

Memo

To: **EEAC**
From: **Eric Belliveau and the EEAC Consultant Team**
Date: **July 16, 2015**
Subject: **June Monthly Report**

The Consultant Team is pleased to provide this update to the Council on our recent activities.

SUMMARY OF MAIN TASKS COVERED IN EACH SECTION OF THE REPORT

EM&V

- Completing and presenting a public webinar on EM&V results
- Refining the first draft of a Strategic Evaluation Plan (SEP) for 2016-2018
- Advancing toward completion 25-30 studies currently in the implementation stage
- Providing EM&V input on processes and deliverables including review of the April 30 Three-Year Plan filing, the goal setting process, the cost drivers analysis, and the savings accounting methodology for codes and standards support efforts in 2016-2018
- Making a presentation and leading a brown-bag discussion session at the June Council meeting

PLANNING & ANALYSIS

- Preparing for, attending, and providing technical support for the EEAC and ExCom meetings
- Reviewing and analyzing the PAs' April 30 Draft Plan for 2016-2018
- Reviewing and analyzing the "key drivers" of the differences in savings and costs between the PA Draft Plan and the Consultant analysis, and making adjustments to the Consultant savings analysis
- Reviewing the actual results in the 2014 Plan-Year Reports, and assessing the implications for the inputs and assumptions for the 2016-2018 Plan.
- Analyzing and drafting comments on the PA-proposed Mid-Term Modifications (MTMs)

RESIDENTIAL AND LOW INCOME

- Supporting the Council's June 4 residential, multi-family and low income workshop through preparation of presentation materials, participating in the workshop, and conducting follow up work
- Preparing for and participating in key drivers discussions with the PAs for lighting, behavior, Home Energy Services, and gas heating and water heating equipment
- Meeting with the Residential Management Committee to discuss implementation plans for the Whole House and Products Programs for 2016-2018

COMMERCIAL AND INDUSTRIAL

- Preparing for and participating in key drivers discussions with the PAs for CHP, streetlights, and C&I lighting.
- Preparing for and attended the Council C&I workshop held on June 9
- Researching improving energy productivity and writing a memo on the topic
- Providing input to the EM&V Group for content on two webinars

TECHNICAL SERVICES

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

EVALUATION, MEASUREMENT & VERIFICATION

In June, the EM&V Advisory Group continued its full range of ongoing activities related to EM&V planning, implementation, reporting, policy, and outreach issues. In particular, the Group disseminated results of a recent wave of completed studies. This included holding a public webinar on residential EM&V results on June 1, and a making a presentation and leading a brown-bag discussion session at the June 29 Council meeting.

Oversee EM&V Planning

The group continued to work with the PAs to refine the first draft of a 2016-2018 Strategic Evaluation Plan (SEP) that was included as an appendix to the April 30 Three-Year Plan filing. Activity in June focused on developing and moving toward consensus on a large number of individual study proposals that are candidates for being performed in the first half of the 2016-2018 program cycle. Individual study proposals that are accepted will be included in the final draft of the plan. Because the SEP is primarily an overall strategic document, it is not the intention that all individual studies to be performed in the 2016-2018 period will be specifically written up in the plan. Rather, individual study write-ups are expected to focus on those studies to be performed early in the cycle.

The group also worked with the PAs on the detailed scoping of several new studies to be initiated in the near-term, including one on the health-related non-energy benefits of low-income programs and one to support ongoing collection of EM&V-related data from HVAC manufacturers.

Oversee EM&V Study Implementation

The Group advanced toward completion roughly 25-30 studies currently in the implementation stage. A few examples include the following studies: C&I On-Site and Market Share; C&I Customer Gas impact; Minisplit Field Monitoring; Residential Single-Family New Construction Baseline and Code Compliance study, and LED Incremental Cost study.

Oversee EM&V Reporting

In June, the Group continued its efforts to disseminate the results from the large wave of recently completed EM&V studies. On June 1, the group presented a public webinar on recent residential results, following on the heels of a similar webinar on non-residential results held in May. Then at the June 29 Council meeting, the Group gave a presentation on key implications of recent EM&V results for the 2016-2018 program cycle, as well as a brown-bag question and answer session over lunch.

Several more final reports were in progress in May, including first drafts of a C&I gas self-reporting net-to-gross study, an impact evaluation of C&I setback thermostats, and an overall report integrating the results of several residential lighting net-to-gross studies. The Group also reviewed and commented on a draft evaluation report on the results of DOER's NEST Seasonal Savings pilot. Finally, the group continued moving several draft reports toward finalization that have gone through multiple iterations responding to stakeholder comments.

