# Southern California Edison



# **Implementation Plan**

# California Statewide Lighting Program

January 2021

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# 1. Program Budget and Savings Information

# 1. Program and/or Sub-Program Name

California Statewide Lighting Program

## 2. Program and/or Sub-Program ID Number

SCE\_SW\_UL

# 3. Program and/or Sub-Program Budget Table

Costs	2021	2022	2023	2024	Total
Administration	\$624,000	\$1,296,000	\$1,104,000	\$576,000	\$3,600,000
Marketing/Outreach	\$374,400	\$777,600	\$662,400	\$345,600	\$2,160,000
Incentive/Rebate	\$4,059,764	\$8,243,277	\$6,046,766	\$2,650,194	\$21,000,000
Direct Implementation	\$1,181,836	\$2,643,123	\$3,226,834	\$2,188,206	\$9,240,000
Total	\$6,240,000	\$12,960,000	\$11,040,000	\$5,760,000	\$36,000,000

# 4. Program and/or Sub-Program Gross Impacts Table

	2021	2022	2023	2024	Total
Gross Demand Reduction (kW)	1,597	3,313	2,819	1,491	9,220
Gross Energy Savings (kWh)	11,001,900	22,850,100	19,464,900	10,155,600	63,472,500

# 5. Program and/or Sub-Program Cost-Effectiveness (TRC)

Delivery Period Year	Expected TRC Ratio
2021	1.09
2022	1.16
2023	1.19
2024	1.21

# 6. Program and/or Sub-Program Cost-Effectiveness (PAC)

Delivery Period Year	Expected PAC Ratio
2021	1.62
2022	1.74
2023	1.87
2024	1.99

# 7. Type of Program and/or Sub-Program Implementer

Program Implementer	
PA-delivered	
Third Party-Delivered	$\boxtimes$
Partnership	

# 8. Market Sector

SCE Business Plan Sector	Yes
Residential	
Commercial	$\boxtimes$
Industrial	$\boxtimes$
Agricultural	
Public	
Cross-Cutting	

# 9. Program and/or Sub-Program Type

Program Type	
Resource	$\boxtimes$
Non-Resource	

# 10. Market Channels and Intervention Strategies:

Market Channels		
Upstream		
Midstream	$\boxtimes$	
Downstream		
Intervention Strategies		
Direct Install		
Incentive	$\boxtimes$	

Market Channels	
Finance	
Audit	
Technical Assistance	
Other	

# **Campaign Goals and Timeline:**

TRC will recruit new Program Partners through virtual and in-person outreach during the 2<sup>nd</sup> quarter of 2021 with a focus to have new Partner MOUs executed by the end of June 2021. New Partners will continue to be vetted and enrolled on an ongoing basis throughout the program term.

Short-term promotions and additional marketing efforts will be scheduled as needed to achieve Program goals and introduce any new measures that are added to the eligible products list. TRC will communicate the addition of new measures to Program Partners within thirty (30) days of approval to add the new measure(s).

# 2. Implementation Plan Narrative

## 1. Program Description

The California Statewide Lighting Program (Program) serves all eligible electric customers in the participating IOUs' service territories – Southern California Edison (SCE), San Diego Gas & Electric (SDG&E), and Pacific Gas & Electric (PG&E). The objective of the Program is to promote the sale and installation of high efficiency lighting products through midstream channels. The Implementation Contactor, TRC, will achieve the Program's objectives through implementation of a cost-effective midstream program for the non-Residential (C&I) market throughout the IOUs' territories.

## 2. Program Delivery and Customer Services

**Program Delivery.** Savings are achieved through the midstream channel.

• **Midstream Program.** TRC partners with wholesalers and distributors to offer mark-downs/buy-downs for approved lighting measures to serve the C&I Sectors. Sales of these products are made to trade professionals who ultimately install them at the utility customer's site.

**Marketing.** The Program will take a multi-pronged approach to marketing.

- Midstream Market Partners these are our target Program participants. They are regionally focused, they stock many brands of many products which provides market neutrality, they want to differentiate themselves from 'other' midstream competitors and will utilize the incentive program to do so. Also, these market actors have self-benefiting reasons to sell high-efficiency equipment and possess the process-driven capabilities and industry knowledge needed to implement and promote the program to their dealer/installer customers.
- Upstream Market Partners these are manufacturers that sell products to their distributor network. Some upstream market Partners also act as their own distributor. TRC will generate unique marketing collateral for manufacturers who, in turn, will become champions and partners in promoting the program to their distributor network and, if self-distributing, their dealer network. Upstream market Partners have immense sway with their distribution network and have established chains-of-command that can strongly encourage midstream market actors to get onboard with energy efficiency programs.
- Downstream Market Partners TRC will broadcast targeted marketing campaigns to generate end-user interest in qualified products.

TRC will leverage point of purchase (POP) materials to support the promotion and sale of all program supported lighting measures. These materials will be provided to the program partners along with requirements for use and display. TRC works with program partners and local and regional organizations to identify and staff special events to promote program incentives and energy efficiency measures. The TRC team will coordinate and participate in distributor, community, and industry events across the IOU service territories as applicable to promote the Program. TRC will target community events

focusing on Hard-to-Reach (HTR) customers and ones in Disadvantaged Communities (DACs). A program partner newsletter is sent out via email on a quarterly basis to inform partners of updates and new program information as well as highlight program successes and high performers.

Partner Visits. TRC staff works with national lighting manufacturers to engage new distributors and develop new market channels. TRC uses tiered categories that assign the level of service and visit frequency required for a program partner location. They are categorized into service groups based on a number of factors, including but not limited to: 1) number of locations, 2) products carried, 3) number of sales associates and incidence of turnover, 4) foot traffic volume, 5) overall contribution, or potential impact, to the Program, 6) active promotions, and 7) historical participation. This categorization allows for easier route planning, scheduling, and increased flexibility to address Program and partner needs. In-person visits to partner locations will be supplemented with phone calls and emails as necessary.

Activities during routine visits may include the following:

- 1. Seek out managers and associates to discuss products and promotions at their locations and continue to build relationships.
- 2. Reinforce the importance of keeping Point of Purchase (POP) material prominently displayed.
- 3. Put up POP material, distribute rebate forms, and replace missing material.
- 4. Determine training needs and schedule or conduct training.
- 5. Verify compliance with partner agreements, funding limits and performance of promotions.
- 6. Discuss product performance, qualified product lists and availability issues.
- 7. Discuss marketing and event opportunities.
- 8. Discuss upcoming training opportunities, counter days and trade shows.
- 9. Label products and check for delisted products.
- 10. Offer additional assistance as needed.

**Inspections.** TRC will perform on-site post-installation inspections for a randomly selected set of midstream customer projects using a sampling procedure to be approved by SCE. For-cause inspections will be performed as needed.

Customer Service. TRC's Customer Service Representatives (CSRs) are available from 8:00am to 5:00pm Pacific Time, Monday through Friday (excluding holidays). All CSRs receive comprehensive training on the Program and program-qualified equipment. CSRs assist Program partners with inquiries, requests, and concerns. TRC uses TouchPoint call center software to manage and record calls and Captures (described below) to log customer interactions. Callers can leave voice messages during off-hours and all messages are returned during the next business day. Captures is used to track and report customer complaints, escalation activities, and resolution.

**Program Management Tool.** Captures is TRC's proprietary program management, data tracking and reporting tool. Captures manages the complete customer lifecycle,

including: 1) outreach and marketing; 2) project management through customized milestones; 3) project approvals; 4) incentive/payment management; 5) check processing; and 6) QA/QC and post-inspections. The system provides a seamless customer relationship management functionality, including detailed project tracking and reporting, process transparency, improved data integrity, and effective customer engagement.

