

## RTR Appendix

Southern California Edison, Pacific Gas and Electric, Southern California Gas, and San Diego Gas and Electric (“Joint Utilities” or “Joint IOUs”) developed Responses to Recommendations (RTR) contained in the evaluation studies of the 2013-2015 Energy Efficiency Program Cycle. This Appendix contains the Responses to Recommendations in the report:

***RTR for the 2013-2015 Multifamily Property Manager Training: Impact and Outcome Study*** (Opinion Dynamics, Calmac ID #CPU0180.01, ED WO #ED\_O\_WET\_3)

The RTR reports demonstrate the Joint Utilities’ plans and activities to incorporate EM&V evaluation recommendations into programs to improve performance and operations, where applicable. The Joint IOUs’ approach is consistent with the 2013-2016 Energy Division-Investor Owned Utility Energy Efficiency Evaluation, Measurement and Verification (EM&V) Plan<sup>1</sup> and CPUC Decision (D.) 07-09-043<sup>2</sup>.

Individual RTR reports consist of a spreadsheet for each evaluation study. Recommendations were copied verbatim from each evaluation’s “Recommendations” section.<sup>3</sup> In cases where reports do not contain a section for recommendations, the Joint IOUs attempted to identify recommendations contained within the evaluation. Responses to the recommendations were made on a statewide basis when possible, and when that was not appropriate (e.g., due to utility-specific recommendations), the Joint IOUs responded individually and clearly indicated the authorship of the response.

The Joint IOUs are proud of this opportunity to publicly demonstrate how programs are taking advantage of evaluation recommendations, while providing transparency to stakeholders on the “positive feedback loop” between program design, implementation, and evaluation. This feedback loop can also provide guidance to the evaluation community on the types and structure of recommendations that are most relevant and helpful to program managers. The Joint IOUs believe this feedback will help improve both programs and future evaluation reports.

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<sup>1</sup> Page 336, “Within 60 days of public release of a final report, the program administrators will respond in writing to the final report findings and recommendations indicating what action, if any, will be taken as a result of study findings. The IOU responses will be posted on the public document website.” The Plan is available at <http://www.energydataweb.com/cpuc>.

<sup>2</sup> Attachment 7, page 4, “Within 60 days of public release, program administrators will respond in writing to the final report findings and recommendations indicating what action, if any, will be taken as a result of study findings as they relate to potential changes to the programs. Energy Division can choose to extend the 60 day limit if the administrator presents a compelling case that more time is needed and the delay will not cause any problems in the implementation schedule, and may shorten the time on a case-by-case basis if necessary to avoid delays in the schedule.”

<sup>3</sup> Recommendations may have also been made to the CPUC, the CEC, and evaluators. Responses to these recommendations will be made by Energy Division at a later time and posted separately.

**Response to Recommendations (RTR) in Impact, Process, and Market Assessment Studies**

**Study Title:** 2013-2015 Multifamily Property Manager Training: Impact and Outcome Study  
**Program:** MF-WB  
**Author:** Opinion Dynamics  
**Calmac ID:** CPU0180.01  
**ED WO:** ED\_O\_WET\_3  
**Link to Report:** [http://calmac.org/publications/CPUC\\_Multifamily\\_Training\\_Study\\_Final\\_Report\\_11.13.17.pdf](http://calmac.org/publications/CPUC_Multifamily_Training_Study_Final_Report_11.13.17.pdf)

