

Program Administrators' Initial Comments on Draft Resolution

July 18, 2018

Under the Green Communities Act, every three-years the Program Administrators must submit their energy efficiency plans that provide for the acquisition of all available energy efficiency and demand reduction resources that are cost effective or less expensive than supply to the Energy Efficiency Advisory Council by April 30th. The Council must review the plan and any additional information and submit its approval or comments to the Program Administrators not later than three months after submission of the plan. The Program Administrators may make any changes or revisions to reflect the input of the Council prior to submitting the Plan to the Department of Public Utilities for its review and approval.

The Program Administrators thank the Council for its efforts to provide recommendations and its priorities for the Plan, as well as their recognition of the Program Administrators' ongoing strong commitment to energy efficiency. As the Council acknowledges in its Resolution, the Program Administrators – with the assistance of many, including Councilors, governmental bodies and officials, contractors and program delivery professionals, and LEAN – have had enormous success in delivering energy efficiency in the Commonwealth and have developed a mature, sophisticated energy efficiency market in Massachusetts.

The Program Administrators appreciate the efforts of each of the Councilors and of the consulting team. Each planning process under the GCA is challenging. Historically, the Program Administrators, the Councilors, and the consultants have been able to work through difficult issues and achieve consensus on three-year plans that have established Massachusetts as a leader in energy efficiency. The Program Administrators will continue to work collaboratively with all parties to develop an outstanding energy efficiency plan for 2019-2021 for the Commonwealth. The Plan must ultimately be achievable in the field and in the best interests of customers, and will need to pass rigorous regulatory review (including a review of bill impacts) at the Department of Public Utilities.

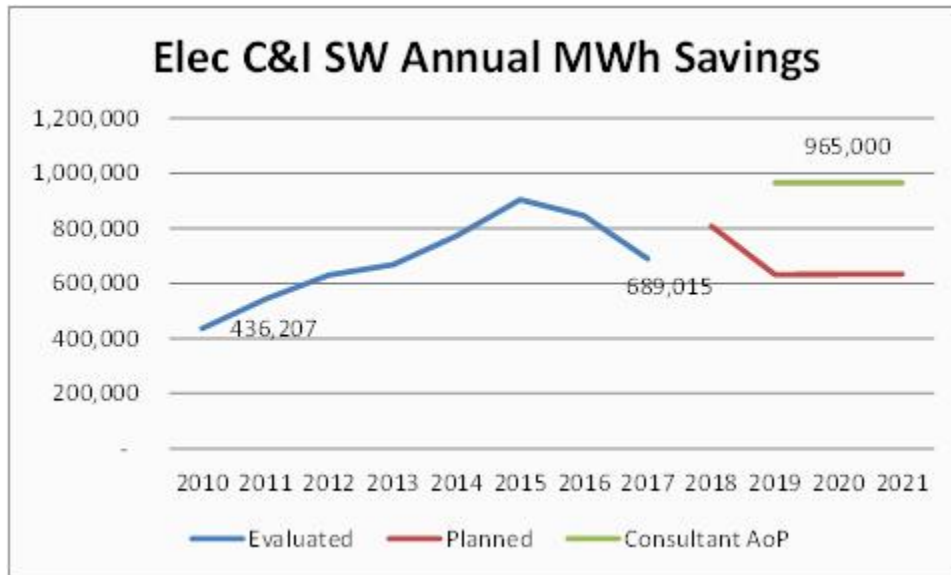
The Council's draft Resolution provides many thoughtful comments and suggestions that the Program Administrators will consider carefully as they work to finalize the 2019-2021 Three-Year Plan. While the Resolution highlights several areas of agreement between the Council and the Program Administrators, there are important areas that raise differences in understandings and lessons learned from the prior terms. To that end, the Program Administrators respectfully offer the following comments on the draft Resolution. Please note that the Program Administrators recognize that this Resolution is intended to reflect the Council's comments on the April 30th draft of the Plan based on councilors' expertise, and that the Program Administrators will have an opportunity to continue to address the comments as the Plan is finalized. As such, these comments are not intended to be exclusive and the Program Administrators' silence on a particular comment is not intended to mean that the Program Administrators do not have concerns with the matter as drafted.

