

# Memo



→ CONSULTANT TEAM

To: **Energy Efficiency Advisory Council**  
From: **Eric Belliveau and the Consultant Team**  
Date: **April 9, 2021**  
Subject: **EEAC Consultant Team 2021 First Quarter Report**

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## SUMMARY

This document summarizes the work completed by the EEAC Consultant Team during the first quarter of 2021. In each section below, the Consultants provide details on the status of key work areas undertaken during Q1. As in the past, our report is organized by advisory groups, representing the major areas of effort across the entire range of Consultant responsibilities and portfolio of Program Administrator (PA) programs. Within each advisory group section of the report, we describe specific tasks the Consultant Team completed in Q4 that did not have a distinct deliverable associated. In Q1, the Consultant Team spent a significant amount of time preparing for the 2022-2024 three-year planning process. Because this process involves all Advisory Groups of the EEAC Consultant Team, we've included a specific Three-Year Planning section to this report. We also provide a table at the end of the document that lists the known deliverables the Team produced over the quarter.

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## THREE-YEAR PLANNING

The table below summarizes the three-year planning process activities and deliverables that occurred in Q1 of 2021. All advisory groups were involved in these efforts to some extent. Many of these tasks will be on-going in 2021. The majority of our three-year planning work in Q1 was focused on supporting the Council workshops that began in November and finalizing the associated recommendations. Another focus was on reviewing draft PA potential studies and developing an assessment of potential, which was presented to the Council in March.

Time Period	Activity/Milestone	Task	Information Needed	Status
January	Planning Workshops	Work with Equity Working Group to Develop briefing document for Equity focused workshop		Complete
		Participate in January workshops and assist the facilitator by adding to the workshop summary content		Complete
February	Planning Workshops	Revise recommendations from all workshops based on Councilor feedback and support the development of Council recommendations resolution		Complete. Council resolution presented and voted on at March EEAC meeting.
	PA potential Studies	Review draft PA potential studies	Draft results from PAs and sufficient documentation to effectively assess results and methodology	PA provided draft high level results in February. Following Consultant Team requests, PAs provided additional granular draft data and methodologies through February and March. Consultant Team has received full draft studies for Eversource, National Grid, and CLC. Final drafts of the PA potential studies are expected to be filed with the April 2022-2024 Plan draft.
	Consultant Team Assessment of Potential	Develop Consultant Team assessment of potential informed by review of PA potential studies	Same as above	Consultant Team did not receive draft PA potential study results until February. Assessment of potential analysis required extrapolation given varying levels of potential study results granularity provided by different PAs.
March	Consultant Team Assessment of Potential	Finalize Consultant Team assessment of	Final results from PAs and sufficient documentation to	Consultant Team presented assessment of potential results for energy efficiency and energy optimization at the March EEAC

		potential	effectively assess results and methodology	meeting. PA potential study results were still draft at time of presentation. ADM assessment of potential will be presented at April EEAC meeting
<b>On-going Q1</b>	Strategic planning	Work with DOER, AGO, and PAs to schedule and participate in meetings related to high priority topics identified as areas of focus for the next Three-Year Plan.		Participated in meetings to discuss strategic planning topics such as heat pumps.

## PLANNING & ANALYSIS

In Q4, the Planning and Analysis Advisory Group focused much of its efforts on gearing up for the 2022-2024 planning process. This included working with the PAs and DOER on strategic planning topics, participating in strategic planning discussions and work groups, developing inputs for the Consultant Team assessment of Potential, and providing input on and reviewing the on-going 2021 AESC avoided cost study. These tasks are summarized in the table below:

Time Period	Meeting	Topic(s)	Task	Information Needed	Status
<b>January</b>	EEAC Meeting	Consultant Team Work Plan	Develop and present to the Council on Consultant Team Work Plan for 2021; brief Councilors		Complete
		Council Priorities	Support the Council with the development of the 2021 Council Priorities; brief Councilors		Complete
		Behavior Programs	Review and provide feedback on PA draft presentation; brief Councilors	Draft presentation	Complete

