

## 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 Upstream and Residential Downstream Lighting Impact Evaluation Report: Lighting Sector—Program Year 2017*** (DNV GL, Calmac ID #CPU0193.01, ED WO #GroupA\_Ltg\_1\_YR1)

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.<sup>3</sup> 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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<sup>1</sup> 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>.

<sup>2</sup> 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.”

<sup>3</sup> 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 2017  
**Program:** Upstream Lighting  
**Author:** DNV GL  
**Calmac ID:** CPU0193.01  
**ED WO:** GroupA\_Ltg\_1\_YR1  
**Link to Report:** [http://calmac.org/publications/CPUC\\_Group\\_A\\_Upstream\\_Lighting\\_Sector\\_Impact\\_Eval\\_Report\\_FINAL\\_CALMAC.pdf](http://calmac.org/publications/CPUC_Group_A_Upstream_Lighting_Sector_Impact_Eval_Report_FINAL_CALMAC.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	80	Program tracking data for the 2017 programs was not as complete as prior program years. <b>Additional Supporting Information:</b> Tracking data discrepancies were identified as an issue in the 2006-2008 upstream lighting impact evaluation, but those issues were fixed in more recent programs. Issues for the 2017 program identified by the evaluation included missing or inaccurate store names, incomplete retail store addresses, and inaccurate shipment quantities. Multiple data requests and discussions were required with program staff for the evaluators to get a clear picture of program delivery. PA internal verification data contained inconsistencies with the tracking data. Additionally, the PA internal verification data showed results that are consistent with the evaluation findings, but it is unclear if any action was taken as a result.	PAs need to improve tracking and verifying program activity. Program tracking data at a minimum should have complete data on program shipment quantities and locations.	All PAs	Accepted	All IOUs currently collect the data for program shipment quantities and retailer locations as part of the invoicing collection information. The IOUs will work on enhancing tracking and verifying program activity.
2	80		PAs should also conduct more verification of program tracking data to verify that program shipments are being fully sold or will reasonably be sold in the near future. Where verification shows substantial discrepancies, PAs should take action to tighten control of distributions.	All PAs	Accepted	The IOUs are exploring best practices to implement reasonable verification for hard-to-reach retailers.  For SCE and PG&E, there is verification of shipments through in-field inspections which include photo verification. The inspectors provide marketing assistance (signage, product placement) to the retailers to ensure product is visible to the consumer. Program requirements are reviewed to make sure that lighting is sold to end user and product stocking is compliant with manufacturer agreements in place. Action is taken by PAs when discrepancies are found.  SDG&E is looking at potential for marketing assistance for retailers who may have overstock in 2019 to ensure that lighting is sold to end user and back-stock requirements are compliant with manufacturer agreements in place. Additionally, SDG&E is launching a field study to smaller retailers to assess recent distributions and compliance with program agreement terms.
3	80		Future upstream lighting impact evaluations will need to include invoice verification to confirm that the information provided in the tracking data is correct.	All PAs	Accepted	The IOUs perform QA/QC on all invoices submitted by all manufacturers to ensure allocation and shipping data is a match to invoice documentation.  Manufacturers must have complete information on allocation requests, shipment quantities, and retailer locations in their invoice documentation.  The IOUs are exploring ways to enhance invoice processing.
4	80	Ex post baselines were substantially higher than ex ante baselines.	Ex ante baseline assumptions should be updated to reflect the evaluated results in this evaluation. The	Ex Ante Team		

		<p><b>Additional Supporting Information:</b></p> <p>Ex ante baselines were set according to the 2017 screw-in lamp disposition. The ex ante baseline for lamps with greater than or equal to 90 lumens per watt was set at 75% CFL and 25% halogen, and the baseline for lamps with less than 90 lumens per watt at 55% CFL, 20% LED and 25% halogen. To avoid double counting free-ridership, the ex ante baselines were offset in the 2017 disposition by raising net-to-gross ratios. This evaluation found that the evaluated retail baseline baselines included more inefficient technologies than were included in the ex ante assumptions. This resulted in higher baseline wattages, greater unit energy savings, and lower net-to-gross ratios for LED lamps.</p>	<p>ex ante team should also set projected baselines moving forward that account for the 2017 evaluation findings, updated lamp stock inventory data, and statewide and national efficiency standards.</p>			
5	80	<p>Upstream lighting programs discounted and shipped more lamps than the non- big box channels that they targeted could support.</p> <p><b>Additional Supporting Information:</b></p> <p>In program year 2017, SCE and SDG&amp;E shifted program incentives towards the discount and grocery channels. These measures achieved the intended effect of maximizing net unit energy savings; however, the volume of lamps shipped to these channels was far greater than the volume of lamps that they could sell.</p>	<p>PAs need to do a better job of tracking and verifying program activity. Program tracking data at a minimum should have complete data on program shipment quantities and locations.</p>	All IOUs	Accepted	<p>All IOUs currently collect the data for program shipment quantities and retailer locations. The IOUs will work on enhancing tracking and verifying program activity.</p> <p>Based on field inspection results, SCE is working with the manufacturers to stop shipping and/or reducing quantities to the discount and grocery channels.</p> <p>PG&amp;E maintains a balance between its distribution of lamp volume for POS and Shipping methods. Over 50% of the program volume is through POS, where the tracking data matches the actual sales.</p>
6	81		<p>PAs should allocate more resources to verifying program activity. This should include internal verification of shipment information coming from manufacturers and distributors as well as in-store verifications of sell- through rates and stocking. We recommend that program tracking include this verification of sell through rates for program shipments.</p>	All IOUs	Accepted	<p>All the IOUs perform QA/QC on all invoices submitted by all manufacturers to ensure allocation and shipping data is a match to invoice documentation. All discrepancies are taken care of before payment and reporting.</p> <p>The IOUs have been seeking the sales data for the participating retailers through the shipping method. Due to the sensitive nature of this data as well as absence of a robust sales tracking mechanism with the smaller grocery and discount stores, the IOUs have not been able to get any reliable sales data for the shipping method.</p> <p>To get more information of the sales-through rate, SCE and PG&amp;E have been enhancing their field verification activities by increasing the sample size and frequency of visits and collecting additional information on the product inventory to ensure there are no overstock situations and the retailers are focusing on promotion and display of participating products.</p> <p>PG&amp;E has been following procedures for internal photo verification for invoice processing as well as field verification at store locations for program monitoring on a sample basis. PG&amp;E has shared best practices with the statewide group and is happy to provide feedback going forward.</p>