Savings Goals:

- The Program Administrators continue to engage with the Council consultants to discuss, among other things, differences in savings goals. At this time, significant gaps in energy efficiency and demand savings goals remain and the PAs emphasize the gulf that currently exists. The Program Administrators believe strongly in setting aggressive but achievable goals, since the goals set expectations for the public and provide estimates for use by energy policy makers. As evidenced by this Resolution, the Council is adopting the consultants' Assessment of Potential estimates as recommended goals. When presented at the March EEAC meeting, these values were expressly characterized by the consultants as estimates of potential savings and one important input in goal-setting, but not as recommended goals. The Program Administrators note that this Assessment of Potential, which was developed prior to the submission of the draft Plan, is largely based on maximum achievable scenarios included in each Program Administrator's potential study.
- Maximum achievable estimates, however, are not the appropriate starting point for developing savings goals under the Green Communities Act. The maximum achievable scenarios are based on providing 100 percent incentives for all measures and do not take into account other factors that the Program Administrators are required to balance under the Green Communities Act, including bill impacts and sustainable acquisition of energy efficiency, or other considerations, such as customer and contractor constraints. Moreover, while largely adopting the maximum potential scenarios of the potential studies, the consultants' Assessment does not adopt the concomitant costs-to-achieve from those studies, and instead uses very materially lower costs developed by the consultants. If the potential study costs were used, the projected costs to deliver the programs would be approximately double. This cherry-picking of maximum savings potential and application of lower costs is not sound planning. Further in regards to MW savings, the consultant's estimate cherry-picks numbers from two potential studies and inappropriately extrapolates to a statewide value.
- Additionally, while the potential studies are a useful element in goal-setting, the Program Administrators take into account many data points when setting goals, such as in-the-field and market conditions, availability of market-ready technologies, evaluation study results, codes and standards, cost-effectiveness, the need to foster predictability and sustainability for market actors, and unique service territory drivers. Under the Green Communities Act, goal setting intrinsically requires consideration of total costs, budgets, and bill impacts; the Council has not included commensurate costs for the saving levels set forth in this Resolution or considered the impact of those costs on customer bills. The failure to give careful consideration to customer bill impacts undermines the important work of the Council.
- To emphasize, while the Council Resolution calls for goals that are drastically higher than what has been achieved to date, the Council supports costs remaining in line with historical cost levels. As has been discussed extensively at EEAC meetings throughout this term, Massachusetts has mature energy efficiency programs and claimable savings potential is diminishing. A significant portion of savings come from low cost lighting measures which will diminish in future terms. As we move towards the next program

term, savings from alternative measures will cost more and therefore drive up cost to achieve, especially for electric programs.

- To illustrate the Program Administrators’ concerns with using the values from the Assessment, the following chart shows the extreme increase in savings levels for one sector if the Assessment values were adopted. For context, the electric C&I sector savings grew 58 percent between 2010 and 2017 (seven years). Despite that growth history, and in the face of a mature program, declining attribution, increasing codes, and higher baselines, the consultants’ Assessment recommends growth of 40 percent in just two years (between 2017 actuals and 2019 planned), with a sustained level of savings for 2019-2021 – all with no impact on cost to achieve. This recommended increase comes at a point when Program Administrators are getting less credit for each MWh saved in each subsequent year of the plan. On its face, this level of consultant projected growth does not appear to be realistic or sustainable.



- The Council’s support of MMBTU as a goals measurement for electric PAs, but not for gas PAs, inappropriately treats Program Administrators differently. The Council approach allows electric Program Administrators to claim savings from all fuel sources, but limits the savings opportunities for gas Program Administrators. The Program Administrators have proposed using MMBTU as a common metric consistent across all types of customers in keeping with the philosophy of offering one integrated program. MMBTU works for electric, gas, oil and propane savings. The Resolution suggests that gas Program Administrators only provide gas efficiency services. This is not accurate because in municipal light plant service areas gas Program Administrators provide energy efficiency services to electric customers. Further, numerous measures offered and supported by gas programs – from air sealing to high efficient equipment - achieve multi-fuel savings. Using MMBTUs captures these savings and ensures that the Commonwealth takes full credit for all of the savings achieved from our programs. To be clear, the Program Administrators will continue to report all information currently provided in the energy efficiency tables on a fuel-specific basis (e.g., kWh, kW, therms, and MMBTU of oil and propane). The use of an overall MMBTU goal, however, as an

overall benchmark is consistent with the goal of looking at a customer's total energy use and fully optimizing each customer's energy efficiency opportunities regardless of fuel source. The Program Administrators note that in several of the suggested key performance indicators, the Council proposes the use of MMBTUs for both gas and electric.

