

Memo



→ CONSULTANT TEAM

To: **Energy Efficiency Advisory Council**
From: **Eric Belliveau and the Consultant Team**
Date: **April 6, 2020**
Subject: **EEAC Consultant Team 2020 First Quarter Report**

SUMMARY

This document summarizes the work completed by the EEAC Consultant Team during the first quarter of 2020. In each section below, the Consultants provide details on the status of key deliverables and tasks undertaken during Q1. The Consultant Team focused significant time on supporting and guiding implementation of the numerous new elements included in the PAs' Plan, many of which ramp up in 2020. These elements include active demand reduction (ADR), energy optimization, an MMBtu savings metric, the residential program redesign, passive house, and strategic energy management, workforce development, among others. The sections below describe specific tasks the Consultant Team completed in Q1 that did not have a distinct deliverable associated. We also provide a table at the end of the document that lists the known deliverables the Team produced over the quarter.

PLANNING & ANALYSIS

In Q1, the Planning and Analysis Advisory Group focused on supporting DOER and the Council as it established 2020 priorities and considered several resolutions around daily dispatch, CVEO, and CMA Greater Lawrence initiatives. The Group also aided the Council as it began the process of outlining key elements of the 2022-2024 Three-Year Plan, including commenting on draft potential study RFPs, and providing technical analysis to support the development and implementation of a strategic vision for the future. Other work in Q1 included reviewing, analyzing, and commenting on results of the Navigant MMBtu study as well as the PA updated TRM. These tasks are summarized in the table below:

Time Period	Meeting	Topic(s)	Task	Information Needed	Status
January	January 22 EEAC Meeting	2020 Priorities, 2020 Consultant Team Work Plan, Daily dispatch	Support DOER and EEAC Executive committee with drafting 2020 EEAC priorities		Completed. Priorities will be voted on at April EEAC meeting
February	February 12 EEAC Meeting	EEAC 2020 Priorities, Daily dispatch, CLC CVEO, CMA Greater Lawrence initiative	Review and provide recommendation to Council on daily dispatch resolution		Completed
			Review and provide recommendation to Council on CLC CVEO resolution		Completed; work continued into March
			Review and provide recommendation to Council on CMA Greater Lawrence initiative resolution		Completed
March			Review and Comment on MMBtu study draft and final reports	Draft reports, BCR model used by Navigant for analysis	Reviewed report and analyzed results. This task is on-going and will continue in Q2.
			Review TRM updated inputs	Updated TRM	In late March, the Consultant Team received the draft TRM and analyzed inputs and provided comments to the PAs. This task may continue into Q2.
Q1	Other/Ongoing	Strategic Planning	Review and provide feedback on PA potential study scopes of work	PA potential study scopes of work	Completed—PAs provided draft potential study scopes of work and Consultant Team provided comments. Some edits were made to the RFPs as a result.

			Establish list of topics that that require significant lead time for 2022-2024 Planning		On-going. Draft list completed in March. Further discussions needed to prioritize topics.
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ACTIVE DEMAND

In Q1, the active demand advisory group reviewed results of the PA daily dispatch demonstrations and supported the Council’s resolution on this topic as well as the CLC CVEO resolution.

Time Period	Meeting	Topic(s)	Task	Information Needed	Status
January	January 22 EEAC Meeting	2020 Priorities, 2020 Consultant Team Work Plan, Daily dispatch	Review and provide feedback on the PA presentation on Daily Dispatch	Update summary table provided in PA November presentation on Active Demand	Completed
February	February 12 EEAC Meeting	EEAC 2020 Priorities, Daily dispatch, CLC CVEO, CMA Greater Lawrence initiative	Review and provide recommendation to Council on daily dispatch resolution		Completed
			Review and provide recommendation to Council on CLC CVEO resolution		Completed; work continued into March
Q1	Other/Ongoing	Strategic Planning	Reengaging the Demand Reduction Working Group with the PAs for a two-part discussion on the 2019 ADR results (programs and demonstrations) and the planned efforts for the summer of 2020, including for storage offerings.	PA participation. Specific information TBD	Not completed formally, but information on discussions on these topics took place in Q1

