TESTIMONY TO
CONNECTICUT JOINT COMMITTEE ON ENERGY AND TECHNOLOGY

SENATE BILL 952
AN ACT CONCERNING CERTAIN SOLAR ENERGY PROJECTS

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Committee Chairs Needleman and Arconti, Vice-Chairs Winfield and Allie-Brennan, Ranking Members Formica and Ferraro, and distinguished members of the Committee:

Thank you for the opportunity to provide these comments today in support of Senate Bill 952. I commend Rep. Michel and the committee chairs for the development of policy that will drive the deployment of energy storage in Connecticut.

ESA is the national trade association dedicated to energy storage, working toward a more resilient, efficient, sustainable and affordable electricity grid – as is uniquely enabled by energy storage. With more than 200 members, ESA represents a diverse group of companies, including independent power producers, electric utilities, energy service companies, financiers, insurers, law firms, installers, manufacturers, component suppliers, and integrators involved in deploying energy storage systems around the globe. Further, our members work with all types of energy storage technologies and chemistries, including lithium-ion, advanced lead-acid, flow batteries, zinc-air, compressed air, liquid air, and pumped hydro among others. ESA members have made significant investments in Connecticut.

Fundamentally, energy storage systems provide the flexibility to deliver energy at the precise moment and location it is needed. This flexibility can deliver value at all levels of the electricity system: wholesale services such as resource adequacy, electricity supply, and capacity; distribution services including peak demand reduction, load shifting, and increased system capacity; and customer benefits including back-up power and bill management.

Energy storage can deliver significant savings to ratepayers. The Connecticut Green Bank has found that a residential energy storage program alone would deliver $215 million in benefits by 2025. Added together with a scaled energy storage deployment that includes large energy storage projects connected directly to the transmission and distribution systems, as envisioned by SB 952, could yield significant additional benefits. For example, our colleagues in Massachusetts Department of Energy Resources have previously found that 1700 MW of energy storage in their state would yield $2.3 billion in ratepayer benefits, and we would expect similar outcomes for Connecticut.

However, the benefits of energy storage don’t stop at the electric bill, and SB 952 wisely includes in its cost-benefit analysis the benefits of energy storage in promoting distribution system reliability, economic development, and achieving the state’s climate and energy goals. Last summer’s devastating
storms and power outages that left some Connecticut residents without power for weeks demonstrate the urgent need to make investments in the reliability and resilience of the electric system.

Energy storage is at an inflection point in its adoption across the United States. The US deployed more than 2 GWh of energy storage in Q4 of 2020 alone – more than the total deployments of all of 2018 and 2019 together. Much of that deployment is concentrated in a few leading markets, and supportive policy is critical to the local adoption of energy storage. Seven states—Massachusetts, New York, California, Nevada, Oregon, Virginia, and New Jersey—have now passed energy storage deployment targets, and Arizona’s Corporation Commission has passed a target that is pending final approval. The passage of SB 952 would allow Connecticut to join the ranks of leadership states on energy storage policy and ensure a robust local market.

SB 952 includes accountability and transparency mechanisms to ensure progress towards the 1,000 MW by 2030 target, including interim targets of 300 MW by 2024 and 650 MW by 2027. ESA finds that this is an achievable deployment trajectory that will allow Connecticut to activate and establish a diverse energy storage market, reducing the costs of more significant energy storage deployment in later years. Specifically, ESA recommends a 2-3 year near-term target of storage capacity equivalent to 3-7 percent of peak demand. The 2024 target in SB 952 is consistent with that near-term target. Moreover, it is consistent with the PURA’s Energy Storage Straw Proposal, which includes a 2024 target of 100 MW for customer-sited energy storage.

Finally, the legislation rightly recognizes that the Public Utility Regulatory Authority (PURA) and the Department of Energy and Environmental Protection (DEEP) are best equipped to develop programs that drive energy storage deployment in the most cost-effective and efficient applications, as well as devise appropriate mechanisms to promote storage that may vary between commercial & industrial customers and residential customers.

ESA has one recommendation to improve the legislation. SB 952 requires PURA to act to deploy energy storage connected to the distribution system – and indeed PURA has already made progress toward this goal with its Energy Storage Straw Proposal. We support this provision, as enshrining this regulatory action in statute improves certainty that Connecticut will continue its policies on energy storage connected to the distribution system, reducing regulatory risk for storage investors and developers. However, the bill does not provide the industry similar regulatory clarity that DEEP will act to procure energy storage connected to the transmission system. ESA respectfully asks the committee to consider an amendment that would require DEEP to issue requests for proposals for storage. Doing so would ensure that cost-effective energy storage is procured if available. Given the significant cost declines of energy storage recently – between 7 and 10% percent year-over-year – requests for proposals provide the most accurate measure of costs in the current market and the most accurate data in the evaluation of cost-effectiveness. Requiring DEEP to issue RFPs would not obligate DEEP to proceed with the procurement if the proposals are not cost-effective.

ESA respectfully urges the Committee’s support of SB 952 to facilitate the deployment of energy storage, for a more resilient, efficient, sustainable and affordable electric grid for Connecticut. I thank you for your leadership and your consideration and look forward to answering your questions.