	N/A	AESC Study	Review assumptions for 2021 analysis updates (AEO energy costs and other new/updated data). Review methods and assumptions for sensitivity modeling and initial results. Participate in Study Group meetings.	Draft PA presentations	Complete
<b>February</b>	EEAC Meeting	Three Year Planning Recommendations	Provide revised recommendations from all workshops, brief Councilors		Complete
		Behavior Programs	Review PA memo on behavior program changes; brief Councilors	Memo from PAs	Complete
	N/A	2020 Q4 Results	Review PA Q4 results and KPI data		Complete
	N/A	AESC Study	Review and Forward Capacity Auction (FCA) results and updated assumptions for AESC, review revised Final Report, and participate in Study Group meetings.		Complete
<b>March</b>	EEAC Meeting	Resolution on 2022-2024 Plan Priorities	Review and comment on draft resolution, brief Councilors	Draft resolution from DOER	Complete
		AESC Study results	Collaborate with PAs to develop slides; Review and comment on draft PA slides, brief		Complete

			Councilors		
		Assessment of Potential	Draft slides; brief Councilors		Complete—ADM results to be presented at April meeting
		Q4 2020 Results	Review and comment on PA slides; draft slides; brief Councilors		Complete—PAs presented on Q4 results, but Consultant Team will present at April meeting
	N/A	AESC Study	Review and provide comments on revised Final Report Deliverable, and participate in Study Group meetings and Final Report presentation.	N/A	Complete

## ACTIVE DEMAND

In Q1, the active demand advisory group met with the PAs and DOER to discuss 2020/2021 Winter ADM events, 2021 Summer ADM enrollment and initial thoughts on in 2022-2024. The EEAC Consultants also prepared a presentation on ADM for the March EEAC meeting as part of the Consultant’s Assessment of Potential presentation. ADM content was put off until the April EEAC meeting instead and will be covered at the first council meeting of Q2.

Time Period	Meeting	Topic(s)	Task	Information Needed	Status
<b>February</b>	Active Demand call with PAs	Regular ADM updates to EEAC	Discussion with PA ADM leads from Eversource and National Grid on 2020/2021 Winter early results, 2021 Summer enrollment and draft plans	PA Potential Studies	Complete
<b>March</b>	Active Demand and	Commonwealth 2025 Storage goals, 2022-	Develop draft active demand and storage	Background from DOER on SMART queue, data	Complete

	Storage call with DOER Staff	2024 Mass Save Plan, SMART storage queue and Consultant Team recommended goals	goals for 2022-2024 plan to discuss with DOER staff	on qualified projects and potential attrition	
On-going Q1	N/A	Summer 2020 Active Demand Management (ADM)	Review summer 2020 ADM activities and participation, including for storage and daily dispatch, and compare to three-year plan goals. Review ADM evaluations and results. Check in with PAs on ADM implementation and field experience. <b>Assess degree and nature of solution provider participation in summer 2020.</b>	Summer 2020 ADM evaluations and participation data	On-going
	N/A	Winter 2020/2021 ADM	Check in with the PAs on the field experience of ADM for the winter of 2020/2021, including for storage offerings. Compare planned and enrolled levels to three-year plan goals	Winter 2020/2021 ADM planning estimates and data on enrollment and field experience to date to be provided by PAs in Q4	On-going
	N/A	Gas demand management	Explore options with PAs for gas DR demonstrations	PA status report on progress on next steps that were identified in Q4 2020 discussion with PAs	On-going

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## 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. This quarter, the Residential Advisory Group focused on advancing the EEAC's priorities from its planning workshops

and the Equity Working Group in discussions with the PAs at the RMC. The Group added a new team member this quarter, Crystal Johnson.

Time Period	Meeting	Topic(s)	Task	Information Needed	Status
<b>January</b>	January 12 Council Workshop	Equity Working Group recommendations	Support Equity Working Group in preparation of briefing and presentation materials	January	Complete
	January 13 RMC	Agenda topic prioritization for Q1 and Q2	Prepare list of topics	None	Complete
	January 27 EEAC	PA behavior update	Review PAs' presentation and prepare comments	PAs' behavior update presentation	Complete
	January 29 RMC	Heat pumps	Prepare HP program priorities for discussion	None	Complete
<b>February</b>	February 10 RMC	Custom approach to residential retrofit	Prepare goals and benefits of such an approach	None	Complete
	February 24 EEAC	Continued discussion of behavior programs	Review additional information from PAs	Additional info from PAs	Topic requires ongoing engagement, especially with Eversource
	February 25 RMC	Scaling up coordinated delivery of heat pumps and weatherization	Prepare presentation of strategies and considerations	None	Complete
<b>March</b>	March 10 RMC	VHEAs	Review draft VHEA evaluation and prepare discussion questions for RMC	Draft VHEA evaluation	Complete
	March 24 EEAC	Consultants' assessment of potential, Q4 results	Contribute res and IE content to team presentations	Q4 results	Q4 presentation rescheduled to April

