



→ CONSULTANT TEAM

To: **EEAC**

From: Eric Belliveau and the EEAC Consultant Team

Date: 4 September 2014

Subject: August Monthly Report

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

RECOGNIZATION OF EEAC ACCOMPLISHMENTS AT ACEEE

In August, several Consultant Team members attended ACEEE's Summer Study on Energy Efficiency in Buildings held in Pacific Grove, California. During the conference, ACEEE presented its 2014 ACEEE Champion of Energy Efficiency in Buildings Awards. Winners were selected based on demonstrated excellence in the categories of Energy Policy, Leadership, Implementation and Deployment, and Research and Development. This year, the EEAC was selected as one of only three award winners. The award was accepted by Tina Halfpenny on behalf of the Council and provided public recognition for the continued accomplishments and hard work of the EEAC and Team. We commend Tina for her leadership of the Council during this historic period.

SUMMARY OF MAIN TASKS COVERED IN EACH SECTION OF THE REPORT

EM&V

- Providing EM&V-focused input on the Implementation Update, Mid-Term Modification, and Statewide Database processes, as well as the EM&V Forum's reporting templates and net-to-gross protocols projects.
- Holding the kickoff meeting for a new cross-cutting EM&V contract; working with the EM&V Forum on its planning efforts for 2015; and finalizing plans for a new study on residential furnace baseline issues.
- Making progress on EM&V studies currently in the implementation stage and reports in various stages of completion.
- Collaborating with the PAs to plan the third in a series of public EM&V webinars.

PLANNING & ANALYSIS

- Preparing for, attending, and providing technical support during the EEAC meeting on August 12, and for the Executive Committee meeting on August 27.
- Completing the review and analysis of the 2014 Implementation Update, and preparing a wrap-up presentation for the September EEAC meeting, with a major focus on the findings and recommendations from the Deeper Dives: Large C&I Retrofit, Multifamily, and Residential Lighting.
- Reviewing and analyzing Mid-Term Modification (MTM) proposals from several PAs.
- Assisting with the development of the RFP for the 2015 regional avoided costs (AESC) study.
- Coordinating with the PAs on topics through the Planning and Analysis Group (PAG) discussions.

RESIDENTIAL AND LOW INCOME SECTORS

- Preparing for and conducting the HES presentation to the Council in August.
- Preparing for and conducting 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.

• Developing preliminary depth of savings opportunity analysis for RMC to support potential deeper savings initiative.

COMMERCIAL AND INDUSTRIAL

- Promoting the adoption of best practices, focusing on a systematic process.
- Developing a specific process for targeting a selected market segment with the CIMC.
- Interviewing and analyzing information for the health care best practice research.

MONITORING, COORDINATION, AND CROSS-CUTTING TASKS

- Coordinating with DOER staff on various EM&V related issues.
- Focusing on development of a summary matrix of statewide database inputs required to provide full transparency and to support optimization of cost-effective program delivery.
- Helping to develop the first use and presentation of a year-end and three-year forecast as a systematic component of the quarterly reports in coordination with the PAs staffing the Planning and Analysis Group (PAG),.
- Exploring with the PAs during the Planning and Analysis Group (PAG) meeting on August 15 how best to address several forward-looking strategic planning topics for the upcoming 2016-2018 Plan.

TECHNICAL SERVICES

- Producing draft minutes for the August 12, 2014 EEAC meeting.
- Completing development of the upgraded EEAC website.
- Making progress towards completing the Annual Report to the DPU and Legislature.

EVALUATION, MEASUREMENT & VERIFICATION

In August, the EM&V Advisory Group continued its full range of ongoing activities related to EM&V planning, implementation, reporting, policy, and outreach issues.