“Underserved Populations and Geographies”

- The Resolution notes that participation in certain segment-specific offerings has not been as robust as the Council hoped, specifically referencing the moderate income initiative. Based on this, the Council has concluded that these populations are underserved. This conclusion, however, is not supported by the evaluations and data presented to the Council. For example, recent evaluations have found that moderate income customers are as likely to receive a HEA and install recommended measures as those with higher incomes. The survey analysis indicates that other factors, such as homeownership and age of household members, are more likely to influence participation decisions than income. In addition, customers have demonstrated an unwillingness to share income information despite the knowledge that they may be eligible for increased incentive levels. Income level is a very personal piece of information for many people.
- Similarly, for small business, the Program Administrators have experienced significant participation through upstream programs that is not captured in the tailored small business turnkey delivery path and results in an incorrect perception that participation is not robust. Renters are often not eligible for major measures since they do not have the authority to change a residence they do not own; as such, the value proposition for a renter specific audit is low. The Program Administrators are focused on serving these customers regardless of channel or initiative to ensure all customers are eligible for service.
- Key indicators:
 - 60-120 percent SMI – This segment is approximately 43 percent of all households in Massachusetts. Together with low-income, this represents about 71 percent of the population. Surveys and in-the-field experience has shown that a significant portion of the population is unwilling to participate in an income verification process even if more incentives were available. The Program Administrators do not income screen participants currently and do not want to discourage participation by requiring income screening for the purpose of reporting on a metric. The Program Administrators could examine participation levels through evaluations, which would draw a sample from participants as the basis for an anonymous survey of income levels. For analytic purposes, the Program Administrators can also use census information to learn more about participation, and have used census information to help understand geographic/demographic participation trends. This research indicates that the benefits of energy efficiency programs have been broadly spread across the Commonwealth and among customers of differing income levels.
 - Renters – The Program Administrators can track and provide the number of renters that participate in the Coordinated Delivery program. However, this number will not include full renter participation levels in all initiatives due to the

diverse channels (e.g., lighting and appliance rebates) through which the Program Administrators deliver savings.

- Non-English speakers – There is no way of accurately getting or tracking this information. Customers may have English speaking family members reach out to the Program Administrators or contractors, or participate through other channels, making it difficult to gather correct data. Additionally, it would not be appropriate for home energy assessors to collect language information during the assessment. As noted above, for analytic purposes, the Program Administrators can use census information to learn more about participation trends.
- Small Business – The Program Administrators will consider how to report on small business participation. Tracking participation by business size or type is challenging because customers may participate through multiple upstream and downstream channels. Participation numbers through the turnkey initiative can be tracked, however, small business and non-profit upstream participation is not easy to track. The best resource will likely be the Customer Profile study.
- Ratios of select customer groups v. market rate - The Program Administrators will explore the possibility of reporting some of the information based on available data. The Program Administrators note that these select customer segments are served through market rate programs, in addition to any segment specific efforts.
- Participants per capita by zip code – Customers participate in the mature programs through multiple channels, including upstream, which are not always tied to a specific location or zip code. The Program Administrators can explore reporting some of the information based on the Customer Profile study.

Active Demand

- The Program Administrators have developed performance based incentive offerings that encourage residential and C&I customers to reduce load during peak demand periods. The approach does not favor one technology over another because all active demand technologies will be able to deliver the same peak demand benefits. The offering is specifically designed to allow customers installing storage to value stack and participate in other state and ISO-NE sponsored programs. This offering gives customers flexibility. The Program Administrators do not support calling out a target for one specific active demand measure over another, but will explore tracking the participation levels of all measures so the Council can understand the proportion of demand savings from storage, Wi-Fi thermostat, and other measures.
- The Program Administrators are exploring installation incentives for storage through ongoing demonstrations that will conclude in the end of 2019 and will report their findings consistent with Department directives.
- Key indicators:
 - ADM MW - The Program Administrators plan to report peak active demand performance achieved through its offerings and will report on the measures that achieve demand savings to the extent possible.
 - Conversion rate – The Program Administrators have no way to accurately track this value. Customer outreach will occur through multiple channels, including direct and indirect marketing and accordingly, the Program Administrators cannot tie a conversion to a specific outreach effort.