	March 25 RMC	Residential program transition	Prepare presentation of strategies and considerations	None	Complete
<b>On-going Q1</b>	2x/mo., plus planning meeting and preps	Equity Working Group	Prepare for and participate in Equity Working Group meetings	On-going Q1	Complete
	N/A	COVID-19-related program implementation (if applicable)	Monitor PA efforts; coordinate regionally to identify strategies; provide ideas and effective practice suggestions to PAs		Complete
	N/A	PA reporting	Review and analyze PA reporting, including Q4 report and KPIs	Q4 report	Complete
	N/A	EM&V	Coordinate with res EM&V efforts, including providing input on draft res EM&V work products	Draft res EM&V reports	Provided comments on draft EM&V products including Residential New Construction Energy Optimization, Residential Enhanced Incentives, and VHEAs; met monthly with EM&V Advisory Group to exchange information
	N/A	Income Eligible Program	Coordinate with LEAN and DOER on an ongoing basis; participate in Low Income Best Practices Working Group; analyze IES data	Updates from LEAN; Q4 KPI data	Met with the PAs and LEAN on March 18 to discuss planning process and EEAC priorities for 2022-2024; follow up meeting planned on this topic once Draft Plan has been filed
	March 4 meeting with PAs	Workforce development	Invite PAs and prepare proposed agenda to discuss workforce development plans for	EEAC recommendations	Follow up meeting planned on this topic once Draft Plan has been filed



			2022-2024		
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## 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 related to 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
<b>January</b>	January 5 (originally scheduled for Jan 6) CIMC meeting	Establish 2021 Meeting schedule for CIMC in coordination w/ PA staff	Consultants to develop initial draft schedule for 2021 CIMC meeting schedule	Major <u>internal</u> PA milestones in planning process	Complete – draft schedule for 2021 established and PA topics added to Consultant team proposed topic list
	January 19 CIMC	Custom HVAC projects (electrification focus)	Discussion of electrification recommendations discussed on 12/1 planning workshop	Latest Bi-annual heat pump reporting provided by PAs	Complete – continued need for better reporting of custom heat pump projects
<b>February</b>	February 3 CIMC meeting	River Run Decision at DPU and impacts on other non-EE funding sources/grants	Discussion of River Run Decision to omit tax credits and other state/federal subsidies from custom project screening	Examples of other funding sources PAs believe could be left out custom projects screening that may improve amount of projects that pass benefit-cost tests	Complete – Green Communities Grants, Alternative Energy Credits and other subsidies to be evaluated for leaving out of screenings
	February 16 CIMC meeting	2020 Q4 Report	Review of C&I 2020 Preliminary Q4 reported numbers	Q4 Report	Complete - Did not include Combined Heat and Power (CHP) data; requested update from PAs

<b>March</b>	March 3 CIMC meeting	High Performance HVAC Systems	Discussion of latest Equipment and Systems Performance Operation (ESPO) program and customer HVAC system optimization	PA updates on ESPO project data (# of projects and amount of savings) including low/no-cost tuning measures, custom, and MBx pathways	Complete – follow-ups from Eversource on dedicated outdoor air system (DOAS) savings
	March 16 CIMC meeting	Industrial process/Strategic Energy Management (SEM)	Discussion of barriers of identified by PA industrial efficiency vendors for measures/projects that have been identified but not yet pursued	Updates from Leidos and other PA industrial vendors	Complete – follow-up question for PAs to ask Cascade how SEM implementation in MA compares to their work in other jurisdictions
<b>On-going Q1</b>	Subcommittee examining Pandemic Effect on C&I Ventilation - Biweekly Call  Multiple bi-weekly meetings and additional meetings as needed	In collaboration with the C&I PA implementers and evaluators, the C&I consulting team has been working to identify changes in standard practice, operations and main O&M and equipment selection for ventilation in commercial buildings in response to the COVID-19 pandemic.	Help bridge the gap between PA implementers, EM&V staff, and 3 <sup>rd</sup> party evaluators to ensure PAs are able to robustly support C&I buildings in optimizing their HVAC systems to deliver healthy indoor air quality (IAQ)	Ongoing data collection and site-specific examples continue to come in as PAs work with schools and other critical C&I buildings most impacted by this issue. Additional non-energy impact research for health and safety benefits of better ventilation	Work will continue in Q2