RESIDENTIAL AND INCOME ELIGIBLE

The Residential Advisory Group's quarterly report is structured primarily around the Residential Management Committee (RMC) meetings which took place twice per month. Where possible, substantive matters were discussed at RMC to ensure a discussion and exchange of information and perspectives. In addition, there were ongoing matters we are attending to that stem from prior work with the RMC, EEAC, and LEAN, including addressing the EEAC's priorities and general work to monitor the PAs' implementation of their 2019-2021 Plan commitments. The specific tasks related to these meetings and on-going work are listed in the table below:

Time Period	Meeting	Topic(s)	Task	Information Needed	Status
January	January 8 RMC meeting	2020 residential work planning, with a focus of prioritizing and scheduling discussion topics for the first six months of 2020	Developed and provided a master list of discussion topics related to EEAC priorities, the team's December white paper, and the PAs' plan commitments	None	Q1 topics determined
	January 22 EEAC meeting	Daily dispatch update (PAs)	Reviewed and provided comments on PAs' draft Daily Dispatch Update presentation	None	Completed
	January 24 RMC meeting	Active demand management	Get status of PAs' res ADM efforts and identify opportunities to enhance and expand them	Updates from PAs on assessment of possible new strategies	Completed
February	February 26 RMC meeting	Nonparticipant study	Determine PAs' takeaways from nonparticipant study and planned next steps	Final nonparticipation study reports	At meeting, PAs indicated still assessing findings of studies
		Eversource behavior savings	Get better insight into Eversource's plans to claim behavior savings and any implications for	More information from Eversource on what they are planning	All PAs have provided update on status of behavior initiatives.

			other PAs		
March	March 3 RMC meeting	Energy optimization	Ensure effective implementation of energy optimization framework	Schedules for calculator and posting of informational resources on MassSave.com	Energy optimization incentives have been in field since early 2019 and energy specialists have been providing multiple heating systems options to customers since end of 2019. To support customers in making educated choices, the Plan called for completion of a calculator by end of 2019, but there is still no firm date for completion—PAs indicate it's at least 12 weeks out. We have asked for timing of completion of companion customer education information for website, which PAs first indicated they were working on in summer of 2019, but PAs have not been able to provide any timing on this from their contractors.
	March 11 RMC meeting	Retail channel/initiative updates	Determine status of various enhancements within the Retail Initiative	Status updates	PAs provided various updates; pending request from consultants for additional information related to type and volume of activity on online marketplace vs. other retail channels

	March 25 RMC meeting	Status of coronavirus response	Compiled matrix of approaches to mitigate adverse impacts to contractors	Status updates	Completed
Q1	Other/ongoing	Coordinate with EM&V efforts	Ongoing coordination with EM&V Advisory Group; review and comment on draft EM&V studies	Draft study reports	Provided input on the following draft studies: RCD Logic Model, new construction baseline
		Income Eligible program	Coordinate with LEAN on an ongoing basis; Collect and organize data on IES; Engage in electronic Q&A with LEAN; develop IEA program compendium	Program information and performance data	In process
		PA reporting	Review Q4 report, with particular focus on KPI data; review data dashboards	Reported information	Reviewed data and compiled information for scheduled EEAC presentation; continue to review Q4 data to support discussions with PAs
		Cape and Vineyard Electrification Offer	Review CVEO information from Cape Light Compact; prepare recommendation for EEAC regarding approval of resolution	CVEO details on costs and savings	Resolution rescheduled to April EEAC meeting
		Revisions to lighting values	Provide input on appropriate values for measure lives, sunset years, and hours of use; analyze impacts on savings of various scenarios	Outputs from relevant EM&V studies	Provided analysis to DOER
		Workforce Development	Provide input during development of PAs'	Draft study	Study complete, next step is to discuss next steps

		needs assessment	Workforce Development Needs Assessment		with PAs
		Revision of PAs' heat pump incentive criteria	Discuss revisions, rationales, and implications with PAs	Revised criteria	PAs provided revised criteria when announced to market; we continue to assess impacts in MA and across region
		Passive House offer	Assess PA progress in development of expanded Passive House offer to include low rise MF and SF	Updated incentives and implementation plans from the PAs. Draft program materials from the PAs and their contractors.	PAs provided information in Q4 report—only applies to low rise MF and not single family

