



June 13, 2022

Senator Michael J. Barrett, Chair, Joint Committee on Telecommunications, Utilities, and Energy

Representative Bradley H. Jones, Jr., Minority Leader

Representative Jeffrey N. Roy, Chair, Joint Committee on Telecommunications, Utilities, and Energy

Senator Cynthia S. Creem, Majority Leader

Representative Tackey Chan, Chair, Joint Committee on Consumer Protection and Professional Licensure

Senator Bruce E. Tarr, Minority Leader

RE: Senate Bill 2842, An Act Driving Climate Forward and House Bill 4524, An Act Advancing Offshore Wind and Clean Energy

Dear Conference Committee Members:

Form Energy appreciates the opportunity to submit this letter in support of provisions in Senate Bill 2842, An Act Driving Climate Forward, and House Bill 4524, An Act Advancing Offshore Wind and Clean Energy. We believe that the work before you has the potential to create a nation leading energy storage industry in Massachusetts, as well as advance the Commonwealth's greenhouse gas emission reduction goals. Our comments are offered in the spirit of collaboration, and are supported by our team's experience and expertise in the energy storage industry. We thank you in advance for your consideration.

Most critically, Form believes that passing a piece of climate legislation this session is necessary to capitalize on the momentum the state has built to drive toward a cleaner future. Storage and other technologies are prepared to accelerate the clean energy workforce, strengthen regional energy security without fossil fuels, and make the best use of our renewable energy resources. The Commonwealth cannot afford to wait to set the foundation to support this transition.

About Form Energy

Form Energy is a Somerville-based company working to commercialize a rechargeable iron-air battery capable of discharging electricity for 100 hours at a system cost less than 1/10th the cost of lithium-ion batteries. Our goal is to enable a fully renewable electric grid that's reliable and cost-effective year-round, even in the face of extreme multi-day weather events like the winter storms New England increasingly experiences. Our battery has the capacity to provide reliable, dispatchable and non-emitting energy to the grid during those worst winter storms, hottest summer hours, and least windy days. Form is a graduate of Greentown Labs, and we now occupy 85,000 square feet of space to support our Massachusetts operations.

Policy Support and Recommendations

Support

- House language in Section 26 (c) ensuring any storage study includes subsequent procurement authority.
- House and Senate language allowing offshore wind to pair with storage projects.
- House and Senate language defining multi-day storage (MDS) at 24+ hours.

Recommendations

- Define long-duration energy storage (LDES) at 8+ hours
 - The House bill defines LDES as 5-24 hours, the Senate bill defines it as 12-24 hours.
 - The definition should not be capped at 24 hours. Five hours does not reasonably differentiate short- from long-duration storage. Twelve hours excludes technologies in the 8-12 hour range traditionally considered long-duration.
 - Set definitions of LDES and MDS that best recognize and reflect the unique grid benefits of emerging energy storage technologies, including addressing grid security and resiliency issues to enable the retirement of fossil fuels.
- Set a required energy storage deployment target of 3GW by 2030, including specific targets for long-duration energy storage (1 GW) and multi-day energy storage (1 GW).
 - Requiring a target would accelerate the development of the local storage industry in the same way that similar targets launched the state's offshore wind industry.
 - Such state goals are needed and most powerful when new energy resources are at an early stage of commercialization and face barriers to market entry and competition in regional electricity markets
 - A portfolio of diverse local energy storage resources is needed to help Massachusetts achieve its decarbonization goals at lower cost, with fewer land-use impacts, high grid reliability, and lower pollution burden.
 - The optimal storage mix to meet regional grid needs and state climate goals will include some long-duration resources and some multi-day resources. Together, with existing storage technologies, these resources can replicate the performance of retiring fossil resources.

Conclusion

Massachusetts developed the leading template to launch the offshore wind industry, a model other states quickly followed. Form Energy hopes the Commonwealth will expand this template for success to build the local long-duration and multi-day energy storage industries to accelerate the Commonwealth's progress toward a reliable, affordable, carbon free electric system.

Form thanks the legislature for its leadership and bold action to advance the Commonwealth's clean energy, environmental and economic development goals, and looks forward to continuing to support your work.

We appreciate your consideration of our comments and welcome any follow up or further discussion.

Respectfully,

Nina Peluso
Policy Advisor
Form Energy, Inc.
npeluso@formenergy.com