

Memo

To: **EEAC**
From: **Eric Belliveau and the EEAC Consultant Team**
Date: **December 19, 2018**
Subject: **June-November 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 June-November 2018 timeframe. Although the Consultant Team typically reports to the Council on a quarterly basis, Q3 reporting fell during the busiest period of time in the 2019-2021 planning and review process. As a result, the Consultant Team decided to deliver its Q3 and Q4 reports at the same time to allow the Consultant Team and EEAC to focus its efforts on the 2019-2021 planning work.

SUMMARY OF MAIN TASKS COVERED IN EACH SECTION OF THE REPORT

THREE-YEAR PLANNING

- Developing and presenting on recommended energy efficiency savings targets
- Reviewing and commenting on the April 30, September 14, October 22, and October 31 versions of the 2019-2021 Plan
- Continuing to work with the PAs on key issues for the Three-Year Plan
- Completing the key drivers review process
- Supporting DOER with analysis for Term Sheet negotiations
- Reviewing the 2019-2021 Plan version of the TRM

EM&V

- Working with the PAs to complete the 2019-2021 Strategic Evaluation Plan
- Finalizing approximately 30 studies to inform planning assumptions in the final draft of the Three-Year Plan
- Completing two quick-turnaround studies intended to support the development of Energy Optimization programming, and studies called for under the 2018 Demand Response EM&V plan
- Coordinating policy processes such as the Demand Reduction Committee, working groups associated with the future codes and standards support initiatives; and the Informal Collaborative Discussion group

PLANNING & ANALYSIS

- Supporting the completion and application of a supplemental analysis of the GWSA avoided cost of compliance in MA
- Reviewing and provided recommended action for three Mid-Term Modification requests

RESIDENTIAL AND LOW INCOME

- Supporting Consultant Team presentations to the EEAC
- Conducting ongoing 2019-2021 planning discussions with the Residential Management Committee
- Reviewing and commenting on draft residential EM&V work products and ongoing coordination with EM&V Advisory Group members

COMMERCIAL AND INDUSTRIAL

- Supporting Consultant Team presentations to the EEAC

- Providing program oversight and monitoring
- Reviewing evaluations for a better understanding of the impact on savings, and to create a feedback loop to improve the programs

TECHNICAL SERVICES

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

THREE-YEAR PLANNING

This section describes three-year planning activities undertaken by all Advisory Groups to some extent.

Assessment of Potential

As the result of the key drives process (described more below), analysis of 2017 evaluated results, known post-2017 EM&V impacts, ramp rate considerations, and updated sales forecasts the Consultant Team provided an updated goals assessment at the August 29 EEAC meeting. Although lower than the assessment of potential presented to the Council in April, the Consultant Team identified the revised goals as aggressive, yet realistic savings targets.

Review of Draft Plan

The PAs filed their Draft 2019-2021 Energy Efficiency Plan with the DPU on April 30. In June, the Consultant Team continued to analyze the contents of the Plan and the data included in the statewide data tables and BCR models. The Team developed a presentation to summarize our observations and assessment of the PA priorities in the Draft Plan priorities and delivered it to the Council at the June 20 EEAC meeting. The PAs also provided the Council with revised drafts of the Plan on September 14 and October 22. The Consultant Team spent a significant amount of time reviewing the contents of the revised plans and comparing them to previous versions, with a particular focus on costs and savings. In November, the Team reviewed and analyzed the contents of the PA 2019-2021 Plan that was filed with the PAs on October 31 and developed a list of clarifying questions for the PAs as part of this review.

The Team further engaged with the PA to review the PAs' new Technical Resource Manual (TRM) to cover the 2019-2021 time period. The new TRM is also available in a redesigned online Technical Resource Library (TRL), which is an improvement over the previous version of the TRL. The C&I Advisory Group, in cooperation with the EM&V Advisory Group, reviewed the evaluation factors in the TRM/TRL and compared those values to the ones used in the Benefit Cost Models (BCR). The Consultants found a number of discrepancies and shared these with DOER.