Hard-to-Reach and Disadvantaged Communities. TRC will analyze sales data to determine underserved market segments and HTR customers using demographic tools such as US Census Data and the California Communities Environmental Health Screening tool (CalEnviroScreen). TRC will engage the identified audiences through participation in community and industry events and with multi-channel campaigns consisting of brochures, digital content, and POP materials (in multiple languages). TRC will promote the program to manufacturers, wholesalers, distributors and retailers located in and serving the HTR and DAC customers throughout California. TRC will also work with distributors and contractors to identify underserved segments of the market throughout the territory. By targeting contractors who serve the underserved, TRC help increase awareness in areas with traditionally low participation. For instance, businesses located in disadvantaged communities are often unaware of efficiency program offerings and benefits. By connecting with program partners that have long-established relationships with these customers and communities, TRC can better reach and serve these customers.

## 3. Program Design and Best Practices

TRC midstream program delivery strategy and tactics, informed by program best practices and lessons learned from running similar programs across the US, include:

- **Determine Optimal Measure Mix:** TRC has developed an automated program design tool which we call ModelMaster<sup>TM</sup> to identify the optimal mix of eligible measures to create the most cost-effective program design satisfying various energy savings, peak demand reduction and budgetary goals.
- Equipment Qualification/QPL List Upload to Database: Upon completion of product review and equipment qualification, TRC will generate the Qualified Product List (QPLs). This QPL will be integrated into the incentive application process which will simplify the application process and ensure consistency of reporting with no deviant equipment offerings. The QPL will be reviewed quarterly and updated as needed.
- Partner Recruitment: TRC will work with all qualified midstream market partners interested in joining the Program. These highly specialized professionals can convey the importance of energy efficiency to the end-user or installers. We will interview and on-board all potential distributors, verifying their eligibility, suitability, and business track record before reviewing participation requirements and checking which of their products are eligible for incentives before the execution of any agreements.

- Train Participants: Training must incorporate the program process and requirements and provide a value proposition to their continued commitment. TRC answers the critical question of "what's in it for me and my business?" Partners must be celebrated for their dedication and for reaching their program goals. The benefit of training goes beyond "how to." It helps partners stand out as a premier energy-efficient equipment vendor or contractor in their communities, which benefits customers as they receive a high-quality product that produces long-term savings.
- Negotiate and Execute Joint Agreements: To facilitate the development of the program's partnerships, using highly evolved agreements from our other midstream programs, TRC will create a standard Memorandum of Understanding (MOU). We will recruit midstream partners through a variety of means, which will include a Request for Proposals (RFP) process to solicit interest from non-local distributors and online vendors. Partners interested in participating in the Midstream Program will agree to a Memorandum of Understanding (MOU). The MOU will include the terms and conditions of participation in the program and receipt of incentives, sales goals and allocations, and any data submission, marketing or advertising requirements. The MOU agreement will be executed detailing requirements for promotions at each distributor's eligible locations. TRC will review the terms and conditions with selected partners, negotiate terms if necessary, and obtain signatures to execute the MOU agreements.
- Develop Market Awareness. TRC promotes the Program through face-to-face engagements and print channels. In-person opportunities include community events, retail collaborations, and zip code targeted sales blitzes. Print advertisements are selected based on circulation within targeted customer zones. This best practice is a multi-faceted marketing approach that ensures high program visibility and reaches various customer segments throughout the territory.
- Work with Partners to Market and Sell Qualifying Products: TRC will
  develop program collateral, communications tools, and point of sale materials to
  assist Program partners in the promotion and sale of qualifying equipment. We
  then engage the identified audiences through participation in events and with
  monthly, multi-touch, multi-media campaigns.
- Product Promotion and Program Application: QPLs are uploaded into Captures and will ensure models submitted by stakeholders are vetted for eligibility and provide cost-effective energy savings. TRC uses continuous improvement techniques to simplify the application process and facilitate participation.
- **Product Application Review:** Using the established minimum requirements as a baseline, we will receive and evaluate documentation for new products proposed by participating distributors and manufacturers. As part of this review, we will also look at pricing, incentive levels, and timing of availability in the market. If an

- appropriate, cost-effective new measure is identified TRC may develop a workpaper to submit for approval and ultimate inclusion on the deemed measure list.
- Customer Eligibility Validation: TRC will use Captures to ensure customers are eligible to participate in the program. Eligibility will be verified using the customer account information supplied and stored in Captures. Partner MOUs will detail the specific data requirements for participation. TRC will train partners on required data collection and verification tools. Captures will include required data fields and will validate install address, installation dates, and compare data submissions against historical data to ensure eligibility
- Program Management Tool: TRC uses its proprietary tracking system, Captures, as the primary, day-to-day project tracking and program management tool to securely track and manage information for this Program. Captures provides a simple general user interface for data entry, project milestone tracks specifically tailored to match the program design, automated workflow queues that alert TRC staff to project action items, and powerful reporting modules. Captures automates calculations with built-in procedures for data processing and reporting. The system includes current and historical program data, maintaining a complete database that allows SCE and TRC to analyze trends and successes over an extensive period.
- **Ease of Participation.** By partnering with a wide-range of program partners, customers have easy access to discounted energy-efficient lighting measures paired with a responsive customer care team.
- External Factors. TRC closely monitors regulatory and product development related to the Lighting industry. Our team actively monitors regulatory proceedings and advice letters to ensure that program performance is optimized through integration with other initiatives when possible and all regulatory mandates and guidance are adhered to in program design and delivery. In addition, TRC staff will meet regularly with SCE staff to review legislative and regulatory activities, assess program-related regulatory needs and establish an action plan for any necessary follow-up, program modifications or discovery needs.

#### 4. Innovation

The Program promotes innovation and minimizes lost opportunities through the following key strategies:

• Technology Innovation. TRC's engineers and technical staff continuously monitor the market for new technologies and develop processes by which to pilot and deploy them in the Program. We work closely with manufacturers and distributors to understand what potential new technologies are on the near-term market horizon and how these new technologies work and where it can be deployed in pilots. We also monitor regulatory developments such as issuance of standards, rollout of new technologies, and certifications having significant impacts on the industry.

- Marketing Innovation. Captures tracks KPIs, program guideline compliance, program partner information, and marketing activity and TRC management makes program decisions based on this real-time data. TRC utilizes point-of-purchase marketing material and signage to direct customers to program-qualified products. The use of social media posts, paid search, and direct email campaigns drive customer awareness of program offerings in their area.
- **Delivery Approach Innovation.** Distributors and installers pass the savings directly on to consumers. Partner staff is trained on the benefits of the Program and EE lighting product trends in order to promote program-qualified lighting products to their customers. The lighting program also leverages additional funding resources from other programs, allowing for upgrades to be integrated and function alongside other improvements such as DR, EE, or water efficiency.

## 5. Metrics

TRC will record all required project data in Captures and track program performance by capturing the following Key Performance Indicators (KPIs):

Category/Program Type	KPI	KPI Definition
Program Performance	Energy Savings (kWh/kW)	To be reported monthly, a comparison of net lifecycle energy savings achieved vs. net lifecycle energy savings required under each annual period of the Agreement
Program Performance	Cost Management (TRC ratio)	Program's TRC ratio based on measure installation and total program costs, including the implementers, participants and utilities cost/spend to date
Program Performance	Goal and Expenditure Alignment (kWh/kW and program spend)	Percent achieved to date of annual kWh goal divided by percent of overall annual budget spent to date
Program Performance	Customer Satisfaction (Survey Scoring)	Average score (0-5 scale) of customer (distributor, retailers) customer satisfaction surveys administered by implementer
Program Performance	Inspections (Commercial enduse customers)	Number of inspections that pass inspection criteria divided by the number of inspections completed = percent of inspections that pass implementer inspection.

