

Memo

To: **EEAC**
From: **Eric Belliveau and the EEAC Consultant Team**
Date: **September 15, 2017**
Subject: **June-August 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 June-August 2017 timeframe.

SUMMARY OF MAIN TASKS COVERED IN EACH SECTION OF THE REPORT

EM&V

- Advancing 55 studies in the implementation stage and advancing roughly 20 studies in the reporting stage
- Supporting policy issues including: the three-year planning process, the Demand Reduction Committee, and the Informal Collaborative Discussion group
- Developing two EM&V presentations scheduled for the June Council meeting

PLANNING & ANALYSIS

- Supporting AESC study work
- Preparing for planning workshops
- Participating in the Strategic Planning Group to plan for 2019-2021
- Supporting the Demand Reduction Subcommittee

RESIDENTIAL AND LOW INCOME

- Preparing for July EEAC meeting, including developing multi-family program opportunities presentation and conducting Councilor briefings
- Conducting planning and analysis work on the future of residential programs and implications of reduced claimable residential lighting savings
- Participating in RMC meetings and discussing a variety of topics
- Reviewing and commenting on draft residential EM&V work products and ongoing coordination with EM&V Advisory Group members

COMMERCIAL AND INDUSTRIAL

- Researching and publishing a CHP and Small Business memo
- Researching new technologies and demand savings performance
- Reviewing major C&I evaluation and market study reports
- Planning and preparing for the October EEAC workshops

TECHNICAL SERVICES

- Continuing regular administrative functions, including EEAC meeting minutes and website maintenance and document uploads
- Coordinating with Cahoots on initial design work for 2013-2015 Report to the Legislature

EVALUATION, MEASUREMENT & VERIFICATION

Oversee EM&V Planning

The primary EM&V planning activity in this reporting period consisted of moving individual projects through the detailed planning process toward the implementation stage. These projects were added to the EM&V portfolio either through the Strategic Evaluation Plan (SEP) Update process completed in the May 2017, or through the Evaluation Plan for Peak Demand Reduction Pilots and Demonstrations submitted in the Spring of 2017 in response to an October 2016 Council resolution.

A secondary EM&V planning activity consisted of early groundwork to develop the EM&V summit meetings currently scheduled for December 6-8. The purpose of the summit meetings is to kick off the development of the 2019-2021 Strategic Evaluation Plan.

Oversee EM&V Study Implementation

Roughly 55 studies were in the implementation stage during the course of the reporting period. These represent a combination of studies added to the portfolio through either the SEP Update or the Peak Demand evaluation plan, and a scattering of studies initiated in 2016 that are nearing completion. 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

Final reports for roughly 20 studies were either finalized or in progress during this reporting period. Finalized reports included the following: PA Differences study; Refinements to C&I Gross Impact Evaluation Framework study; Injection Molding Market Assessment study; and residential lighting supplier, store Manager, and ENERGY STAR partner insights study.

EM&V Policy Issues

The Group's work on EM&V policy issues focused on coordination with a number of major policy processes that were in motion in this reporting period, including, early work on the three-year planning process, the Demand Reduction Committee, and the Informal Collaborative Discussion group.

Council and Stakeholder Engagement

Council and stakeholder engagement activities focused on the completion of two EM&V presentations for the June Council meeting. The EM&V team also coordinated with DOER through both monthly overall check-in calls and discussions on issues regarding individual studies.

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 and Review/Assess Reports

The P&A Group also participated in strategic planning and informal discussions with the PAs. The Consultant Team has been meeting with the PAs on a monthly basis on key issues to explore and consider early in the process of developing the 2019-2021 Three-Year Plan. These issues include consideration of how to measure success, potential metrics for planning and measuring success, fuel switching to achieve policy objectives, potential significant program revisions as lighting markets evolve, and other key issues. The Consultant Team

has drafted or has coordinated with the PAs to develop materials for discussion and review during the informal discussions.

Planning and Analysis Support for Implementation of the 2016-2018 Plan

In the June-August timeframe, the P&A Advisory Groups helped to lay the groundwork for the upcoming regional avoided cost study called the "Avoided Energy Supply Components" (AESC). The AESC study is scheduled to be performed in October 2017 through March 2018. This study, a joint effort across six New England states, is a major study overseen by the multi-party "AESC study group." The avoided cost values determined through this study will be used for the cost-effectiveness analysis for all programs proposed in the 2019-2021 Plan. The Consultant Team has worked to identify new issues for the study to address, provide input to the scope of work, commented on drafts of the scope of work, participated in all AESC study group discussions, and participated as reviewers in the RFP and bid selection process. The winning bidder is expected to be selected in late September, and the study will begin in October.

The Consultant Team also continued to work with the PAs on exploring and analyzing issues and opportunities for demand management and peak demand reduction. This work has included cost-effectiveness analysis, coordination on demand and capacity issues for the avoided cost study (AESC), tracking of the demand demonstrations, review of demand initiatives in other states, and consideration of future demand management efforts. The Team has also been coordinating with DOER and the PAs on planning for the demand topics scheduled for the November EEAC meeting.

The Group also supported analysis of program cost and savings impacts from the loss of claimable residential lighting savings due to increasing baselines and market transformation. Other work included preparing for 2019-2021 planning workshops and assessing the use of a single kWh equivalent savings metric.

