MA ENERGY EFFICIENCY ADVISORY COUNCIL

MEETING MINUTES

Wednesday, February 26, 2025
Virtual Meeting via Zoom

Councilors Present:	Greg Abbe, Commissioner Elizabeth Mahony, Brian Beote, Audrey Hettinger, Paul Johnson, Steven Miller, Kyle Murray, William Rose, Sharon Weber, Brooks Winner, Martijn Fleuren, Meg Lusardi, Robert Rio, Cindy Carroll, Margaret Song (for Maggie Downey), Michael Ferrante, Amit Kulkarni (for Kate Peters), Chris Porter, Stephanie Terach, Jillian Winterkorn (for Hammad Chaudry), Tim Costa, Alexis Washburn, Mary Wambui, Daniel Leary
Councilors Absent:	(None)
Consultants Present:	Adrian Caesar, Gretchen Calcagni, Margie Lynch, Griff Keating, Jordan Galluzzo
DOER Staff Present:	Ina Dasso, Alissa Whiteman, Jo Ann Bodemer, Rachel Evans, Ian Finlayson

1. Call to Order

Bodemer, acting on behalf of the Chair, called the meeting to order at 1:01 PM.

Virtual Meeting Procedure
Bodemer reviewed the virtual EEAC meeting procedure:

1. The Council meeting will be recorded, for administrative purposes only.
2. All attendees except for Councilors and presenters will remain muted for the duration of the meeting.
3. Councilors should hold comments until the end of presentations, but Councilors and other participants should speak instead of using any chat function.
4. Councilors who disconnect from meetings need to announce when they rejoin.
5. All Council votes will be taken by roll call.

2. Public Comment

Steve Cowell (Conservation Services Group)
Cowell commended Green Energy Consumer's Alliance for their commentary on why the Department of Public Utilities (DPU) should approve the 2025-2027 Plan. Cowell said that stories in the Boston Globe highlighted concerns surrounding the high cost of energy, but the Plan will decrease the cost of energy through energy efficiency. Cowell said that he will provide further comments on the implementation of the Plan once the DPU issues its order on the 2025-2027 Plan. Cowell emphasized the need for better collaboration with the Massachusetts Clean Energy Center (MassCEC), particularly on their solar projects. Cowell said that the combination of solar and electrification is highly effective for decarbonization. Cowell added that he is working with the Low-income Energy Affordability Network (LEAN) to address mixed-income multi-family housing, which is one of the hardest groups to serve. Cowell said that collaboration with the Office of Energy Transformation is also critical.

3. Council Business and Updates

Commissioner Mahony congratulated the Council for their work on the Plan and their continued efforts to reduce customers' energy bills. Commissioner Mahony said that the MassSave program is not easy to operate, but it provides significant benefits to customers and utilities. Commissioner Mahony stated that the DPU must rule on the 2025-2027 Plan by the end of the week and said that she was looking forward to reading the DPU order, implementing the Plan, and continuing to deliver savings to customers.

Department of Energy Resources (DOER) Updates
Bodemer announced that DOER will file the EEAC annual report with the legislature, on behalf of the Council, in a few weeks. Bodemer said that the Council will provide real-time interpreters at the June EEAC Meeting for those who speak the seven most common languages other than English. Bodemer said that interpreters are always available upon request. Washburn asked if a location had been secured for this meeting and if an agenda had been set. Bodemer said that the June EEAC Meeting will be virtual, but the May EEAC Meeting will take place in-person at 100 Cambridge St. in Boston.

Bodemer said that due to the 2024 Climate Law, there will be changes to the members of the EEAC as of January 1, 2028. Bodemer said that these changes included the elimination of the manufacturing and energy efficiency business seats, the creation of a low-moderate income seat, the creation of a seat for a MassCEC representative, and adjustments to the organized labor seat. Bodemer said that DOER had asked MassCEC to participate in future EEAC Meetings as a non-Councilor representative until the legislative change takes effect in 2028.

Johnson said that Rio has done a magnificent job with the Council for 15 years, and the elimination of his seat will be a significant loss for the EEAC. Bodemer agreed with Johnson and said that the changes do not take effect for three years, so the EEAC will continue to take full advantage of Rio's expertise until then. Rio thanked Johnson for his praise.

Evans said that the exemption to the Open Meeting Law, which allows for virtual and hybrid open meetings, is still set to expire at the end of March. Evans said that Governor Healey has

submitted a bill that would permanently enact the exemption, but the April Executive Committee and EEAC Meetings may take place in-person if the exemption is not extended.