Key Drivers

In June-August, the Consultant Team worked with the PAs to exchange information about and discuss planning assumptions related to the list of key drivers as previously agreed to. This list and the primary issues surrounding each key driver was included in the Consultant presentation to the EEAC on June 20. At the July 31 EEAC meeting, the Consultant Team presented an update of the Key Drivers process to the EEAC and presented a summary of the completed key drivers process at that August 29 EEAC meeting. The process help the PAs and Consultants to better understand differences in planning assumptions. In some cases, the data exchange and conversations let to agree-to changes in the assumptions used. However, it was difficult to isolate the net effects of these changes in the overall goals due to other factors such as evaluation results, some increases and some decreases, as well as measure level assumptions impacting the total portfolio in different ways.

Term Sheet Negotiations

The Consultant Team also continued to work with the PAs on other key issues for the Three-Year Plan including the goals framework and a common MMBtu savings metric, fuel switching and energy optimization, term sheet structure, the application of EM&V results, and market transformation and market effects, and a performance metric for underserved customers. The Consultant Team worked with DOER and PA representatives to discuss and exchange information on these topics and other aspects of the Plan.

In addition, the PAs worked with DOER to develop key metrics that can be used to monitor progress toward EEAC priorities and stated PA commitments in the plan.

EVALUATION, MEASUREMENT & VERIFICATION

Oversee EM&V Planning

During this reporting period the EM&V Group worked with the PAs to complete the 2019-2021 Strategic Evaluation Plan (SEP), which was filed as a component of the Three-Year Plan. The SEP is to serve as the overall strategic template for EM&V efforts over the next three years.

Following the completion and filing of the SEP, the focus of EM&V planning activities shifted toward moving many of the individual studies laid out in the SEP through the detailed study planning process and toward the implementation stage.

Oversee EM&V Study Implementation

A key focus of study implementation efforts in this reporting period was completing a wave of impact evaluation studies that had been timed to inform key impact assumptions for the 2019-2021 planning period. Roughly 30 such studies were completed in the several months leading up to the filing of the final version of the Three-Year Plan. Prominent among these were studies of program attribution, which are generally done as late in each three-year program cycle as feasible due to the policy requirement to lock in attribution factors for the entirety of the next three-year period. Completing attribution studies late in the three-year cycle helps to keep the results as timely as possible for their three-year application period.

Other significant EM&V implementation activities included the performance of two quick-turnaround studies intended to support the development of Energy Optimization programming, and the implementation of PA-specific studies called for under the 2018 Demand Response EM&V plan.

A comprehensive status report on the current status of the Massachusetts EM&V program can be found at <http://ma-eeac.org/studies/>.

Oversee EM&V Reporting

EM&V reporting activities in this reporting period focused on overseeing the development of final reports for the large wave of studies completed in connection with the Three-Year Plan filing.

EM&V Policy Issues

Much of the Group's work on EM&V policy issues in this reporting period focused on providing EM&V input and coordination to a number of major policy processes connected to the 2019-2021 Three-Year Plan. In addition, the Group coordinated with other policy processes such as the Demand Reduction Committee, various working groups associated with the planning of future codes and standards support initiatives; and the Informal Collaborative Discussion group. Specific EM&V policy issues in this reporting period included: supporting DOER on negotiations over savings goals, discussions of possible changes to the EM&V application framework, and analysis of distributional equity issues; reviewing the Plan Year Report and Three-Year Plan versions of the TRL; initiating the development of a framework for the evaluation of C&I code advocacy efforts; and working to resolve issues pertaining to Eversource's acceptance of ISP baseline results.

Council and Stakeholder Engagement

The EM&V Group engaged with DOER through both monthly overall check-in calls and discussions on issues regarding individual studies, and also 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

During the June-November timeframe, Planning and Analysis (P&A) Advisory Group was actively involved in all aspects of the planning process described above, in particular, issues of active demand management and storage as well as winter benefits and winter reliability. The P&A Advisory Group also supported completion and application of a supplemental analysis of the Global Warming Solutions Act (GWSA), which will be used for the 2019-2021 Plan. The Group presented the results of the study to the Council at the August 29 EEAC meeting. The P&A Group also coordinated with the PAs and DOER regarding the application the avoided cost values from the full Avoid Energy Supply Cost study.

