

# Memo

To: **EEAC**  
From: **Eric Belliveau and the EEAC Consultant Team**  
Date: **July 26, 2018**  
Subject: **March-May Consultant Team Summary Report**

The Consultant Team is pleased to provide a summary to the Council of our activities.

This report serves as a summary of key activities, accomplishments, and deliverables completed by the Consultant Team during the March-May 2018 timeframe.

## SUMMARY OF MAIN TASKS COVERED IN EACH SECTION OF THE REPORT

### THREE-YEAR PLANNING

- Developing and presenting the energy efficiency assessment of potential
- Developing and presenting the active demand management assessment of potential
- Reviewing and commenting on the April 30<sup>th</sup> Draft 2019-2021 Plan
- Continuing to work with the PAs on key issues for the Three-Year Plan
- Coordinating with the PAs to identify the key drivers and launch the key drivers review process

### EM&V

- Developing the draft 2019-2021 Strategic Evaluation Plan
- Planning and launching a number of studies of 2018 demand response pilots and demonstrations
- Moving studies timed to feed into the final draft of the Three-Year plan toward completion
- Coordinating policy processes such as the Demand Reduction Committee, working groups associated with the future codes and standards support initiatives; and the Informal Collaborative Discussion group.

### PLANNING & ANALYSIS

- Supporting the completion and application in MA of the next regional avoided cost study, including the scoping of a supplemental analysis of the GWSA avoided cost of compliance in MA

### RESIDENTIAL AND LOW INCOME

- Supporting Consultant Team presentations to the EEAC
- Conducting ongoing 2019-2021 planning discussions with the Residential Management Committee
- Reviewing and commenting on draft residential EM&V work products and ongoing coordination with EM&V Advisory Group members

### COMMERCIAL AND INDUSTRIAL

- Providing program oversight and monitoring
- Reviewing evaluations for a better understanding of the impact on savings

### TECHNICAL SERVICES

- Continuing regular administrative functions, including EEAC meeting minutes and website maintenance and document uploads

## THREE-YEAR PLANNING

This section describes three-year planning activities undertaken by all Advisory Groups to some extent.

### Review of PA Potential Studies

In March, the Consultant Team continued to analyze the results of the PA energy efficiency potential studies. The Team also reviewed answers received from the PAs in response questions and data requests the Consultant Team submitted to the PA potential study contractors to fully understand what was included and the assumptions used. The Team also reviewed and analyzed the results of National Grid's demand response potential study.

### Assessment of Potential

In March, the Consultant Team continued work on putting together the assessment of potential. The Team used the PA potential studies, informed by trends and market knowledge, as its starting point for estimating potential savings in Massachusetts. The Team presented results of its energy efficiency assessment of potential at the March 29 EEAC meeting. The assessment indicated that there is still energy efficiency potential in Massachusetts to support electric savings in excess of 3% and that there is still potential to support robust programs. The residential electric potential is lower than recent achievement due to lighting market changes, but C&I electric opportunities remain strong. The Team found that there are no significant changes expected in gas potential for either the residential or C&I sectors. Early expectations are the residential costs may increase somewhat, but the PA Plan would provide the best source of data for ongoing planning.

In April, the Consultant Team developed an assessment of the potential for Active Demand Management (ADM) in Massachusetts and presented results at the April 25 EEAC meeting. The Consultants primarily relied on ADM results in CLC's potential study as well as a separate demand potential study completed for National Grid. The Team found that the potential for ADM through the MassSave programs to be 245 to 295 in 2021 for all PAs. This result was based on and extrapolated from the two PA ADM potential studies. The higher estimate includes 75 MW for energy storage.

### Review of Draft Plan

The PAs filed their Draft 2019-2021 Energy Efficiency Plan with the DPU on April 30. In May, the Consultant Team spent a significant amount of time reviewing the contents of the Plan and the data included in the statewide data tables and BCR models. The Team developed a presentation to summarize our observations and assessment of the Draft Plan and delivered it to the Council at the May 16 EEAC meeting. At a high level, the Team determined that the Plan was well written, but lacked the detail needed to respond to many of the EEAC recommendations. The benefits and savings presented in the Draft Plan were lower than the current plan while the costs to achieve were higher than expected and there were no large apparent changes in program measure mix or delivery. Other topics the presentation touched on related to Active Demand Management, variation in planning assumptions, a common savings tracking metric, performance incentives and sector-specific topics. Ultimately, the Consultant Team determined that there was a significant amount of work to do to get a final Plan together.

