



Legislative Testimony of Vivint Solar, Inc.

To the Joint Committee on ENERGY AND TECHNOLOGY

March 5th, 2020

In SUPPORT of House Bill 5351 – An Act Concerning Certain Programs to Incentivize and Implement Electric Energy Storage Resources

Senator Needleman, Representative Arconti, Senator Formica, Representative Ferraro, and members of the Joint Committee on Energy and Technology:

Vivint Solar Supports House Bill 5351

Vivint Solar strongly supports the target of 1,000 MW of energy storage by 2030. Energy storage is a key piece of a high-renewables future and can provide significant value to the electric grid and all ratepayers. No viable storage market currently exists in the state, but progress is being made at PURA on that front and this legislation would help create the environment for a market to develop.

We believe that while the bill today is generally positive, there are a few changes that could be made to strengthen the residential energy storage program which will help the state meet the 1,000 MW target.

1. First, we would recommend that the size of the residential energy storage program be specified in the bill. This would provide confidence to the industry that the incentive program will have a sufficient runway so that companies are able to invest the necessary resources to bring energy storage into their offerings here in Connecticut. The risk of not specifying a program size in the legislation is that the program could be prematurely ended or have funding diverted due to lacking statutory protection. We recommend a 250 MW program size to start. This would produce a quarter of the energy storage needed over the next 10 years to reach the 1,000 MW target.
2. We also recommend that the bill specify that the residential energy storage program be “continuously open,” like the current RSIP program. Residential incentive programs do not operate well when applications are not accepted on an ongoing basis. It is difficult for businesses that rely on continuous work to participate in programs that involve auctions, solicitations, or similar mechanisms because the timelines for residential projects don’t align with those schedules.
3. Third, the bill should specify that the incentive be an upfront incentive for energy storage systems. One of the largest impediments to a residential storage market is the high upfront price. Additionally, there are pay-for-performance demand response programs already being developed, so any additional pay-for-performance program would further complicate the policy landscape. This incentive program should be purely a deployment-focused program, whereas the demand response or future grid services programs should be optimization-focused on how to actually use the energy storage resources to maximize the

grid and ratepayer benefits. If there are multiple programs for energy storage and each has different operational requirements, it is likely that there will be conflicting price signals for customers which will lead to confusion and reduced participation. An upfront payment could also be a lower total dollar amount versus payments over time because of the time-value-of-money aspect of revenues streams and associated production or operational risk.

4. Finally, the program should be as simple as possible to encourage participation. Energy storage is a new technology that adds many layers of complexity to a project. Many, if not most, residential solar companies have probably installed very few (if any) energy storage systems or participated in any demand response programs before. Having a complex program with complicated incentive values or strict operational requirements will not foster the type of growth in the energy storage market that the state needs to see in the coming years to meet its target. Especially at the beginning, the program needs to be accessible to a wide range of solar companies in order to be accessible for a wide range of customers.

We do not believe that any of the proposals above are in conflict with the goal of the legislation: to incentivize the deployment of residential energy storage in Connecticut. Making these changes will ensure that this program is focused on the deployment of energy storage systems without overlapping with the forthcoming demand response programs for energy storage from the utilities. The residential energy storage program requirement in this bill should not be able to be satisfied solely by the already-approved demand response programs.

Some may argue that no additional incentive program is needed beyond the demand response programs being developed: this is not the case. Those programs, while important and hopefully successful, will not come close to adding enough value to customers to overcome the costs of adding energy storage to their solar system at this time – meaning they will not drive growth in the energy storage market in Connecticut.

The optimal combination of policies to create an energy storage market include 1) an upfront incentive to reduce the upfront cost of an energy storage system and so that economies of scale can be utilized, 2) a demand response or grid services tariff that can provide additional revenue streams and provide ratepayer benefits, and 3) adequate solar compensation policies that allow for a healthy solar market. A storage market cannot exist without a viable solar market. We believe that with the incentive program in this bill, if structured appropriately, with the demand response and net metering programs, a viable energy storage market will be possible in Connecticut.

We are extremely supportive of transforming the residential solar market in Connecticut into a solar plus storage market. It would be a new era of solar development in the state and one we look forward to participating in.

Sincerely,



Kyle Wallace
Manager, Public Policy