



ENERGY EFFICIENCY PROGRAMS

SoCalREN Public Sector

Public Agency Distributed Energy Resources Disadvantaged Communities (DER DAC) Project Delivery Program

Publicly Known as Pathway to Zero Program Implementation Plan

*Prepared by the County of Los Angeles on behalf
of the Southern California Regional Energy Network*

Version 1.0
October 2021

Contents

Program Overview	3
Program Budget and Savings	3
Implementation Plan Narrative.....	5
Program Description	5
Program Delivery and Customer Services	6
Program Design and Best Practices	9
Innovation	12
Metrics	13
To-Code Savings Claims	14
Pilots	15
Workforce Education and Training.....	15
Workforce Standards	15
Disadvantaged Worker Plan	15
Additional Information	15
Supporting Documents	16
Program Manual and Program Rules	16
Program Theory and Program Logic Model.....	16
Process Flow Chart.....	17
Incentive Tables, Workpapers, and Software Tools.....	17
Quantitative Program Targets.....	18
Diagram of Program.....	19
Evaluation, Measurement, and Verification (EM&V).....	20
Normalized Metered Energy Consumption (NMEC).....	21

Program Overview

To support the Public Sector and to expand on lessons learned from the Southern California Regional Energy Network's (SoCalREN) existing public sector strategies, in 2019 the SoCalREN expanded its energy efficiency (EE) project delivery with the Public Agency Distributed Energy Resources Disadvantaged Communities (DER DAC) Project Delivery Program, publicly known as Pathway to Zero. DER DAC includes distributed energy resources (DER) and sustainability strategies during project identification and provides educational information and resources for integrating DERs in energy efficiency projects. This Program is offered within DACs, rural, and low-income communities. Similar to SoCalREN's Public Agency Energy Efficiency Project Delivery Program, the DER DAC Program will provide energy efficiency project management and education, but it will also provide information and subject matter expertise on DER and sustainability strategies for underserved public agencies. The goal of the program is to maximize energy efficiency opportunities while driving the integration of DERs to help public agencies achieve zero net energy (ZNE). SoCalREN has learned that for most public agencies in the program, energy efficiency retrofits are just the beginning. Many want to achieve deeper energy savings, water efficiency savings, and greater energy resiliency through renewable generation, energy storage, and sophisticated energy management systems. The DER DAC program will support underserved public agencies and address comprehensive resiliency strategies to achieve their climate and sustainability goals.

Program Budget and Savings

1. Program and/or Sub-Program Name
SoCalREN Public Agency Distributed Energy Resources Disadvantaged Communities Project Delivery Program
2. Program / Sub-Program ID number
SCR-PUBL-B2
3. Program / Sub-program Budget Table
Table 1. Program Budget Breakdown

Budget Category	2021
Administration	\$359,083
Marketing	\$215,450
Direct Implementation - Non-incentive	\$3,016,300
Direct Implementation - Incentive	\$0
Total	\$3,590,833

4. Program / Sub-program Gross Impacts Table
This section is not applicable.
5. Program / Sub-Program Cost Effectiveness
This section is not applicable.
6. Type of Program / Sub-Program Implementer (PA-delivered, third party-delivered or Partnership)
Third party-delivered
7. Market Sector(s) (i.e., residential, commercial, industrial, agricultural, public)
Public
8. Program / Sub-program Type (i.e., Non-resource, Resource)
Non-resource
9. Market channel(s) (i.e., downstream, midstream, and/or upstream) and Intervention Strategies (e.g., direct install, incentive, finance, audit, technical assistance, etc.), campaign goals, and timeline.
Market Channel: Downstream

Intervention Strategies: Technical Assistance

Implementation Plan Narrative

Program Description

The Southern California Regional Energy Network's (SoCalREN) mission is to bring together a variety of services with one common goal: achieving unprecedented levels of energy savings throughout Southern California. SoCalREN's Public Sector Programs believe in the power of public agencies to lead their communities towards a safe, secure, resilient, affordable, and sustainable clean energy future. SoCalREN offers comprehensive services to public agencies to identify energy efficiency projects that yield electricity and gas savings, overcome common barriers to implementation, and deliver energy efficiency projects. A key initiative for this sector is to serve communities who are most in need of energy services to ensure equitable access to resources and expertise.

In addition to energy efficiency, many public agencies have indicated interest in deeper energy savings and greater self-reliance through local renewable energy generation, energy storage, energy management systems, and water efficiency technologies. While customers may have the interest and motivation to pursue these types of DER strategies, they often lack the knowledge needed to take action. In response, the SoCalREN developed a Public Agency Distributed Energy Resources Disadvantaged Communities (DER DAC) Project Delivery Program, publicly referred to as Pathway to Zero, to address this market gap. Services from this program will increase energy efficiency savings, increase involvement in Investor Owned Utility (IOU) and state programs, reduce carbon emissions, and offset energy consumption through renewables and other technologies. The program will contribute to SoCalREN's vision of supporting communities on their path to zero net energy (ZNE) and customers will optimize energy and cost savings by taking a comprehensive approach to facility energy projects.