Category/Program Type	KPI	KPI Definition
Marketing Activities	Events	Number of field events held at retailer and distributor sites (reported monthly)
Marketing Activities	Retailer and Distributor Visits	Number of retailer and distributor visits performed by implementer field staff (reported monthly)
Compliance	Reporting Accuracy	Accuracy and timeliness of monthly invoicing and energy savings (monthly) and TRC reporting (quarterly/annually) submitted by implementer
Supplier Chain	Diverse Business Enterprises	Measures spend performance
Responsibility	Spend	with Diverse Business Enterprises
Supplier Chain	Safety Ratings	An evaluation of the
Responsibility		implementer's overall approach to safety and the quality of the
		implementer's safety program

# 6. For Programs Claiming To-Code Savings

This section intentionally omitted.

#### 7. Pilots

This section intentionally omitted.

## 8. Workforce Education & Training (WE&T)<sup>1</sup>

The program will engage the IOU's Workforce Education & Training (WE&T) program where possible to help promote the creation of a valued, skilled workforce. The program team will encourage program partners to consider providing job access to Disadvantaged Workers through the program participation process. TRC will provide program partners with Point of Purchase marketing materials for display at distributor locations, or in an electronic template to be used in their marketing to area contractors, to encourage partners and their customers to seek out a DAV organization when seeking to hire new staff. The program team regularly works with local associations, training organizations and colleges to support recruitment and training of a diverse industry workforce. Additionally, workforce education and training requirements will be incorporated into any program subcontract agreements.

<sup>&</sup>lt;sup>1</sup> D.18-05-041, Page 20-21 and Ordering Paragraph 7.

## 9. Workforce Standards<sup>2</sup>

As appropriate, TRC will comply with the Lighting Controls Workforce Standards through our current Partner MOU and training process and through promotion prerequisites. By proactively educating customers and Partners on the standards and requiring the inclusion of the standards in the contracting documents when customers solicit bids for lighting measure implementation, the Program enforces compliance. Workforce standards incorporated into the Program ensure lighting installation technicians possess certification from the California Advanced Lighting Controls Training Program (CALCTP) as either CALCTP Technical Installer or CALCTP Acceptance Test Technician. These requirements apply to all the individuals that perform the installation work, not to the contracting firm itself. As proof, only Qualified Documents issued by the CALCTP is accepted.

## 10. Disadvantaged Worker Plan:<sup>3</sup>

TRC tracks Disadvantaged Worker participation where appropriate and feasible. Focused questions in the MOU allow for voluntary self-reporting and partners will be encouraged to flow this down to the contractors and installers who purchase the program incentivized measures. Customers may be asked to self-report Disadvantaged Worker details through customer satisfaction surveys. All information collected is tracked in Captures.

## 11. Additional Information

This section is not applicable for this Program.

D.18-10-008, Ordering Paragraph 1-2 and Attachment B, Section A-B, Page B-1.

D.18-10-008, Attachment B, Section D, page B-9.

# 3. Supporting Documents

Attach all the following documents as PDF-format files to this file:

## 1. Program Manuals and Program Rules

#### Introduction

California Statewide Lighting Program (CASWL or Program) is a non-residential midstream retrofit program offering monetary incentives to market partners (lighting distributors and manufacturers) to encourage the purchase and installation of energy-efficient lighting equipment for commercial and industrial electricity customers. Installing energy-efficient lighting can help reduce energy consumption and operating expenses, which leads to greater profitability, productivity and efficiency. Incentives are designed to encourage these installations by offsetting the incremental cost of higher efficiency equipment. Using energy-efficient lighting can positively impact a business' bottom line while helping the environment by reducing air pollution and preserving natural resources. All utility customers benefit, because reduced electrical system demand helps keep energy costs down.

#### **About CASWL**

CASWL is administered by SCE under the auspices of the CPUC and implemented by TRC. The CASWL Program provides program implementation services, including marketing, outreach, operations, customer service, and data management and reporting. The Program leverages TRC's outreach staff, team of subcontractors, and network of trade professionals to provide customers with more affordable energy efficient lighting options.

CASWL runs from July 1, 2021 until May 31, 2024. Incentive applications cannot be submitted prior to July 1, 2021. Project installations must be completed by the date specified in the most current program application terms and conditions and no later than May 31, 2024. The program budget is limited, and incentives are paid to qualifying program partners until funds are no longer available or May 31, 2024 — whichever comes first.

#### **Customer Eligibility**

To be eligible a customer must be a commercial or industrial customer and take or receive electricity services from within the IOUs' service territories and pay into the Public Purpose Programs Charge, based on Customer service account and/or Site address. A "Commercial and Industrial Customer" is a Customer who is not a Residential Customer and has a monthly maximum demand of greater than 20 kW.

Eligible customer segments include, but are not necessarily limited to:

Sector	Segment	NAICS Code	Description of Segment
Industrial	Mining, Quarrying, and Oil and Gas Extraction	21****	Mining, oil and gas extraction and support activities

Sector	Segment	NAICS Code	Description of Segment
Commercial	Utilities	22****	Power, gas and water generation, transmission and distribution
Commercial	Construction	23****	Construction and supporting services
Industrial	Manufacturing	31-33****	All manufacturing
Commercial	Wholesale Trade	42***	All wholesale activities
Commercial	Retail Trade	44-45***	All retailers
Commercial	Transportation and Warehousing	48-49***	All transportation and support services
Commercial	Information	51****	Publishing, communication and information technology
Commercial	Finance and Insurance	52***	Financial and insurance services
Commercial	Real Estate Rental and Leasing	53***	All rental and leasing services
Commercial	Professional, Scientific, and Technical Services	54***	Professional service offices
Commercial	Management of Companies and Enterprises	55****	Corporate offices
Commercial	Administrative and Support and Waste Management and Remediation Services	56****	Administrative and waste services
Education	Educational Services	61****	All educational facilities
Commercial	Health Care and Social Assistance	62***	All health care facilities

Sector	Segment	NAICS Code	Description of Segment
Commercial	Arts, Entertainment, and Recreation	71****	Entertainment and recreational facilities
Commercial	Other Services	81***	All other services except public administration
Government	Public Administration	92****	All government facilities

#### Incentive Exclusivity

Program offerings will be continually evaluated for potential overlap with other programs. If a customer has received an incentive or services from another statewide or local program, they are ineligible to receive an incentive or services through CASWL for the same measure(s). Conversely, if a customer receives an incentive from CASWL, they are ineligible to receive incentives from any other statewide or local program for the same measure(s). As a result, all project site and customer participation records will be tracked and reviewed prior to enrolling a customer in CASWL. In addition, all customers must certify that they have not received other incentives or funding related to the application's measure or service in order to qualify for the program.

### **Program Partner Eligibility**

The program will engage with national, regional and local distributors and manufacturers who sell products that will meet the eligibility requirements of the program.

To be eligible for incentives, program partners must:

- Agree to a Memorandum of Understanding (MOU) issued by the program;
- Submit supporting documentation as outlined in the MOU including sales data;
- Attend required program training;
- Abide by all program rules and regulations as detailed in the MOU program Terms & Conditions;
   and
- Require all participating contractors to abide by all program rules and regulations as detailed in the MOU program Terms & Conditions.

In addition to the above network participation requirements, the following apply to all Advanced Lighting projects:

<u>Lighting.</u> Lighting installation technicians must possess certification from the California Advanced Lighting Controls Training Program (CALCTP) as either CALTCP Technical Installer or CALCTP Acceptance Test Technician. These requirements apply to all the individuals that perform the installation work.

