



To EEAC
From Eric Belliveau and the EEAC Consultant Team
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Subject April Monthly Report

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

Items for Council Consideration

Aside from the material to be presented at the May Council Meeting, there are no additional items that we feel need Council attention at this time.

Evaluation, Measurement & Verification

In April, the EM&V Advisory Group continued its focus on working with the PAs to implement the overall 2013-2014 EM&V plan submitted to the Council last October. The EM&V program is now in high gear, with an unprecedented volume of research under way. As the bulk of the studies listed in the 2013-2014 EM&V plan have now cleared the detailed planning stage, the EM&V Advisory Group is increasingly focused on overseeing study implementation. The Group has also recently received a flurry of final reports.

Oversee EM&V Planning

The EM&V Advisory Group completed the planning process and entered the implementation stage for several more studies, including the C&I Supply-Side Characterization, C&I Code Compliance Follow-Up, Non-Residential New Construction NEBs, and Codes and Standards Cross-Cutting Support studies. The Group moved several studies currently in the planning stage toward implementation, including the following: Multi-Family New Construction Baseline study; Phase 2 of the Minisplit study, which will focus on field monitoring of participating homes; and Phase 2 of the C&I Existing Buildings study, which will focus on on-site visits to a large sample of buildings. The Group agreed to cancel one project that had been in the development stage: a technology assessment of Roof Top Unit control technologies in the C&I sector. The PAs and EEAC consultants reached consensus that there would be limited payoff from a dedicated study of this technology at this time. Oversight is a continuous process and work area for the EM&V Advisory Group. The PAs have updated the EM&V Gantt chart with all studies and their completion status. This should be available on the EEAC website soon.

Oversee EM&V Study Implementation

The Group advanced toward completion roughly 35-40 of the studies identified in the 2013-2014 EM&V plan and currently in the implementation stage. A few examples include the following: the HES Program Delivery, HEAT Loan, Low-Income HOU, Minisplit, C&I Existing Buildings, Efficient Neighborhoods, LED Market Effects, Top-Down NTG, and Market Effects Framework studies. Again, this is a continuous process and a work area for the Group.





Oversee EM&V Reporting

The Group received, commented on, and processed with the PAs and evaluation contractors the following draft and final study reports:

- Draft reports: PY 2012 C&I Customer Profile Report; HVAC Contractor Umbrella Branding Report; C&I Market Sector Profiles; EN+ Interim Results Presentation; Residential Lighting Shelf Stocking Report; Minisplit Participant Survey Interim Results Presentation; LI Lighting HOU and Heating, Res Lighting Shelf survey
- Final Reports: Regional Lighting HOU, T12 Phaseout interim report

Council and Stakeholder Engagement

The Group collaborated with the PAs to conduct the first in a series of public EM&V webinars on individual studies to be presented by the lead EM&V contractors. The first webinar, focused on the C&I Mid-Sized Customer Needs Assessment, was held on April 3, with 26 participants attending, including many Councilors. The next EM&V webinar, currently being developed, will focus on the results of the Residential New Construction Net-to-Gross, Residential Lighting HOU, and Low-Income Lighting HOU studies.

EM&V Policy Issues

The Group continued work on 2013 Plan-Year Report version of TRM. A key activity in the latter area was reaching agreement on the specific application of the results from several impact evaluations to this update of the TRM.

Planning and Analysis

In April, the EEAC consultant 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 conducting technical analysis and review, providing technical support for DPU proceedings, and reviewing and analyzing the 2014 Implementation Update.

Participate in EEAC Meetings; Brief and Support the Council

The Planning and Analysis Group prepared for, attended, and provided technical support during the EEAC meeting on April 8, and for the Executive Committee meeting on April 30. The Group 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). The Group coordinated with DOER as chair of the Council on a weekly basis and with various Councilors periodically. The Group compiled and clarified the working list of topics for future EEAC meetings based on the list of "scheduled topics" reviewed at the February meeting, the Implementation Update tasks and Deeper Dives (discussed below), and other planned or expected activities. EEAC Meeting and Council support is on-going and a repeating monthly task area.



Support the Council on Regulatory Issues and DPU Proceedings

The Planning and Analysis Group provided technical support for DPU proceedings and regulatory processes. We reviewed the final proposed template for the Plan-Year reports developed as part of the DPU 11-120 Phase 2 proceedings. In May we will be reviewing the DPU Hearing Officer Memo on the Plan-Year Reports, and in June the PAs will be filing with the DPU and submitting to the EEAC the 2013 Plan-Year Reports, which we will review. We also reviewed the technical analysis regarding the calculation of the avoided cost of compliance with GWSA, which is expected to be filed with the DPU in May.

