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

February 25, 2025
Re: Oppose HB 2410

Dear Chair Lively, Vice Chairs Gamba and B. Levy, and members of the House Committee on Climate, 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 HB 2038, HB 2410, and the other bills this legislative session that suggest the use of nuclear power. It is particularly concerning that many of the bills are suggesting waiving the requirement of having a plan for storage of radioactive waste before a project is approved.

Regarding HB 2410 in particular, although this is a bill suggesting a demonstration project in one county and so it might be argued that that county can decide what risks it wants to take on, these risks impact all of us. We are all impacted by the 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 the Oregon will inevitably be required to pay for clean up and storage.

Additionally, 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 leaking 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.
- 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.

[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/

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- Small modular reactors are **not a proven technology**. Members of the committee brought up NuScale, an Oregon company that has been attempting to create SMRs for over 15 years but its major project, 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).
- 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. Nuclear reactors must shut down in the case of an extreme weather emergency or earthquake, so they do not help us become more climate resilient; in fact, they 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 energy is fossil fuel intensive**: it begins with mining uranium, which uses a large amount of fossil fuels. Building a nuclear power facility takes more fossil fuels than building other energy projects.
- 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]

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 nuclear waste, only exacerbate it. 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 and if we figure out solutions to radioactive waste and the fossil fuel intensity of the mining and enriching processes, **it is our strong recommendation that Oregon not waste its limited funding on nuclear**. We have many other options that are less expensive and better for the environment.

Dr. Cherice Bock
Climate Policy Manager
350PDX

[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.