

6/27/2018

To: Members of the EEAC
From: Steve Cowell, President, E4TheFuture

First is a thank you to all the dedicated members of the PA's, EEAC, DOER, Stakeholders and consultant team that have worked so hard to craft the next stage in our exceptional energy efficiency strategy in Massachusetts. We are faced with real challenges with the demise of lighting savings and many years of providing services to many of the early adopters with clearly identified opportunities. We also have been rewarded by the most effective low income program efforts that have provided the highest level of low income services than any state in the country. We should be proud but face the reality that we have more to accomplish and need to address any barriers that create difficulties in serving some customers or deploying new technology opportunities. Some recommendations for improvement or development in the next more detailed version of the plan are outlined below. Some of these may require passage of 1724 but we hope that will be realized in the next few weeks:

1. Data: Data has been a significant concern to some members of the EEAC and while data availability and access has improved over the years, there could be some added steps and should not be a serious barrier to moving ahead with the next 3 year plan.
 - a. Increase development of, and access to, data on the proposed and implemented service delivery, perhaps to a targeted group of stakeholders and/or consultants, as well an appropriate level to the general public. Part of the challenge is the access to data on the EEAC or Mass SAVE web site or other available locations. General data availability for public review might be one component of data availability but a second component might be targeted availability to approved stakeholders. In addition, confidentiality for customer data is an important aspect of this issue.
 - b. It is important to Include background data on both electric and gas savings, including time of impact--if possible, to understand and calculate the impact for purposes of reducing the winter cost of unregulated natural gas that increases the cost of electricity and level of emissions due to the need to substitute oil for natural gas by electricity generators. Having fuel neutral targets and data is important from a policy objective and should be continued, fuel specific savings has value for policy and energy management purposes.
 - c. Hire a data analytics consultant to assess service delivery by customer type and zip code as well as do follow up survey's and potentially focus groups to identify barriers to increase the equitable distribution of services to hard to reach segments. Currently, the Massachusetts programs do an excellent job of serving low income through the LEAN operated programs but some of this impact may not be available for third party analysis. In addition, moderate income and renters may

need additional support. In addition, E4The Future has worked with Eversource and National Grid to analyze the barriers and opportunities to serve 'micro' commercial customers.

2. Natural Gas Efficiency:

a. Increase focus and investment in both natural gas heating savings and active DR for gas to reduce or avoid winter electricity price spikes (as a result of competition between regulated gas for heating and unregulated gas for power generation) and any potential for unnecessary pipeline construction (as per the Analysis Group study). This has been pilot tested but should be continued and evaluated for impact on price impact on both gas and electric costs. Avoided electricity costs should be included in gas efficiency and Gas DR initiatives. New England is the region with the most significant interactivity between gas availability and electricity prices.

b. Establish pilot programs carried out by LEAN to develop a low-income inefficient oil to efficient gas and electric system conversion program that is both cost effective economically and environmentally. This would include identifying the level of efficiency and type of the existing system and the projected efficiency and cost of a replacement system packaged with building efficiency for a high efficiency gas system (including integrated heat and hot water) or heat pump. This pilot can identify both energy and environmental impacts.

3. C and I sector:

a. Improve the strategy of addressing the needs of 'micro' small business through targeted collaboration with third parties, targeted third-party 'ambassadors' that have clear customer focused skills based on the sectors of the micro business energy needs. E4TheFuture is collaborating with Chambers for Innovation, National Grid and Eversource to perform an extensive focus group project with 'micro' small businesses (80% of the C and I sector) to identify issues and barriers. Final results are not complete but will hopefully help direct services to this hard to reach sector.

b. after 1724 is adopted, look to new clean tech, DR and other strategies/technologies to integrate into the C and I sector by both category and type.

4. TVR:

a. Develop and include an opt-in smart meter and Time Varying Rate (TVR) for customers receiving energy assessments to facilitate introducing Active DR as well as provide a better ability to measure and estimate savings results both to consumer and for evaluation purposes. The assessment process would identify what criteria (such as level, time and type of use) and level of customer interest would justify a cost-effective application of TVR for the customer. New England has very volatile wholesale rates that range from very

high to 0 at unexpected times. This makes control strategy and corresponding TVR difficult but also potentially very valuable.

