

MEETING MINUTES

Tuesday, August 18, 2015

100 Cambridge St, 2nd Floor

Conference Rooms C&D

Boston, MA 02114

Councilors Present: Judith Judson, Brad Swing (for Austin Blackmon), Amy Boyd, Larry Chretien, Betsy Glynn, John Howat (for Charlie Harak), Donald Boecke (for Maura Healy), Elliott Jacobson, Paul Johnson, Alana Murphy (for Chrystal Kornegay), Richard Malmstrom, Justin Davidson (for Michael McDonagh), Robert Rio, Nancy Seidman (for Martin Suuberg), Trish Walker, Cindy Carroll, Elizabeth Cellucci, Maggie Downey, Fran Cummings (for Paul Gromer), Emmett Lyne (for Mike Sommer), Frank Gundal (for Tilak Subrahmanian), Carol White, Eric Winkler

Councilors Absent: Deirdre Manning, Michael Ferrante, Andrew Newman

Consultants Present: Eric Belliveau, Jeff Schlegel, Glenn Reed

DOER Staff Present: Ian Finlayson, Lyn Huckabee, Maggie McCarey, Alex Pollard, Steve Venezia, Alissa Whiteman

Others Present: Marie Abdou, Matt Nelson, JoAnn Bodemer, Shaela Collins, Jonathan Goldberg, Lisa Shea, Jodi Hanover, Jeff Leupold, Cara Mottola, Riley Hastings, Melanie Coen, Tabitha Vigliotti, Christopher Long, Amy Vavak, Dennis Pasqualino, Greg Krantz, Brandy Chambers, Rita Carvalho, Jessica Buno, Kathryn Wright, Amanda Helwig, Sharon Weber, Clayton Hale, Sam Milton, Sean Callahan, Kristen Demeter, Igor Zhadanovsky, Daniel O'Leary, Dave Gibbons, Larry Simpson, Chris Plecs

1. Call to Order

Judson called the meeting to order at 10:06 am.

She thanked the Councilors for accommodating the change in meeting schedule.

2. Public Comment

- a. Igor Zhadanovsky (AEC) shared with the Council a new vacuum heating technology for steam heating that is best suited for multifamily buildings. He spoke about the savings realized in a pilot program with National Grid that proved savings during our tough last winter. He wanted to follow up with someone about how he can bring this technology in to the Massachusetts market. In response, Finlayson offered to post a presentation about the technology on the EEAC website.

- b. Sean Callahan (Able Restoration, Inc.) suggested creating a program to pilot distributing leads from the statewide HES resources with Home Performance Contractors (HPCs). He connected the idea to the EEAC resolution instruction to improve customer experience because HPCs serve customers throughout the entire project and don't require them working with separate contractors. He also stated that the marketing dollars HPCs spend finding customers often result in them going through the statewide HES queue because they find the number when they research the program. The suggested pilot would give 25 leads per analyst per week for a year so they can analyze whether the HPC close rate and savings results improve using warm leads. In addition, he contends that HPCs can better serve underserved areas like Brockton and that they could serve customers faster in the winter when the lead vendors' wait times are long.
- c. Dennis Pasqualino (AAArden, LLC) informed the Council of additional issues facing HPCs. First, he suggested that HPC work should be inspected by a company that doesn't provide energy assessments (like the lead vendors do) because a company that does is a direct competitor of the HPC which is a conflict of interest. He was also concerned about the fact that HPCs are scored on the merit of their service but those scores aren't compared directly to the merit scores of the lead vendors. In addition, he expressed concern about the unilateral removal of one HPC seat from the Best Practices Working Group (BPWG) without any discussion among the group. His comments speak to the 7/21/15 EEAC Resolution section (B)(g).
- d. John Perrier (New England Green Homes) reiterated the comments offered by Callahan and Pasqualino.
- e. Judson then thanked the commenters for their thoughts and assured them that contractor concerns are of concern to the administration.

