

Submitter:

ALDENE MCCAWE

On Behalf Of:

Committee:

Senate Committee On Energy and Environment

Measure, Appointment or Topic: SB635

I SUPPORT SB 635. I believe that Oregon State University is fully qualified to do this research.

The United States is 15 years behind China in nuclear power and is losing to both China and Russia. In fact, the US is dependent upon Russia for enriched uranium. Being the largest producer of nuclear energy in the world, we have allowed our civilian nuclear infrastructure to languish. Russia continues its climb upward and exports many reactors, while China is investing heavily in civilian nuclear tech and boosting its atomic power generation at home. Beijing plans to build 24 new nuclear plants by 2030, bringing it's total to 60, overtaking the US. The US has 93 operational nuclear power plants in total of which no more is currently under development.

The units now are 1/100th the size of the nuclear plants in operation today. There is a whole new generation called advanced reactors. Factory-built, small reactors can be standardized, punched out like a cookie cutter, the same design over and over. The more of these things you punch out, the cheaper it gets, and the more practice you have installing them, the cheaper it gets. If you do things like that, you can improve on safety and budget. The waste issue depends on the specific reactor technology. Some advanced reactors are based on existing Gen III designs, so their waste would be the same but with smaller quantities because the reactors are smaller. Gen IV reactors use fast neutrons, which allow a more efficient use of fuel and therefore a reduction of total volumes. Some Gen IV reactors can burn used fuel that has already been irradiated, which would have the effect of both burning out some of the minor actinides and turning what is now considered "waste" into a source of more energy. At the end of the day, all nuclear waste, whether from current generation or advanced reactors, will need to be disposed in deep geologic formations; this is a safe process with well-known technology.

Oregon State has been so successful with research that they have spun off a business called NuScale Energy which has plans approved by the Federal Atomic Energy Commission. I encourage you to let Oregon lead the way in clean energy solutions by doing the research.

I support this bill to research the feasibility of nuclear energy

PLEASE VOTE YES!