These requirements are incorporated into all program Terms & Conditions to ensure compliance.

# **Measure Eligibility**

The program requires that all eligible lighting measures have strong technical support for claimed energy savings. This technical support may come from the Database for Energy Efficient Resources (DEER) or through new or existing CPUC approved Workpapers. The program utilizes the Deemed platform to influence, calculate, and incentivize customers for energy savings. Deemed measures, or prescriptive measures with predefined attributes, must have current, approved technical workpapers and be listed in the current DEER or electronic Technical Resource Manual (eTRM).

In addition, the measure must be sold by an eligible distributor to an eligible utility customer, or a contractor on behalf of an eligible utility customer; and each measure is installed at a customer site that directly takes or receives electricity services from within the IOUs' service territories and pays into the Public Purpose Programs Charge, based on service account and/or site address. The energy reductions associated with each measure must meet or exceed Title 24 or Title 20 energy efficiency standards set by the CEC, if applicable. Each measure that is part of a Project must be a new measure that was not previously installed or utilized by any entity.

Deemed measures include, but are not necessarily limited to:

MeasCode	MeasureID	MeasDescription
SWLG011A	SWLG011-03A-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 4500 to < 5400 lumens and >= 130 LPW and < 150 LPW
SWLG011A	SWLG011-03A-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 4500 to < 5400 lumens and >= 130 LPW and < 150 LPW
SWLG011B	SWLG011-03B-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 5400 to < 6500 lumens and >= 130 LPW and < 150 LPW
SWLG011B	SWLG011-03B-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 5400 to < 6500 lumens and >= 130 LPW and < 150 LPW
SWLG011C	SWLG011-03C-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 6500 to < 7800 lumens and >= 130 LPW and < 150 LPW
SWLG011C	SWLG011-03C-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 6500 to < 7800 lumens and >= 130 LPW and < 150 LPW
SWLG011D	SWLG011-03D-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 7800 to < 9400 lumens and >= 130 LPW and < 150 LPW
SWLG011D	SWLG011-03D-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 7800 to < 9400 lumens and >= 130 LPW and < 150 LPW
SWLG011E	SWLG011-03E-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 9400 to < 11800 lumens and >= 130 LPW and < 150 LPW

MeasCode	MeasureID	MeasDescription
SWLG011E	SWLG011-03E-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 9400 to < 11800 lumens and >= 130 LPW and < 150 LPW
SWLG011F	SWLG011-03F-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 11800 to < 14800 lumens and >= 130 LPW and < 150 LPW
SWLG011F	SWLG011-03F-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 11800 to < 14800 lumens and >= 130 LPW and < 150 LPW
SWLG011G	SWLG011-03G-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 14800 to < 18500 lumens and >= 135 LPW and < 150 LPW
SWLG011G	SWLG011-03G-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBa y luminaire rated from 14800 to < 18500 lumens and >= 135 LPW and < 150 LPW
SWLG011H	SWLG011-03H-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 18500 to < 23100 lumens and >= 135 LPW and < 150 LPW
SWLG011H	SWLG011-03H-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 18500 to < 23100 lumens and >= 135 LPW and < 150 LPW
SWLG011I	SWLG011-03I-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 23100 to < 30000 lumens and >= 135 LPW and < 150 LPW
SWLG011I	SWLG011-03I-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 23100 to < 30000 lumens and >= 135 LPW and < 150 LPW
SWLG011J	SWLG011-03J-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 30000 to < 39000 lumens and >= 135 LPW and < 150 LPW
SWLG011J	SWLG011-03J-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 30000 to < 39000 lumens and >= 135 LPW and < 150 LPW
SWLG011K	SWLG011-03K-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 39000 to < 50700 lumens and >= 140 LPW and < 150 LPW
SWLG011K	SWLG011-03K-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 39000 to < 50700 lumens and >= 140 LPW and < 150 LPW
SWLG011L	SWLG011-03L-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 50700 to < 65900 lumens and >= 140 LPW and < 150 LPW

MeasCode	MeasureID	MeasDescription
SWLG011L	SWLG011-03L-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 50700 to < 65900 lumens and >= 140 LPW and < 150 LPW
SWLG011M	SWLG011-03M-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 4500 to < 5400 lumens and >= 150 LPW
SWLG011M	SWLG011-03M-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 4500 to < 5400 lumens and >= 150 LPW
SWLG011N	SWLG011-03N-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 5400 to < 6500 lumens and >= 150 LPW
SWLG011N	SWLG011-03N-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 5400 to < 6500 lumens and >= 150 LPW
SWLG011O	SWLG011-03O-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 6500 to < 7800 lumens and >= 150 LPW
SWLG011O	SWLG011-03O-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 6500 to < 7800 lumens and >= 150 LPW
SWLG011P	SWLG011-03P-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 7800 to < 9400 lumens and >= 150 LPW
SWLG011P	SWLG011-03P-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 7800 to < 9400 lumens and >= 150 LPW
SWLG011Q	SWLG011-03Q-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 9400 to < 11800 lumens and >= 150 LPW
SWLG011Q	SWLG011-03Q-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 9400 to < 11800 lumens and >= 150 LPW
SWLG011R	SWLG011-03R-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 11800 to < 14800 lumens and >= 150 LPW
SWLG011R	SWLG011-03R-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 11800 to < 14800 lumens and >= 150 LPW
SWLG011S	SWLG011-03S-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 14800 to < 18500 lumens and >= 150 LPW

MeasCode	MeasureID	MeasDescription
SWLG011S	SWLG011-03S-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 14800 to < 18500 lumens and >= 150 LPW
SWLG011T	SWLG011-03T-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 18500 to < 23100 lumens and >= 150 LPW
SWLG011T	SWLG011-03T-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 18500 to < 23100 lumens and >= 150 LPW
SWLG011U	SWLG011-03U-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 23100 to < 30000 lumens and >= 150 LPW
SWLG011U	SWLG011-03U-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 23100 to < 30000 lumens and >= 150 LPW
SWLG011V	SWLG011-03V-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 30000 to < 39000 lumens and >= 150 LPW
SWLG011V	SWLG011-03V-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 30000 to < 39000 lumens and >= 150 LPW
SWLG011W	SWLG011-03W-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 39000 to < 50700 lumens and >= 150 LPW
SWLG011W	SWLG011-03W-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 39000 to < 50700 lumens and >= 150 LPW
SWLG011X	SWLG011-03X-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 50700 to < 65900 lumens and >= 150 LPW
SWLG011X	SWLG011-03X-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 50700 to < 65900 lumens and >= 150 LPW

In addition, TRC may include currently available and future available eTRM lighting measures in the program offering as needed to achieve energy savings and cost effectiveness. The following table provides a summary of additional deemed measures and associated workpapers currently available on the CA eTRM.

#	Workpaper Name	Short Description	URL link or location name
1	LED, Tube	Replacement of a 4-foot linear fluorescent T8 lamp with a LED T8 Lamp UL Type A	https://www.caetrm.com/measure/SWLG009/02/
2	Type B and Type C LED, Tube	Installation of high efficacy DLC compliant UL Type B lamps and UL Type C LED lamp and driver systems	https://www.caetrm.com/measure/SWLG018/01/

## **Inspections**

TRC will perform on-site post-installation inspections for a randomly selected set of midstream customer projects using a sampling procedure to be approved by SCE. For-cause inspections will be performed as needed.

## **Quality Assurance**

TRC's Quality Management Plan (Plan) ensures that the quality of field activities and product installations while also promoting and monitoring partner compliance with program requirements. The Plan is designed to realize savings that can be validated via robust evaluation without creating undue program participation barriers.

