

Memo

To: **EEAC**
From: **Eric Belliveau and the EEAC Consultant Team**
Date: **7 August 2014**
Subject: **July 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

- Providing input on the Deeper Dive, Implementation Update, and Statewide Database processes, as well as the EM&V Forum's reporting templates and net-to-gross protocols projects.
- Working with programmers and the PA evaluators to finalize plans for the EM&V study to support the newly launched Code Compliance Enhancement Initiative.
- Advancing toward completion the roughly 35-40 studies in the implementation stage; moving three more studies from the planning to the implementation stage; finalizing three EM&V reports; moving 10 in-progress reports toward finalization.
- Working with the PAs to attempt to resolve differences regarding the baseline assumption for residential furnaces that are replaced on failure.

PLANNING & ANALYSIS

- Preparing for, attending, and providing technical support during the EEAC meeting on July 8, and for the Executive Committee meeting on July 30.
- Reviewing and analyzing the 2014 Implementation Update, with a major focus on the three Deeper Dives: Large C&I Retrofit, Multifamily, and a follow up on Residential Lighting.
- Conducting some additional analysis of the PA filings in DPU 14-05 regarding the 2013 AESC study.
- Beginning work on the 2015 regional AESC study.

RESIDENTIAL AND LOW INCOME SECTORS

- Preparing for the HES presentation to the Council in August.
- Preparing for the Multifamily Deeper Dive presentation to the Council in August.
- Continuing the implementation update lighting Deeper Dive analysis with newly available data from the 2013 plan year reports.
- Determining the status of deeper savings efforts and next steps for advancing a program offering by the PAs.

COMMERCIAL AND INDUSTRIAL

- Presenting the Large C&I Retrofit Implementation Update to the Council.
- Participating in Commercial Real Estate Working Group discussions as well as reviewing and commenting on the CRE report.
- Finalizing survey instruments and interviewing PAs and hospital management to identify opportunities and best practices for the healthcare segment.
- Preparing and leading working sessions with the CIMC on a segmentation and effective practice adoption process.

MONITORING, COORDINATION, AND CROSS-CUTTING TASKS

- Evaluating PAs' achievements on action items related to the 2013-2015 plan.
- Reviewing and analyzing the 2013 Plan-Year Reports filed by the PAs on June 20.
- Making suggestions on the Mass Save Data interim database that could also apply to data included in the statewide database.

TECHNICAL SERVICES

- Producing draft minutes for the July 12, 2014 EEAC meeting.
- Actively working to complete website development and preparing to move files to new platform.
- Making progress towards completing the Annual Report to the DPU and Legislature.

EVALUATION, MEASUREMENT & VERIFICATION

In July, the EM&V Advisory Group continued its full range of ongoing activities across the spectrum of EM&V planning, implementation, reporting, and policy issues. Highlights of July tasks included: advancing toward completion the roughly 35-40 studies in the implementation stage; moving three more studies from the planning to the implementation stage; finalizing three EM&V reports; and moving 10 in-progress reports toward finalization.

EM&V Policy Issues

The Group provided EM&V-focused input on the Deeper Dive, Implementation Update, and Statewide Database processes, as well as the EM&V Forum's reporting templates and net-to-gross protocols projects.

The Group also worked with both programmers and the PA evaluators to finalize plans for the EM&V study that will provide overall analytic support for the newly launched Code Compliance Enhancement Initiative (CCEI). The shape of this study is interwoven with policy issues such as the manner and timing by which the PAs will claim savings from CCEI. As such, finalization of the study required close coordination between groups. As of the end of July, agreement had been reached on basic savings claims issues, and the study was almost ready to be launched.

Lastly, the Group worked with the PAs to attempt to resolve differences in views regarding the appropriate baseline assumption for residential furnaces that are replaced on failure. As discussed in previous monthly reports, we believe the EM&V evidence suggests that the market may have advanced past the 80% AFUE baseline assumed by the PAs in their 2013 annual reports. Therefore, there is strong potential for ex-post residential gas savings claims for 2013 and beyond to be over-stated.

