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 and beyond. This Appendix contains the Responses to Recommendations in the report:

RTR for the Upstream and Residential Downstream Lighting Impact Evaluation Report: Lighting Sector—Program Year 2019 (EM&V Group A) (DNV GL, Calmac ID #CPU0230.01, ED WO #GroupA_Ltg_1_YR3)

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 CPUC Decision (D.) 07-09-043[1] and the Energy Division-Investor Owned Utility Energy Efficiency Evaluation, Measurement and Verification (EM&V) Plan[2] for 2013 and beyond.

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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1 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."

2 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.

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.

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

Study Title: Upstream and Residential Downstream Lighting Impact Evaluation Report: Lighting Sector—Program Year 2019 (EM&V Group A)
Program: Lighting
Author: DNV GL
Calmac ID: CPU0230.01
ED WO: GroupA_Ltg_1_YR3
Link to Report: http://calmac.org/publications/CPUC_Upstream_Lighting_Sector_PY2019_Impact_Eval_Report_FINAL_CALMAC.pdf

					PG&E (if applicable)		SCE (if applicable)		SDG&E (if applicable)	
Item #	**Page #**	**Findings**	**Best Practice / Recommendations (Verbatim from Final Report)**	**Recommendation Recipient**	**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.
1a	71	**Programs continued to significantly over ship light bulbs to stores.** The PY 2019 upstream lighting programs continued to ship significantly more light bulbs to individual stores, particularly to the discount and grocery channels, than stores could reasonably stock and sell. Evaluation results suggest that there was inadequate monitoring and verification of program light bulb shipments and that many participating retail stores were not required to purchase program discounted light bulbs from manufacturers.	PAs should have a clear understanding of the estimated size of the market and segmentation of the market by sales channel to make an informed decision on the appropriate level of program shipments.	All PAs	Accepted	PG&E has closed the Upstream Lighting program in December 2019 and did not offer Upstream Lighting Program for PY2020 or PY2021. The future third-party implementers will be responsible to develop and implement efficient verification protocols to support the applicable program structure. Any future 3rd Party implementers will be expected to have a clear understanding of the estimated size of the market and segmentation of the market by sales channel to make an informed decision on the appropriate level of program shipments. The learnings from past programs and recommendations from the past impact evaluations will be made available to the selected third-party implementers to adopt the best practices while developing the QA/QC protocols. PG&E notes and understood the concern on potential overstock and higher shipment volumes through the program. PG&E maintained a balance between its distribution of lamp volume for POS (Point of Sale) and Shipping methods. While the POS method provided completely trackable sales data and does not carry risk of an overstock situation, the shipping method is crucial to reach the Hard to Reach customers and Disadvantaged Communities that are largely served by smaller retailers participating through the shipping method. In 2018, over 50% of the program volume was through the POS method, where the tracking data matches	Other	As noted in SCE's comments on the Draft 2019 Upstream and Residential Downstream Report dated March 23rd, SCE acknowledges the Draft Report's finding that overstock existed in PY 2019. SCE implemented improved monitoring and verification practices in 2019 by increasing the number of in-store verifications and by requiring manufacturers to do their own inspections of stores more frequently for overstock before they request new allocation amounts into SCE's internal CRM database. In 2019, SCE also implemented a new program process —duplicate detection—to prevent more than one manufacturer from shipping to a single retailer, and thereby preventing overstock. SCE also spaced out their allocation periods and halted shipments earlier in the year. SCE appreciates the importance of understanding market sizes before undertaking a change in program strategy (from Market Transformation to a segment driven approach as was recommended by DNV GL), but the evaluation community agreed that more research was needed as there was "difficulty in understanding market size, and [DNV-GL] welcome additional sources to help understand the market." (2017 Upstream Lighting Impact Evaluation Report, at p. 155.) SCE agrees with this assessment.	Other	N/A

