



Memorandum

To EEAC
From Eric Belliveau and the EEAC Consultant Team
Date 21 March 2014
Subject February Monthly Report

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

Planning & Analysis Advisory Group

In February, the EEAC consultant Planning and Analysis Group focused on eight 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 providing input on key program enhancements and strategies; maintaining team attention on achieving the savings and benefits goals; maximizing the use of best practices information; serving all segments of MA customers; and supporting the Council's priorities while encouraging the cost-efficient use of ratepayer funding:

- **Council Meetings** – Prepared for, attended, and provided technical support during the EEAC meeting on February 25, and during the Executive Committee meeting on February 14. Assisted the Council in the development of its 2014 priorities, and drafted the topics schedule for future Council meeting topics, for review and consideration by the Council. Briefed individual councilors in advance of the EEAC meeting (the substantive issues and outcomes are summarized in the task descriptions below).
- **Review 2013 Year-End Results and Trends; Achieving Savings and Benefits Goals** – The major P&A Group activity in February was a review and analysis of 2013 preliminary year end results, the assessment of multi-year trends, and the analysis of the effects of 2013 performance on the 2013-2015 Three-Year Plan. Prepared the analysis, charts, and slides and presented the Consultants findings and recommendations to the Council on February 25. Reviewed and analyzed 2013 portfolio, sector, and program performance, and coordinated with the PAs on PA results and the PAs' summary review, with a special focus on the C&I energy savings shortfalls relative to goals, the C&I under-investments in some years, and the C&I "hockey stick" of project completions. Followed up with individual councilors and PAs on questions resulting from the February 25 presentation.
- **Statewide Database** –Reviewed and commented on Energy Platform's vision document. Continued dialog with EP and DOER staff on database development process and data requirements specification.
- **DPU Proceedings Support** – Provided technical support for DPU proceedings and regulatory processes. Continued work on DPU 11-120 reporting streamlining regarding the regulatory review, reporting, and approval of performance reports, performance incentives, and energy efficiency surcharges. Worked on some details of reporting issues, needs, and priorities related to the DPU 11-120 working group with individual councilors and the PAs. Followed up on the January 28 DPU working

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group subcommittee meeting, which focused on the timing of EM&V studies, Plan-Year Reports, and other documents, and on the format and content of future Plan-Year reports (which will replace the annual reports of the past).

- **Annual Report Review** – Continued the review of the PAs' 2011 and 2012 Annual Reports, and provided technical assistance for the DPU proceeding reviewing the Annual Reports, with a focus on the reliability of the reported impacts and costs, the use of the evaluation results, non-energy impacts (NEIs), the PA performance incentive claims, and the performance incentive metrics claims and documentation. Coordinated with individual councilors involved in the DPU proceeding and provided technical assistance on discovery items and review of PA responses to select discovery questions.
- **Implementation Update** – Worked with the PAs on preparation for the Annual Implementation Update for the 2014 program year, for the Council review process in March/April. The Implementation Update will be a combination of one third looking back (2013) and two thirds looking forward (2014-2015), which will support the Council in reviewing progress towards achieving the goals of the 2013-2015 Plan. Confirmed the process and schedule, with the Implementation Update due to be distributed on March 17, for review at the Council meeting on April 8.
- **Interim Data System and Data Management** – Reviewed PA progress on the interim approach to data and data management, focused on improving effectiveness and efficiency of current data management, to ensure reliable and internally-consistent data in the interim while the statewide database is being developed. Confirmed with the PAs the key features of web-based file storage, versioning and version control (logs), PA data manager(s) responsible for and procedures to ensure data quality and internal consistency, and the importance of QA and consistent data for all users. Reviewed a summary of the interim data system being developed by the PAs during a conference call on February 7, reviewed the February 25 presentation to the Council, and followed up with a memo to the PAs.
- **Other Technical Support** – Reviewed and discussed the ISO-NE draft regional EE forecast (February 11 meeting), the recent results of Forward Capacity Market Auctions (FCA), and the implications of both for MA EE programs.
- **Consultant Workplan** – Completed work on consultant workplan. Re-ordered consultant team tasks, revised monthly report, and changed invoice style.

