



## Implementation Plan for SW WISE™



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# Table of Contents

<b>A.</b>	<b>PROGRAM OVERVIEW</b> .....	<b>1</b>
<b>B.</b>	<b>PROGRAM BUDGET AND SAVINGS</b> .....	<b>1</b>
1.	Program Name.....	1
2.	Program ID Number.....	1
3.	Program Budget Table.....	1
4.	Program Gross Impacts Table:.....	1
5.	Program Cost-Effectiveness (TRC):.....	2
6.	Program Cost-Effectiveness (PAC):.....	2
7.	Type of Program Implementer:.....	2
8.	Market Sector.....	2
9.	Program Type.....	2
10.	Market Channel and Intervention Strategies.....	3
11.	Campaign Goals and Timeline.....	3
<b>C.</b>	<b>IMPLEMENTATION PLAN NARRATIVE</b> .....	<b>4</b>
1.	Program Description.....	4
2.	Program Delivery Channel and Customer Services:.....	5
3.	Program Design and Best Practices.....	7
4.	Innovation.....	8
5.	Metrics.....	9
6.	Key Performance Indicators (KPIs) and Schedule.....	11
7.	For Programs Claiming To-Code Savings.....	13
8.	Pilots.....	13
9.	Workforce Education & Training (WE&T).....	13
10.	Workforce Standards.....	14
11.	Disadvantaged Worker Plan:.....	14
12.	Additional information.....	15
<b>D.</b>	<b>SUPPORTING DOCUMENTS</b> .....	<b>15</b>
1.	Program Manuals and Program Rules.....	15
2.	Program Theory and Program Logic Model.....	15
3.	Process Flow Chart.....	19
4.	Incentive Tables, Measure Packages, Software Tools.....	21
5.	Quantitative Targets.....	26
6.	Diagram of Program.....	27
7.	Embedded Measurement & Verification (M&V).....	28
8.	Evaluation, Measurement & Verification (M&V).....	28
9.	Normalized Metered Energy Consumption (NMEC).....	29
<b>E.</b>	<b>PROGRAM MANUALS</b> .....	<b>29</b>
1.	Eligible Measures or measure eligibility, if applicable.....	29
2.	Customer Eligibility Requirements.....	29
3.	Contractor Eligibility Requirements.....	31
4.	Participating Contractors, Manufacturers, Retailers, Distributors, and Partners.....	31
5.	Additional Services.....	31
6.	Audits.....	31
7.	Sub-Program Quality Assurance Provisions.....	33
8.	Other Program Metrics.....	33

**Tables & Figures**

**TABLE 1: SW WISE™ CUSTOM INCENTIVE RATES FOR 2024 AND 2025**..... 21

**TABLE 2: SW WISE™ 2023 CUSTOM BONUS INCENTIVE RATES**..... 22

**TABLE 3: CUSTOM MEASURES LIST** ..... 22

**TABLE 4: DEEMED MEASURES LIST**..... 24

**TABLE 5: SW WISE™ WORKPAPER LIST** ..... 26

**TABLE 6: DEEMED REBATE AMOUNTS** ..... **ERROR! BOOKMARK NOT DEFINED.**

**FIGURE 1: SW WISE™ PROGRAM LOGIC MODEL**..... 18

**FIGURE 2: : SW WISE™ PROCESS FLOW** ..... 19

**FIGURE 3: SW WISE™ PROGRAM STAKEHOLDER DIAGRAM** ..... 27

## PROGRAM IMPLEMENTATION PLAN

### A. Program Overview

Statewide Water Infrastructure and System Efficiency™ Program (SW WISE™) is a downstream offering within Pacific Gas and Electric's (PG&E's), Southern California Edison's (SCE's), Southern California Gas' (SoCalGas'), and San Diego Gas and Electric's (SDG&E's) service territories, providing Energy Efficiency (EE) solutions to water production, distribution, and water/wastewater treatment systems and oil field clear water pumping systems. Program trains and equips trade allies in the water and wastewater segment to recommend more efficient processes and technologies to their customers for enabling project implementation.

### B. Program Budget and Savings

#### 1. Program Name

Statewide Water Infrastructure and System Efficiency™ (SW WISE™) Program

#### 2. Program ID Number

**TBD**

#### 3. Program Budget Table

Costs	2023	2024	2025	Total
Administration	\$488,122	\$530,000	\$530,000	\$1,548,122
Marketing/Outreach	\$292,873	\$318,000	\$318,000	\$928,873
Incentive/Rebate	\$3,457,859	\$2,609,288	\$2,702,281	\$8,769,428
Direct Implementation	\$642,364	\$1,842,712	\$1,749,719	\$4,234,795
Total	\$4,881,218	\$5,300,000	\$5,300,000	\$15,481,218

#### 4. Program Gross Impacts Table:

	2023	2024	2025	Total
Gross Demand Reduction (kW)	1,667	1,260	933	3,860
Net Demand Reduction (kW)	1,000	756	560	2,316
Gross Energy Savings (kWh)	8,894,493	12,988,226	11,959,443	33,842,163
Net Energy Savings (kWh)	5,822,726	9,109,746	8,468,478	23,400,950

**5. Program Cost-Effectiveness (TRC):**

	2023	2024	2025
TRC	1.09	1.07	1.13
TRC w/ 6% SCE Adder	1.07	1.04	1.10

**6. Program Cost-Effectiveness (PAC):**

	2023	2024	2025
PAC	1.31	1.27	1.26
PAC w/ 6% SCE Adder	1.29	1.23	1.22

**7. Type of Program Implementer:**

Program Implementer	
PA-delivered	<input type="checkbox"/>
Third Party-Delivered	<input checked="" type="checkbox"/>
Partnership	<input type="checkbox"/>

**8. Market Sector**

Sector	Yes
Residential	
Commercial	
Industrial	
Agricultural	
Public	
Water/Wastewater	X

**9. Program Type**

Program Type	Yes	No
Resource	X	
Non-Resource		X

## 10. Market Channel and Intervention Strategies

Market Channels	
Upstream	<input type="checkbox"/>
Midstream	<input type="checkbox"/>
Downstream	<input checked="" type="checkbox"/>
Intervention Strategies	
Direct Install	<input type="checkbox"/>
Incentive	<input checked="" type="checkbox"/>
Finance	<input checked="" type="checkbox"/>
Audit	<input checked="" type="checkbox"/>
Technical Assistance	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

## 11. Campaign Goals and Timeline

Phase	Key Deliverable(s) / Milestone(s)	Dates/Duration	% of Energy Savings <sup>1</sup>
Launch Readiness	• Implementation Plan	07/20/2022-9/20/2022	0%
	• EEM M&V Plan		
	• Marketing Plan		
	• QA/QC Plan		
	• Program Management Plan		
	• Program Marketing		
Program Ramp Up	• Materials	9/21/2022-12/31/2022	0%
	• Date Program is Available to Customers		
	• Marketing Plan Implemented		
	• Pipeline Development		
	• Energy Savings		
	• Measure Package		
	• Development / Updates		

<sup>1</sup> Ratio of net kWh savings for the Phase to the total net kWh savings for the 2023-2025 Program Cycle.

Program Steady State	<ul style="list-style-type: none"> <li>• Energy Savings</li> </ul>	01/01/2023-12/31/2024	76%
	<ul style="list-style-type: none"> <li>• Measure Package Development /Updates</li> </ul>		
Program Ramp Down / Transition	<ul style="list-style-type: none"> <li>• Program Ramp-Down Plan</li> </ul>	01/01/2025-10/31/2025	24%
	<ul style="list-style-type: none"> <li>• Energy Savings</li> </ul>		
Measurement & Payment	<ul style="list-style-type: none"> <li>• Date Program is No Longer Available to Customers</li> </ul>	11/01/2025-12/31/2025 <sup>2</sup>	0%
	<ul style="list-style-type: none"> <li>• Completion of energy savings reporting/payments, if required</li> </ul>		

### C. Implementation Plan Narrative

#### 1. Program Description

Statewide Water Infrastructure and System Efficiency™ Program (SW WISE™) is a downstream offering within PG&E’s, SCE’s, SoCalGas’, and SDG&E’s service territories, providing Energy Efficiency (EE) solutions to water production, distribution, and water/wastewater treatment systems and oil field clear water pumping systems. SW WISE™ serves facilities/systems including Water Agencies, Private Water Companies, Wastewater Agencies, Special Districts, Joint Power Authorities, Local Government Agencies, Water Investor-Owned Utilities (IOUs), Oil field water pumping Customers, and other water pumping or treatment customers (Customer) paying the Public Purpose Programs (PPP) charge. Program offers services to train and equip trade allies in the water and wastewater segment to recommend more efficient processes and technologies to their customers for enabling project implementation.