In order to achieve this goal, the DER DAC Program aims to achieve the following objectives:

1. Fill market gaps in the public sector and provide public agencies serving DAC, rural, and low-income with an integrated, objective, and comprehensive EE and DER solution for their facilities and non-facility infrastructure;
2. Increase the percentage of DAC, low-income, and rural public agencies that engage their communities in DER energy actions and strategies, reducing overall community energy consumption;
3. Increase the number of public agencies participating in SoCalREN's EE programs, with an emphasis on DACs, rural, and low-income communities;
4. Encourage DAC, rural, and low-income public agencies to engage their constituents about energy and DER programs and strategies;
5. Expand the implementation of energy efficiency projects and integrate EE as a standard business practice for underserved public agencies, and;

6. Position public agencies and strategic regional partners to lead community awareness campaigns, engage stakeholders, build public awareness of local, regional, and state efforts, develop energy action plans, and drive participation in PA resource programs.

At no cost to agencies, the DER DAC Program identifies energy-saving measures and works side-by-side with public agency staff throughout the project lifecycle, from performance specification to construction completion, to implement energy strategies. In addition to the DER DAC Program offerings, agencies also receive energy benchmarking and DER technical audit services through the Benchmarking Call to Action (BMCTA) sub-program, which is funded by the CEC.

Program Delivery and Customer Services

SoCalREN's DER DAC Program offers public agencies serving DACs, low-income, and rural communities customized project management and technical engineering services through a third party implementer to implement cost-effective and streamlined projects. The DER DAC Program aligns with IOU downstream intervention strategies and programs and actively works to ensure other Program Administrator offerings, such as the upstream, midstream, direct install, and IOU third party programs, are leveraged when feasible. After enrollment in the SoCalREN Public Sector Programs, each agency is assigned a dedicated project manager and engineering firm. The project delivery team works with the agency to address project challenges and proactively identify solutions.

The DER DAC Program uses a phased project delivery process to move projects from planning and identification to execution and completion. Each phase includes activities to ensure industry best practices, agency alignment, utility coordination, and cost-effectiveness throughout the project. The following is a high-level overview of the project delivery process and services deployed by SoCalREN's DER DAC Program.

Enrollment and Project Identification: An agency is enrolled in the SoCalREN Public Sector Programs once it signs a non-binding enrollment form that acknowledges program participation, responsibilities, and services. The enrollment process begins with a presentation to introduce SoCalREN Public Sector Programs in coordination with the IOUs, local government partnerships, regional partners, and any other applicable partners. The enrollment form is presented to the agency during this meeting; services are not offered until the form is signed and returned. Only agencies with facilities co-located in DAC, low-income, and rural communities can participate in the DER DAC Program. Once enrolled, a project manager is assigned to the agency to begin the identifying and developing projects.

After enrollment, the project manager prepares an agency-wide energy analysis for the agency. The analysis provides a portfolio-wide snapshot of energy consumption and cost by sector (i.e. water and wastewater pumping, street lighting, facilities, and outdoor lighting), and estimates the energy and financial impacts of potential energy efficiency retrofits. The analysis indicates which facilities are located within communities that are eligible for the DER DAC Program and helps identify energy efficiency and DER project opportunities.

Audit: Once a project is identified, the agency signs a project commitment form that records the agency's commitment to pursue the project, if viable, before the program invests limited

resources in conducting an audit. The DER DAC Program project manager then works with the designated engineer to complete a detailed facility or site visit and to identify a preliminary list of recommended energy efficiency measures to present to the agency. Leveraging the BMCTA sub-program, the preliminary list of measures (and all audit phase activities) includes applicable DER measures. After the agency selects which energy efficiency and DER measures to implement, the DER DAC Program prepares audit calculations and a project proposal with operational and maintenance improvements and/or upgrades to equipment and controls. The proposal details the business case for the recommended energy measures by providing estimated project costs, energy bill savings, available incentives, and financing solutions for the package of measures. The DER DAC Program team prepares and submits an IOU incentive application package to reserve applicable incentives and financing. For DER-only measures, the project proposal will include a comprehensive list of financing and program resources as well as potential next steps for the agency to pursue; additional program support may be provided for these measures through BMCTA.

When possible, the audit phase is completed in coordination with applicable program partners, such as regional partners, IOUs, and third-party programs. Coordination among partners ensures that the agency receives a robust array of service offerings, while improving cost-effectiveness across programs and avoiding duplication of efforts. Other SoCalREN Public Sector program offerings are integrated during this phase if applicable.

Design and Procurement: The engineer completes technical performance specifications for the selected energy efficiency measures. If the agency releases a bid for construction services, the DER DAC Program can provide supplementary bid package materials and sample language to support procurement. If the agency uses the DER DAC Program's simplified procurement, SoCalREN schedules a joint scope walk at the site with the pre-qualified contractor, agency representative, and SoCalREN's DER DAC project team. The contractor provides feedback on the draft technical specifications and, if necessary, revises and finalizes them before SoCalREN presents a cost proposal to the agency.

Agency Approval: The DER DAC project manager prepares a detailed project proposal to help agency staff obtain approval for the energy efficiency project. The proposal package may include a staff report and draft resolution, scope of work, cost proposal, and utility incentives and/or financing documents. The agency's relevant approval authority approves the project, then the agency submits the necessary signed documentation and issues a purchase order to the contractor for construction services.

Construction: During construction, the agency is the "project owner of record" responsible for all construction contracts and costs and for designating a construction manager. The agency may choose to manage the construction on its own or can access construction management services through Sourcewell. SoCalREN's DERDAC project management team provides construction management support throughout the process, including review of contractor submittals and verification that work is performed in accordance with the design specifications so that energy savings are achieved and incentives are captured.

Completion: Once the project is installed and verified, the DER DAC team will work with the agency and contractor to collect project close-out information for the applicable resource program. This allows the agency to receive incentives and allows the program administrator to accrue

savings (if applicable). The contractor transfers all appropriate documentation, knowledge, and training to the agency and the facility management personnel for new equipment and/or operational changes. After project completion, the agency receives a survey to provide feedback on the program.

