**Southern California Regional Energy Network**

****Implementation Plan****

**SoCalREN Small Hard-to-Reach Multifamily Direct Install Program**

**Filing Date: 08/15/2024**

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# Program Budget and Savings Information

## Program Information

**Program Name:** SoCalREN Small Hard-to-Reach Multifamily Direct Install Program

**Program ID#:** SCR-RES-A5

## Program Implementer

|  |  |  |
| --- | --- | --- |
|  | **Yes** | **No** |
| SoCalREN Only |  | X |
| SoCalREN—Statewide Lead |  | X |
| Other PA—Statewide Lead |  | X |
| Third Party | X |  |
| Other |  | X |

1. **Program Segment**

|  |  |  |
| --- | --- | --- |
|  | **Yes** | **No** |
| Equity |  | X |
| Market Support |  | X |
| Resource Acquisition | X |  |

1. **Program Sector**

|  |  |  |
| --- | --- | --- |
|  | **Yes** | **No** |
| Residential | X |  |
| Commercial |  | X |
| Industrial |  | X |
| Agricultural |  | X |
| Public |  | X |
| Codes & Standards |  | X |
| Workforce Education & Training |  | X |
| Finance |  | X |
| Other |  | X |

1. **Market Channels**

|  |  |  |
| --- | --- | --- |
|  | **Yes** | **No** |
| Upstream |  | X |
| Midstream |  | X |
| Downstream |  | X |
| Direct Install | X |  |

1. **Intervention Strategies**

|  |  |  |
| --- | --- | --- |
|  | **Yes** | **No** |
| Direct Install | X |  |
| Incentive |  | X |
| Finance |  | X |
| Audit | X |  |
| Technical Assistance | X |  |

1. **Projected Program Budget**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **2024** | **2025** | **2026** | **2027** |
| Marketing | $37,304 | $46,278 | $54,076 | $60,399 |
| Direct Implementation—Non-Incentive | $784,221 | $565,911 | $661,262 | $738,585 |
| Direct Implementation—Incentive  | $1,570,140 | $1,583,958 | $1,850,839 | $1,445,874 |
| **Total** | **$2,391,665** | **$2,196,147** | **$2,566,177** | **$2,244,858** |

1. **Gross Program Impacts**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **2024** | **2025** | **2026** | **2027** |
| kWh | 1,042,834.11 | 1,008,771.15 | 971,259.13 | 976,719.56 |
| kW | 403.78 | 388.14 | 371.39 | 361.61 |
| Therms | 50,722.69 | 50,017.27 | 49,053.92 | 56,302.34 |
| TSB | $1,048,744 | $1,054,097 | $1,056,820 | $1,132,396 |

1. **Program Cost-Effectiveness (TRC)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **2024** | **2025** | **2026** | **2027** |
| **TRC (Includes Admin)** | 0.45 | 0.50 | 0.42 | 0.52 |

1. **Program Cost-Effectiveness (PAC)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **2024** | **2025** | **2026** | **2027** |
| **PAC (Includes Admin)** | 0.45 | 0.50 | 0.42 | 0.52 |

1. **Campaign Goals**

The Program has established the following goals for 2024–2027:

* Serve 644 small multifamily buildings meeting Hard-to-Reach criteria (assuming an average of 25 rental units per building).
* Provide bill savings measures for 16,000 tenant units.
* Establish a team of local Direct Install (DI) Contractors to serve a diverse geographic region.
1. **Timeline**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **2024 Q3–Q4** | **2024 Q4** | **2025** | **2026** | **2027** |
| * Execute contracts with DI contractors
* Complete DI contractor training
 | * Initiate marketing
* Begin sales and enrollment
* Begin installations
* Annual reporting and savings claim
 | * Continue enrollment and installations
* Annual reporting and savings claim
 | * Continue enrollment and installations
* Annual reporting and savings claim
 | * Continue enrollment and installations
* Shutdown Plan
* Inform Stakeholders
* Resolve open items
* Final Program Report
 |

# Implementation Plan Narrative

## Program Description

The Southern California Regional Energy Network (SoCalREN) Small Hard-to-Reach Multifamily Direct Install Program (Small HTR MF DI Program or “the Program”) provides turnkey installation of energy efficiency measures that will reduce electric, natural gas, and water consumption of small (50 units or fewer) apartment buildings that are classified as Hard-to-Reach (HTR) or are located within Disadvantaged Communities (DACs). The measures will be applicable to both individual residential units and common areas, thereby reducing energy costs for both owners and tenants. The program will include outreach needed to enroll buildings in the program, basic energy awareness training for tenants and owners, training and management of direct install contractors, and opportunities for contractors to provide employment and training for disadvantaged workers.