The Group provided technical assistance for the DPU proceeding reviewing the PAs' 2011 and 2012 Annual Reports, with a focus on the reliability of the reported impacts and costs, the use of the evaluation results, non-energy impacts (NEIs), and the impact of the planning and reporting of NEIs on claimed performance incentives. The Group coordinated with individual councilors involved in the DPU proceeding and provided technical assistance by reviewing the reply briefs. Additional consultant team work will be dependent on DPU actions and councilor requests.

Future work on other regulatory issues and DPU proceedings (e.g., DPU 14-05) will depend on the nature and timing of DPU activities and actions in the future.

Provide Technical Analysis

The Planning and Analysis Group answered inquiries from several councilors about the nature and timing of bill impacts. As part of the PAG meeting on April 11, we began discussions with the PAs on 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 than the more detailed DPU bill impact documents. Work will continue on this in May.

The Group reviewed the ISO-NE responses to stakeholder comments on the regional EE forecast, and will review the final EE forecast distributed by ISO-NE on May 1.

The Group monitored PA work on the development and implementation of a more effective and efficient interim reporting system for data and data management, to ensure reliable and internally-consistent data in the interim while the statewide database is being developed. The Group reviewed the status and a high-level summary of the PA-planned scope of the interim data system (labeled "MAREE" by the PAs) during the PAG meeting on April 11. However, we have not seen any proposed system requirements or the draft interim system. The PAs expect to be sharing more information including a demonstration of the system on May 9th, and we will be reviewing and commenting on the interim system during May.

Following up on Birud Jhaveri's (DOER) presentation on regional energy issues at the April 8 EEAC meeting, the Group reviewed the primary causes and effects of the much higher winter energy prices and increased concerns about winter peak reliability. The Group developed some initial ideas about how the EE programs potentially could



help to mitigate the effects and reduce some of the causes. Subject to EEAC direction, in May and in future months we expect to be working with the PAs and the EEAC on some of the ideas for accelerating, reallocating, and geo-targeting the EE programs to mitigate the effects of high winter energy prices.

Track and Report on the Implementation Update and Planning Process

The review, analysis, and assessment of the 2014 Implementation Update provided by the PAs on March 17 was a major task of the Consultant Team in April. The Implementation Update is a combination of looking back at past performance (2013) and looking forward at projections of future performance (2014-2015), which will support the Council in reviewing progress towards achieving the three-year goals of the 2013-2015 Plan.

The Group prepared slides based on the Consultant preliminary analysis and five initial key findings, and presented the findings to the EEAC at its meeting on April 8. Coordinating with the PAs, the Group identified three appropriate “Deeper Dive” topics for the Implementation Update, which will be conducted jointly with the PAs. The Deeper Dives will be based on additional narratives and data focused on the most significant drivers of changes from the original Plan values.

Members of the C&I, Residential, and Planning & Analysis Advisory Groups identified the questions to be addressed, data requested, and proposed use of data for the Deeper Dive topics as part of the Implementation Update. The EM&V Group provided EM&V-focused input to the Implementation Update and Deeper Dive processes. The Consultant Team’s proposed approach to the Deeper Dives was provided to the Council’s Executive Committee and to the PAs in a memorandum dated April 25.

Following the discussion at the April 8 EEAC meeting, we assisted in the development of an EEAC document on the Implementation Update for initial review by the Executive Committee, and then subsequently for review and consideration by the EEAC. This work will continue to be a strong focus in May and in future months, as the results of the Deeper Dives and other analysis are presented to the Council in June, July, and August.

Residential and Low Income Sectors

Residential Whole House and Low Income Programs

The Residential Advisory Group completed its work to develop draft residential deeper savings performance indicators to track and assess the PAs’ progress in achieving the Council’s priorities. This work was discussed conceptually with the Residential Management Committee (RMC) at meetings on April 2 and 16. The draft indicators were submitted in a joint memo (with the C&I Advisory Group) to the Council’s Executive Committee and the PAs on April 25. We expect to work in coming months with the PAs and Council to refine the indicators and determine the best means for reporting them.



On April 3, Residential Advisory Group members met by phone with members of the HES Working Group to learn about and discuss new approaches the PAs are contemplating for deeper savings. Our team is reviewing materials associated with the effort to identify possible comments we may provide. We will continue discussions with the PAs as they refine their approach.

