Decades-old war over Yucca Mountain nuclear dump resumes under Trump budget plan

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Abandoned tunnel in the desolate Nevada desert, barricaded only by a chain-link fence, is all that remains of the nation's tortured effort to create a permanent repository for nuclear waste 100 miles northwest of Las Vegas.

After spending $11 billion, the Energy Department met with unrelenting opposition from Nevada and was forced to shut down the program at Yucca Mountain — the only remotely viable option for storing tons of deadly waste that currently has nowhere to go — in 2010.

But that was before Nevada's powerful senior senator, former Senate Majority Leader Harry Reid, retired in January. It was before the election of President Trump, who is looking for a way to keep nuclear power plants operational. Oblivious to the storm of fury it would arouse in Nevada — which doesn't have a single commercial nuclear reactor of its own — Trump has proposed spending $120 million to restart licensing Yucca Mountain to take on a massive storehouse of deadly radioactive spent fuel.

The plan to ship waste from reactors all over the nation to Yucca Mountain and bury it deep in volcanic rock has dragged on for 30 years, ranking among the most intractable political, legal and technical issues in modern U.S. history.

The prospects for Yucca Mountain have fluctuated so many times that its future is unpredictable. But the Trump initiative could bring closure to dozens of communities desperate to get rid of nuclear stockpiles they consider a frightening safety threat.

At an estimated cost of $100 billion, the Yucca Mountain nuclear waste dump would rival the International Space Station in cost and complexity, requiring construction of roughly 300 miles of new railroad tracks to transport the waste, development of advanced robots to work underground and fabrication of special titanium shields to keep the waste intact for, it is hoped, hundreds of thousands of years.

The $120 million outlined by Trump this month in his budget blueprint would restart the ponderous licensing process that was abandoned by the Obama administration and begin plans for a temporary storage facility at an undetermined location.

With 99 operating reactors, supplying about 20% of the nation's electricity, and four more under construction, the nuclear industry considers a permanent storage facility such as Yucca Mountain to be a top priority. About two dozen more retired or demolished plants have stranded waste in need of a permanent home.

Proponents say the dump will provide safe disposal for waste parked at power plants from the shores of the Pacific in California to the banks of the James River in Virginia. The waste, which generates enormous heat from nuclear decay, would be placed in side rooms off the existing five-mile-long main tunnel.

The nation's utilities have a total of 79,000 metric tons of spent fuel already in reserve, and are producing another 2,000 tons every year. Yucca Mountain's legal limit is 70,000 tons, though the site has the physical capacity to handle all the existing waste and much more.

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Nevada officials have put every ounce of their political muscle into stopping the dump, worried that a radioactive spill or even the possibility of one could

destroy their tourist economy. There are also fears that, in the distant future, the dump might leak radioactivity into groundwater supplies — that has happened at several Energy Department plants. The state is quickly gearing up for a new fight, readying new legal strategies and pushing a resolution through the state Legislature.

“The Trump administration’s attempt to revive Yucca Mountain is naive and a waste of taxpayer dollars,” said Sen. Catherine Cortez Masto (D-Nev.), who successfully fought off the Energy Department for years when she was the state’s attorney general. “It is a nonstarter.”

Cortez Masto said the state is united against the dump across party lines, including Republican Gov. Brian Sandoval, another former attorney general.

“Yucca Mountain is just a hole in the ground,” she said in an interview. “It is time for members of Congress to recognize that Yucca Mountain won’t work.”

Energy Secretary Rick Perry made a low-key visit to Yucca Mountain on Monday and met with Sandoval afterward, saying it was “the first step in a process that will involve talking with many federal, state, local and commercial stakeholders.”

Sandoval said he had “reaffirmed my unwavering opposition to any potential progress toward developing the site as a potential destination for high-level nuclear waste.”

Environmental groups have opposed the dump as well, part of an effort to undermine any further reliance on nuclear power. “If you don’t solve the waste problem, it is very difficult to make the case for nuclear power,” said Judy Treichel, executive director of the Nevada Nuclear Waste Task Force.

But the Nuclear Energy Institute, a Washington trade group, sees political support growing for the dump. “There are signs that the new administration

wants to end the stalemate, but we need resolve from both branches of government," said spokesman John Keeley.

Longtime nuclear waste watchers see a potential sea change. "As long as the Trump administration is willing to spend political capital, we will move slowly forward to placement of spent fuel in Yucca Mountain," said David Leroy, an Idaho attorney who was the federal government's "nuclear waste negotiator" and led an effort in the 1990s to find a state willing to voluntarily take waste on an interim basis.

The bumpy road to Yucca Mountain began with the Nuclear Waste Policy Act, a 1982 law that called for the establishment of two nuclear waste dumps, one in the eastern U.S., one in the West. But in 1987, Congress directed the Energy Department to put a single dump in Nevada, ending what was supposed to be a process of scientific evaluation. The state quickly branded the legislation "The Screw Nevada Act."

The state shocked the Energy Department with its political and legal tenacity. It successfully fought the federal standard that said the site must be capable of keeping any waste isolated for 10,000 years. A federal court ruled the waste had to be kept safe for many hundreds of thousands of years — as long or longer than humans have roamed the Earth. The state engineer shut off water to the site. Las Vegas officials threatened to arrest anybody who tried to transport waste through the city.

Then Reid, the former Senate majority leader, cut off funding for the Nuclear Regulatory Commission to license the dump and placed political allies in key regulatory positions capable of snarling the process.

Nevada has filed some 300 legal "contentions" against the Energy Department's license, each of which must be examined by a special board. The state is swinging into action to file even more contentions if the license action is resumed, said Robert Halstead, chief of the state's nuclear office.

“They think because Reid is gone, this will be a cakewalk. Wrong,” Halstead said. “I see them going through a licensing procedure that will cost $1.5 billion and take five years, with a 50% chance of success.”

The delays have resulted in staggering costs. The government promised nuclear utilities decades ago that it would take the spent fuel by 1998. Customers have paid a fraction of a penny on every kilowatt-hour of electricity into a fund for waste storage, which now contains about $36 billion.

The Energy Department’s failure to keep its promise to move forward with a disposal project, even while it collected the money, has created a swamp of litigation.

Most of the nation’s commercial reactors, including the shuttered San Onofre plant in northern San Diego County, are located on rivers, lakes and oceans — a risky location for storing highly radioactive fuel rods. And much of the nation’s nuclear weapons waste, which could also end up at Yucca Mountain, is stored in leaky tanks and steel drums.

The nation's nuclear utilities have won judgments and settlements of $6.1 billion, arguing that the government’s failure to take the waste has increased their storage and operation costs, said Jay Silberg, an attorney representing the industry. And the Energy Department has projected that it may be liable for up to $25 billion more.

“Maybe we are getting back on track,” Silberg said of Trump’s budget plan. “I don’t think anybody is jumping for joy, but there is optimism.”