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						the actual sales. In 2019 PG&E further increased the % of completely trackable POS volume to over 70% of the total program volume.				
1b	71		Program monitoring should always include verification of shipment and delivery documentation from manufacturers and an adequate number of in-store verifications to confirm stocking and sufficient sell- through rates of program discounted measures. Verifications results should be shared and monitored regularly among program staff and PA management.	All PAs	Accepted	PG&E agrees with this recommendation and built in a robust 2-pronged verification process. PG&E has thorough field verification processes and invoice documentation verification processes established for a few years to ensure the program terms are being followed by the participants. PG&E's QA/QC process for the Upstream Lighting program consisted of a two-pronged process. 1. The PG&E Application Management team verified the information provided by the manufacturer and the invoice details prior to processing each invoice submitted by the manufacturer. 2. The PG&E Field Services Team selected a random sample of participating retailers to visit and conduct periodic spot checks, for each manufacturer. The Team obtained store manager/owner authorization to conduct the spot checks to collect the following information. The spot checks confirmed the following aspects: • Products are sold and displayed appropriately. If products were not available, then worked with the store manager to determine if the products are in stock and can be moved to the appropriate area of the store. • All products have ENERGY STAR logo on packaging. • Correct signage and marketing are displayed. • If the store manager is aware of the program and if they received signage/marketing materials with their product shipment. Whenever possible, the PG&E Field Services Team obtains the store managers' general feedback about participation in the program • There is no product overstock (applicable to Shipment Method approach only).	Other	SCE improved its tracking and verification processes in 2019, which included a more extensive review of allocation shipment quantities and matching quantities to invoices.	Other	N/A

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2a	71	**The lighting market has largely been transformed.** Evaluation results suggest that the California lighting market has shifted, and LEDs are the dominant technology and the preferred choice by most consumers for the evaluated measure types. LEDs account for more than 75% of the market across all three evaluated measure groups and more than 90% of the reflector market. LED prices have fallen to a point where they are competitive with inefficient technologies, even without program incentives. Upstream lighting program incentives no longer influence customer purchases as much as they did when inefficient light bulbs dominated the lighting market.	The PAs discontinued the statewide upstream lighting program in 2020 and should not revive the program in 2021 or future years.	All PAs	Accepted	PG&E discontinued the statewide upstream lighting program in 2020 and did not revive the program in 2021 and does not plan to in future years.	Other	SCE recognizes that LEDs are a customer's preferred choice when purchasing lighting products and the incentives no longer influence a customer's decision to purchase LEDs. SCE closed its Residential Upstream Primary Lighting program as of December 31, 2019 due to the changes in California standards. SCE does not plan to implement its own stand-alone Residential Upstream Lighting Program in the future as the IOUs transition to the new Statewide and Third-Party model where third-party implementers will propose, design, and implement EE programs. As part of this transition, SCE was designated by the Commission in D.18-10-051 to be the lead program administrator for the Statewide Lighting Program. As the statewide lead program administrator, SCE conducted a solicitation and awarded a contract to a third-party implementer to design and deliver a statewide midstream lighting program targeted at nonresidential lighting installations. SCE is responsible for administration of the pay for performance contract and ensuring the selected vendor delivers on its contractual obligations. As part of SCE's role as contract administrator, SCE is updating its processes for inspections and project reviews to reflect this new role and build upon the lessons of previous programs.	Other	N/A
2b	71		Increases in standards are expected to remove the remaining pockets of halogen bulbs in the market, and halogens that remain in sockets have such short measure lives that they will soon be replaced by LEDs. To the extent that pockets of inefficient bulbs remain and/or these changes happen inequitably, residential lighting programs should be tailored to reach the appropriate segments of customers, but these programs should be designed thoughtfully to maximize impact.	All PAs	Accepted	PG&E discontinued the statewide upstream lighting program in 2020 and did not revive the program in 2021 and does not plan to in future years.	Other	See 2a.	Other	N/A

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3	71-72	**LEDs were a cost-effective upstream measure, but this is no longer the case.** The upstream lighting program was a cost-effective vehicle for accelerating the adoption of efficient light bulbs for more than a decade, but the lighting market transformed to the point where LEDs comprised an ever increasing majority of the market during the 2017, 2018, and 2019 program years. With LEDs becoming so common and accepted by consumers, the upstream lighting program's influence on consumer behavior diminished considerably.	PAs offering upstream programs should closely monitor market trends, particularly trends in overall market size and market share of efficient technologies and less efficient alternatives.	All PAs	Accepted	PG&E discontinued the statewide upstream lighting program in 2020 and did not revive the program in 2021 and does not plan to in future years. In addition, if PG&E offers a future upstream program, we would expect the 3rd party vendor to closely monitor market trends, particularly trends in overall market size and market share of efficient technologies and less efficient alternatives.	Other	See 2a.	Other	N/A