Oversee EM&V Planning

EM&V planning highlights for July include: working with the EM&V Forum on the initiation of its planning efforts for 2015; holding a stakeholder workshop on the Low-Income Multifamily impact evaluation; and working with the PAs on the development of a possible study on residential furnace baseline issues.

Oversee EM&V Study Implementation

The Group advanced toward completion the roughly 35-40 studies identified in the 2013-2014 EM&V plan that are currently in the implementation stage. A few examples include the following: HES Program Delivery, HEAT Loan, LED Market Effects, Top-Down NTG, and Market Effects Framework studies. We also moved three studies from the planning into the implementation stage: 2nd Phase of the C&I Existing Buildings study, consisting of some 800 on-site visits to C&I buildings; the MiniSplit Impact Evaluation; and the Non-Residential New Construction Non-Energy Impacts study. This is a continuous process and a work area for the Group.

Oversee EM&V Reporting

The group finalized three EM&V reports and advanced toward finalization another 10 draft reports that are in various stages of completion. Finalized reports include: Multifamily Best Practices Memo; C&I Whole Systems Wrap-Up Memo, and C&I Boiler Market Characterization Report. In-progress reports include: C&I Existing

Buildings Survey Report; C&I 2012 Customer Profile Report; Residential Lighting Market Lift Pilot Evaluation Report; Residential Code Compliance Report; MiniSplit Participant Survey Study; C&I Successful Projects Study Interim Report; PA Differences Study Interim Report; Residential Lighting On-Site Visits Preliminary Results Memo; Residential Lighting Consumer Survey Report; and NEI Marketing Study Methods Memo.

As we noted in our June monthly report, the elapsed time between the receipt of first drafts of EM&V reports and the finalization of these reports appears to be increasing as of late. We believe this increase in elapsed time for reporting reflects a combination of increased stakeholder participation in report review, intensified efforts by both the EEAC consultants and the PAs to ensure that final reports are actively contributing to Council-related processes, and some bandwidth issues on the part of evaluation contractors.

Council and Stakeholder Engagement

The Group collaborated with the PAs to plan the third in a series of public EM&V webinars on the results of individual studies, presented by the lead EM&V contractors. The webinar, to be held on September 16, will focus on the results of the 2012 C&I customer profile study.

PLANNING AND ANALYSIS

In July, the Planning and Analysis Advisory Group focused on the primary tasks described below to support and push for the effective implementation of the key components of the 2013-2015 Three-Year Plan. This included reviewing and analyzing the 2014 Implementation Update, with significant work in July on the deeper dives; providing technical support for DPU proceedings; and conducting technical analysis and review.

Participate in EEAC Meetings; Brief and Support the Council

The Group prepared for, attended, and provided technical support during the EEAC meeting on July 8, and for the Executive Committee meeting on July 30. 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 ongoing and is a regular monthly task area.

Track, Analyze, and Report on the Implementation Update and “Deeper Dives”

The review, analysis, and assessment of the 2014 Implementation Update (originally provided by the PAs in mid-March) was a major task of the Planning and Analysis Group in July. The Implementation Update is a combination of looking back at past performance (2013) and looking forward at PA projections of future performance (2014-2015), which supports the Council in reviewing progress towards achieving the three-year goals of the 2013-2015 Plan. In July, the major focus of the Consultant Team was on the three Deeper Dives: Large C&I Retrofit, Multifamily, and a follow up on Residential Lighting. The Deeper Dives are based on additional PA narratives and PA-provided data focused on the most significant drivers of changes from the original Plan values.

In early July, the focus was on completing the analysis for the second Deeper Dive – Large C&I Retrofit. One important objective of this Deeper Dive review is to increase understanding of and confidence in the PAs’ ability to successfully drive the levels of business customer participation and the sizes and comprehensiveness of C&I projects necessary to meet the revised targets the PAs set forth in the Implementation Update in March. The Planning and Analysis Group has been doing some follow up with the PAs and the C&I Management Committee on the Large C&I Retrofit Deeper Dive, and we will provide an update at the August 12 EEAC meeting.

