

Memo

To: **EEAC**
From: **Eric Belliveau and the EEAC Consultant Team**
Date: **April 10, 2019**
Subject: **2019 Q1 Consultant Team Summary Report**

The Consultant Team is pleased to provide a summary to the Council of our activities.

This report serves as a summary of key activities, accomplishments, and deliverables completed by the Consultant Team during the 2019 Q1 (January-March) timeframe.

SUMMARY OF MAIN TASKS COVERED IN EACH SECTION OF THE REPORT

EM&V

- Developing the 2019 Consultant Team Work Plan
- Managing a set of studies started in 2018
- Finalizing approximately 13 EM&V reports and posting to the EEAC website
- Developing a response to term sheets language calling for specific EM&V research
- Developing two presentations for the April Council

PLANNING & ANALYSIS

- Developing the 2019 Consultant Team Work Plan
- Supporting the development of the 2019 Council Priorities
- Developing Key Performance Indicators
- Reviewing the DPU Order on the 2019-2021 Plan
- Working on studies, evaluations, and demonstrations related to peak demand
- Reviewing Q4 2018 Results

RESIDENTIAL AND LOW INCOME

- Developing the 2019 Consultant Team Work Plan
- Developing residential Key Performance Indicators
- Discussing progress on implementing Plan commitments with the Residential Management Committee
- Contributing to EEAC presentations
- Reviewing and commenting on draft residential EM&V work products and ongoing coordination with EM&V Advisory Group members

COMMERCIAL AND INDUSTRIAL

- Developing the 2019 Consultant Team Work Plan
- Developing C&I Key Performance Indicators
- Reviewing changes to the C&I programs to start the new Three-Year Plan
- Working with PAs and Evaluators to redesign the C&I New Construction program
- Collaborating with evaluators to provide review and input on project and evaluation reports, and the 2017 Customer profile

TECHNICAL SERVICES

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

EVALUATION, MEASUREMENT & VERIFICATION

Oversee EM&V Implementation

A primary focus of the EM&V Advisory Group in January-March was on managing a set of studies that were started in 2018. These studies had been planned to be completed after the filing of the Three-Year Plan because they did not affect savings assumptions. Also, an increasing number of new studies laid out in the Strategic Evaluation Plan (SEP) have reached the implementation stage. A comprehensive status report on the current status of the Massachusetts EM&V program can be found at <http://ma-eeac.org/studies/>.

A key EM&V planning activity during this reporting period was developing a response to language in the Three-Year Plan term sheets calling for EM&V to research non-participants, winter peak issues, and passive house impact accounting methods. The first step was forming a working group to coordinate the effort to respond to these issues. The working group then developed sector-specific strategies to complete needed research by the end of 2019. Research activities to address the term sheet language will include a combination of completing several new studies and leveraging of studies already in progress. Several of the new studies have already been advanced to the implementation stage.

A second planning activity during the reporting period was to continue to move the individual studies called for by the SEP through the detailed study planning process and toward the implementation stage.

Oversee EM&V Reporting

Around 13 EM&V reports were finalized and posted on the website in this reporting period, including several non-impact studies that had been planned to be completed after the Three-Year Plan, and evaluations of the summer 2018 Active Demand Reduction demonstration projects. At the time this report was prepared, several additional reports were in the process of being finalized, including major impact evaluations of C&I electric and gas measures.

Council and Stakeholder Engagement

Council engagement activities focused on the development of two in-person presentations for the April Council meeting, providing a broad update on the status and results from recent EM&V activities. We also engaged with DOER through monthly overall check-in calls and discussions on issues regarding individual studies and managed the process of posting completed EM&V studies on the Council's website.

PLANNING AND ANALYSIS

Participate in EEAC Meetings; Brief and Support the Council

The P&A Advisory Group prepared for, attended, and provided technical support during the meetings of the EEAC and coordinated through Executive Committee each month. The Group coordinated with DOER as chair of the Council on a weekly basis and briefed individual Councilors in advance of the EEAC meeting and during the month. Also, the P&A Advisory Group assisted with the development, planning, and coordination of potential topics for future EEAC meetings. EEAC Meeting and Council support was an on-going and regular monthly task area.

Provide Technical Analysis

In early January, the P&A Group developed and compiled activities for the Consultant Team 2019 Work Plan. In January and February, the P&A Advisory Group supported DOER and the Council with developing the Council's 2019 Priorities.

In collaboration with the PAs and other Consultant Team members, the Group also helped develop Key Performance Indicators that will be tracked during the implementation of the 2019-2021 Plan and compiled a list of other PA reporting requirements for tracking purposes. The Group developed a presentation to the Council on

these topics in March. The Group also reviewed the PAs' Q4 2018 results.

The Group reviewed the DPU final decision on 2019-2021 Three-Year Plan, with special focus on revisions to cost-effectiveness and avoided cost of compliance with GWSA, active demand and storage program strategies and approvals vs. demonstrations, multiple goals including MMBTU application, and statewide data tables. The Group completed additional review and analysis on change in GWSA avoided cost values.

The Group reviewed results of active demand demonstrations and evaluations. The Group analyzed 2019 goals, program offerings, and implementation, including comparison of goals to EEAC priorities. The Group had discussions with the PAs, DOER, and AGO on these topics and developed a presentation for the March EEAC meeting.

