Arcadia

LD1850 - An Act Relating to Energy Storage and the State's Energy Goals
Maine State Legislature, Energy, Utilities and Technology Committee
131st Legislature
May 16, 2023
Position: Oppose

Testimony of Arcadia on LD1850

Thank you for the opportunity to submit testimony on this legislation. Arcadia urges the Energy, Utilities and Technology Committee to oppose this legislation as written. Below is an introduction to Arcadia, a brief explanation of why we oppose this legislation and two proposals to amend the legislation to ensure maximum benefits to Mainers.

Introduction to Arcadia
Arcadia is building the software necessary for Mainers to realize the full benefits of clean energy. Today, customers face a bewildering assortment of energy technologies – ranging from energy efficiency and renewable energy to battery storage and electric vehicles – all of which have unique capabilities, costs, and user experiences. Arcadia's software makes it possible for energy technology providers to serve their customers and move clean energy forward by enabling a simple user experience that saves people money.

The Company's software is revolutionizing community solar, making it easy for people to sign up with guaranteed savings and without any risk. Today, Arcadia manages more than 150 megawatts of community solar across 34 projects in the state. Once energized, these projects will serve approximately 22,500 energy users. Nationwide Arcadia works with more than 40 developers to manage 475 community solar projects representing a combined 1.3 gigawatts of capacity, making it the largest subscriber manager in the country.

Opposition to LD1850
Energy storage is critical in achieving Maine's broad climate and clean energy targets. However, creating a utility-owned storage program would be inefficient, costly for Mainers, and bar market involvement by crowding out robust private sector investment and competition.

Proposed Amendments to the Legislation
Arcadia urges the Committee to amend the legislation to provide for third-party ownership of storage assets, particularly distributed storage assets. The storage assets should have the option to participate in a Time-of-Use (TOU) rate design as well as a dual-incentive structure to maximize storage deployment. These policies will bolster the Maine's progress towards

statewide targets by lowering wholesale electricity costs, utility infrastructure costs, and electricity bills, all while increasing resiliency and integrating more renewable energy. [1]

Proposal 1: Implement effective Time-of-Use rates for energy storage
An effective Time-Of-Use (TOU) rate will encourage system charging when the demand is lowest and cheapest, and dispatch when demand is highest and most expensive. The following factors help optimize grid performance:

- At least three pricing periods of on-peak, off-peak, and mid-peak
- On-peak vs. off-peak differential of at least 3 to 1

Aligning TOU rate periods with system-wide energy demand gives customers the financial incentive to optimally utilize TOU rates and increase storage deployment. What's more, a good TOU rate works to incentivize effective storage project operations and optimize residential and commercial customer electricity usage.

Proposal 2: Implement a dual-incentive structure to maximize storage deployment
Establish a dual-incentive structure for participating standalone storage projects via

- Upfront incentive per kilowatt-hour, and
- Ongoing performance incentive per kilowatt

This is the most effective way to enable storage deployment. The greater the proportion of the overall incentive that can be aligned with underlying TOU rate, the higher the correlation of charge and dispatch within the opportune timeframes, which will maximize grid benefits.

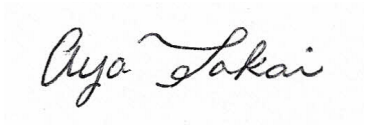
Benefits to Mainers
A successful distributed generation energy storage policy will increase grid resilience for Mainers by reducing unexpected outages. Both planned and unplanned outages cause major economic losses to Mainers. A comprehensive storage policy that includes third party owned distributed storage assets can mitigate this by ensuring there is enough backup energy during blackouts and brownouts.

Conclusion
Arcadia asks that the EUT Committee do not report LD1850 as written but instead adopt amendments reflecting our proposals. We appreciate the opportunity to provide this testimony

[1] Governor's Energy Office, State of Maine. Energy Storage. https://www.maine.gov/energy/initiatives/renewable-energy/energy-storage

and would be happy to answer questions. Please do not hesitate to contact me at Aya.Takai@arcadia.com or 314-210-4792 if you would like to discuss further.

Sincerely,



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