Lastly, the Group responded to several queries from individual Councilors and DOER regarding new evaluation results and potential implications thereof.

EM&V Policy Issues

The group provided EM&V input into a number of broader processes and deliverables, including review of the April 30 Three-Year Plan filing, the key drivers analysis, and the savings accounting methodology for codes and standards support efforts in 2016-2018. The Group also continued working with the PAs on the development of savings parameter assumptions that either were included in the April 30 filing or will be included in the next draft of the Three-Year Plan. Refinement of savings parameter assumptions based on EM&V results is expected to be ongoing through the Fall of 2015, when the final draft of the Three-Year Plan filing is due. Lastly, the group worked with the PAs and the EM&V Forum on a pilot effort aimed at eventual regional standardization of summary impact reporting for regulatory agencies.

PLANNING AND ANALYSIS

In June 2015, the Planning and Analysis (P&A) Advisory Group focused on the primary tasks described below to support the effective implementation of the key components of the 2013-2015 Three-Year Plan, and to assist with the development of the next Three-Year Plan. The Group's primary tasks were the review of the PAs' April 30 Draft Plan, the analysis of the "key drivers" of the differences in the savings goals and costs between the PA Draft Plan and the Consultant analysis, and the review of the final evaluated results for 2014 reported by the PAs in early June.

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 ExCom during the 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 (the substantive issues and outcomes are summarized in the task descriptions below). EEAC Meeting and Council support is on-going and is a regular monthly task area.

Support the Council on Regulatory Issues and DPU Proceedings

The P&A Advisory Group reviewed the proposed MTMs from four PAs, analyzed the three National Grid Electric MTMs in particular, and drafted the EEAC comments and resolution on the National Grid Electric MTMs, which were reviewed and supported by the EEAC at the June 29 meeting. Ten additional MTMs – seven from National Grid Gas and one each from Eversource, Liberty, and Unitil – will be reviewed in July.

Provide Technical Analysis

The P&A Advisory Group reviewed the final 2014 evaluated results reported in the 2014 Plan-Year Reports that were filed by the PAs in early June. The Group assessed the effects and implications of using the evaluated results for the inputs and assumptions in the 2016-2018 Plan. Overall, the final savings for 2014 were higher than the Q4 quarterly report preliminary savings reviewed in February, which resulted in increased savings in the Consultant analysis of savings goals for the 2016-2018 Plan (note that the 2014 achieved savings, as actual in-the-field achieved results, were a primary input to the Consultant analysis).

Input and Analysis for the 2016-2018 Three-Year Plan

The P&A Advisory Group continued the review and analysis of the Draft 2016-2018 Plan prepared by the PAs and received on April 30. The Group compared the savings, budgets, and bill impacts in the PA Draft Plan to the Consultant analysis provided to the EEAC and the PAs in late April. As part of the review, and collaborating with the PAs, the Group analyzed the "key drivers" that account for and cause the differences in savings and costs between the PA Draft Plan and the Consultant analysis. The Consultants made adjustments to the inputs and assumptions used in the Team's savings estimates based on results of the key drivers analysis, and the evaluated results for 2014 in the Plan-Year Reports. Work on key drivers to identify and hopefully close or narrow differences in costs and savings is expected to continue in July and August, with increased focus on the cost drivers. This work has been a collaborative process with the PAs.

The Group coordinated and compared notes with the PAs on other cross-cutting Plan topics, including demand savings, demand response, and costing periods for cost-effectiveness analysis (winter and summer, on and off peak). The P&A Group considered peak demand reductions for possible inclusion in the savings framework and future Term Sheets for the 2016-2018 Plan.

RESIDENTIAL AND LOW INCOME SECTORS

In June, the Residential Advisory Group's continued primary focus was on 2016-2018 planning activities, which are described more fully below.

Input and Recommendations for the 2016-2018 Plan

The Group carried out a variety of activities in early June to support the June 4 residential, low income, and multi-family Council workshop. These included completing presentation materials, participating in planning meetings,

briefing several councilors, participating in the workshop, and follow-up tasks including reviewing PA materials from the workshop and editing meeting notes.

