

# C&I Working Group June Meeting

Thursday, September 7th, 2023

1:00 PM - 3:00 PM

Zoom Meeting

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## Meeting Attendees

Nina Mascarenhas, Lisa Zagura, Jason D'Antona, Dennis Villanueva, Heather Takle, Krista Lillis, Jennifer Chiodo, David Chamberlain, Zack Lippert, Seth Federspiel, Carly Thibodeau, Yve Torrie, Frank Gundal, Robert Rio, Caroline Beaven, Lauren Martel

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## AGENDA

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| <b>1:00 PM – 1:05 PM:</b> | <b>Introductions</b>  |
| <b>1:05 PM – 1:10 PM:</b> | <b>Review Agenda</b>  |
| <b>1:10 PM – 1:40 PM:</b> | <b>Improving HVAC measure uptake.</b> <ul style="list-style-type: none"><li>• Presentation by Jason D'Antona</li><li>• Discussion</li><li>• Next Steps</li></ul>  |
| <b>1:40 PM – 2:10 PM:</b> | <b>Review and Prioritize Opportunities and Recommendations identified by the CIWG.</b> <ul style="list-style-type: none"><li>• Round Robin to get members' feedback on the following points:<ol style="list-style-type: none"><li>1. Does the revised organization of the spreadsheet improve the clarity of the information and is there anything to change or improve?</li><li>2. Are there any new topics that we should include? Any that we should remove?</li><li>3. What should we prioritize and how do we translate the opportunities to actionable items?</li></ol></li></ul> |
| <b>2:10 PM – 2:55 PM:</b> | <b>C&amp;I EEAC Planning Workshop Review</b> <ul style="list-style-type: none"><li>• Workshop materials can be found here: <a href="https://ma-eeac.org/august-24-2023-workshop-1-commercial-industrial/">https://ma-eeac.org/august-24-2023-workshop-1-commercial-industrial/</a></li></ul>  |
| <b>2:55 PM – 3:00 PM:</b> | <b>Plus/Delta – what worked well in this meeting, what can we improve?</b>  |
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## Meeting Notes

### Improving HVAC measure uptake

- Presentation provided by Jason D'Antona, Director of Engineering and Utilities at Mass General Brigham.
- *Slide deck provided separately.*
- Questions and Comments:
  - The PAs excel at pushing projects that have a quick turnaround like lighting. The MRDs and results for this project type are based on average savings. The suggestion is to streamline the [HVAC] process and mimic the prescriptive program where the rules are very clear to improve progression towards goals.
  - Are these trends you're seeing across all projects or only in these four examples?
    - The projects that were selected are representative of a larger problem.
  - The PA representative responded that all recommendations sound reasonable and straightforward for the PAs to increase throughput and to make the process less cumbersome for customers. A large portion of energy savings in the past have come from lighting projects. As the program gravitates to having HVAC be a larger portion of the savings portfolio, it makes sense to start focusing on how we can improve this process. We should look at the offerings for HVAC to see how we can make them more prescriptive or 'Custom Express', as we are doing for BMS and retro-commissioning.
  - A point in the presentation relates to a CIWG recommendation made last year: Having a single PA point of contact to help when the process is taking more time than anticipated. The recommendation for a transparent and clear workflow aligns with the recommendations made as well.
  - The PA representative responded it might not be fair to compare lighting and HVAC because lighting works in a similar way across industries. HVAC has many more variables, especially in hospitals. There will be more of a challenge to get HVAC measures to a more prescriptive path.
    - The biggest problem is a lack of consistency. The end use may be different but the fundamental understanding of how the technology works from an electrical and mechanical engineering perspective is what is needed to support program goal achievement and ease participation.
    - [HVAC projects] will likely never get to the point that lighting was at, but if we can come together across the PAs, TA vendors, and industry experts to determine what is required to get a project processed, it will increase the throughput. One of the biggest issues from the customer's perspective is that the rules are not

always the same across projects and PAs. If we can come to a documented agreement for what is acceptable it will make the process go much faster.