Capacity Building: Enrolled agencies can access the SoCalREN networks’ collective expertise, resources, shared procurement strategies, best practices, and lessons learned to reduce costs and address common barriers. The DER DAC Program provides access to resources including project managers, technical advisors, engineering firms, contractors, financial advisory services, utilities, other industry participants, and peer-to-peer sharing through workshops, newsletters, and other outreach.

BMCTA Sub-program

The Benchmarking Call to Action (BMCTA) sub-program integrates seamlessly into the existing SoCalREN DER DAC Program. Public agencies that serve DAC, low-income, and rural communities are eligible for the BMCTA sub-program. The sub-program has three phases, as outlined below, aligning with and complementing the existing DER DAC Program project delivery process. Each phase includes several steps that ensure industry best practices are applied, utilities are kept informed, and solutions are cost-effective.

BMCTA will provide the following services:

- **On-site Benchmarking and Data Analysis.** BMCTA will perform on-site benchmarking services and screening for EE and DER project opportunities. This phase enhances the DER DAC Program energy analysis services. The goal of this phase is to assess energy savings opportunities, identify viable projects, and educate agency energy champions and facility staff.
- **DER Audit.** BMCTA will coordinate with the agency to determine the DER strategies they want to pursue and to perform a DER audit. The DER audit phase supports the DER DAC Program EE audit phase by providing in-depth technical analysis of DER strategies. The task will culminate in a project proposal, which integrates the DER audit findings with the EE measures and analysis from SoCalREN’s DER DAC Program. Combining the EE and DER audit findings into a project proposal report provides public agencies with a comprehensive business case for projects to obtain staff buy-in and move to implementation. Program services for each DER strategy are described below.

Table 2. DER Strategies

Strategies	Program Services
Demand Response (DR)	Analyze savings, benefits and costs for potential DR measures and available SCE DR programs, support accessing SCE rebates, and provide advisory services
Electric Vehicles (EV) Charging Stations	Provide information regarding general cost estimates for charging stations, information and support with accessing SCE rebates, and advisory services

Solar Water Heating	Analyze savings, benefits, costs, and rebates for SoCalGas and SCE solar water heating systems
Photovoltaic (PV) and Battery Storage Systems	Analyze savings, benefits, costs, and rebates for solar PV and battery storage, and provide information and support for participation in SCE pilots and programs
Greenhouse Gas Emission (GHG) Reduction Options	Educate customers on their options to reduce GHG through SCE or local Community Choice Aggregation provider renewable energy tariff programs
Permanent Load Shifting via energy storage	Analyze savings, benefits, costs, and rebates for facility peak demand and possible load shifting benefits
Water Efficiency	Analyze savings, benefits, costs, and rebates for water efficiency measures

- DER Strategies Development.** SoCalREN will present the DER audit to the agency and review the findings and recommendations with them. Based on agency feedback and energy goals, SoCalREN’s project management team will finalize DER strategy recommendations and update the DER audit and project proposal with final measures and detailed project savings, costs, available incentives, and financing solutions. This phase enhances the DER DAC Program EE audit phase by providing agencies with an in-depth DER project feasibility analysis.

In addition to the services above, the DER DAC Program will offer project management support for each strategy as long as support is tied to the implementation of energy efficiency measures. This includes working with third parties and programs to identify and secure additional resources to move the project through implementation. For example, the program will educate customers on utility and non-utility financial options and support them with the applications if needed. The program will help agencies obtain technical assistance to develop the project, including submitting applications for audits or technical assistance through programs such as the California Energy Commission Energy Partnership Program¹, Bright Schools Program Technical Assistance² and the School Project for Utility Rate Reduction Program³.

Program Design and Best Practices

Market Barriers

The fragmented way the energy industry currently delivers services and incentives makes it challenging to achieve deep energy retrofits and clean energy self-reliance resulting in multiple barriers to whole building energy retrofits and a “project delivery gap” for the customer. Public agencies may have trouble recognizing the benefits of energy projects on a comprehensive scale and often lack in-house expertise and financial resources. These are important challenges to solve because public agencies are significant players in the energy field, both as consumers and as leaders of their communities. SoCalREN’s DER DAC Program addresses these barriers by

¹ www.energy.ca.gov/efficiency/partnership
² www.energy.ca.gov/efficiency/brightschoools
³ www.spurr.org

providing services to streamline energy efficiency project implementation and DER identification with sustained technical assistance and support accessing project funding.

While the existing SoCalREN Project Delivery Program supports energy efficiency, it lacks assistance for complementary technologies. As a result, public agencies either have to navigate these projects on their own or pay for services, both of which are deterrents to project completion. The DER DAC Program addresses these deterrents by providing information on DER technologies and supporting agencies as they secure financial and technical resources for project implementation. The SoCalREN DER DAC Program's comprehensive support educates and supports the agency as they pursue EE and DER projects and greenhouse gas (GHG) emission reduction goals. The Program works hand in hand with the agency and industry partners to support EE and DER project development and implementation through combined EE and DER benchmarking and audits.

Best Practices

To help public agencies meet key challenges, SoCalREN's DER DAC Program has identified several best practices and integrated them into the project delivery process. The DER DAC Program addresses the unique needs of the public agency customer and mitigates the need for agencies to acquire their own in-house expertise and resources. Through a "one stop" approach, SoCalREN's DER DAC Program delivers comprehensive energy retrofit services, customizable to the agency's needs. Participating public agencies can take advantage of the full suite of offerings or select only the services that fit their needs.