Captures defines roles and responsibilities in a project milestone track to efficiently and effectively move a project through the QA/QC process. QA processes are used to evaluate and ensure the quality of projects and measures. QA is supported by process and standards development, process checklists, an advanced tracking system, automated applications, and internal and external project audits.

QC ensures that our projects and results meet CPUC and SCE expectations. QC includes product eligibility, customer eligibility, appropriate measure classification, and savings claims. With the multitude of delivery partners participating in this midstream/upstream program, the specific processes must be tailored to each program element to achieve these QA/QC goals in the most cost-effective manner.

The following QA/QC activities are performed to validate program results and verify compliance with program rules:

- Customer On-site Post-Inspections. TRC will perform a minimum of 15% random site inspections on C&I projects post-installation. On-site inspections consist of TRC staff conducting site walk-throughs to confirm the incentivized products were installed at the customer site. An inspection form is completed for all inspections and uploaded in Captures. Distributors are responsible for informing C&I customers that upon purchasing incentivized lighting products, they may be selected for a post-inspection and will need to provide site access to Program and SCE staff. TRC reserves the right to inspect any project, regardless of size, for cause.
- Sales Data Review. Participating program partners submit their sales information and supporting verification documents through a web-based portal where they are verified and tracked in Captures. TRC sales data import verifies that the distributor's data is in the specified format as outlined in the MOU, products were installed within an eligible service territory, products sold

meet the eligibility requirements detailed in the Program's qualifying products criteria, and that all promotions are in compliance with Program rules. All sales data is thoroughly reviewed to identify discrepancies that might indicate attempts at fraud, such as duplicate records, suspect customer addresses, or a disproportionately high percentage of sales from a single customer. TRC uses advanced data analysis to effectively diagnose the less obvious discrepancies, as well as monitor for trends where performance might be improved with closer attention.

- Invoice Review. Partner invoice submissions are checked against previous submissions to mitigate the potential for duplication of items/quantities invoiced. Partner invoices will also be include a line item that shows the incentive amount being passed to the customer with program attribution. If errors are found after incentives are paid, TRC will reconcile the amount during the next upload cycle in collaboration with the participating distributor after clearly explaining the change. All eligible and reconciled reimbursement information is stored in Captures.
- In-Store Visits. TRC conducts field visits at all program partner locations to ensure compliance with Program rules and MOUs as well as provide additional training and support where needed. Visits are recorded in Captures and included in regular reports.

**Negotiate contractual agreements with distributors.** TRC will negotiate program contracts with each distributor selected for the program. TRC and each participating Distributor will sign a Memorandum of Understanding (MOU). The MOU will also pre-determine who will supply the sales data reporting requirements and where the incentives will be sent. Each MOU will include:

- All Program terms and conditions;
- Implementer's company name and ultimate parent;
- Implementer's customer service contact information (phone number and email);
- Cancellation policy, requirements, process, and any applicable fees;
- The benefits and risks of enrolling in the Program, including any termination or termination fees that may be assessed by Implementer;
- Invoicing details, including information on required documentation;
- Commitment (by product type and model) to a sales quota, pricing, and the buy down/markdown amount;
- Pre-promotional pricing and subsequent promotional pricing;
- Program-qualified product types and SKUs;
- Total funding allocation;
- Description of any contribution from the Distributor to support cooperative advertising;
- List of retail locations where the incentivized product will be sold and an outline of any product promotions; and
- Commitment to collect product sales data on incentivized measures and to submit monthly reports.

TRC will establish MOUs directly with Distributors on an annual basis. These agreements will include specific participation information such as SKUs for the products supported through the program, reporting requirements, incentive levels, and the promotional schedule for outreach events.

Distributors must submit monthly sales data which will allow the program to track product movement by product type, model number, location, date of movement, and kWh savings. Product sales information will be compiled in program reports and TRC will submit these reports to SCE as a part of the regular reporting cycles. The Sales Data File includes:

#### A. Distributor

- 1) Distributor ID
- 2) Retail Price Before Incentive
- 3) Total Instant Discount Incentive Amount Requested (Quantity Sold \* Incentive Amount)
- 4) Invoice/PO # to Purchasing Contractor

#### **B.** Customer

- 5) Customer/End User Building Type (Example: warehouse, gym, retail, special purpose, etc.)
- 6) Customer/End User Company
- 7) Customer/End User Installation Contact Name
- 8) Customer/End User Installation Address
- 9) Customer/End User Phone Number
- 10) Customer/End User Email

### C. Purchaser/Contractor

- 11) Purchaser/Contractor Company Name
- 12) Purchaser/Contractor Contact Name
- 13) Purchaser/Contractor Address
- 14) Purchaser/Contractor Phone Number
- 15) Purchaser/Contractor Email
- 16) Sales Date

#### D. Product Data

- 17) Quantity sold
- 18) Distributor Model #
- 19) Commercial Lighting Product Type
- 20) Measure Code
- 21) Qualified Product List (QPL) Model Number
- 22) DLC/ENERGY STAR Model Number or ID (as applicable)
- 23) Product Manufacturer Name

The remaining data will auto populate in Captures based on the measure code.

- 24) Lamps Per Fixture
- 25) Watts Per Lamp
- 26) Watts Per Fixture
- 27) Lumens

- 28) Rated Life (in hours)
- 29) Comments

In addition, the Distributor-Implementer Agreement will include provisions requiring the Distributor to include the applicable Program requirements in agreements or Program Terms and Conditions that apply to the trade professionals purchasing and installing the products on behalf of the End-Use Customers. The trade professionals will have the responsibility to inform the End-Use Customer of the rules and requirements associated with purchasing the incentivized equipment including the potential for inspection by the Program team and/or SCE. The Program requirements will include, but are not limited to:

- Disclaimer stating that, "Measures do not guarantee a certain amount of energy savings";
- Disclosure that Implementer is not a representative of SCE or otherwise affiliated with SCE.
- Acknowledgment of the risks associated with participating in energy efficiency programs;
- Provide any Installation requirements or requirement to effectuate the Measure, any inspection rights or other rights of SCE, the QA/QC Engineer or other third party under this Agreement with respect to Customer's premises and each Measure;
- Ongoing rights for TRC and/or SCE to inspect the product installation at the participating enduser site;
- The benefits and risks of enrolling in the Program and the applicable Project, including any termination or termination fees that may be assessed by Implementer; and
- Customer is not guaranteed any energy savings from the Measure.

TRC will design and implement a Quality Performance Indicator (QPI) tool to help quickly identify trends in performance and non-compliance by partners. The QPI tool increases operational efficiency by identifying and correcting issues early in the process. By quickly addressing problems with the distributors and providing additional training, similar issues can be eliminated on future submittals. The QPI tool also helps identify possible fraudulent activity by displaying trends that are above or below acceptable thresholds. The QPI tool will collect and track key performance metrics including, but not limited to adherence to the terms of the agreements; ability to properly screen and apply product and participant eligibility requirements; timeliness and thoroughness of data submittals; and number of failed inspections at customers' facilities.

The QPI tool allows for overall evaluation of distributor performance and is used to create a performance scoring system. The performance score will give participating distributors a quick and easy way of measuring their performance and how it contributes to the overall success of the Initiative.

Any Distributor that consistently submits incomplete applications, does not follow the Program guidelines, requests multiple exceptions, misrepresents energy savings, or misrepresents their partnership with the Program will be given a formal warning. The Operations Manager will call the Distributor to discuss the complaint and will follow up with a written warning. If the Program receives a second complaint the Operations Manager will contact the Distributor via phone with a second warning and the Distributor will be placed on a Performance Improvement Plan. The Operations Manager will follow-up with an email including the Performance Improvement Plan Agreement. The Performance

Improvement Plan will include training to review the specific areas of improvement which the Distributor will need to agree to. If the plan is not followed, improvement is not observed, or the Program receives additional complaints, the Distributor will be removed from further Program participation.