RESIDENTIAL AND LOW INCOME SECTORS

Technical Support for Programs and Effective Practices

The Group continued and intensified its work on the future of the Mass Save residential programs with a particular view to preparing for meetings with the EEAC related to this topic on September 20 (regular EEAC monthly meeting) and September 26 (first residential planning workshop). In addition to the discussions with the Residential Management Committee described below, the Group worked to identify and analyze key issues—including those related to the significant reduction in claimable lighting savings—and opportunities for new innovative approaches in areas of whole building approaches, fuel switching and active demand management, and technology modernization. This work will continue into the fall.

Over the course of the quarter, the Group also continued its review of the PAs' 2016 Plan Year Reports, reviewed the PAs' Q2 2017 report, conducted discussions with LEAN about a planning process for low income programs for 2019-2021, and conducted its ongoing business of coordinating with DOER staff on residential and low income issues and supporting the Council by providing answers to Councilor inquiries. Additional low income related activities included creating an initial draft of a counselor informational handbook and working with healthcare partners on a co-funding initiative.

Participate in RMC and Council Meetings

The Residential Advisory Group spent a significant amount of work in this quarter preparing for the July 19 EEAC meeting, which focused on multi-family programs. The team presented on [Multi-family Program Improvement Opportunities](#): Positioning the Retrofit Initiative for a Future With Negligible Claimable Lighting Savings. In addition to the presentation preparations and associated research and analysis, work in support of the meeting included planning and review meetings with the PAs, DOER staff and LEAN; reviewing and commenting on draft presentations from other presenters; and briefings of several EEAC members.

The Group met with the Residential Management Committee six times during this past quarter. On June 14, the RMC provided updates to the Consultants regarding the HES and low rise new construction initiatives. On June 28, the RMC and Consultants discussed opportunities to increase upstream approaches for residential HVAC

equipment. At the July 12 meeting, the RMC and Consultants discussed draft presentations for the July 19 EEAC meeting. Starting with the July 26 RMC meeting, the RMC and Consultants began planning discussions for the 2019-2021 plan period, starting with reviewing analysis both the PAs and Consultants had prepared on the potential impacts on claimable lighting savings during that time period. On August 9, the discussion at RMC shifted to discussing key drivers for program innovation in 2019-2021 and several best practice examples. The RMC and Consultants continued this work on August 23, discussing high level goals for the 2019-2021 plan period and confirming a schedule for discussions to continue in September with a focus on the fall workshop process.

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. The Group also reviewed and provided comments on drafts of several in-progress residential evaluation outputs, including the Residential Customer Profile Study, a draft multi-family impact evaluation plan, a draft HEAT Loan evaluation plan, HES Mystery Shopper report, responses to HVAC manufacturer panel interviews, lighting In Service Rate values, preliminary lighting onsite survey results, a ductless heat pump survey, and participated in an interview on efficient products opportunities, and a low income process evaluation plan.

COMMERCIAL AND INDUSTRIAL SECTOR

Technical Support for Programs and Effective Practices

In June through August, the C&I Advisory Group completed a new memo on Combined Heat and Power (CHP) savings, and a new memo on the Small Business initiative. The Group also reviewed plans for strategic electrification and developed a new team work plan for the next 16 months.

In preparation for a series of EEAC workshops scheduled for October, the Group began to turn the memos referenced above into Councilor briefings, and to plan for the workshops.

Technical Support for New Technologies and Innovation

The C&I Advisory Group continued to support the PAs to explore technologies and innovation in programs. The Group participated in a regional Strategic Energy Management call (splitting time with other states). A new technology is now available on the market: tubular T8 LEDs with wireless controls, which can allow for control of each lamp individually via a wireless network. The Group investigated the status of this measure and discussed with the PAs.

The Group also did some analysis of 2016 data to identify which currently offered measures were having the greatest impact on summer demand savings. This analysis also identified measures that are currently offered but that are not valued or their disproportionate demand savings impact.

Reporting Updated and Best Practices

The Group reviewed information and provided feedback on topics including: the proposed metric to convert saved delivered fuels to be kWh equivalent savings, and NEMA lamp sales in New England. The Group also reviewed and tracked the PAs' progress towards commitments made in the 2016 Annual Plan.

Participate in CIMC and Council Meetings

The Group participated in a number of CIMC meetings and informal calls with the PAs to discuss implementation methodology, share best practices, and progress towards savings goals to date. In June, the Group presented the results of analysis done on 2016 data to identify opportunities for more summer peak passive savings. There were no CIMC meetings in August that were open to the consultants.

In August, the C&I Group presented on the Small Business Direct Install initiative to the EEAC. This presentation included analysis on past results, important findings, and recommendations for increasing participation of more new customers in the future.

Incorporate Feedback from EM&V and Studies into the Programs

The Group reviewed and commented on documents for a number of end uses. A report that sets the realization rates for upstream LED lighting was published in draft form with disturbing results of low realization rates. This report will have an impact on 2017 savings, and this prompted discussion as the upstream lighting program is a critical part of program savings. Other reports on feedback from HVAC market actors and a CHP process evaluation were informative. In addition, the team provided significant feedback on a draft deep dive report about C&I lighting. The team was also involved in discussions about the transition to a dual baseline structure.

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 May 17, June 21, and July 19 EEAC meetings and forwarded them to the EEAC Chair. These minutes along with all documents and presentations distributed at the September-November 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 June-August this included posting materials for EEAC meetings and other meetings that occurred during the month.

For the June-August time period, there were:

- 3,208 sessions
- 1,606 users: 45.6% new visitors and 54.4% returning visitors
- 8,895 page views with an average of 2.8 page views per session

Produce the Annual Report to the DPU and Legislature

In August, the Consultant Team worked with Cahoots on the initial design work for the Report to the Legislature.