



350PDX
3625 N. Mississippi Avenue
Portland, OR 97227
350pdx.org

March 10, 2025

Re: Oppose SB 215, 216, 635

Dear Chair Sollman, Vice-chair Brock Smith, and members of the Senate Committee on Energy and Environment,

On behalf of 350PDX and the thousands of members around the Portland area who organize with us, we wish to express our major concern around SB 215, 216, 635, and the other bills this legislative session that suggest the use of nuclear power. We encourage you to oppose these and other nuclear bills this session and to not advance them out of committee. It is particularly concerning that SB 215 and 216 are suggesting waiving the requirement of having a plan for storage of radioactive waste and spent fuel before a project is approved. While SB 635 simply suggests studying nuclear energy, there are already many studies showing the risks and environmental harm of nuclear energy and its waste conundrums. Using taxpayer money to perform another study does not seem prudent.

Regarding all the nuclear bills this session, we are concerned about the risks relating to nuclear power and resulting waste, as well as the ways this is being touted as a climate “solution.” We are all impacted by the spent nuclear fuel and nuclear waste that must be stored, whether this is an environmental cost or a question of economic cost. Who will pay for the creation of a storage facility for the generated waste? Who will pay for any clean up required if and when there are leaks, or in the case of larger disasters? Taxpayers across Oregon will inevitably be required to pay for clean up and storage. As you will see below, there are many reasons this is not a solution that is effective regarding the climate crisis.

It is important to us that the risks be weighed realistically and with awareness of who and what will be impacted. Oregon created its nuclear power moratorium because our community saw the risks of this form of power generation firsthand in our own communities, land, and waterways, as well as massive emergencies in other parts of the world. We recognized nuclear power was not healthy for people or our ecosystems. The siting of nuclear facilities, whether for power generation or storage of waste, becomes a public health and environmental justice issue, because it most directly impacts those who live nearby these facilities and waste sites.

350PDX mainly focuses on mitigating and reversing climate change. As such I will state strongly that **climate change should not be used as an excuse to begin utilizing nuclear power**. It is not currently a climate “solution.” Here are some of the reasons:

- First and foremost, **nuclear power is not “clean” energy**: radioactive waste continues to harm people and ecosystems for a million years. We do not have waste storage that will safely last that long without leaching into the soil and water.¹ Though the waste is not harmful to the climate, it is harmful to the environment for timescales beyond human comprehension.

¹ Helpful description of the problem of waste storage:

<https://www.forbes.com/sites/christinero/2019/11/26/the-staggering-timescales-of-nuclear-waste-disposal/>

- **Nuclear energy is fossil fuel intensive:** it begins with mining uranium, which uses a large amount of fossil fuels (not to mention environmentally damaging). Building a nuclear power facility takes more fossil fuels than building other energy projects.
- Traditional nuclear power plants take **decades to come online**, time we do not have to transition away from greenhouse gas emissions. The use of nuclear energy is often used as a **greenwashing tool to allow continued emissions today** with the promise of switching to nuclear eventually: it is necessary to switch to non-emitting sources of energy now.
- Small modular reactors (SMRs) are **not a proven technology**. NuScale, an Oregon company that has been attempting to create SMRs for over 15 years, has been brought up as a company the State of Oregon would want to support. Yet its major project, the Carbon Free Power Project in Idaho, was cancelled in 2023 due to the **enormous cost overruns** (the project had been funded by both taxpayers and private investors). SMR technology has not been shown to be cost effective or even viable.
- Nuclear power is **more expensive than wind, solar, and energy storage** projects that would produce the same amount of power with a lower cost, with fewer fossil fuels used to create them, and with no nuclear waste.
- **We know how to solve base load problems through batteries and other storage solutions.** We do not need nuclear energy to solve intermittent power concerns.
- Nuclear reactors **do not assist us toward climate resilience:** they must shut down in the case of an extreme weather emergency or earthquake, so they do not help us keep power running during these events. In fact, nuclear plants create larger problems in the case of such events, as was seen with Fukushima Daiichi, with its multiple failures of backup strategies leading to radioactive water, food, and soil, endangering human and other life.
- SMRs are estimated to **create more nuclear waste and more spent fuel rods than traditional nuclear plants** per unit of energy produced. The *Stanford Report* concludes: “small modular designs are inferior to conventional reactors with respect to radioactive waste generation, management requirements, and disposal options.”²
- Nuclear power plants also require the use of **large amounts of water**. In addition to the large amounts of water necessary for mining and enriching uranium, traditional reactors either boil or pressurize water, and then use water in the cooling process. They use as much water as a coal plant.³ Many SMRs use similar water cooling strategies. In an era of climate change when we are already seeing conflict over access to smaller amounts of available water in Oregon, adding power plants (and AI centers, I might add) that will also compete for water is not sensible.

In short, the risks associated with nuclear power are many and long-lasting. They are well researched and known. SMRs do not solve the problems of spent fuel and nuclear waste, only

² Article explaining peer-reviewed study:

<https://news.stanford.edu/stories/2022/05/small-modular-reactors-produce-high-levels-nuclear-waste>

³ <https://www.ucsusa.org/resources/water-nuclear>.



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exacerbate it. These projects are expensive and take a long time; they are not a solution for the immediate necessity of switching away from greenhouse gas emitting energy sources. Nuclear energy does not help solve the climate crisis, and instead creates more problems. While it may in the future make sense to have SMRs once the technology is proven, if we figure out solutions to spent fuel and radioactive waste, and if we lower the greenhouse gas emission intensity of the mining and enriching processes, **it is our strong recommendation that Oregon not waste its limited funding on nuclear energy.** We have many other options that are less expensive and better for the environment.

Dr. Cherice Bock
Climate Policy Manager
350PDX

Building the climate justice movement.