



June 27, 2018

Judith Judson
Chair, Energy Efficiency Advisory Council (EEAC)
Commissioner, Department of Energy Resources
100 Cambridge Street, Suite 1020 Boston, MA 02114

Dear Commissioner Judson and Members of the EEAC:

I am writing on behalf of Solect Energy regarding the 2019-2021 Three Year Energy Efficiency Plan. With more than 80 MWs installed and over 400 installed projects, Solect Energy is the largest solar energy company in the Commonwealth focused exclusively on the commercial scale market. This means we have worked with hundreds of businesses, municipalities, schools, housing projects and other institutions throughout the state to help them lower their energy costs and their carbon footprints by installing solar energy systems.

As we worked with many of our customers we observed that most of them were paying extremely high demand charges and capacity charges, but had limited ability to pursue active demand management (ADM) practices to mitigate these costs. In turn, these market fundamentals convinced us to start an energy storage division. We strongly believe that energy storage paired with solar is the most cost effective way to reduce expensive demand charges for C&I consumers. We also believe that energy storage will improve the economics and further accelerate the deployment of solar energy in the C&I sector. Lastly, assuming that the EDCs design their rate structures to send price signals, via higher demand charges, to mitigate regional and nodal congestion on the grid, behind the meter storage (BTM) is likely the most efficient way to relieve these expensive congestion challenges, lowering peak emissions and costs for all consumers across the grid.

Over the past year or so, we have performed over one-hundred energy storage assessments for existing and potential customers. For most of them, the economic analysis shows a payback that in many cases is similar to PV, in some a couple of years longer. A recent study by the National Renewable Energy Laboratory showed that energy storage offered compelling payback windows for 189,000 commercial customers in Massachusetts -- those paying more than \$15 per kilowatt). Yet, with the exception of projects that have received demonstration grants from the state, *not a single customer has decided to install a system.*

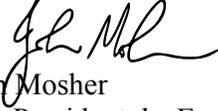
The reasons for this are obvious and are confirmed by our conversations with our customers: there is too much risk. As was originally the case with solar, and also remains true for energy efficiency, good economics are often not enough to start a market based on unfamiliar technologies and mobilize adoption from consumers. Although BTM storage technology is well proven and has a large installed base in California and other parts of the world, consumers and vendors in Massachusetts are still unfamiliar with the entire approach. Therefore, even though many customers could benefit today, they are electing to wait on the sidelines. We strongly believe that enhancing price signals and defraying upfront capital costs through an energy storage rebate program is exactly what is needed to get these consumers off the sidelines and to start building projects. We are aware of and fully support a recent proposal crafted by the Northeast Clean Energy Council (NECEC) and other clean energy advocates called MOR Storage (Massachusetts Offers Rebates for Storage), modeled in part on the successful California Self Generation Incentive Program (SGIP). Based on our analysis and conversations with our customers, we know that this incentive will be enough to get them across the tipping point to begin greenlighting projects. The irony is that while many of these customers have participated in SREC I and SREC II, are committed to renewable energy, understand the benefits and are sophisticated energy consumers, they are for all practical purposes locked out of the SMART program and energy storage. Without an incentive the ROI is too long and the risk too high. The nature of lithium ion would require a refresh in many cases just after the project becomes revenue positive. Further, the economics in MA are still in flux as vendors learn the MA market and the SMART program. Finally, key provisions in SMART that will affect the economics (and make modeling at this time uncertain) are still outstanding, such as ownership and control of the capacity of the PV + ESS and mandatory program participation (which could affect peak shaving, the primary benefit for BTM).

We urge the EEAC and the Program Administrators to increase funding available for commercial and industrial energy storage applications in the finalized three-year plans, likely through the use dedicated or enhanced ADM offerings. These programs should be increased to at least \$25M in participant incentives per year for the 2019-2021 Plan to provide a pool of funding commensurate with the robust opportunity for energy storage adoption in the C&I sector across the Commonwealth, including and especially for solar+storage retrofits of existing SREC I and SREC II systems.

We understand that the traditional cost benefit analysis performed by the Program Administrators may not be ideally suited for assessing the benefits of energy storage and other ADM measures, and we would strongly urge that these analyses be updated to reflect the differentiated characteristics of energy storage savings (kW vs. kWh) and current economics of our energy markets in the Commonwealth. Energy storage can and should be part of the 2019-2021 plan; we

speaking from direct experience when we say that an energy storage rebate program is the single most important incentive for the short-term for the deployment of storage and its associated benefits.

Respectfully,

A handwritten signature in black ink, appearing to read "John Mosher". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

John Mosher
Vice President, IecEnergy Solutions
Solect Energy
Hopkinton, MA