| Item # | Page # | Findings   | Best Practice / Recommendations (Verbatim from Final Report)   | Recommendation Recipient                             | PG&E (if applicable)  |  | SCE (if applicable)                                      |   | SCG (if applicable)                                      |  | SDG&E (if applicable)                                       |   |
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|        |        |  |  |  | Disposition   | Disposition Notes  | Disposition  | Disposition Notes   | Disposition  | Disposition Notes  | Disposition   | Disposition Notes   |
|        |        |  |  | If incorrect, please indicate and redirect in notes. | Choose: Accepted, Rejected, or Other                        | Examples: Describe specific program change, give reason for rejection, or indicate that it's under further review.   | Choose: Accepted, Rejected, or Other                     | Examples: Describe specific program change, give reason for rejection, or indicate that it's under further review.  | Choose: Accepted, Rejected, or Other                     | Examples: Describe specific program change, give reason for rejection, or indicate that it's under further review.   | Choose: Accepted, Rejected, or Other                        | Examples: Describe specific program change, give reason for rejection, or indicate that it's under further review.  |
| 1      | 39     | Through we found some evidence that the BOC training includes some MF staff, the BOC training primarily targets commercial building operators. Further, NEEC does not have the data tracking systems in place to properly identify multifamily participants. | <p><b>(1.1) Focus on BPI MF BO training.</b> We recommend that future research focus specifically on BPI MFBO training, as this is a training attended predominately by multifamily building owners, managers, and maintenance staff.</p> <p><b>(1.2)</b> Should the CPUC and/or NEEC seek to determine the energy savings potential of BOC training in the multifamily sector, additional data tracking will be necessary to identify multifamily participants.</p> <p><b>(1.3)</b> Most importantly, NEEC should consider including an identifier flag in the data that indicates whether a participant oversees or maintains a multifamily property. With this data, future evaluations can identify MF staff by looking for "multifamily" participants in the "property management" or "other" categories.</p> | All IOUs and CPUC                                    | <p>(1.1) Rejected</p> <p>(1.2) Other</p> <p>(1.3) Other</p> | <p>(1.1) The limited sample size makes it difficult to draw supportable conclusions, especially to form the basis of future research. PG&amp;E has no plans for future research; however, the scope of any future proposed research should be developed in coordination with all relevant stakeholders and should fully consider the merits of various approaches to effective engagement and training.</p> <p>(1.2) PG&amp;E is not interested in attributing savings specific to the BOC training. PG&amp;E is supportive, in general, of increased data tracking in order to better identify multifamily participants.</p> <p>(1.3) PG&amp;E supports the inclusion of a multifamily identifier to capture MF staff participation in BOC trainings, subject to NEEC database capabilities and the cost-effectiveness of adding this detail. Should PG&amp;E incentivize these sorts of trainings in the future, we will make tracking multifamily participants part of the training contract.</p> | <p>(1.1) Other</p> <p>(1.2) Other</p> <p>(1.3) Other</p> | <p>(1.1) A focus on BPI MFBO might be appropriate, since NEEC's BOC training is not specifically designed toward "multifamily" participants in the "property management" sector of the market.</p> <p>(1.2) Although somewhat inconclusive, given the ODC study seemed to suggest little/no savings associated with training additional research or data tracking may not be warranted at this time. Incorporating BPI and MFBO into the BOC curriculum may be appropriate, but would mean a significant change to the program. Further research is warranted on the weather BOC can attract more MF participants by implementing a more target marketing strategy.</p> <p>(1.3) If additional data are needed to facilitate identifying MF participants, given NEEC's BOC training is not specifically designed for MF building owners/operators additional participant data should include the type of property, and not be limited to "MF" or not MF. (i.e., restaurant, motel/hotel, shopping, etc.).</p> | <p>(1.1) Other</p> <p>(1.2) Other</p> <p>(1.3) Other</p> | <p>(1.1) A focus on BPI MFBO might be appropriate, since NEEC's BOC training is not specifically designed toward "multifamily" participants in the "property management" sector of the market.</p> <p>(1.2) NEEC's BOC training is not specifically designed for MF building owners/operators. Any specific data tracking enhancements should not be limited to "MF".</p> <p>(1.3) The enhancements to data tracking by the NEEC BOC training program to identify the category of training participants and the types of buildings maintained by participants in the training would be beneficial to capturing "multifamily" and "other" categories of participants (i.e., restaurant, motel/hotel, shopping, etc.).</p> | <p>(1.1) Other</p> <p>(1.2) Other</p> <p>(1.3) Accepted</p> | <p>(1.1) SDG&amp;E is currently working to offer a BPI multi-family training program that offers a certificate. This isn't a standard BPI certification as multi-family buildings in San Diego are unique to our territory and would require customization.</p> <p>(1.2) This would require further discussion.</p> <p>(1.3) NEEC does track the building types/industry.</p> |

