

Spent nuclear fuel edges closer to Yucca

Progress is slow but sure.

The Christian Science Monitor
July 27, 2006

The Department of Energy has announced a timeline for the nuclear-waste site, as opposition intensifies in Nevada.

What weighs a total of about 50,000 tons, is scattered among 31 states, and scares the daylights out of almost everybody?

For the congressional delegation of Nevada – home to the much-debated, much-delayed Yucca Mountain nuclear-waste site – the answer could be headed their way a little too soon. It was over their protests that the Department of Energy (DOE) announced last week that Yucca will begin accepting the nation's spent nuclear fuel by 2017.

True, this is about 19 years later than the department originally promised. But these days, nuclear power is on an upswing, thanks to climbing gas prices, concerns about climate change, and an increasing desire to diminish America's dependency on foreign oil.

Despite the shifting economic and political winds, however, policymakers and others are still wrestling with questions about spent nuclear fuel.

For its part, the DOE says its new dumping date is still a best-case scenario.

But the new timetable, and a new political will for the project, have hardly swayed the senators of Nevada from their opposition. The timeline "is a wish list by the people who are trying to turn the state of Nevada into the nation's nuclear dumping ground," says Jon Summers, a spokesman for Sen. Harry Reid (D) of Nevada.

The new date comes as several pieces of legislation seek to address the decades-old issue of handling spent nuclear fuel. One such proposal, tacked onto an appropriations bill by Sen. Pete Domenici (R) of New Mexico, would empower the Energy Department to designate "interim" waste sites for up to 25 years, or until Yucca is complete. Most likely, the sites would designate existing or decommissioned power plants, where radioactive materials are already stored. However, the DOE has already acknowledged major bureaucratic challenges to granting speedy, temporary storage licenses for some 31 facilities.

For supporters of Yucca Mountain, the proposal for interim sites smacks of diversionary tactics.

"Senator Reid wants to make sure that the nuclear waste doesn't come to his state," says Charles Pray, a nuclear safety adviser for the state of Maine. "Even though the licensing is [for] 25 years, we're afraid that once it's there, it will be a long time before it moves out of the state."

Many states, including Maine, are suing the department for failing to remove their spent fuel by 1998 as originally promised. Maine expects a decision on its case later this year, and total damages against the federal government are expected to climb into the tens of

billions of dollars. The DOE has so far doled out about \$150 million in damages to commercial nuclear utilities.

The DOE has thrown its support behind legislation that would speed Yucca's progress by "streamlining" some remaining regulatory hurdles. "People on both sides of the aisle are seeing the need for an expansion of nuclear energy," says Craig Stevens, a spokesman for the department. "We're just looking at [the political dialogue] as a positive development in the discussion as we're moving ahead with the nuclear renaissance in this country."

After all, Yucca is widely touted as the world's most studied piece of real estate. The Nevada laboratory facility currently employs about 2,000 scientists and staff – a research effort that has already cost the government about \$8 billion. Energy officials are convinced of the facility's safety.

But opponents of Yucca, particularly Nevada's powerful congressional delegation, blame the DOE for what they call politically motivated science. Some environmental groups say the proposed Yucca facility, as well as its location about 90 miles from Las Vegas, is unsafe. The office of Sen. John Ensign (R) of Nevada cites the threat of terrorism as a primary argument against a centralized waste site.

"There's a larger problem with putting [nuclear waste] on trucks and trains and shipping it all over the country to Nevada," says Jack Finn, communications director for Senator Ensign. "What's done in other countries is reprocessing on site, where waste is produced. That's an option Senator Ensign thinks we should pursue more vigorously."

Nuclear reprocessing, which is essentially a form of recycling for spent nuclear fuel, also forms the centerpiece of President Bush's Global Nuclear Energy Partnership project. Mr. Bush's proposal would fund an expansion of nuclear energy facilities in the United States and abroad. The project would also reclaim spent fuel for reprocessing in order to reduce waste and prevent the still-radioactive materials from falling into the hands of militant groups.

"If you were to take fuel rods, you could put them back, theoretically, into a nuclear reactor and burn that down even more," says Mr. Stevens.

But even if scientists perfect reprocessing for widespread use – so far, it has only been shown to work in a lab – Yucca Mountain remains the closest thing to a long-term waste solution, Stevens says. "We see nuclear power as the single environmentally clean, base-load source of electricity. Period. Yucca Mountain is the place, by science and by law."