### Key Drivers

In May, the Consultant Team worked with the PAs to develop a list of key drivers that likely account for the main differences in the proposed goals and budgets put forward by the PAs and those found in the Consultants in the assessment of Potential. The Consultants and PAs also agreed on a process for addressing these topics in a collaborative process. This process will continue next month.

The Consultant Team also continued to work with the PAs on other key issues for the Three-Year Plan including the goals framework and a common MMBtu savings metric, fuel switching and energy optimization, term sheet structure, the application of EM&V results, and market transformation and market effects.

## EVALUATION, MEASUREMENT & VERIFICATION

### Oversee EM&V Planning

A key EM&V planning activity in this reporting period consisted of working with the PAs to complete the draft 2019-2021 Strategic Evaluation Plan (SEP), which was filed as a component of the Draft Three-Year Plan. Currently under development is a final draft of the SEP that includes specific studies to be conducted in the first year of the 2019-2021 period. The final draft of the SEP will be included as a component of the final Three-Year Plan.

A secondary EM&V planning activity consisted of planning and launching a number of studies of 2018 demand response pilots and demonstrations. Finally, the Team moved several new individual energy efficiency studies through the detailed planning process to the implementation stage.

### Oversee EM&V Study Implementation

A key focus of study implementation efforts in this reporting period was moving toward completion a wave of studies that have been timed to feed into the final draft of the Three-Year plan. This wave follows earlier waves that were completed earlier this year to feed into either the 2017 Plan Year Report or the Draft Three-Year plan. Prominent among the current wave are studies of program attribution, which are generally done as late in each three-year program cycle as feasible due to the policy requirement to lock in attribution factors for the entirety of the next three-year period. Completing attribution studies late in the three-year cycle helps to keep the results as timely as possible for their three-year application period.

A comprehensive status report on the current status of the Massachusetts EM&V program can be found at <http://ma-eeac.org/studies/>.

### Oversee EM&V Reporting

Many studies that had been staged to feed into either the 2017 Plan Year Report or the draft Three-Year Plan were completed during this report period. Year- to-date, roughly 40 studies have been finalized and posted on the Council's website.

### EM&V Policy Issues

Much of the Group's work on EM&V policy issues focused on providing EM&V input and coordination to a number of major policy processes connected to the 2019-2021 Three-Year Plan. In addition, the Group coordinated with other policy processes such as the Demand Reduction Committee, various working groups associated with the planning of future codes and standards support initiatives; and the Informal Collaborative Discussion group.

### Council and Stakeholder Engagement

The EM&V Group engaged with DOER through both monthly overall check-in calls and discussions on issues regarding individual studies. In addition, the Group presented at the April Council meeting on recent EM&V results bearing on the residential moderate income sector.

## PLANNING AND ANALYSIS

### Participate in EEAC Meetings; Brief and Support the Council

The P&A Advisory Group prepared for, attended, and provided technical support during the meetings of the EEAC and coordinated through Executive Committee each month. The Group coordinated with DOER as chair of the Council on a weekly basis, and briefed individual Councilors in advance of the EEAC meeting and during the month. Also, the P&A Advisory Group assisted with the development, planning, and coordination of potential topics for future EEAC meetings. EEAC Meeting and Council support was an on-going and regular monthly task area.

## **Provide Technical Analysis**

During the March-May timeframe, the P&A Advisory Group supported completion of the regional avoided cost study, the 2018 AESC study (Avoided Energy Supply Component), which will be used for the 2019-2021 Plan. The P&A Group also coordinated with the PAs and DOER regarding the application in MA of the avoided cost study values. The P&A Group assisted with the scoping of a supplemental analysis of the GWSA avoided cost of compliance in MA.

