

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:

<i>RTR for the Pacific Gas and Electric Company’s Lighting Innovation Midstream Trial Evaluation</i> (Evergreen Economics, Calmac ID #PGE0361.01)
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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's Lighting Innovation Midstream Trial Evaluation

Program: PG&E LED Midstream

Author: Evergreen Economics

Calmac ID: PGE0361.01

Link to Report: http://calmac.org/publications/PGandE_Commercial_Midstream_LED_Trial_Assessment_Final_Report.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	95	The Trial's design is feasible, although the evaluation findings suggest that the program logic and theory should be revised. Contractors are less involved than anticipated and participation is driven by very large and very small purchases (as opposed to primarily small projects) many of which are direct sales from distributors.	Revise the program theory and logic model to reflect that contractors are less involved than anticipated and that most sales are direct from the distributor to the end-user.	PG&E	Accepted	We agree that there is a need to revise the logic models (p.83-84). We believe that both logic models have merit for two distinctly different approaches to midstream. The original model fits well with Retrofit & New Construction projects where the Distributor could influence the contractor and customer to choose better efficiency options. Currently this midstream program operates as outlined in the new logic model where contractors are less involved. Participating distributors provide direct sales to the end-customer targeting Operational & Maintenance needs. O&M products such as Replacement lamps are easily installed by the customer or its maintenance staff.
2	95	To best ensure that program performance is accounted for (in terms of transforming the commercial lighting market) we propose a list of likely market transformation indicators, below: 1. Program incentivized LED replacement lamp sales volumes 2. LED Price 3. Distributor purchase and stocking practices 4. Market Actor promotional effort	Develop systems to track market indicators. These indicators will help assess the effectiveness of the Trial and conditions in the overall commercial LED replacement lamp market. Tracking should balance the cost of additional precision with the need for additional precision (for example, we do not necessarily recommend conducting distributor shelf surveys to assess changes in distributor stocking practices).	PG&E	Accepted	We agree that there should be some program involvement in tracking the market trends. This raises some questions regarding what effectively can be collected at point of sale vs. what will require interviews and surveys. PG&E would like to work with ED staff and EM&V to clearly understand what will best serve the purpose of the Midstream program. We believe there needs to be a balance in the logic model of a midstream program with the extra effort by participants to provide sales data. The Distributors are currently providing data on their sales/units by lamp type, manufacturer and model number. This can be tied to the customer NAICS code based on their SAID. We are in discussions with our EM&V teams to assist in providing evaluation and comparisons to other reports containing some of these program performance metrics. Examples of such reports include WO13: California Replacement Lamp Market Status Report by DNV GL, California LED Work paper Update Study by Navigant, and Residential Lighting Market Trends Analysis by TRC. Also, in 2016 Navigant will be conducting another LED pricing web scraping effort. While not a direct correlation to lamp sales, lamp shipment data from sources like NEMA and U.S. Department of Commerce may also be tracked.
3	95	End-user business type is unknown for over half of the projects that received LED replacement lamps at reduced cost through the Trial.	Seek to improve end use facility type data in program tracking (ensure that this is required of distributors) and monitor changes in participating end use business types.	PG&E	Accepted	PG&E savings claimed is based on "COM" building which is the blended hours for all or "Any" building type. As indicated in response to recommendation #2, based on addresses provided by the distributor we are able to connect the address to a customer record SAID. One of the goals set for 2016 is to proactively update our customer records such as collecting best point of contact, preferred method for contact, Email or text and connecting a NAICS code to each customer record.

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4	95-96	For many Trial tracking records there is no contact name or phone number for anyone at the business who received midstream incentivized LED replacement lamps through the Trial; contact information other than business name and installation address was not available for all end use customers.	Ensure that end-user contact information is captured for all facilities receiving midstream incentivized LED replacement lamps.	PG&E	Other	<p>As noted earlier, PG&E is making an effort to update contact information in our SAID records. As we improve this, the address provided will be matched to an SAID record with current contact information.</p> <p>However it is unclear how customer contact information will benefit the implementation and future evaluation of these programs. The purpose of these programs is to engage Distribution and increase their participation in selling more efficient equipment. Are we evaluating the Customer optake or the Distributor participation? If we focus on evaluating customer motivations for participation in midstream programs we may end up with inaccurate program attribution.</p> <p>Our current instructions to the distributor are to provide the best known contact that will allow our Central Inspection Team to verify installation of products. We need to leave options open for the distributor to choose between their sales rep, the contractor or the customer contact to provide the best contact for this verification process.</p> <p>In this LED Midstream Trial Evaluation, many of the participants cited the ease of participation as one of the strengths of this Midstream Program.</p> <p>PG&E along with other IOU's will need to work with Commission staff to define clear guidelines for Upstream, Midstream and Downstream participation and data collection. Each channel is intended to impact the supply chain at a different point in the distribution or purchase process.</p>
5	96	Manufacturers report concern over the quality of the products on the qualifying product list, as well as a particular concern related to the incentive structure: since the incentive level is tied to the wattage of lamps alone, some manufacturers may opt to develop products that are higher wattage than required in order to qualify for a higher incentive. The concerned manufacturers suggested that the incentive structure should be tied to other performance factors in addition to wattage. They also suggested capping incentive amounts based on the price of the lamp so there is a minimum consumer contribution. This would prevent lower quality, cheaper bulbs being distributed free of charge.	a) Consider adding additional lamp specification requirements for qualifying products. b) According to the manufacturers themselves, since the incentive amount is only tied to the lamp wattage, there is no direct incentive for them to develop higher quality, higher efficacy lamps. c) Furthermore, with rapidly declining LED price, it is recommended that PG&E consider capping the incentive amount based on the price of the lamp, ensuring that the consumer must contribute financially in order to receive the lamps.	PG&E	Accepted	<p>a) PG&E uses Energy Star as the quality standard for all Non-Residential Replacement lamps. We regularly work with Energy Star and CEE to ensure relevant product quality and performance in their specification setting process;</p> <p>b) In April 2015, PG&E Program staff revised incentive structures to remove wattage ranges within product type; the Wattage Reduction Ratio (WRR) assumes and allows the utility to claim higher savings as the wattage of the lamp increases. Due to WRR the fixed rebate may initially have a negative impact on PG&E savings, because we're paying the same incentive for lower wattage (lower savings) products vs. higher wattage (high savings, higher cost products). WRR continues to be a subject of debate and there is consensus for revision. In Q1 2016, in response to the LED Workpaper Update Study, the IOUs created a working group to develop proposals to address Navigant's detailed recommendations on changes needed to the WRR.</p> <p>d) In 2015 PG&E implemented a "no free bulb" policy in the distributor midstream agreement. Each distributor is expected to require a co-pay per customer.</p> <p>e) As LED prices decline, incentive levels are determined based on a survey of incentives from utilities across the country, distributor prices to the customer in the program, and manufacturer/ distributor input. LED price trend studies will help utilities keep pace with the decline of LED pricing and proactively forecast rebate levels.</p>
6	viii	The preponderance of evidence suggests that the midstream incentive mechanism would be an effective tool for a full-scale PG&E energy efficiency incentive program.	The primary recommendation from this early EM&V assessment is to continue offering midstream incentives at the distributor level for LED replacement lamps.	PG&E	Accepted	We are supportive of this recommendation and have taken steps to move Replacement lamps into our Midstream Distributor based Program. This opens up the possibility of expanding the program with additional O&M type products including but not limited to lighting.