SUNPOWER®

1 March 2018

Energy and Technology Committee
Legislative Office Building, Room 3900
Hartford, CT 06106

RE: SB9, An Act Concerning Connecticut's Energy Future
Position: OPPOSED

Co-Chairs Reed, Winfield, and Formica

My name is Robin Dutta, and I am the Director of Market Development and Policy for SunPower Corporation, focusing on east coast state policy. SunPower is a global technology company involved in every step of the solar system supply chain. SunPower has over 7,000 employees worldwide, the world's highest efficiency solar photovoltaic panel technology, and an extensive national dealer network mostly consisting of locally-owned small businesses. In Connecticut, SunPower has 11 local companies in our dealer network, who develop and install residential and commercial projects, representing several hundred full-time workers in Connecticut.

SunPower respectfully and strongly opposes SB9, An Act Concerning Connecticut's Energy Future. It would repeal foundational solar policies such as net metering, and create new solar programs that would, as proposed, stifle private investment and innovation. SB9 would place the state's 2,710 solar workers' livelihoods at risk. It would also prevent the solar plus storage project innovation occurring in other states from happening here. And, couple with the import tariffs just imposed by the Trump Administration, the solar industry is facing greater opposition than ever before. State solar policies have the potential to off-set the Federal government's negative actions. SB9 would add to the Connecticut solar industry's problems.

It is surprising to see such anti-solar policies being brought forward by Governor Malloy and the bill sponsors, considering the bipartisan support our industry receives from around the country, particularly from Connecticut's neighboring states. SB9 is a clear signal that the Malloy Administration is hostile towards the solar industry, that it does not want to encourage the growth or retention of solar jobs, nor help provide greater energy choices for its residents and businesses suffering from high energy costs. If SB9 were to become law, it would discourage SunPower and other solar companies from doing business in Connecticut.

SunPower offers these written comments on SB9, focusing on the sections of the bill that directly impact the state's solar market.

Section 1 – Increasing Renewable Portfolio Standard Targets

SunPower supports Connecticut's proposed increase to their RPS, however it should be noted that increasing those renewables mandates does not directly impact the in-state solar industry. It also does not off-set the repeals of other solar policies. Renewables projects that are eligible to meet those mandates can be located outside of the state. They are also large merchant facilities that participate in the wholesale energy market. The RPS does not directly support Connecticut's homeowners and local businesses who would like to offset their energy consumption with on-site solar.

Section 4 – Repealing Net Metering

Absent an evidence-based, thorough investigation to quantify the value of energy from distributed energy sources, proposals to end net metering are nothing more than an attack against solar development. Net metering is a cornerstone solar policy, and it is the mechanism for solar customers to directly benefit, financially, from their solar array. This is true from the homeowner who has had solar installed on their roof or the community college that is purchasing energy being generated from the solar parking canopy on their campus and saving money on their operating budget. The reason that many solar customers sign a contract is not only because they would like to become more environmentally friendly but because they can save money. That would not be able to happen without net metering.

There is not yet any evidence to suggest that net metering is a burden to Connecticut ratepayers, nor is there any evidence to suggest that the value of energy from distributed energy sources in Connecticut should be anything other than equal to customers' volumetric retail rates. While the Department of Energy and Environmental Protection (DEEP) has made these claims, they have not substantiated them with data and analysis. The Department has not published any figures that quantify any "cost shift" to non-solar ratepayers, and calculations included in the recently finalized 2018 Comprehensive Energy Strategy (CES) report are unsubstantiated. Their use of net present value calculations is curious, at best. Such calculations are not relevant when attempting to determine any annual ratepayer impact. DEEP has also not attempted to quantify the benefits from solar net metered systems.

SunPower submitted comments on the record during DEEP's public stakeholder engagement, and did provide estimates of ratepayer impact using publicly available data. Our analysis of DEEP's calculations used for the draft CES showed multiple erroneous calculations, uncited cost data points, and many unlabeled data points. SunPower analysis showed that net metering ratepayer impact translated to roughly $0.001/kWh for the average residential ratepayer, and provided citations for methodology and all data sources. SunPower will gladly submit those comments to the Committee for your review.

The Administration did not substantially revise their policy recommendations from the draft CES to the final version. SB9 reflects the policy recommendations from this final document. Given the lack of evidence to support the Administration's cost-shift claims, and the lack of intellectual rigor reflected in both the report and published quantitative analysis, the policy recommendation to repeal net metering must also be looked at with a very critical eye.

