## 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 Energy Upgrade California—Home Upgrade Program Process Evaluation **2014-2015** (EMI Consulting, Calmac ID #PGE0389.01)

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. 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.

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.

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."

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:** Energy Upgrade California—Home Upgrade Program Process Evaluation 2014-2015

Program: Home Upgrade
Author: EMI Consulting
Calmac ID: PGE0389.01

Link to Report: http://www.calmac.org/publications/EUC\_Home\_Upgrade\_Process\_Evaluation\_Report\_Draft\_2016.08.24\_(CLEAN).pdf

Item#	Page #	Findings	Best Practice / Recommendations (Verbatim from Final Report)	Recommendation Recipient	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.
1	69	While the evaluation team did not identify any major inconsistency in program implementation across service territories, several contractors operating across multiple IOU service territories reported difficulty navigating different program requirements between implementers.	We recommend the IOUs review application standards across service territories for consistency. In addition, in order to mitigate contractor misconceptions, the IOUs should include education for contractors on key administrative similarities and unavoidable differences as part of contractor outreach activities.	All IOUs	Rejected	The IOUs recognize the value of program consistency across IOU service territories. During the Market Transformation phase in 2015, the IOUs compared data collected and collaborated to help simplify the application process statewide. In 2016, changes were made to align incentive values and measure specifications statewide. The IOUs will continue to collaborate to make program standards more consistent statewide.  Due to climate zones differences, regional differences, and singlefuel utilities, the IOUs are not able to make application processes entirely consistent across the State. Furthermore given the low volume of contractors who participate in multiple IOU service territories (less than 7 contractors participate in more than one territory and only one contractor participates in all territories), the IOUs reject the recommendation to include education and outreach on administrative differences and similarities.
2	69	More participants are taking advantage of existing financing options than in previous studies, suggesting an opportunity to leverage financing to increase program participation, mitigating first cost barriers. Also, The cost of equipment continues to be a major barrier to participation, particularly among near-participants who reported an annual income below \$100,000.	We recommend that the Home Upgrade Working Group should coordinate on how to best incorporate the emerging portfolio of energy efficiency financing programs into the program.	All IOUs	Rejected	The IOUs agree that the program should leverage financing to increase program participation. Currently the IOUs support all financing options that meet customer needs including statewide financing programs, HERO, PACE, and private lending. Currently, the IOUs promote the following statewide financing options to contractors through outreach and training and to customers through marketing: Golden State Financing Authority Residential Energy Retrofit Program, EmPower Home Upgrade Loan, and Residential Energy Efficiency Loan Assistance Program (REEL). In 2017, the IOUs will continue supporting the launch and integration of the REEL Financing Program into the Energy Upgrade California Home Upgrade program by promoting the program to contractors during training, outreach events, and contractor facing marketing. REEL is designed to help homeowners to access lower-cost financing for energy efficiency

						projects by reducing risk to participating lenders.
						The IOUs reject the recommendation that Home Upgrade Working Group should coordinate on how to best incorporate the emerging portfolio of energy efficiency financing programs into the program. Given the expertise of the Program Administrators in financing program administration and Home Upgrade program administration, Program Administrators (rather than the Home Upgrade Working Group) are best suited to continue coordinate how best to incorporate financing into Home Upgrade.
3	70	Contractors are frequently the source of program awareness for homeowners and find that their participation in the program provides market differentiation among non-participating contractors and improves their ability to sell whole house projects.	We recommend providing additional support to participating trade allies from non-participating contractors. Examples of this support could include a tiered contractor rating system or co-branding materials.	All IOUs	Rejected	The IOUs agree that Program Administrators should provide support to trade allies and accept this portion of the recommendation. Currently, all the IOUs acknowledge all participating contractor and raters and list contact information directly on the customer facing websites to provide contractors with differentiation.  The IOUs reject supporting contractors through a tiered contractor rating system or co-branding materials. The IOUs are not able endorse or rank the services of an individual company through marketing. PG&E, SCE, and SoCalGas provide Energy Upgrade California® marketing materials that contractors can customize with their business card to differentiate their business. In Q4 of 2015, for example, PG&E launched a co-branded postcard that contractors can customize with their logo, given they sign a limited trademark license agreement with PG&E. This co-branded postcard has seen limited uptake in 2016.
4	70	Participating contractors frequently requested additional materials to help them market whole home retrofits (and by association, the Home Upgrade program) to potential customers.	We recommend that the program managers develop simplified and streamlined contractor marketing materials to supplement detailed brochures.	All IOUs	Accepted	The IOUs agree that program managers should develop additional, simplified marketing materials for contractors.  Currently, the IOUs continuously accept contractor feedback on the materials and their efficacy in the field. As materials are reprinted in the future, the IOUs will redesign marketing materials with the goal of simplifying and streamlining based on need, incorporating contractor feedback.
5	71	Contractors across all four IOU service territories requested comprehensive documentation that provides more detailed instructions on completing project incentive request forms and meeting installation requirements.	We recommend that program managers continue to refine program documentation for contractors and incorporate material drawn from implementers' experiences responding to frequently asked contractor questions.	All IOUs	Accepted	The IOUs agree that program documentation should incorporate information on frequently asked questions. Currently, the IOUs refine documentation based on contractor feedback and best practices. Currently, supplemental fact sheets (on installation requirements, on how to upload project applications) are provided on the contractor website and in the contractor portal.  As materials are reprinted and redesigned in the future, the IOUs will refine program documentation for contractors based on contractor feedback, best practices, and implementers' experiences responding to frequently asked contractor questions.
6	71	Program participants are increasingly turning to financing options to fund the capital cost associated with whole home retrofits.	We recommend that the program staff include training for participating contractors on the available energy efficiency and income-qualified	All IOUs	Other	The IOUs agree that program staff should continue to train contractors on available financing options for customers to increase awareness and understanding of the benefits of