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| 2 | 39 | Lack of interest or time among multifamily staff to participate in research, regardless of the incentive offered, is a known challenge in the industry and was a significant limitation for this study. | <p><b>(2.1) Identify strategies for increasing response rates.</b> Before any further research is conducted, we recommend that the CPUC and IOUs collaborate with multifamily program implementers, training providers (e.g., AEA and NEEC), and other industry organizations to identify improved strategies to engage and motivate multifamily staff to participate in research (e.g., survey mode, survey length, outreach methods, incentive types and levels, best times to contact them, etc.).</p> <p><b>(2.2)</b> These types of organization can provide expertise on outreach strategies to this sector and can serve as credible messengers for research efforts.</p> | All IOUs and CPUC | <p>(2.1) Other</p> <p>(2.2) Other</p> | <p>(2.1) PG&amp;E is in agreement that improving strategies to engage and motivate multifamily staff to participate in research is a good idea, should future research be warranted. PG&amp;E has found that previous program participants have been receptive to research projects. PG&amp;E intends to continue to leverage past program participants during research projects. PG&amp;E does not believe additional research is needed at this time.</p> <p>(2.2) Leveraging training providers such as AEA and NEEC to motivate MF staff to participate in future research may be a good tactic for increasing response rates. However, we first need to understand whether the MF sector is a target market for these training providers. Other research design tactics for increasing response rates include, leveraging past IOU program participants, higher incentives and using appropriate survey modes (phone vs. web surveys).</p> | <p>(2.1) Other</p> <p>(2.2) Other</p> | <p>(2.1) Having a strategy to increase response rates and target training participants (e.g., facilities managers/maintenance staff) and relevant stakeholders (e.g., property owners) with an appropriate research method is a good idea. The study did not differentiate issues between two sets of participants: 1) the facilities/maintenance personnel. 2) The property owners/managers. The former attend the training (what did they learn and utilize?). The latter (property owners/manager) send/pay for the facilities/maintenance folks to training (Why? and did they see energy savings on their bills -because they have visibility to them). Does the training have any impact on their decisions to invest in upgrades? If further research is warranted, differentiating the actions and motivations between types of respondents will be important.</p> <p>(2.2) Prior to engaging partners in outreach it would be useful for NEEC to identify the potential to engage the MF sector. If there is opportunity for more participation, using program implementers and training providers may be one of numerous strategies under consideration, including adding meaningful incentives to participate and using more streamlined survey tools, etc.</p> | <p>(2.1) Other</p> <p>(2.2) Other</p> | <p>(2.1) It is well documented by prior IOUs/ED studies that MF owners/operators are some of the most difficult people to engage due to their busy schedule and other business priorities beyond EE investments/upgrade. Since this study did not offer any incentive to participate in the survey, this may be a first concern. Based on past study experience, to properly engage these participants, an incentive of \$200 to \$250 may be needed to complete the survey.</p> <p>SoCalGas agrees to join SDG&amp;E to explore alternatives that may improve the response rate of the study, as an M&amp;E initiative.</p> <p>(2.2) We recommend postpone contacting the other organizations at this time, until the above exploration can be completed.</p> | <p>(2.1) Other</p> <p>(2.2) Other</p> | <p>(2.1) SDG&amp;E will explore working with other industry organizations to identify improved strategies and will explore possibly conducting a focus group with those organizations or reaching out to the advisory board(s).</p> <p>(2.2) Prior to engaging partners in outreach it would be useful for NEEC to identify the potential to engage the MF sector. If there is opportunity for more participation, using program implementers and training providers may be one of numerous strategies under consideration, including adding meaningful incentives to participate and using more streamlined survey tools, etc.</p> |
| 3 | 39 | Additional research is needed to fully understand the MF O&M training needs and market.   | <p><b>Include non-participants to fully understand the training needs.</b> This study was intended to understand the motivations and benefits to O&amp;M training among training participants and their companies. The study also gathered insights from multifamily program implementers to understand potential O&amp;M training needs in the market.</p> <p><b>(3.1)</b> The next step would be to get a full picture of O&amp;M training needs and barriers to getting train-</p>  | All IOUs and CPUC | <p>(3.1) Other</p> <p>(3.2) Other</p> | <p>(3.1) PG&amp;E is in agreement that improving the understanding of O&amp;M training needs and barriers in the MF market is important and should be included in future research. PG&amp;E does not believe additional research is needed at this time.</p> <p>(3.2) PG&amp;E is in agreement that understanding the O&amp;M training needs in the MF market is important and should be included in future research. PG&amp;E does not believe additional research is</p>  | <p>(3.1) Other</p>                    | <p>(3.1) One core goal of the study was understanding the benefits of the training(s). Although the research was somewhat inconclusive, profiling what are existing training needs and opportunities for this market in California could be a useful next step. NEEC may also provide some insight into relevant needs and barriers. The specific design and method for additional research would need to be considered with the time, budget, costs, and relative value of the potential outcomes.</p>  | <p>(3.1) Other</p>                    | <p>(3.1) SoCalGas is currently the lead study manager for the Statewide Gas Boiler Market Characterization study. This is a M&amp;E funded MF study. The objective of this initial phase is to provide a characterization of the installed base (i.e., age/size, etc.). There is currently an unfunded phase-2 of this study to explore how this installed base can be persuaded to upgrade to more efficient boilers and water heaters.</p> <p>There may be an interest for</p>   | <p>(3.1) Other</p> <p>(3.2) Other</p> | <p>(3.1) SDG&amp;E will explore holding a focus group or conducting a survey/study to identify the market needs. From there determine if there is a need for development or updates to training material.</p> <p>(3.2) Recently training is being developed in collaboration with TRC to provide a modified version of BPI MF. This is because the BPI MF training would not benefit the MF building in San Diego territory. The new training that is being developed is a combination of BPI SF and BPI</p>  |

