February 27, 2025 To: The House Committee on Climate, Energy and Environment.

Thank you for this opportunity to testify in opposition to HB 2038. My name is Patricia Kullberg and I live in Portland. I'm a retired physician and public health official and member of the Board of Directors for Oregon Physicians for Social Responsibility. This bill proposes to study the "advantages of nuclear energy" including how it could support current energy systems; the potential for contributions to economic growth; the safety of waste disposal; reliability of nuclear energy; and the potential to eliminate dependence on foreign sources of energy.

In other words, this is a directive to gloss over or ignore the many disadvantages of nuclear energy and promote its return to Oregon. Oregonians deserve better.

Here are the chief *disadvantages* we should be studying:

- 1. Massive cost overruns for construction of small modular nuclear energy plants, including the collapse of Oregon's own NuScale company due to projected costs and the refusal of utilities to invest in their project.
- 2. The lack of any safe long term storage for nuclear waste. After several decades of "study", we still have no solution for the widespread radiation contamination at the Hanford site, nor for the safe disposal of its waste. Our own governor has protested the latest federal plan to truck radioactive waste from Hanford through Oregon communities to out-of-state disposal sites.
- 3. The environmental injustice of uranium mining, usually done on Indigenous lands far removed from the public view and the significant health effects of radiation exposure to workers and neighboring communities.
- 4. The dependence on foreign supplies of uranium which SMRs would create, from Kazakhstan, Russia, China, Canada, Australia among others. Alternatively, the need to ramp up domestic production of uranium with unknown environmental and public health costs.
- 5. The security necessary to protect SMRs from sabotage and theft of radioactive fuel and the capacity for small rural communities to provide that level of security.
- 6. The alternatives to nuclear energy, including wind and solar, (which are at most half as costly to develop and are already a proven technology) and the feasibility of improved battery storage which would mitigate the off and on power production of wind and solar.
- 7. The alternative of not supporting high energy AI data centers in Oregon, which consume huge amounts of energy, and the possibility that domestic development of AI will collapse in face of China's ability to produce AI at one-tenth the energy needs. Note that Microsoft is already backing out of building new data centers siting doubts about the future of AI: <u>https://futurism.com/microsoft-ceo-hesitation-ai-expensive-data-centers</u>
- 8. The lack of adequate consultation of the tribes whose lands and ways of life may be threatened by the rural siting of SMRs.

This at minimum is what we should be thinking about before overturn the will of Oregonians and bring nuclear energy back to our state. Thank you for your time and attention.

Respectfully submitted, Patricia Kullberg, MD MPH Portland, OR