- This discussion will be followed by an HVAC taskforce with membership from the PAs, the CIWG and associated subject matter experts. Taskforce to meet separately and report out to CIWG (see below).

#### **Review and Prioritize Opportunities and Recommendations identified by the CIWG.**

- The CIWG Opportunities and Recommendations tracker has multiple tabs, each with an area of opportunity identified by the CIWG, to make the information clearer. The tabs include the recommendations and activities that have already been identified pertaining to each opportunity.
- We are seeking to ensure recommendations and opportunities are as clear and streamlined as possible.
- Questions and Comments:
  - There is a lot of confluence or overlap in the recommendations and ideas. Looking over the tab content can determine if what is covered is specifically applicable to that tab or may apply more broadly.
  - Having a forum about electrification and decarbonization in the November session may cover more of the electrification tab.
  - The format of the spreadsheet is appreciated but for planning purposes it was suggested setting up sub-working groups to address some of these issues and ideas outside of the main session. This way recommendations can be brought up in the following full group meeting, thereby using the quarterly meeting time more effectively.
    - Focusing on HVAC is a good idea because it seems like we can have the most impact there.
    - Working on any one of these tabs, also works on efforts in other tabs simultaneously because all the ideas and issues are interconnected.
    - It doesn't make sense to divvy out individual topics from one tab to separate groups. Given the group participation, it may not make sense to work on multiple tabs at once outside of the main sessions.
  - Overall, the opportunities are not mutually exclusive. It may help to combine some of these rather than have separate tabs.
    - If the recommendation for example is to improve communication in the HVAC custom process, we put that under the HVAC tab.
  - It was mentioned the group should dive into an opportunity area and work through the kinks of the process as they arise.
    - As recommendations develop, it is likely the recommendations or major ideas may be applicable across more than one tab.

- Next steps recommendation:
  - Task Group to advance recommendations to increase production of custom HVAC projects:
    - Jason D'Antona was appointed HVAC Taskforce chair. The task group chair will establish a subset working group including representatives from the PAs and from C&I customers. The group will decide how many times they need to meet. Once the group is satisfied with their resolution, they will bring this to the CIWG for feedback.
    - The recommendations will require coordination with the consultants, the PAs, and the customers. The task group should consist of volunteers that make up a good mix of diverse viewpoints.
  - The group will prioritize HVAC then Electrification with an additional focus on Communication.

#### **C&I EEAC Planning Workshop Review**

- *Slide deck provided seperately*
- Questions and Comments:
  - Slide 5 '1A. Lay Foundation for Energy Transition' - Undertake a high-volume existing building commissioning offer that provides EBCx studies to 2,200 medium and large customers and implementation of measures for at least 1,200 customers by 2027. Studies should address priority end uses and identify capital improvements as well as low/no-cost measures.
    - This recommendation is greatly supported by the PAs and workshop attendees.
    - Retro commissioning is a snapshot in time, usually re-establishing setbacks that were not there or were bypassed. It would be helpful to ensure that the program, at the time of the commissioning, allows for or subsidizes instrumentation to allow ongoing monitoring of the improvement. If you implement the setback at the time of the commissioning it gives both the customer and the PA, the ability to go back after a period and make sure the measure is still working.
    - The ROI calculation is based on a measure life that may not be accurate for the actual measure.
    - Are the BCRs as high for monitoring based commissioning as retro-commissioning? 14:1?
      - There is no data on that currently. There was an ACEEE paper that compared the cost for existing building commissioning and monitoring based commissioning buildings of a similar size. Costs and savings were similar.

The difference between them is that you have more persistence of savings over time with monitoring-based commissioning. It is likely that the BCRs would be similar, however with longer lifetime savings the monitoring-based commissioning might be higher performing.

