

NEWS

Colorado and nation face 70,000-ton nuclear waste burden

The government has paid utilities \$4 billion as court-ordered compensation for storing nuclear waste

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The federal government stepped up efforts to deal with the nation's growing, heavily guarded stockpiles of nuclear waste Tuesday, convening westerners in Denver to search for a path to a locally accepted site somewhere for deep burial.

That radioactive waste — 70,000 tons, increasing by 2,000 tons a year — comes from nuclear power plants that provide one-fifth of the electricity Americans use, twice the share the wind power industry expects to provide by 2020. More nuclear waste comes from nuclear weapons. Decades of failure to find a central disposal site has backed up spent fuel at 99 commercial plants and 14 shut-down plants, including Fort St. Vrain north of Denver, and forced the government to pay utilities \$4 billion as court-ordered compensation.



The Fort St. Vrain plant, closed as a nuclear facility in 1989 because of operational problems, was reopened in 2001 as a natural-gas-fired power plant.

Denver Post file

“It makes sense to deal with this now instead of kicking the can down the road,” acting Assistant Energy Secretary John Kotek said in an interview before Tuesday’s session.

“At a minimum, it is about responsibly dealing with waste that was generated for our benefit. We’ve benefited from the electricity. We benefited from the nuclear deterrence.”

U.S. officials are acting as China and other nations construct nuclear plants as a cleaner source of energy to meet obligations under the International Climate Change Treaty. Nuclear plants don’t emit carbon dioxide and other heat-trapping gases that scientists blame for global warming. A new U.S. plant is nearly complete in Tennessee. Four more are planned in Georgia and South Carolina.

The Department of Energy is providing \$40 million to spur efforts to design smaller “modular nuclear reactors” that could provide greenhouse gas-free electricity with less risk of the nuclear disasters seen in Japan, Chernobyl and at Three-Mile Island.

Other nations relying heavily on nuclear energy, such as Sweden and Finland, also are working toward deep burial of radioactive nuclear waste, a task for which the United States has stashed \$30 billion.

“We’re certainly trying to do all we can to keep the options open,” Kotek said. While enabling more nuclear power as part of the nation’s electricity grid “is not the primary purpose” of the government-led forums in Denver and other cities, he said, “having a waste disposal path would make nuclear more acceptable ... It’s really essential to have state-level buy-in.”

For 22 years, federal officials worked toward central disposal at Yucca Mountain in Nevada. Nevada politicians opposed the project. President Obama in 2009 declared Yucca Mountain an unworkable solution.

A federal commission for dealing with spent fuel, including current Energy Secretary Ernest Moniz, in 2013 hatched a new strategy that prioritized seeking local consent for a “deep-mined geological repository.”

Tuesday’s forum in Denver, drawing about 50 participants ranging from former Wyoming Gov. Mike Sullivan to anti-nuclear group members, followed sessions in Chicago, Atlanta and Sacramento. After a final session July 21 in Minneapolis, energy officials said they will launch a process for winning community support.

Local resistance to nuclear waste remains fierce. The recent plans to drill an exploratory bore hole three miles deep under North Dakota, for nuclear weapons waste, were scuttled this year as residents objected. Federal energy officials say they’re now looking at bore hole sites in South Dakota to test geological conditions.

“There’s no waste involved. ... It is just to determine if it would be feasible,” DOE spokeswoman Alisa Trunzo said.

The only nuclear power plant in Colorado operated from 1979 to 1989 at Fort St. Vrain, 40 miles north of Denver near Platteville — a center for Colorado’s oil and gas drilling boom. Xcel closed this gas-cooled reactor in 1989 after facing technical difficulties. Federal armed guards lugging machine guns patrol the spent fuel, stored behind barbed wire in a special concrete building encased in protective casks.

Some of the Colorado nuclear waste moved by truck to a facility in Idaho until Idaho's governor refused to accept it. Today, more than 14 tons remains at Fort St. Vrain.

The power plant still runs, converted to natural gas. Xcel has no plans to generate electricity in Colorado using nuclear power, utility spokesman Mark Stutz said. "Our trend in recent years has been more toward the development of wind and solar." However, Xcel operates three nuclear power plants in Minnesota.

The forums are designed to give federal officials a sense of what matters most in communities where leaders might want to embark on nuclear waste disposal. It would be done deep underground, where rocks conditions are right to isolate the radioactive waste for hundreds of years.

"We're not at all at the stage of looking at locations," Kotek said. "We're developing a process. What matters to people? What do they think is important? Are benefits going to be the driver?"

Some participants have indicated an interest in developing their communities as hubs for scientific research and development.

Guarding the spent fuel at 113 locations is expensive. Energy officials said waste is stored in different ways at each site and eventually would have to be re-packaged for safety. The waste in Colorado is clear to remain until at least 2030, or until a permanent disposal facility is built.

TAGS: **ENERGY TRANSFER EQUITY, JOHN KOTEK, MIKE SULLIVAN (POLITICIAN), NUCLEAR WASTE, U.S. DEPARTMENT OF ENERGY, XCEL ENERGY**



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