4. Evaluation, Measurement, and Verification Studies: Overview

EEAC Consultant Presentation
Prahl, on behalf of the EEAC Consultants, presented recent Evaluation, Measurement, and Verification (EM&V) studies on heat-pumps which covered heat-pump market effects and heat-pump program theory.

Council Discussion
Keating commented that the Heat-Pump Market Effects Study identified a decrease in new central-air conditioners but not for ducted air-source-heat pumps. Keating said that this provides further evidence that mini-split heat-pumps are the primary choice of contractors.

Abbe asked if there has been follow up to figure out why contractors' confidence in full displacements is declining. Prahl said that the consultants are following up on that in the current study, and relevant questions have been added to the contractor surveys. Rose asked if contractors with more experience are more likely to be skeptical of full displacement and Prahl confirmed. Fleuren agreed with Abbe that it is important to get more information from contractors. Fleuren said that program requirements for increased full displacements are driving concerns in the contractor community because they are seeing some customer service issues. Fleuren said that the Council needs to understand the scenarios in which flexibility in program requirements is necessary. Abbe asked how the study defined more experienced contractors and Prahl replied that experience level was defined in terms of the contractor's years of experience installing heat-pumps specifically.

Fleuren asked if the studies had compared cost trends for mini-split-heat pumps to the national inflation rate or HVAC producer-price index (PPI) inflation. Prahl said that the studies compared heat-pump cost trends against HVAC PPI inflation, because of the labor element in heat pump installation. Prahl said that the current study analyzes labor and equipment separately using the appropriate inflation indices. Fleuren asked if the HVAC PPI aligns with the rise in the cost of materials and Prahl confirmed. Fleuren asked if there was a statistically significant impact from program rebates on heat-pump pricing. Prahl responded that the studies have not produced evidence of program-induced effects so far, but they cannot be ruled out without further analysis.

Commissioner Mahony asked if equipment costs were assessed nationally or only within Massachusetts. Prahl said that the Heat-Pump Market Effects Study looked at wholesale equipment costs in Massachusetts and that we do not know for sure what is driving the increases in equipment costs. Prahl said that there are similar trends in heat pump costs worldwide during the study period and that the current iteration of the study includes other states.

Abbe asked if total project costs included electrical upgrades in addition to heat pump equipment. Prahl responded that the total project cost is the all-in system cost, including equipment, labor, and ancillary charges. Abbe said that payments outside of the program, such as

electrical upgrades via an outside contractor, would not be reflected in the total project cost. Prahl confirmed.

Weber asked how heat pumps could be performing higher than rated. Prahl said that the heating seasonal performance factor (HSPF) rating is manufactured, so it is possible for the equipment to perform better than their rating.

Abbe said that in the Heat-Pump Metering Study, two-thirds of the systems performed below their rating and asked if the study explored the potential link between less-than-ideally performing systems and contractor skepticism of full displacement. Prahl said that the Heat Pump Metering Study analyzed this potential relationship. Prahl added that contractors are not being irrational in their skepticism; the programs are asking people to use unfamiliar systems to keep themselves warm. Prahl said that he does not see reason to believe that the skepticism is resulting from underperforming equipment. Abbe asked in what ways do the PAs use study results to impact program evaluation and delivery. Prahl replied that the Heat Pump Metering Study produced impact factors that were fed into the 2025-2027 Plan. Prahl said that this study was not intended to produce specific impact factors, but it served as a diagnostic take on whether there were issues within the heat pump programs.

Commissioner Mahony said that this is a great reminder for people to get their heat-pumps serviced each year and asked for clarification on how systems were identified for inclusion in the study. Prahl said that the population was a random sample of program participants, and there was no element of contractor selection. Prahl said that the study zeroed in on subsets to address the specific research questions.

Fleuren said that he appreciated the breakdown of these reports and said that trends in the field indicate more under-sizing than over-sizing of heat pump systems. Fleuren said that, from a program perspective, we should not overcorrect out of fear of oversizing. Prahl said that the best insights on those issues have come from questions on the contractor survey regarding how they approach sizing heat pump systems. Prahl said that this indicator is moving in the right direction and that he trusts the contractor interview results more than the study results at this time.

Beote asked if dirty filters can be mitigated through regular maintenance. Beote also asked if the studies assessed how many heat pumps were coupled with weatherization, particularly the systems that were undersized. Beote said that under sizing issues could be mitigated with weatherization. Prahl said that he was unsure if that was part of the current study, but it was not assessed in the Heat Pump Metering Study.