The key drivers process was the main focus of the Residential Advisory Group's June work. The Group researched and analyzed 2014 Plan Year Report data and BCR models as well as 2016-2018 BCR models to prepare for key drivers discussions with the PAs. Group members participated in five key drivers meetings with the PAs on four residential topics: lighting, behavior (electric and gas), Home Energy Services (gas), and heating and water heating (gas). During these meetings Group members and the PAs exchanged information on their respective assumptions and assessments of savings opportunities for 2016-2018. The PAs provided several pieces of follow up information, which the team began and continues to assess. The Group revised its goals analysis based on the PAs' evaluated 2014 results and prepared updates to DOER and to the Council for the June meeting. The Group's assessment is that these discussions have been very valuable to date and will continue to be so in July. The results of these discussions, which will also address costs, will be reported to the Council at its August meeting.

Multi-Family Retrofit

On June 10, Group members met with the Residential Management Committee (RMC) to discuss plans for the Whole House Program, including the Multi-Family Retrofit Initiative, in 2016-2018. The PAs provided additional information on planned enhancements to the single point of contact model and coordination between residential and commercial and industrial multi-family efforts. The Group feels the PAs' plans in this area are a very positive step forward.

Home Energy Services

The June 10 in-person meeting with the RMC also addressed the HES initiative, including the planned new initiative for renters. The discussion was wide ranging and productive, covering among other topics the evolution of the home performance contractor model and the potential to capture increased cost efficiencies through reduced QA/QC. As noted above, HES is also a key drivers topic and discussions continue.

Residential Products

The Group prepared for and participated in an in-person discussion on June 24 with the RMC regarding plans for the Products Program in 2016-2018. As with the Whole House Program discussion on June 10, this was a wide-ranging and productive discussion. With both lighting and gas heating and water heating equipment being the focus of key drivers discussions, the RMC discussions were primarily focused on implementation strategies for those and the other products initiatives. The PAs provided additional information on strategies for dryers and advanced power strips. There was also extensive discussion of PA plans for addressing the evaluation finding that many condensing boilers installed and supported through Mass Save are not condensing. The PAs are planning additional research to further understand the problem and potential solutions. The Consultant Team feels this is a significant matter and will be following the implementation and research work closely in coming months.

COMMERCIAL AND INDUSTRIAL

Input and Analysis for the 2016-2018 Three-Year Plan

This task was the primary focus of the C&I Advisory Group in June. The Group prepared for and attended the Council C&I workshop held on June 9. This workshop was to try to understand and work through some of the differences between the PA and Council/Consultant perspectives on the next Three Year Plan. The Consultants also helped to review and refine the notes from that workshop. Significant time was spent on working through the key driver process, which identified streetlights, C&I lighting, and CHP as key drivers of savings for the next three years. The Consultants researched these areas, organized and led calls with the PAs, and kept the DOER informed through e-mails and calls. The Consultants also remotely attended the PA roundtable on June 19.

Approaches for Increasing Energy Productivity

The C&I Advisory Group continued research on behavioral and Strategic Energy Management/Continuous

Energy Improvement programs, worked to better understand the SEMP/MOU process as implemented in Massachusetts, and continued writing a forthcoming memo on this topic.

Incorporate Feedback from EM&V into the Programs

The C&I Group provided input to the EM&V Group on content for two webinars, one focused on C&I and one on residential EM&V results, and reviewed the slide deck for the C&I presentation.

Comprehensive Segment Strategies

The C&I Group participated in CIMC meetings and calls.

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 June 29, 2015 EEAC meeting and forwarded them to the EEAC Chair. The EEAC Chair reviewed the minutes and had them posted on the EEAC website. The EEAC approved the May meeting minutes at their May 19 meeting. These minutes along with all documents and presentations distributed at the June 29 meeting have been posted on the EEAC website <http://ma-eeac.org/ma-eeac-meeting-june-29-2015/>.

EEAC Website Upgrades, Revisions & Maintenance

Consultant Team staff continue to manage the updated website on a day-to-day basis. In June, this included posting materials for the June 29, 2015 meeting and other meetings that occurred during the month.

For the month of May 2015 there were:

- 3,081 sessions
- 2,076 unique users: 59% new visitors and 41% returning visitors
- 7,133 page views with an average of 2.3 page views per session

Produce the Annual Report to the DPU and Legislature

In June, the Consultant Team continued discussions to develop the 2014 Annual Report. The Team requested that the PAs provide case studies for inclusion in the report by the end of the month.