- Penetration of Wi-Fi t-stats enrolled – The Program Administrators have no way to accurately track the total number of Wi-Fi enabled devices installed in the Commonwealth since customers may purchase devices through multiple channels, including outside of the programs.
- Performance of customers enrolled – The Program Administrators could potentially report on customer participation in events, but note that the MWs achieved during peak hours is the primary focus. Consistently achieving a set MW reduction during peak hours over time is how the Commonwealth will realize benefits from any active demand offering.

“Fuel Switching”

- Under the Green Communities Act, the Program Administrators are focused on energy savings and have proposed to serve customers in a fuel neutral manner. The Program Administrators will assist customers in understanding their energy savings opportunities regardless of fuel source and will incentivize highly efficient equipment. Consistent with Department precedent and statutes, the Program Administrators emphasize that they do not propose to promote or incentivize fuel switching - that is, promoting one fuel choice over another. Rather, the focus of the Program Administrators is on optimizing energy use and ensuring that when customers make a choice about their energy sources, energy efficiency solutions are presented and, as a result, the customer’s decision is well-informed.
- Key indicators:
 - Since the Program Administrators are not promoting fuel switching, this key performance indicator is not relevant. The Program Administrators could report the number of heat pumps installed under the programs by program and by sector. Other breakdowns of heat pumps installed will be challenging because customers may participate through multiple channels and, as discussed above, the Program Administrators cannot track all of the various market segments identified by the Council.

Integrated Residential Program Design

- The Program Administrators have proposed a new program alignment in order to create pathways that are more intuitive to customers and to maximize savings and benefits. The Program Administrators understand the Council’s comments on seeking additional information and are working on refining savings and cost estimates, including for energy optimization, and working on timelines for implementation.
- Key indicators:
 - Conversion rates – The Program Administrators can provide conversion rates for recommended-to-installed major measures for single and multi-family customers.
 - MMBTU savings per household – The Program Administrators will explore the ability to provide average savings per household in residential Coordinated Delivery, and note that this is a measurement that bridges fuels and is consistent with the Program Administrators’ proposal to use MMBTU as a single overall metric of success.

- Customer enrollments by first engagement channel – The Program Administrators cannot track this data. Customers may be engaged from and/or participate through multiple channels.
- Participation by re-engaged customers – The Program Administrators are constantly re-engaging with customers and cannot track this data. Customers may be engaged from and/or participate through multiple channels.

C&I Sector Savings Measures

- The Program Administrators have proposed savings levels based on their analysis of historical data, in-the-field assessments, customer pipeline, and available technologies, as well as taking into account the costs associated with increased savings levels. With respect to CHP, the Program Administrators are engaged in continuing discussions with the consultants, and have not identified an interconnection queue as described the resolution. With respect to the specific CHP project noted, the relevant PA is working with the evaluation team to understand whether and how much savings would be claimable from this potential project.
- Key indicators:
 - Savings from lighting and HVAC controls – The Program Administrators can report this information.
 - Process savings – The Program Administrators can report this information.
 - CHP savings and project information currently reported – The Program Administrators can report this information.
 - Savings by customer consumption size bin – This information will continue to be provided in the Customer Profile studies; there is no other way to track and provide this information.

Zero Energy Ready Buildings and Passive House

- The Program Administrators are working with the Zero Energy Ready and Passive House delivery community and are planning to provide additional details in the next draft of the Plan.
- Key indicators:
 - Given that the focus on this effort is new, the Program Administrators are unsure of whether these are accurate and appropriate indicators of success, and believe it would be challenging to put forth planning estimates for these indicators. The Program Administrators can report on ZEB/Passive House projects and trainings.

Integrated Multi-Family Framework

- The Program Administrators have proposed a Coordinated Delivery initiative, integrating single and multi-family programs, in order to refocus the delivery of services on building science, opportunity, customer choice, and what each customer has the authority to implement. The Program Administrators did not undertake this realignment due to any cost-effectiveness challenges. The realignment focuses on removing perceived barriers to participation and optimizing the customer experience. The Program Administrators will report measures separately for the categories of Single Family detached, Low Rise attached, and High Rise attached.

- Key indicators:
 - Close rates – The Program Administrators can report close rates.
 - Savings and participation – The Program Administrators can report this information by residential and C&I sectors.

