



March 28, 2023

VIA EMAIL to jnewman@leg.state.vt.us

RE: S140 An act relating to an energy storage study committee

The Solar Energy Industries Association (SEIA) appreciates the opportunity to express our support for Senate Bill 140. This bill will create the Legislative Energy Storage Study Committee (Committee) to evaluate the economic, environmental, and energy costs and benefits of energy storage to electricity customers, utility providers, and the energy storage industry in Vermont. Energy storage is rapidly emerging as a vital component of the transition to a lower carbon, high reliability grid, and we commend Vermont for taking early steps to establish a robust storage industry in the state.

As states set energy storage targets, the opportunity for storage becomes even more compelling. For businesses and utilities across the country, energy storage can reduce the cost of electricity, increase reliability, improve the sustainability of the grid, and allow us to scale our renewable energy deployment. This is very timely in New England; as more storage is deployed elsewhere in the region, the cost of the regional peak charges falls onto states that are not actively utilizing storage as a peak shaving tool.

Establishing an energy storage target and an energy storage deployment plan will place Vermont among the handful of states that are emerging as leaders in energy storage deployment. It will send the necessary market signals that businesses rely on to bring economic activity to a state. Senate Bill 140 represents a critical first step in reducing barriers such as permitting, financing, and interconnection while piloting robust business models that will be needed to succeed at wide-scale energy storage deployment in the future.

Energy storage is a powerful tool both when installed in a standalone manner or when paired with renewable resources. As a standalone resource, energy storage's dense footprint enables meaningful capacity to be installed in tight quarters, such as on existing utility assets like substations, in mechanical areas of commercial buildings, or on brownfield or decommissioned industrial facilities. Whether connected to the transmission grid or distribution grid, energy storage can help shape load flows and manage congestion, provide vital power quality support, avoid the need for expensive peaking assets that only run a handful of hours a year.

When paired with renewable generation, energy storage can "firm" solar and wind, increasing the value of these resources to Vermont's utilities or in the broader New England wholesale markets. Storage also enables solar generation to be shifted from midday when excess generation can cause operational challenges to evening and morning peaks when loads – and

costs – are higher. This in turn allows for deeper reductions in greenhouse gas emissions by avoiding less efficient gas- or oil-powered peaking units and enables Vermont to better manage its peak demand to avoid costly capacity charges.

For residential and commercial customers, installing energy storage with solar can – literally – be a lifesaver. With proper configuration, these behind-the-meter installations can provide customers with backup power when the broader electric grid is out. Even for customers with gas or oil heat, backup electric power is necessary to run the heater as the controls and ventilation fans that run and distribute heat through the building require electricity. Solar plus storage units can help customers ride through power outages without going cold, without having to throw out valuable food, and keeping medications safe and medical equipment running.

Senate Bill 140 is the first step towards a legislative goal for energy storage in Vermont. By establishing and supporting the Committee to study the myriad benefits that storage provides to the transmission and distribution systems, to help manage utilities' peak demands, to wholesale and retail market customers, and to the tax base and economic development of the state writ large, SEIA is confident that Vermont will find merit in pursuing energy storage targets in the future.

Thank you again for allowing us to provide our support for Senate Bill 140.

Sincerely,

A handwritten signature in cursive script, appearing to read "V. Souter-Kline".

Valessa Souter-Kline
Northeast Regional Director
Solar Energy Industries Association