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Subject: Testimony to House Committee on Energy and Environment in Support of Senate Bill 990 by Dr. Kathryn A. Higley

Good afternoon. My name is Kathryn Higley, Professor and Head of the School of Nuclear Science and Engineering (NSE) in the College of Engineering at Oregon State University. I am here today to testify in support of SB 990 as a faculty member. I hold a PhD in Radiological Health Sciences from Colorado State University. In my capacity as school head, I oversee top ranked nuclear engineering and radiation protection programs, which include more than 300 undergraduate and graduate students and conducts more than $5.5 million of research annually.

More than a decade ago, the NuScale small modular reactor concept was conceived at OSU. From a grant provided by the U.S. Department of Energy, and with the dedicated efforts of Dr. Jose Reyes and his students, the "multi-application, small light water reactor" design was launched. Following this modest beginning, NuScale Power, LLC, has grown into a substantial employer of OSU alumni as nuclear engineers and radiation safety professionals. Mindful of the benefits of academic partnerships, NuScale continues to fund research into its design by employing the efforts of faculty and students at the NuScale Integral System Test facility on the OSU campus in Corvallis.

Since our nuclear science and engineering programs began at OSU more than 60 years ago, we have graduated more than 1,300 nuclear engineers and radiation health physicists. In our school, we fully understand the concerns and controversies surrounding nuclear power. That is why our research ranges from the design of next generation reactors to understanding the fate and transport of radionuclides in the environment. We also know that nuclear power represents a valued option in cutting carbon emissions that can complement and extend the reach of hydro, solar, wind and tidal energy sources. SMRs in particular have an extremely small footprint for the energy that they provide and their Emergency Planning Zone will be substantially smaller than any previous nuclear power plant design.

In recent years, the vast majority of our NSE students have left Oregon in order to use their excellent education: there was no nuclear power industry in this state. The creation of NuScale Power has now reestablished a small, but significant nuclear industry within Oregon. SB990 would offer Oregon educated nuclear engineers and radiation safety professionals the opportunity to work at a nuclear power facility in Oregon, designed by Oregon-based institutions.