

JAN 28 2000

Comments prepared by **Philip L. Taylor** on The U.S. Department of Energy's proposed action to construct, operate and monitor, and eventually close a repository at Yucca Mountain. These comments are to be presented at the hearing on January 28, 2000, 6:00 pm - 9:00 pm, at the Holiday Inn, 1111 Lakeside Avenue, Cleveland, Ohio 44114

My name is Philip Taylor. I am the Perkins Professor of Physics at Case Western Reserve University here in Cleveland. I perform research in theoretical physics and I teach courses on Energy and its Relation to Society.

1 The concern that I want to express is that the alternatives to Yucca Mountain studied for comparison in the Draft Environmental Impact Statement are unreasonable. They appear to be straw men, set up in order to be easily demolished.

For example, Alternative Scenario 2 assumes that the wastes are managed in place for 100 years, and then are simply abandoned. They are left to rot until all the remaining radionuclides are released into the environment. This is obviously an unacceptable choice, but it is one that you present as a valid alternative to the Yucca Mountain proposal.

The problem of nuclear waste disposal is a difficult and complex one, and needs careful thought. It is not helpful to say "Well, if you don't like our solution, see how you like it if we just walk away from the problem." It is as if I were to offer you the solution "Well, you never should have produced it in the first place, and you should stop producing it now!" It needs a less flippant solution that takes into account the changing face of nuclear power in this country.

2 The first fact to face is that nuclear power is dying in the US and in the world, but particularly in the US. No commercial plants have been ordered in almost a quarter of a century, and plants that were built at a cost of \$5000 per kW are changing hands at \$180 per kW. With the restructuring of the electric utility industry, a nuclear power plant has become an albatross about the neck of its owner, good only for extracting "stranded costs" from unwilling consumers. Realization of the dangers of global warming will not alter this.

What is needed is a plan that takes into account this rapidly changing scene, in which bankruptcies of the owners of plants -- who are also owners of their attendant wastes -- will become increasingly common.

What happens when the owners of a heap of nuclear waste become insolvent? They walk away from it. Does that sound familiar? Just like Scenario 2, only it happens in 5 years from now, and not in 100 years.

We all know there will not be time to prepare, transport, and sequester all the existing waste within that time. Yucca Mountain won't be ready to begin receiving waste until 2020.

The only feasible solution is a temporary one that requires upgrading the safety of storage at all existing sites. The long-term solution will have to be found after the short-term crisis has been dealt with. It will require more careful exploration of alternatives than is present in the Draft Environmental Impact Statement.

In summary, the proposed plan is not feasible because events will have overtaken it before it can be implemented. We are faced with a serious problem that needs more imaginative solutions and immediate action.