			options for homeowners.			financing.
						The IOUs also agree that income-qualified customers are best suited for the Energy Savings Assistance (ESA) program. While the IOUs acknowledge that the participation of low-income customers in the Home Upgrade program speaks to the affordability of the program, the Impact Evaluation findings show that there was low cost effectiveness in these shallow-retrofit projects. The IOUs agree that these projects should not be served in the Home Upgrade program and will continue to suggest that contractors refer customers to income-qualified options.
						Currently, contractors are not trained to income-qualify options for customers.
						The IOUs reject the recommendation that the program train participating contractors on the income-qualified options for homeowners. PG&E feels that program staff should raise awareness among contractor of the options available to income-qualified customers, but contractors should not be responsible for income qualifying customers in the program. The energy advisor service sponsored by PG&E (the Home Performance Advisor) is best suited to determine if interested customers qualify for income-qualified offerings and direct customers to the ESA program.  SDG&E rejects the recommendation to train participating contractors on program options that are based on income.
7	71	Inspectors felt that the existing collaborative or "witness" inspections, in which contractors accompany inspectors during inspections of their projects, were effective mentorship opportunities, although they expressed concern that few contractors take advantage of these opportunities.	We recommend that the program managers continue to promote collaborative or "witness" inspections.	All IOUs	Accepted	The IOUs agree to continue to offer and support the collaborative inspection process and encourage contractor participation in this effort.
8	72	Contractors reported that while they understood Quality Installation in principle, they did not believe there was enough market demand to justify the increased installation costs. Customers did not see the value of Quality Installation and assumed that all HVAC installations were "quality."	The Home Upgrade program should continue to coordinate marketing messages with statewide Quality Installation/Quality Maintenance programs (e.g., the AC Quality Care program) to raise awareness of the benefits of Quality Installation as part of whole home retrofits.	All IOUs	Other	PG&E agrees to continue coordinating Energy Upgrade California Home Upgrade marketing messages with the PG&E Quality Maintenance program, AC Quality Care.  SDG&E agrees to continue coordinating Energy Upgrade California Home Upgrade marketing messages with SDG&E QA/QM programs and.  The IOUs agree to help raise awareness of the benefits of quality installations and support quality HVAC installations as a part of whole home retrofits in the Home Upgrade program.
						PG&E and SCE/SoCalGas joint program reject coordinating marketing messages with the statewide Quality Installation program as they do not currently offer a statewide Quality Installation program.

9	72	While most participants were generally very satisfied with their participation in the Home Upgrade program, one suggestion for improvement that was frequently mentioned was to better communicate the time commitment associated with program participation.	Clearly communicate program time commitments to both new contractors and potential participants during the application process.	All IOUs	Accepted	The IOUs agree to continue clearly communicating program time commitments to both new contractors and potential participants during the application process and will continue to reiterate that message through program marketing materials and contractors trainings. SCE/SoCalGas currently provide customers with a postcard that lists steps while participating.
10	72	Homes built prior to 1978 likely provide a greater opportunity for energy savings than homes built after 1978 due to the adoption of California's Building Energy Efficiency Standards. The program is currently focused on this population with 65% of survey respondents reporting that their homes were built before 1978 (compared to 50% of overall population of residential homes).	The evaluation team recommends that customer-facing outreach materials include messages about the benefits to retrofitting older homes. These materials could include images of older vintage homes and copy targeting "classic" or "traditional" style dwellings.	All IOUs	Accepted	SDG&E agrees that homes of older vintages provide greater opportunity for energy savings and therefore beginning 2017 the program will focus on projects that target homes that are 1992 or older.  To keep program marketing materials simple as advised in Recommendation 4, PG&E rejects the recommendation to include additional information on home vintage in marketing materials.  PG&E agrees that homes built before 1978 stand to achieve the most energy savings benefits from whole house retrofits. PG&E has revised the program design in 2017 to ensure that older homes are targeted by the program and by contractors.  SCE/SCG currently feature an older Craftsman home on marketing materials and communicate the benefits of retrofitting older homes. The process of identifying older neighborhoods for contractors to target is currently being implemented.
11	73	Non-energy benefits continue to be a primary driver for participation in the Home Upgrade program. Participants ranked increasing the comfort of their home as the second most important motivation for participating in the program (after saving money on their energy bill). In addition, participants reported several non-energy benefits as a result of participation.	The evaluation team recommends that program staff include non-energy benefits (e.g., comfort and home value) as part of customer-focused and contractor-focused outreach activities. Combined with energy cost reductions, these benefits can make a compelling case for investing in a whole house retrofit project.	All IOUs	Other	The IOUs currently focus messaging around home comfort and saving on energy costs in customer-focused marketing materials and websites to encourage investment in a whole house retrofit project.  The IOUs appreciate the recommendation regarding non-energy benefits, however how we go about monetizing these non-energy benefits requires a policy discussion before it is resolved.
12	73	Home Upgrades participants are increasingly relying on financing options to fund the whole house retrofit project. Coordinating with the launch of several statewide energy efficiency financing programs, program staff can capitalize on this interest and include messages regarding the availability and benefits for energy efficiency financing as part of participation in the Home Upgrade program.	The evaluation team recommends that program managers incorporate energy efficiency financing options into program marketing materials.	All IOUs	Accepted	The IOUs include financing options in customer-facing marketing materials and contractors outreach materials and trainings.  Please reference Response to Recommendation 2 for more detail on financing offerings supported.  The IOUs agree to continue incorporating energy efficiency financing options into program marketing materials.