

SUBMITTED ELECTRONICALLY
ma-eeac@mass.gov

September 25, 2018

Judith Judson
Chair, Energy Efficiency Advisory Council (EEAC)
Commissioner, Massachusetts Dept. of Energy Resources (DOER)
100 Cambridge St., Suite 1020
Boston, MA 02114

RE: Clean Energy Group (CEG) Comments on Energy Storage in the Revised 2019-2021
Massachusetts Energy Efficiency Plan

Dear Commissioner Judson and members of the EEAC:

Thank you for the opportunity to comment on the draft three-year energy efficiency plan for 2019-2021. Clean Energy Group (CEG) is a leading national, nonprofit advocacy organization working on innovative policy, technology, and finance strategies in the areas of clean energy and climate change. CEG promotes effective clean energy policies, develops new finance tools, and fosters public-private partnerships to advance clean energy markets that will benefit all sectors of society for a just transition. CEG assists states and local governments to create and implement innovative practices and public funding programs for clean energy and resilient power technologies.

CEG appreciates the work of the DOER and the EEAC to develop effective policies for energy efficiency and clean energy. The recently released revised energy efficiency plan proposed by the Program Administrators (PAs) represents a significant step forward from the April plan, in that energy storage is explicitly included, and some program design elements are provided. However, it is still incomplete on a number of fronts. It is critical that the gaps in the plan are filled in over the coming few weeks, because the clock is ticking on this three-year plan. The month between the September and October EEAC meetings represents our last, best chance to make sure energy storage is done right in the state's EE program.

Comment on the current plan

The main problem is a **lack of clarity as to what is being proposed**. The plan does not indicate how much storage is to be deployed, nor how large or small the incentives might be. These are not inconsequential details – they are important to include so that customers, ratepayers, stakeholders, and the energy storage industry understand what is being proposed regarding energy storage in this plan. As it now stands, the goals and scope of investment being proposed are not clear.

With regard to program design, it appears that the PAs are proposing to include storage as a HEAT Loan-eligible technology, and to provide performance incentives for storage customers

who sign up for remote dispatch (this would be similar to a demand response program). This is good as far as it goes, but there are a number of problems and missing pieces here. Most importantly, there is **no mention of an up-front rebate, and no indication of the performance incentive rate**. We question whether the performance incentive will be likely to equal the HEAT loan payments the customer will be responsible for. As an example, for a \$15,000 HEAT loan, the monthly payments would be \$178/month over 7 years. An incentive rate lower than the loan repayment requirement will not support deployment of energy storage. This is a recipe for failure. We need visibility into the value of the performance-based incentive to fully assess whether it (and other sources of project revenue) would make an investment attractive for customers and workable for storage providers.

Conceptually, the proposal to make storage eligible for HEAT loans could be a good partial solution to the first-cost barrier. However, simply making financing available is not enough – an up-front rebate is also needed. (We note that there are rebates for some HEAT program technologies within the HEAT program. One solution is to make storage eligible for such a rebate – but there is no mention of this in the current draft plan.)

It is also not clear whether financing similar to HEAT loans would be available to commercial/industrial customers, or whether this program is being proposed only for residential customers. **Commercial customers are an important part of the energy storage market. They should not be left behind.**

The revised plan also references enhanced incentives for income eligible customers. This is a good idea, but it is never defined in the plan. **Much more detail is needed as to how energy storage will be made available to low-income communities.**

Other problems include a **lack of transparency regarding the mechanics of the proposed program**. For example, who will dispatch the batteries? How many cycles will be required per year? Will third-party aggregators would be eligible to participate in the program? Who can own the batteries? How will the proposed loan and incentives interact with other applicable programs (such as the new SMART solar program)? What is the overall size and scope of the proposed energy storage investment? Again, these details cannot be left for later – they need to be clearly explained now, while there is still time for public input to this process.

Recommendation

As the EEAC discusses and evaluates the storage components of this revised plan, we urge it to consider what has worked well in other states, specifically, California. Currently, **California has budgeted \$141 million per year for three years** to support distributed energy storage deployment, Through its Self-Generation Incentive Program (SGIP).¹

¹ The California Legislature has recently extended the SGIP program another 5 years and \$800 million. This added funding is not included in our analysis here. For more information, see <https://www.utilitydive.com/news/energy-storage-gets-a-boost-as-california-legislature-extends-sgip/531350/>

Peak load in California is four times the peak load in Massachusetts. Doing the math, \$141 million divided by four yields an **equivalent yearly participant incentive for Massachusetts of \$35.25 million, or a total of \$105.75 million over three years.**

At a 50% incentive level,² and using an industry average cost of \$1/watt, this level of funding would support the annual installation of roughly 70 MW of distributed energy storage in Massachusetts, or **210 MW over the three-year EE plan period.** This could be accomplished through a simple upfront rebate, or by combining elements of an upfront rebate with the performance-related incentives the PAs have suggested.

Conclusion

In conclusion, the revised EE plan is a step forward, but it cannot be the final step. There are simply too many unknowns remaining in the plan. In its current state, it is impossible for stakeholders to evaluate the plan's effectiveness. We urge the EEAC to continue to insist that the PAs provide real numbers and a detailed explanation of program design. There is still time to make real and meaningful improvements to the current draft plan. It is not acceptable in its current form.

Thank you for consideration of these comments. Please do not hesitate to contact us if you have any questions or if we can provide any assistance.

Sincerely,



Todd Olinsky-Paul
Project Director
Clean Energy Group

cc: Lewis Milford, CEG

² The 50% incentive is reflective both of the initial SGIP program incentive level and the MA ACES program matching requirement. For more information on the specific investment recommendation, please refer to CEG's previous stakeholder comments submitted to the EEAC.