The DER DAC Program aims for continuous improvement of implementation practices and systems. Since the DER DAC Program's inception, it has leveraged best practices from the SoCalREN Project Delivery Program's on-the-ground experience to design more effective systems, tools, and techniques for project delivery. To improve cost-effectiveness, SoCalREN develops and evaluates program strategies to control costs and ensure that the most efficient methods are deployed for project implementation. Examples of cost-effective program strategies include:

- A project budget tool that ensures appropriate allocation of program resources based on project and agency characteristics;
- A streamlined pathway for engineers to enter project budgets for approval to ensure alignment on project scope and deliverables, and;
- Audit and project commitment forms to confirm agency buy-in as a project progresses and to ensure that DER DAC Program resources are carefully managed and delivered.

Furthermore, the DER DAC Program has incorporated the following best practices into the overall program design:

- Regional partner agency engagement: The regional partner strategy was initiated to mitigate gaps created by SCE's closing of local government partnership (LGP) programs and to leverage local experts to better serve diverse communities across SoCalREN's expansive territory. In 2019, SoCalREN began partnering with regional community-

based organizations and Councils of Government (COG) for on-the-ground outreach and engagement. Many regional partner organizations have established relationships with agencies working on energy efficiency efforts through LGPs. Through these regional partners, SoCalREN can connect with agencies across diverse climate zones, population sizes, population densities, and other demographic characteristics that are targeted for engagement in order to ensure comprehensive service to all eligible SoCalREN agencies.

Regional partner strategy goals:

- Demonstrate regional reach and deliver valuable services to the entire service territory;
- Increase impacts of energy efficiency through enrollments and enhance engagement;
- Increase energy projects and their associated savings;
- Find opportunities to customize and enhance services in subregions, and;
- Identify new opportunities, sub-programs, and strategies to meet specific sub region needs.

Regional partners enhance SoCalREN's expertise and reach with their local knowledge, relationships with member agencies, and professional relationships that often extend beyond energy efficiency.

- Utility coordination and stakeholder collaboration: SoCalREN's DER DAC Program promotes early and ongoing collaboration with utility partners, third-party program implementers, and stakeholders based on an agreed upon protocol. Coordination among partners ensures a robust array of service offerings are provided to the agency, while also improving cost-effectiveness across programs and avoiding duplication of efforts. A collaborative approach also improves the customer's experience and helps avoid confusion between programs.
- Standardized tools and templates: The DER DAC Program develops and implements standardized tools and templates, including a comprehensive Project Delivery Manual (PDM). The PDM guides project managers and engineers to ensure quality control and application of best practices through the project delivery process.
- Procurement assistance: Assistance during the procurement process helps public agencies to move projects into construction sooner and ensures the achievement and persistence of expected energy savings. SoCalREN's DER DAC Program offers access to a pool of highly qualified specialty contractors that have been selected through a competitive process, further driving down project costs. Procurement support is only available for EE projects or EE and DER combined projects.
- Financing support: To overcome the significant hurdle of project funding, SoCalREN's project team helps to identify and secure grant funding and project financing. The DER DAC Program helps agencies apply for a variety of funding and financing sources including Energy Lease Financing (ELF), IOU on-bill financing (OBF), the California Energy Commission (CEC) low interest loan program, local self-funded financing opportunities, and the SoCalREN's Revolving Savings Fund (RSF). Enrolled agencies

also have access to a financial advisor for additional expertise if needed. Financing support is only available for EE projects or EE and DER combined projects.

- Marketing and communications: SoCalREN uses proven marketing and communications strategies to drive program activities, encourage enrollment, and build agency capacity and expertise.
- Evaluation and reporting: SoCalREN's DER DAC Program completes ongoing evaluation to ensure goals and targets are met while keeping stakeholders fully informed of program operations and outcomes.
- Workforce development: The DER DAC Program supports workforce development initiatives by measuring and reporting on job creation metrics.
- Outreach to eligible public agencies: The DER DAC Program has identified and enrolled agencies serving DAC, low income, and rural communities, providing them with specialized services and deliverables.
- Customer satisfaction: SoCalREN's DER DAC Program monitors customer feedback to identify program enhancements and ensure customer satisfaction. Since the SoCalREN Public Sector Program's inception, annual customer satisfaction ratings have consistently been 90% or higher.
- Peer-to-peer learning: The DER DAC Program builds agency capacity and expertise in energy efficiency by providing customized tools and resources agencies would otherwise have to develop on their own, saving them time, money, and staff resources. The DER DAC Program shares strategies and best practices to overcome common barriers with enrolled agencies by hosting webinars and presenting at conferences and workshops.

SoCalREN's DER DAC Program will implement the following best practices consistent with the CPUC's DER Action Plan⁴, which highlights the importance of performing energy efficiency in conjunction with DERs to avoid unnecessary and costly grid infrastructure upgrades:

- Gather and ensure accuracy of available resources and programs to support project performance and savings persistence;
- Coordinate with IOU customer representatives to communicate the benefits of non-energy efficiency IOU programs for maximum impact;
- Create and leverage tools and templates to streamline program efficiency, and;
- Lead training and development workshops for public agencies to learn about DER topics and build expertise for EE and DER projects.

Innovation

SoCalREN aims to maximize energy savings while reducing implementation costs. Innovative

⁴ www.cpuc.ca.gov/General.aspx?id=6442458159

program elements include DER and sustainability measure support, start-to-finish customized energy project management support, streamlined data analytics, partnerships, and continuous improvement procedures.

