

As another plant gets set to close, some say it's 'the end of the nuclear era'

Teri Sforza, Orange County Register, 6-22-16

As the nuclear age comes to an unexpectedly sudden close in California, the fate of the deadly waste it has produced will be debated, again, in San Juan Capistrano on Wednesday night.

John F. Kotek, the U.S. Department of Energy's acting assistant secretary for nuclear energy, will detail a new federal push to place "interim storage" sites for nuclear waste in places allegedly eager for the business, such as Texas and New Mexico.

Kotek will speak with the San Onofre Community Engagement Panel from 5:30 to 8:30 p.m. at the San Juan Capistrano Community Center. The action will be streamed live online.

The idea is to move spent nuclear fuel from the past half century off about 75 sites – including the beaches of San Onofre and, now, Diablo Canyon in central California – while the feds try to figure out where to put it permanently.

After battling for years for a license renewal for Diablo Canyon, California's last operating commercial nuclear power plant, operator Pacific Gas and Electric announced Tuesday that Diablo will be shuttered in 2025 and replaced with renewable energy.

Newly discovered faults near Diablo made it a menace, critics have been arguing, and the fight to keep Diablo operating became expensive for PG&E, both in dollars and public relations.

The closing of San Onofre in 2013, after unexpected tube wear was discovered in its brand-new steam generators, can be chalked up to much the same thing.

"This is not just the end of the nuclear era in California, it's the end of the nuclear era in America," said Mark Cooper, senior research fellow for economic analysis at the Institute for Energy and the Environment at the Vermont Law School, who testified against Diablo's license renewal.

"You just don't need nuclear to keep the lights on or the computers running. The simple fact is that wind and solar and a variety of good management techniques can deliver lower-cost, low-carbon, equally reliable electricity."

Central Californians may learn what Southern Californians learned after San Onofre shut down: The fate of the highly radioactive waste that has piled up for decades moves passionately to center stage.

WHAT NOW?

Technically, nuclear waste is the federal government's problem. To encourage the industry's growth, the feds promised to accept and permanently dispose of spent fuel from commercial reactors by 1998. In return, utilities operating those reactors made payments into a Nuclear Waste Fund to pay for disposal.

That fund collected about \$750 million a year – for a total of about \$40 billion – but the Department of Energy has been unable to find a permanent repository, so it hasn't accepted any waste. In the interim, it has piled up at sites such as San Onofre nationwide.

Utilities sued the federal government for breach of contract and won: The DOE has had to pay more than \$3.7 billion for this failure, and taxpayers could fork over an additional \$21 billion before the problem is solved, according to the U.S. Government Accountability Office.

As a result of that paralysis, San Onofre's operator, Southern California Edison, contracted with Holtec International to build a "robust" underground system to hold San Onofre's waste for decades while the federal government tries to figure it out.

Holtec's underground system features corrosion-resistant, stainless steel fuel canisters encased in a "concrete monolith" topped with a 24,000-pound steel and concrete lid.

San Onofre's decommissioning plan sets aside \$1.27 billion for "management" of future spent fuel.

All waste now cooling in San Onofre's spent fuel pools is slated to move to dry storage in Holtec's system by 2019. Critics fear that the canisters are dangerously close to shore, and that our region has been saddled with a beachfront nuclear waste dump.

'CONSENT-BASED'

The new federal push, to be discussed tonight, could move that waste out earlier than planned.

Several consent-based sites could be up and running even as the question of locating a permanent repository is hashed out.

That could mean moving the fuel from San Onofre by 2039, a decade earlier than currently envisioned, and perhaps sooner, David Victor has said. He chairs the San Onofre Community Engagement Panel, a volunteer group that advises Edison on San Onofre's decommissioning.

While Victor was cautiously optimistic about the new federal push, others remain skeptical. The question has lingered for 50 years, and critics don't expect a solid answer now.

A commission appointed by President Barack Obama recommended that the task be taken away from the DOE.

That move, said Rochelle Becker, executive director of Alliance for Nuclear Responsibility, a nonprofit citizens group, would go a long way toward restoring trust.

But Becker and other activists worry about logistics. Even if the feds manage to get interim waste sites up and running, will the radioactive material be stable enough to move? And if so, how will it be transported?

Others, however, savored Diablo Canyon's coming demise.

"This is a historic agreement," said Erich Pica, president of Friends of the Earth. "It lays out an effective road map for a nuclear phase-out in the world's sixth-largest economy, while assuring a green energy replacement plan to make California a global leader in fighting climate change."

Nuclear power once provided about 20 percent of California's electricity. In less than 10 years, it will provide zero.

"The news that nuclear power will be replaced by renewables is heartening," Sen. Barbara Boxer, D-California, said.

Cooper, the analyst at the Vermont Law School, predicted the wave of nuclear plant closures years ago.

Cheap oil and natural gas have been nuclear's death knell, he has said, along with a growing consensus that renewable energy is the path to the future.