

2017

UNITED STATES NUCLEAR WASTE DISPOSAL SOLUTIONS

A few suggestions on what to do with the Nation's nuclear waste:

1. **Recycle** all nuclear waste to reduce the volume. Other countries do just that. The current Volume of our waste needs to be reduced.
2. Waste that cannot be recycled will be placed in a **Repository**. We have one.
3. Waste will be packaged, inspected regularly, and re-packaged until science finds a safer way to leave it alone. It will not be "buried".

Solutions to this problem have been around for many years. It only costs money.

Thank you.

Attached: The Heritage Foundation Commentary

Let the Government or Board



COMMENTARY Environment

Recycling Nuclear Fuel: The French Do It, Why Can't Ours?

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Jack Spencer oversees research as Vice President for the Institute for Economic Freedom and Opportunity.

What if the government allowed you to burn only 25 percent of every tank of gas?
Or if Washington made you pour half of every gallon of milk down the drain?

What if lawmakers forced us to bury 95 percent of our energy resources?

That is exactly what Washington does when it comes to safe, affordable and CO₂-free nuclear energy. Indeed, 95 percent of the used fuel from America's 104 power reactors, which provide about 20 percent of the nation's electricity, could be recycled for future use.

To create power, reactor fuel must contain 3-5 percent burnable uranium. Once the burnable uranium falls below that level, the fuel must be replaced. But this "spent" fuel generally retains about 95 percent of the uranium it started with, and that

uranium can be recycled.

Over the past four decades, America's reactors have produced about 56,000 tons of used fuel. That "waste" contains roughly enough energy to power every U.S. household for 12 years. And it's just sitting there, piling up at power plant storage facilities. Talk about waste!

The sad thing is, the United States developed the technology to recapture that energy decades ago, then barred its commercial use in 1977. We have practiced a virtual moratorium ever since.

Other countries have not taken such a backward approach to nuclear power. France, whose 59 reactors generate 80 percent of its electricity, has safely recycled nuclear fuel for decades. They turned to nuclear power in the 1970s to limit their dependence on foreign energy. And, from the beginning, they made recycling used fuel central to their program.

Upon its removal from French reactors, used fuel is packed in containers and safely shipped via train and road to a facility in La Hague. There, the energy producing uranium and plutonium are removed and separated from the other waste and made into new fuel that can be used again. The entire process adds about 6 percent in costs for the French.

Anti-nuclear fear mongering has proved baseless. The French have recycled fuel like this for 30 years without incident: no terrorist attack, no bad guys stealing uranium, no contribution toward nuclear weapons proliferation, and no accidental explosions.

France meets all of its recycling needs with one facility. Indeed, domestic French reprocessing only takes about half of La Hague's capacity. The other half is used to recycle other countries' spent nuclear fuel.

Since beginning operations, France's La Hague plant has safely processed over 23,000 tons of used fuel--enough to power France for fourteen years.

Their success has sparked plenty of interest abroad. The French company AREVA

has already helped Japan with its reprocessing facility and is currently looking at the feasibility of building a similar plant in China.

The British, Japanese, Indians, and Russians all engage in some level of reprocessing.

Of course, there is still waste involved. But recycling produces much lower volumes of highly radioactive waste, and the French deal with it effectively--placing some waste in short-term, interim storage or preparing the rest for long-term storage in their version of Yucca Mountain.

All is not perfect in France. They are still working to open a permanent geologic storage facility. But the critical issue is that they have an organization to handle used nuclear fuel that allows their program to advance without being held hostage to the politics of geologic storage.

If the United States is serious about reducing CO₂ and energy dependence, it must get serious about nuclear power and begin recycling used nuclear fuel.

A viable reprocessing capability not only would give the United States a valuable energy resource, it would reduce the amount of material going to Yucca Mountain. The U.S. has already produced enough waste to nearly fill Yucca's legal limit of 70,000 metric tons--subsequent studies estimate that its actual capacity is about double that amount and some believe that it is even greater.

It would also put the United States back on the map as a leader in commercial nuclear technology, which today it is not.

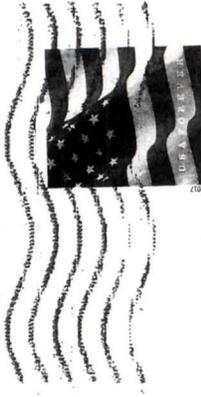
Nuclear fuel reprocessing is a safe activity that should be part of America's nuclear energy program. It can be affordable and is technologically feasible. The French are proving that on a daily basis. The question is: Why can't ours?

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