

From: Michael Cheok *J NRC*
To: "srmarie@nuc.berkeley.edu"@GATED.nrcsmtp Shannon M. Rohrer, *NVC Berkeley*
Date: Wednesday, April 19, 2000 02:41 PM
Subject: Re: Draft Final Technical Study of Spent Fuel Pool AccidentRisk at Decommissioning Nuclear Power Plants

Shannon:

The transcription errors in the draft report are as follows:

pg A2a-58, Section 4.5.5.4, 2nd line in table should be: HEP-MKUP-START-E

pg A2a-59, 1st line in test should be: HEP-MKUP-START-E

pg A2a-65, Table 5.1: Fuel Uncovery Frequency for Internal Fires should be: 2.3E-08 per year.

The fuel uncovery frequencies for the individual event tree sequences in Figures 4.1 through 4.5 of Appendix 2 of the draft report are not affected by the above revisions. In your latest e-mail, you listed some frequencies you have calculated that are different from those in Figures 4.1 through 4.5. I believe that, in your calculations, you may have multiplied the initiating event frequencies by the functional failure probabilities at each event tree branch to obtain a sequence frequency. In doing so, you will be non-conservative since you are creating sequences with non-minimal cutsets (which do not account for the dependencies between the event tree functions). To account for functional dependencies, you will have to Boolean AND the initiating event with all the functional cutsets in the sequence to obtain the sequence frequency.

Please contact me if I can be of further assistance.

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4/16/00