PowerOptions Comments on Raised Bill No. 5351:
AN ACT CONCERNING CERTAIN PROGRAMS AND TO INCENTIVIZE AND IMPLEMENT ELECTRIC ENERGY STORAGE RESOURCES.

Introduction

Good afternoon Co-Chairs Needleman and Arconti, and Members of the Committee. My name is Derek Howell and I manage business development for PowerOptions in Connecticut. Thank you for the opportunity to testify in support of electric energy storage programs as described in Raised Bill No. 5351.

PowerOptions is a nonprofit energy buying consortium with over 450 members in Connecticut, Massachusetts and Rhode Island. For over 20 years, PowerOptions' mission has been to help save municipalities, state entities and nonprofits time and money on energy. Our members range from cities and towns to small community centers and religious organizations, YMCAs, public housing authorities, school districts, hospitals and universities, among others, that purchase about $200 million of energy commodity through our programs annually.

PowerOptions has operated a successful solar power program for the last 8 years and its membership represents over 75 MW of solar in Massachusetts. As solar power has gained generation market share, the idea of storing and using the energy saved when it is most useful has been critical . The emerging storage market can enable peak shaving, thereby reducing energy use and the reliance on the least efficient resources that are called on to meet peak demand. In addition, each megawatt contributed by storage is one less megawatt contributed by fossil fuels, reducing our state's and region's emissions. While PowerOptions supports Raised Bill 5351, PowerOptions also provides the following comments regarding establishing behind the meter commercial and industrial customer and public entity storage goals.

Behind the Meter Commercial & Industrial (C&I) Program

PowerOptions believes that Connecticut should establish electric energy storage programs for Behind the Meter (BTM) C&I customers and public entities. Section 2 of the bill states that the Public Utilities Regulatory Authority "*shall* establish a program or programs for the residential class of electric customers." It then states that the "authority *may* establish a program or programs for commercial and industrial classes of electric customers." The legislation should provide the same requirement for a C&I customer program as it does for the residential class. A larger quantity of smaller, BTM projects for C&I customers would facilitate a "learning by doing" that could help drive down costs for energy storage, as seen in the solar industry. This would also facilitate greater competition, furthering the incentive to improve efficiencies where possible. Another benefit to robust BTM deployment for C&I customers is that it carries the potential to

alleviate grid concerns associated with densely concentrated solar projects. If customers site their energy storage with BTM solar, some of the impacts of solar deployment on the distribution system would be eliminated as customers export less energy to the grid. Another benefit of C&I customers with BTM energy storage is the ability to provide services to the grid, especially if a number of systems are aggregated by third parties.

Without a BTM requirement, economies of scale could make it likely that large, utility-owned projects could dominate the vast majority of deployments to meet the 1,000 MW by 2030 goal. Utilities have indicated that solar can strain the distribution system if not deployed efficiently, and that energy storage on a large scale has the potential to alleviate these concerns.

Public Entities Should Lead by Example

PowerOptions also recommends that the Connecticut Legislature create a target for public entity energy storage projects. Governor Lamont's Executive Order No. 1 emphasized DEEP's *Lead By Example,* which has made it clear that reducing greenhouse gas emissions from the public sector is critical to meeting the State's emissions goals. By reserving a portion of the 1,000 MW energy storage target for public projects, the Legislature would advance Governor Lamont's goals and allow public entities to be active participants in promoting the development the energy storage industry. Further, a public project target will provide greater incentive as more developers will seek these projects. Without such a target, public entities may be hesitant to invest in storage using their tight budgets, and developers may shy away from them. Thus, it is in the best interests of both the state and the industry to set an energy storage target for public entities to incent development and to lead by example.

Conclusion

Thank you again for allowing PowerOptions to provide these comments. PowerOptions supports a state policy to encourage the deployment of 1,000 MWs of electric energy storage by 2030. PowerOptions suggests establishing a target for public entity procurement of energy storage and a requirement for a C&I program, similar to the requirement in the bill for a residential program.