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 2018 (EM&V Group A) (DNV GL, Calmac ID #CPU0210.01, ED WO #19-Res-ED-002)

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.

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."

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.

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.

Study Title:Upstream and Residential Downstream Lighting Impact Evaluation Report: Lighting Sector—Program Year 2018 (EM&V Group A)Program:LightingAuthor:DNV GLCalmac ID:CPU0210.01ED WO:19-Res-ED-002

Link to Report: http://calmac.org/publications/CPUC_Upstream_Lighting_Sector_PY2018_Impact_Eval_Report_FINAL_CALMAC.pdf

						PG&E (if applicable)	SCE (if applicable)		SDG&E (if applicable)		
ltem #	Findings	Additional Supporting Information	Best Practice / Recommendations (Verbatim from Final Report)	Recommendation Recipient	Disposition	Disposition Notes	Disposition	Disposition Notes	Disposition	Disposition Notes	
				If incorrect,	Choose:	Examples:	Choose:	Examples:	Choose:	Examples:	
				please	Accepted,	Describe specific program change, give	Accepted,	Describe specific program change, give	Accepted,	Describe specific program change, give	
				indicate and	Rejected, or	reason for rejection, or indicate that it's	Rejected, or	reason for rejection, or indicate that it's	Rejected, or	reason for rejection, or indicate that it's	
				redirect in notes.	Other	under further review.	Other	under further review.	Other	under further review.	
1	LEDs are the dominate	LEDs comprise well over	PAs should move away	All PAs	Accepted	PG&E tracks and considers the updates	Other	SCE recognizes that LEDs are a cus-	Other	SDG&E no longer administers an up-	
	lighting technology and	50% of the market for all	from a statewide up-			in Lighting Codes and Standards in the		tomer's preferred choice when pur-		stream lighting program. SDG&E does	
	are the preferred choice	three evaluated measure	stream lighting program			past, existing, and future program plan-		chasing lighting products and the in-		not have any current plans to adminis-	
	among most consumers.	groups, and LED prices	model. Increases in stand-			ning process. We constantly updated		centives no longer influence a cus-		ter an upstream lighting program.	
		have fallen to a point	ards are expected to re-			the program and measures included in		tomer's decision to purchase LEDs.			
		where they are competi-	move the final pockets of			the program to incorporate the find-		SCE closed its Residential Upstream Pri-			
		tive with inefficient tech-	halogen bulbs in the mar-			ings from past impact evaluations and		mary Lighting program as of December			
		nologies, even without	ket, and halogens that re-			to prepare the retail market for upcom-		31, 2019 due to the changes in Califor-			
		program incentives. Up-	main in sockets have such			ing code changes. In line with this strat-		nia standards. SCE does not plan to im-			
		stream lighting program	short measure lives that			egy, PG&E did not offer the Primary		plement its own stand-alone Residen-			
		incentives no longer in-	they will soon be replaced			Lighting Program in 2020 and did not		tial Upstream Lighting Program in the			
		fluence customer pur-	by LEDs. To the extent			include any deemed lighting measures		future as the IOUs transition to the			
		chases as much as they	that pockets of inefficient			in its other residential programs in		new Statewide and Third Party model			
		did when inefficient	bulbs remain and or these			2020.		where third party implementers will			
		lamps dominated the	changes happen inequita-			The future Primary Lighting Program		propose, design, and implement EE			
		lighting market.	bly, residential lighting			will emerge through a state-wide third-		programs. As part of this transition, SCE			
			programs should be tai-			party solicitation. We are optimistic to		was designated by the Commission in			
			lored to reach the appro-			see some innovative approaches that		D.18-10-051 to be the lead program			
			priate segments of cus-			consider the changing paradigm of the		administrator for the Statewide Light-			
			tomers, but these pro-			lighting retail market and customer		ing Program. As a result, SCE is cur-			
			grams should be designed			choices through this process. In addi-		rently conducting a solicitation for third			
			thoughtfully to maximize			tion, there will be third-party programs		parties to propose, design, and poten-			
			impact.			launching through PG&E's third-party		tially implement one or more			
						solicitation process. Some of these new		Statewide Lighting Programs. It will be			
						programs may include lighting inter-		the responsibility of any successful im-			
						ventions where the opportunity for		plementer or implementers to tailor			
						savings still exist. The impact evalua-		their programs to reach the appropri-			
						tion indicated a shift in baseline and		ate segments of customers and provide			
						market trends, and therefore we would		maximum value. As lead PA, it will be			
						expect a targeted approach using up-		SCE's responsibility to review and ap-			
						dated baseline selection in compliance		prove programs that meet compliance,			
						will be appropriate for the remaining		ex-post findings requirements, etc.			
						customer segments that carry ineffi-					
						cient lighting.					
2	Upstream lighting pro-	Retail store surveys re-	Upstream lighting pro-	All PAs	Accepted	PG&E notes and understands the con-	Other	SCE implemented improved monitoring	Other	SDG&E no longer administers an up-	
	grams shipped more	vealed that participating	grams need to strike a bal-			cern on potential overstock and higher		and verification practices in 2019 by in-		stream lighting program. SDG&E does	
	lamps to discount and gro-	discount and grocery	ance between market size			shipment volumes through the pro-		creasing the number of in-store verifi-		not have any current plans to adminis-	
	cery stores than those	stores sell far fewer	and program shipments			gram. PG&E maintains a balance be-		cations and by requiring manufacturers		ter an upstream lighting program.	
	channels could reasonably	lamps than were shipped	and include careful moni-			tween its distribution of lamp volume		to do their own inspections of stores			
	stock and sell.		toring of program sales in			for POS and Shipping methods. While		more frequently for overstock before			
			these stores to ensure			the POS method provides completely		they request new allocation amounts			