EM&V Policy Issues

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

Oversee EM&V Planning

EM&V planning highlights for August include: holding the kickoff meeting for a new cross-cutting EM&V contract focusing on behavioral programs, education, and training; working with the EM&V Forum on its planning efforts for 2015; and finalizing plans for a new 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 studies: HES Program Delivery, HEAT Loan, LED Market Effects, Top-Down NTG, and Market Effects Framework. We also moved a few new studies from the planning to the implementation stage, including the Cross-Cutting Code Compliance Support Initiative Evaluation, a study that has required particularly close coordination with programmers and planners to develop.

Oversee EM&V Reporting

The group processed approximately 12-14 EM&V reports in various stages of completion, including interim, draft, and final reports. As we noted in our July 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 lately. 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 began to develop a briefing on EM&V issues that will be presented at the September 9 Council meeting. We also 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 August, 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 August on wrapping up the review; providing technical support for DPU proceedings including the initial review of draft Mid-Term Modification proposals from several PAs; and conducting technical analysis and review primarily focused in August on the regional avoided cost study.

Participate in EEAC Meetings; Brief and Support the Council

The Group prepared for, attended, and provided technical support during the EEAC meeting on August 12, and for the Executive Committee meeting on August 27. 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.

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) continued to be a major task of the Planning and Analysis Group in August. 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 August, the major focus of the Consultant Team was on two of the Deeper Dives: Multifamily, and a follow up on Residential Lighting (which was partially addressed in June).

In early August, the focus was on completing the analysis for the third Deeper Dive – Multifamily. The Residential Advisory Group worked with the PAs on the Residential Multifamily Deeper Dive and segment overview, which was presented to the EEAC on August 12.

Throughout August, the Consultants continued additional Deeper Dive analysis on Residential Lighting (first presented to the EEAC in early June) using data provided in the 2013 Plan-Year Reports (filed by the PAs on June 20) and additional data from the PAs; the Residential Lighting update will be presented to the EEAC in September.

The Consultants also began work on the Implementation Update wrap-up presentation, by updating the five key findings of the Consultant Team, and by compiling and updating/prioritizing the key recommendations for Council action from each of the Deeper Dives. The Implementation Update wrap up will be presented to the EEAC in September.

Support the Council on Regulatory Issues and DPU Proceedings

The Group reviewed and analyzed proposed Mid-Term Modifications (MTMs) from several PAs, which the PAs began to provide in late August. If approved by the Council, these MTMs will apply to the balance of the 2013-2015 Three-Year Plan period. Specifically, the DPU EE Guidelines state: "If the Council passes a resolution supporting the proposed modification, the Program Administrator may implement the modification." EE Guidelines, Section 3.8.1.1. Three PAs are expected to request MTMs: National Grid, Unitil, and Cape Light Compact. The review and EEAC action on the proposed MTMs will be a significant area of work in September.

Future work on other regulatory issues and DPU proceedings will depend on the nature and timing of DPU activities and actions in the future.

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Provide Technical Analysis

In August, the Group continued work on the 2015 regional avoided cost study (also known as the AESC study) This 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 the avoided cost values) 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 drafts of the RFP, raised and clarified issues to be addressed through the study, and participated in the study group conference calls to develop the RFP. The RFP will be issued in September. 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 2016-2018 Three-Year Plan being developed during 2015.

As part of the Planning and Analysis Group (PAG) meeting on August 15, the Consultants discussed with the PAs the value of and process for updating the "typical customer" summaries of EE bill impacts. They also discussed 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. Winter peak energy issues and price effects, and what the EE programs could do to help mitigate the winter peak issues, were also discussed at the PAG meeting.

RESIDENTIAL AND LOW INCOME SECTORS

In August, the Residential Advisory Group worked on the tasks described below. The main focus for August included preparing and presenting Multifamily Retrofit and Home Energy Services presentations for the August Council meeting, continuing lighting analysis as part of the Implementation Update Deeper Dive, and developing a preliminary depth of savings opportunity analysis for PA consideration of a new deeper savings offering.