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|   |    |   | <p>ing in the multifamily market by including MF staff who have not received any O&amp;M training.</p> <p><b>(3.2)</b> This research should also explore whether the BPI MFBO and/or BOC's list of course topics align with those needs. For example, some systems (e.g., boilers and chillers), may not be applicable to the majority of California multifamily properties.</p> |                   |             | <p>needed at this time. PG&amp;E O&amp;M trainings for MF staff have been targeted to address topics specific to CA building stock. PG&amp;E will continue to focus on training aspects specific to the local market.</p>   | (3.2) Other    | <p>A comparison between training participants and non-participants is one approach that may be considered.</p> <p><b>(3.2)</b> If research indicates there is additional value or potential for the MF sector, given the current BOC curriculum is developed for a wider national market that includes equipment not found in California, the training may also need to adapt and align more closely with regionally based needs.</p> | (3.2) Other    | <p>the WE&amp;T team to utilize the currently available WE&amp;T M&amp;E study funds to help shore up these WE&amp;T/MF related study needs. The statewide WE&amp;T team will explore this option and coordinate this study effort with the MF M&amp;E study team.</p> <p><b>(3.2)</b> Depending on the above study design, the scope of specific course design may be outside of scope. This can be more fully explored with WE&amp;T specific research.</p> |                | <p>MF to be of relevance to our customers.</p>  |
| 4 | 39 | <p>Additional research is needed to fully understand the most cost-effective approach to providing MF O&amp;M training.</p> | <p><b>(4.1) Cost Comparison.</b> The CPUC should compare the costs of providing additional O&amp;M marketing, education and outreach (ME&amp;O) to the costs of incentivizing BOC/BPI training. Marketing might be a more cost-effective alternative.</p>  | All IOUs and CPUC | (4.1) Other | <p><b>(4.1)</b> PG&amp;E agrees that better understanding the costs associated with all options of providing training to the MF market is important and should be included in future research. PG&amp;E does not believe additional research is needed at this time. Another alternative to incentives or increased ME&amp;O is to incorporate O&amp;M training into the IOU program process. PG&amp;E continues to explore this approach in its multifamily program.</p> | (4.1) Rejected | <p><b>(4.1)</b> Before exploring cost-effective methods of encouraging participation, the value of the participation for increased savings needs to be assessed. The research conducted was inconclusive on this issue. Moreover, Specific marketing budget for such targeted outreach efforts would be required for this purpose.</p>  | (4.1) Rejected | <p><b>(4.1)</b> The MF property owners/operators and facility maintenance staff need more technical training to provide insights. We do not believe the ME&amp;O oriented "EE awareness" training and promotion will meet the needs of the MF property owners/operators. For the scope and content of the MEO program support for the MF sector, SoCalGas will defer this to ED/CPUC.</p>   | (4.1) Rejected | <p><b>(4.1)</b> More information is needed on the type of ME&amp;O that would replace BPI/BOC training. Just because it may be less costly to conduct ME&amp;O does not mean that it would have the same benefits to the customer as a hands-on certification training.</p> |