Throughout July, the Residential Advisory Group worked with the PAs on the Residential Multifamily Deeper Dive and segment overview, which will be presented to the EEAC in August. In parallel, some additional deeper dive analysis on Residential Lighting (first presented to the EEAC in early June) is continuing, and is being informed by the data provided in the 2013 Plan-Year Reports (filed by the PAs on June 20) and other data from the PAs; the Residential Lighting update will be presented to the EEAC in September.

The Deeper Dive work will continue to be a strong focus of our work in August and September, and the final findings and results of the Deeper Dives and other related analysis will be presented to the EEAC as a wrap up of the Implementation Update in September.

Support the Council on Regulatory Issues and DPU Proceedings

The Group provided technical support for DPU proceedings and regulatory processes. In July, the Group conducted some additional analysis of the PA filings in DPU 14-05 regarding the 2013 avoided cost study (AESC), including the effects of the new AESC values on 2013-2015 Plan benefits, and compared the data to the results of the 2013 Plan-Year Reports filed on June 20. Future work on other regulatory issues and DPU proceedings (e.g., DPU 14-05 or other proceedings) will depend on the nature and timing of DPU activities and actions in the future.

The Group also provided written, conference call, and in-person support for the Council in the DPU database technical session.

Provide Technical Analysis

In July, the Group began work on the 2015 regional avoided cost study (also known as the AESC study), which will now be completed every three years (aligned with the Three-Year Plan schedule) with potential annual updates when necessary, rather than being conducted every two years. This very important regional study is used to determine the economic benefits (using avoided costs) of all energy efficiency programs in Massachusetts and throughout New England. The Group coordinated with the multi-state study group on the development of the RFP for the contractor. The Group provided input on the draft scope of work and key tasks and analyses, reviewed and commented on early drafts of the RFP, and participated in the study group conference calls to develop the RFP. The 2015 AESC study is scheduled to be completed by March 31, 2015, in time for the avoided cost values to be used in the final version of the 2016-2018 Three-Year Plan being developed during 2015.

The Group followed up on inquiries from several councilors about the nature and timing of bill impacts and EERF reconciliations. Also, as part of prior PAG meetings and again at the PAG meeting on July 11, the Group discussed with the PAs the value of and process for updating the “typical customer” summaries of EE bill impacts and how different packages of EE measures offset the bill impacts to significant degrees, which will be useful to have available as customer energy bills increase during 2014. The “typical customer” summaries prepared in the past were much more accessible and understandable than the more detailed DPU bill impact documents. Work will continue on this with the PAG in August.

RESIDENTIAL AND LOW INCOME SECTORS

In July, the Residential Advisory Group worked on the tasks described below. The main focus for July included preparing Multifamily retrofit and Home Energy Services presentations for the August Council meeting and continuing lighting analysis as part of the implementation update Deeper Dive.

Residential Whole House and Low Income Programs

In July, the group prepared for the August Multifamily presentation by holding separate telephone conferences with Conservation Services Group and RISE as a major implementer and the Multifamily market integrator respectively for the residential Multifamily retrofit program. These discussions provided the Group with a better sense of program operations and improvements to recommend to the Council. The Group also looked at the literature review memo interim work product for the in-progress Multifamily process evaluation. The Group met with the PAs on July 28 to provide comments on their draft Multifamily presentation and completed a review draft on July 31 to share with the PAs and other reviewers.

The Group also prepared for the HES presentation to the Council in August. This included a discussion with the Residential Management Committee on June 9 regarding the PAs’ quality assurance and quality control procedures for HES and information that could be featured in the presentation. The Group also compiled and analyzed data for the presentation to give the Council a sense of initiative achievements as well as opportunities for continuous improvements.