DER and sustainability measure support: Ratepayer funds are utilized to provide underserved public agencies with educational information and resources on DER and sustainability measures at sites developing energy efficiency projects. These resources help drive comprehensive energy solutions at public agency sites. The CEC-funded BMCTA sub-program goes beyond high level information, offering agencies serving DAC, rural, and low-income communities technical assistance for DER and sustainability audits, design, and implementation.

Start-to-finish project management service delivery: Public agencies face unique barriers across all stages of an energy efficiency project’s lifecycle. SoCalREN offers comprehensive, customized project management support to overcome barriers at every project phase. SoCalREN integrates and coordinates with all applicable energy efficiency programs and services to avoid duplication and customer confusion. This integrated approach reduces customer touch points and enables public agencies to complete deeper and more comprehensive energy efficiency projects.

Streamlined data analytics: DER DAC leverages various energy analysis tools to compare agency-owned assets, such as buildings and streetlights, and to identify energy intensive infrastructure with energy efficiency project potential. SoCalREN’s comparative energy analysis report synthesizes energy usage data to increase public agency awareness of their energy usage and to identify potential projects. Additionally, ENERGY STAR Portfolio Manager® (ESPM) is used for benchmarking and additional analyses.

Partner with other program administrators and third parties: SoCalREN will partner with program administrators, regional partners, and third-party programs operating locally to coordinate program services that provide value to public agencies. These may include regional energy networks (RENs), community choice aggregators (CCAs), investor-owned utilities (IOUs), and municipally-owned utilities (MOUs).

Continuous improvement procedures: SoCalREN will employ a continuous improvement approach to all aspects of program implementation. This approach will include evaluation and development of program strategies to control costs and ensure that the most efficient methods are deployed for implementing projects. Regular evaluation of feedback and lessons learned from program staff, subconsultants (including regional partners), agency participants, and stakeholders will ensure SoCalREN is operating as cost effectively as possible.

Metrics

SoCalREN’s DER DAC Program is proposing the following key performance metrics to be tracked and reported on periodically throughout the program cycle.

Table 3. Program Performance Metrics

#	Metric	Method	Frequency
---	--------	--------	-----------

1	1st Year Gross kWh Savings Claimed	Savings submitted to CPUC through channeled resource programs	Annually
2	1st Year Gross kW Savings Claimed	Savings submitted to CPUC through channeled resource programs	Annually
3	1st Year Gross Therm Savings Claimed	Savings submitted to CPUC through channeled resource programs	Annually
4	Agency Enrollment	Number of agencies enrolled in SoCalREN Public Sector programs	Annually
5	Increased Pipeline	Energy savings identified through completed audits to be installed in future years	Annually
6	Program Savings Contribution to Market Share	Overall contributions of energy savings to IOU programs as measured by percentage of overall Public Sector savings	Annually
7	Job Creation	Number of new construction jobs as measured by construction costs	Annually
8	Capacity and Expertise	Number of informational and educational outreach activities conducted by SoCalREN	Annually
9	Customized Services	Reporting of services leveraged as a percentage of completed projects	Annually
10	Educational Materials	Number of fact sheets, newsletters, and case studies generated by the SoCalREN program	Annually
11	Customer Satisfaction	Enrolled agency satisfaction rating as reported in annual survey	Annually
12	Regional Environmental Benefits	Metric tons of greenhouse gas (GHG) emissions reduced regionally as measured by lifetime gross energy savings of completed EE projects	Annually
13	Number of EE and DER projects proposals developed	Number of EE and DER project proposals presented to agencies	Annually

SoCalREN's CRM will track this information to show the impact of the DER DAC Program. The program will work hand in hand with all SoCalREN Public Sector Programs to obtain updates from the customer on a quarterly basis and as needed. Once information is gathered, it will be entered in the CRM and used to generate reports.

To-Code Savings Claims

This section is not applicable.

Pilots

This section is not applicable.

Workforce Education and Training

This section is not applicable.

Workforce Standards

DER DAC does not directly install energy efficiency equipment. Nonetheless, the program will provide due diligence to ensure that energy efficiency projects supported by the program adhere to the workforce standards for heating, ventilation, and air conditioning (HVAC) and advanced lighting control programs as applicable. The program will integrate messaging and direction to public agencies during the project lifecycle to ensure projects installed comply with CPUC Workforce Standards as stipulated in D.18-10-008. These standards will be referenced and reiterated during various program services including the following touchpoints:

- Project proposal will highlight the importance and purpose of the standards.
- Technical specifications will include language that program participants will reference prior to project installation.
- Procurement kickoff meeting will include an agenda item to highlight the significance of the standards and requirements for agencies to submit applicable documentation and confirm adherence to the guidelines at project closeout.

DER DAC may request program participants share applicable documentation to demonstrate adherence to the Workforce Standards which may include any certifications, apprenticeship programs, accredited degrees, or other workforce training programs.

Disadvantaged Worker Plan

DER DAC coordinates with SoCalREN's Workforce, Education, and Training programs to present information on career opportunities for disadvantaged workers in the energy efficiency industry.

Additional Information

This section is not applicable.