Residential Whole House and Low Income Programs

In August, the Group prepared for its August Multifamily presentation by revising the draft content to address PA input and briefing councilors prior to the Council meeting. The group also reviewed and provided input on the PAs' revised draft presentation. Team member Courtney Moriarta presented to the Council at its August 12 meeting. The Residential Advisory Group included its recommendation that the multifamily retrofit initiative be restructured to establish a fully integrated and distinct multifamily effort for the 2016-2018 3-year plan. This recommended Council action in the Implementation Update summary is being presented to the Council at its September 9 meeting. It also plans to engage the PAs in coming months on more near-term opportunities for continuous improvements.

The Group also finalized preparations for the HES presentation to the Council in August, including reviewing the draft presentation with the PAs at the August 6 RMC meeting and incorporating that input into the final draft and Councilor briefings. Group member Courtney Moriarta presented to the Council on August 12 and presented content focusing on three areas: quality assurance, deeper savings, and cost efficiency. In coming months, the Group will be working with the PAs to address these areas, with a particular focus on developing a deeper savings program offering.

Group members shared a preliminary depth of savings opportunity analysis for HES with the RMC on August 20. The analysis provides support for a potential initiative for deeper savings. To follow up on that discussion, the Group is compiling additional information on other programs' performance-based approaches to deeper savings and assessing potential methods for baseline calculations. At the August 6 RMC meeting, the consultants and PAs brainstormed methods regarding ways that savings from heating and cooling system improvements stemming from an HES audit can more effectively be linked to HES program results. The PAs are in the process of assessing the most promising idea.

The Residential Advisory Group also coordinated with the evaluation team on the status of in-process evaluations related to residential retrofit and reviewed evaluation results on Efficient Neighborhoods+® and an OPower decay analysis.

Residential Products Program

The Group continued work on the lighting Implementation Update Deeper Dive. Efforts were focused on reviewing proposed changes to 2014 Lighting Initiative program activity to ensure both best practices and consistent levels of effort across the PAs. The Group is also working with the PAs to develop a more consistent approach to the use of LEDs in DI lighting efforts and to review current and 2015 lighting planning assumptions. The Group will present the results of this additional analysis to the Council at its September meeting. The Residential Advisory Group also provided support to the EM&V Group through review and comment of the draft lighting saturation survey results and the proposed furnace and boiler baseline study.

Innovative Strategies

In response to concerns regarding upcoming winter peak issues, the Group worked with DOER to investigate savings opportunities through the use of programmable communicating thermostats. This work will continue at least through September. The Group also began preparations for a presentation to the Council in October on innovative approaches.

COMMERCIAL AND INDUSTRIAL

In August, 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 continued focus on promoting the adoption of best practices, developing a specific process for targeting a selected market segment with the CIMC, and interviews and analysis for the health care best practice research.

Deeper Savings in All Programs

Deeper savings are a key component of increased Large C&I savings. The C&I Advisory Group continued work with the PAs to increase adoption of effective practices that result in more comprehensive projects and make a greater impact on customer energy loads. The focus in August was on advancing the effective practices through the development of a systematic process to move program ideas from stakeholders and elsewhere in North America through to adoption in Massachusetts. The group is proposing to use the Retro-commissioning Best Practice Study to beta test any processes.

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 provided a memo providing feedback on the W&M report which was shared with the entire CRE working group.

The C&I Advisory Group continued its work on the Health Care Best Practice study. In August, the Group interviewed PAs, industry stakeholders, including a representative from hospital management, to identify opportunities and best practices for this segment. The work was hampered by low response rates to survey requests. The Group worked with Health Care Without Harm (HCWH) to make connections with hospital administrators and facility personnel. The lack of response may result in a delay in the work product as the C&I Advisory Group, PAs, and industry stakeholders such as HCWH believe that stakeholder input on market needs is a key aspect of the study. The Group has proposed extending the report deadline another month to allow for more stakeholder interviews to be scheduled.

The Group continued its work on articulating a Massachusetts-specific adoption process for effective and best practices. At the August 17 CIMC meeting the Group reviewed of the current process for assessing unsolicited proposals and discussed whether that process could be modified to address work driven by the Group such as the best practice studies. ¹

¹ http://www.masssave.com/~/media/Media-folder/Process_for_Managing_Unsolicited_Proposal.ashx

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.