In June, the Consultant Team review Mid-Term Modification (MTMs) requests from Berkshire, Liberty, and National Grid. The consultant Team developed a memo to the Council on the MTMs with recommended actions and presented the recommendations to the Council at the June 20 EEAC meeting.

The P&A Group also worked with the PAs to consider and analyze the pros and cons of the various key indicators that could be used in the 2019-2021 Plan, including in the Plan term sheet.

RESIDENTIAL AND LOW INCOME SECTORS

Technical Support for Programs and Effective Practices

The Residential Advisory Group's technical support for this period was almost entirely devoted to work in support of the 2019-2021 planning process. Much of this work is described in the Three-Year Planning section of this memo, including analysis and participation in the key drivers process (residential topics included the residential program realignment, heat pumps, retail lighting, and low income) detailed review and analysis of the residential and low income content of the several draft plans and additional PA responses thereto, and compiling PA commitments for the 2019-2021 Plan from the final Plan and PA discovery responses from the DPU review process. In addition, the Group provided support to EEAC Councilors in developing a renter performance metric for the Term Sheet, reviewed and provided input on Berkshire Gas's mid-term modification request, reviewed and commented on the PAs' geographic savings analysis, worked with Councilor Wambui to organize and conduct an August 22 stakeholder meeting to discuss improving service to underserved customers, drafted residential performance indicators, established a periodic meeting with the PAs to discuss issues related to Mass Save Data, reviewed the PAs' quarterly reporting, participated in Low Income Best Practices Working Group meetings, responded to various Councilor inquiries, and continued to coordinate with DOER staff.

Participate in RMC and Council Meetings

The Group provided and presented content for several presentations by the Consultant Team at monthly EEAC meetings this period and participated in briefings of EEAC Councilors in advance. The Group met with the Residential Management Committee five times during this period. The discussions all related to residential program planning for 2019-2021 with a particular focus on the PAs' development of additional details for the residential components of the Plan.

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

residential and low income content of the draft Strategic Evaluation Plan. In addition, the Group reviewed and--in most instances--provided comments on drafts of several in-progress residential evaluation outputs, including the Low Income Process, HES Impact, Multifamily Engineering, Multifamily Program Improvement, Advanced Power Strips Metering, Lighting Shelf Stocking Socket Saturation, and HEAT Loans evaluation studies.

COMMERCIAL AND INDUSTRIAL SECTOR

Technical Support for Programs and Effective Practices

The C&I Advisory Group's primary focus this quarter was analyzing and synthesizing results of the energy potential studies to develop a statewide assessment of potential for both energy and demand savings. The Consultants also continued to monitor program progress towards goals which included looking into upstream lighting performance, progress toward launching a strategic energy management initiative, streetlight upgrades, combined heat and power projects, heat pumps, and general program performance.

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

The C&I Advisory Group spent time in this reporting period on a number of planning and evaluation activities. Key issues continue to be dual baselines, baselines for building energy management systems, lighting controls savings, and the new metric that would report all savings in MMBtus. Significant time was spent in November to review custom project reports from 2016 as part of an evaluation study. These reports provide valuable insight into setting baselines, program practices, and the effectiveness of capturing identified opportunities.

Participate in CIMC and Council Meetings

In addition to participation in CIMC meetings and calls, the C&I consultants reviewed and provided feedback on PA materials presented at the Council meetings. The C&I Consultants participated in the September EEAC meeting.

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 May, June, July, August, and September EEAC meetings and forwarded them to the EEAC Chair. These minutes along with all documents and presentations distributed at the June-October meetings have been posted on the EEAC website. The November EEAC meeting was cancelled.

EEAC Website Upgrades, Revisions & Maintenance

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

For the June-November time period, there were:

- 10,911 sessions
- 4,436 users: 76% new visitors and 24% returning visitors
- 29,973 page views with an average of 2.7 page views per session

Consultant Team Quarterly Reports

In July, the Consultant Team produced a report of its activities from March 1, 2018 to May 31, 2018.