Supporting Documents

Program Manual and Program Rules

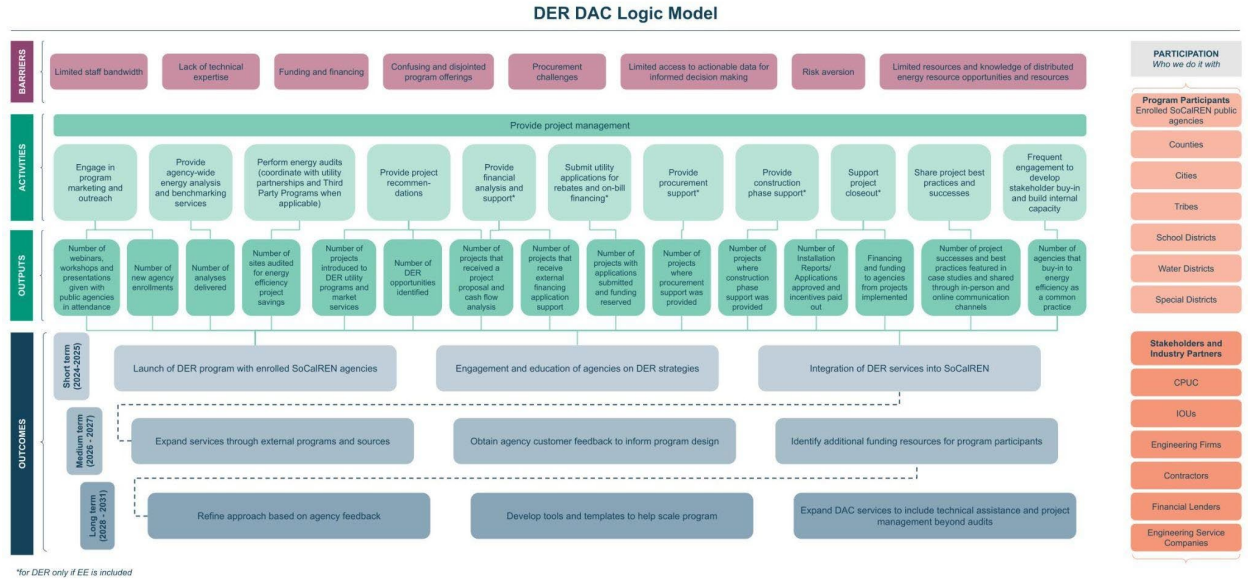
A short description of supporting materials is provided below. Greater detail is provided in the program manual.

Table 4. Supporting Materials

#	Information Required	Short Description
1	Eligible Measures or Measure Eligibility	Eligible measures pursued by public agencies through SoCalREN's DER DAC Program will adhere to program administrators' rules regarding measure eligibility. All savings will be transparent in supporting calculations as submitted to the program administrators.
2	Customer Eligibility Requirements	The DER DAC Program will work with eligible customers in the public sector who serve DAC, low-income, and rural communities. This includes cities, counties, school districts, tribes and special districts serviced by SCE and/or SoCalGas that pay Public Purpose Program charges.
3	Contractor Eligibility Requirements	The DER DAC Program will work with the contractor selected by the agency to ensure all incentive eligibility requirements are addressed and met.
4	Participating Contractors, Manufacturers, Retailers, Distributors	This is a downstream program offering project development and project implementation services, with post-installation incentives offered through EE resource programs.
5	Additional Services	SoCalREN's DER DAC Program will offer DER education and outreach to public sector customers in SCE and SoCalGas territories.
6	Audits	Pre and post installation audits, as required, will be conducted in a manner that aligns with EE resource program eligibility requirements.
7	Sub-program Quality Assurance Provisions	Quality assurance checks will be implemented throughout the process at various milestones to maintain data accuracy and customer satisfaction.
8	Eligible DER DAC Programs and Resources	Description of eligible IOU and State programs and resources on various EE and DER topics covered by the DER DAC Program.
9	Inputs and Assumptions for DER Strategy Assessments	Detailed description on the inputs and assumptions needed to conduct the high level assessment of PV and battery storage systems and water efficiency measures.

