? Can we envision anything that would cause the DOE abstraction to be non-conservative?

1. Do we know for sure that the drift-collapsed MSTH results are applied for all seismic events (how is a seismic event defined, 10⁻⁴ probability?)
2. Where is the temperature threshold of 100 C for seepage checked for the collapsed drift scenario; at the actual degraded drift ceiling (11-m diameter position), or the hypothetical original drift ceiling (5.5-m position)?

--Randy

>>> Chandrika Manepally <cmanepally@cnwra.swri.edu> 08/29/07 11:38 AM

>>> >>>

Randy

Take a look at the attachment and let me know if you think this question needs to be included in the App 7. Based on my discussions with Luis, DOE says that only a very strong seismic event will cause a complete collapse (i.e., drift fills up completely) and it does not happen very often. They use this assumption in the calculation of the static rubble load. This is inconsistent with the assumption in MSTHM.

Let me know what you think...

-Chandrika

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"Chandrika Manepally" <cmanepally@cnwra.swri.edu>
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