Chairman Winfield, Reed and Formica, and the Members of the Committee:

The Energy Storage Association (“ESA”) appreciates the opportunity to submit these comments on Senate Bill (SB) 9, a bill Concerning Connecticut’s Energy Future. ESA’s membership comprises over 150 electric utilities, project developers, technology manufacturers, components suppliers, and other companies directly involved in energy storage. Several of our members conduct storage or related business activities in Connecticut. ESA strongly believes that energy storage can open a path to a more efficient, resilient and reliable, sustainable and affordable electric system for Connecticut.

In simplest terms, storage enables energy that is generated to be used at a later time, when it is most needed. Using energy storage can save Connecticut ratepayers money by reducing the amount of spare capacity, in the form of excess power plants and wires, that utilities need to build to meet system peak demands. Energy storage also makes the grid more reliable by evening out fluctuations in supply and demand and serving as back-up for disruptions to supply and outages. Finally, energy storage will allow Connecticut to integrate a larger supply of clean energy by compensating for the natural variability of wind and solar power—including from solar rooftops on homes and businesses.

Energy storage is unlike any other resource and does not fit existing electric system rules—sometimes it acts like supply, sometimes it acts like demand, sometimes it acts like infrastructure, and it can switch between these roles at will. That multi-service capability is what make storage so valuable. For Connecticut to be able to take advantage of energy storage, however, the rules must be updated to include technology not earlier contemplated. The existing system rules and processes in Connecticut do not currently value its multiple capabilities.

Energy storage complements renewable energy deployment and should be a critical pillar of the State’s policy goals of providing a cleaner, more resilient and flexible grid. As such, it is appropriate for SB 9 to include policies aimed at overcoming the barriers to energy storage. ESA recommends that the bill be amended to include a cost-benefit study of energy storage deployment in the State of Connecticut.
Directing a study of a scenario of energy storage deployment in the state’s electric system will provide you, as well as your colleagues at the Public Utilities Regulatory Authority, important analysis on how storage may lower costs and increase reliability for Connecticut businesses and households. The study will also inform policies, programs and subsequent targets that enable storage deployment to support the clean energy goals contemplated in SB 9.

In 2016 the Commonwealth of Massachusetts commissioned such a study as part of meeting its clean energy policy goals, and the results are instructive for Connecticut. Massachusetts policymakers discovered that system benefits to ratepayers were twice that of the direct services energy storage could be paid to provide. Furthermore, the study identified specific Massachusetts barriers to realizing those ratepayer benefits and informed how a storage could assist the Commonwealth in achieving greenhouse gas reductions. Other states have embarked on similar studies. In 2017, the Nevada legislature passed Senate Bill 204, calling on the Public Utilities Commission to conduct a cost-benefit analysis of energy storage and establish biennial procurement targets. In addition, the Maryland and North Carolina legislatures passed storage study bills in the 2017 legislative session. Lastly, a cost-benefit analysis of storage deployment is being conducted for the New York State Energy Research and Development Authority and is slated for completion in the coming months to inform New York’s clean energy deployment goals.

ESA urges the Committee to consider additional language related to energy storage to ensure that the State of Connecticut is able to achieve its goals of a more efficient, resilient, sustainable and affordable electric grid.

Thank you for your time and consideration.

Nitzan Goldberger
State Policy Director
Energy Storage Association