



MTAB Meeting Notes

March 5, 2026 | 1-4 p.m.

Virtual Meeting

Welcome, Agenda & Conflict of Interest Declarations

Stacey Hobart opened the meeting by introducing MTAB members and reviewing CalMTA's internal and MTAB conflict of interest policies. Jennifer Green noted that MCE is a community choice aggregator seeking to utilize and incentivize some of the technologies on which MTIs focus. Stacey confirmed that this does not represent a conflict of interest and that CalMTA seeks to work in concert with these external programs while minimizing overlap and duplication of efforts.

She then asked MTAB members for any comments regarding draft notes from the previous meeting (1/29). No MTAB comments were received. One member of the public noted a previously submitted public comment not reflected in meeting notes; CalMTA committed to investigating and updating notes to include this comment.

Commercial Rooftop Units (CRTUs): Appendix I Feedback Themes and Updates to MTI Plan

Rick Olson-Huddle shared a summary of the feedback received on the draft CRTUs MTI Plan via the public comment period on the CPUC PDA site, as well as actions taken by CalMTA in response to these comments. Common themes included: (1) concerns about mandating specific technologies, (2) cost and customer economics, (3) uncertainty about contractor adoption of connected controls and commissioning (CCC), and (4) lack of clarity in some definitions. MTAB comments and questions included:

- If the CEE "Advanced Tier" specification, which CalMTA's CRTU Tier 2 currently aligns, changes will CalMTA also modify their tier?
 - Rick clarified that CalMTA plans to keep the tier as currently established (targeting cooling efficiency at least 20% above the federal minimum standard) since that is how savings have been modeled.
- How will variable-speed compressors (VSP) be addressed in the 20-year MTI lifecycle, given that this is no longer part of the Tier 3 product definition?
 - Rick replied that market insight indicates that VSP will continue to gather momentum over this time -- Daikin recently introduced a lower tier VSP, Lenox released a VSP compressor on their high-efficiency unit, etc. While this will be important to moving the market forward overall, it is not a focus of the MTI.
- Is the goal for when the desired market end-state is achieved (CalMTA-defined CRTU products represent at least 30% of sales) ambitious enough?

- Rick noted that this aligns with our thinking to date and added that this goal is for Tier 3 products with all desired features. The percentage of sales for Tier 1 products is estimated to be much higher.
- Concerns about contractor adoption of CCCs go beyond installation -- there is a larger scope of work change involved when it comes to actual commissioning. How will training, compensation structures, and staffing change to reflect this shift to ongoing maintenance and continuous improvement?
 - Rick said that the training piece seems relatively easy to influence but it may be more challenging to shift the workforce toward responding to calls. CalMTA's planned demonstration projects should yield good insight into the contractor experience and opportunities for intervention.

Revised Induction Cooking MTI Plan Update: TSB & Cost-Effectiveness

Elaine Miller presented modifications made to the Induction Cooking MTI Plan based on CPUC guidance in the Nov. 20 Decision, which asked CalMTA to narrow its focus to 120V technologies (with and without battery backup). She discussed the resulting shift in strategy impacts and budget. MTAB feedback included:

- The new construction market has been removed as a key target, but why would 120V products with battery not make sense for these buildings?
 - Elaine replied that it might, but market feedback indicates that it is not a significant play.
- Looking at the revised budget, why has the budget for supply chain engagement doubled?
 - Elaine clarified that 120V inductions products are a newer technology still in the early stages of development, so there is more complexity and more engagement needed to motivate development, encourage market deployment, and support related issues like ENERGY STAR certification.
- Has CalMTA had any conversations with major manufacturers about 120V battery products?
 - Elaine confirmed that CalMTA has been engaged in discussions with manufacturers for some time and that response has been varied: some manufacturers are very interested and want to bring it to their product development team, others say the batteries aren't ready for this mass deployment.
- Are 120V products with no battery really positioned for mainstream adoption? They seem to have limitations on cooking capacity.
 - Elaine said that preliminary research indicates these products won't be for everybody but that there are market segments where they are better-suited, particularly given the significantly lower cost.