Many energy efficiency (EE) programs offered by Investor-Owned Utilities (IOUs) and municipal utilities located in the area served by SoCalREN provide services to large multifamily properties. These programs typically offer technical assistance to identify savings opportunities, as well as financial incentives that are intended to reduce the total cost of implementing EE measures. For these larger properties, the owner, who is usually a corporation or real estate investment trust, will bear a substantial portion of the cost of the project, as justified by the need to refresh the property, address deferred maintenance needs, or qualify for subsidized, lower interest rate financing available for energy-efficient properties.

The market dynamic within the smaller, independently owned “mom and pop” buildings is different and thus requires a nuanced approach. These small property owners are not as well capitalized as corporate property owners, lack the same financial and tax advantages, and do not have the same level of expertise to manage complex energy efficiency retrofits. As a result, these owners require a more turnkey approach with little-to-no cash outlay, making direct install (DI) the best option for market success. Custom measures may be used to fit the needs of specific customers where direct install measures are not optimal.

SoCalREN’s Small HTR MF DI program will:

* Improve the efficiency of targeted multifamily buildings through simple retrofits, performed by program pre-qualified contractors at no cost to the property owner or tenants, which will benefit both tenants and owners by reducing their energy and water utility bills.
* Raise the knowledge and awareness of tenants and owners about energy saving behaviors and practices so that they can make better choices and manage their utility costs to ensure persistence of savings from the program measures.
* Provide valuable energy services to underserved HTR customers, and those located in DACs.
* Help reduce strain on California’s energy grid while also helping California meet long-term greenhouse gas (GHG) reduction goals.
* Provide opportunities for training and employment of Disadvantaged Workers who could work for the DI contractors who will be performing the EE measure installations.

## Program Delivery and Customer Services[[1]](#footnote-2)

The Program will deliver information, training and direct installation of energy and water saving measures. Information will be aimed at raising tenants' and owners' awareness of the importance and benefits of reducing energy and water use, with simple pointers about how to manage and reduce usage and save money on utility bills. Town Hall style gatherings will be held in collaboration with city and county agencies, coordinated through SoCalREN’s Public Agency program. For each building enrolled in the program, simple, easy-to-understand education will be delivered to tenants and owners and provided with additional supporting materials such as tip sheets and refrigerator magnets.

Exhibit 1. 2024 Energy Savings Projections

|  |  |  |
| --- | --- | --- |
|  | **Gross** | **Net** |
| kWh | 1,042,834.11 | 916,928.62 |
| kW | 403.78 | 343.35 |
| Therms | 50,722.69 | 44,748.98 |

Eligible properties are those between five (5) and 50 tenant units, owned by individuals rather than large real estate investment corporations. Participating properties are required to meet the California Public Utilities Commission (CPUC) criteria which broadly classifies HTR as “those customers who do not have easy access to program information or generally do not participate in energy efficiency programs due to a combination of language, business size, geographic and lease (split incentive) barriers.” Additional criteria for residential customers include Income and Housing Type.

The Program is delivered through third-party direct installation contractors under contract with SoCalREN’s prime implementation contractor. SoCalREN will identify targeted customers using a combination of utility billing information, census data, real estate databases, and other data sources. Primary characteristics that will inform target customers include ZIP code, number of rental units, ownership, and year built. The list of targeted customers will be provided to the DI contractors, who will do outbound calling to screen and qualify properties and to arrange a site evaluation and sales appointment. The number and type of measures will be determined during this phase. SoCalREN will also have the capability to implement custom measures at their discretion. This approach provides flexibility, enabling SoCalREN to recommend measures that may be more appropriate for a specific customer's needs when standardized options are not optimal.

**Eligible Measures**

The Program will offer a menu of retrofit measures that will save natural gas, electricity, and water. All services will be provided at no cost to the customer. In instances where savings measures do not have current California Electronic Technical Reference Manual (CAeTRM) measure packages, the program will work to create new measure packages. In all cases, there will be a reduction in grid connected load, GHGs and utility costs. The program will also provide free training and energy management information as described above. A summary of measures anticipated to be installed is presented below. A comprehensive list of applicable measures is presented in Exhibit 9 on page 18.