3. Updates

- a. Judson recognized Ralph Prah for receiving a lifetime achievement award from the [International Energy Program Evaluation Conference](#).
- b. Judson offered DOER staffing updates. Maggie McCarey is leaving for graduate school. Her position will be posted soon. The EE Division Director has been chosen and will be announced after 9/1. She also thanked Finlayson for this work as acting Director.
- c. EEAC Meeting Minutes – July 14th
Rio motioned to approve the minutes as submitted. Boyd seconded. All were in favor with no opposed (Manning absent). The minutes were approved as submitted.
- d. EEAC Meeting Minutes – July 21st
Boecke motioned to approve the minutes as submitted. Rio seconded. All were in favor with no opposed. Glynn abstained. The minutes were approved as submitted (Manning absent).
- e. EPA Clean Power Plan update
Seidman offered the update and also proposed a follow up webinar for more in-depth details. The EPA Administrator signed the plan on 8/3 at the White House targeting a 32% GHG reduction from fossil fueled power plants by 2030.

Massachusetts won't need to change a lot in order to comply. The EPA has published an extensive [website](#) on the plan which includes several concise fact sheets. The DEP is still in the process of reviewing the 2,000 page document that has not yet been published in the Federal Register but the current version is considered final. Energy Efficiency (EE) is not included in state targets but it can be considered as a way to comply either through a mass program (e.g. RGGI or other cap & trade system) or a rate based system. The biggest action expected would be minor changes to our RGGI rules. She suggests reading a [summary of the plan](#) from Howard Geller of SWEEP and EPA's [EM&V Draft Guidance](#). The plan could result in more national convergence of EM&V practices.

4. Q2 Results

Matt Nelson (Eversource) and Marie Abdou (National Grid) presented on the Q2 results. The highlights include that electric spending, savings, and benefits are ahead of where they were in both 2013 and 2014. The electric side is relying heavily on the residential sector to account for their performance and expect a typical hockey-stick effect pushing commercial activity toward the end of the year. They expect the 3 year portfolio goal to be met, as they are at 75% right now. The gas side has required higher spending for flat savings as was expected after the most recent evaluation results. They expect to meet their 3 year portfolio goal because they are currently at 88%. Both sectors anticipate finishing at more than 100% of their lifetime savings targets with annual and budgets closer to 100%.

Johnson asked for an explanation of the performance of the C&I sector which was tracking well behind the 50% target for Q2. PAs explained the hockey-stick phenomenon which illustrates that commercial customers tend to commit to projects in Q4. They also reiterated some previously reviewed points including C&I LED performance, diminished potential in customer studies, and the fact that C&I has in fact trended upward over the past 3 years.

5. Demand Reduction

Carol White (National Grid) presented an overview of demand reduction potential within energy efficiency. Cost effective DR is allowed by the Green Communities Act and was flagged as a priority by the 7/21 Council resolution. It can take the form of long term energy efficiency and deferred capital investments for the narrow window of peak hours. Additionally, load management sculpts load curve to optimize existing infrastructure and avoid future capital investments. DR benefits include grid reliability, geo-targeting, deferred capital investments and balancing of supply and demand. PAs are working with Consultants on a DR strategy for the next 3 year plan that would cover both wholesale and retail ISO markets.

This strategy can't be finalized until the [US Supreme Court rules on a challenge](#) to an RTO's current Demand Response plan. Although the decision wouldn't prevent utilities from executing DR programs, it would change how they fit in to ISO market planning. Considerations will include the costs, benefits, customer perception, and resource gap analysis. They will also consider DR as a piece of their grid modernization efforts.

In order to craft a DR strategy, the AESC study would need updating to better represent savings associated with the activity. 4 NE states have agreed to analyze the issue. The avoided cost question is also complicated by efforts to geo-target. Nantucket was offered as an example; if you invest in avoiding a transmission line to a specific place, do you use statewide avoided costs or the costs of just that project? Statewide would undervalue the benefits and local might overvalue the benefits statewide.

The PAs are committed to taking action on DR but the above factors speak to the need for flexibility in the upcoming plan. They don't have enough certainty now to outline details in October. They expect that 2016 will be a year of demonstration and research so they can devise a detailed DR strategy for 2017 and 2018.

Judson asked if the PA DR efforts include both summer and winter peaks. Winkler clarified that the ISO doesn't have a value for winter peak. Schlegel added that the information needed to start considering the possibility will be available later this year.

Jacobson reminded the Council that any DR efforts need to consider low income customer equity and wanted to ensure that LEAN is included in discussions.

