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On Behalf Of:

Committee: House Committee On Climate, Energy, and Environment

Measure, Appointment or Topic: HB2410

I am opposed to HB 2038 and HB 2410 mainly because Oregon has a long standing moratorium on the building of nuclear power reactors and there is NO national nuclear waste repository. Even if there were such a place, I would still oppose the use of any and all types of nuclear reactor to produce energy, even the small modular reactors [SMRs].

Additional reasons for my opposition to nuclear power reactors is that Uranium is used as the fuel in nuclear reactors even in the small modular reactors [SMRs]. The half-life of the most common uranium isotope, Uranium-238, is approximately 4.5 billion years. Uranium emits radioactivity for its entire half life. Even buried, it will still keep on emitting radioactivity and there is NO safe repository for radioactive waste. Since the 1940s, just look at the trials and errors that are still being faced with radioactive waste at Hanford, WA. That reality alone supports the issue of the lack of proven long-term, effective, waste disposal solutions.

As for new nuclear issues, mainly the small modular nuclear reactors [SMRs] seem to have increased neutron leakage issues, which generate more radioactive waste, which would, in essence, make waste disposal of this hazardous material quite complex and expensive, meaning that their cost effectiveness would be questionable at best.

The smaller size of the SMR has the potential to cause increased safety risks in relation to managing heat and reactivity in a smaller reactor's core.

?Since climate change issues are paramount, mitigation for immediate climate change might be better met by the use of renewable energy sources rather than waiting for the development and installation any SMRs. With renewable energy sources the issues of safety and hazards waste are irrelevant.

There is also a question of fuel efficiency with SMRs....these reactors could effectively have a high fuel consumption thereby leading to higher fuel costs and the release of more greenhouse gasses. Renewable energy leaves less of a carbon footprint and would have a lower operational cost.

According to research from Stanford and the University of British Columbia, it seems that small modular reactors, long touted as the future of nuclear energy, will actually generate more radioactive waste than conventional nuclear power plants.

There only appears to be one SMR in China and at least one known one in Russia. None elsewhere. Hence, there is not any overwhelming performance data of several operational SMRs to rate their overall efficiency, durability and radioactive hazards' records.

Nuclear power has no place as a transition facilitator from fossil fuel to clean energy's present and future.

Studies have been conduct showing nuclear power to be as much as 5 times more expensive to produce and to maintain as renewable energy. Renewable energy has no half life or need for a radioactive waste repository.

?With the advance of renewable energy and with new grid and storage technologies, baseload power like coal and nuclear is rapidly becoming obsolete.

Any development of SMRs will undoubtedly divert funding from energy efficiency, renewable energy, and storage technologies that are safer, far far less expensive to undertake and to maintain, and faster to deploy.

How can the planet's struggle to survive a toxin riddled atmosphere make any progress as long as fossilized policies, prejudices and solutions such as nuclear power plants fueled by radioactive uranium isotopes are still being considered as the gold standard for continued energy production and climate change elimination? Not only is that an oxymoron but even more so it is such an outdated fool's gold standard meant only to generate more and more irresponsible and destructive corporate profits.

In our home planet's best interests, I am hereby voicing my opposition to HB 2038 and HB 2410.