Residential Products Program

The primary focus for April was developing the lighting Deeper Dive topic for presentation to the Council in June.

Innovative Strategies

The Group began research on opportunities for increasing savings by pairing communicating thermostats with behavior platforms and demand response. Once it collects additional information, the team will discuss with the PAs whether there are opportunities to further enhance existing program offerings in this area.

Commercial and Industrial

In April, the C&I Advisory Group worked on the tasks described below to enable PAs to advance towards meeting the 2013-2015 Three-Year Plan C&I goals. This included issuing a memo on Depth of Savings, advancing work on segmentation along multiple fronts, and advancing research on innovative strategies.

Planned work for May will focus largely on segmentation and stakeholder engagement.

Deeper Savings in All Programs

Obtaining deeper savings in participant customer facilities is an important strategy for achieving savings goals. In order to assess how the PAs are doing at increasing the depth of savings, we finalized and issued a memo detailing the background, rationale, definitions and proposed depth of savings indicators. The cross-cutting memo includes recommendations for both residential and commercial depth of savings indicators and data sources. The next step on this memo is for the PAs to provide input on the proposed indicators, which we expect to receive towards the end of May.

Comprehensive Segment Strategies

In order to support the PAs as they seek to improve performance in C&I Retrofit, a key objective in the Consultant Team 2014 Workplan is to engage with the PAs on the development of formal comprehensive segment strategies that can provide value to customers and the PAs. In April we interviewed CI leads of all but one PA and met with the PA Leadership Group to advance the issue of segmentation as a strategic topic. The aggregate PA response to the issue has been weak and we continue to work to gain traction with the PAs on the importance of the topic and the potential benefits of engaging in a collaborative process. The C&I Advisory Group conducted in depth research on segmentation best practices and prepared materials for presentation at the May Council meeting.



In parallel with the strategic planning work, we prepared for the Health Care Best Practices study including establishing the PA/consultant team that will be engaged in the work and scheduling the kick-off meeting at the May 7th C&I Management Committee (CIMC) meeting. We began mapping the process for the study.

Coordination and Partnerships

The C&I Advisory Group engaged with the DOER, the PAs and their implementation contractor (CSG) regarding plans and activities related to the codes and standards initiative. This included review of current implementation progress and plans, as well as issues related to EM&V and attributing and claiming savings for the codes and standards initiative. In addition, the Group convened a meeting with the same parties to encourage and further explore applying to the U.S. DOE for grant funding to supplement the codes and standards initiative budget already approved. We will continue to work closely with parties in May and intend to submit a joint-state regional application, due May 21.

Innovative Strategies

The C&I Advisory Group finalized the identification of best practices in retro-commissioning and drafted a report summarizing the findings for review by the study team and the C&I Management Committee. This report details the process used to develop collaborative findings on retro-commissioning program practices, the best practices identified by the group, and the next steps that need to be undertaken to analyze the applicability of these practices in MA. In May, we will present the study findings to the CIMC, finalize the report, and support the advancement of the recommended next steps.

We discussed the advancement of upstream measures at the CIMC and it was agreed that the market research and program changes to the upstream HVAC program should be the primary near-term focus for upstream.

Achieve Greater Savings Earlier in the Year

The issue of improving PA quarterly sales profile was discussed briefly at the PA Leadership meeting. In May, the consultants will endeavor to develop a sales projection for the remainder of 2014 and 2015. The projection will be based on past PA performance as well as the potential change in close rate that could be expected with the adoption of a quarterly focus on savings goals.

Monitoring, Coordination, and Cross-Cutting Tasks

Monitor and Advise Current Programs

The Group prepared a preliminary draft of the residential overview presentation scheduled for the June 10 Council meeting. The RMC provided input on the draft at its April 30 meeting. The presentation content will be developed during May.



The C&I Advisory Group attended the CIMC meetings on April 9 and April 23rd where we shared the details of the C&I work plan with the group and received input on timing and PA capacity to engage in best practices studies. We engaged in discussions of gas measures and best practices in advancing gas savings providing input that HVAC systems, in particular, demand control ventilation and energy recovery, are strong performers in terms of gas savings. NGrid confirmed that HVAC was the largest source of their gas savings in 2013. We participated in the presentation of the Whole Building Systems Approach study conducted by DNV GL with significant input and guidance from the consulting team. This study focused on a gas program that was designed to engage market actors in promoting deeper savings with customers. The PAs indicated that while the current MA programs include several elements in the program, they had questions regarding specific program practices that DNV GL will bring to the EMC for consideration of further research. We provided input on a PA discussion of the Mass Saves C&I website navigation. DNV GL presented on non-energy impacts by sector, an effort to use NEI data to provide program implementers with useful market data. This study occurred due to strong support by the EMV and C&I Advisory Groups and was well received by the PAs though it lacked the depth that the Consultant Team had expected due to data limitations of the original study.