Johnson felt that the presentation wasn't enough of an update on the working group progress considering the focus on DR recommended in the winter EEAC workshops. White explained that her presentation gave specific details about why more specifics weren't available for this presentation.

Chretien would like to see a best practices analysis of DR efforts from other jurisdictions, a presentation from the ISO about their current position on winter peak valuation, and an updated briefing on grid modification filing effect on EEAC. White assured him that they were doing a best practice analysis.

Swing inquired about presenting results of a City of Boston energy study funded by the CEC and completed by Christoph Reinhart of MIT. He thinks an opportunity for DR geo-targeting may arise from the study.

Malmstrom wanted to better understand the cost differential between statewide and geo-targeted DR projects. White elaborated on the process clarifying that they can analyze geo-specific costs but they need to deconstruct the avoided costs across the state so they don't overstate the benefits outside of the area. She also discussed the need to geo-target non-energy benefits.

Johnson would like to participate in the DR working group if LEAN is allowed to participate. White cautioned that participation of Councilors outside of LEAN which has a unique statutory role in the programs may be a violation of Massachusetts' open meeting law. DOER promised to follow up.

Finlayson reminded the Council that DOER did a winter DR program with NEST and is currently doing a summer DR program. Results will be available in the spring for consideration.

Schlegel reiterated the importance of maintaining flexibility. He wants to avoid the need for a side plan that will require a subsequent regulatory review process.

Judson reminded the Council that peak demand is a priority issue for the Administration and a flexible timeline is ideal if it helps us move forward. Boyd was happy to see the presentation and to see better coordination between EE and DR.

6. EM&V Update

Matt Nelson (Eversource) delivered the EM&V update presentation. Significant impacts expected from the latest round of studies including:

- C&I Custom *** study which will impact Columbia Gas
- The C&I custom gas net-to-gross study
- Custom electric HVAC study – a significant decrease
- Residential multifamily impact study – could seriously threaten the cost effectiveness of the program
- Cool Smart incremental cost study – a potential risk
- C&I LED market effects and spillover study – could justify minor benefit

Glynn asked if the multifamily study only tested the residential activity in a building or if the commercial activity was studied. Nelson clarified that the study was a billing analysis of both residential and commercial meters.

Johnson inquired about the schedule for the residential customer profile. Nelson replied that there have been some vendor issues that still require resolution before it can be finished. Johnson then asked about how the C&I custom gas study was conducted. Nelson replied that the vendor metered the actual equipment installed.

Schlegel expressed concern about the 10/31 filing deadline because the studies might not be done in time for the final submission to the Council before 10/31 which is due 9/18. Nelson assured him that only two studies (MF Impact and LED spillover) were at risk of not being ready on time and that they expected the rest of the completions by the 9/18 deadline. Schlegel also asked for a ballpark estimate of the net effect of EM&V. Nelson estimated that both sectors would take a net hit from EM&V. Finlayson countered that estimate by recounting a conversation when Prahl assumed that the effects would be net positive and that the overall trend is an important factor in determining the achievability of goals.

Seidman requested an update to the chart presented to clearly reflect that positive or negative impact the study will have on the program(s).

7. Key Drivers Negotiations

Belliveau presented on behalf of the Consultants and Nelson/Abdou presented on behalf of the PAs. The original discussions focused on higher level analysis. The presentation focused primarily on differences in costs.

Nelson/Abdou presented on the PA planning methodology which uses 3 prongs: bottom-up, evaluation, and top-down. They start bottom-up by analyzing historical performance, program enhancements, vendor market assessments, and cost effectiveness. They then take those preliminary estimates and apply current evaluation results. Evaluation can study impact of historical programming, markets, process effectiveness, codes and baselines, bill impacts, customer experience, portfolio risk and reward, and the cost-effectiveness of new measures. Once the estimates are refined by evaluation, PA management then adjusts using top-down methods of planning which include big-picture market concerns and execution of corporate policy.