On July 23, the Residential Advisory Group met with the Residential Management Committee and reviewed the PAs’ status in accomplishing the residential enhancements in the 2013-2015 Plan. The Group also discussed challenges to incorporating savings from HVAC system installations into the HES initiative when the installations stem from an HES assessment. The deeper savings enhancement was a specific focus. The PAs report that they

have been screening measures to be included in a deeper savings offering but that additional work remains to be done before they could introduce an offering by Q3 or Q4 of this year. The Group sees potential in comprehensive approaches to deeper savings. The Group and PAs will continue these discussions in August with a goal of identifying specific next steps.

The Residential Advisory Group also coordinated with the evaluation team on the status of in-process evaluations related to residential retrofit and reviewed and provided comments on the single family new construction code compliance assessment study.

Residential Products Program

Following up on the June Council presentation work, the Group continued on the lighting Implementation Update Deeper Dive. Efforts were focused on reviewing proposed changes to 2014 Lighting Initiative program activity to vet the PAs' revised savings numbers, and to ensure both best practices and consistent levels of effort across the PAs. The Group will present the results of this additional analysis to the Council at its September meeting. The Residential Advisory Group also provided support on the furnace baseline issue completing analysis that quantified the impact of a revised baseline on both initiative and sector level savings. The Group also reviewed and provided comments on the Massachusetts market lift pilot evaluation.

Innovative Strategies

The Residential Advisory Group responded to recent announcements by Whirlpool of the first hybrid (heat pump) dryer made for the U.S. market. The Residential Advisory Group reached out to NEEP, the Super-Efficient Dryer Initiative (SEDI), and others to ascertain Whirlpool's timeline to introduce these units into the Northeast market. Clothes drying has remained the largest residential electric end use for which we had limited efficiency options to offer customers. With Whirlpool's announcement and ENERGY STAR's new dryer specification, PAs should have many more energy and money saving options to offer to customers.

COMMERCIAL AND INDUSTRIAL

In July, the C&I Advisory Group worked on the tasks described below to support the PAs in their work to meet the 2013-2015 Three-Year Plan C&I goals. These tasks included delivering the Large C&I Retrofit Implementation Update to the Council, advancing work on adoption of best practices, developing a specific process for targeting a selected market segment with the CIMC, and interviews for the health care best practice research.

Deeper Savings in All Programs

On July 8, the C&I Advisory Group presented the Large C&I Retrofit Implementation Update to the Council. The presentation included discussion of 2013 challenges and drivers as well as recommendations for enhancing the probability of hitting the Plan targets. These recommendations include increasing the speed with which effective practices are identified and implemented, providing a mechanism to better understand progress toward targets, and using the latest information from EMV to help identify and promote best practices. During the weeks after the presentation, the group exerted an intensive effort and follow up with PAs on the material presented and questions raised.

In addition to the Deeper Dive presentation, the activities described below also helped to inform and advance efforts to achieve deeper savings in all programs.

Comprehensive Segment Strategies

The C&I Advisory group participated in Commercial Real Estate Working Group discussions as well as reviewed and commented on a report completed by Weller & Michal Architects. The Group also leveraged the Commercial Real Estate expertise of team mate Jack Davis of JDM by having him review the report. Jack Davis of JDM provided a memo providing feedback on the W&M report which was shared with the entire CRE working group.

The Group continued its work on the Health Care Best Practice study. In July, the Group finalized survey instruments and interviewed PAs and hospital management to identify opportunities and best practices for this segment.

The Group also continued its work on advancing the development of segment strategies. The Group prepared and led a working session with the CIMC on the segmentation and Massachusetts-specific adoption process.

Coordination and Partnerships

The C&I Advisory Group worked closely with Health Care Without Harm to engage the hospital community in the surveys being conducted as part of the Health Care Best Practice study.

The Group also scheduled a meeting with ENE at the CIMC in September to give an update on the status of boiler projects in the Commonwealth.

Innovative Strategies

In July, the Group continued to work on advancing innovative strategies in retro-commissioning, commercial real estate, health care, and segmentation strategies as described above. This effort involved monitoring progress on advancing these strategies, internal and external discussions, and continued research.

