

BLUEWAVE

VIA ELECTRONIC FILING

May 16, 2023

The Honorable Mark Lawrence
Chair, Energy, Utilities, & Technology Committee
Senate Democratic Office
3 State House Station
Augusta, Maine 04333

The Honorable Stanley Paige Zeigler
Chair, Energy, Utilities, & Technology Committee
Senate Democratic Office
3 State House Station
Augusta, Maine 04333

re: BlueWave Testimony on LD1850, *An Act Relating to Energy Storage and the State's Energy Goals*

Dear Chair Lawrence, Chair Zeigler, and Members of the Committee:

BlueWave appreciates the opportunity to provide this written testimony in support of LD1850 – *An Act Relating to Energy Storage and the State's Energy Goals* – being heard before the Committee on Energy, Utilities and Technology (“Committee”) today.

BlueWave's vision is to protect our planet by transforming access to clean energy. As a pioneering clean energy developer, BlueWave has developed and built more than 150 megawatts of solar projects to date. As built, these projects collectively generate enough solar energy to avoid more than 144,000 metric tons of carbon emissions annually. BlueWave is also actively developing energy storage projects to ensure our grid is reliable and efficient in a clean energy future. BlueWave is proud to be a certified B Corp, scoring in the top 5% of companies assessed towards certification in Governance, and named Best for the World for Governance.

Energy storage is an essential technology to achieving Maine’s clean energy goals and climate mandates. Energy storage is a key enabler of Maine’s clean energy transition. Storage can charge when renewable energy is plentiful and discharge when and where electricity is needed most. It can facilitate and integrate high levels of distributed solar, offshore wind, electrified buildings, and decarbonized transportation, even as Maine is building out a more resilient, reliable electricity system. Importantly, energy storage is technically and economically ready to deliver these benefits today. However, state policy leadership is needed to overcome market and regulatory barriers and ensure that the benefits of energy storage are fully captured and equitably delivered.

Procurements

Section 3 of LD1850 would go a long way towards providing the state policy leadership needed to kickstart the energy storage industry in Maine by setting in motion a process to consider procuring energy storage connected to the distribution or transmission system. Such a procurement has the potential to deliver significant benefits to the State, including integrating large-scale renewable energy purchases like onshore wind in Northern Maine, improving grid reliability, and mitigating peak demand. Procurement through long-term contracts is a proven tool to deploy clean energy at scale that is increasingly being used in the region for energy storage. Procurements ensure that energy storage projects have access to contracted revenue, significantly reducing capital costs. Procurements also leverage competition to ensure the best and most cost effective projects are chosen. New York is

currently considering the procurement of an additional 3,000 MW of bulk (i.e., >5 megawatt) energy storage to achieve its goal of 6,000 MW by 2030, and Connecticut’s Department of Energy and Environmental Protection is legislatively authorized and has begun a process to procure transmission-connected energy storage to help achieve the state’s goal of 1,000 MW by 2030. The procurement provisions would put Maine on a parallel track with its peers, would advance the industry, and would ensure that Maine meets the targets set forth in this bill. BlueWave support the optionality provided to the Governor’s Energy Office to choose the right procurement mechanism that fits Maine’s unique needs.

Utility Ownership

Section 6 of LD1850 directs the Public Utilities Commission (the “Commission”) to consider the prudence of and conditions for utility ownership of energy storage. While it makes sense for the Commission to examine whether utility ownership of energy storage should be permitted in any circumstance, we are concerned that this section presupposes that utility ownership of energy storage is prudent. Utility ownership of energy storage may have a chilling effect on the development of the competitive market that this bill intends to spur. Further, rather than expending utility resources competing with the private market, we suggest that allocation of those utility resources towards improving the interconnection process for clean energy resources would have the effect of lowering the cost to interconnect clean energy and, thus, the cost of clean energy policy. As such, we encourage amendment of this section to require the Commission to conduct an inquiry into utility ownership of energy storage and that said inquiry may find that utility ownership of energy storage is not permissible.

Rate Design

One issue for energy storage that is not addressed in LD1850 is that of rate design, specifically how front-of-the-meter (i.e., storage connected directly to electric grid, not at an electric customer premises), distribution-connected energy storage will be charged for its use of the distribution system. Rate design for charging load is a significant barrier to the deployment of FTM energy storage on the utility distribution system. Currently, energy storage systems are assigned electric rates designed for commercial and industrial customers, which do not reflect the unique and flexible operating profiles of energy storage, nor the fact that storage is not consuming energy but rather engaging in a sale for resale. As a result, misapplied rate design can lead to distribution charges that make otherwise beneficial energy projects uneconomic and inhibit deployment. Both Massachusetts and Connecticut are in the midst of considering energy storage-specific rates.

The Commission also has an open docket, 2021-00273, considering a Central Maine Power (“CMP”) rate for energy storage.¹ CMP’s energy storage rate is largely the same as its commercial and industrial rate, with the only difference being the removal of transmission charges for energy storage as required by the Federal Energy Regulatory Commission. This rate is a missed opportunity to consider the actual costs that energy storage imposes on the distribution system when charging. We urge the Legislature to address rate design for energy storage in this legislation and require the utilities to file energy storage-specific rates that account for the unique operating characteristics and benefits of storage on the distribution system.

¹ <https://mpuc-cms.maine.gov/CQM.Public.WebUI/Common/CaseMaster.aspx?CaseNumber=2021-00273>

Distributed Storage Benefits

The procurement authority granted in LD1850 will support the development of larger scale energy storage, but additional consideration is necessary to support the deployment of distribution-connected energy storage. Distribution-scale energy storage can provide substantial benefits to ratepayers by improving grid efficiency, integrating renewable generation, and reducing utility costs. Connecticut Green Bank performed a cost-benefit analysis of a program to compensate standalone front-of-the-meter energy storage for performing in response to utility-called events. This analysis found that front-of-the-meter energy storage had a 2.8:1 benefit:cost ratio when only looking at the ratepayer impacts (i.e., not including any societal or economic development benefits).² Clearly, the benefits of distributed energy storage are substantial, and we urge Maine to capitalize on this opportunity by including authorization for the Governor's Energy Office to design programs that would support the deployment of distribution-scale energy storage to provide grid and ratepayer benefits.

Conclusion

LD1850 opens the door for the dynamic storage industry to participate in solving the cost, reliability, and emissions challenges facing Maine today and in the future. Energy storage, as a standalone resource or paired with a clean energy resource, can be programmed to capture a number of value streams. The flexibility and authority provided through this bill will allow for the design of programs and procurements that compensate storage for operating in the ways that most benefit the State. I look forward to working with the Legislature as this bill progresses. Please do not hesitate to contact me with any questions.

Sincerely,

/s/ Sean Burke

Sean Burke

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² CT PURA Docket 21-08-05, Connecticut Green Bank Order 19 Compliance, pp. 57. Available at: [https://www.dpuc.state.ct.us/dockcurr.nsf/8e6fc37a54110e3e852576190052b64d/434aa27c309ed0838525885d00643350/\\$FILE/FTM%20Energy%20Storage%20Projects%20in%20CT%20-%20BCA%2006102022.pdf](https://www.dpuc.state.ct.us/dockcurr.nsf/8e6fc37a54110e3e852576190052b64d/434aa27c309ed0838525885d00643350/$FILE/FTM%20Energy%20Storage%20Projects%20in%20CT%20-%20BCA%2006102022.pdf)