

FEATURE

SCE nuclear waste settlement highlights growing problem for shuttered plants

Activists scored a victory in their settlement, but it may not bring a solution on spent fuel any closer.

By Peter Maloney • Sept. 18, 2017



he recent settlement between Southern California Edison and the activist group Citizens Oversight regarding onsite storage of spent nuclear fuel highlights a growing dilemma for nuclear plant owners, particularly owners that are shutting down reactors.

There is a growing list of shuttered nuclear plants across the country that will have to store their spent nuclear fuel onsite for the foreseeable future, or at least until an alternative waste storage site is approved and funded, a goal that has eluded politicians for decades.

However, there are already about 70,000 metric tons of spent nuclear fuel stored at sites around the country, mostly nuclear plants, and that tally grows by about 2,400 tons each year.

The settlement

The settlement between SCE and Citizens Oversight frames out a potential solution, but nuclear experts are cautious about the prospect that the settlement represents a breakthrough in the problem of disposing of spent nuclear fuel. Under the settlement, a Citizens Oversight lawsuit against SCE is dismissed and, in return, SCE agreed to put together an expert panel to

study the problem and submitted to court oversight for that process.

"It puts a little more weight on moving forward on a solution, but it is also a way of getting rid of the lawsuit," said an industry attorney with years of experience in nuclear issues, who requested anonymity because he is involved in active cases.

In the lawsuit, Citizens Oversight argued that the California Coastal Commission erred in issuing a 2015 permit that allows for the expansion of an independent spent fuel storage installation to temporarily store San Onofre Nuclear Generating Station's 3.6 million tons of spent nuclear fuel on the shorefront site of the shuttered plant. The suit raises safety issues and claims the area is subject to earthquakes and tsunamis.

The settlement calls for SoCal Ed, which owns about 78% of San Onofre, to spend as much as \$4 million to explore the feasibility of finding an alternative interim storage site for the spent fuel from the plant. SoCal Ed notified the Nuclear Regulatory Commission of its plans to shut the nuclear plant in June 2013.

"I think it can be dubbed as an incremental win for the local community that opposed onsite waste storage at" San Onofre, Christina Simeone, director of policy and external affairs at the Kleinman Center for Energy Policy at the University of Pennsylvania, told Utility Dive in an interview. "However, I don't see the settlement itself advancing broader solutions to the interim waste storage problem," she said.

Opposition in Nevada

Following passage of the Nuclear Waste Policy Act in 1982, Yucca Mountain in Nye County, Nevada, was chosen as the national nuclear waste repository, and \$36 billion was collected from utilities to fund the project, but work on Yucca Mountain was halted by the Obama administration in 2010.

In June, the Nuclear Regulatory Commission took the first step toward restarting the project, by requesting \$30 million for the Yucca Mountain permitting process. The Trump administration has included \$150 million for Yucca Mountain in its 2018 budget,

comprising \$120 million for the Department of Energy to support the completion of the licensing process and \$30 million for NRC.

But that amount of funding would only begin to cover restarting the permitting process. An April 2017 report by the Government Accountability Office said it could take as much as five years and \$330 million to resume and complete the licensing process. Reviving Yucca Mountain also faces stiff challenges from lawmakers in Nevada, most of whom oppose the site. Plan B would be to establish an interim spent fuel storage site. Efforts to create a consolidated interim storage (CIS) facility have been under way in various locations for years.

The settlement between Citizens Oversight and SoCal Ed calls for the utility to take "commercially reasonable" efforts to relocate San Onofre's nuclear waste to an inland CIS facility or the Palo Verde nuclear plant near Tonopah, Ariz., in which SoCal Ed is a minority owner. The settlement also mentions two sites being privately developed, one in New Mexico by the Eddy Lea Energy Alliance and the other in Texas by Waste Control Specialists.

The settlement calls for SoCal Ed to spend up to \$4 million on consultant fees and other costs associated with finding an offsite repository and gives the utility 90 days to assemble a team of experts to study the problem and then 30 days to solicit from the experts potential locations and schedules for completion of the plan. The settlement also imposes milestones that should provide the local community with increased transparency on the process of finding a new home for the nuclear waste.

