Reviving nuclear power in Vermont — or anywhere — would be a health hazard

By Joseph Mangano

Vermont is a model for future energy generation. The Vermont Yankee nuclear plant has closed and now over 99 percent of the state's electricity is from hydroelectric, wind, solar, and biomass — renewable sources.

Sources like coal, oil, nuclear, and natural gas — which cause climate change and pollute the environment — were major sources of electrical power for a long time, but are a thing of the past, at least in Vermont.

But recently, Governor Phil Scott proposed changing a current law to include nuclear power as a renewable source of electricity. Some believe that if bill H601 becomes law, nuclear power might make a comeback in the Green Mountain State.

Why would nuclear power be considered renewable? Virtually all reactors in the world today use radioactive uranium-235 atoms to generate power. U-235 is found in rocks, soil, and water, and will eventually run out.

Along with "renewable," supporters of nuclear power often claim it is "emission-free" or "zero-emission." While reactors routinely release less climate-changing gas than coal, oil, or gas plants, they do release some (like carbon-14). And preparing uranium-235 for reactor [fuel] requires mining, milling, fabrication, enrichment, and purification — each emitting large amounts of greenhouse gas.

Reactors release their own environmental emissions. Over 100 radioactive chemicals are created after splitting U-235 atoms — the same as atomic bomb explosions. Even if reactors don't experience meltdowns like Chernobyl and Fukushima, they must routinely release some of the 100-plus chemicals into the local environment. These waste products enter the body through breathing, food, and water, raising risk of cancer, birth defects, and other diseases.

Vermont's experience with health hazards of reactors should be proof of why nuclear power should not be part of its future. Vermont Yankee's shutdown in late 2014 was part of a movement that reduced the number of reactors in New England from nine to three since the early 1990s.

Vermont Yankee is situated in the town of Vernon, where counties in three states converge. Windham (Vermont) county, Cheshire (New Hampshire) county, and Franklin (Massachusetts) county are all close to the site; the large majority of the 195,000 residents of these three counties live under 25 miles from the reactor.

According to the Centers for Disease Control statistics, the infant death rate in these three local counties in the most recent period (2021-2025) fell 39% from a decade earlier, when Vermont Yankee was still operating. The decline was only 22% elsewhere in the three states, and 8% in the U.S. asl a whole. Previous research has identified declines in local infant deaths after reactor shutdowns, as the fetus and infant are most sensitive to radiation exposure.

In neighboring New York state, Governor Kathy Hochul has proposed adding up to $33 billion in electric bills to pay maintenance costs needed to keep the state's four aging reactors in operation until 2049. She also has proposed building five large new nuclear stations. If New York's plans become reality, it will increase the chance that some of this power could end up in Vermont.

Vermont leaders should reject H601 for public health reasons, and maintain the state's current electricity mix as an example for other states.

— Joseph Mangano, MPH MBA, executive director of the Radiation and Public Health Project, based in New Jersey, wrote this piece for the* Brattleboro Reformer*, March 16, 2026

Letter: Nuclear not affordable or clean

To the Editor, *Bennington Banner* (Vermont):

Governor Scott, Lt. Governor Rodgers, and Republican legislative leadership are all on record promoting new nuclear power for Vermont. Phil Scott continues to push for legislation labeling nuclear as clean and seeking to remove the requirement that the General Assembly must approve any new nuclear power.

The Trump Administration has been surprisingly clear about its energy policy for the nation. "Drill Baby Drill," regarding fossil fuels. "Beautiful Clean Coal," signaling a revival for coal burning power plants. As for nuclear, Trump is calling for the reduction of "red tape" like environmental and safety testing for proposed small modular reactors, all the while attacking renewable energy and energy efficiency programs. Of course, Trump's energy policy labels climate change as a hoax.