The Group coordinated with the PAs on winter benefits study per the Plan term sheet, including developing scope of work for RFP, review of proposals, and input on selection of contractor.

The Group also worked with the PAs and DOER on ISO-NE issues regarding Forward Capacity Market (FCM) and EE performance and revenues for EE programs. The Group reviewed and analyzed ISO-NE Capacity Scarcity Conditions (CSC), with focus on impacts and implications for EE performance in off-peak hours and FCM financial impacts on EE programs. The Group worked with a small multi-state group to develop solutions for ISO and Markets Committee consideration. The Group also tracked the ISO and FERC process regarding energy efficiency performance net vs. gross capacity issue in FCM.

RESIDENTIAL AND LOW INCOME SECTORS

Planning, Technical, Analytical, and Strategic Support for Implementation of the 2019-2021 Plan

The Residential Advisory Group began its work this quarter with developing activities for the Consultant Team 2019 Work Plan, including compiling a list of residential and low income commitments in the Plan. Its other work this quarter included continuing development of residential Key Performance Indicators per the Term Sheet, participating in discussions with the PAs and DOER regarding residential scorecards, compiling suggested inputs and outputs for the PAs' energy optimization calculator, strategizing key elements of the process and substance of the PAs' municipal and community partnership strategy, and reviewing monthly lighting and consumer products invoice data to assess progress to meeting annual unit goals and implications for future program planning and offers.

The Group also reviewed the PAs' Q4 report and data dashboards for this period, met regularly with DOER staff, attended the Mass Save HVAC contractor annual program roll-out meeting in January, developed proposed discussion topics for the May EEAC meeting, participated in an internal residential program visioning meeting, and provided support to Councilors on an as needed basis.

Participate in Residential Management (RMC) and Council Meetings

The Residential Advisory Group prepared for and participated in six RMC meetings this quarter, which included discussions of the PAs' progress on meeting Plan commitments on the New Buildings Program (includes additions and renovations and Passive House), heat pump incentives, energy optimization, active demand management, mitigation of pre-weatherization barriers, and municipal and community partnerships. It also reviewed and provided input on PA presentations for the February (New Buildings Program and heat pumps) and March (energy optimization) EEAC meetings as well as presenting its own energy optimization presentation in March.

Coordinate with EM&V Efforts and Incorporate Feedback from EM&V Studies into the Programs

The Group continued its monthly coordinating calls with the EM&V Advisory Group to exchange information and discuss priority evaluation issues and implications for implementation. It also reviewed and provided comments on drafts of several in-progress residential evaluation outputs, including the low income process evaluation; non-participant study; lighting delta watts draft report; advanced power strip metering study; lighting market scan; residential renovation, rehabilitation & addition draft gross savings methodology; onsite lighting report, and residential new construction User Defined Reference Home (UDRH) Stage 3 Plan.

COMMERCIAL AND INDUSTRIAL SECTOR

Technical support for program strategies and segmentation

The C&I Advisory Group provided program support in several ways during the first quarter of 2019, beginning with developing activities for the Consultant Team 2019 Work Plan. This included compiling a list of C&I commitments in the Plan. The C&I Group also developed a set of Key Performance Indicators in cooperation with DOER and the PAs, to track important developments in the evolution of the programs. The Group also performed typical oversight activities such as reviewing the upstream program changes for 2019 and reviewing the 4th Quarter report.

The C&I Advisory Group also participated in a charrette as part of an effort to redesign the new construction program. The intent is to change how savings are estimated using modelled savings to be based on actual building performance.

Identify and Review New Technologies

The C&I Advisory Group identified several opportunities that could increase savings and overall program performance. These include a class of demand response modeling tools that will provide guidance for customers who are trying to prioritize and choose amongst demand, storage, renewable energy and efficiency options. We also identified and shared with the PAs a methodology to better specify and document sequence of operations for HVAC systems.

Coordinate with EM&V Efforts and Incorporate Feedback from EM&V Studies into the Programs

There was a significant amount of activity in the EM&V area during the January-March timeframe. The C&I Advisory Group reviewed and provided feedback on several studies, including a refrigeration evaluation, the C&I Lighting onsite report, and the 2017 C&I Customer profile. In addition, the Group reviewed a series of 2016 custom gas and electric projects to provide feedback, gather insight into how the programs operate, and to better understand baseline issues. We also participated in an ongoing discussion with evaluators about the status and treatment of Energy Management Systems (EMS). Finally, the Group reviewed and provided input on and additional materials for the Industry Standard Practice (ISP) library.

Participate in CIMC and Council Meetings

The purpose of these meetings is to gather relevant program information and to share best practices from other states and countries. In the first quarter of 2019, the Consultant team has discussed the following topics with the PAs at the CIMC meetings: upstream programs, marketing outreach strategy, industrial initiative, monitoring based commissioning, energy management information systems.

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 December, January, and February EEAC meetings and forwarded them to the EEAC Chair. These minutes along with all documents and presentations distributed at the January-March meetings have been posted on the EEAC website.

EEAC Website Upgrades, Revisions & Maintenance

Consultant Team staff continue to manage the updated website on a day-to-day basis. In January-March this included posting materials for EEAC meetings and other meetings that occurred during the month.

For the January-March time period, there were:

- 3,814 sessions
- 1,925 users: 71% new visitors and 29% returning visitors
- 10,445 page views with an average of 2.7 page views per session