Upcoming Activities

The Planning & Analysis group will undertake several tasks in the next few months.

- **Successful Implementation of the Three-Year Plan** – Continue meeting with the PAs and management committees to discuss and ensure the early and effective implementation of the key components of the 2013-2015 Three-Year Plan. Significant focus in the near term will continue to be on the C&I programs and how to achieve the C&I goals, as well as on the varied performance across the PAs and ensuring best practices by all PAs, which will be informed by the 2014 Implementation Update process in March and April.
- **Statewide Database** -- Support the design and development of the statewide database, and participate in the Statewide Database Working Group and the Council's Statewide Database Subcommittee, as directed by the Council. Coordinate with the database consultant/facilitator to assist in the design,



scoping, as specification of the statewide database, including through interviews. Review and comment on the draft database specifications.

- **Interim Data System and Data Management** – Encourage the PAs to complete work on the development and implementation of a more effective and efficient interim approach to data and data management, to ensure reliable and internally-consistent data in the interim while the statewide database is being developed. Review a draft of the interim data system when it is provided by the PAs. We recommend that the interim data system should be in place in time for the 2014 Implementation Update work in March.
- **Implementation Update** – Coordinating with the PAs, review and analyze the 2014 Implementation Update to be considered and reviewed by the Council in March and April 2014. Review, analyze, and assess the 2014 Implementation Updates when they are provided by the PAs on March 17. Identify and begin work, coordinating with the PAs, on the 3 to 5 “deeper dive” analyses.
- **Review and Comment on PA Reporting** – Review, analyze, and comment on the quarterly reports and the dashboard monthly reports and trends, with special focus on the achievement of the goals. Improve the reporting of trends and the comparison to similar time periods in prior years in the monthly report dashboards. Also, working with the PAs, complete the new template for the quarterly reports, focusing on the reporting of benefits and GHG emissions reductions (Q2 and Q4 reporting), consider how best to report on oil savings (continuing discussions), and implement any additional revisions identified and directed by the Council as a result of EEAC review of the revised template for the quarterly reports. Enhance the reporting on the Council's priorities in response to councilor comments.
- **Provide Technical Support for DPU Proceedings and Regulatory Processes** – Support the Council, as directed, in its review and analysis of the DPU NOI Phase II order and the EE Guidelines, through the DPU 11-120 reporting streamlining process regarding the regulatory review, reporting, and approval of performance reports, performance incentives, energy efficiency surcharges, and mid-term modifications. Assist in the application of the AESC study results in Massachusetts for the 2014 and 2015 program years. Participate in any DPU 11-120 technical session and/or proceeding on avoided costs of GWSA compliance and carbon avoided costs, as assigned. Continue the review of the PAs' 2011 and 2012 Annual Reports, provide the consultant findings and recommendations to the Council and to individual councilors, and provide technical assistance and technical support during the DPU proceeding on the Annual Reports. Participate in any other DPU 08-50 or DPU 11-120 processes, as scheduled and as assigned by the Council.
- **Strategic Planning** – Assist the Council in strategic planning efforts, including advance planning and identification of information and analysis needs for the development of the 2016-2018 Plan.
- **Technical Reference Manual** – Continue to work on future tasks related to the Technical Reference Manual (TRM), per the TRM schedule and process.

C&I Advisory Group

In February, the C&I Advisory Group focused on the following primary objectives/tasks



1. **Developing the 2014 Consulting Team Workplan:** The Consulting Team Workplan serves as the guiding document to direct our team's efforts. In February, the C&I Advisory Group spent considerable time restructuring the Workplan from past years to focus on five specific C&I objectives and the supporting tasks, deliverables, and timelines to achieve them. The five C&I objectives are:

- Achieve deeper savings in all programs with a focus on retrofit programs for small, medium, and large customers.
- Develop formal, comprehensive segment strategies for key market segments including but not limited to: Healthcare, Commercial Real Estate, Manufacturing, and Hospitality.
- Advance innovative strategies and approaches to achieve the Commonwealth's goals
- Facilitate coordination and partnerships between PAs and stakeholders as a means to expand the reach of the programs and achieve greater savings.
- Identify and implement strategies to achieve greater savings earlier in the year to reduce the "hockey stick" effect of C&I programs

Details of the tasks, deliverables, and timelines for each objective are listed in the Workplan.

