

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 California Statewide Non-Residential LED Quality and Market Characterization Study: Part 1—Preliminary Non-Residential LED Quality Criteria
(Navigant Consulting, Calmac ID #PGE0433.01, ED WO #2161)

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.) 07-09-043¹ and the Energy Division-Investor Owned Utility Energy Efficiency Evaluation, Measurement and Verification (EM&V) Plan² 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.

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: California Statewide Non-Residential LED Quality and Market Characterization Study: Part 1—Preliminary Non-Residential LED Quality Criteria
Program: Lighting
Author: Navigant Consulting
Calmac ID: PGE0433.01
ED WO: 2161
Link to Report: http://calmac.org/publications/California_Statewide_Non-Residential_LED_Quality_and_Market_Characterization_Study_Part_One_2018-08-03.pdf

Item #	Page #	Findings	Best Practice / Recommendations (Verbatim from Final Report)	Recommendation Recipient	PG&E (if applicable)		SCE (if applicable)		SDG&E (if applicable)	
					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.
1	55	Stakeholder engagement and research showed that DLC and ENERGY STAR are the most established organizations for developing specification tolerances and thresholds that influence product design and lighting quality.	CA IOUs should continue to align with the most current versions of the DLC Technical Requirements (currently V4.3) and the ENERGY STAR Program Requirements Product Specification for Luminaires (Light Fixtures) Eligibility Criteria (currently V2.1). CA IOUs should monitor and examine changes made within each new version and maintain contact with DLC and ENERGY STAR representatives as new versions are being developed to align interests and minimize conflicts with the Criteria.	PG&E, SCE, SDG&E	Accepted	PG&E leverages DLC and ENERGY STAR to qualify products for rebates and incentives, and updates requirements as needed to align with the DLC Technical Requirement updates.	Accepted	SCE utilizes DLC and EnergyStar to qualify products for incentives and does keep up with technical requirements in developing lighting workpapers.		
2	55	The research and analysis showed that the “top-half of lighting quality” is best identified by a combination of prescriptive, reporting, and performance criteria. In particular, the performance criteria, which is implemented through the Lighting Quality Rating described in Section 3.3.3, rewards higher performance using a tiered point structure. In addition, several industry stakeholders were in favor of the performance approach since it incentivizes in-	CA IOUs should move forward with the blended prescriptive, reporting, and performance approach. The Criteria has been vetted with key industry stakeholders to ensure LED products meeting the Criteria are of higher lighting quality compared to those qualified by the DLC and ENERGY STAR. Additionally, existing data from the DOE’s LED Lighting Facts database and DLC’s QPL were used to optimize the Lighting Quality Rating approach. The results of this optimization	PG&E, SCE, SDG&E	Other	As national qualifying bodies for non-residential lighting, DLC and ENERGY STAR are better suited to serve as the reference point for program participants on technical requirements, including those that relate to lighting quality. Rather than implement Criteria for California, PG&E recommends continuing to refer to DLC and ENERGY STAR as the most cost-effective way to ensure that non-residential LED fixtures and lamps in the market meet lighting quality standards. Additionally, the Statewide administration of the lighting programs will likely be implemented by a third-party starting in 2021, at which time the third-party can assess.	Other	As SCE will no longer be implementing the lighting program in 2020, SCE will add this recommendation to the Statewide Lighting Solicitation.		

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		creased lighting quality performance while allowing for tradeoffs between the metrics included.	are discussed in Appendix B, which indicate that more stringent lighting quality tolerances and metrics are needed beyond DLC and ENERGY STAR to identify LED products that meet the “top-half of lighting quality.” CA IOUs should also utilize the LED Product Quality Evaluation Tool to analyze LED products meeting or not meeting the Criteria. The LED Product Quality Evaluation Tool should be updated annually to evaluate future versions of each database, as well as additional metrics and revised performance tolerances as needed. This update process will help to ensure that LED products available are able to meet any future revised Criteria, and 2) that any future revised Criteria continues to represent the “top-half of lighting quality.”							
3	55	Stakeholders suggested that fully developing the structure of a testing and verification system parallel to finalizing the Criteria is vital to ensuring high quality products are adopted by customers as a result of the Criteria’s implementation.	As the process unfolds to present the Criteria to the CPUC, the CA IOUs should work with the CPUC and CEC to determine the most suitable route forward for ensuring product compliance. Navigant identified three potential testing and verification pathways: 1) allow manufacturers to self-report certification data, 2) CA implement its own testing and verification system, or 3) CA could leverage the DLC reporting infrastructure (with the exclusion of downlight products).	PG&E, SCE, SDG&E	Other	As national qualifying bodies for non-residential lighting, DLC and ENERGYSTAR are better suited to serve as the reference point for program participants on technical requirements, including those that relate to lighting quality. Rather than implement Criteria for California, PG&E recommends continuing to refer to DLC and ENERGY STAR as the most cost-effective way to ensure that non-residential LED fixtures and lamps in the market meet lighting quality standards. PG&E’s Codes & Standards team is engaged with DLC and ENERGY STAR as well as the CPUC and CEC to determine the most suitable route forward for ensuring high quality LED products are produced and sold in CA.	Other	As SCE will no longer be implementing the lighting program in 2020, SCE will add this recommendation to the Statewide Lighting Solicitation.		
4	56	Several key industry stakeholders emphasized the need for the CA IOUs to remain vigilant as new metrics and test methods become available for defining and quantifying	In order to maintain the relevancy of the Criteria, the CA IOUs should refer to Section 3.5 which described the recommended process for updating the Criteria, This Criteria Future Revisions Plan indicates	PG&E, SCE, SDG&E	Other	PG&E’s Codes & Standards team is engaged with DLC and ENERGY STAR as well as the CPUC and CEC to determine the most suitable route forward for ensuring high quality LED products are produced and sold in CA	Other	As SCE will no longer be implementing the lighting program in 2020, SCE will add this recommendation to the Statewide Lighting Solicitation.		

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		lighting quality for LED products. In addition, stakeholders commented that revisions should be continued for the Criteria, preferably on an annual basis. The LED industry is evolving rapidly, and industry standards and metrics are continually developed to assess the performance of products coming to market.	the CA IOUs should 1) review new and updated metrics, test methods and industry-accepted tolerances, 2) continually engage with key stakeholders, 3) regularly update the LED Product Quality Evaluation Tool with new products, and lastly 4) propose new metrics and tolerances for consideration with the CPUC.							