

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:

<i>RTR for the Impact Evaluation of 2013-14 Upstream and Residential Downstream Lighting Programs</i> (DNV GL, Calmac ID #CPU0122.01, ED WO #ED_I_LTG_4)

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.

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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>.

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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.”

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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: Impact Evaluation of 2013-14 Upstream and Residential Downstream Lighting Programs
Program: Statewide Lighting
Author: DNV GL
Calmac ID: CPU0122.01
ED WO: ED_I_LTG_4
Link to Report: http://calmac.org/publications/2013-2014_California_Upstream_and_Residential_Lighting_Impact_Evaluation_Report_FINALV2.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	123	In big box channels, NTGR are relatively low in the current evaluation and were relatively low in prior evaluations for most measure groups. The presence of LED lamps in these channels has increased rapidly while pricing has declined at the market level.	Refine targeting for LED lamp incentives. Review the cost-effectiveness of offering incentives for LED lamps in big box channels and (if not cost-effective) consider directing incentives for these lamps toward the non-big box channels. The cost-effectiveness review should consider not only the NTGR determined for the 2013-14 program, but also the likelihood that even without program discounts LED lamps will increase in availability at lower prices in big box channels.	All IOUs	Other	The IOUs acknowledge value in updating channel targets, and maintain consensus that incentivized energy efficient lamps should remain at big-box retailers. To do otherwise would work against several key objectives for lighting energy efficiency in the State. It would negatively disincentivize manufacturers to produce California-quality LEDs. It would reduce the breadth of the program reach for market transformation at a time when it is crucial to complete the task of building a foundation for the 2018 code changes. It would also unfairly penalize the historically highest performing class of participating retailers, who continue to be important partners in promoting energy efficiency throughout the state.
2	123	The NTGR for CFLs are somewhat lower than in the prior evaluation, but still potentially represent cost-effective investments.	Refine targeting for CFL incentives. The IOUs should examine the cost-effectiveness of offering incentives for CFLs of the different measure groups in each retail channel and consider discontinuing incentive offerings in channels where incentives are not cost effective, or are borderline cost-effective.	All IOUs	Accepted	The IOUs will continue to refine targeting for CFL incentives. After 2016, all previous CFL models will be ineligible. The CFLs in the 2017 program will be based on new technology advancements boosting CFL efficacy to 80 lumens per Watt in order to meet ENERGY STAR 2017 requirements. That is higher than the requirement of 70 lumens per Watt for LEDs. These new-generation CFLs will be selected in ways that fill market gaps of LEDs like eligibility or availability. Examples include 3-Way lamps, and high lumen reading lamps. These new products may carry a higher NTG than previous CFLs.
3	123	Ex Ante assumptions could benefit from projections of key impact parameters by the IOUs.	Examine projections of lamp pricing and market conditions. DNV GL recommends that the IOUs conduct scenario analyses to represent current market conditions regarding lamp availability and pricing as of 2016, and to project changing conditions into the future. The IOUs can then apply the results of these analyses to adjust ex ante assumptions for key impact parameters. The lamp choice model developed	All IOUs	Accepted	EM&V studies have examined lamp pricing and market conditions that could impact ex-ante assumptions for key parameters and have conducted scenario analyses that help plan for future programs (see Goebes et al. ACEEE 2016). Specific parameters and actions taken are indicated below with comments. Studies for products that could remain eligible for Primary Lighting incentives after 2017 are also of interest to pursue. The IOUs are not authorized to adjust ex ante assumptions, but rather to sponsor studies

			for this evaluation could support such analysis with scenarios representing more current market conditions.			and make recommendations to the Energy Division, whose role it is to adjust and set ex ante assumptions. Parameters Examined: <ul style="list-style-type: none"> • Hours of Use (HOU): The new ED-led metering study will help to address this • Peak Coincidence Factor: IOUs are hopeful that DEER 2017 and 2018 updates will provide newly addressed peak coincidence factor reflecting up-to-date load curves. IOUs have commented accordingly on a recent scoping memo. • Delta Watts: this parameter is addressed via the "Alternatives to WRR working group" recommendations • Baseline wattage assumptions • Installation rate: PG&E is hopeful that installation rates incorporated in this study will be in DEER 2017 and 2018 updates and have commented as such in the scoping memo • HVAC interactive effects: the IOUs are interested in findings from the ED-led interactive effects study and welcomes discussion on how best to incorporate findings • UES (Unit Energy Savings): will be addressed by these other parameters • Res/Non-res Split: The split should be in line with impact evaluation findings from 2010-2012 and 2013-2014, and therefore modified for each IOU to match the values found.
3a	123	This evaluation characterized the baseline for CFLs and as the mix of installed incandescent lamp stock in IOU customer households as of 2012 and the baseline for LED lamps as the mix of installed CFLs and incandescent lamps during the same timeframe.	Review baselines. Another perspective on baseline would be to identify the mix of lamp technologies that consumers would purchase in the absence of program discounts—in other words, the purchases displaced by program-discounted lamps. The mix of displaced lamps represents the net baseline condition, and could be estimated using the lamp choice model. This became apparent during the course of the 2013-14 impact evaluation.	All IOUs	Accepted	The IOUs are actively contributing support for baseline assumption updates related to 2017 workpaper preparation. The Energy Division will set final program ex ante baselines. The IOUs are wary that if LEDs are included in baselines, application of NTG could result in double deduction. The IOUs encourage the CPUC to adopt baselines and NTG ratios that do not count LED purchases as free ridership if those same lamps are already deducted in the baseline.
3b	123	Evaluation results indicate that there is competition among program-discounted measure groups within the same replacement lamp category when more than one is offered in a retail store at the same time. At the same time, when the program provides incentives for only one measure group within a replacement lamp category (say, basic spiral CFLs) and the other is available without program discounts (say, CFL A-lamps), sales of the program-discounted lamp may come at the expense of sales of the similarly-efficient non-program alternative.	Explore the effectiveness of offering discounts on multiple competing technologies. Assessment of program cost-effectiveness needs to explore these substitution effects. Again, the lamp choice model developed for this work could support such exploration. The goal is to clarify how best to allocate discounts among multiple efficient technologies within a replacement lamp category for specific combinations of measure groups and retail channels.	All IOUs	Accepted	The IOUs are scoping a Residential Lighting Customer Decision Making Study that may help to provide insights into the customers' technology choices for replacement lamps. The IOUs will offer upstream incentives on a wider range of technologies, product types, and light sources with the objective of optimizing cost-effectiveness. Regarding the portions of this recommendation that would affect baselines, the Energy Division will set final program ex ante baselines.
4	124	While these results are already somewhat dated at the time of this report's publication, these results are still more current than those used to generate their ex ante savings estimates for 2013-14.	If more up-to-date estimates are not developed through prospective work, use the results of this evaluation to true up ex ante assumptions for key impact parameters.	All IOUs	Accepted	The IOUs will use the most up-to-date estimates to help contribute to the ED's role of setting ex ante assumptions for key impact parameters. These recommendations would apply where applicable.