#### Performance Improvement Plan:

- ♦ <u>Training:</u> Distributor is offered a training session to review the Program basics, application process and general Program guidelines. They will sign the Performance Improvement Plan agreement agreeing to adhere to the Program guidelines or be terminated from the Program. If the Distributor does not improve their performance, they may be offered specialized training.
- <u>Specialized Training:</u> Distributor can be offered specialized training if they are not adhering to the Program requirements and guidelines. Specialized training will focus on reviewing the specific issues with projects submitted by Distributor. If the Distributor does not improve their performance, they will be notified of termination from the Program.
- <u>Letter of Termination: If</u> a Distributor's performance does not improve after their specialized training meeting and do not adhere to the Program and application guidelines, they will be sent a letter of termination from the Program.

#### Customer Issue Resolution:

TRC provides exceptional customer service and follows the core values of simplify, assist, provide expertise, navigate, and deliver. Following the issue escalation procedures ensure that all concerns are addressed, tracked, and resolved in a timely manner. Additionally, all appropriate parties are informed about issues to provide process improvement. This procedure applies to all issues that are shared with TRC employees, contractors, and other stakeholders.

Though most issues are quickly resolved, some require additional escalation; thus, taking more time to find the best possible resolution. The table below summarizes TRC's issue resolution procedures. Following these procedures, team members can clearly filter escalated issues to the proper level of management. Additionally, it ensures that all necessary parties have been properly informed of any issues that may arise.

Level	1	2	3	4
Activity	Whomever first received the issue	Issue has not resolved at Level 1, customer requests manager, or expresses specific concern with a program or individual.	Concern has not been resolved at Level 2 to customer's satisfaction or customer is requesting upper management	Customer threatens legal action, informing the media, informing legislative stakeholders, the complaint could impact the continued success of the Program, etc.
Accountable	Representative who fielded the complaint	TRC Operations Manager	TRC Program Manager (may delegate)	TRC Program Manager, SCE Program Managers

Level	1	2	3	4
Consulted	Representative' s supervisor	TRC Program Manager	SCE Program Managers	SCE Senior Program Managers, TRC Senior Program Managers, Legal counsel (as necessary)

# **Program Metrics**

# **Overall Portfolio**

Common Problem	Final Common Metric or Indicator	Category: Metric or Indicator
Capturing energy Savings	First year annual and lifecycle ex-ante (pre- evaluation) gas, electric, and demand savings (gross and net)	Metric
Disadvantaged Communities	First year annual and lifecycle ex-ante (pre- evaluation) gas, electric, and demand savings (gross and net) in disadvantaged communities	Metric
Hard-to-Reach Markets	First year annual and lifecycle ex-ante (pre- evaluation) gas, electric, and demand savings (gross and net) in hard-to-reach markets	Metric
Cost per unit Saved	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	Metric

# Commercial

Common Problem	Final Common Metric or Indicator	Category: Metric or Indicator
Capturing energy Savings	First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net)	Metrics
	First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) as a percentage of overall sectoral usage	
Greenhouse Gas Emissions	Greenhouse gasses (MT CO2eq) Net kWh savings, reported on an annual basis	Metric

Common Problem	Final Common Metric or Indicator	Category: Metric or Indicator
Depth of interventions	Energy savings (gross kWh, therms) as a fraction of total project consumption.	Metric
Penetration of energy efficiency programs in the eligible market	Percent of participation relative to eligible population for small, medium, and large customers	Metrics
	Percent of square feet of eligible population	
	Percent of participation by customers defined as "hard-to-reach"	
Cost per unit saved	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	Metric
Program Satisfaction	Improvement in customer satisfaction	Indicator
	Improvement in Distributor satisfaction	
Investment in energy efficiency	Fraction of total investments made by ratepayers and private capital	Indicator

# **Industrial**

Common Problem	Final Common Metric or Indicator	Category: Metric or Indicator
Capturing energy Savings	First year annualized and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) in industrial sector	Metric
Greenhouse Gas Emissions	Greenhouse gasses (MT CO2eq) Net kWh savings, reported on an annual basis	Metric
Penetration of energy efficiency programs and diversity of participants	Percent of participation relative to eligible population for small, medium and large customers	Metric
New participation	Percent of customers participating that have not received an incentive for the past three years, annually, by small, medium and large customer categories	Indicator
Cost per unit saved	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	Metric
Baseline/consumption reduction	Reduction in consumption (proposed by SCE and SDG&E)	Metric

# 2. Program Theory <sup>4</sup> and Program Logic Model <sup>5</sup>

Program Theory:

The program theory indicates that providing midstream incentives to distributors to buydown the cost of energy efficient lighting will:

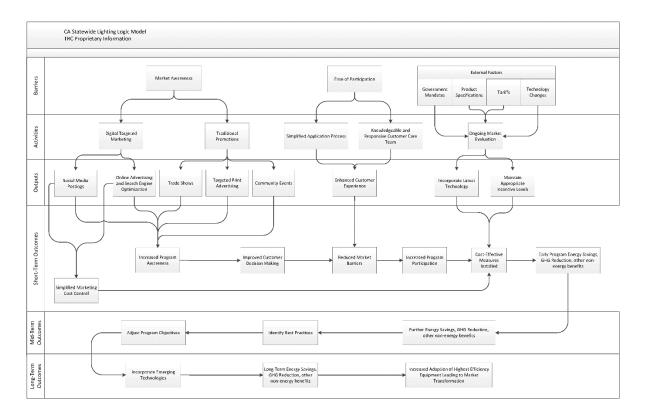
- Increase distributor awareness of higher efficiency equipment;
- Create motivation for distributors to stock and sell more efficient equipment;
- Improve customer energy efficiency decision making;
- Reduce market barriers leading to an overall increase in the purchase of more efficient products;
- Result in energy savings over the short, mid and long term;
- Increase broader adoption of higher efficiency equipment leading to market transformation;
- Contribute to the collective achievement of energy savings; and
- Move California closer to the target of doubling statewide energy efficiency savings in electricity and natural gas end uses by 2030 as set by SB350.

Program Logic Model:

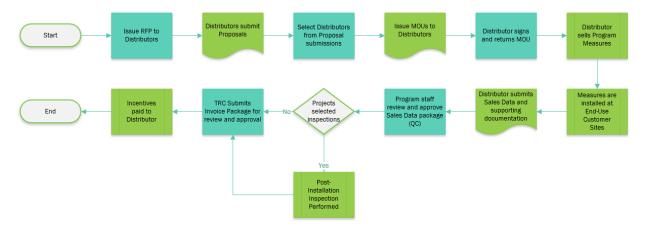
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<sup>&</sup>lt;sup>4</sup> The expected causal relationships between program goals and program activities in a way that allows the reader to understand why the proposed program activities are expected to result in the accomplishment of the program goals. A well-developed program theory can (and should) also describe the barriers that will be overcome in order to accomplish the goals and clearly describe how the program activities are expected to overcome those barriers. *California Evaluation Framework*, June 2004.

The graphical representation of the program theory showing the flow between activities, their outputs, and subsequent short-term, intermediate, and long-term outcomes. *California Evaluation Framework*, June 2004.



## 3. Process Flow Chart



## 4. Incentive Tables, Workpapers, Software Tools<sup>6</sup>

The following tables provide a summary of the deemed measure offerings and associated workpapers. TRC will modify rebate amounts through the MOU process based on Program needs such as energy savings and cost effectiveness. The table below provides an expected range of incentive level for each measure.