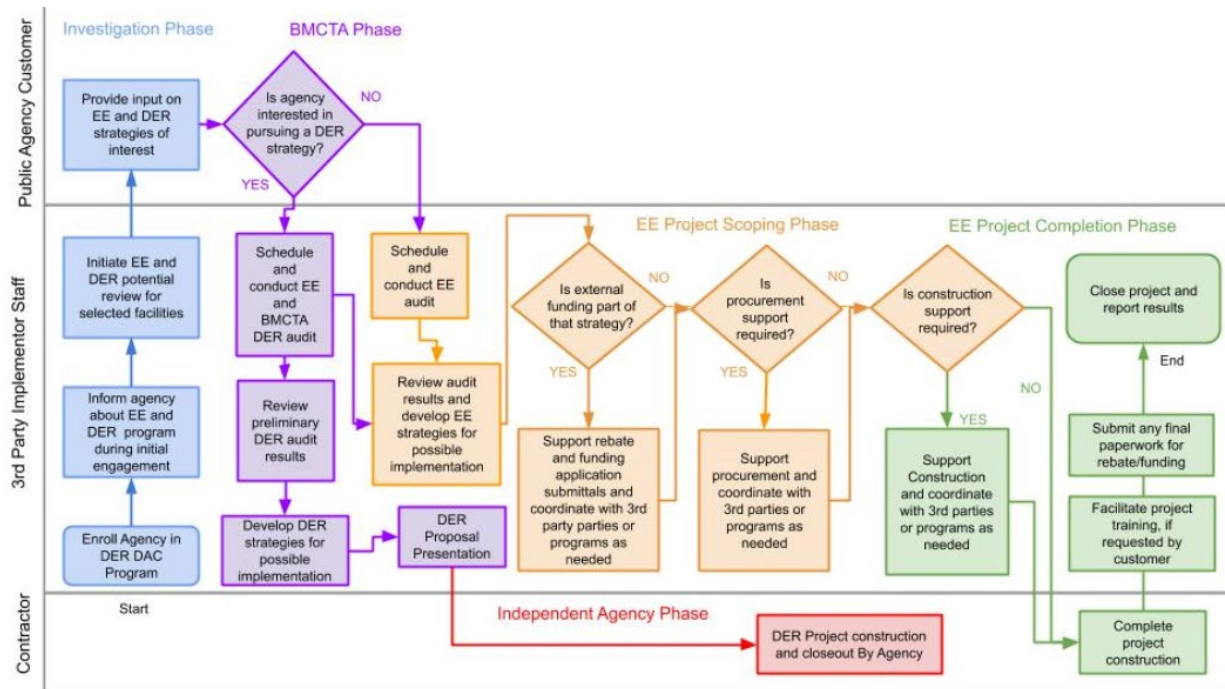
Program Theory and Program Logic Model

Figure 1: Program Theory and Program Logic Model



Process Flow Chart

Figure 2: Program Process Flow Chart



Incentive Tables, Workpapers, and Software Tools

EE measures will channel through existing EE resource programs wherever possible. The below table describes other tools leveraged to support turnkey project delivery services.

Table 5. Program Tools

#	Tools	Short Description
1	Salesforce	Customer relationship management (CRM), used to track projects and generate customer reports
2	Google Data Studio	Platform used to collect and synthesize energy consumption data and deliver customer energy use analyses
3	Energy Star Portfolio Manager®	Online tool used to track energy consumption and greenhouse gas emissions; allows user to benchmark the performance of one building or a whole portfolio of buildings
4	GIS	Geographic Information System (GIS) tool allows users to pinpoint exact locations of facilities and tie usage characteristics to those facilities
5	ezIQC	Provides access to competitively awarded contractors through cooperative purchasing networks, expediting project delivery through a simplified procurement process

The SoCalREN DER DAC Program will utilize analysis tools to inform public agencies about solar PV, battery storage systems, and water efficiency measures options.

Table 6. Additional Tools

#	Tool Name	Short Description	URL Link or Location
1	REopt	REopt is a NREL developed decision support model used to optimize solar PV and battery storage systems for buildings	reopt.nrel.gov
2	Federal Energy Management Program (FEMP) Water Project Screening Tool	The FEMP Water Project Screening Tool is an Excel based tool that analyzes Facility water consumption data to identify applicable water efficiency measures	www.energy.gov/eere/femp/downloads/water-project-screening-tool

Quantitative Program Targets

The following targets are applicable to the combined savings delivered by SoCalREN's DER DAC Program and Energy Efficiency Project Delivery Program (PDP):

Table 7. Quantitative Program Targets

Year	(1st Year Gross) kWh Savings Claimed	(1st Year Gross) kW Savings Claimed	(1st Year Gross) Therm Savings Claimed
2020	10,000,000	500	18,000
2021 - 2023*	11,666,666	350	23,333
2024 - 2025**	12,000,000	540	24,000

* Mid-term targets are an average of 2021, 2022, and 2023 targets

** Long-term targets are an average of 2024 and 2025 targets

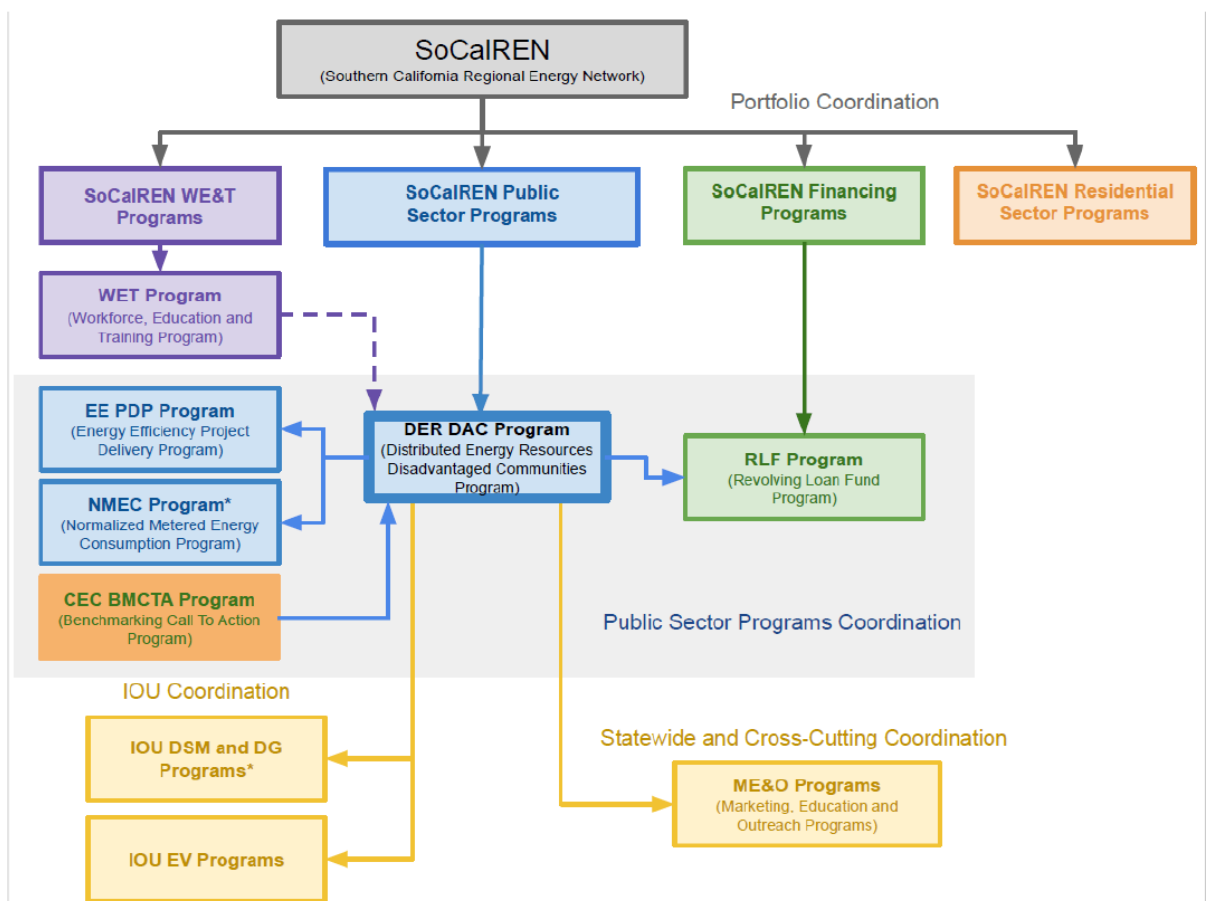
The following targets are specific to the DER DAC Program:

Table 8. Additional Targets

Year	Projects Supported with Informational and Educational Information
2020	20
2021	30

Diagram of Program

Figure 3: Diagram of Program



*Resource Program

Evaluation, Measurement, and Verification (EM&V)

SoCalREN's DER DAC Program is a non-resource program that channels energy savings through existing resource programs. As such, EM&V for the program focuses on customer energy savings claimed by the IOUs and program performance metrics for services offered in alignment with the CPUC's California Long Term Energy Efficiency Strategic Plan⁵. For data related to energy savings projects, the DER DAC Program works in close coordination with the IOUs to collect project measure data on a monthly basis through a data transfer process.

The DER DAC Program offers audits, which include estimated energy savings and a list of measures, for facilities and assets they serve. Energy savings are determined by calculating the energy consumption of the system or facility before (referred to as the "baseline" period) and forecasting savings after the measures are implemented, adjusted for any differences such as operating and weather conditions. Behavioral, retro-commissioning, and operational (BRO) strategies may use an existing conditions baseline and may require additional energy model or simulation data. Depending on the measure type, some calculations must use the most recent California Code of Regulations Title 24 (T24) Energy Efficiency Building Standards or standard practice for baseline operating conditions.

The Measurement and Verification (M&V) process built into SoCalREN's DER DAC Program procedures is in accordance with IOU downstream intervention program requirements and follows M&V standards as required by the resource program through which the project is implemented. For example, per the SCE Customized Calculation Savings Guidelines v. 22.0⁶, a full M&V plan is required for most custom projects with more than 250,000 kWh in savings, though custom projects with less than 250,000 kWh in savings may also require an M&V plan. If a full M&V plan is required for a project, it will be provided by the assigned engineer during development of the Project Feasibility Study. The full M&V plan is approved by SCE, or a third-party technical reviewer representing SCE, and includes the minimum required M&V data for the baseline and/or measure equipment and system performance.

The M&V plan methodology is based on the principles, procedures, and guidelines set forth in the International Performance Measurement and Verification Protocol (IPMVP) Options A-D⁷, and the Federal Energy Management Program (FEMP) M&V guidelines⁸. The full M&V plan can be used as the basis for project verification. The project M&V plan is submitted as an attachment to the Project Feasibility Study at the time of application submission, and attached to the Installation Report after project implementation.

⁵ California Energy Efficiency Strategic Plan, <http://www.cpuc.ca.gov/general.aspx?id=4125>

⁶ SCE Customized Calculation Savings Guidelines for Non Residential Programs v. 22.0, <https://sceonlineapp.com/DocCounter.aspx?did=670>

⁷ International Performance Measurement and Verification Protocol, http://www.eepperformance.org/uploads/8/6/5/0/8650231/ipmvp_volume_i__2012.pdf

⁸ Federal Energy Management Program (FEMP) M&V Guidelines, <https://www.energy.gov/eere/femp/downloads/mv-guidelines-measurement-and-verification-performance-based-contracts-version>

In addition to channeling projects through utility programs, SoCalREN's DER DAC Program also delivers non-resource benefits to the public sector. The following paragraph describes the data collected in support of continuous improvement and ongoing program evaluation.

The SoCalREN Public Sector Programs' customer relationship management (CRM) database is used to record program and project related information and to generate reports that indicate progress toward program goals. The DER DAC Program seeks feedback from its customers with a project-specific survey after each project closeout, via focus groups, and through an annual agency satisfaction survey. Focus group feedback and survey results are analyzed to understand the impact program services have on energy efficiency and DER projects and how the program can improve. Through data collected in the CRM and analysis of survey feedback, SoCalREN's DER DAC Program can evaluate its ability to deliver energy savings, build agency knowledge and expertise, conduct outreach activities, meet greenhouse gas (GHG) reduction targets, support job creation, and streamline processes and procedures. The DER DAC Program ensures customer satisfaction and effective service delivery by taking a nimble and adaptive approach to program implementation.

Normalized Metered Energy Consumption (NMEC)

This section is not applicable.