- b. Support PA's filing to the DPU for pilot Smart Meter/TVR that could be integrated into the Mass Save program.

5. Integration of New Technologies:

- a. Create a clear and close collaboration between DOER, MassCEC and PAs on the evaluation and integration, on an expedited basis, of new technologies and products as they become available. Technology is moving fast; incorporating these new technologies and partners quickly will facilitate hitting aggressive and expanded goals. This might be carried out through an expanded program development committee that includes a defined group of agencies and experts to review and expedite technology and program innovation as promote pilot strategies.
- b. The program procedures and technical standards needs to be evaluated to insure that cost effective measures are included in the program and customers are not penalized for installing more effective measures that benefit their non-energy needs. This has been an issue for many years. A measure such as spray foam was not allowed based on a cost to benefit on energy savings only when the benefit from non-energy and installation capability issues was clearly cost effective for the customer (I believe that progress on this has been under way). The new program standards should allow measure installation that provide multiple energy and non-energy benefits without unnecessary barriers. For example, providing incentives based on a 'base measure' savings but allowing a customer to cover the additional cost of the non-energy benefits would be an example. This would be consistent with appropriate cost- effective testing procedures.

6. Home Energy Score: Include the Home Energy Score (HES) as part of the energy assessment. This is being proposed in the legislature by the governor but has not been adopted. The Mass SAVE program could include the HES as part of the program without a controversy. We would encourage all PAs to include the HES, update it when improvements are made and work with NEEP and their HELIX platform to assist in making the score available based on customer request as part of the audit data. This would jump start on a voluntary basis the ability of consumers to use their home energy efficiency as a value proposition in the sale of their home without a controversial legislative mandate.

7. Multi-family participation:

- a. Multi family service delivery is challenging due to renter's lack of control of the building and the fact that the owner often does not pay the energy costs. In addition, for many years, the fact that the common area usage was a commercial meter and the unit usage was a residential meter, created a

program barrier to comprehensive treatment. I believe that this has been corrected but the process should be reviewed to insure that service delivery can be clean and 'one stop'. In addition, I would propose that an owner participation incentive be established to reward the owner for taking steps to implement measures that benefit the renters. This would be in addition to existing higher incentives for rental units and close collaboration between low income and non-low income programs in mixed income buildings. I believe that this is happening but worth a review.

8. Expand Technology options:

a. One "out of the box" idea is to include solar installations as part of the HEAT Loan program but perhaps without any interest write-down unless it is from MassCEC; this would allow customers to package renewables and efficiency in a much more facilitated manner and would not violate any current required separation. CSG has done similar projects in the past and this has worked very effectively to increase participation in all measures.

b. 1724 will take the shackles off for multi- technology strategies and planning should start in each customer segment to plan on how this can be implemented. This might include measures such as EV charging.

9. Community Based Engagement:

a. Expand relationships with community based or sector-based partners to assist with outreach and follow through on measures. This is mentioned in the plan but might be more effectively emphasized. E4TheFuture (and previously CSG) actively worked/works with community based partners, including CAP agencies; municipalities; non-profits and others to help spread the word about Mass SAVE and encourage continuous participation and adoption of measures. Our Community Clean Energy Coop project is designed to test new approaches that get multiple members and categories of consumer in a community to work collaboratively to achieve clean energy success, including introduction of new technologies. The PA's are supportive and participating in these efforts.

b. engage solar community engagement efforts such as the Solarize initiative, to collaborate with energy efficiency to remove barriers and lower the cost of both solar and energy efficiency.

In conclusion, the PA's 3 year plan has many positive aspects and is continuing the strong energy efficiency efforts in the state. It is also struggling to deal with the challenges that come from historical success making future savings more difficult and technology and market changes that raise the bar for easy to achieve savings. Responding to these challenges will take a collaborative effort on the technology, administration, delivery, marketing and stakeholder collaboration level. We look forward to working with all parties to achieve the continuation of our nation leading energy efficiency efforts. Expanding the scope and incorporation of additional energy approaches such as that which is presented in the proposed H1724 can help achieve that result.