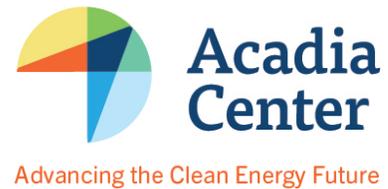


# Massachusetts 2019-2021 Utility Energy Efficiency Program

## Evaluation of Final Plan and EEAC Resolution

November 13, 2018



On October 30, 2018, the Massachusetts [Energy Efficiency Advisory Council](#) (“EEAC”)<sup>1</sup> unanimously approved [a resolution](#) supporting the utility program administrators’ proposed [Three-Year Plan for 2019-2021](#).<sup>2</sup> In its role as the environmental representative on the EEAC, Acadia Center successfully represented stakeholder priorities and pushed for the 2019-2021 Plan to innovate, better use technology, help customers switch from polluting oil to clean, efficient heat pumps, and cut electric and gas peak demand in summer and winter. Acadia Center also led the charge to tie a portion of the program administrators’ performance incentive to how well they serve renters, an innovation that did not exist in the draft plans. Now the Plan moves to the Department of Public Utilities (“DPU”) for consideration and approval by the end of January 2019. Acadia Center has intervened in those proceedings to ensure that the programs deliver the most savings and benefits to Massachusetts residents and businesses.

As the 2019-2021 Plan advanced through the EEAC process, Acadia Center identified significant deficiencies in the [April](#) and [September](#) Draft Plans, including those highlighted in Acadia Center’s September 27<sup>th</sup> [Evaluation of the September Plan](#). Through negotiation and collaboration with the program administrators, Acadia Center won improvements in the October 22<sup>nd</sup> Plan supported by the EEAC that largely address these concerns. This memorandum lays out the highlights of the 2019-2021 Plan as filed with the DPU, along with issues that remain and should be the focus of the DPU’s review.

### High Savings & Benefits

By all measures, the Plan will achieve high levels of energy savings and benefits. The Plan proposes statewide electric savings levels of 2.7% of annual sales (35.6 million lifetime MWh) and natural gas savings levels of 1.25% of annual sales (1.192 million lifetime therms) – the highest natural gas savings goal ever set in Massachusetts. The 2019-2021 Plans will provide 8.6% higher dollar benefits than the 2016-2018 Plan. The cost to achieve savings is lower and savings goals are significantly higher. In response to EEAC efforts, the program administrators increased statewide lifetime electric MWh goals by 23% and statewide lifetime gas therm goals by 16% from the April Draft Plan’s goals.

### Greenhouse Gas Emissions Reductions

Although the program administrators are careful to note that the Plan is not governed by the Global Warming Solutions Act (“GWSA”), the Plan responds to pressure from Acadia Center, other EEAC members and stakeholders to set a stretch goal and pursue additional GHG savings where cost-effective. The Plan is expected to deliver the highest GHG savings yet-- 2,643,426 short tons of CO<sub>2e</sub>, the equivalent of removing 507,375 cars from

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<sup>1</sup> The EEAC is a stakeholder board is charged with reviewing drafts of 3-year plans for statewide efficiency programs proposed by the program administrators (gas and electric utilities and a municipal aggregator) before they are submitted to the Department of Public Utilities for approval.

<sup>2</sup> Due to time pressures, the EEAC approved the Plan as it stood on October 22<sup>nd</sup>, under the assumption that the Final Plan, filed with the DPU on October 31<sup>st</sup>, is consistent with the draft that the EEAC had reviewed.

the road. These increased savings are primarily due to the new demand management and strategic electrification offerings.

The Plan also incorporates the Massachusetts-specific costs of GWSA compliance in avoided cost of energy – raising the value of avoiding carbon emissions in the test of cost-effectiveness. By better reflecting the true value of efficiency savings, measures in the plan that reduce GHG emissions more will fare better in cost-effectiveness testing. Additionally, given the recent amendments to the Green Communities Act (“GCA”) that allow the efficiency plans to integrate renewables and clean energy technologies, program administrators that want to integrate such cost-effective offerings can strengthen the GHG savings the Plan can deliver even further.

## Reaching Underserved Populations

One of Acadia Center’s priority improvements was identifying concrete program design changes to better serve renters, moderate income consumers, non-English speakers, and microbusinesses. By working with environmental justice stakeholders to apply pressure to the program administrators on these points, Acadia Center secured the introduction of a new municipal and community partnership strategy to enhance outreach, as well as tailored evaluations in 2019 to identify barriers to participation and identification of solutions. The Plan includes no-cost weatherization for moderate income customers for the first time and will provide semiannual reports on how this offering is faring at a zip code level. The Plan also calls for the introduction of a scorecard as part of the results of an in-home audit by summer 2019. Acadia Center has supported this idea for years, as it would allow potential buyers and renters to compare the energy use and efficiency upgrades of the homes and apartments they are considering.

Significantly, the Plan ties a portion of both gas and electric program administrators’ performance incentive to serving at least 100,000 rental units over the 3 years. Renters serve as a proxy for other underserved populations in this metric, which also requires the program administrators to improve their data collection processes to verify which rental units they’ve served. Tying utility performance incentives to addressing longstanding consumer concerns is a method Acadia Center is pushing for in grid modernization and utility business model reform dockets throughout the Northeast. Acadia Center commends Massachusetts for its innovation in this area.

