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Viewpoint: Turning old bombs into carbon-free electricity

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Just across the Savannah River in South Carolina on a 310 square-mile track of land sits a federal project 64 percent complete. Yet the project's future is uncertain because of the age-old problem of big government. Here's five good reasons why we should finish what is called the "MOX" facility at the Savannah River Site.

This plant, essentially a nuclear kitchen, will employ high-tech engineer types and turn old, surplus nuclear war-heads into commercial nuclear reactor fuel. Plutonium from old bombs go in, and fuel for plants like Vogtle comes out. We have so much surplus bomb material that this plant will be busy for at least 20 years.

Second, the plant itself is a construction marvel. It will contain 35,000 tons of steel, which is five times as much as the Eiffel Tower. There will be 85 miles of process piping—enough to stretch across the English Channel. Over 170,000 cubic yards of concrete will be used, which is enough to make four Washington monuments. The warehouse space at the facility is four times the square footage of a **Walmart**. Obviously, all the pipefitters, electricians, instrument fitters, structural steel workers, machinists, millwrights, welders, sheet metal workers, carpenters, truck drivers, laborers, engineers, and supervisors—1,600 good paying construction jobs—spend their wages in the region and have a direct impact on the economies of Augusta and Aiken.

Third, this option treats surplus plutonium as a resource instead of a waste product. Rather than burying the old bombs or keeping them in a warehouse, the plant will convert them to fuel that will be used to generate carbon-free energy at commercial nuclear facilities. This will become even more important if the federal government has its way with the new EPA 111(d) rule. The pending rule requires states like Georgia and South Carolina to reduce their carbon emissions drastically without regard to economic impact. The MOX plant under construction helps us reach our goal.

Fourth, this recycled plutonium will be available at a discounted price compared to natural uranium fuel. Ratepayers and shareholders will benefit from cheaper reactor fuel—especially in these times when low natural gas prices are causing nuclear plants to be at a financial disadvantage. If and when this new plant goes on line in 2019, companies like Georgia

Power, Duke, Scana, Dominion Services and TVA could begin using the fuel as early as 2020. Any plant modifications needed to burn the fuel will be covered by the Department of Energy—not by the utility and its ratepayers.

Fifth, this plant is about promises made and promises kept. In 2000, the United States signed an agreement with Russia to eliminate 34 metric tons of plutonium. That is enough fissile material to power 17,000 nuclear weapons. Russia will be burning their material in fast reactors now in development. With the political climate in Russia as it is right now, renegotiating would let Russia off the hook. Too often our government negotiates in good faith only to change policies with the next set of political leaders who get to Washington.

This MOX plant should be receiving wide-spread support, but because it is the middle of one of the most secure federal sites in America, no one knows about it. Yes, the project is facing scheduling and cost challenges. Not surprising when you think that this was a first-of-a-kind nuclear technology facility in the US, and the first nuclear new build in decades. Additionally, the plant has to balance dual regulatory requirements from the DOE and Nuclear Regulatory Commission.

Finally, we are talking about plutonium here. It is material that has the capability to destroy life as we know it on the planet. I, for one, don't want to drive by an-almost finished \$4 billion complex knowing I did nothing to finish this important job.