

131st Legislature
Senate of
Maine
Senate District 24

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Testimony of Senator Eloise Vitelli presenting
LD 1850, An Act Relating to Energy Storage and the State's Energy Goals
Before the Joint Standing Committee on Energy, Utilities and Technology
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Senator Lawrence, Representative Zeigler, and fellow members of the Joint Standing Committee on Energy, Utilities and Technology, my name is Eloise Vitelli, and I represent Senate District 24, which includes all of Sagadahoc County and the town of Dresden in Lincoln County. I am before you all today to introduce LD 1850, "An Act Relating to Energy Storage and the State's Energy Goals."

I became well acquainted with energy storage technology and the role it must play in Maine's energy landscape during my service on the Commission to Study the Economic, Environmental and Energy Benefits of Energy Storage to the Maine Electricity Industry. I'm pleased to have chaired this Commission, whose work culminated in a report published in December 2019.

The Commission report unanimously agreed on four key findings:

- 1 Energy storage has the potential to reduce costs and improve reliability,
- 2 Energy storage complements and supports renewable energy,
- 3 Energy storage technology is dynamic and evolving and presents cost-effective options, and
- 4 Energy storage development may be inhibited by market barriers or a lack of clear regulatory signals.

Further, the Commission report included the following recommendations to capture the economic, environmental and energy benefits as we shape policy that encourages energy storage:

- 1 Establish state targets for energy storage development,
- 2 Encourage energy storage paired with renewable and distributed generation resources,
- 3 Advance energy storage as an energy efficiency resource,
- 4 Address electricity rate design issues relating to time variation in costs,
- 5 Clarify utility ownership of energy storage,
- 6 Advocate for energy storage consideration in regional wholesale markets, and

7 Conduct an in-depth Maine-specific analysis of energy storage costs, benefits and opportunities

Understanding that we could improve Maine's energy storage infrastructure if we could store excess power and reduce the inefficiencies that occur between peaks and valleys in demand, during the 130th Legislature we made headway on these recommendations when this committee supported my legislation, LD 528. Because of that bill, we were able to implement some of the recommendations made through the Commission's study and it also led to two pilot programs

Efficiency Maine conducted those pilot programs, one that began January 1, 2022 to provide energy storage systems to critical care facilities, including hospitals, health care facilities, fire departments, emergency medical service departments, police departments, public safety buildings, emergency shelters and other facilities providing critical services. The total energy storage capacity deployed under the pilot program was not to exceed 15 megawatts, meant to install energy storage systems to support the operations of a critical care facility during outages or emergencies. The trust was directed to choose the most cost-effective proposal that offered benefits through transmission or distribution deferral. The pilots proved they were cost effective and could work for emergency needs, and there are now 6 large battery projects in the cue so we can do even more.

The second pilot was Efficiency Maine's Energy Storage System (ESS) Pilot Program which offered performance-based incentives for the deployment of energy storage systems during summer peak demand conditions. This allowed us to test sending individual generator's energy to the grid during peak times to "shave the peak" and cut down on peak energy prices at key times. This initiative involved testing and evaluating time-of-use rates in conjunction with energy storage. All demand metered customers (commercial, nonprofits, institutions and government) were eligible to participate. We know if we lower the price at our peak usage, where energy prices are often set, we can lower ratepayer costs. Through this program, small-scale producers of energy contribute energy back at peak times, trimming our peaks.

In the 130th Legislature, this Committee agreed that investment in energy storage technology had the potential to improve cost and reliability of electricity in Maine. Energy prices were rising to an all-time high and individual consumers and all ratepayers pay more under our current system, which is not well-equipped to manage peaks in demand. As you know, these peaks require the grid to generate and distribute large amounts of energy for short amounts of time, resulting in a larger, less efficient and more costly energy infrastructure. This cost is distributed to all ratepayers, though consumers who pay demand charges are especially impacted.

My bill today will get us even closer to our energy storage targets and implements some of the other Commission recommendations. LD 1850 helps us keep our eye on the ball, setting a more attainable goal for increased energy storage in our state. It modifies the state goal for energy storage system development to at least 300 megawatts by the end of 2025 and to at least 400 megawatts by the end of 2030. It also allows the Governor's Energy Office to reevaluate and or increase the state goal biannually starting next year. It also asks GEO to submit a report with recommendations in February 2024 studying long-duration energy storage options that would support the State's renewable energy goals.

I have an amendment that makes sure we address one key, final Commission recommendation to clarify utility ownership of energy storage. My proposal will be for the PUC to initiate one or more proceedings to determine the conditions under which an investor-owned utility may own or have financial interest in energy storage systems.

While state policy in recent years has affirmed a commitment to renewable sources of energy, a complementary energy storage policy has yet to fully evolve. My bill LD 1850 seeks to get us there, keep up with other states, and keep us on track to support and develop the infrastructure needed to meet Maine's aggressive renewable energy goals by 2030 and beyond.

Thank you for your time. I am happy to answer any questions you may have.



Eloise Vitelli
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