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# Whatever America's energy future, our nuclear waste problem isn't going anywhere

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Electricity affects nearly every aspect of modern life, from the food supply to health, transportation, housing and emergency services. Lives depend on reliable access to electrical power and nuclear power plants generate a fifth of all U.S. electricity. It would take decades to make up their loss if these indispensable plants were closed, not to mention that people would have to live with 20% less energy.

But there's a larger problem, and the same people wanting to stop nuclear power through the Green New Deal won't allow the government to fix it: nuclear waste disposal. There are currently 100,000-tons of waste spread over 30 different states, from New Hampshire to California, generated by 98 nuclear reactors at 60 vitally needed nuclear power plants.

And it won't matter if the Green New Deal becomes reality or not: Even if every nuclear reactor in the U.S. were immediately shut down, nuclear waste would not go away.

Why are things so bad, and why can't we get rid of the waste? After all, the Nuclear Waste Policy Act (NWPA) of 1982 directed the Department of Energy (DOE) to develop a site to permanently store waste

from nuclear power plants, and nine locations were considered: Yucca Mountain in Nevada; the Vacherie salt dome in Louisiana; the Richton and Cypress Creek salt domes in Mississippi; the salt beds in Deaf Smith and Swisher counties in Texas; the Davis and Lavender canyons in Utah; and the volcanic basalt beneath Hanford, Wash. In addition, the DOE looked at other, more exotic alternatives, included burying waste at sea or shooting it into space.

Any of these options should have worked. And in 2002, twenty years after passing NWPA, the President and Congress finally approved Yucca Mountain in Nevada as the site for disposing this waste, and a labyrinth of storage facilities was constructed deep underground.

Then politics got in the way. On January 5, 2009 Senator Harry Reid of Nevada boasted that President Obama “reiterated his promise to work with me to prevent the dump from ever being built.” And in 2010, after spending \$15 billion, the Yucca Mountain project was stopped over still-debatable concerns of possible radiation leakage into groundwater.

This occurred despite a nonpartisan, 1999 US Geological Survey analysis that concluded continuous monitoring would provide “enough confidence for [the] safety and stability” of the facility. An additional, independent safety evaluation of the site, sponsored by the U.S. Nuclear Regulatory Commission in 2015 concluded, “DOE’s proposed [Yucca mountain] repository as designed will be capable of safely isolating used nuclear fuel and high-level radioactive waste for the *one-million-year* period.”

What's the situation today? It hasn't changed. In the meantime, taxpayers continue to fork over \$800 million a year for temporary storage all over the U.S. because the government isn't allowed to consolidate nuclear waste. All because of politics.

If the goal is finding the perfect site — a completely risk-free facility, good for millions of years — then *no* site is viable, not even the already-built Yucca Mountain. It's the classic example of "better is the enemy of the good enough." As a result, nuclear waste is still scattered at 60 different locations instead of stored safely at one. There are 60 ways for Murphy's Law to have its effect, and 60 different sites mean 60 targets of opportunity for terrorists to steal nuclear waste to make a "dirty bomb," a security nightmare that would cause wide-spread panic.

The problem is unique to the U.S., as the vast majority of countries dispose their nuclear waste in deep geological repositories; a small minority reprocesses their waste, but this raises proliferation concerns.

The time to dispose of nuclear waste is now, and stop kicking that can down the road — either by reopening Yucca Mountain or by building other sites. Because when something does happen that compromises our current dispersed system of storing waste, then by past experience our nation will overreact and seek out a quick, ill-thought out solution. That's when a really disastrous scenario may occur.

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*Command. His thriller Kill Zone, just released by Forge Books, is about the threat posed by the failure to secure nuclear waste.*