## **+350PDX**

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

February 25, 2025 Re: Oppose HB 2038

Dear Chair Lively, Vice Chairs Gamba and B. Levy, and members of the House Committee on Climate, Energy, and Environment,

On behalf of 35OPDX 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 2038 in particular, we are concerned that the bill is biased and encourages only the study of the "advantages" of nuclear power; though not mentioned in the bill, committee members brought up small modular reactors (SMRs). As with any technology, it is important to study potential risks and benefits.

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.

35OPDX 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.<sup>1</sup> 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.
- 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

<sup>&</sup>lt;sup>1</sup> Helpful description of the problem of waste storage:

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



**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."<sup>2</sup>
- **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.<sup>3</sup>

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 studying something is never a terrible idea, it is our strong recommendation that Oregon not waste its limited research funding on nuclear: instead, let's focus on energy technologies that are actually environmentally clean and do not have the long-term side effects described in this statement.

Dr. Cherice Bock Climate Policy Manager 350PDX

<sup>&</sup>lt;sup>2</sup> Article explaining peer-reviewed study:

https://news.stanford.edu/stories/2022/05/small-modular-reactors-produce-high-levels-nuclear-waste <sup>3</sup> https://www.ucsusa.org/resources/water-nuclear.