Per D.19-08-009, for fuel substitution measures where the incentive exceeds the Incremental Measure Cost (IMC), the CPUC requires submission of a workpaper addendum using a separate template. Third-party implementers can request the template from their Contract Manager. SCE Program Managers should refer to the E-PPICs Smart Sheet.

#	Measure	Incentive Level	
1	All measure variations listed in the table below.	\$5 to Incremental Measure Cost (IMC)	
2			
3			

#	Workpaper Name	Short Description	URL link or location name
1	LED, High or Low Bay	Installation of LED fixtures in high bay and low bay interior spaces	https://www.caetrm.com/measure/SWLG011/03/
2			
3			

MeasCode	MeasureID	MeasDescription
SWLG011A	SWLG011-03A-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 4500 to < 5400 lumens and >= 130 LPW and < 150 LPW
SWLG011A	SWLG011-03A-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 4500 to < 5400 lumens and >= 130 LPW and < 150 LPW
SWLG011B	SWLG011-03B-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 5400 to < 6500 lumens and >= 130 LPW and < 150 LPW
SWLG011B	SWLG011-03B-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 5400 to < 6500 lumens and >= 130 LPW and < 150 LPW
SWLG011C	SWLG011-03C-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 6500 to < 7800 lumens and >= 130 LPW and < 150 LPW
SWLG011C	SWLG011-03C-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 6500 to < 7800 lumens and >= 130 LPW and < 150 LPW
SWLG011D	SWLG011-03D-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 7800 to < 9400 lumens and >= 130 LPW and < 150 LPW
SWLG011D	SWLG011-03D-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 7800 to < 9400 lumens and >= 130 LPW and < 150 LPW

MeasCode	MeasureID	MeasDescription
SWLG011E	SWLG011-03E-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 9400 to < 11800 lumens and >= 130 LPW and < 150 LPW
SWLG011E	SWLG011-03E-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 9400 to < 11800 lumens and >= 130 LPW and < 150 LPW
SWLG011F	SWLG011-03F-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 11800 to < 14800 lumens and >= 130 LPW and < 150 LPW
SWLG011F	SWLG011-03F-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 11800 to < 14800 lumens and >= 130 LPW and < 150 LPW
SWLG011G	SWLG011-03G-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 14800 to < 18500 lumens and >= 135 LPW and < 150 LPW
SWLG011G	SWLG011-03G-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBa y luminaire rated from 14800 to < 18500 lumens and >= 135 LPW and < 150 LPW
SWLG011H	SWLG011-03H-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 18500 to < 23100 lumens and >= 135 LPW and < 150 LPW
SWLG011H	SWLG011-03H-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 18500 to < 23100 lumens and >= 135 LPW and < 150 LPW
SWLG011I	SWLG011-03I-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 23100 to < 30000 lumens and >= 135 LPW and < 150 LPW
SWLG011I	SWLG011-03I-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 23100 to < 30000 lumens and >= 135 LPW and < 150 LPW
SWLG011J	SWLG011-03J-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 30000 to < 39000 lumens and >= 135 LPW and < 150 LPW
SWLG011J	SWLG011-03J-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 30000 to < 39000 lumens and >= 135 LPW and < 150 LPW
SWLG011K	SWLG011-03K-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 39000 to < 50700 lumens and >= 140 LPW and < 150 LPW
SWLG011K	SWLG011-03K-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 39000 to < 50700 lumens and >= 140 LPW and < 150 LPW

MeasCode	MeasureID	MeasDescription
SWLG011L	SWLG011-03L-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 50700 to < 65900 lumens and >= 140 LPW and < 150 LPW
SWLG011L	SWLG011-03L-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 50700 to < 65900 lumens and >= 140 LPW and < 150 LPW
SWLG011M	SWLG011-03M-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 4500 to < 5400 lumens and >= 150 LPW
SWLG011M	SWLG011-03M-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 4500 to < 5400 lumens and >= 150 LPW
SWLG011N	SWLG011-03N-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 5400 to < 6500 lumens and >= 150 LPW
SWLG011N	SWLG011-03N-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 5400 to < 6500 lumens and >= 150 LPW
SWLG011O	SWLG011-03O-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 6500 to < 7800 lumens and >= 150 LPW
SWLG011O	SWLG011-03O-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 6500 to < 7800 lumens and >= 150 LPW
SWLG011P	SWLG011-03P-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 7800 to < 9400 lumens and >= 150 LPW
SWLG011P	SWLG011-03P-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 7800 to < 9400 lumens and >= 150 LPW
SWLG011Q	SWLG011-03Q-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 9400 to < 11800 lumens and >= 150 LPW
SWLG011Q	SWLG011-03Q-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 9400 to < 11800 lumens and >= 150 LPW
SWLG011R	SWLG011-03R-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 11800 to < 14800 lumens and >= 150 LPW
SWLG011R	SWLG011-03R-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 11800 to < 14800 lumens and >= 150 LPW

MeasCode	MeasureID	MeasDescription
SWLG011S	SWLG011-03S-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 14800 to < 18500 lumens and >= 150 LPW
SWLG011S	SWLG011-03S-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 14800 to < 18500 lumens and >= 150 LPW
SWLG011T	SWLG011-03T-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 18500 to < 23100 lumens and >= 150 LPW
SWLG011T	SWLG011-03T-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 18500 to < 23100 lumens and >= 150 LPW
SWLG011U	SWLG011-03U-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 23100 to < 30000 lumens and >= 150 LPW
SWLG011U	SWLG011-03U-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 23100 to < 30000 lumens and >= 150 LPW
SWLG011V	SWLG011-03V-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 30000 to < 39000 lumens and >= 150 LPW
SWLG011V	SWLG011-03V-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 30000 to < 39000 lumens and >= 150 LPW
SWLG011W	SWLG011-03W-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 39000 to < 50700 lumens and >= 150 LPW
SWLG011W	SWLG011-03W-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 39000 to < 50700 lumens and >= 150 LPW
SWLG011X	SWLG011-03X-Com- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 50700 to < 65900 lumens and >= 150 LPW
SWLG011X	SWLG011-03X-Ind- UpDeemed-cWtd-SCE-NR	SW-Lighting, cWtd, LED HighBay luminaire rated from 50700 to < 65900 lumens and >= 150 LPW

# 4. Additional Measure: Incentives and Workpapers

The following tables provide a summary of additional deemed measures and associated workpapers currently available on the CA eTRM. TRC may include currently available and future available eTRM lighting measures in the program offering as needed to achieve energy savings and cost effectiveness. The table below provides an expected range of incentive level for currently available additional eTRM lighting measures.

