To: Members of the Senate Committee on Energy & Environment

From: Debra Higbee-Sudyka

Date: March 23, 2021 RE: Senate Bill 360

Dear Chair Beyer, Vice-Chair Findley, and members of the Senate Committee on Energy & Environment

Thank you for the opportunity to provide comments. I am testifying in opposition to SB 360. There are good reasons why Oregonians passed Measure 7, which prohibits nuclear power plant construction in Oregon. The reasons revolve around the simple fact that the nuclear power industry—which include small modular nuclear reactors (SMNR)--produce the deadliest industrial byproduct in the world, which will continue to pose a danger to human health and the environment for millions of years. Because of this fact, purveyors of nuclear energy, such as NuScale, want to draw your attention away from the following facts:

- 1. Oregon, and the world, does not have "an adequate repository for the disposal of high-level radioactive waste." This is just as true now, as it was when Measure 7 was passed in 1980. Nuclear waste is the most potent substance on the planet, and no one knows what to do with it, other than put it in a pool or bury it somewhere, hopefully keeping it secure.
 - a. The US has 96 active nuclear reactors, where nuclear waste is stored in wet storage pools on site, as it remains intensely radioactive and thermally hot. And after plants are decommissioned this radioactive and hot will be a problem for hundreds to thousands of years.
- 2. **Each year, U.S. nuclear power plants produce more than 2,000 tons of waste**. And because this is the deadliest industrial byproduct in the world, the U.S. has no technology capable of isolating it from the environment, and no credible plan to create one.
- 3. Small nuclear reactor waste production is the same as large nuclear reactors. To be cost-effective, small nuclear reactor modules must be grouped together in a single installation. This need for economy of scale makes SMNRs equivalent to large nuclear reactors in their output of nuclear waste.
- 4. **Nuclear power is not clean energy.** The fuel chain for nuclear power begins with mining, milling, and enriching uranium, then storing, all of which are carbon-intensive processes that generate vast amounts of radioactive and toxic wastes, and affect biological ecosystems and communities.
- 5. The industry is rooted in environmental injustice and human rights violations. The vast majority of uranium mines, mills, production facilities, reactors, and waste dumps are located in communities that are disproportionately Indigenous, Black, People of Color, rural, and lowincome.
- 6. **Nuclear Reactors divert funds away from true energy solutions**. Wind, solar, energy efficiency, and conservation are far more affordable and can be deployed much more quickly than nuclear power. Therefore, a "Carbon-Free Power Project" worthy of the name would support the phaseout of nuclear power as part of the transition to a renewable, zero-emissions energy sector.

It is for these reasons that you should vote no on Senate Bill 360. Thank you for the opportunity and for your consideration of this testimony.

Respectfully, Debra Higbee-Sudyka Corvallis, Oregon 97333