The P&A Group also worked with the PAs to consider and analyze the pros and cons of the various key indicators that could be used in the 2019-2021 Plan, including in the Plan term sheet.

## **RESIDENTIAL AND LOW INCOME SECTORS**

### **Technical Support for Programs and Effective Practices**

The Residential Advisory Group's technical support continues to be devoted to work in support of the 2019-2021 planning process. In addition to the work described in the planning section of this memo, the Group further developed the concept of an IT portal to support continuous customer engagement, reviewed the PAs' regular reporting, conducted analysis of the LEAN program and met with LEAN representatives, attended an MAPC meeting on municipal priorities for the Three-Year Plan, reviewed and provided informal comments to DOER staff on the Residential Conservation Services draft guideline, reviewed and commented on proposed appliance net-to-gross values, analyzed potential fuel switching impacts, responded to various Councilor inquiries, and continued to coordinate with DOER staff.

### **Participate in RMC and Council Meetings**

The Group provided content for presentations by the Consultant Team at each monthly meeting this quarter, including supporting the preparations of the EM&V Advisory Group for its presentation at the April EEAC meeting on [New Data to Inform Moderate Income Market](#).

The Group met with the Residential Management Committee five times during this quarter. The discussions all related to residential program planning for 2019-2021, including the assessment of savings potential and the Consultants' related participation analysis, a review of a program overview the PAs provided in advance of the draft plan, further discussion of Tennessee Valley Authority's [eScore platform](#) as a model for Massachusetts, and for the May meetings specifically discussion of the Draft Plan.

### **Coordinate with EM&V Efforts and Incorporate Feedback from EM&V Studies into the Programs**

The Group continued its monthly coordinating calls with the EM&V Advisory Group to exchange information and discuss priority evaluation issues and implications for implementation. In addition, the Group reviewed, and in most instances, provided comments on drafts of several in-progress residential evaluation outputs, including the Residential Customer Profile, Multifamily Census, Multifamily Impact, Low Income Process, HES Process, Mass Save awareness, HVAC Net-to-Gross, Lighting Socket Saturation, Advanced Power Strips Metering, and Ductless Mini-Split Heat Pump evaluation studies.

## **COMMERCIAL AND INDUSTRIAL SECTOR**

### **Technical Support for Programs and Effective Practices**

The C&I Advisory Group's primary focus this quarter was analyzing and synthesizing results of the energy potential studies to develop a statewide assessment of potential for both energy and demand savings. The Consultants also continued to monitor program progress towards goals which included looking into upstream lighting performance, progress toward launching a strategic energy management initiative, streetlight upgrades, combined heat and power projects, and general program performance. In addition, the Consultants have been tracking the progress towards issuing a RFP for Strategic Energy Management services in order to launch a SEM cohort demonstration.

## **Coordinate with EM&V Efforts and Incorporate Feedback from EM&V Studies into the Programs**

The C&I Advisory Group spent the majority of the time in this reporting period on a number of planning and evaluation activities. Key issues continue to be dual baselines, baselines for building energy management systems, lighting controls savings, and the new metric that would report all savings in MMBtus.

## **Participate in CIMC and Council Meetings**

In addition to participation in CIMC meetings and calls, the C&I consultants reviewed and provided feedback on PA materials presented at the Council meetings.

## **TECHNICAL SERVICES**

### **Produce Minutes from all EEAC Meetings**

The Consultant Team is charged with producing draft and final meeting minutes for each EEAC monthly meeting. The Team produced draft minutes for the February, March, and April EEAC meetings and forwarded them to the EEAC Chair. These minutes along with all documents and presentations distributed at the March-May meetings have been posted on the EEAC website.

### **EEAC Website Upgrades, Revisions & Maintenance**

Consultant Team staff continue to manage the updated website on a day-to-day basis. In March-May this included posting materials for EEAC meetings and other meetings that occurred during the month.

For the December-February time period, there were:

- 5,984 sessions
- 2,736 users: 26% new visitors and 74% returning visitors
- 15,775 page views with an average of 3.8 page views per session

### **Consultant Team Quarterly Reports**

In April, the Consultant Team produced a report of its activities from December 1, 2017 to February 28, 2018.