

By Kevin Robinson-Avila / Journal Staff Writer

UPDATED: Monday, May 4, 2015 at 9:24 am

PUBLISHED: Monday, May 4, 2015 at 12:02 am



Tech Bytes

Kevin Robinson-Avila
krobinson-avila@abqjournal.com

Holtec International Inc. wants to build the nation's first "interim" depository in southeast New Mexico for spent

nuclear fuel from U.S. power plants, but the company faces many hurdles, including opposition from environmental groups and a potential need for a change in federal law.

The company says it will spend about \$80 million on the licensing process alone. If it gets a Nuclear Regulatory Commission license, it would invest about \$200 million to build the first phase of the storage site, which would be about 12 miles north of the Waste Isolation Pilot Plant.

WIPP is a permanent repository near Carlsbad that opened in 1999 for low-radioactive waste from federal facilities. Unlike WIPP, however, Holtec's project would house highly radioactive spent nuclear fuel from commercial power plants for up to 100 years as an "interim" depository until permanent storage is built.

Holtec and many industry experts say an interim site is needed to lower the cost of managing spent fuel, which is currently stored on-site at the power plants where it's generated. An interim site also would offer an alternative for about a dozen nuclear plants that have shut down in the U.S. but continue to store the spent fuel, said Holtec Senior Vice President and Chief Nuclear Officer Pierre Oneid.

"For security reasons, the government doesn't want scores of sites around the country, it wants to consolidate them, and it would be less expensive that way," Oneid said.

In addition, many power plants where spent fuel is now stored are near oceans or in humid environments, which can corrode storage containers over time. And many plants are located just 30 or 60 minutes from major metropolitan areas.

In contrast, the New Mexico site is in a low-population desert zone where dry conditions would make long-term container storage much safer, Oneid said.

Holtec's status as a major player in the global spent-fuel storage industry may help it when applying for the NRC license. The company, which reports about \$500 million in annual revenue, provides the components for all spent nuclear fuel in the U.S. that is now stored in cooling pools at commercial reactors. It also supplied more than half of the roughly 2,100 dry-storage canisters that now contain spent fuel at plants across the U.S.

And it's a major international player, managing storage projects in countries like the Ukraine, where the 1986 Chernobyl accident occurred.

Holtec's proposal may also be boosted by recommendations from a Blue Ribbon Commission on America's Nuclear Future that the federal government appointed in 2011 after President Barack Obama decided in 2009 to abandon the Yucca Mountain repository project in Nevada. The commission's final report said a permanent repository is unlikely until at least mid-century and it recommended seeking an interim site in the meantime.

But even if Holtec gets the NRC license for the proposed storage site – a process the company says will take at least three years – the U.S. Department of Energy may be prohibited by federal law from spending money to transport and store spent fuel there. That's because the current federal Nuclear Waste Policy Act authorizes the DOE to store spent fuel only in a permanent geological repository, not an interim depository, said Don Hancock, director of the Southwest Research and Information Center's Nuclear Waste Program.

Under the act, utilities can seek NRC licenses to collectively store spent fuel in an interim concentrated location. A Holtec-run facility, however, would seek DOE contracts to transport and manage spent fuel.

"What Holtec is proposing is not feasible without a major change in federal law," Hancock said. "The DOE can't spend money on this without changing the law."

And Hancock questions whether Congress would appropriate millions of dollars to do something he says is unnecessary anyway.

"All these containers can continue to be held at power plants," Hancock said.

Hundreds of millions of dollars might also be needed to upgrade railroad tracks for transport of highly radioactive waste, Hancock added.

"My organization and many other environmental groups will oppose this, but, to be honest, I don't believe this idea is going to go anyplace," he said.

There is some disagreement about whether the federal law would need to be changed.

John Heaton, a former Democratic state representative from Carlsbad and now chair of the Eddy-Lea County Energy Alliance – which is promoting the Holtec project – said the law does prohibit the

DOE from opening an interim facility for spent fuel until a permanent repository is under construction. But it's a different situation if the DOE doesn't own the facility, Heaton said.

"In this case, a private company would build and own it," he said. "We'd need to ask legal experts, but I don't believe a private company would be prohibited from doing this as long as it has an NRC license."

Either way, spending federal dollars to transport spent fuel and lease storage space at the site would likely prove controversial in Congress. New Mexico's U.S. senators, Democrats Martin Heinrich and Tom Udall, released statements last week stressing their support for permanent, not interim, solutions.

"We can't put the cart before the horse," Heinrich said. "I cannot support establishing an interim storage facility until we are sure there will be a path forward to permanent disposal."

Udall said he wouldn't support an interim site without a permanent one, no matter where it's built, because the nuclear waste could end up "orphaned there indefinitely."

Even if Holtec does get an NRC license and all legal issues are resolved, the company will be competing for DOE contracts with a West Texas firm, Waste Control Specialists, which has partnered with the French firm AREVA Inc. to store spent fuel at the WCS facility just across the border from Lea County.