2. **Reviewing the PA's 2013 Results:** The PAs submitted the 2013 Q4 report in February. We analyzed the results and prepared a presentation to the EEAC on the results. The data show that C&I, and in particular C&I Retrofit, continues to be an area of significant concern that is largely responsible for the overall shortfall in statewide 2013 achievement. Further, PA achievement in C&I varies considerably, with some PAs achieving as much as four times the savings of other PAs when normalized against electricity or gas sales. It is of fundamental importance to Massachusetts to identify what the higher performing PAs are doing that other PAs are not in order to improve statewide performance. This cannot be done without detailed, up-to-date, comparable data among PAs, and lack of this data remains a critical obstacle to the effort. The Consulting Team is preparing a draft proposal and data request to enable this effort as part of the forthcoming Implementation Update and supporting "Deeper Dives."

3. **Identifying and implementing strategies to achieve greater savings earlier in the year to reduce the "hockey stick" effect of C&I programs:** The very large percentage of C&I portfolio savings occurring in the last 1-2 months of the year increases the uncertainty of achievement and creates a "firestorm" at the end of the year that strains resources, sets bad precedents with customers, inhibits the ability of programs to plan and manage in a balanced and strategic way, and leaves the programs in a poor position leading into the following year. This is an issue the consulting team plans to bring forward at the proposed statewide strategic planning forum that is to be scheduled sometime in April. In the meantime, the Consulting Team has been leading an effort within the Management Committee to come up with strategies to reduce the hockey stick effect. In January, the Consulting Team presented the most recent data and led a brainstorm with PAs to develop high level strategies that could be implemented at a statewide level. In February, we led an additional brainstorm with PAs to further refine the list of potential strategies to bring to the larger strategic planning forum. These include:

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- Process improvements such as shortening the decision making process, the time required to participate, and/or further empowerment of vendors/customers to move forward without PA involvement, allowing projects to complete faster and easier.
 - Vendor strategies to get vendors to bring in more projects earlier in the year for PAs as they do currently late in the year.
 - Development of events/promotions/limited-time offers that will drive earlier project completions and savings.
 - Incentive strategies to drive earlier savings.
 - Finding ways to incorporate project timing into MOUs with customers.
4. **Enhancing the feedback loop between implementation and EM&V:** EM&V serves an important role in assessing the effectiveness of the programs. It is critical that this feedback loop between EM&V and program implementation is strong to ensure PAs are developing and offering the best programs possible. In the past, this feedback loop has not been as strong as it should be and our team continues to work to improve it. In February, the team focused on the following activities:
- Reviewing results of the Mid-Sized Customer needs study. We participated in a meeting with PAs on this study and discussed potential enhancements to programs based on the results. This work is ongoing.
 - We also provided guidance to the evaluation contractor on the Existing Buildings Market Sector Characterization Study, including development of Market Sector Profiles on Commercial Offices, Small and Medium Sized Food Stores, and Healthcare (excluding large hospitals). These will be used to inform future segmentation approaches.
 - We facilitated a market effects study planning meeting that brought together evaluators and implementers and identified program components and initiatives that could be candidates for prospective market effects research. In an increasingly complex energy efficiency landscape with new innovative types of program delivery, market effects studies are a new type of study that will help ensure that all savings attributable to the Mass Save programs are claimed.
 - We participated in the C&I Evaluation Strategic Planning meeting to help focus 2014 evaluation activities to areas that will support improved implementation and fostered discussion of areas where focus could increase in the future such as market effects relating to the financial valuation of energy efficiency.

In addition, the C&I Advisory Group focused on the following activities in February:

- Provided continued support to DOER's new C&I lead to bring him up to speed on C&I programs.
- Continued to strategize on how to move forward with depth of savings indicators.
- Continued Retro-commissioning Best Practice Study. Completed in-depth interviews with PG&E, California Commissioning Collaborative, BC Hydro, and Centerpoint Energy.