#	Measure	Incentive Level	
1	All measure variations listed in the table below.	\$1 to Incremental Measure Cost (IMC)	
2			
3			

#	Workpaper Name	<b>Short Description</b>	URL link or location name
1	LED, Tube	Replacement of a 4-foot linear fluorescent T8 lamp with a LED T8 Lamp UL Type A	https://www.caetrm.com/measure/SWLG009/02/
2	Type B and Type C LED, Tube	Installation of high efficacy DLC compliant UL Type B lamps and UL Type C LED lamp and driver systems	https://www.caetrm.com/measure/SWLG018/01/

MeasCode	MeasureID	MeasDescription
SWLG009A	SWLG009-02A-Com- UpDeemed-cWtd-SCE-AR	4-foot LED T8 lamp UL type A replacing linear fluorescent T8 lamp (non-res)
SWLG009A	SWLG009-02A-Ind- UpDeemed-cWtd-SCE-AR  4-foot LED T8 lamp UL type A rep linear fluorescent T8 lamp (non-res)	
SWLG009B	SWLG009-02B-Com- UpDeemed-cWtd-SCE-AR	4-foot LED T8 lamp UL type A replacing linear fluorescent T8 lamp (parking garages)
SWLG009B	SWLG009-02B-Ind- UpDeemed-cWtd-SCE-AR	4-foot LED T8 lamp UL type A replacing linear fluorescent T8 lamp (parking garages)
SWLG018Q	SWLG018-01Q-Com- UpDeemed-cWtd-SCE-NR	Efficient 4-foot UL type B LED T8 lamp, non-res, NR
SWLG018Q	SWLG018-01Q-Ind- UpDeemed-cWtd-SCE-NR	Efficient 4-foot UL type B LED T8 lamp, non-res, NR
SWLG018R	SWLG018-01R-Com- UpDeemed-cWtd-SCE-NR	Efficient 4-foot UL type B LED T8 lamp, parking garages, NR

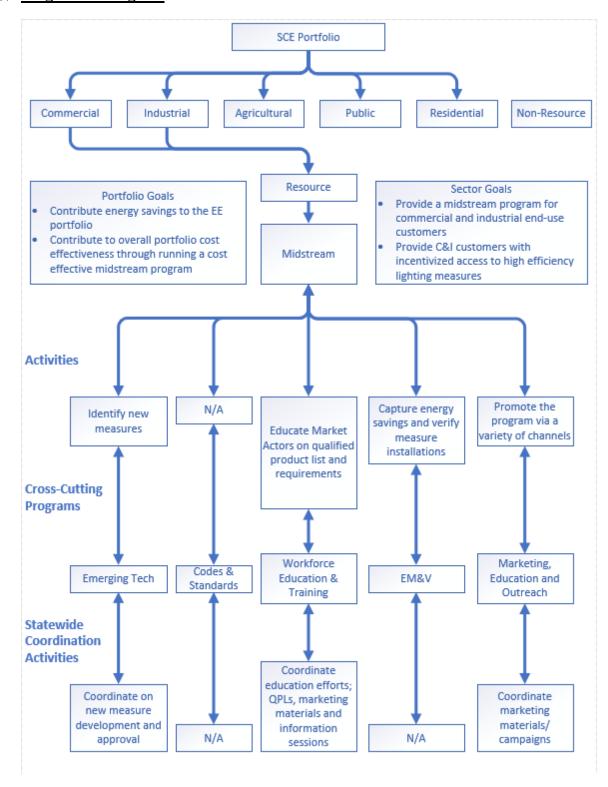
MeasCode	MeasureID	MeasDescription
SWLG018R	SWLG018-01R-Ind- UpDeemed-cWtd-SCE-NR	Efficient 4-foot UL type B LED T8 lamp, parking garages, NR
SWLG018-01U-Com- UpDeemed-cWtd-SCE-NR		Fixture with (2) efficient 4-foot UL type C LED T8 lamp, non-res, NR
SWLG018U	SWLG018-01U-Ind- UpDeemed-cWtd-SCE-NR	Fixture with (2) efficient 4-foot UL type C LED T8 lamp, non-res, NR
SWLG018V	SWLG018-01V-Com- UpDeemed-cWtd-SCE-NR	Fixture with (2) efficient 4-foot UL type C LED T8 lamp, parking garages, NR
SWLG018V	SWLG018-01V-Ind- UpDeemed-cWtd-SCE-NR	Fixture with (2) efficient 4-foot UL type C LED T8 lamp, parking garages, NR
SWLG018Y	SWLG018-01Y-Com- UpDeemed-cWtd-SCE-NR	Fixture with (3) efficient 4-foot UL type C LED T8 lamp, non-res, NR
SWLG018Y	SWLG018-01Y-Ind- UpDeemed-cWtd-SCE-NR	Fixture with (3) efficient 4-foot UL type C LED T8 lamp, non-res, NR
SWLG018Z	SWLG018-01Z-Com- UpDeemed-cWtd-SCE-NR	Fixture with (3) efficient 4-foot UL type C LED T8 lamp, parking garages, NR
SWLG018Z	SWLG018-01Z-Ind- UpDeemed-cWtd-SCE-NR	Fixture with (3) efficient 4-foot UL type C LED T8 lamp, parking garages, NR
SWLG018AC	SWLG018-01AC-Com- UpDeemed-cWtd-SCE-NR	Fixture with (4) efficient 4-foot UL type C LED T8 lamp, non-res, NR
SWLG018AC	SWLG018-01AC-Ind- UpDeemed-cWtd-SCE-NR	Fixture with (4) efficient 4-foot UL type C LED T8 lamp, non-res, NR
SWLG018AD	SWLG018-01AD-Com- UpDeemed-cWtd-SCE-NR	Fixture with (4) efficient 4-foot UL type C LED T8 lamp, parking garages, NR
SWLG018AD	SWLG018-01AD-Ind- UpDeemed-cWtd-SCE-NR	Fixture with (4) efficient 4-foot UL type C LED T8 lamp, parking garages, NR

# 5. Quantitative Program Targets

The following table provides the quantitative program targets.

Target	2021	2022	2023	2024
Total customers served	1,294	2,670	2,182	1,091
Hard-to-Reach (HTR) customers served	90	181	181	91
Disadvantaged Community (DAC) projects	90	181	181	91

## 6. Diagram of Program



## 7. Evaluation, Measurement, and Verification (EM&V):

All program savings are claimed from CPUC approved statewide workpapers, as described in the California eTRM. TRC collects all the relevant data to allow SCE and/or the CPUC to verify the claimed savings including measure quantity and installation locations. The energy savings values vary in the Statewide Lighting Workpapers based on climate zone and building type. For midstream participants, this information is gathered as part of the purchase process. Additionally, the site address provides a secondary check of this information. Each zip code correlates to an individual climate zone. The address is cross-referenced with SCE's internal NAICS codes assigned to the meter or through a google search for the building type. For point-of-sale participants, TRC collects the zip code which allows for climate zone alignment.

Verification of tracking data is important to increase realization rates. Validation that incentivized products are installed through End-Use Customer inspections provides assurances of the claimed savings. When discrepancies arise in sold and installed amounts, TRC works diligently to tighten the control of the distributions and data. Invoice verification is another method used to ensure that the tracking data provided by the distributor is correct.

## 8. Normalized Metered Energy Consumption (NMEC):

Not applicable for this program. Intentionally blank.

# **APPENDIX.** List of Acronyms and Abbreviations

Term	Definition		
C&S	Codes & Standards		
CALCTP	California Advanced Lighting Controls Training Program		
CEDARS	California Energy Data and Reporting System		
CPUC	California Public Utilities Commission		
DAC	Disadvantaged Communities		
DEER	Database for Energy Efficient Resources		
DSM	Demand-Side Management		
EE	Energy Efficiency		
EE PRG	Energy Efficiency Procurement Review Group		
EM&V	Evaluation, Measurement & Verification		
ET	Emerging Technologies		
EUL	Effective Useful Life		
FSU	Fractional Savings Uncertainty		
HTR	Hard-to-Reach		
HVAC	Heating, Ventilation, & Air Conditioning		
IOU	Investor-Owned Utility		
IP	Implementation Plan		
kW, kWh	kilowatts, kilowatt-hours		
M&V	Measurement & Verification (or, sometimes, Validation)		
NMEC	Normalized Metered Energy Consumption		
PA	Program Administrator		
PAC	Program Administrator Cost		
RFA	Request for Abstract		
RFP	Request for Proposal		
TRC	Total Resource Cost		
WE&T	Workforce Education & Training		