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Testimony
In Support of

LD 342 An Act to Include Nuclear Power in the State's Renewable Portfolio Standard

Senator Lawrence, Representative Sachs, and members of the Joint Standing Committee on Energy, Utilities, and Technology, my name is Reagan Paul, and I represent House District 37, which includes Winterport, Prospect, Stockton Springs, Searsport, and part of Frankfort.

I am here to present my bill, LD 342, "An Act to Include Nuclear Power in the State's Renewable Portfolio Standard."

In the Governor's "Maine Energy Plan," the Governor's Energy Office acknowledges on page 34 that Maine's Renewable Portfolio Standard (RPS) could be expanded to include zero or low-carbon energy sources like nuclear power. This aligns perfectly with Maine's goal of reaching 100% clean electricity by 2040. In fact, my bill fits seamlessly into that plan.

Maine is not alone in this shift. Eight states—including Utah, North Carolina, and Massachusetts—have already included nuclear power in their renewable or clean energy standards. Currently, Maine defines biomass as renewable, even though it is a carbon-emitting energy source. By comparison, nuclear power emits 75% less CO2 than solar and does not rely on fossil fuels. If biomass is considered renewable in Maine, then nuclear certainly deserves to be classified as a Class 1 renewable energy source.

The truth is, wind and solar, despite their popularity, are not without their flaws. They are intermittent sources of energy, dependent on weather conditions—wind and sun. On cloudy days or windless nights, we are left relying on fossil fuels to fill the gap with backup generation sources needed on demand. These "green" technologies also depend on rare earth minerals like lithium, cobalt, and neodymium. These minerals are extremely limited, with only about 1% being able to be recycled due to the challenges of collecting, separating, and processing them from end-of-life products. They also are often extracted in environmentally destructive ways from regions with unstable political conditions and human rights violations. The mining of these materials also causes significant environmental damage. Moreover, the recycling of these rare earth minerals is an energy-intensive and hazardous process that involves dangerous chemicals, contributing to further environmental degradation and health risks. So, while wind and solar might seem clean at first glance, the reality is that their environmental and geopolitical costs are much higher than often acknowledged.

District 37 Frankfort, Prospect, Searsport, Stockton Springs, Winterport

In contrast, nuclear energy, specifically Small Modular Reactors (SMRs), does not depend on these rare earth minerals. Instead, it relies on uranium, which is abundant and far more sustainable in comparison. Uranium is widely available, and some modern reactors can recycle spent fuel. The Department Of Energy even reports that up to 96% of the material in spent nuclear fuel, can be recycled to create new fuel. This means that nuclear power is not just low-carbon; it is also truly renewable in a way that wind and solar, which rely on finite and increasingly difficult-to-source materials, are not.

While wind and solar have been heavily subsidized for years, we must ask ourselves: Should we continue propping up technologies that can't provide reliable baseload power? Nuclear, on the other hand, specifically SMRs, does not need these heavy handed subsidies to work. The technology behind SMRs is already proven and efficient. The costs that have driven up nuclear power in the past are not due to the technology itself, but due to the regulatory burdens, drawn-out approval processes, and lawsuits that delay projects. If we can streamline and eliminate these unnecessary hurdles, nuclear power will become more cost-effective and competitive without requiring the kind of subsidies that wind and solar depend on.

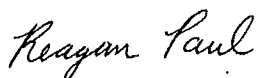
Small Modular Reactors represent a breakthrough in nuclear energy. They are smaller, safer, and more affordable than traditional nuclear plants. SMRs can be built quickly in factories, reducing construction costs and time. Unlike wind and solar, SMRs provide 24/7 baseload power, ensuring that when the wind isn't blowing and the sun isn't shining, the lights stay on. Moreover, SMRs have a much longer operational lifespan—up to 60 years—compared to wind and solar, which typically need replacement far before the reported 20 to 30 year lifespan. This longevity makes nuclear a far more reliable and cost-effective solution over the long term.

The World Economic Forum and energy experts across the globe have recognized that nuclear power is an essential part of a diverse energy mix. Nuclear provides reliable, low-carbon energy that complements other renewables, rather than competing with them. It's time to stop treating wind and solar as the only renewable options and start embracing nuclear as an equally important part of the solution.

Maine currently has the third-highest electricity prices in the nation, with 100,000 households struggling to pay their energy bills. Including nuclear energy in Maine's RPS is a practical step toward reducing energy costs and ensuring a reliable, sustainable, and affordable energy future for all Mainers.

By incorporating nuclear power—specifically Small Modular Reactors—into Maine's energy mix, we can lead the way in creating a balanced and effective energy policy that works for both the environment and the people of Maine. Let's stop pretending that there's a war between renewables and nuclear. The future of energy is about balance and practicality, and nuclear power is a critical part of that future.

Thank you.



Reagan Paul
State Representative