Coordinate with the Council on Programs and EM&V Results

The Residential Advisory Group provided several sets of input on ongoing evaluation efforts to ensure appropriate consideration of residential issues. This included reviewing and providing comments on the regional lighting hours of use study, retail lighting shelf stocking and price survey multifamily best practices research, HEHE and Cool Smart Program models for market effects research, and a draft HES interview guide.

The Residential Advisory Group continued to work with DOER staff to analyze thermal renewable heating and hot water system options to support DOER's work on the Residential Conservation Services guidelines. This work will continue in May.

As noted above, the C&I Advisory Group contributed to the presentation of the Whole Systems EMV report to the CIMC.

The C&I Advisory Group reviewed a proposed scope of work for the Codes and Standards study. We also provided input on program logic models that will be used to develop future market effects studies.

The 2012 C&I Customer Profile Report detailing the characteristics of customer participation across the state and comparing participation with 2011 was issued in April. This report showed a significant evolution in analysis and data enhancement over the 2011 report. As a result, the CI Advisory Group and DOER identified and requested data at the PA level which was reported at the statewide level in the report. This data will enable better understanding of the differences in PA markets and projects, support the Deeper Dive on the IU and the planned C&I presentations to the Council in July and September.



Review and Assess PA Reports and Data

The team reviewed the data dashboard for February and the first quarter report.

Support the Statewide Database

Consultants reviewed the PAs' comments on the statewide database and provided responses for contribution at, and attended, database committee meetings. The consultants also provided input as the database resolution was crafted. In May, Consultants will review a draft of the PAs' interim data solution (MAREE).

Prepare for the 2016-2018 Plan

The Residential Advisory Group prepared two discussion topics—program integration and maintaining savings levels—for a strategic planning meeting with the PAs held on April 30. The primary purpose of the meeting was to discuss the appropriate forum(s) and process for collaborative discussions between the PAs and the consultants to prepare for the 2016-2018 plan. These discussions will continue in coming months.

Technical Services

Inventory and Organize Recurring Technical Services

The Technical Services Advisory Group produced an inventory of all ongoing technical services tasks. It was submitted to the Chair of the EEAC on April 30 to ensure that no tasks were omitted. Once the inventory is approved a master schedule will be put in place. The purpose of this exercise is to document and streamline these tasks so that they happen easily and efficiently. This will allow the EEAC Chair and the full EEAC to focus the bulk of its efforts on non-administrative activities.

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 April 8, 2014 EEAC meeting and forwarded to the EEAC Chair on April 16, 2014. The EEAC Chair will review the minutes and distribute them directly to the EEAC prior to next EEAC meeting to be held on May 13, 2014. The EEAC approved March meeting minutes during their April meeting. These minutes have been posted on the EEAC website.

Develop EEAC Logo and EEAC Website Upgrade

Cahoots Design, the firm retained by the Consultant Team to develop an EEAC logo and upgrade the EEAC website, prepared a design brief on April 3, 2014. Using the approved design brief as its guide, Cahoots produced three separate logo designs and corresponding website home page layouts. Cahoots also produced a draft website site plan. The EEAC Executive Committee approved the final logo design at its April 30, 2014 meeting. The home page layout and site plan have also been approved.



Cahoots will now proceed with developing EEAC letterhead, PowerPoint, report and memo templates based on the approved logo. This work will take place in May.

Based on the approved website home page layout and site plan, Cahoots will move forward with upgrading the entire EEAC website. The launch of the upgraded website is scheduled for the middle of June.

Revise the Consultant Team Monthly Report

The EEAC requested that the Consultant Team Monthly Report be revised to provide a clearer connection between our efforts and our tangible outcomes and work products. A new monthly report format was developed in March and first used for the April monthly report. The Team welcomes feedback on this format.

Produce the Annual Report to the DPU and Legislature

The EEAC Executive Committee decided to maintain the existing Year 2012 annual report design for the 2013 report. The Consultant Team is working with DOER and PA staff to develop the content for the report. Content development will occur during May, with the objective of producing a draft report for Council review by late June/early July.