

To: Members of the Joint Committee on Energy Utilities and Technology
From: Becky Bartovics, Sierra Club Maine volunteer
Date: March 7, 2023
Re: Testimony in Opposition to LD 486 and LD 689

Senator Lawrence, Representative Ziegler and Members of the Joint Committee on Energy, Utilities and Technology,

I am submitting the following testimony on behalf of Sierra Club Maine, representing over 22,000 supporters and members statewide. We work diligently to amplify the power of our 3.8 million members and supporters nation-wide as we work towards combating climate change and promoting a just and sustainable economy. We urge you to vote "ought not to pass" on both LD 486 "An Act to Encourage Economic Development Through the Manufacture and Use of Marine Nuclear Power Modules" and LD 689 An Act to Study the Construction of a Nuclear Power Facility in the State.

The nuclear power industry has never dealt with its waste problem, which is already an existential threat. The industry has devised a new plan to generate electrical power through small scale reactors (SMR's) while never addressing the waste threat or coming up with a viable solution for it. Backed by an intensive economic boost from private investors, SMR's are a nascent, experimental industry; and little examination of the long term impacts of SMR's has yet occurred.

We have our own nuclear waste problem right in Wiscasset, Maine. The waste remains in temporary storage caskets only 20' above the high-tide level and could be compromised in an abnormal storm surge, the likelihood of which only increases as we experience rising sea levels due to global warming. Until we can safely move our nuclear waste to a permanent repository, Maine should never consider more nuclear power plants.

For information about nuclear waste please see

https://news.stanford.edu/2022/05/30/small-modular-reactors-produce-high-levels-nuclear-wast e/.

Here's a sample of the Stanford Study: "Simple metrics, such as estimates of the mass of spent fuel, offer little insight into the resources that will be required to store, package, and dispose of the spent fuel and other radioactive waste," said Krall, who is now a scientist at the Swedish Nuclear Fuel and Waste Management Company. "In fact, remarkably few studies have analyzed the management and disposal of nuclear waste streams from small modular reactors." We consider both LD 486 and LD 689 ill-advised and ill-informed legislative initiatives which ought never to see the light of day just because of the unsolved waste issue alone.



If one is concerned about cost to ratepayers, it is equally an untenable non-solution. Promising lower costs with no metrics is easy to do, not possible to prove. Coming from an industry

with a history of notoriously costly power production, it is highly unlikely to prove beneficial to Mainers. According to a study done by MIT, lower cost " expectation is based on an assumption typically expressed in terms of the "learning rate" for a given technology, which represents the percent cost reduction associated with a doubling of cumulative production. Nuclear industry cost-estimating guidelines as well as widely used climate models and global energy scenarios often rely on learning rates that significantly reduce costs as installed nuclear capacity increases. Yet empirical evidence shows that in the case of nuclear plants, learning rates are negative. Costs just keep rising." https://energy.mit.edu/news/building-nuclear-power-plants/

SC Maine urges the EUT to vote "Ought Not to Pass on both LD 486 and 689.

Respectfully Submitted,

Becky Bartovics Volunteer Legislative Team