



Legislative Testimony of Sunrun, Inc.
To the Committee on Energy & Technology
March 4, 2021

In SUPPORT of:

Senate Bill 882: AN ACT CONCERNING CLIMATE CHANGE MITIGATION AND HOME ENERGY AFFORDABILITY

Senate Bill 952: AN ACT CONCERNING CERTAIN SOLAR ENERGY PROJECTS

Chairs Arconti and Needleman, Ranking Members Formica and Ferraro, and distinguished members of the Energy and Technology Committee:

Senate Bill 952

Sunrun strongly supports Sections 1 and 2 of SB 952 which sets an energy storage deployment goal of 1 GW by 2030 and requires the Public Utilities Regulatory Authority (“PURA”) create programs to help achieve that deployment target. Setting a state deployment target for this dynamic technology sends an important signal to energy storage providers that Connecticut is committed to developing its clean energy economy. While PURA is already in the process of creating programs that would fulfill the intent of this legislation, we believe that codifying these programs will provide the stability and certainty necessary for businesses to invest in Connecticut.

Distributed energy storage will be a critical component as Connecticut works toward a 100% zero-carbon electric grid by 2040 and seeks to mitigate the effects of climate change and more frequent severe weather. The recent events in Texas and Tropical Storm Isaias last summer have made it clear that a more resilient grid must include customer-sited energy storage. Most recently, in Texas hundreds of families that were fortunate enough to have onsite solar plus storage were able to power through multiple days of outages and avoid the emotional and physical distress that many in the state experienced.¹

As long as there is an electric distribution system able to be damaged, there will be power outages for residents. The optimal response to severe weather is to never lose power in the first place – which can *only* be provided by on-site energy storage. The programs being developed by PURA would enable broader adoption of energy storage so that Connecticut could eventually move to solar and storage being the default option for consumers.

Importantly, the bill also requires the programs be designed to provide a benefit for *all* ratepayers. The known value of energy storage for the electric grid and ratepayers is significant, as demonstrated by the joint report by PURA and DEEP on the Value of Distributed Energy Resources even when benefits such as resilience were not able to be quantified.² It is likely that the quantifiable value of energy storage will continue to increase over the next decade as new value streams are identified and regulatory structures adapt to the technology.

¹Sunrun customers with solar and storage were able to keep critical loads powered throughout the extreme weather, for one example see: <https://www.seia.org/blog/texaspowercrisis>.

² Of the energy resources examined, small-scale solar and storage provided *the highest quantified value* of any resource. Source: Draft Distributed Energy Resources in Connecticut Report, July 2020, prepared by DEEP & PURA per Public Act 19-35.

Senate Bill 882

Sunrun supports Governor Lamont's bill which would establish a statewide 100% zero-carbon electricity goal by 2040. Having this statutory target will help guide the necessary program designs, regulations, and administrative actions over the next two decades to combat climate change and develop a clean energy economy.

To meet the emissions reduction necessary to comply with the Global Warming Solutions Act, Connecticut will need to increasingly electrify its transportation and heating sectors and ensure that the increase in electric demand is served by non-emitting resources. Even with aggressive energy efficiency policies, it is possible that electric demand in the region could double by 2050 with successful electrification.³ A clean electric grid must be the backbone of every state's comprehensive approach to climate change.

A 100% zero-carbon electric grid will have to be a more dynamic, flexible, and smart grid. Energy storage, demand response, and flexible load resources will all be incredibly important in providing the reliability customers expect and deserve. In that regard, the energy storage language in SB 952 is critical to achieving the state goal in SB 882.

Sincerely,

Kyle Wallace
Sr. Manager, Public Policy

Sunrun Inc. is the nation's leading home solar, battery storage, and energy services company. Founded in 2007, Sunrun pioneered home solar service plans to make local clean energy more accessible to everyone for little to no upfront cost. Sunrun's innovative home battery solution, Brightbox, brings families affordable, resilient, and reliable energy. The company can also manage and share stored solar energy from the batteries to provide benefits to households, utilities, and the electric grid while reducing our reliance on polluting energy sources.

³ Jurgen Weiss, J. Michal Hagerty, et al, [Achieving 80% GHG Reduction in New England by 2050](#), at 8 (Brattle Group September 2019).