

Submitter: Andy Harris
On Behalf Of: Oregon Physicians for Social Responsibility
Committee: Senate Committee On Energy and Environment
Measure, Appointment or Topic: SB215

Chair Sollman, Vice-Chair Smith and members of the Committee:

My name is Dr Andy Harris, and I am testifying for Oregon Physicians for Social Responsibility in opposition to SB 215 and 216.

In considering whether to repeal Oregon's 1980 Ballot Measure 7, please consider the following:

Nuclear energy is notorious for cost overruns and years of delays. The typical time for planning and construction of a nuclear reactor is 10-15 years.

Nuclear is by far the most expensive source of energy. It depends on government (taxpayer) funding to extract and mill uranium, to subsidize construction costs, to clean up radioactive waste, and to indemnify reactors against radioactive leaks and meltdowns.

Nuclear reactors, including small modular nuclear reactors (SMRs), use a process of nuclear fission, and all produce radioactive waste. The isotopes can remain radioactive for tens of thousands of years.

A permanent repository for radioactive waste did not exist in 1970, and it still does not exist today.

Spent radioactive fuel is currently stored next to reactors - a danger to people living downwind and posing a risk of terrorist attack by powerful drones.

Small modular nuclear reactors are experimental, an unproven entity since none have been built in the U.S.

SMRs are hardly small, typically measuring 76 ft in height and 15 ft in diameter.

Uranium mining is usually done on Indigenous lands, exposing workers and communities downwind to ionizing radiation that can cause cancer, birth defects, damaged DNA, leukemia, cardiovascular disease, cataracts, and thyroid disease.

SMRs are touted as "clean energy" by the nuclear industry. But dirty fossil fuels are used in the mining and milling of uranium, heavy equipment site prep, construction and transportation of SMRs, and building waste storage facilities.

Nuclear reactors are at risk of malfunction and radiation leaks, which may lead to meltdowns and disasters, such as at Three Mile Island (1979), Chernobly (1986) and Fukushima (2011)

Nuclear power technology can be subverted to the development of nuclear weapons by rogue nations. X-energy's proposed SMR uses HALEU reactor fuel that is more highly enriched than current light water reactors.

Green energy, especially solar and wind, are growing rapidly, accounting for 19% of electricity in Oregon (2023 figures). Wind and solar power can ramp up far more quickly and economically than nuclear power.

Renewable clean energy projects are currently being delayed because of an outdated power grid. Updating the grid would bring many more solar and wind projects online at a fraction of the cost of nuclear energy.

Major improvements in battery storage are occurring and will continue to be a key factor in providing a stable source of energy.

Climate change cannot wait 10-15 years for the development and construction of new nuclear reactors. Time is running out on our climate as we have witnessed with wildfires, heat domes, severe storms, flooding, droughts, and rising sea levels.

Thank you for considering these serious concerns about the risks of nuclear energy reactors in Oregon.