## Active Demand Management and Energy Storage

Another of Acadia Center’s priorities was utilizing the efficiency programs to address other issues in the energy sector, such as peak demand, particularly as it relates to winter system reliability. Reducing peak demand on the coldest and hottest days can save ratepayers significantly and avoid running the dirtiest generators. The Plan introduces the programs’ first full-scale active demand management (ADM) offering, including a winter ADM program for natural gas. The electric ADM offering includes incentives for storage technologies in all three sectors (residential, low-income, and commercial & industrial), along with an active demand savings target of 200 MW in the summer and 50 MW in the winter. Permanent demand reductions through efficiency are also a focus on the Plan – setting total demand savings targets of 665 MW in the summer and 500 MW in the winter. The Plan also provides for a Q1 2019 study of benefits associated with winter peak capacity reduction and ties a portion of the electric program administrators’ performance incentive to achieving these ADM targets.

## From Oil and Propane to Efficient Heat Pumps and Passive Houses

For years, electric program administrators have provided incentives for air sealing, weatherization, and high efficiency equipment for residential customers who heat with oil or propane, delivering significant savings in GHG emissions and benefits to customers. The 2019-2021 Plan takes this several steps forward with “energy optimization,” offering education and incentives on all heating and hot water options to all ratepayers, including commercial and industrial. The Plan also sets a target for the program administrators to install over 62,000 cold climate air source heat pumps and provides incentives for switching to renewable and clean energy heating technologies. One area where heat pumps are expected to be deployed in large numbers is through the Plan’s new offering centered around Passive House construction. This program includes training, a new incentive structure to provide financial certainty early in projects, and a whole-building performance incentive to encourage very efficient, passive house certified, and all-electric new construction.

Acadia Center believes that although oil-to-gas conversions would save customers money and reduce GHG emissions, it is not prudent to incentivize new use of fossil fuels when cleaner alternatives are available and should be prioritized. Accordingly, Acadia Center and other members of the EEAC successfully pushed to promote strategic electrification of heating and hot water, but not further incentivize customers to switch from delivered fuels to natural gas. In a big shift from the April and September drafts, the Plan does not give any additional customer incentives for conversions from oil to gas and prevents gas program administrators from claiming the MMBTU savings associated with such conversions.

## What’s Next at the DPU?

Despite these many positive attributes, the 2019-2021 Plan needs improvement. Acadia Center intervened in the DPU proceedings on November 1<sup>st</sup> and will actively push for improvements and additional changes. The DPU is holding a public hearing on December 3<sup>rd</sup> at 2 PM to take public comments on the Plans. Acadia Center intends to highlight the following issues as a focus of the DPU’s review:

- **Variations Among Individual Program Administrator Plans:** Although the statewide savings goals are high, individual program administrators’ goals vary widely. One electric program administrator’s goal is set at only 54% of the statewide electric saving goal, and three gas program administrators aim for only 46%, 52% and 62%, respectively, of the statewide gas saving goal. Costs to achieve savings are similarly variable. Some program administrators predict costs per MWh that are nearly double the average of the statewide Plan. The program administrators cover very different service territories, and high overhead costs can create outsized impacts on a small program administrator’s cost to achieve. Even so, in mature, statewide programs such as these, implementation and performance should be far more consistent. This is a matter of fairness – every customer should have access to the same opportunities at comparable costs, regardless of where they live. Allowing such low individual administrator savings goals also leads to performance incentives being paid out to program administrators that deliver very few benefits for their customers. As the individual targets were only presented to the EEAC in the last days before voting, there was no opportunity to advocate for further adjustments. However, the DPU can and should consider remedying this issue.
- **Coordinated, Useful Potential Studies:** In the 2013 and 2016 Orders approving the last three-year plans, DPU required the program administrators to conduct studies of potentially achievable efficiency to inform forthcoming plans. Unfortunately, the DPU did not provide further instructions

- regarding coordination with the EEAC or its consultants, or standardization across program administrators. As a result, the studies that inform the current Plan lack common assumptions, common offerings, or even consistent programs (such as demand management, storage, or combined heat and power). Without such commonalities, it is very difficult to compare the studies, verify that the studies are accurate, or aggregate them to create a statewide goal. If the DPU requires the program administrators to conduct potential studies for the next three-year plan, coordination and standardization among program administrators and with the EEAC is essential to enable potential studies that can be used to inform planning, and not just waste money and time.
- **Residential Redesign:** With the amount of savings that the programs can claim from residential lighting declining precipitously in 2020 as LED bulbs become the norm, the cost-effectiveness of the in-home audit, fueled in the past by ample lighting savings, is expected to decline significantly. The EEAC consultants began raising this issue in 2017, and EEAC pressured the program administrators to redesign their delivery models to innovate, rather than shrink the residential programs. While the 2019-2021 Plan offers many enhancements in the residential sector – such as better serving moderate income customers and allowing online audits when appropriate – the essential delivery model of an in-home audit as the gateway to major measures like weatherization has not changed. The EEAC’s October 30<sup>th</sup> resolution calls on the program administrators to work with the EEAC and its consultants to evaluate this issue, assess the enhancements, and provide updates by the end of 2019. Acadia Center will be asking the DPU to help ensure that progress on this issue continues.
  - **Data Management:** The way program administrators utilize, share, and protect data has been an ongoing issue, and its importance will only increase as the programs collect more customer data. The 2019-2021 Plan proposes some improvements in using data to track customers and encourage them to follow through on recommended efficiency measures, as well as investments in single-purpose customer engagement platforms like the instant rebate platform. However, it is still unclear how important data from these single-purpose tools and other sources of data (like the utilities’ own billing systems) will be harmonized sufficiently to achieve the stated objective of serving customers where they are and with what they need. Acadia Center will ask the DPU to require the Plan to address the EEAC’s call for better transparency of MassSave’s own data and creation of a common data platform across program administrators. The platform should be capable of enabling two-way engagement between customers and competitive service providers and facilitate targeting, coordination, and customer service.

### For more information

Amy Boyd, Senior Attorney, [aboyd@acadiacenter.org](mailto:aboyd@acadiacenter.org), 617.742.0054 ext.102