Recently it was reported that the State of Vermont has spent 530 million ratepayer dollars cleaning up the Vermont Yankee nuclear [reactor] site in Vernon. It has also been reported that, to date, the site has filled 1,462 rail cars of low-level radioactive waste, most of which has been shipped to a dump in Andrews County, Texas. Down in Andrews many of the locals are not happy about being dumped on by Vermont. What remains at the site in Vernon are 58 giant casks of high-level radioactive waste sitting on the banks of the Connecticut River with nowhere to go. Nuclear is not affordable or clean.

Going backwards is not a good policy path for Vermont. We must demand better from our leaders.

— Chris Williams, Hancock, Addison County, VT

A History of Scientists' Warnings About Radiation Exposures

Cindy Folkers and Ian Fairlie have published an essential book:

The *Scientists Who Alerted Us to the Dangers of Radiation* (Ethics International Press, 2024) presents the findings of 39 scientists who have studied and raised alarms over the health effects of radiation exposure and who often suffered severe harassment from government and industry insiders. The scientists showed that from the beginning of the atomic age radiation risks have "consistently been underestimated." The authors report:

"[R]ecent epidemiology findings indicate that these radiation scientists were correct … but by larger margins than we had thought. For example, increased radiogenic risks are routinely ignored, the protections of children and women are not addressed, large dose/risk uncertainties are passed by, internal radiation exposures remain largely unexamined, cardiovascular risks ignored, and the hazards of common radionuclides are systematically minimized."

Nine of the radiation scientists profiled in the book "observed increased incidences of childhood leukemias and solid cancers near U.S. nuclear facilities."

"Indeed," the authors note, "a strong pattern of epidemiological evidence indicates increased leukemia and solid cancer risks near all reactors world-wide, not just those in the U.S."

The most important study on this matter was the German government's 2008 KiKK study.*

"This found a 120% increase in leukemias and a 60% increase in all cancers among infants and children under 5 years old living within 5 km of all German NPPs" (nuclear power plants).

"KiKK was a large well-conducted study; its findings were scientifically rigorous; its evidence was particularly strong; and the German government's radiation protection agency (the BfS) which commissioned the study, confirmed its findings. A BfS-appointed expert group stated:

"The present study confirms that in Germany there is a correlation between the distance of the home from the nearest NPP [nuclear power plant] at the time of diagnosis and the risk of developing cancer (particularly leukemia) before the 5th birthday."

"The KiKK study refrained from discussing the reasons for its findings. However one hypothesis is that the infant leukemias were a teratogenic effect of in utero exposures from intakes of radionuclides during fetal development in pregnancies. The risks to embryos and fetuses that are exposed near NPPs were apparently much larger than currently estimated. For example, blood-forming tissues are considerably more radio-sensitive in embryos and fetuses than in adults. The combined immaturity of children's nervous and blood-forming systems makes them particularly vulnerable to chronic radiation exposures from NPPs."

(This highly influential study, followed three years later by the Fukushima-Daiichi triple reactor disaster in Japan, moved Germany's government to phase out all 17 of its nuclear power reactors.)

The authors note that official organizations find it difficult to accept that cancer increases near NPPs may be due to radioactive emissions. Their view is that exposures to radioactive emissions from NPPs are too small to explain the increases. They assume: 1) that official risk models are correct; and 2) that official dose estimates are without uncertainties.

However, the UK government's 2005 "Report of the Committee Examining Radiation Risks of Internal Emitters" found that "the models used to estimate radiation doses from nuclear plants are now known to be highly uncertain and unreliable."

* German KiKK study: "Childhood Cancer in the Vicinity of Nuclear Power Plants," P. Kaatsch et al (2008), *International Journal of Cancer*, #122; and "Case-control study on childhood cancer in the vicinity of nuclear power plants in Germany 1980 - 2003," C. Spix et al (2008), *European Journal of Cancer*, #44 ***— JL***

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Massachusetts, which identified elevated cancer incidence among populations living closer to NPPs.

They also noted some limitations to the study, including that it did not incorporate direct radiation measurements and instead assumed equal impact by [emissions from] all NPPs.

— Maya Brownstein is the Media Relations Manager in the Office of Communications, Chan School of Public Health.

— Link to Harvard report is here: https://www.nature.com/articles/s41467-026-69285-4