SW WISE™ delivers demand reductions (EE kW) and energy (EE kWh and therms) savings. The Program will assist qualified Customers in installing EE measures through the program services. SW WISE™ provides energy engineering and project support services to qualified customers selected to participate in the program and helps secure downstream rebates and incentives for eligible measures. Engineering services may include project identification, feasibility evaluation, energy efficiency measures (EEMs) recommendations and evaluations, EE post-operations validation, and final verification of realized savings. Project support includes application processing, project inspections, and incentive payments. SW WISE™ focuses on technologies and solutions to meet the Program’s target TRC ratio.

SW WISE™ offering will be the same for all program participants throughout CA. To meet the program goals, SW WISE™ will:

<sup>2</sup> Period the program is no longer accepting deemed applications or installation report. This is the period the program is performing final rebate and incentive processing.

- a) Offer energy engineering services, project support services, and incentives/rebates to facilitate customer installations of EE Measures and concurrently train customers on the EE and non-EE benefits of these projects.
- b) Train and equip trade allies through various stages of project development, such as marketing to the targeted groups, identification of potential measures through program developed energy assessments, measure post-installation verifications, and providing financial incentives/rebates.
- c) Provide project monitoring and inspection support necessary to guide projects toward installation and savings delivery.
- d) Be a Resource Acquisition Program, providing measurable direct electricity and gas savings, reducing GHG emission and contributing toward the goals of SB32.

## 2. Program Delivery Channel and Customer Services:

The program strategies and interventions, along with their anticipated outcomes are described below. These are also shown visually through the Figure 1: SW WISE™ Program's Logic Model in the Supporting Documents Section D.2.

**Customer Enrollment** – Accelerate implementation by leveraging existing relationships with customers, digital marketing, proven installations of EE measures in water and wastewater systems, and trade allies to influence every decision made in these systems to incorporate EE.

**Marketing** – Overcome segment risk aversion by leveraging testimonials, case studies, and demonstration projects in California based on past participants of programs in this segment.

**Influence** – Address infrastructure longevity barriers and indefinite repairs only upon failure practices through training trade allies to recommend more efficient technologies. Develop energy assessment, life-cycle cost analysis, and energy data visualization to assist customers in making more energy efficient decisions.

**Funding** – Address limited funding availability by leveraging IOU and external funding sources including OBF, bridge funding, financing, ESCO models, and external grants, as applicable.

**Staffing** – Overcome the systematic shortage of staff and the prioritization of operations and environmental compliance by offering program resources to support project critical efforts, such as engineering assessments, project support, and verification services.

**Decision Making** – Facilitate energy efficient decisions by performing standardized approaches to engage customer decision-makers including established customer relationships, phased project executions, and support services to influence management, boards, and city councils to adopt EE.

**Customer Reluctance** – Address customer reluctance to participate in IOU programs through technical and financial assistance, increased incentives on more complex measures, and



prioritizing customer satisfaction during all program and project tasks.

Short-term outcomes:

- Trade Allies stock and promote higher efficiency equipment to other Stakeholders
- Increased energy savings
- Increased market adoption of uncommon EE technologies
- Customers understand the significant and costly energy footprint sites in their water systems
- Install EE projects on water/wastewater and oil field clear water pumping systems

Long-term outcomes:

- Environmental and non-energy benefits
- Energy savings persist
- New equipment efficiency standards at the State and Federal level
- EE technologies and processes become standard practice
- Increased market penetration of higher efficiency equipment
- Measurable reduction in kW, kWh, and Therms usage

Program includes an end-to-end process to streamline and reduce confusion for customers, while ensuring compliance with program policies and procedures, and maintaining customer satisfaction. The end-to-end process is described below and in Figure 2: SW WISE™ Process Flow illustrated in Supporting Documents Section 3.

Customer End-to-End Process

- a) **Customer Outreach:** Implementer obtains high level Customer information to prequalify projects prior to initial engagement through leads from IOU reps, trade allies and/or existing customer relationships.
- b) **Customer Engagement:** Kick Off Meetings will be set up by Implementer to inform potential customers of program services. IOU rep and/or trade allies are included when they create a lead.
- c) **Program Participant Agreement:** Program participants will sign an agreement with Implementer triggering Program Enrollment. The agreement describes the program services and offerings, program eligibility requirements, and includes the terms and conditions for participation, which requires participant review and execution.
- d) **Project Assessments:** Customer contacts identified upon program enrollment are engaged on an ongoing basis. These contacts will support data requests, site walks, project qualifications, project identification, project feasibility study proposals, and decision-maker agreement to implement the project. Preliminary assessments are performed and presented by Implementer to the participant prior to Implementer performing a site visit and detailed energy assessments of customized measures.
- e) **Project Application:** Implementer develops and presents the project recommendations to the Customer and obtains documented decision to implement measures in the participant reviewed and executed Pre-Installation Package. Implementer performs quality assurance on the Early Screening Document and Pre-Installation Package prior to SCE submission.
- f) **Project Review:** Implementer facilitates project reviews and approvals through the IOU and CPUC Ex-Ante Review process, with the support of the Program Administrator's technical reviewers, inspectors, and project managers.

- g) **Contractor Selection Support:** Implementer may provide Trade Ally references while Customers select equipment and an installation contractor. Trade allies may provide Customer support to facilitate the selection of high efficiency equipment and selection of a trained installation contractor for the recommended measure(s).
- h) **Project Installation, Commissioning and Optimization, and Installation Report (IR):** Implementer provides project support to verify installed energy savings and project monitoring, in compliance with approved M&V Plans. Implementer also develops and obtains participant reviewed and executed Post-Installation Inspection Report.
- i) **Installation Report Review:** Implementer facilitates project installation report review and approvals through the IOU and CPUC Ex Ante Review process.
- j) **Payment of Incentives:** Pay incentives for verified project savings to the customers.

Targeted Market/Customer Group

SW WISE™ serves facilities/systems including but not limited to Water Agencies, Private Water Companies, Wastewater Agencies, Special Districts, Joint Power Authorities, Local Government Agencies, Water Investor- Owned Utilities (IOUs), Oil field water pumping Customers, and other water pumping or treatment customers (Customer) paying the Public Purpose Programs (PPP) charge.

Program manages a Trade Ally Network serving manufacturers, distributors, contractors, and engineering designers in the water and wastewater segment.

**3. Program Design and Best Practices**

Market barriers to EE in this segment include short-term, start/stop program cycles with long-term projects, customer risk aversion, infrastructure longevity with repair practices upon failure, limited funding, limited staff availability and EE knowledge, complex decision-making process, and drought/water scarcity. The program activities and intervention strategies address and reduce the impact of the market barriers for water, wastewater, oil, and gas customers within the limitations created by the shorter program cycle.

One of the SW WISE™’s best practices is to continuously evaluate the Program’s cost-effectiveness through CEDARS and our internally developed Lincus Program Management Software Tool (Lincus PM Tool), tracking and reporting platform, and budget management platform has been customized to manage SW WISE™. Additional best practices include the following:

**Trade Ally Network** is specifically designed to provide customers access to enrolled, trained, and knowledgeable designers, manufacturers, distributors, and contractors. Program will enroll, prequalify, and educate trade allies prior to leveraging trade allies’ customer leads to enable prequalification of projects, since the trade allies are familiar with the customers’ personnel, water systems and sites, which shortens project identification, recommendation, and decision-making timelines crucial for this short-term program cycle. Since the trade allies will continue to operate in this segment, the EE training enables the program recommendations to continue in the market after the program shuts down, which enables these recommendations to occur when system infrastructure fails or requires replacement. Trade ally testimonials, case studies, and past project installations are used to ease

customer's aversion to risk, unfamiliar technologies, or new processes.

**Deemed Measure Mix** included in the program to work with trade allies to use the financial incentives to increase sales. This enables short-term savings delivery and program participation with minimal impact to customer personnel availability.

