Feds want nuclear waste train, but nowhere to go

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ATLANTA (AP) — The U.S. government is looking for trains to haul radioactive waste from nuclear power plants to disposal sites. Too bad those trains have nowhere to go.

Putting the cart before the horse, the U.S. Department of Energy recently asked companies for ideas on how the government should get the rail cars needed to haul 150-ton casks filled with used, radioactive nuclear fuel.

They won't be moving anytime soon. The latest government plans call for having an interim test storage site in 2021 and a long-term geologic depository in 2048.

No one knows where those sites will be, but the Obama administration is already thinking about contracts to develop, test and certify the necessary rail equipment.

U.S. Energy Department officials did not return messages seeking detailed comment. The U.S. Nuclear Regulatory Commission and Department of Transportation share responsibility for regulating shipments.

"We know we're going to have to do it, so you might as well do it," said James Conca, senior scientist at the geoscience and environmental consulting firm UFA Ventures Inc. He has monitored a nuclear waste disposal site, helped design another and worked on cleanup efforts.

In a public solicitation, the Energy Department asked for opinions on whether it should buy or lease the rail cars. It expects the cars could last 30 years, run at standard speeds on regular tracks, accommodate the heavy protective casks and be used up to eight times annually. Besides a car to carry the cask, the trains would have buffer cars to maintain a safe distance between the crew and the radioactive cargo.

The U.S. military already sends fuel by rail from its reactors on Navy ships to federal labs for storage. The civilian power industry hauled more than 2,300 tons by rail from 1979 to 2007, averaging just over nine trips annually, according to NRC data.

Nuclear fuel is extremely hot and radioactive when it is removed from a reactor. Utilities first cool spent fuel in a water-filled pool, then can transfer it to massive casks that sit on land. Neither option is supposed to be final.
One of the biggest rail shippers was Progress Energy, which moved spent fuel from two of its plants to a third plant, Shearon Harris in North Carolina, because it had spare room in its spent fuel pool. The rail shipments prompted protests and appeals from environmental groups and local governments, and the company announced in 2003 it would halt those shipments after building land-based storage facilities at its other plants, eliminating the need for the transfers.

"Their story to us was that it was basically they were tired of fighting," said Jim Warren, executive director of NC WARN, which opposed the transfers on safety grounds.

The tracks were supposed to lead to a depository at Yucca Mountain in Nevada, where Congress intended to send radioactive fuel. Instead, the Obama administration cancelled a project that had been criticized as inadequate and opposed by many Nevadans.

By law, the federal government is responsible for nuclear fuel disposal and once charged electric customers to fund its work. After a lawsuit, the Energy Department quit collecting that fee this year.

No one is certain what comes next. Federal timelines would put off many big decisions about a permanent resting place for the waste until long after Obama leaves office.

Industry officials are praising even limited signs of forward movement, including federal interest in a train.

"This is a good timing," said Everett Redmond, who works on waste policy for the Nuclear Energy Institute, an industry lobbying group. "You don't want to wait until you're close to opening the facility to try and design a rail car."