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Please take the following under consideration:

The "THREE MAIN REASONS" many scientists, politicians, economists, Indigenous nations and ordinary people oppose new nuclear development

Nuclear energy creates many unnecessary financial, environmental and human health risks. This is why nuclear energy is trending down – globally more reactors shut down than start up every year. The U.S. Energy Administration predicts that U.S. electricity generation from nuclear power will most likely decline from its 2019 share of about 20 percent to 12 percent by 2050. There are three main reasons for this.

1. Nuclear energy is the most expensive way to generate electricity.

The main reason for the downward trend is the cost. The two big Vogtle reactors in Georgia were the most recent nuclear plants built in decades in the U.S. Taxpayers in that state have already spent billions and their electricity will be much more expensive to pay off the project. The two reactors were supposed to cost \$14 billion and open in 2017. They eventually cost \$34 billion and opened in 2023 and 2024.

Smaller nuclear reactors (SMRs) will cost even more per unit of electricity generated. The reason is economies of scale: a reactor generating three times as much electricity as a smaller plant does not need three times as much concrete or three times as many operators. The first SMR project in the U.S., NuScale, failed in 2023 because there were not enough customers for its expensive electricity. Construction cost estimates for the project had been steadily rising – from USD \$4.2 billion for 600 megawatts in 2018 to a staggering USD \$9.3 billion for 462 megawatts. Renewable and storage systems are much less expensive to build and operate.

2. Mining uranium and splitting atoms creates a toxic waste product: radioactivity.

All nuclear reactors create radioactive waste products when operating. Mining the uranium fuel creates tons of radioactive mine tailings. Radioactivity cannot be turned off; that's what makes it so dangerous. Used nuclear fuel – high-level radioactive waste – must be kept isolated from all living things for hundreds of thousands of years, until the radioactivity degrades to a safe exposure level. Exposure to radioactivity even at low doses increases the risk of cancer, leukemia, anemia, genetic damage, immune system damage, strokes, heart attacks, and low intelligence. The U.S. has not been successful in finding a place to permanently store high-level waste. In Canada, Indigenous nations overwhelmingly oppose new nuclear development primarily because the nuclear waste will end up on Indigenous homelands. (Check out the report and video, Indigenous Views on Nuclear Energy and Radioactive Waste: <https://cedar-project.org/indigenous/>)

3. Nuclear power is too slow to help mitigate the climate crisis.

A 2023 report by the U.S. National Academies of Sciences, Engineering and Medicine found that most advanced reactors, including small modular nuclear reactors (SMRs), “will confront significant challenges in meeting commercial deployment by 2050.” In contrast, wind and solar farms and storage systems can be built quickly and less expensively. Renewables, storage, energy efficiency and conservation, demand-side management, and interties can provide reliable baseload electricity. Waiting for SMRs to arrive is delaying the inevitable energy transition from fossil fuel electricity generation. Waiting is courting climate catastrophe.

Thank you (Chi-Woliwon) for reading to the end.