Karen then provided an update on how adjustments to the MTI Plan impacted forecasting, including incremental adoption and measure costs as well as Total System Benefits (TSB). MTAB comments and questions included:

- Does CalMTA have data about how many range change-outs occur annually in California and what share of the retrofit market this represents? Karen said she would look up this data and report back after the meeting.
- The incremental adoption approach seems reasonable but there may be some spillover into the 240V market even if MTI is focused on 120V technologies.
 - Karen noted that CalMTA's forecast for 240V products shows some decline from the original forecast but still assumes interventions related to increasing awareness and interest in induction products will positively affect adoption of 240V products.
- Does that mean CalMTA will be able to claim some savings from 240V products?
 - Karen replied that the methodology for this has been extensively discussed. CalMTA believes that as a result of the investment in the MTI, there will be greater adoption of 240V products than there would be without the MTI.
- Is there a feature-to-feature comparison between the baseline product (gas ranges) and induction, which often has many special features to enable an apples-to-apples comparison?
 - Karen said that CalMTA conducted a broad survey of available products to establish a composite price based on those models vs. attempting a feature-specific comparison.
- How is the 10% decrease in market adoption of 120V products with batteries (the dominant energy-saving technology in this MTI) related to the 30% decrease in MTI energy savings?
 - Karen clarified that energy savings (gas + electric) are relatively low for most product types but more positive for battery-enabled units, so taking out 10% of those products has a significant impact on total savings. There are many different products included and six market segments, so quite a few variables at play. She said that she would follow up to provide additional information to MTAB. The follow-up response has been appended to these meeting notes.
- The recent CPUC Decision states that future MTI Plan applications must include sensitivity analyses in cases where cost-effectiveness is marginal. It is not required for the Induction Cooking MTI Advice Letter, but CalMTA should be prepared to respond to a question about this from the Commission.
- When proposing revisions to the Induction MTI, it would be beneficial for CalMTA to share its valuable discussion of trade-offs related to the narrower product focus. This helps illustrate how organic MTIs are and it's not just about replacing widget X with widget Y with no impact on the overall market - the whole picture is really important to keep in mind.

2026 Operations Plan & Budget

Lynette shared an overview of CalMTA's 2026 Operations Plan and Budget, which reflect recent guidance and strategy updates based on the Nov. 20 CPUC Decision. Various staff then walked through 2026 program milestones. MTAB feedback included:

- The budget indicates that CalMTA will seek to gather market data for residential initiatives. Is that not planned for the commercial MTIs?
 - Jeff agreed that data will be important to the commercial initiatives but is most critical to MTIs moving into market deployment, beginning with the Room Heat Pumps & Induction MTIs. It is relatively easy to add-on data for residential heat pump water heaters. Data needs for the commercial MTIs will be determined once they are approved for market deployment and move into implementation.
- Is there a comment or response period for the Induction Cooking MTI Advice Letter?
 - Lynette noted that there is a protest period, which CalMTA would have an opportunity to respond to.
- Within a year or two, CalMTA will want some sort of standard process for triggering a review of an MTI to see if it should continue moving forward. Market factors can evolve rapidly and may require a plan for deciding how and when we would re-evaluate.
 - Lynette acknowledged the importance of this and added that once implementers/evaluators are in place, this will be part of CalMTA's planning work.
- In considering this, CalMTA could look to policies established by NEEA about responding to market progress evaluation reports and obligations to third-party evaluators. While it is good to consider this, it is not urgent since CalMTA is just preparing to launch the first MTIs.