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		to them through the pro-	program lamps are selling			trackable sales data and does not carry		into SCE's internal CRM database.		
		gram.	as expected.			risk of overstock situation, the shipping		In 2019, SCE also implemented a new		
		Evaluation results also	PAs should allocate more			method is crucial to reach the Hard to		program process—duplicate detec-		
		suggest that there was	resources to verify pro-			Reach customers and Disadvantaged		tion—to prevent more than one manu-		
		inadequate monitoring	gram activity. This should			Communities that are largely served by		facturer from shipping to a single re-		
		and verification of pro-	include verification of			smaller retailers participating through		tailer, and thereby preventing over-		
		gram lamp shipments	shipment and delivery			shipping method. In 2018, over 50% of the program volume was through Point		stock. SCE also spaced out their alloca-		
		and that many participat-	documentation from man-			of Sale (POS) method, where the track-		tion periods and halted shipments ear-		
		ing retail stores were not	ufacturers and more in-			ing data matches the actual sales. In		lier in the year.		
		required to purchase	store verifications to con-			2019 PG&E further increased the % of		If overstock is found during the in-store		
		program discounted	firm stocking and ade-			completely trackable POS volume to		investigation, the inspector documents		
		lamps from manufactur-	quate sell-through rates of			over 70% of the total program volume.		the amounts and take pictures. This is		
		ers.	program discounted lamps.			PG&E has thorough field verification		reported back to SCE. The manufac-		
			iumps.			processes and invoice documentation		turer is contacted in order to pick up		
						verification processes established for a		overstock and deliver to an under-		
						few years to ensure the program terms		stocked retailer (manufacturer's cost).		
						are being followed by the participants.		The manufacturer provides SCE a Bill of		
						In response to the findings for PY 2017		Lading from the trucking company		
						impact evaluations, PG&E increased		showing the pick-up and delivery of stock. After the exchange, another in-		
						the number and scope of field verifica-		spection is conducted to make sure nei-		
						tions in PY2019. We believe this is in		ther retailer is overstocked.		
						line with the evaluation's recommen-				
						dation for the allocation of more re-		With the exception of the manufactur-		
						sources to verify program activity.		ers working with the big-box stores,		
						PG&E's QA/QC process for the primary		SCE reduced the allocation amounts per manufacturer in 2019.		
						Lighting program consists of a two-				
						pronged process.		It is important to note, however, that		
						1. The PG&E Application Management		even if certain stores were over-		
						team verifies the information pro-		stocked, the light bulbs are not perisha-		
						vided by manufacturer and the in-		ble—it is likely that these bulbs entered the California market (perhaps in differ-		
						voice details prior to processing		ent ways than the Program intended		
						each invoice submitted by the man-		i.e., bulk sales, giveaways), and pro-		
						ufacturer.		vided benefits because they could be		
						2. The Field services Team selects a		sold at a reduced price which would		
						random sample of participating re-		have contributed to the overall decline		
						tailers to visit and conduct periodic		in LED prices over this time period.		
						spot checks, for each manufacturer.				
						The team obtains store man-				
						ager/owner authorization to con-				
						duct the spot checks to collect the				
						following information. The spot				
						checks confirm the following as-				
						pects:				
						 Products are sold and displayed 				
						appropriately. If products are not				
						available, then work 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 is				
						displayed.				

