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Dr. Michael L. Corradini
Chairman
U.S. Nuclear Waste Technical Review Board
2300 Clarendon Boulevard
Suite 1300
Arlington, VA 22201

RE: Internal Criticality Risk at Yucca Mountain

Dear Dr. Corradini:

I am writing to request that the Nuclear Waste Technical Review Board ("TRB") conduct a careful review of the previously withheld, but recognized potential for internal criticality of nuclear waste residues at the proposed Yucca Mountain nuclear waste repository. We were amazed to learn, after finally obtaining some of the pertinent documents from the Department of Energy ("DOE") through the Freedom of Information Act ("FOIA"), that DOE's own studies anticipate that, if the repository operates as is now planned, *up to 60 nuclear criticalities* may plausibly occur inside the mountain, and that the conditional probability of occurrence may be greater than one in one thousand per year.

That conclusion is sharply at odds with what DOE publicly represented in its Final Environmental Impact Statement (FEIS) on the proposed facility, which assigns such events an extremely low probability of occurrence. In particular, in FEIS Volume 1 at page 5-39, DOE concluded:

The potential for criticality of commercial spent nuclear fuel would be maximized when the internal basket was fully degraded, but with the assemblies remaining intact and no breach of the bottom of the waste package. Under these circumstances, the calculated probability of a critical event within the total inventory of the 21-PWR Absorber Plate