Jim Giordano then presented the 2026 Operations Plan Budget and its relation to the six-year budget authorized by the CPUC in its 2025 Decision. MTAB feedback included:

- CalMTA is making shifts now based on delays due to the required redesign of the Induction Cooking MTI and required application process for the second tranche of MTIs. The last application took almost a year, so the second tranche is likely to still be in Phase II in 2027. Should CalMTA make adjustments now to get ahead of that?
 - Lynette replied that the biggest impact on the 2026 budget came not just from the application process but from keeping the second tranche of MTIs in Phase II longer than anticipated, which requires ongoing market engagement and related work. To accommodate this, CalMTA looked for and will continue to identify efficiencies in operations and administration so that more funding is available for the second group of MTIs. The 2027-2031 budget allocations are still being revised and will likely go through a Tier 2 Advice Letter process to adjust as necessary.

- When will MTAB see the revised six-year table?
 - Lynette said this would happen at a future MTAB meeting, but the exact timing is still to be determined.

Public Comment

There were no public comments.

Next Meeting & Next Steps

Stacey shared the plan for upcoming MTAB meetings, including the virtual meeting scheduled for March 25, which will conclude the Res HPWH MTI Idea to Initiative sharing series with the TSB & Evaluation Plan. An in-person meeting in late April or early May will be used to present this information for the CRAWNS MTI. The next MTAB meeting after this will likely not be scheduled until the fall.

The meeting was adjourned.

Attendees

MTAB Members

Mary Anderson, Pacific Gas & Electric
Cyane Dandridge, SEI
Hayley Goodson, TURN
Fred Gordon, Context Consulting
Jennifer Green, MCE
Jeff Harris, Northwest Energy Efficiency Alliance
Peter Miller, Natural Resources Defense Council
Christie Torok, California Public Utilities Commission

Participating Staff & Consultants

Lynette Curthoys, CalMTA/Resource Innovations
Rachel Good, CalMTA/Resource Innovations
Jim Giordano, CalMTA/Resource Innovations
Stacey Hobart, CalMTA/Resource Innovations
Karen Horkitz, KSH Advising
Elaine Miller, CalMTA/Resource Innovations
Jeff Mitchell, CalMTA/Resource Innovations
Rick Olson-Huddle, CalMTA/Resource Innovations

Guests

Abe Cubano, TRC Companies
Abrielle White, RMS Energy Consulting
Allison Skidd, Rheem Manufacturing Company
Amruta Khanolkar, TRC Companies
Aubrie Hunt, Sonoma Clean Power

Barry Hooper, San Francisco Environment Department
Davi Ibarra, Southern California Edison
Emily Pelstring, California Public Utilities Commission
Erica Petrofsky, California Public Utilities Commission
Harshad Inamdar, Rheem Manufacturing Company
Kate Zeng, San Diego Gas & Electric
Maria Dahlin, N'de Apache Tribe
Martin O'Gorman, Summit Appliance
Marty Turock, Cleantech San Diego
Nicole Davis, Energy Solutions
Paul Campbell, ICF International
Peter Biermayer, California Public Utilities Commission
Priscilla Ortiz, Southern California Edison
Ritika Kumbharkar, Center for Energy and Environment
Robert Marcial, Pacific Gas & Electric Company
Savannah McLaughlin, California Public Utilities Commission
Sazi Bugay, FSI/Summit Appliance
Senait Forthal, OC Goes Solar

Response to questions from the March 5 MTAB meeting. Regarding questions and discussion about the decrease in the energy benefits component of TSB from \$36M to \$25M, which is disproportionate to the decrease in 120V battery-equipped units, the following clarifications have been provided:

- The forecast decrease in battery-enabled units is estimated at 17.6% – not 10%, as stated in the presentation. The slide bullet that erroneously stated 10% has been updated.
- TSB and its components (Energy, Grid, and GHG benefits) are calculated for each installation scenario, defined by the baseline equipment being replaced and the replacement equipment.
- The net decrease in energy avoided costs (30%) is not proportional to the 17.6% decrease in battery-equipped units (109 units) because that decrease is accompanied by an increase of 281 120V non-battery induction units.
- Non-battery induction units have negative avoided energy costs, which become increasingly negative over time.