Belliveau assured the Council that the parties are in agreement about the bottom-up analysis and that the divergence lies in the assumptions about the future. However, future projections have changed from the discussions. He reminded all that a \$.001 per lifetime kWh saved divergence in estimates represented ~\$43.6M. For gas, \$.001 per lifetime therm savings represented \$1.3M. These numbers illustrate that a seemingly minor difference in the estimate for cost to achieve will represent a lot of ratepayer money. The consultants have increased the cost to achieve at the proposed level of savings but are still at a \$470M electric gap as of 2018 (based on technical analysis – this does not include the top-down planning element). The estimates are closest in the C&I sector. The gas gap is more stubborn at \$129M. For portfolio mix, PA and consultant proportions are relatively similar but the consultants assume a bigger pie.

The parties have also encountered differences in cost to achieve between PAs. For electric, CLC is the highest and Eversource is the lowest. For gas, Grid is the highest and Berkshire gas is the lowest. Some rates are as much as 2.5 times higher than the lowest. Many of the differences can be attributed to what individual PAs decided to do.

Nelson and Abdou responded to the consultant narrative. The differences in the C&I sector are primarily qualitative. For instance, parties agree on the extent of the C&I lighting opportunity but differences on levels of CHP and lighting are driving the electric cost gap. The outstanding issues include the timing and levels of savings and the balance of the portfolio. The issues in progress include in depth review of C&I lighting data, C&I gas evaluation results, and identification of errors that will close the gap. Remedying gas evaluation errors should increase the net savings while decreasing the net costs.

The PAs made several adjustments in their residential estimates. They agreed with the Consultants on the reassessed opportunities which resulted in increasing the quantity and decreasing the estimated cost of lighting. They agree to expect the cost of Home Energy Services to increase because of material enhancements including non-regulated fuel services. There is still a gap in total LED share but it has narrowed. They still face a gap on behavior estimates. The electric gap has narrowed from 28% to 12%. The gas gap has narrowed from 25% to 17%.

Belliveau attributed much of the persistence of gaps to the level of risk inherent in the assumption. He reminded the Council that they have a tool to manage the risks associated with planning 3 years in advance which is the mid-term modification process. Schlegel added the MTMs are a surgical precision tool and that they are currently forecasting on a broad scale.

Cummings asked how non-regulated fuels would influence the cost to achieve. Abdou explained that changes to the RCS regulations would increase the \$/kWh spent without a corresponding annual kWh saving increase in favor of an increase in the lifetime benefits of the program.

Johnson was not satisfied with the report on the key drivers group results. He would like a chart that lists all of the measures in the portfolio with their savings, incentive costs, volume, and the delta between PA and Consultant estimates. Abdou explained that measure level information is included with the plan but the key drivers analysis is designed to explain why those differences occur.

Seidman expressed concern about the state of the gap at this, the last Council meeting before the September due date. She encouraged the Council to support lower cost estimates because they can add more later. Abdou challenged that recommendation because the PAs prefer to tie cost increases to savings increases. Seidman then sought clarification on how bill collections and performance incentives will be covered if something happens like a precipitous drop in the cost of LED bulbs. Abdou reminded her that the Department is considering annual reconciliation. Seidman also expressed concern about the differences between the PAs in their assumptions.

Judson would like to see the impact of non regulated fuel savings quantified. She would also like to see the next presentation reflect PA April vs. PA Sept vs. Consultant estimates for costs and savings.

Swing would like information at the next meeting that helps him better understand the use of MTMs. Boston values managing bill impacts so he wants to better understand the interplay between broad forecasting in advance and precise targeting in real time. Abdou gave some general background but pointed out that previous MTMs have been miniscule in comparison to the current estimate gap so we need to ensure broad support for the plans first.

Belliveau advocated for maximum detail in the September draft plan because baselines specifics help make MTM decisions later on.

Downey offered to present to the Council (after the plan is filed) on why there is such a significant delta in the cost to achieve estimates between the CLC and other electric PAs. She explained that municipal aggregation status drives significant differences in costs. Judson asked the Consultants to follow up on Downey's offer.

White reminded all that the savings goals are higher than anywhere else in the country which is inherently risky. PAs need the resources to execute in light of that risk. She agreed with Abdou that they should first focus on drafting an executable plan before relying on MTMs.

Judson expressed an expectation that costs will decrease by the September draft deadline as the result of hard work by both parties. She then pointed out that meetings for the rest of the year were printed on the back of the agendas handed out and clarified that the next EC meeting was on 9/24 and the next (and final before filing) Council meeting was on 9/30.