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Surface Storage at Yucca Mountain is Not the Answer to the Nuclear Waste Problem

Creating an "interim" surface storage site at Yucca Mountain or elsewhere around the country is not a solution for our nation's commercial nuclear waste that is lethal for hundreds of thousands of years, and in fact is a worse option than leaving most of the waste safely stored at the reactor sites.

- **Surface waste storage at Yucca Mountain will make it virtually impossible to have an unbiased, scientific analysis of DOE's license application.** If waste is stored at Yucca Mountain before it is licensed as a permanent repository, the political and financial investment at the site will prevent the NRC from being able to do an independent and objective evaluation of DOE's license application. The intention of the licensing process set up in the Nuclear Waste Policy Act of 1982 was to "ensure that such waste and spent fuel do not adversely affect the public health and safety and the environment of this or future generations." The NRC should be allowed to carry out this mandate without an overriding public perception that the licensing process is a "done deal."
- **Creating a centralized surface storage site at Yucca Mountain or elsewhere would not meaningfully reduce the number of sites where high-level nuclear waste is stored**, so long as most commercial nuclear power plants remain in operation. Waste generated in nuclear power plants must be stored on site for at least five years to cool both radioactively and thermally before it is safe enough to be transported. Hence, any operating reactor will always have at least five years' worth of waste—approximately 100 tons—on site.
- **"Interim" surface storage would not eliminate the need for a permanent waste solution.** Yucca Mountain is fundamentally unsafe for long-term highly radioactive waste storage. But even if Yucca does eventually open, there will be too much waste to store at that site and additional repositories will be required. In fact, moving waste to interim storage may be used as an excuse to continue generating even more waste beyond what Yucca is able to contain, further exacerbating the problem.
- **Surface storage at Yucca Mountain or elsewhere increases transport risks to public health and safety**, because the waste must be transported from the site where it is generated to the interim location, and to a permanent repository. The Government Accountability Office recommended in July 2003 that the number of nuclear waste shipments be minimized in order to enhance spent fuel security. The February 2006 report by the National Academy of Sciences on the transport of spent nuclear fuel recommended that "an independent examination of the security of spent fuel and high-level waste be carried out *prior to* the commencement of large-quantity shipments" [emphasis added]. The report also concluded that "extreme accident conditions involving very-long-duration fires could compromise" waste containers and recommended that the NRC do additional analyses of these scenarios.
- **Interim storage will be extremely expensive.** According to Allison Macfarlane, a researcher at MIT, the waste storage casks alone required at these sites currently cost between $90 and $210 per kilogram of waste stored. In other words, to create enough interim storage for all 50,000-plus tons of spent fuel we have currently will cost between $4.5 billion and $10.5 billion, not including licensing and other expenses.

Moving nuclear waste to Yucca Mountain is simply a "shell game" to give the illusion of a waste solution. Instead, we should stop wasting money on the unsuitable Yucca Mountain site and enact a policy for safely storing the waste at the reactor sites.

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