Upcoming Activities

The C&I Advisory Group will continue to support the implementation of the Plan. Specific areas of focus in coming months will include:

- Continuing to monitor PA achievement towards goals and spending. Continuing to work with PAs on planning and strategy to address any goal shortfalls.
- Providing input to the statewide database consultant with a focus on how the data can be used to identify individual PA best practices and raise the bar for statewide performance.
- Working on Retro-commissioning Best Practice Research. Once complete, we will work with PAs to develop and implement resulting recommendations and enhancements to programs. This work is expected to be complete in Q4 2013.
- Developing workplan for Healthcare Best Practice Research. Once workplan is complete, research will begin. Once research is complete, we will work with PAs to develop and implement resulting recommendations and enhancements to programs. This work is expected to be complete in Q2 2014
- Working with PAs to develop a definition, process, and structure to support development of formalized segmentation strategies.
- Working with PAs to develop formal, comprehensive segment approaches for the most important segments including Commercial Real Estate, Healthcare, Hospitality, and Industrial/Manufacturing based on industry best practices.
- Continue to work with PAs to identify and implement strategies to reduce the "hockey stick" effect on C&I savings.
- Continuing to work with PAs, stakeholders, Council, and others to develop an integrated solution for customer-owned and utility-owned street lights.
- Continuing to work with PAs to make a stronger connection and feedback loop between evaluation, and implementation and planning.
- Continuing to support the Commercial Real Estate Working Group and development of a PA roadmap to address the segment.

Residential and Low Income Advisory Group

In February, the Residential Advisory Group focused on three primary tasks:

1. **2014 work planning:** The team finished its work on this important effort that frames its work for the year. Team members finalized the objectives and tasks for the residential and low income sectors, added deliverables and timing, and prepared a draft budget. The work plan was provided to the Council for approval at its February meeting.
2. **2013 Q4 report:** The team's work on the quarterly report included reviewing the report and supporting data tables and preparing a presentation and talking points summarizing key findings for the Council for its February meeting. These slides were included in the overall presentation from the consulting team, and included bullets noting highlights and charts depicting PAs' annual savings as a percentage relative to the annual goal and electric and gas annual and lifetime savings and participants by initiative. At the RMC's



February 19 meeting the consulting team also discussed the factors underlying the PAs' varied projected achievement levels of the 2013 deeper savings metric (several did not achieve the Threshold level) according to the Q4 report. This discussion brought forth a number of issues and perspectives, including the priority on goals achievement and interest in new ideas from the consultants on achieving deeper savings. The consulting team is seeking additional information on the PAs' progress on the 2014 new deeper savings approach enhancement, and this will be a topic in the June presentation to the Council.

3. **Direct install lighting request for proposal (RFP):** The PAs are developing an RFP for CFLs and LEDs for its direct install (DI) lighting initiatives in low income, Home Energy Services, residential new construction and multifamily retrofit. The PAs report that in 2013 they installed 1.5 million lamps through these DI initiatives, and they believe the RFP will provide them with an opportunity to secure additional vendors and more favorable pricing. The residential consulting team is supportive of this effort and spoke with the RMC at its meetings on February 5 and 19 to learn more about the particulars of the effort and how the PAs are positioning the RFP to capitalize on pricing decreases, product quality improvements, and the opportunity to increase LED installations. At the second meeting, the consulting team asked the PAs to consider eliminating dimmable CFLs from the procurement due to their poor performance and presented information on the topic from recent evaluation studies. The PAs noted that 20 percent of the lamps installed in 2013 were dimmable and that most of these were CFLs, which are significantly less expensive than dimmable LEDs. The consulting team is seeking the opportunity to review a draft of the RFP and anticipates additional discussions could be forthcoming on this topic, including on lighting planning assumptions.

In addition to these topics, the group covered key program areas by engaging with the Residential Management Committee (RMC) and key initiative working groups on several topics.

