

Submitter: Ed Diehl

On Behalf Of:

Committee: House Committee On Climate, Energy, and Environment

Measure: HB2215

Chair Marsh, Vice-Chairs Levy and Levy, and committee members: My name is Ed Diehl, State Representative for House District 17, East Salem through the majestic Santiam Canyon. Thank you for the opportunity to speak in enthusiastic support of House Bill 2215.

Many years have passed since Oregon voters opted to prohibit the use of nuclear power in the state. In the meantime, our electrical energy needs have increased, the demand for clean, 'green' energy has grown, and nuclear power technology has radically improved. For us to meet our clean energy goals, nuclear has to be on the table. Simply put, we cannot meet our green energy goals with wind and solar alone.

In Oregon land-based wind power is at capacity. The talk now is to build out our sea-based wind power and land-based solar. While these are definitely components of Oregon's future energy needs, they are not enough to meet future demands.

Let's look at some high-level numbers: A 600MWe small modular reactor (SMR) plant requires just 20 acres of land, and can generate that power 24 hours a day, 7 days a week. The equivalent solar farm requires about 2,700 acres and only generates that power when the sun is shining. Currently, Oregon gets about 25% of our electricity from coal power generated in other states. 15 twenty-acre SMR plants, occupying just 300 acres of land, would replace all of our current reliance on coal. To do the same with solar would require over 40,900 acres of land, plus acreage and equipment for storage devices such as battery banks in times when the sun is not shining. This does not consider the additional power needed as we move forward. The radically smaller SMR footprint frees up more land for housing, manufacturing, farming, recreation, and wildlife.

Today's SMR plants can operate independent of the grid. Imagine massive amounts of clean hydrogen generated 24/7 from nuclear power. Or a nuclear-powered desalinization plant providing millions of gallons of fresh drinking and irrigation water. Today's nuclear power opens up a host of possibilities.

In short, today's nuclear tech is cool! This is not your grandmother's nuclear power plant! The Small Modular Reactor technology today is extremely safe, compact, and scaleable. Best of all, Oregon is leading the way designing and developing this next generation of nuclear power. NuScale, one of the leading SMR companies in the world, is based right here, a spinoff of technology developed at Oregon State University. Oregon has an unprecedented opportunity to lead the way not only with

design and development, but also with implementation of the next generation of nuclear.

I ask that you support House Bill 2215, to allow nuclear power to be a part of our green energy future. Oregon has an opportunity to show the rest of the country how this is done. Thank you for your time.