**Leverage Established Customer Relationships** The short-term and start/stop program cycle and complex decision-making process barrier is addressed by leveraging established customer relationships in this segment to streamline program enrollment and project identification, deliver project recommendations to all relevant decision makers at once, and connect customers with trade allies for design, contractor selection, installation, and commissioning support. This shortens the project timelines from identification to customer decision-making to installation verification. Customer aversion to risk and repair/replace upon failure maintenance practices barriers is also reduced through providing case studies, customer testimonials, and customer referrals of completed projects in past programs while delivering project recommendations.

**Normalizing Measure and Verification Solutions for Varying Water Sources:** The drought/water scarcity barrier is addressed through alternative Measure and Verification (M&V) solutions to enable customer installations and normalized savings verifications regardless of the mandated water sources customers are required to use from year to year. Around springtime every year, the state announces where customers in specific geographic locations are required to obtain their water, based on use type and proximity. At this time, these customers find out which pumps they will need to operate as well as which will remain off during that year. According to California Constitution Article 10, section 2, California water system operators and agricultural customers are obligated to comply with these allocations, no matter the impact it has on their operations. This means some pumps will not be operating in the year the energy efficiency project was completed.

**Project Funding Options** have been identified to prevent project implementation cycle delays in waiting for the next capital budgeting to approve the project. Increased incentives, OBF, bridge funding, external funding (EPIC, DOE, financing), and ESCOs are methods of reducing the customers' upfront costs. Funding options are included with the energy assessment recommendations.

#### **4. Innovation**

The implementation of lessons learned, and qualitative comparison resulted in 10 innovations to past program offerings, which are listed below to increase the uptake of cost-effective EE.

**Innovation #1 - Delivery Approach:** Offer elevated incentives in the first program year to facilitate savings delivery within 12-months of program launch. Please see Table 2 for the SW WISE™ 2023 elevated Customer incentive rates.

**Innovation #2 – Technology & Delivery Approach:** System optimization-based EE project phasing from component efficiency improvement to controls to system-wide water system or treatment process optimization leads to comprehensive, deep, and persistent, near-term energy

savings.

**Innovation #3 – Technology & Delivery Approach:** Leveraging relationships with program trained and equipped trade allies in California for the water/wastewater, oil, and gas sector drives additional awareness, demand, and implementation of EE projects.

**Innovation #4 – Marketing:** Virtual/Digital Marketing in conjunction with traditional marketing approaches to facilitate cost-effective program participation.

**Innovation #5 – Delivery Approach:** Tested approach to project development and implementation support services to help resource constrained customers overcome project barriers.

**Innovation #6 – Delivery Approach:** Develop relationships with stakeholders at multiple levels of the organization to understand their needs and barriers, communicate EE and non-EE benefits of projects, and drive decision making.

**Innovation #7 – Delivery Approach:** Develop sufficient customized project pipeline in the first program year to meet annual EE savings goals in 2024 and 2025, mitigating project fall out due to barriers.

**Innovation #8 – Delivery Approach:** Leveraging program trained and equipped consultant relationships in California for the water/wastewater and oil and gas sectors to include incremental EE scope in the design.

**Innovation #9 – Delivery Approach:** Perform standardized customer and project qualifications to prevent projects falling out of the identified pipeline.

**Innovation #10 – Delivery Approach:** Leverage established customer relationships to recommend EE projects and incremental project scopes for inclusion in their capital budgeting process and prioritize their capital budgeting items based on EE project implementation.

## 5. Metrics

### Overall Portfolio Level

<b>Common Problem</b>	<b>Final Common Metric or Indicator</b>	<b>Category: Metric or Indicator</b>
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

### Water/Wastewater Pumping

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
Greenhouse Gas Emissions	Greenhouse gasses (MT CO <sub>2</sub> eq) Net kWh savings, reported on an annual basis	Metric
Depth of interventions	Average percent energy savings (kWh, kw, therms) per project building or facility Average annual energy savings (kWh, kW, therms) per annual flow Million Gallons per Day (MGD) through project water/wastewater facilities	Metrics
Penetration of energy efficiency programs in the eligible market	Percent of participation in disadvantaged communities Percent of participation by customers defined as “hard-to-reach”	Metrics
Penetration of benchmarking in the eligible market	Percent of water/wastewater flow (i.e., annual average Million Gallons per Day) enrolled in non-building water/wastewater programs— estimate within +/-20% of flow through eligible facilities (treatment facilities pumping stations), +/-10% of flow through project facilities	Indicator
Program Satisfaction	Improvement in customer satisfaction	Indicator
Investment in energy efficiency	As available, fraction of total investments made by ratepayers and private capital	Indicator
New participation	Percent of customers participating that have not received an incentive for the past three years, as reported by such customers	Indicator

Baseline/consumption reduction	Reduction in consumption from existing usage (proposed by SCE and SDG&E)	Metric
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## 6. Key Performance Indicators (KPIs) and Schedule

KPI	Description	Measurement	KPI Source	Reporting Frequency	Purpose of KPI
Energy Savings (kWh, kW, therms)	A comparison of net lifecycle energy savings achieved vs. expected net lifecycle energy savings	Based on numeric value of the total net lifecycle energy savings achieved	Progress Reports	Quarterly	Track progress towards achieving annual program savings goals
Project Pipeline Target (kWh, kW, therms)	A comparison of net life cycle energy savings associated with future project pipeline in relation to the expected net life cycle energy savings	Numeric value of the total net lifecycle energy savings tracked in the program pipeline	Progress Report	Quarterly	Track progress towards achieving overall program savings goals
Schedule Adherence	Expected Energy Savings vs. Ex Ante Energy Savings; Expected Demand Savings vs. Ex Ante Demand Savings; Expected TRC Ratio vs. Ex Ante Annual TRC Ratio	Expected performance vs. actual performance	Progress Report	Annually	Track progress towards achieving overall program savings goals
Cost Management (TRC ratio) (Levelized cost)	[Incentive/non-incentive] spend based on paid [incentive/non-incentive] spend vs forecasted [incentive/non-incentive] spend	Report of program-to- date incentive/non-incentive spend	Program invoice	Monthly	

Customer Satisfaction Rating	Measurement of Implementer's ability to respond to customer needs, number of complaints, resolution of complaints, flexibility, reporting accuracy and timeliness	Report of overall customer satisfaction rating	Customer Satisfaction Surveys	Quarterly	Reflects ability to deliver Program at a high level of customer satisfaction
Safety Ratings	Maintain ISNetworld (ISN) grade of B or better	ISN grade	ISNetworld	Annually	Validate adherence to maintaining a culture of workplace safety
Diverse Business Enterprises Spend	To date Diverse Business Enterprise spend as percent of total Program spend.	Total inception-to-date Diverse Business Enterprise spend divided by the total invoiced amount	Progress Report	Quarterly	Validates that the Diverse Business Enterprise commitment is being met
Hard-to-Reach Customers	Ex Ante Energy Savings, Ex Ante Demand Savings, and Ex Ante TRC Ratio installed at Hard-to-Reach Customer Sites relative to the Program's total Ex Ante Energy Savings, Ex Ante Demand Savings, and Ex Ante TRC Ratio. Total incentives paid to Hard-to-Reach Customer	Total inception-to-date Ex Ante Energy Savings, Ex Ante Demand Savings, and Ex Ante TRC Ratio attributable to Hard-to-Reach Customers divided by the Program's total overall inception-to-date Ex Ante Energy Savings, Ex Ante Demand Savings, and Ex Ante TRC Ratio. Dollar value of incentives paid to Hard-to-Reach Customers	Progress Report	Annually	

Disadvantaged Communities	Ex Ante Energy Savings, Ex Ante Demand Savings, and Ex Ante TRC Ratio installed in Disadvantages Communities relative to the Program's total Ex Ante Energy Savings, Ex Ante Demand Savings, and Ex Ante TRC Ratio. Total incentives paid to Customers within Disadvantaged Communities.	Total inception-to-date Ex Ante Energy Savings, Ex Ante Demand Savings, and Ex Ante TRC Ratio attributable to Disadvantaged Communities divided by the Program's total overall inception-to-date Ex Ante Energy Savings, Ex Ante Demand Savings, and Ex Ante TRC Ratio. Dollar value of incentives paid to Disadvantaged Communities	Progress Report	Annually	
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**7. For Programs Claiming To-Code Savings**

The SW WISE™ program design has a mix of measures above code or BRO-RCx. To- Code Savings are anticipated if in-flight projects become Standard Practice prior to project approval or the standard practice baseline is applied retroactively.

