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To: spencer.abraham@hq.doe.gov
cc: YMP.SR@ymp.gov, robert.card@hq.doe.gov, lake.barrett@rw.doe.gov, pbernstein@pcgpr.com
Subject: "RE: Possible Site Recommendation for Yucca Mountain"

Dear Secretary Abraham:

I am writing with regards to the next steps for the Yucca Mountain project, given the recent report on the "Yucca Mountain Preliminary Site Suitability Evaluation" (PSSE) and the solicitation of opinions about the next step in the creation of a repository to host the high level nuclear wastes and the spent fuel from commercial power plants.

First of all, it is evident that DOE has gathered a large body of data on the behavior of the waste form, its engineered barrier and the natural barrier to migration of the radionuclides. The resulting calculations indicate that in the long run, an individual on the site perimeter will be exposed to a maximum of 0.1 mrem per year, about two orders of magnitude lower than the allowable limits by EPA and NRC. This margin should be enough to compensate for any unforeseen developments.

Second, I commend the plan to leave the decision of closing the mountain to a future date. What is important now is to show that the site can remain open for inspection for a hundred or even two hundred years after the placement of the last waste canisters. This will allow considerable time for monitoring and detection of any unexpected water seepage and correcting for the situation.

Assuming that the technical and scientific issues for the site suitability are properly addressed, the fundamental question is should the President recommend moving ahead with a permanent repository in Yucca Mountain? As with any major project, there are pros and cons for such a decision. Fundamentally, the issue is whether the risk from the spent fuel is minimized by keeping it where it is at some 70 locations of power plants, and increasingly in above ground dry storage casks, or in a central underground location which appears suitable to be a permanent repository. I am of the opinion that the central underground repository offers the minimum risk, even if there is a small risk that it only functions as such for a few hundred years.

That a central storage location offers a reduced risk compared to multiple storage location has been addressed by several studies, including the special commission formed to address the question in 1987. When they reported to congress in 1989 Radin, Klein, Parker and Axelrad said that cumulatively the advantages of central storage override those of distributed storage. If one also considers that geologic disposal prevents the gradual negligence that might become the dry casks at abandoned nuclear power plant sites over the coming decades, or the small probability of direct assault on the dry storage casks while they are above ground, the risk to the country will be significantly minimized.

Therefore, I do recommend that you proceed with the recommendation to the President to prepare the Yucca Mountain site as a geologic repository to the spent nuclear fuel.

Sincerely

Mujid S. Kazimi