- Engaged the PAs on high-level Residential Sector issues at the Residential Management Committee (RMC) meetings and through individual communications with RMC members. Monitored PA progress on new initiative enhancements and action plans, including participation in select working group meetings and review of working group agendas and minutes and PA's data dashboard.
- Reviewed furnace early replacement scenarios at the request of the PAs and provided suggestions on revising some assumptions.
- Continued assessment of a deeper savings performance indicator(s) as a possible alternative to the performance metrics in place for 2013.
- Responded to information requests from several Council members on HES data, multifamily program information and PA savings calculations for heating equipment replacement.
- Provided Evaluation Advisory Group members with input on residential evaluation plans, including code compliance and Efficient Neighborhoods+. Participated in residential market effects workshop on Feb. 26 to provide input on focus areas. Maintained ongoing dialogue with evaluation team to coordinate evaluation and residential consulting team activities.
- Compiled and transmitted research for DOER to support contemplated revisions to Residential Conservation Services guidelines.
- Drafted preliminary outline for June Council presentation on Home Energy Services initiative.



Upcoming Activities

The Residential Advisory Group will continue to work with the PAs on planning tasks and preparation activities toward the successful implementation of the 2013-2015 statewide plan. Activities we anticipate in March include:

- Continue program planning discussions with the PAs at the Residential Management Committee (RMC), including on monitoring progress on the key Three Year Plan implementation tasks
- Prepare at least one "deeper dive" for the implementation update for the Council's April meeting
- Review and discuss the PAs' new deeper savings approach
- Prepare more detailed plan for June Council presentation, seeking input from Council members and PAs
- Identify potential topics for a strategic planning discussion with the PAs
- Continue development of performance metrics and/or performance indicators for 2014
- Continue to identify existing data sources and support database development
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Evaluation, Measurement & Verification Advisory Group

Highlights from the Past Month

Much of the EM&V Group's focus over the past few months has been on working closely with the PAs to convert the ambitious mid-term research agenda contained in the overall 2013-2014 EM&V plan submitted to the Council last October into concrete studies in the field. This has entailed: (1) moving a large number of studies through three progressively more detailed stages of project-specific planning to reach the implementation phase; and (2) once studies reach the implementation phase, overseeing the performance of the study by participating in project management meetings and selectively reviewing and commenting on interim deliverables. As of mid-February, there were 53 active EM&V studies. Of these approximately 30 were in the implementation phase, 20 in the planning phase, and 3 in the reporting phase.

The EM&V Group continued its active involvement in a wide range of EM&V planning, implementation, reporting, and policy functions. Specific tasks in February included:

- **EM&V Planning:** Completed the planning process and entered the implementation stage for a number of new studies, including the following: Cross-Cutting Top-Down NTG, Cross-Cutting Market Effects Framework, C&I Self-Report NTG, C&I Codes and Standards Compliance, Behavioral Program Persistence, and Residential Code Compliance Data-mining studies. Moved a number of additional new



studies that were identified in the 2013-2014 Evaluation Plan through the three planning stages and toward the starting gate for implementation, including the following: Residential Lighting NTG, C&I Supply-Side Characterization, Non-Residential New Construction NEBs, Multi-Family New Construction Baseline, and Codes and Standards Cross-Cutting Support studies.

- **EM&V Implementation:** Advanced toward completion some 30 studies currently in the implementation stage. Most of these are studies that were identified in the 2013-2014 Evaluation Plan and entered the implementation stage over the past few months. A few examples include the HES Program Delivery, HEAT Loan, Low-Income HOU, Minisplit, C&I Existing Buildings, Efficient Neighborhoods, and LED Market Effects studies.
- **EM&V Reporting:** Finalized the C&I Upstream Lighting Impact Evaluation report.
- **EM&V Policy Issues:** Worked with other Consultant Advisory Groups to help develop recommended specifications for the statewide database. Reached resolution with the PAs on an overall administrative approach to the PA Penetration and Remaining Cost-Effective Opportunities study mandated by the DPU for selected PAs.
- **Miscellaneous Activities:** Briefed the Council at its February 25 meeting on the current status of EM&V efforts, recent results of interest, and results anticipated in the remainder of 2014.

Upcoming Activities

In March we expect our primary focus to continue to be on implementing the 2013-2014 evaluation plan, including advancing several additional studies from the planning into the implementation stage, overseeing implementation of the growing number of studies in progress, and finalizing several reports on projects that are winding down.