COMMERCIAL AND INDUSTRIAL

The C&I team's quarterly report is structured primarily around scheduled Commercial & Industrial Management Committee (CIMC) meetings which took place twice per month, as well as participation in several different PA working groups. Where possible, substantive matters were discussed at CIMC to ensure a discussion and exchange of information and perspectives. In addition, there were ongoing matters we are attending to that stem from prior work with the CIMC, EEAC, and C&I stakeholders, including addressing the EEAC's priorities and general work to monitor the PAs' implementation of their 2019-2021 Plan commitments. The specific tasks related to these meetings and on-going work are listed in the table below:

Time Period	Meeting	Topic(s)	Task	Information Needed	Status
January	January 7 CIMC meeting	Energy Management Systems and Customer Profile Dashboard	Consultants developed a draft memo on EMS baselines to clear up confusion from 2019 EMS baseline opinion memo, which did not constitute a formal evaluation. This has been an ongoing topic at CIMC and with Evaluations due to lack of ISP research informing	None	Completed, consultant team was provided early access to C&I customer profile dashboard and reviewed initial data cuts and findings with PAs

			said opinion memo. The C&I Customer Profile Dashboard to be presented at January's EEAC meeting was also reviewed.		
	January 15 C&I New Construction Charette	Overview of newly developed EUI focused C&I new construction program to be launched in current plan. ZNE Ready, EUI-based incentives, in addition to traditional prescriptive pathways.	Share best practices in measuring EUI-based approach for baselines	Latest data from Boston and Cambridge benchmarking ordinances	Completed
	January 21 CIMC Meeting	Retro-commissioning	Lead discussion based on consultant team initial review of newly launched Equipment System Performance Optimization (ESPO) program for RCx-like activity and MBx. Bring in examples of how RCx is delivered in different states, including CA, CT and others.		Completed, PAs to provide June 2020 update on ESPO roll-out
February	February 5 CIMC meeting	Upstream lighting distributor survey (<i>Tentative pending consensus on 2020 CIMC topics/schedule</i>)	Review data from RI upstream lighting distributor survey (covering MA, RI, CT and NH distributors).		Completed, shared results of upstream distributor survey w/ MA PAs
	February 18 CIMC meeting	C&I stakeholder engagement and C&I business partners event	Discussion of plans for C&I business partners event included attendees, session topics, high-level presentation materials	Slides decks from event	Complete, received all slide presentations from event

March	March 4 CIMC Meeting	2019 Q4 results review	Review of electric and gas performance in 2019 for C&I programs, KPIs and PA differences	NGrid to continue investigating higher controls penetration than peers	Completed
	March 17 CIMC meeting	Energy Optimization (<i>Tentative pending consensus on 2020 CIMC topics/schedule</i>)	Progress towards C&I term-sheet goal for cold climate heat-pumps, challenges and opportunities.	NGrid to share breakdown of Upstream HVAC savings by measure, tonnage, customer-type	Completed
Q1	Other/Ongoing	Energy Management System Baselines Working Group	Ongoing collaboration between PA C&I implementers and evaluators with EEAC Consultant Team C&I team to address baseline uncertainties based on ERS Opinion memo issued in 2019	Consultant team to follow up w/ PA peers identified in other jurisdictions	Ongoing
		Energy Optimization	Ensure effective implementation of energy optimization framework	Schedules for calculator and posting of informational resources on MassSave.com; update on	Ongoing
		Workforce Development Needs Assessment Study	Provide input on Mass Save workforce development needs assessment study, executive interviews, career profiles, recommendations and conclusions.	Next steps for PAs on workforce development and whether group will continue to convene post-study publishing still TBD	Completed; report has been issued and posted to EEAC website; includes several recommendations/sources identified by C&I consultant team lead

EVALUATION, MEASUREMENT, AND VERIFICATION

In Q1, our work in the area of Evaluation, Measurement, and Verification (EM&V) continued to be shaped by the requirements of the 2009 Council resolution that established the Commonwealth’s current EM&V framework, which assigns substantial responsibilities to the Council Consultants.