Section 5 – Blocked Innovation, Stifled Investment, and Reduced Energy Choice for Individuals and Businesses

If the intent of Section 5 is to implement new solar programs that support the growth of the local solar industry, they are poorly designed. If the intent of Section 5 is to reduce the state's solar industry to our knees, it is well designed. SB9 will create inferior solar programs than those currently in effect, and block the possibility for Connecticut to benefit from further innovations in solar.

First, it should be noted that the current solar incentive programs have had mixed success. The Residential Solar Investment Program (RSIP), dramatically expanded by the Legislature in 2014, has been a steady program, with transparent rules and compensation. The program is "always on", which means the program rules does not restrict how businesses engage customers. As a result, Connecticut residential solar installation rates have increased nearly five-fold[1]. The ZREC program has been mired in the mess of its own program design. Commercial solar installations have remained constant between 2014-2016[2]. The program relies on annual auctions. Solar developers cannot put together a business plan and a customer value proposition because ZREC values cannot be known ahead of time. Solar projects live or die based on the auction results. It is not facilitating solar industry development, thus denying a viable alternative to businesses trying to lower their electricity costs.

SB9 takes the worst program design aspects from the ZREC program, the auction, when creating its new programs. And, it goes further to actively dis-incentivize solar investment and penalize those who adopt solar.

<u>Blocking Investment</u>

The auction component means that future programs lack transparency and hurt the business environment. That adds further obstacles to solar businesses because there is no way to develop rational expectations when project selection is random and not based on any project quality criteria. While the RSIP allowed solar companies to perform business strategy planning with the confidence that public policy will remain constant, SB9 would discourage solar companies from trying to attract customers. It is a program designed to tie down solar development, not encourage it.

<u>Eliminating the Right to Energy Self-Consumption</u>

SB9 eliminates the ability for homeowners and businesses to off-set their energy consumption by going solar, just as if they made their home more energy efficient. By eliminating this right, SB9 effectively places a penalty on homeowners and businesses who adopt solar. The new tariff program envisioned by SB9 would prevent solar systems from being located behind the customer's meter. Customers would lose out on the value of solar, and on the potential savings solar arrays could bring them. This represents further intrusion of the electric distribution company into the home and business, unfairly influencing the private decisions on how one can and should consume electricity. Such programs do exist in other states, such as Georgia, but these are minor solar markets for residential and commercial solar. In fact, these programs are the reason that these distributed generation markets remain minor.

---

[1] Honeyman, Kann et al. "US Solar Market Insight: Q1 2015 Full Report" GTM Research and SEIA. June 2015. p13

[2] Perea, Honeyman, et al. "US Solar Market Insight: Q3 2017 Full Report" GTM Research and SEIA. Sept 2017. p27

SUNPOWER®

Preventing Solar Plus Storage Innovation

By eliminating net metering, any separate value of energy, and the right for a customer to consume the energy they generate, SB9 is designed to prevent Connecticut from benefiting from solar plus storage innovation and development. Solar plus storage projects are the next wave of distributed energy resource, and they can provide not only greater monetary benefits for customers, but also provide grid benefits to the distribution company. This can only be done with the current construct, where these systems are located behind the customer's meter and the right to self-consumption remains in place. Otherwise, there is little rationale or business case for these systems to be developed. Homeowners and businesses would have little financial motivation to pay for solar plus storage systems that by law cannot provide them benefits. This would leave Connecticut behind as the clean energy revolution continues in its neighboring states and across the country.

Conclusion

SB9 would represent a major step back for Connecticut solar policy, and likely incur the reduction or even elimination of Connecticut as a viable solar market. The Malloy Administration appears to support actively denying homeowners and businesses in the state the choice to go solar. It is troubling that the Malloy Administration's energy experts are not developing policies aimed at increasing renewable distributed generation – that their focus is not on improving a business environment that attracts renewable energy developers. The proposed solar programs are influenced by a DEEP report severely lacking in data analytics and reliant on sloppy research. If this Committee supports SB9, it risks losing over 2,000 solar jobs.

SunPower supports the proposals of the Northeast Clean Energy Council (NECEC), who proposes a solar program similar to those in Rhode Island and Massachusetts. Those programs are "always on", create a transparent and stable business environment, and allow solar companies to offer meaningful and significant savings to customers. It will also allow Connecticut to grow its solar industry, attract investment from companies such as SunPower, and provide its population with greater options to lower their energy costs.

Sincerely,

Robin K. Dutta

Robin K. Dutta
Market Development & Policy – Eastern US
1342 Florida Avenue NW
Washington, DC 20009
Email: robin.dutta@sunpower.com
Phone: 202.341.9513