MONITORING, COORDINATION, AND CROSS-CUTTING TASKS

Monitor and Advise Current Programs

On July 23, the Residential Advisory Group met with the Residential Management Committee and reviewed the PAs' status on accomplishing the 2014 residential enhancements in the 2013-2015 plan. In August, the Group will compile the status of the enhancements dating back to 2013. The C&I Group also reviewed PAs' achievements on action items related to the 2013-2015 plan.

Coordinate with the Council on Programs and EM&V Results

The Residential Advisory Group continued its coordination with DOER staff on various residential issues, particularly how the Group's Multifamily and HES recommendations should take into account the Residential Conservation Services guideline revisions in progress.

The C&I group worked to incorporate EM&V results relevant to Large Commercial retrofit efforts into the Deeper Dive presentation to the Council.

Review and Assess PA Reports and Data

The C&I group reviewed outcomes from program implementation of Large Commercial retrofit efforts and incorporated findings into the Deeper Dive presentation to the Council.

During the PAG meeting on July 11, the Planning and Analysis Group discussed with the PAs how best and when to include PA forecasts of year-end and three-year program performance in the quarterly reports and potentially in some of the monthly dashboards. The Group has continued to recommend including the forward-looking PA forecasts of performance in PA reporting beginning in the second quarter, with forecasts provided at the portfolio, sector, and key program or initiative levels. The first use and presentation of a year-end forecast as a systematic component of the quarterly reports will be provided in the 2014 Q2 report to be presented to the EEAC at the August 12 meeting.

In July, the Consultants reviewed and analyzed the 2013 Plan-Year Reports filed by the PAs on June 20, including a high-level comparison to the 2013 preliminary year-end results reviewed with the EEAC in February, and an analysis of sector- and PA-specific results, following the statewide summary prepared by the PAs. The Group prepared and presented a summary of our findings to the EEAC at the July 8 meeting.

Support the Statewide Database

On July 11, the Residential Advisory Group sent comments on suggested inclusions for the Home Energy Services tab to the PAs' working group on the Mass Save Data interim database as a follow up to a verbal conversation from June. These recommendations would also apply to data included in the statewide database,

and included measure level data, energy savings, market penetration, and cost information, and suggestions for filters by which the information could be viewed (e.g., primary heating fuel).

Prepare for the 2016-2018 Plan

The C&I Advisory Group used the Implementation Deeper Dive presentation as a platform to discuss changes to Large Retrofit program going into the next Three-Year Plan.

The Planning and Analysis Group explored how best to address several forward-looking strategic planning topics for the upcoming 2016-2018 Plan, including how some of the insights gained from the Implementation Update, Deeper Dives, findings of recent evaluation studies, and results of the 2013 Plan-Year Reports will inform the next Plan, and also how best to consider and incorporate stakeholder input into the next Plan. We expect to continue discussions with the PAs and EEAC in August and future months.

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. Consultants produced draft minutes for the July 8, 2014 EEAC meeting and forwarded them to the EEAC Chair. The EEAC Chair will review the minutes and distribute them directly to the EEAC prior to the next EEAC meeting to be held on August 12, 2014. The EEAC approved the June meeting minutes during their July meeting. These minutes have been posted on the EEAC website.

Develop EEAC Logo and EEAC Website Upgrade

The current schedule for the EEAC website upgrade indicates that all new website pages will be fully developed by August 15th. At that point, Optimal administrative staff will upload and link the various files and reports. It will take about one week to move all of the files and fully test the new website. Based on this schedule, upgraded website should go live by the end of August.

Produce the Annual Report to the DPU and Legislature

The Consultant Team continued to prepare material for inclusion in the EEAC's annual report to the legislature. This included working with PA representatives and DOER to gathering and finalize information on topic areas to highlight in the report. We completed a draft report for internal review in mid-July, which has been sent to Cahoots for initial layout work.