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						 If the store manager is aware of the program and if they received signage/marketing materials with their product shipment. When- ever possible, the Field Services Team obtains the store managers' general feedback about participa- tion in the program There is no product overstock (ap- plicable to Shipment Method ap- proach only). PG&E will not be offering Primary Light- ing Program for PY2020. The future third-party implementers will be re- sponsible to develop and implement ef- ficient verification protocols to support the applicable program structure. The learnings from past programs and rec- ommendations from the past impact evaluations will be made available to the selected third-party implementers 				
3	A baseline that includes inefficient lamps will con- tinue to decline as LEDs comprise the vast majority of the market and con- tinue to grow.	Gross unit energy savings for LED lamps still show energy savings opportu- nities. However, the rap- idly transforming lighting market suggests that the market share of ineffi- cient lamps is shrinking.	Unit energy savings will continue to decline. Resi- dential lighting programs should be targeted at cus- tomer segments and ap- plications where savings opportunities still exist.	All PAs	Accepted	to adopt the best practices while devel- oping the QA/QC protocols. PG&E understand the changing market trends and shifting baseline for the res- idential lighting customer segment. Hence PG&E constantly updated the program and measures offered under the program to incorporate the find- ings from past impact evaluations and to prepare the retail market for upcom- ing code changes. In line with this strat- egy, PG&E did not offer any Primary Lighting Program in 2020 and did not offer any deemed lighting measures in its other residential program. As the future Primary Lighting program design will emerge from the statewide third- party solicitation process, these studies and findings should be made available as resources through the third-party	Accepted	The third parties who are participating in SCE's Statewide Lighting Program so- licitation have been made aware of the recommendations provided in the 2017 and 2018 Impact Evaluations; there- fore, SCE anticipates that the third party implementers' new program de- signs will be targeted at customer seg- ments and applications where savings opportunities still exist.	Other	SDG&E no longer administers an up- stream lighting program. SDG&E does not have any current plans to adminis- ter an upstream lighting program.
4	Program tracking data for the 2018 programs were comparatively better than the data for the 2017 pro- grams. However, data quality issues continued to persist for the 2018 pro- gram.	Tracking data quality is- sues included missing or inaccurate store names, incomplete retail store addresses, missing or in- accurate retail store phone numbers, and in- accurate shipment quan- tities. There were also in- stances of incomplete or inaccurate residential customer data, including missing customer service addresses and incorrect	PAs need to improve tracking and verification of program activity. Program tracking data at a mini- mum should have com- plete and accurate data on program shipment quanti- ties as well as retail store addresses, phone num- bers, and key contacts.	All PAs	Accepted	solicitation process for the interested stakeholders. When PG&E was offering an Upstream Lighting Program prior to 2020, PG&E collected the data for program ship- ment quantities and retailer locations from the participating manufacturers and worked to maintain and update the information with the most recent contact information available. The de- tails of tracking and verification process for the shipment volume is described in further detail in response to recom- mendation #2. As this upstream program does not di- rectly communicate with the individual	Accepted	SCE improved its tracking and verifica- tion processes in 2019, which included a more extensive review of allocation shipment quantities and matching quantities to invoices. SCE's Primary Lighting program did not directly communicate with the retailers (except during inspections); this is the function of the manufacturers. SCE worked with manufacturers to ensure they provided complete retailer infor- mation for tracking and reporting pur- poses. SCE also provided training to its call center staff to capture additional	Other	SDG&E no longer administers an up- stream lighting program. SDG&E does not have any current plans to adminis- ter an upstream lighting program.

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		climate zones for some customers. Follow-up data requests and discus- sions were required with program staff for the evaluators to get the necessary data to com- plete the evaluation.				retailers, we need to rely on the infor- mation provided by the manufacturer. PG&E will not be offering Primary Light- ing Program for PY2020. The future third-party implementers will be re- sponsible to develop and implement ef- ficient data collection and tracking mechanism to support the applicable program structure. 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 data collection mechanism.		and complete information when retail- ers call SCE to turn on service for new accounts. This information includes the climate zone in which the retailer is lo- cated and the retailer's complete ad- dress. 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, de- sign, and implement EE programs. SCE intends to contract with new Third Party vendors and retain the right to receive all applicable documents and records intended to substantiate ven- dor compliance with the contract. This includes the ability to review any rec- ords or documents needed to examine, evaluate, test, measure, or inspect and properly perform all Inspections. Fur- ther, SCE will maintain electronic rec- ords of all invoices, work orders, and other relevant documentation for fu- ture programs.		