Innovative Strategies

The Group met with the CIMC on August 13 to discuss next steps on retro-commissioning best practices. Unfortunately, due to summer schedules, National Grid was the only PA in attendance. National Grid reported that the PAs are working to increase incentives on the market driven, prescriptive monitoring based retro-commissioning (MBCx) offer that is currently in place. The Group agrees that this is a reasonable interim strategy but advised that a market driven MBCx program does not reflect the best practices identified in the study. National Grid reported that they are testing the approach outlined in the best practice study with some of their large customers, which is what the Group recommended as an initial step. In addition, the PAs are working on a contract for the development of an RCx analysis tool similar to the one used in California.

MONITORING, COORDINATION, AND CROSS-CUTTING TASKS

Monitor and Advise Current Programs

Coordinate with the Council on Programs and EM&V Results

The Residential Advisory Group continued its coordination with DOER staff on various residential issues, including the consultants' recommendations to the Council for HES and Multifamily Retrofit, deeper savings approaches, and winter peak. It also prepared a briefing on the Low Income Program for new councilor Jemison.

Review and Assess PA Reports and Data

In coordination with the PAs staffing the Planning and Analysis Group (PAG), the Consultants helped develop the first use and presentation of a year-end and three-year forecast as a systematic component of the quarterly reports. The forecast was provided in the 2014 Q2 report distributed to the EEAC in advance of the August 12 meeting.

The Consultants reviewed the 2014 second quarter (Q2) quarterly reports, with an additional focus on the forecasts included in the quarterly reports for the first time. This topic was deferred from the August to the September EEAC meeting

Support the Statewide Database

The Consultant Team continued its ongoing support for development of a comprehensive, unified statewide energy efficiency database. The work in August, in collaboration with DOER staff, focused on developing a summary matrix of database inputs required to provide full transparency and to support optimization of cost-effective program delivery. We also responded to the matrix of required database inputs prepared by the Program Administrators. This activity was directed by the DPU in their effort to resolve disagreements between the PAs and other stakeholders regarding the level of functionality to be supported by the database.

Prepare for the 2016-2018 Plan

The Residential Advisory Group used the Multifamily Deeper Dive presentation as a platform to discuss recommended changes to multifamily program delivery going into the next Three-Year Plan.

During the Planning and Analysis Group (PAG) meeting on August 15, the Consultants discussed and explored with the PAs how best to address several forward-looking planning topics for the upcoming 2016-2018 Plan. Topics discussed included: the overall schedule for Plan development; how some of the insights gained from the Implementation Update, Deeper Dives, findings of recent evaluation studies, and results of the 2013 programs will inform the next Plan; how to consider some key technical topics such as market effects, appropriate baselines, and net savings; and how best to consider and incorporate stakeholder input into the next Plan. We expect to continue discussions with the PAs and EEAC in September 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. The Team produced draft minutes for the August 12, 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 September 9, 2014. The EEAC approved the July meeting minutes during their August meeting. These minutes have been posted on the EEAC website.

Develop EEAC Logo and EEAC Website Upgrade

The upgraded EEAC website was completed in August. Optimal administrative staff will upload, link, and test all of the various files and reports during the first week of September. The EEAC website holds over 1,200 files and reports dating back to 2008. The upgraded website will go live on September 8, 2014. Cahoots Design, the website designer, will prepare a memo for the EEAC explaining the design attributes of the website and the new search, calendar, and navigation features. The content management software used for the new website is Word Press. Cahoots Design is providing a Word Press manual and training for Optimal staff. This will allow Optimal staff to manage the new website on a day-to-day basis.

Produce the Annual Report to the DPU and Legislature

In August, the Consultant Team received a draft layout design of the report from Cahoots. The Team compiled internal and DOER comments on the draft and made revisions as necessary. The Team will soon provide these revisions to Cahoots for an updated draft of the layout design.