**8. Pilots**

No pilots are associated with this program.

**9. Workforce Education & Training (WE&T)**

SW WISE™ will coordinate with statewide workforce education and training (WE&T) efforts to identify, encourage, and involve local vendors in project opportunities.

SW WISE™ program will build out working relationships with local contractors to promote increased capability and interest in providing energy efficiency services to program participants through the following key stages:

- a) Project Identification – Implementer will build out its trade ally network to identify contractors across IOU service territories qualified to carry out eligible work under the SW WISE™ program. As potentially eligible contractors are identified, Implementer will schedule meetings with contractors to present program offerings,



eligibility requirements, and opportunities for collaboration and development. The Program will work collaboratively with contractors to train them to identify new opportunities and build out a project pipeline while driving new business to local contractors.

- b) Project Development – Implementer will work with contractors to provide the information necessary for contractors to successfully implement energy efficiency measures, particularly when such contractor have not developed such projects or participated in the program. This critical step will ensure all the energy efficiency measures are included in project development, will maximize potential energy savings at the site, and ensure the ability for participating contractors to effectively install such measures in the future.
- c) Project Verification – Implementer will inform contractors of the target operational parameters to ensure full realization of anticipated energy savings are achieved.

## **10. Workforce Standards**

SW WISE™ follows the workforce standards as outlined in D. 18-10-008. SW WISE™ project applications will include a statement summarizing such workforce standards as required by the Commission. Each project Installation report will include a statement for the program participant to verify the project complies with those requirements.

## **11. Disadvantaged Worker Plan:**

The Trade Ally Network offers training to vendors on the program and workforce standards. Knowledgeable and engaged trade allies help address key customer barriers to implementation by ensuring qualified and knowledgeable vendors are available to perform installations. Program trained trade allies will provide customers with information about the program and its benefits to encourage project implementation. Technical support and training related to measure installation requirements will be made available by the program for qualified projects to help improve the market's knowledge of energy efficient technologies and processes. Equipped with this knowledge and support, trade allies can leverage existing relationships and knowledge of the California market to explain the program, the benefits of participating, and how to move forward with participation.

- a) **Recruitment and Qualification.** SW WISE™ will recruit new trade allies into the program through our existing relationships with vendor networks. Recruitment of new partners will be through marketing and outreach efforts.
- b) **Enrollment.** SW WISE™ will educate and gain commitment from the trade ally through a Participation Agreement (PA) and prequalifying for adherence to workforce standards.
- c) **Training.** SW WISE™ will offer initial program training to qualify projects, scheduled technical trainings, and program support as trade allies identify additional needs while working with customers.
- d) **Equip and Support.** SW WISE™ will help trade allies develop the skills needed and provide the resources required to support the program as our partners in the field to recommend energy efficient technology and processes.
- e) **Monitor.** SW WISE™ will track performance of trade allies according to program needs.

## 12. Additional information

- QA/QC Plan to be developed during the Program Setup as part of the Program Management Plan (PMP)
- M&V Plan to be developed during the Program Setup as part of the PMP
- Post Installation Inspection Sampling Methodology for Deemed Measures to be developed during the Program Setup as part of the PMP

## D. Supporting Documents

### 1. Program Manuals and Program Rules

All Program procedures and calculations will comply with the following guidance documents<sup>3</sup>:

- a) Statewide Customized Offering Procedures Manual
- b) Statewide Custom Project Guidance Document
- c) Statewide Customized Calculated Savings Guideline
- d) Statewide Express Program Manual
- e) Pump Overhaul Guidance Document
- f) SCE BRO Program Guidelines
- g) Fuel Substitution Guidance: [Fuel Substitution in Energy Efficiency \(ca.gov\)](#)
- h) Deemed Measures/Measure Packages: [eTRM Overview — Cal TF & Ex Ante Database Archive \(deeresources.net\)](#)

**Please also see Section E. for more information on the Program Manual**

### 2. Program Theory and Program Logic Model

Implementing energy efficiency in water and wastewater infrastructure is not a simple process due to systemic challenges present in water utilities. Operational, institutional, political, regulatory, and financial barriers present a direct risk in a program's ability to successfully carryout implementation actions and deliver its expected outcomes.

These challenges rest on the culture of a water utility and the outside constraints placed on water utilities. The culture at a water utility centers around the public health aspect of providing high quality drinking water with the lowest possible burden through the operation of permanent infrastructure. Utilities take this mandate very seriously, and because of that obligation and various other regulations, utility employees are highly trained in their field.

The principal program risks and barriers can be summarized as follows:

- a) Expertise in water treatment is not directly translatable to expertise in energy efficiency. Employees usually cannot identify and implement energy efficiency projects despite comprehensive technical knowledge of their water systems. Energy engineering is critical to increasing water system efficiency.
- b) Water system management requires balancing public demands for low-cost water and regulatory agency demands to meet quality standards. Rarely will the public welcome a rate increase. While energy efficiency measures can reduce costs over

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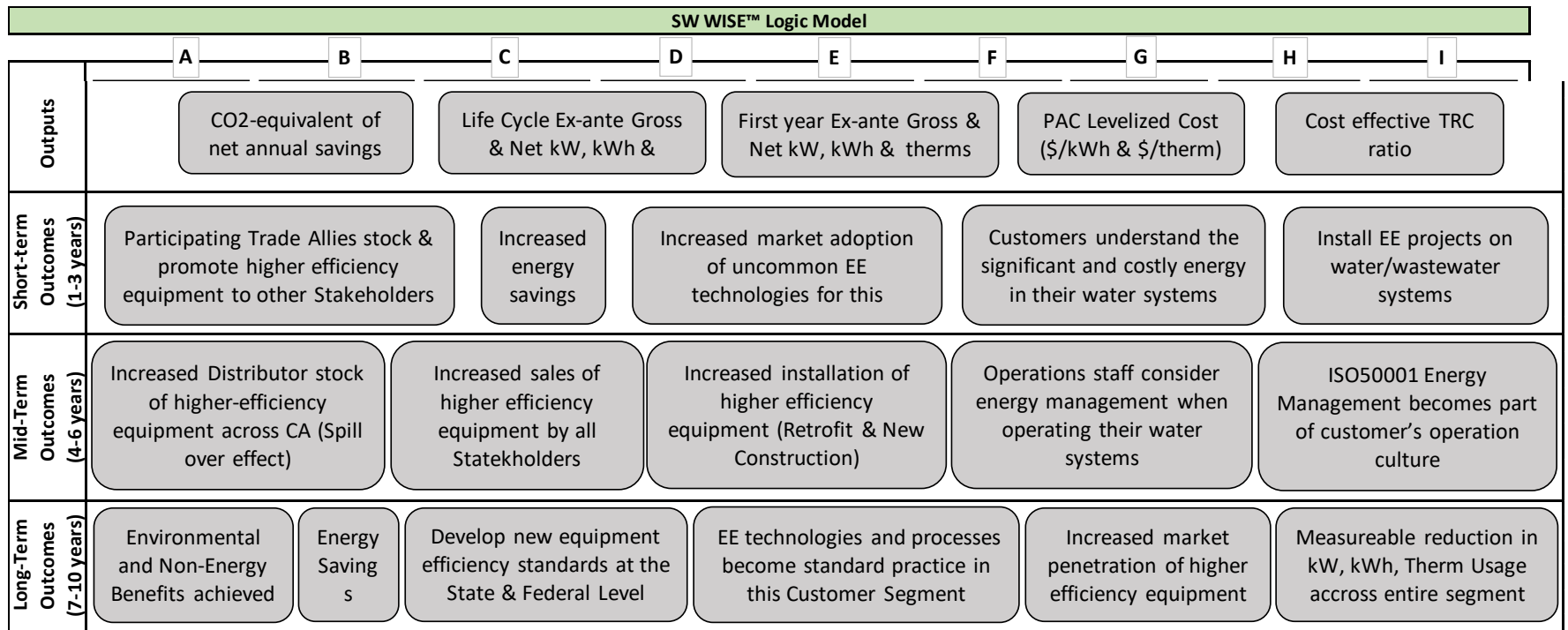
<sup>3</sup> All documents can be found at: <https://sce-trade-ally-community.force.com/tradeally/s/trade-professional-resources>

time, the upfront capital investment can often be hard for the public agency to accept. Resistance from the public can often dissuade managers from timely implementation of infrastructure improvements.