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## 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 2021 include:**

Time Period	Task	Information Needed	Status
Ongoing Q4	Move from the implementation stage to the reporting stage those studies that are needed for filing with the 2020 annual report (current lockdown date for draft results is March 1). Highlights include: C&I custom electric and gas impact evaluations; the C&I lighting market model study; and a non-residential new construction baseline study.	None	All of the impact evaluation results feeding into the 2020 annual reports have been finalized, although some of the related reports are still in progress. The EM&V team has provided comments to the PAs on all EM&V-driven changes in the 2020 report version of the TRM.
	Move from the implementation stage to the reporting stage those studies that are needed to inform the first draft of the three-year plan (current lockdown date for draft results is March 15). Highlights include 8 net-to-gross studies that have been structured to produce preliminary results in time for the draft three-year plan; and studies of NEIs in the low-income multifamily and C&I sectors.	None	The majority of the studies needed to inform the three-year plan have now reached the reporting stage and have produced at least draft results. Draft results from the C&I NEI study are not expected until May.
	Oversee planning, implementation and reporting of remainder of in-progress EM&V studies. Highlights include a study of the residential virtual audit process; a process and impact evaluation of residential heat pumps; and an EMS baseline study.	None	Planning, implementation and reporting of the remainder of in-progress studies are generally on schedule. The residential virtual audit study has been finalized, the EMS baseline study is in the reporting stage, and the residential heat pump study is in the implementation stage.
	Develop first draft of 2022-2024 SEP	None	First draft of the SEP is nearly complete. We are assembling write-ups on selected individual studies to be initiated early in the three-year period, which will be included as an appendix to the SEP.

## 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
On-going Q1	Update the EEAC website including improving the search function, updating images, and improving backend functionality.		Worked with Cahoots design to flesh out a work plan for EEAC website updates and began working on aspects of plan. This work will be on-going in Q2.
	Post meeting materials for the December-February EEAC Meetings, planning workshops, and other associated planning resources and public comment.		Complete
	Take meeting minutes at the January-March Executive Committee and EEAC meetings.		Complete

## COUNCIL DELIVERABLES

The sections below provide details on Council work products for Q1:

Month	Category	Topic	Description	Advisory Group(s)	Status
January	Memo	Consultant Team Q4 report	A report summarizing the activities of the Consultant Team in Q4 2020	All	Complete
	Memo	Consultant Team 2021 Work Plan	A memo summarizing the anticipated tasks and deliverables of the Consultant Team in 2021	All	Complete
February	Presentation	K-12 Schools	A presentation updating the Council on status of	C&I	Presentation completed; did not have time to

		Update	subcommittee work examining pandemic effect on C&I ventilation in schools		present at February EEAC meeting; presentation developed in collaboration with PAs
<b>March</b>	Presentation	Assessment of Potential	A presentation on the results of the Consultant Team Assessment of Potential	Planning & Analysis	Complete
	Presentation	PA Q4 Report	A presentation on the results of the PA Q4 results and KPI data	All	Presentation completed; did not have time to present at March EEAC meeting; will present at April EEAC meeting
	Presentation	AESC study results	A presentation summarizing the results of the AESC study and potential considerations for the Three-Year Plan.	Planning & Analysis	Complete; developed and presented in collaboration with PAs
<b>On-going Q1</b>	Tracking Spreadsheet	EM&V Status Update	A spreadsheet summarizing the status of current and planning EM&V studies – Updated monthly	EM&V	Complete