Exhibit 2. Eligible Measures

|  |
| --- |
| **Measure Name** |
| Hot Water Tank Insulation, Nonresidential and Multifamily |
| Brushless Fan Motor Replacement, Residential |
| Duct Seal, Residential |
| Low-Flow Showerhead, Residential |
| Faucet Aerator, Residential |
| Hot Water Pipe Insulation, Nonresidential and Multifamily |
| Smart Thermostat, Residential |
| Smart Fan Controller, Residential |
| UL Type B LED Mogul Base Lamp HID Retrofits for Outdoor Area/Pole and Decorative Fixtures |

## Program Design and Best Practices

The goal of the SoCalREN Small HTR MF DI Program is to install simple energy efficiency upgrades that will save underserved owners and tenants money on their electric, natural gas, and water bills. The requirements of the program are as follows:

* Building must have at least five and no more than 50 attached units
* Customers of either Southern California Edison (SCE) or Southern California Gas Company (SoCalGas)
* Property must be located in a DAC or classified as HTR per CPUC criteria[[2]](#footnote-3)

The steps to participation are as follows:

1. **Enrollment:** The DI contractor receives acknowledgment and approval from the property owner and submits the program participation application. This step also includes verifying eligibility and checking for previous participation.
2. **Scope Finalization and Scheduling:** The DI contractor works closely with the property owner to finalize the proposed scope of work, receives Program approval, and schedules construction.
3. **Project Construction:** Construction activities typically begin by identifying a vacant unit to perform initial program DI services. The onsite maintenance observes the work performed and makes suggestions and special requests for how they would like the work to be extended to the rest of the property. Once the measure mix and installation process are ratified between the multifamily property and the contractor, a plan is put in place to systematically service all units at the multifamily site.
4. **Project Verification and Close-Out:** The Program will perform specific QA/QC checks to ensure baseline conditions are properly documented and that the proposed equipment matches what was approved. Up to 10 percent of projects will also be selected for onsite post construction inspection by the program implementer. Upon approval, the contractors will be paid the agreed upon contract rate for measure procurement and installation.

The SoCalREN Small HTR MF DI Program addresses the following market barriers to comprehensive upgrades, and implements best practices to mitigate these potential barriers:

Exhibit 3. Market Barriers, Strategies, Tactics, and Best Practices

| **Market Barriers[[3]](#footnote-4)** | **Strategy to Overcome Barrier** | **Program Tactics** | **Best Practices[[4]](#footnote-5)** |
| --- | --- | --- | --- |
| * Lack of capacity
* Multiple decision makers
* Market confusion and high transaction costs
 | * Intelligent outreach to reach appropriate decision maker
 | * Targeted marketing and outreach using a variety of communication channels
* Active engagement with local gov/CBOs
* Subcontractors to install EE measures
* In-language program outreach to address language barriers
 | * Consult and target building owners and managers
 |
| * Market confusion and high transaction costs
* Lack of capacity
 | * Single point of contact to manage property interactions with program
 | * Assigned program representatives based on region
* Installation of direct install measures managed through subcontractors
 | * Provide a one-stop shop for program services
 |
| * Split incentives
* Tenant disruption
* Market confusion and high transaction costs
 | * Comprehensive program that addresses both common area and in-unit measures
 | * Subcontractors to install EE measures
* Marketing and education targeted to building owners
 | * Integrate direct installation and incentive programs
 |
| * Split incentives
* Lack of capital
* Lack of capacity
* Market confusion and high transaction costs
* Uncertainty about energy savings and other NEBs
 | * Direct installation of both common area and in-unit measures
 | * Case Studies featuring example projects and opportunities
* EE solutions based on property needs
* Installation of DI measures managed through subcontractors
 | * Streamline incentives and incentivize in-unit measures
 |
| * Split Incentives
* Lack of capital
* Timing and disruption of tenants
* Multiple decision makers
 | * Target properties less than 50 units in HTR areas
 | * Targeted marketing leveraging various data sources
* In-language support to address language barriers
* No cost DI of common area and tenant measures to address income barriers
* Referral of income-qualified customers to ESA programs
 | * Serve both low-income and market-rate multifamily households
 |
| * Market confusion and high transaction costs
* Timing and disruption of tenants
* Multiple decision makers
 | * Electric, gas and water efficiency measures with savings support by CPUC approved measure packages
 | * No cost DI of common area and tenant measures to address income barriers
 | * Coordinate programs across electric, gas and water utilities
 |