- c) Regulatory constraints placed on water utilities are daunting. Failure to meet any of the standards can result in a dramatic loss in public confidence and possibly hefty fines from regulatory agencies. Federal fines for some infractions can cost utilities thousands of dollars a day. As a result, utilities often take a more risk-adverse approach by implementing oversized equipment or maintaining processes that work even if energy-intensive.
- d) Financial constraints revolve around the nature of utilities providing what is seen as a public good. Utilities operate on very tight margins. In many situations, utilities must ask for approval from customers before undertaking new capital expenditures or raising rates. Taken together, this creates an environment where non-essential capital expenditures often sit on the shelf until resources are available. It is not uncommon for pumps to operate for 30+ years, well below the efficiency curve, and still not be scheduled for repair until they fail completely.

To address these very important challenges/barriers, the program has developed a logic model that further dives into these challenges and describes our proposed solutions. The following logic model is a graphical depiction of the underlying theory, key implementation actions and strategies, key program milestone and performance indicator outputs, and anticipated outcomes. Program's resource and non-resource strategies:

SW WISE™ Logic Model									
	A	B	C	D	E	F	G	H	I
Risks & Barriers	Short-Term Program Cycle with Long-Term Projects	Customer risk aversion	Infrastructure Longevity / indefinite repair only upon failure	Limited funding availability	Limited staff focused on operations / environmental compliance	Complex decision making process	Start-stop program cycles	Industry standard practice and lower cost-effectiveness	Utility Program Participation added workload
Activities	Enrollment through established relationships	Case Studies	Energy and Asset Management	OBF and Bridge Funding	Engineering assessments	Standardized Energy Management approach	Train and Equip Trade Allies	Trade Allies identify new measures	Technical and financial support
	Sales through trade ally network	Demonstration Projects	System Life-Cycle Cost Analysis	Facilitate ESCO Performance Contracting	Specialized verification support	Board Presentation assistance	Customer scheduling until completion	Develop Workpapers on new Technologies	Increased incentives for complicated long EUL
	Digital Marketing	Trade Ally testimonials	Energy Data Visualization	External funding (EPIC, DOE, ...)	Project support	Phased project approach	Turnkey ESCO options	TRC monitoring and measure sunset	Customer Centric Approach



*Figure 1: SW WISE™ Program Logic Model*



#### 4. Incentive Tables, Measure Packages, Software Tools

The SW WISE™ program incentives are designed to fully comply with the D18-05-041 requirements as follows:

- Measures were selected based on a favorable next lifecycle savings and align with achievement of portfolio net lifecycle savings goals. Therefore, the incentives which are paid on measure savings are aligned with CPUC’s recommendation in D18-05-041.
- Incentives are tiered to promote increasing degrees of efficiency above code, particularly when an existing conditions baseline is used. This is particularly relevant to system optimization measures.
- Incentives are strategically targeted for products and processes relevant to this market.

For BRO measures, payment of customer incentives are tied to Implementer’s independent verification of savings.

The incentive level specified by customized measure we are using for SW WISE™ are specified in the table below. Unit Incentives: The customized incentive rates we are using for SW WISE™ are based on the gross first year savings.

**Table 1: SW WISE™ Custom Incentive Rates for 2023 - 2025**

Incentive Rates	\$/kWh	\$/kW	\$/therm	Incentive Cap
Above Code	\$0.12	\$150	\$1.50	50% of project cost for AOE measures and 100% of incremental cost of NC and NR MATs
BRO & To Code	\$0.06	\$150	\$0.75	50% of Project cost

Since energy efficient water system optimization is a long-term implementation measure taking at least 3-5 years, the incentives in the first year may be greatly increased for the W/WW measure mix to facilitate customized project completions in the first program year. **If projects are committed and incentive approved by 12/31/2023, customers may receive the bonus incentive rates below capped at 100% the IOU eligible measure cost.**

**Table 2: SW WISE™ 2023 Custom Bonus Incentive Rates**

Incentive Rates	\$/kWh	Incentive Cap
Above Code	\$0.24	100% of applicable measure cost
BRO & To Code	\$0.30	

These elevated incentives are being offered to influence customers and trade allies to quickly enroll in SW WISE™ and provide the data to facilitate detailed project assessments. These incentives should also motivate customers who are on the fence in moving forward with project implementation of EE technologies to commit to moving forward and select construction contractors in parallel with the project reviews. As implementation barriers are encountered, the elevated incentives will motivate Trade Allies to complete projects by the end of Q3 2023, so project savings may be achieved in Q4 2023.

SW WISE™ includes the following Custom and Deemed measures.

**Table 3: Custom Measures List**

MeasCode	MeasureID	MeasDescription
PM-16109	PM-16109	Pump controls - add-on equipment
PM-21946	PM-21946	Pump controls - new
PM-21409	PM-21409	Commercial pump system overhaul (25 to 49 HP) - retrocommissioning
PM-21410	PM-21410	Commercial pump system overhaul (50 to 99 HP) - retrocommissioning
PM-21411	PM-21411	Commercial pump system overhaul (100 to 249 HP) - retrocommissioning
PM-21412	PM-21412	Commercial pump system overhaul (250 to 499 HP) - retrocommissioning
PM-21413	PM-21413	Commercial pump system overhaul (>= 500 HP) - retrocommissioning
PM-21414	PM-21414	Wastewater pump system overhaul (25 to 49 HP) - retrocommissioning
PM-21415	PM-21415	Wastewater pump system overhaul (50 to 99 HP) - retrocommissioning
PM-21416	PM-21416	Wastewater pump system overhaul (100 to 249 HP) - retrocommissioning
PM-21417	PM-21417	Wastewater pump system overhaul (250 to 499 HP) - retrocommissioning
PM-21418	PM-21418	Wastewater pump system overhaul (>= 500 HP) - retrocommissioning



PM-21419	PM-21419	Agricultural pump system overhaul (25 to 49 HP) - retrocommissioning
PM-21420	PM-21420	Agricultural pump system overhaul (50 to 99 HP) - retrocommissioning
PM-21421	PM-21421	Agricultural pump system overhaul (100 to 249 HP) - retrocommissioning
PM-21422	PM-21422	Agricultural pump system overhaul (250 to 499 HP) - retrocommissioning
PM-21423	PM-21423	Agricultural pump system overhaul ( $\geq$ 500 HP) - retrocommissioning
PM-21821	PM-21821	VFD on Ag pump serving non-pressurized system - new
PR-21440	PR-21440	Ammonia based controls on wastewater blower - new
PR-17464	PR-17464	Wastewater controls - add-on equipment
PR-34895	PR-34895	Wastewater aerator blower - VFD - add-on equipment
PR-10192	PR-10192	Wastewater treatment - blower VFD - add-on equipment
PR-24132	PR-24132	Efficient wastewater mixer
PR-20170	PR-20170	High efficiency wastewater blower $<$ 700 hp
PR-21870	PR-21870	Wastewater chemically enhanced primary treatment/sedimentation - new
PR-21713	PR-21713	Wastewater effluent discharge system optimization - retrocommissioning
PR-21949	PR-21949	Wastewater membrane bio reactor pulse aeration - normal replacement
PM-98434	PM-98434	Wastewater pump - VFD - add-on equipment
PM-58371	PM-58371	Optimize pump discharge valve - retrocommissioning
PR-90007	PR-90007	Water pressure management with pressure reducing valves - retrocommissioning
TBD	TBD	Wastewater Controls - UV Clean
PM-28579	PM-28579	Optimize water pump level control system - retrocommissioning
PM-29644	PM-29644	Optimize fluid flow system - retrocommissioning
TBD	TBD	UV Light Retrofits/Controls
PM-21426	PM-21426	VFD on Ag well pump ( $>$ 300 HP) - new
PM-18628	PM-18628	VFD on Ag well pump serving non-pressurized system - add-on equipment
PM-18600	PM-18600	VFD on agricultural well pumps ( $>$ 300hp) serving pressurized systems - add-on equipment
PM-21452	PM-21452	VFD on fluid pump - new
PM-18629	PM-18629	VFD on non Ag well pump - add-on equipment
PR-49586	PR-49586	Wastewater treatment - fine bubble aeration
TBD	TBD	Improve Pump Overhaul process optimization for WWTP biogas storage
TBD	TBD	BOILERS/HW/STEAM SYSTEMS RETROFIT/NEW-PROCESS BOILER-EFFICIENT UNIT
PM-35845	PM-35845	Fluid pump - VFD - add-on equipment