- What vendors out there can do this and can ensure that they can provide the deliverables. Having folks that understand full building design and the operation details is important.
- Relative to the increased EBCx Study delivery, the budget needed to support this effort would be about an 18-fold increase compared to what is being done. There are additional concerns about the workforce needed to accommodate this new amount of work. – There was documentation provided that the market may be able to accommodate this increase in installation goals by putting this increased objective into the marketplace.
- Paying for the full cost of the existing building commissioning studies as documented in the workshop brief would be \$165M to the S.T.A.T. (Sales, Technical Assistance, and Training) budget. In the past the DPU has discouraged budgets that increase S.T.A.T. budgets dramatically.
  - TA studies cost split are part of the S.T.A.T. budget
  - It would be helpful to see if there is a way to change the consideration for STAT budget adjustments.
  - This is a customer benefit so convincing the DPU that this would be beneficial is something that would be worthwhile.
  - Could additional EBCx incentives go under the ‘Hard to Measure’ category?
- Slide 6 ‘1A. Lay Foundation for Energy Transitions’- Facilitate Decarbonization Planning
  - The counselors didn’t seem to support the recommendations on this slide as much. Where and who this sits with is important. This is valuable information for customers to have but the most cost-effective way of implementing it should be taken into consideration.
  - The clearing house could potentially be a good place for this at some point. Gas and Electric PAs could work together to develop an integrated a decarbonization planning guide for C&I customers
  - At some point it may be best to have decarbonization planning as part of the clearing house, but the clearinghouse is still conceptual, so this could cause delays.
  - Storing and tracking plans could get tricky. Customers are often dealing with multiple PAs on one project so this could get tricky.

- When it benefits the PAs, they usually make it work but there could be some difficulty.
  - The PAs role would be to develop the guide, but they wouldn't lead the process. The leaders would be qualified providers, like the TA providers. Mass Save is a party to support the customer in doing the planning but not responsible for doing the planning.
  - Would it be appropriate to limit the proposed PA role in decarbonization planning to scope one and scope two? Decarbonization may be a word that needs a little fine tuning to describe exactly what would be covered. Consumption Reduction or Electrification may be better phrasing for the second scope.
  - If it is in the interest of the Commonwealth to have a comprehensive guide, then what other resources could be provided and what role would the PAs play? If it is going to be more on the aspects of buildings and the operations around buildings, then perhaps it should be limited to scopes one and two as suggested.
- Slide 10 'II. Deliver Services to Drive and Accelerate Savings':
  - Apology from the PAs: Recommendation two during the workshop did not get a fair discussion because the PA representative essentially said what was presented was already being done. This is not the agreed to PA response. The intent was to agree directionally with the recommendations, do some elements of all the recommendations, and have room to expand and improve. This was not conveyed in the workshop.
  - Enhanced coordination between PAs engineering teams and Account managers is a desired outcome.
  - Having a central warehouse or program where all of project information is saved would enhance the process and the communication between the customers and the PAs.
- Slide 12 'Track, Use, and Share Data':
  - Aggregated data that communities can access is needed. It is important to have a consolidated database. There is a lot of DOE and EPA money flowing, especially for Environmental Justice Communities, and it would be helpful to understand those communities and their participation so they can help address challenges and needs within the communities.
    - The Customer Data Profile is up on the DNV website, and it covers data and participation regarding the EJCs.
    - This is helpful but it would be more helpful to have data that is a little bit more granular. This conversation could be continued offline.

**Plus/Delta – what worked well in this meeting, what can we improve?**

- Positive feedback on the format.
- The charts made based on feedback is greatly appreciated.
- Any opportunity to find ways to speed up the work being done is greatly appreciated.
- Regarding the input on the EEAC C&I Workshop Recommendations for the next 3 year plan; the recommendations should have been reviewed by the CIWG before going to the EEAC. Continued alignment of the EEAC working group and the CIWG would be greatly appreciated.
- The [HVAC] task force will help to increase the speed at which progress is made.
- There were time constraints regarding the recommendations but the feedback from the CIWG is valued and appreciated.