Working on the Council’s behalf, we are charged with overseeing every phase of the EM&V process, including evaluation planning, contractor procurement, study implementation, reporting and outreach, and application of study results.

Specific EM&V research objectives in the first quarter of 2020 include:

Time Period	Task	Information Needed	Status
Q1	Complete and report on tailored evaluations begun in 2019 that address participation levels and unaddressed barriers for potentially underserved groups, including renters, moderate income, non-English speaking households, and small business customers.		Two residential studies finalized in March. Small commercial study expected to be finalized first week of April.
	Continue to refine approaches to evaluate active demand response initiatives.		Residential and non-residential daily dispatch studies finalized in February. Residential DLC evaluation finalized in March. C&I demand response program summer 2019 evaluation expected to be finalized first week of April. Demand response demonstration reports expected to be finalized in April.
	Evaluate newer initiatives, including Energy Optimization and Strategic Energy Management (SEM).		Study updating residential energy optimization model completed in March. Study extending the residential energy optimization model to small commercial completed in January. SEM program has not advanced far enough to be evaluated yet.

TECHNICAL SERVICES

The Technical Services team is responsible for a variety of administrative tasks that support the Council’s information sharing.

Below are the primary tasks of the Technical Services Team in Q1 were:

Time Period	Task	Information Needed	Status
Q1	Post meeting materials for the January-March EEAC Meetings		Completed
	Take meeting minutes at the January-March Executive Committee and EEAC meetings		January and February Completed, March to be completed in first month of Q2
	Support DOER with completing the 2016-2018 EEAC Report to the Legislature		Consultant Team provided comments and input on draft report. This task is on-going and will continue in Q2.

COUNCIL DELIVERABLES

The sections below provide details on Council work products for Q1

Q1

Month	Category	Topic	Description	Advisory Group(s)	Status
January	Tracking Spreadsheet	EM&V Status Update	A spreadsheet summarizing the status of current and planning EM&V studies	EM&V	Completed
	Memo	2020 Work Plan	Describes Consultant Team tasks, deliverables, and budget for 2020	All	Completed
	Presentation	2020 Work Plan	Summarizes Consultant Team tasks and deliverables for 2020	All	Completed and presented at January EEAC Meeting
	Memo	Residential Program Design	Started in December 2019, this memo provides the Consultant Team's recommendations regarding remaining residential program opportunities and suggested metrics measuring success	Residential	Completed and posted on the EEAC website

February	Tracking Spreadsheet	EM&V Status Update	A spreadsheet summarizing the status of current and planning EM&V studies	EM&V	Completed
	Presentation	Daily Dispatch resolution	Presentation providing an overview of the draft Council resolution and recommendations	Active Demand	Completed and presented at February EEAC meeting
	Memo	Energy Management Systems (EMS)	Memo clarifying appropriate baseline considerations for Energy Management Systems	C&I	
	Memo	Consultant Team Quarterly Report	Report on Consultant Team activities for Q4 of 2019.	All	Draft completed in late March; will be posted to EEAC website with April meeting materials
March	Tracking Spreadsheet	EM&V Status Update	A spreadsheet summarizing the status of current and planning EM&V studies	EM&V	Completed
	Presentation	PA Q4 Report	Observations on KPIs, PA differences, areas PAs not on track to meet goals or council priorities	P&A Residential C&I	Presentation development completed. Presentation not given to EEAC due to March meeting cancellation
	Presentation	Non-participant studies	Results of the non-participant studies conducted in response to language in the 2019-2021 term sheets	EM&V	Presentation is ready, but event delayed due to Covid-19 crisis. Being rescheduled to late March or beginning of April.