AC-78722	AC-78722	Ventilation fan - VFD - add-on equipment
MT-20868	MT-20868	Induction to Permanent Magnet Motor (Oil/gas submersible pumps only) - NR, NEW
PM-50902	PM-50902	Industrial pump retrofit - accelerated replacement
PM-38485	PM-38485	New Construction - Above Code Systems Design - Wastewater Treatment Pumping and Aeration
PM-29383	PM-29383	New Construction - Above Code Systems Design - Water Distribution Pumping
PR-10793	PR-10793	Air Compressor - Variable Displacement
PM-28467	PM-28467	Water shutoff controls (excludes smart wells for oil applications) - add-on equipment
PM-54502	PM-54502	Vacuum pumps - VFD - add-on equipment
PR-59848	PR-59848	New Construction - Above Code Systems Design - Manufacturing & Industrial Process Efficiency
PM-27202	PM-27202	Right sizing pumps - retrocommissioning
PM-21404	PM-21404	Industrial pump system overhaul (25 to 49 HP) - retrocommissioning
PM-21405	PM-21405	Industrial pump system overhaul (50 to 99 HP) - retrocommissioning
PM-21406	PM-21406	Industrial pump system overhaul (100 to 249 HP) - retrocommissioning
PM-21407	PM-21407	Industrial pump system overhaul (250 to 499 HP) - retrocommissioning
PM-21408	PM-21408	Industrial pump system overhaul ( $\geq$ 500 HP) - retrocommissioning

**Table 4: Deemed Measures List**

<b>MeasCode</b>	<b>MeasureID</b>	<b>MeasDescription</b>
PM-21051	SWWP002C	Efficient, VFD Ag Pumps, Well, NC
PM-21052	SWWP002D	Efficient, VFD Ag Pumps, Booster, NC
PM-20275	SWWP004A	Clean Water Pump, High PEI, Com, Constant, $1 \leq \text{HP} < 3$
PM-20281	SWWP004A	Clean Water Pump, High PEI, Ind, Constant, $1 \leq \text{HP} < 3$
PM-21041	SWWP004A	Clean Water Pump, High PEI, Ag, Constant, $1 \leq \text{HP} < 3$
PM-20282	SWWP004B	Clean Water Pump, High PEI, Ind, Constant, $3 \leq \text{HP} \leq 50$
PM-20276	SWWP004B	Clean Water Pump, High PEI, Com, Constant, $3 \leq \text{HP} \leq 50$
PM-21042	SWWP004B	Clean Water Pump, High PEI, Ag, Constant, $3 \leq \text{HP} \leq 50$
PM-20283	SWWP004C	Clean Water Pump, High PEI, Ind, Constant, $50 < \text{HP} \leq 200$
PM-20277	SWWP004C	Clean Water Pump, High PEI, Com, Constant, $50 < \text{HP} \leq 200$
PM-21044	SWWP004C	Clean Water Pump, High PEI, Ag, Constant, $50 < \text{HP} \leq 200$
PM-21045	SWWP004D	Clean Water Pump, High PEI, Ag, Variable, $1 \leq \text{HP} < 3$
PM-20284	SWWP004D	Clean Water Pump, High PEI, Ind, Variable, $1 \leq \text{HP} < 3$
PM-20278	SWWP004D	Clean Water Pump, High PEI, Com, Variable, $1 \leq \text{HP} < 3$
PM-20285	SWWP004E	Clean Water Pump, High PEI, Ind, Variable, $3 \leq \text{HP} \leq 50$
PM-20279	SWWP004E	Clean Water Pump, High PEI, Com, Variable, $3 \leq \text{HP} \leq 50$

PM-21046	SWWP004E	Clean Water Pump, High PEI, Ag, Variable, 3 <= HP <= 50
PM-20280	SWWP004F	Clean Water Pump, High PEI, Com, Variable, 50 < HP <= 200
PM-20286	SWWP004F	Clean Water Pump, High PEI, Ind, Variable, 50 < HP <= 200
PM-21047	SWWP004F	Clean Water Pump, High PEI, Ag, Variable, 50 < HP <= 200
SWWH017A	SWWH017A	Pipe Insulation 1" Insulation <= 1" pipe Hot Water Outdoor
SWWH017B	SWWH017B	Pipe Insulation 1" Insulation 1" < pipe <= 4" Hot Water Outdoor
SWWH017C	SWWH017C	Pipe Insulation 1" Insulation > 4" pipe Hot Water Outdoor
SWWH017D	SWWH017D	Pipe Insulation 1" Insulation <= 1" pipe <=15 psig steam Outdoor
SWWH017E	SWWH017E	Pipe Insulation 1" Insulation 1" < pipe <= 4" <=15 psig steam Outdoor
SWWH017F	SWWH017F	Pipe Insulation 1" Insulation > 4" pipe <=15 psig steam Outdoor
SWWH017G	SWWH017G	Pipe Insulation 1" Insulation <= 1" pipe >15 psig steam Outdoor
SWWH017H	SWWH017H	Pipe Insulation 1" Insulation 1" < pipe <= 4" >15 psig steam Outdoor
SWWH017I	SWWH017I	Pipe Insulation 1" Insulation > 4" pipe >15 psig steam_Outdoor
SWWH017J	SWWH017J	Fitting Insulation <= 1" pipe Hot Water_Outdoor
SWWH017K	SWWH017K	Fitting Insulation 1" < pipe <= 4" Hot Water_Outdoor
SWWH017L	SWWH017L	Fitting Insulation > 4" pipe Hot Water_Outdoor
SWWH017M	SWWH017M	Fitting Insulation <= 1" pipe <=15 psig steam_Outdoor
SWWH017N	SWWH017N	Fitting Insulation 1" < pipe <= 4" <=15 psig steam_Outdoor
SWWH017O	SWWH017O	Fitting Insulation > 4" pipe <=15 psig steam_Outdoor
SWWH017P	SWWH017P	Fitting Insulation <= 1" pipe >15 psig steam_Outdoor
SWWH017Q	SWWH017Q	Fitting Insulation 1" < pipe <= 4" >15 psig steam_Outdoor
SWWH017R	SWWH017R	Fitting Insulation > 4" pipe >15 psig steam_Outdoor

SW WISE™ includes deemed measures from approved statewide measure packages referenced in the Table below:

**Table 5: SW WISE™ Measure Package List**

#	Measure Package	Short Description	URL link or location name
1	SWWP004-02	WATER PUMP UPGRADE	<a href="https://www.caetrm.com/measures/">https://www.caetrm.com/measures/</a>
2	SWWP002-02	VFD ON WELL PUMP, <=300 HP	<a href="https://www.caetrm.com/measures/">https://www.caetrm.com/measures/</a>
3	SWWH017-02	HOT WATER PIPE INSULATION, NONRESIDENTIAL & MUTLIFAMILY	<a href="https://www.caetrm.com/measures/">https://www.caetrm.com/measures/</a>

To maximize market adoption of the above code water pump upgrade measures, the rebates were set equal to the measure package specified incremental measure costs for Normal Replacement (NR) and New Construction (NC) measure application types.

For the pump VFD measure, the incentives were set at \$107/HP for booster pumps and \$99/HP for wells pumps. For pump VFD projects completed by 12/31/2023, the incentives are elevated to the incremental measure cost in the SW approved measure package.