Of the three options mentioned in the settlement, Palo Verde is the only one that already stores high level nuclear waste. But expanding Palo Verde to accept San Onofre's nuclear waste does not seem to be a welcome prospect. "We safely and securely store Palo Verde's used fuel. We are not licensed to store used fuel from any other facility, and there is no initiative that makes sense to start the licensing process," Palo Verde spokesman James McDonald said in a statement.

Local stumbling blocks

Palo Verde's reluctance highlights a key stumbling block in securing approval for a nuclear waste repository, winning local approval. Nye County in Nevada supports Yucca Mountain, but most of the state's Congressional delegation oppose it.

Similarly, the two interim sites mentioned in the settlement are supported locally but face tough battles. Backers of the Eddy Lea site in New Mexico include officials from the two counties in the project's name, as well as the cities of Carlsbad and Hobbs and the state's governor. But the state's senators, Martin Heinrich and Tom Udall, both Democrats, are opposed to the establishment of an interim storage facility. Udall says he will not support an interim facility "without a plan for permanent disposal."

Waste Control Specialists' site in Andrews County, Texas, is used for low level radioactive waste. Extending it to include high level nuclear waste enjoys local support, as well as support in Congress.

In January, representatives Darrell Issa (R) from California and Mike Conaway (R), who represents the district that includes the WCS waste facility, introduced the Interim Consolidated Storage Act, which would allow the Department of Energy to use interest from the Nuclear Waste Fund to contract temporary storage facilities for spent nuclear fuel and could have the federal government begin collecting waste from nuclear facilities across the country in as little as five years.

Interim site struggles

But Waste Control Specialists recently asked the Nuclear Regulatory Commission to suspend its application for a high level nuclear waste repository. The Dallas company is struggling to find roughly \$7.5 million it needs to continue the licensing process.

In an April letter, Waste Control Specialists CEO Rod Baltzer told the NRC the company "is faced with a magnitude of financial burdens that currently make pursuit of licensing unsupportable." The prospects for WCS' Texas facility took another hit in June when a federal judge ruled against EnergySolutions' \$367 million acquisition of WCS, saying the acquisition would create a monopoly in nuclear waste disposal.

The fact that there is not an existing interim storage facility and that it could take years for one to be permitted and built would seem to give SoCal Ed an easy out. The settlement says the utility has fulfilled its commitments if, among other things, "an offsite storage facility that is commercially reasonable is not available."

But in the settlement, SoCal Ed agreed to submit to the oversight of the superior court. That oversight will keep pressure on the company to make "commercially reasonable" efforts to find an interim storage facility, said Maria Severson, a partner with Aguirre & Severson, who represented the plaintiffs in the settlement. "We feel it is the best we could get right now," she said.

A request for comment from SoCal Ed was not returned by press time.

Going it alone

A private company could license and build a nuclear waste repository on its own, without legislative backing, but that seems unlikely. Licensing a nuclear waste repository is expensive. Just securing the permits could cost as much as \$100 million. But legislation could make the Department of Energy, which has ultimate responsibility for the disposal of high level nuclear waste, a partner – both in terms of liability and financial support – for any potential interim repository.

Having an interim storage facility could be a welcome change for utilities like SoCal Ed that face opposition to storing nuclear waste at shuttered nuclear plants for the foreseeable future.

At least two more nuclear plants on or near coastal sites are scheduled to close in the next couple of years, Entergy's Pilgrim station in Massachusetts and Exelon's Oyster Creek plant in New Jersey.

But until there is an interim storage facility, utilities will continue to do what they have done for the past several years, sue the federal government to cover the cost of storing spent fuel onsite.

Suing the government

To date, utilities have won 70 judgments against the government for partial breach of contract over DOE's failure to provide a permanent nuclear waste repository. The total of those payments so far are in excess of \$6 billion, according to the Nuclear Energy Institute. And every year a national repository is not ready to accept spent fuel adds another \$500 million to the potential costs of storing nuclear fuel onsite.

Even though the costs will continue to rise, most utilities are not overly concerned about storing waste onsite, as long as they are being reimbursed by the federal government, said the industry attorney. Once a plant is shut, though, they have a greater incentive to get rid of the liability, he said.

Given that liability and the prospect of capital and assets that could be put to more productive uses, "the retirement of nuclear facilities will create new pressure from nuclear companies and local communities for a waste facility," said Simeone. "The question," she said, "is will this be greater or less than the pressure exerted against the facility from the proposed waste storage host community."