

SUBMITTED ELECTRONICALLY

September 22, 2021

To: Massachusetts Energy Efficiency Advisory Council
From: Clean Energy Group

Back in 2018, Clean Energy Group (CEG) advocated for the inclusion of distributed battery storage in the 2019-2021 Massachusetts Three-Year Energy Efficiency Plan. At that time, nobody had conducted a cost-benefit analysis to determine whether battery storage behind customer meters was cost-effective – a requirement for inclusion in the efficiency plan. CEG contracted with the Applied Economics Clinic to conduct this analysis. Published by AEC as *Updated Massachusetts Battery Storage Measures: Benefits and Costs*, the report showed that distributed battery storage was indeed cost-effective, using the same tests, assumptions and inputs used by the Massachusetts program administrators. We presented this analysis to the EEAC and the PAs. Subsequent analysis by the PAs confirmed our conclusion, and battery storage became a part of the ConnectedSolutions program as a peak load reducing measure in 2019.

AEC's analysis was incorporated into CEG's report, [Energy Storage: The New Efficiency — How States Can Use Efficiency Funds to Support Battery Storage and Flatten Costly Demand Peaks](#), which described how Massachusetts had expanded the definition of efficiency and created a nation-leading funding program to support distributed storage deployment, reduce ratepayer costs, increase resiliency and modernize the grid. In subsequent reports,¹ CEG has refined our understanding of the ConnectedSolutions model; and with our support and advocacy, this model or variations on it has been adopted by the other five New England states. Notably, Connecticut has recently announced a nine-year, 580 MW customer battery program modeled on ConnectedSolutions, called the Connecticut Statewide Electric Storage Program.² The Connecticut program expands and, in many areas, improves upon the basic program that originated in Massachusetts.

Today, we are pleased to present to the Massachusetts EEAC and PAs another piece of analysis. For this report, ConnectedSolutions: A Program Assessment for Massachusetts, CEG once again contracted the Applied Economics Clinic. Our goal this time was to examine how the ConnectedSolutions customer battery storage program has been administered in the first three-year cycle in Massachusetts, and to make recommendations as to how the program could be improved for 2022-2024.

¹ See <https://www.cleangroup.org/ceg-resources/resource/connected-solutions-policy/>, <https://www.cleangroup.org/ceg-resources/resource/connected-solutions-affordable-housing/> and <https://www.cesa.org/resource-library/resource/energy-storage-policy-best-practices-from-new-england/>.

² See <https://portal.ct.gov/PURA/Press-Releases/2021/PURA-Establishes-Statewide-Electric-Storage-Program>.

Out of this analysis come four important recommendations:

RECOMMENDATIONS

- 1. Massachusetts should develop specific ConnectedSolutions income-eligible enrollment targets or carve-outs for its 2022-2024 energy efficiency and demand management plan, broken out by technology (including specific income-eligible battery enrollment targets).**
- 2. ConnectedSolutions should offer higher incentives for income-eligible customers. Other equity provisions, such as up-front rebates and on-bill payment, should also be considered.**
- 3. ConnectedSolutions administrators should provide more detailed program data to track progress towards the Commonwealth's energy storage goals**
- 4. ConnectedSolutions needs to scale up rapidly to meet Massachusetts clean peak goals. To drive clean peak resource development at the scale desired, ConnectedSolutions must offer higher incentive rates and longer-term customer contracts.**

These recommendations are explained in the accompanying pre-publication draft report, which we submit in hopes that it will be helpful to the EEAC and program administrators, as they work toward an improved and expanded customer battery program for the coming 3-year energy efficiency plan cycle. (Please do not circulate the attached draft report – a final, formatted version will be published in October.)

CEG would be happy to answer questions or discuss the report with members of the EEAC, program administrators, or the Massachusetts energy agencies.

Respectfully submitted,
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