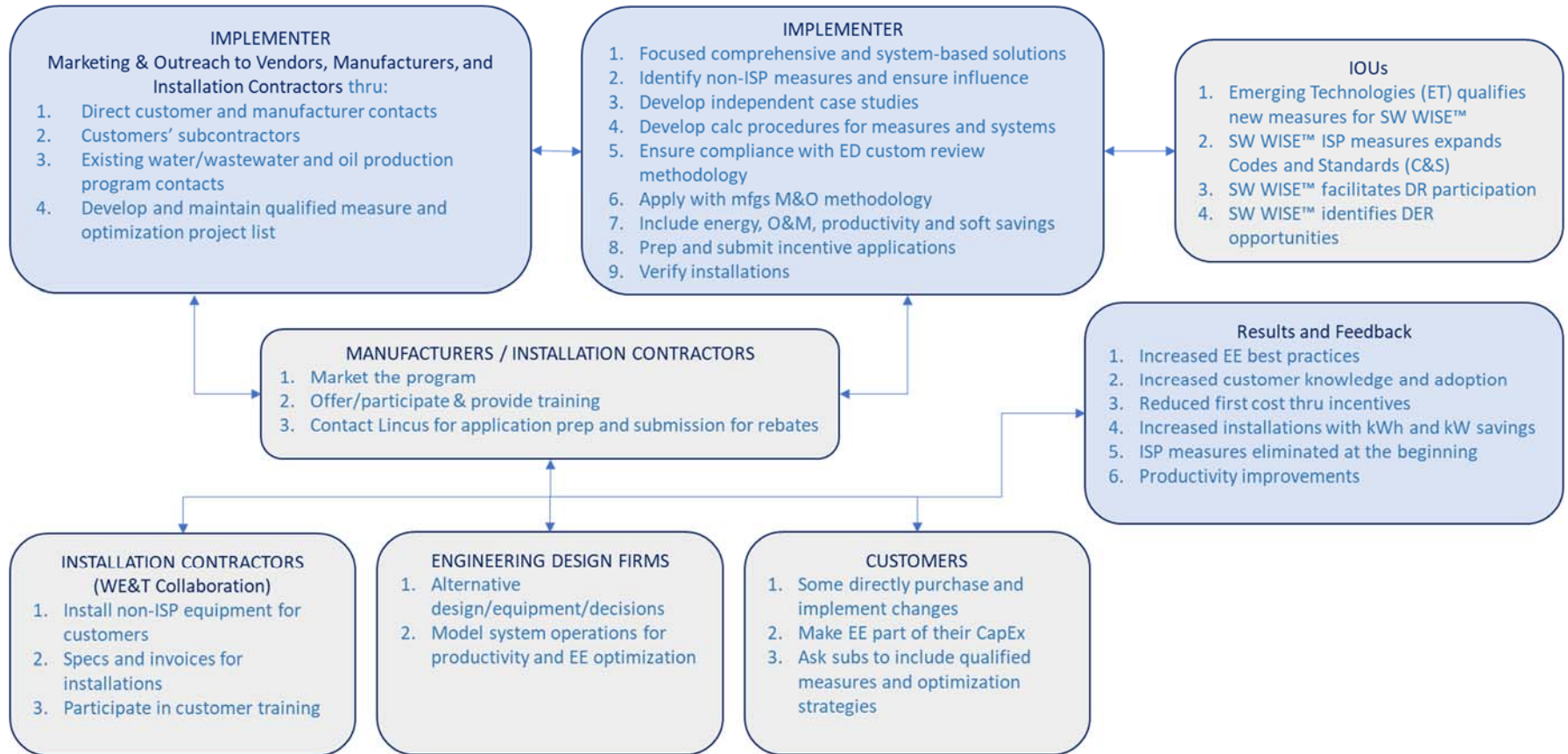
The incentives for the fitting and pipe insulation Add-On Equipment (AOE) measure application type are set at \$3/unit.

The deemed rebates we are using for SW WISE™ are specified in the table below by measure package.

### 5. Qualitative Targets

Year	2023	2024	2025	Total
Total Project Savings (net kWh)	5,822,726	9,109,746	8,468,478	23,400,950
Hard-to-Reach (HTR)/ Disadvantaged Community (DAC) Project Savings (net kWh)	2,300,000	3,600,000	3,400,000	9,300,000
Total Incentives (\$)	\$3,000,000	\$2,500,000	\$2,500,000	\$8,000,000
Incentives Delivered for HTR/DAC Project (\$)	\$1,200,000	\$1,000,000	\$1,000,000	\$3,200,000

## 6. Diagram of Program



**Figure 3: SW WISE™ Program Stakeholder Diagram**

## **7. Embedded Measurement & Verification (M&V)**

SW WISE™ program design incorporates Embedded M&V in the following ways:

- a) Customer satisfaction surveys are performed during energy assessments and provided with the application submissions. Implementer will request Customer Satisfaction Survey responses from each Customer that has a Customer Implementer Agreement (CIA) with the Implementer for SW WISE™ upon each Project completion and will deliver such Customer Satisfaction Survey results to SCE.
- b) Custom projects follow the International Performance for Measurement and Verification Protocol (IPMVP) techniques. All pre- and post-installation energy savings calculations are based on one of the 4 options recommended by IPMVP, wherein Implementer leverages the data collected from the Customers' SCADA systems along with IOU interval data reading to produce verifiable energy savings.
- c) Commissioning and verification services offered in SW WISE™ provide training for customers to learn what operational parameters result in persistent energy savings for the effective useful life of the measures.

## **8. Evaluation, Measurement & Verification (M&V)**

The purpose of EM&V at the program level is to provide ongoing performance feedback during implementation, produce impact evaluations once the program term is over, and to inform planning for future program cycles. To provide robust program EM&V, the implementation team ensures program data integrity through rigorous Quality Assurance/Quality Control (QA/QC) procedures and extensive records retention. These data collection and review strategies are embedded in the design of the program from end-to-end. This promotes accurate reporting and allows near-term optimization of Program performance.

The program is committed to providing quality program delivery and meeting customer needs, compliant with CPUC requirements and statewide guidance. SW WISE™ integrates project and program management tools, providing a platform for sharing information with all stakeholders. The QA/QC procedures were developed and will be overseen by a team of industry experts, with emphasis on continuous improvement in response to QA/QC metrics, cost-effectiveness tracking, and any changes in legislation, regulation, and technologies.

The Quality Assurance Plan (QAP) has the following features:

- Oversight by Engineering Program Managers: Implementer oversees QA/QC training, review operating procedures development and execution of QA/QC procedures, and provide full process review and analysis of program level metrics for Key Performance Indicators (KPIs). Our quality assurance effort integrates with M&V and drives continuous process evaluation and improvement.
- QA/QC Process Review Operating Procedures: Implementer will oversee development and continuous improvement of QA/QC review documents consolidating guidance from various sources, and QA/QC checklists, refined from the existing CPUC checklist.
- Early Screening: Implementer justifies measure eligibility, influence, measure application type, and other measure attributes, then screens for project cost-effectiveness before submittal of application. Implementer may opt to send completed Early Screening documents to SCE for approval prior to completing the Pre-Installation package.
- Enforcement, Documentation and Transparency: Program staff enforce QA/QC procedures, requiring signoff of review checklists by senior level engineers before project advancement. The Implementer provides visibility to submittals and QA/QC documentation and tracks QA/QC

metrics.

- M&V Plans: Custom projects require development and execution of M&V plans, compliant with the most current versions of the Statewide Custom Project Guidance Document and International Performance Measurement and Verification Protocol (IPMVP).
- Customer Satisfaction: The QAP reduces review times and errors, preventing erosion of savings and incentives with the aim of satisfying IOU customers.
- Continuous Improvement: Feedback of our QA/QC metrics will be used to revise our review tools and guidance documents as well as targeting training of **Lincus** engineers and Trade Allies

#### Data Collection and Management to Support EM&V

Comprehensive and thoughtful data collection practices are vital for streamlining EM&V efforts. The Implementer will obtain and securely manage all data including internal and external program activities. Examples of these activities include customer interaction, targeting, outreach, project scope definition, project installation, QA/QC, invoicing, and performance tracking. EM&V industry expert partners provide feedback on our data collection process to ensure support for process and impact evaluations.

#### **9. Normalized Metered Energy Consumption (NMEC)**

- a) Site-Level NMEC Programs: Not applicable
- b) Population-Level NMEC Programs: Not applicable

### **E. Program Manuals**

#### **1. Eligible Measures or measure eligibility, if applicable**

Please see Section D.4 for a list of eligible measures. Consistent with the policies and procedures manual, industry standard practice (ISP) for custom measures with MAT of NC, AR or NR will be documented through low-rigor ISP studies performed once and will be in effect for the entire program duration.

#### **2. Customer Eligibility Requirements**

SW WISE™ serves facilities/systems for Water/Wastewater Pumping Customers including Water Agencies, Private Water Companies, Wastewater Agencies, Special Districts, Joint Power Authorities, Local Government Agencies, Water Investor-Owned Utilities (IOUs), Oil field water pumping Customers, and other water pumping or treatment customers (Customer) paying the Public Purpose Programs (PPP) charge.

