March 5, 2025

Oregon State Legislature
Senate Committee on Energy and Environment
900 Court St. NE
Salem, OR 97301

RE: **Oppose Senate Bill 216** – Repeals 1980 Ballot Measure Law.

Dear Chair Sollman, Vice Chair Brock Smith and members of the Committee,

I urge you to vote NO on Senate Bill 216. The Department of Energy and the nuclear industry are attempting to rebrand nuclear power as clean, safe, economical and essential as a climate change solution.. With the purported energy needs of artificial intelligence and data centers, major tech companies like Microsoft, Google, and Amazon are looking to nuclear energy. But all of this is a distraction from the real energy solutions.

Solar power, wind power, geothermal power, and aggressive energy efficiency are climate solutions that are safer, cheaper, faster, more secure, and less wasteful than nuclear energy. Oregon needs a massive influx of investment in these solutions if we are to avoid the worst consequences of climate change, enjoy energy security, jump-start our economy, create jobs, and work to lead the world in development of clean energy.

Here are 7 reasons why passing HB 216 is a bad idea:

1. Nuclear waste:

The waste generated by nuclear reactors remains radioactive for hundreds of thousands of years. Currently, no long-term storage solutions exist for radioactive waste. Most waste is stored in temporary, above-ground facilities. These facilities are running out of storage space, so other types of storage are being turned to that are more costly and potentially less safe.[1]

2. Nuclear proliferation:

Most small modular nuclear reactor (SMNR) and microreactor designs will run on HALEU fuel, and HALEU is a nuclear weapons proliferation nightmare.[2] "This material is directly usable for making nuclear weapons without any further enrichment or reprocessing. In other words, the new

[1] Union of Concerned Scientists, Safer Storage of Spent Nuclear Fuel, https://www.ucsusa.org/resources/safer-storage-spent-nuclear-fuel
[2] Uranium fuel planned for high-tech US reactors a weapons risk, scientists say

reactors pose an unprecedented nuclear-security risk."[3] Nuclear research facilities, uranium enrichment plants, and uranium mines are also potentially at risk for attacks that could cause widespread contamination with radioactive material.

3. Accidents

All nuclear reactors, even small ones, are at risk for severe accidents. The risk is multiplied by extreme weather due to climate change, weakening regulations[4] and human fallibility.[5] If we were to expand nuclear energy production to include many thousands of nuclear energy plants across the U.S., as pro-nuclear climate boosters advise, we will have a massive inventory of waste sites and radioactive exposure.[6]

4. Impacts on Local Communities and Ecosystems

Nuclear power plants, which use enormous amounts of water as a coolant, increase the temperatures of local water bodies, which can harm local ecosystems and kill aquatic wildlife.[7] Also, with climate change creating increasing water shortages, nuclear power plants are at risk of temporary shutdowns since without water they can't be cooled. In addition to the significant risk of cancer associated with fallout from nuclear disasters, studies also show increased risk for those who reside near a nuclear power plant, especially for childhood cancers such as leukemia. Workers in the nuclear industry are also exposed to higher-than-normal levels of radiation, and as a result are at a higher risk of death from cancer.[8]

5. Energy production

The 440 nuclear power plants currently in existence provide about 9% of the world's energy.[9] Studies show that in order to meet current and future energy needs, the nuclear sector would have to scale up to around 14,500 plants.[10] This means we will end up with huge amounts of radioactive material that the reactors will create (not known by humanity before the 1940s), which will continue to emit radiation for millions of years.[11]

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[3] The weapons potential of high-assay low-enriched uranium. Quote from Scott Kemp, one of five authors of the peer-reviewed article in the journal Science https://www.science.org/doi/10.1126/science.ado8693

[4] The Advance Act, passed in 2024 by the U,S. Congress, weakens regulatory oversight. Senate Nuclear Fetishists Take Lid Off of Pandora's Box, by David Kraft Kraft, Director, NEIS, June 21, 2024 https://columbusfreepress.com/article/senate-nuclear-fetishists-take-lid-pandora%E2%80%99s-box

[5] Accidents reach across space and time, i.e.: 35 years after Chernobyl, parts of Ukraine and Belarus are uninhabitable due to high radiation levels that will last for thousands of years.

[6] Radioactivity is released routinely at every stage of nuclear power generation.

[7] https://www.fws.gov/node/265255

[8] https://academic.oup.com/ije/article/52/4/1015/7186891

[9] https://world-nuclear.org/information-library/current-and-future-generation/nuclear-power-in-the-world-today

[10] https://www.inspirecleanenergy.com/blog/clean-energy-101/is-nuclear-energy-renewable

[11] Two examples of radioactive materials produced in a reactor that will continue to emit radiation for millions of years are Iodine-129 and cesium-135, which have been responsible for the largest health impacts from Chernobyl and Fukushima accidents.

6. Cost

Unlike renewables, which are now the cheapest energy sources, nuclear costs are on the rise, and many plants are being shut down or in danger of being shut down for economic reasons. Initial capital costs, fuel, and maintenance costs are much higher for nuclear plants than wind and solar, and nuclear projects tend to suffer cost overruns and construction delays. For example, the recently constructed Vogtle nuclear plants in Georgia came online 7 years late and $17 billion over budget. The price of renewable energy has fallen significantly over the past decade, and it is projected to continue to fall.[12]

7. Competition with renewables

Investment in nuclear plants, security, mining infrastructure, etc. draws funding away from investment in cleaner sources such as wind, solar, and geothermal. Financing for renewable energy is becoming more scarce, as compared to fossil fuels, and threatened by political headwinds, and as nuclear capacity increases, it will only add to the competition for funding.

For these reason I urge you to vote NO on Senate Bill 216.

Respectfully submitted,

Debra Higbee

[12] https://apnews.com/article/georgia-power-vogtle-nuclear-plant-oglethorpe-lawsuit-899e34f518cb137a5d57542b51d1244b