5. EEAC Subject-Matter Expert

Murray presented the mission, programs, and support provided by the Acadia Center. Murray described how the Acadia Center's work relates to the issues that the EEAC has interest in, including energy burdens, grid modernization, and fossil-fuel phase-out. Murray said that the Acadia Center views energy system issues wholistically and intervenes in DPU proceedings wherever possible. Murray emphasized that Massachusetts is working on many different

proceedings, which are all important and worth doing, but the capacities of non-profit organizations and State agencies are stretched thin.

Bodemer said that the regulatory landscape is complex and interconnected, and decisions made in one docket influence those made in others. Bodemer asked what role the Acadia Center plays in docket participation. Murray said that the Acadia Center promotes the transition to a decarbonized economy that is affordable for everyone. Murray said that Acadia Center seeks to figure out the balance between affordability and decarbonization.

Rose commented that the Office of the Attorney General (AGO) has a dozen attorneys tracking these proceedings, and he commended Murray for following all of the proceedings himself. Murray said that he often represents the Acadia Center, but he does have help. Murray said that he is also the Director of State Program Implementation at Acadia Center.

6. 2025 EEAC Consultant Team: Introductions

The EEAC Consultants reviewed their organizational chart and core work areas for the Council and described their personal backgrounds.

Rio left the virtual meeting at 2:43 PM.

7. Commercial & Industrial (C&I) Sector Update

PA Presentation

Kessler, Willingham, and Lippert, on behalf of the PAs, provided updates on key topics in the C&I sector such as electrification, existing building commissioning (EBC), technical assistance, school decarbonization, and small-business offerings. They also identified program enhancements included in the 2025-2027 Plan.

EEAC Consultant Presentation

Caesar, on behalf of the EEAC Consultants, described priorities and approaches for two C&I-focused forums: the C&I Management Committee and C&I Working Group.

Council Discussion

Winner asked for the incentive limit for heat pumps, as the PAs excluded them from the 100% enhanced incentive offer. Lippert replied that the PAs will apply the same per-ton incentives used for the rest of the C&I sector and that the incentives will range from $2,500 to $4,500 per ton. Lippert explained that the PAs did not want to distort the heat pump market by covering 100% of the costs for eligible small businesses.

8. Air Source Heat Pump Refrigerants

DOER Presentation

Finlayson, on behalf of DOER, presented an overview of the transition of the regulation of refrigerants in Massachusetts and potential impacts on decarbonization and energy-efficiency projects.

Council Discussion
Abbe said that the PAs have aggressive heat pump goals, but it will take time for the contracting community to become comfortable with the regulatory code changes. Abbe asked how the code changes may impact heat pump production. Finlayson said that DOER wants to engage with the code changes, not mitigate them as a potential issue. Finlayson said that DOER does not want to see confusion or concern that leads to project delays, so reassured building designers and developers that it is legal to install equipment. Finlayson said that DOER has received inquiries from heat pump manufacturers but have not heard of any delays yet. Finlayson said DOER is promoting the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) pathway because it streamlines construction. Abbe said that emergency fuel shutoff measures were proposed as potential safety measures for a few projects, so these projects may not be following the ASHRAE approach. Finlayson said that the newer equipment has integrated leak detection, which will likely mitigate the need for additional safety measures. Commissioner Mahony said that Section 45 of the 2024 Climate Law legalized A2L refrigerants in Massachusetts.

Rio rejoined the virtual meeting at 3:46 PM.

9. Massachusetts Building Decarbonization Clearinghouse

DOER Presentation
Bodemer, on behalf of DOER, provided a briefing on the Building Decarbonization Clearinghouse, a potential centralized resource to help customers navigate the range of programs and offerings available for reducing greenhouse-gas (GHG) emissions. Bodemer summarized proposed options for the Clearinghouse and stakeholder feedback.

Council Discussion
Bodemer asked that Councilors email any written feedback or questions to DOER.

10. Adjournment

Bodemer, on behalf of the Chair, adjourned the meeting at 4:00 PM.

Meeting Materials:
- Official Meeting Notice
- Meeting Link
- Agenda
- January 8, 2025 EEAC Executive Committee Meeting Minutes – DRAFT
- January 22, 2025 EEAC Meeting Minutes – DRAFT
- 2025 EEAC Budget Proposal 2.21.25 Correction
- 2024 Climate Law Update
- Feb. PA Update
- EMV Presentation
- Acadia Center Introduction
- C-Team Introductions

- Program Administrator Commercial & Industrial Sector Updates
- Consultant Team Commercial & Industrial Sector Updates
- Feb 2025 Refrigerant Transition Overview
- Decarbonization Clearinghouse Briefing