“Water/Wastewater Pumping Customer” means a Customer who: (i) engages in water production, water/wastewater distribution, or water/wastewater treatment, irrigation, facility water pumping, or surface transport pumping; or (ii) is a water agency, water/sanitation special district, irrigation district, investor-owned water utilities, or local government primarily focused on water production, water/wastewater distribution, water treatment, wastewater treatment, irrigation, water pumping facilities and systems, or surface transport pumping; or (iii) engages in oil or gas water pumping or treatment, including steam systems, or (iv) engages in water/steam injection/reinjection, distribution and disposal, surface transport pumping, or irrigation/agricultural pumping; or (v) is a manufacturer, distributor, retailer, or contractor of program eligible energy efficiency technology or measures used for water production, water/wastewater distribution, or water/wastewater treatment, irrigation, facility water

pumping, or surface transport pumping. Eligible Customers include any Commercial and Industrial Customer, Public Customer, or Agricultural Customer that satisfies the definition of Water/Wastewater Pumping Customer.

<b>Engineering Sector for NTG</b>	<b>NAICS Codes Description</b>	<b>NAICS Code</b>	<b>Title of NAICS Code</b>
Agricultural	Farming, Groves Vineyards, Orchards	111xxx	Crop Production
Agricultural	Animal Aquaculture, Fish Hatcheries, Marine Products	1125xx	Aquaculture Customers
Commercial and Industrial	Crude Petroleum, Natural Gas, Natural Gas Liquids, Industrial Inorganic Chemicals	211xxx	Oil and Gas Extraction
Commercial and Industrial	Oil and Gas Exploration/Field Services	213112	Support Activities for Oil and Gas Operations
Agriculture, Commercial and Industrial	Water, Steam and Air- conditioning Supply, Irrigation Systems	2213xx	Water, Sewage, and Other Systems
Agriculture, Commercial and Industrial	Water, Sewer, and Utility Lines, Water Well Drilling	237110	Water and Sewer Line and Related Structures Construction
Commercial and Industrial	Air and Gas Compressors	33391x	Pump and Compressor Manufacturing
Commercial and Industrial	Pumps and Pumping Equipment, Measuring and Dispensing Pumps	333914	Measuring, Dispensing, and Other Pumping Equipment Manufacturing
Commercial and Industrial	Pipelines	486990	All Other Pipeline Transportation

Measures installed for or at the following are considered the Engineering Industrial Sector:

- Non-drinking/potable water use,
- Well water at water districts, and
- All Wastewater treatment facilities.

Measures installed for or at the following are considered the Engineering Commercial Sector:



- Drinkable/potable water,
- Irrigation - Other (Golf Courses, Fountains, etc.), and
- Well Water - Pump Houses.

Measures installed for or at the following are considered the Engineering Agriculture Sector:

- Irrigation – Farming and,
- Well Water – water farm.

### **3. Contractor Eligibility Requirements**

SW WISE™ will develop a network of qualified, trained trade allies who will support this market segment. This trade ally network will be available to contractors and vendors who provide services and products to assist SW WISE™ customers with the implementation of Program energy efficiency measures. Customers will not be required to use a network trade ally to qualify for Program incentives. Trade allies who complete the following will be eligible to enroll in the network:

- Complete a trade ally network application
- Provide documentation outlined in the application including W9, proof of insurance, etc.
- Complete Program training
- Observe and abide by all Program rules as detailed in the trade ally network application and the Customer application Terms & Conditions.

Implementer will also work closely with water/wastewater providers who provide design and engineering services for the water/wastewater segment. These providers typically contract to specialty trades for actual installation.

### **4. Participating Contractors, Manufacturers, Retailers, Distributors, and Partners**

SW WISE™ is a downstream offering within PG&E, SCE, SoCalGas, and SDG&E territories. This section is not applicable.

### **5. Additional Services**

Delivering a high-quality customer experience is a key priority for the SW WISE™ offering. Program's goal is to streamline and reduce confusion for customers, while ensuring compliance, limiting customer service problems, and maximizing value-added services through the end-to-end process described in Section D.2. Please see Section D.3. which illustrates the end-to-end process. Key participant implementation tasks include specifics on A) Minimizing mistakes, B) Preventing customer complaints/problems, and C) Enabling timely and satisfactory resolutions to participant issues.

### **6. Audits**

#### **a) Custom Pre-Installation Inspection**

Prior to any Installation activities at a Site, Implementer will conduct an on-site Pre-Installation Inspection to (A) test and make any measurements needed to calculate and establish the Individual Measurement Baseline for such Project for purposes of measuring each of the Expected Gas Savings, Expected Energy Savings, Expected Demand Savings, and Expected TRC Ratio; and (B) verify that the Measure would not have been installed without the influence of Implementer. Such Inspections shall be conducted consistent with the applicable M&V Plan and to the extent any technologies that reduce customer energy demand or consumption or reduce customer gas

consumption are installed (current or future) at the Customer Site exceed the net potential benefits of a Measure or the Project, the calculation of the impact of each Measure and Project will comply with the Statewide Custom Project Guidance Document, Customized Calculated Savings Guidelines, Fuel Substitution Guidance, and any resolutions, disposition and guidance issued by the CPUC.

b) Custom Primary Post-Installation Inspection

After Implementer has completed an Installation, Implementer will conduct the on-site Custom Primary Post-Installation Inspection that is consistent with the applicable M&V Plan, and to the extent that any technologies that reduce customer energy demand or consumption, or gas consumption, are installed (current or future) at the Customer Site, including Non-IOU Fuel Source(s), which exceed the net potential benefits of a Measure or the Project, the calculation of the impact of each Measure and Project must comply with the Statewide Custom Project Guidance Document, Customized Calculated Savings Guidelines, Fuel Substitution Guidance, and any resolutions, disposition and guidance issued by the CPUC. Such Custom Primary Post-Installation Inspection to verify that:

- The Project was Installed consistent with the applicable M&V Plan;
- All Measures in the Project are operating or otherwise being implemented in a manner consistent with the applicable NMEC- Custom Pre-Installation Package and otherwise in accordance with Applicable Standards;
- Identify the Ex Ante Gas Savings, Ex Ante Energy Savings, Ex Ante Demand Savings, Ex Ante Monthly TRC Ratio, and Ex Ante Annual TRC Ratio, as applicable, associated with each Measure for the Project at the Site; and
- Documentation evidencing the equipment and labor costs of such Measures.

c) Pre-Installation Package; Pre-Installation Inspection.

Prior to any Installation activities at a Site, Implementer will conduct a Pre- Installation Inspection (only if such inspection is required by the applicable Deemed Measure Package) and provide to SCE: (1) a Project and Measure Description, (2) a Measure Package Description, (3) Eligibility Verification, (4) a Pre-Installation Inspection Report (only if required by the applicable Measure Package), for each Measure, Project, Site, and Customer, as applicable (collectively, the “Deemed Pre-Installation Package”). The Deemed Pre-Installation Package must be provided to SCE in accordance with the procedures and, in the system, database or format required by SCE.

d) Measure Package Verification and Deemed Primary Post-Installation Inspection  
Implementer will conduct a Deemed Primary Post-Installation Inspection and provide SCE with the following: (1) Measure Package Verification; and (2) a Deemed Primary Post- Installation Inspection Report, for each Measure, Installation, and Site (collectively the “Post Installation Package”).

The Post-Installation Inspection Sampling Methodology for Deemed Measures deploys a statistical approach to determine the number of virtual Post-Installation Inspection and in-person Post-Installation Inspections required for verifying the deemed measures.

Employing a statistical approach enables standardization of Quality Assurance (QA) procedures within deemed installations whilst ensuring inspection activities be

performed with a limited sample set from the entire population. A sample is a subset of a population selected for direct assessment of one or more variables of interest. Refer to 220818\_SW WISE Post Inspection Sampling Methodology v2.docx, for more details on the methodology for the deemed measures included in the SW WISE™ program offering.

#### **7. Sub-Program Quality Assurance Provisions**

SW WISE™ has no sub-programs.

#### **8. Other Program Metrics**

All project data is recorded in the Program's project and customer tracing systems. Program performance will be tracked and measured by the Key Performance Indicators (KPIs) as outlined in Section C.6.