

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 2013-2014 Energy Efficiency Program Cycle. This Appendix contains the Responses to Recommendations in the report:

RTR for the PG&E Dimming Ballast and CALCTP Midstream Trial Assessment (TRC, ED Work Order #2030a, Calmac ID #PGE0357.02)

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) Plan¹ and CPUC Decision (D.) 07-09-043².

Individual RTR reports consist of a spreadsheet for each evaluation study. Recommendations were copied verbatim from each evaluation’s “Recommendations” section.³ 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.

¹ 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>.

² 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.”

³ 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.

EM&V Impact, Process, Market Assessment Study Recommendations
 Study Title: Pacific Gas and Electric Company Dimming Ballast and CALCTP Midstream Trial Assessment
 Program: Lighting
 Author: TRC
 Calmac ID: PGE0357.02
 ED Work Order: 2030a
 Link to Report: http://calmac.org/publications/Dimming_Ballast_Draft_Report_FINAL.pdf

Item #	Page #	Findings	Best Practice / Recommendations	Recommendation Recipient	Disposition (Accepted, Rejected, or Other)	Disposition Notes (e.g. Description of specific program change or Reason for rejection or Under further review)
1	20-21	Proper installation achieves greater savings potential of advanced controls. Contractor understanding of the technical aspects of the lighting system, and understanding of the intent of the lighting controls helps to ensure that the system is properly installed and performing most effectively for the occupants. When occupants are satisfied with the lighting controls system operation, they are less likely to request changes to the settings or disable the system. A properly functioning lighting and control system is likely to have higher persistence of savings, as the controls are unlikely to be changed unless there is a perceived problem that needs to be addressed.	Continue to support contractor training and certification. The new multilevel lighting control requirements in the Title 24 Standards highlight the need for knowledgeable lighting professionals, and structured training sets a good minimum standard.	PG&E	Accepted	Continuing with existing training plans to ensure that the market is prepared for any Title 24 code changes. To increase audience participation, PG&E will continue to offer T24 classes as simulcasts when and where appropriate.
2	20-21	Proper installation achieves greater savings potential of advanced controls. Contractor understanding of the technical aspects of the lighting system, and understanding of the intent of the lighting controls helps to ensure that the system is properly installed and performing most effectively for the occupants. When occupants are satisfied with the lighting controls system operation, they are less likely to request changes to the settings or disable the system. A properly functioning lighting and control system is likely to have higher persistence of savings, as the controls are unlikely to be changed unless there is a perceived problem that needs to be addressed.	Support sufficient commissioning and human comfort factors in the installation of future dimming ballast and advanced lighting controls projects. Occupants and building owners may override or disable lighting controls that are disruptive or bothersome. Proper commissioning can correct these problems. The utilities should ensure that dimming ballast and advanced lighting controls installation contractors are properly trained. Trainings should include sufficient discussion of proper commissioning for lighting controls, consideration of human factors in programming controls, such as the types of activities in the space, and appropriate delay times. Dimming ballast and advanced lighting controls projects should include the necessary commissioning, including post-occupancy feedback on controls operation and function collected directly from the occupants. This feedback should be gathered after the occupants have had time to experience the operation of the controls, perhaps one to two months.	PG&E	Accepted	PG&E will continue to offer trainings that consider proper commissioning and human factors with lighting controls. PG&E will evaluate the appropriate post-occupancy survey instrument and train participants to perform surveys. PG&E may consider incorporating these post-occupancy surveys as part of the Advanced Lighting Control Systems Calculator Lighting Innovation Trial in 2015-2016.
3	21	Non-union contractors faced challenges completing CALCTP certification. Both contractors reported difficulty completing the CALCTP trainings. One contractor said that his non-union status made it difficult to find available classes and that union participants suggested that it was not appropriate for him to attend the trainings, making him feel unwelcome.	Work to overcome non-union contractor barriers to CALCTP certification. Work with CALCTP to ensure that training courses are available to all interested contractors and lighting professionals. Utilities could support CALCTP and possibly other quality training programs, by sponsoring classes within their service territories, at their energy centers, or through third-party entities that will not restrict course availability. Utilities should ensure that trainings are available regularly and throughout the state.	PG&E	Accepted	PG&E has had preliminary conversations with the program implementer (ICF International) to work to overcome these barriers and will continue to diversify where the trainings are offered. While we cannot control the behavior of course participants, we can work with ICF to assure that there's a balance between union and non-union participation.

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4	20-22	Energy savings were higher than PG&E projected because projects leveraged multiple lighting control strategies. Trial program projects resulted in higher than anticipated energy savings because the projects employed multiple control strategies that take advantage of the dimming ballast capabilities. Projects employed especially short occupancy delay times, particularly after hours, and systems were commissioned to ensure controls were working properly.	Explore the programmatic potential for systems that incorporate advanced controls. These systems facilitate multiple controls strategies to maximize energy savings from lighting controls. In addition, these systems include monitoring capabilities that the end user could use to track energy savings in support of calculated incentives.	PG&E	Accepted	PG&E is in agreement that there is high potential with Advanced Lighting Control Systems (ALCS) that leverage multiple control strategies. PG&E has developed an ALCS Calculator Tool that we believe will be able to unlock those savings. PG&E seeks to trial this Tool in a Lighting Innovation Trial in 2015-2016. PG&E would leverage the lessons of the Dimming Ballast & CALCTP Midstream Trial to engage the broader contractor market in ALCS installations.