Low-Income Programs

- The Program Administrators work consistently with LEAN on planning and delivery low-income programs. The low-income process evaluation, now in draft report stage, looked thoroughly at LEAN’s ideas for new measures. The Program Administrators will review the recommendations from the study for new measures, as well as process improvement in advance of the next draft of the Plan. With respect to LIHEAP, the partnership is not a referral program, but rather a co-delivery implementation.
- Key indicators:
 - Average total cost and savings per participant household – The Program Administrators will explore how to provide this information.
 - # of participants referred by LIHEAP – Participants are not referred by LIHEAP. This is not an accurate indicator.
 - # of participating households receiving each measure – The Program Administrators and LEAN do not track at this level and cannot provide this information without substantial new costs and processes.

Data Management

- The Program Administrators provide timely and substantial data on a monthly, quarterly, annual, and term basis, utilizing formats and data requirements that have allowed stakeholders to track progress over extended periods and to inform program strategies. Each of the Program Administrators has an individual tracking system and successfully populates these periodic reports. The additional adoption of a new statewide data tracking system would be redundant, costly, and would likely slow reporting, especially during installation, training and initial operation, and could have significant customer privacy concerns. There is no need to place these redundant costs on the backs of Massachusetts customers. Indeed, the requirement of a new statewide data tracking system would not yield any material benefits that the Program Administrators can perceive, but would have very high costs.

Performance Incentives

- The Program Administrators appreciate the Council’s consistent support of performance incentives for the successful delivery of energy efficiency programs. Performance incentives have been a fundamental underpinning of the success of energy efficiency in Massachusetts from the earliest stages of program deployment. The Program Administrators look forward to discussing performance incentives with the Council in future meetings.
- The Program Administrators note the clear precedent of the Department of Public Utilities eliminating performance metrics from the performance incentive mechanism utilized under the Green Communities Act. D.P.U. 13-67; D.P.U. 15-160 to 169 (2016-2018 Three-Year Plan Order). The Program Administrators generally believe the two-component mechanism currently utilized is well understood and has demonstrably helped

incentivize high savings levels at a good value for the benefit of customers. The Program Administrators emphasize that, to the extent the Councilors seek to have the Program Administrators continue to set aggressive savings goals at reasonable costs, they need to allow the Program Administrators the flexibility to pursue all savings opportunities and make adjustments in delivery strategies over time, as well as recognize the inherent and growing delivery risk associated with aggressive goals due to market evolution and evaluation results. Overly prescriptive requirements, whether with respect to performance incentive metrics or additional key indicators/sub-goals, serve to constrain the Program Administrators' ability to reach high savings.

Overarching:

- The Program Administrators understand the Council's desire for more specific information on certain segments, such as some of the proposed key indicators. The Program Administrators could report on several of these indicators as noted above throughout the program term, particularly in Quarterly Reports. The Program Administrators do not plan at the level described in many of the key indicators in the resolution. Setting goals at a prescriptive/micro level distracts from achieving all cost-effective energy efficiency by diverting attention to a specific way a customer is served and how to gather customer profiling information, rather than how to provide optimal service and cost-effective savings. The Program Administrators ask the Council to carefully identify and prioritize the information it seeks to have the Program Administrators report. The Program Administrators must be able to retain flexibility in order to deliver the programs optimally over time and achieve high levels of energy savings, without also being required to hit numerous micro-level targets or sub-goals.
- In reviewing the draft Resolution, the Program Administrators detect a movement to separate gas and electric efforts in a manner inconsistent with past practice and successful implementation of integrated programs. The Program Administrators and the Commonwealth have embraced an integrated statewide gas and electric plan approach that provides seamless delivery and uniform reporting. The Program Administrators propose to continue this construct for 2019-2021. From a customer perspective, the Program Administrators want customers to engage with the Mass Save efforts regardless of whether they are an electric, gas, oil and/or propane customer. One of Massachusetts unique strengths is the way electric and gas Program Administrators coordinate and work together. Separating these efforts and uniform practices may have a negative impact on program success. The Council should be mindful not to favor energy efficiency opportunities based on fuel source.
- Several places throughout the Resolution paraphrase or quote the Green Communities Act. In some locations, the Resolution may inadvertently use alternative terminology or modify the language of the Green Communities Act. The Program Administrators recommend that where the language is intended to reference requirements of the statute it either directly quote the statute or paraphrase the statute using the same terminology.
- As noted earlier, the Program Administrators will not be able to commit to provide a new draft of the Plan by the end of August. The Program Administrators are willing to plan to provide a new draft of the Plan by September 14, 2018.