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

The M&V process for the Program has been established to validate that measure installation complies with measure package guidelines and that savings can be claimed accordingly. This validation process involves the following levels of review:

1. **Desk Review:** All projects will be verified through a thorough Desk Review. All program documents are reviewed to ensure that all program requirements and measure requirements specified in the measure package are confirmed. These documents include customer application/account information, itemized inventory of equipment installed, photos of baseline and new equipment for all measures, specification sheets, and any supplemental measure-specific information as needed. Savings for each measure will be sourced from the measure packages previously listed. If the project is greater than $5,000, it will go through an additional quality control step where the program manager will provide a secondary level of review and approval.
2. **Site Inspection:** On-site inspections will be conducted for a randomized 10 percent of projects. The selection for on-site inspection is a system generated parameter that is completed after the project has moved through the Desk Review process. Site inspections include verification of equipment installation, operation, and eligibility. If no discrepancies are found during the inspection, the project is approved for payment and moves into the incentive disbursement process. If discrepancies were found during the inspection, a punch list is provided to the DI contractor listing the issues to be resolved prior to payment. Once the contractor addresses the punch list items, the project is reinspected to verify that all outstanding items have been resolved.
3. **Additional Consumer Protection Mechanisms:** To ensure consumer protection, all contractors participating in the Program must hold a Contractors State License Board (CSLB) license and comply with all state and local codes. The program will also track Properties’ commitment to adhering to any program policies regarding tenant protection and housing security. Residents of properties that participate in the program will also be provided with access to resources regarding their housing security rights.

Data gathered through site inspections and M&V activities is documented in the Program database for future use by Evaluation teams. This data will also prove useful in helping inform future program design to improve overall cost-effectiveness. Data stored includes the following items as a minimum:

* Contact information for the applicant, site, and contractor for measure installations
* Utility data from SCE and SoCalGas
* Project invoice for installation labor and materials
* Equipment specification sheets
* Project energy savings
* Measure cost
* Project installation date
* Equipment model number
* Additional measure-specific data points specified in the measure packages to satisfy M&V

The gross savings will be calculated after the measures are documented and reviewed and the project-specific M&V requirements are satisfied. The per-unit savings will be sourced from approved measure packages available through the California Technical Forum dashboard located online at <https://www.caetrm.com/dashboard/>.

Savings are documented in the program database along with the expected useful life (EUL) and measure costs. The EUL will be used to calculate net lifecycle savings. Net savings will be reported for the program to represent the savings over the lifecycle of the measures with the estimated savings associated with free ridership excluded. The project lifecycle savings will be based on a weighted average EUL method.

## Program Performance Metrics [[5]](#footnote-6)

A comprehensive set of metrics will be used to measure success. Metrics the program intends to track are summarized below.

Exhibit 4. Program Performance Metrics

| **Metric Type** | **Description** | **Point of Measurement** | **Frequency** |
| --- | --- | --- | --- |
| **Energy Savings** | TSB  | Per project/program total | Monthly, Annual |
| TRC | Per project/program total | Monthly, Annual |
| kWh (gross and net) | Per project/program total | Monthly, Annual |
| kW (gross and net) | Per project/program total | Monthly, Annual |
| Therms (gross and net) | Per project/program total | Monthly, Annual |
| % Savings from DAC | Per project/program total | Monthly, Annual |
| % Savings from HTR | Per project/program total | Monthly, Annual  |
| % Savings by County | Per project/program total | Monthly, Annual  |
| % Projects by County | Per project/program total | Monthly, Annual  |
| Pipeline kWh | Per project/program total | Monthly, Annual |
| Pipeline kW | Per project/program total | Monthly, Annual |
| Pipeline therms | Per project/program total | Monthly, Annual |
| **Water Savings** | Gallons of water | Per project/program total | Monthly, Annual |
| **Financial** | Program expenditures | Administration, Marketing, Direct Implementation Non-incentive, and Incentive | Monthly, Annual |
| Funds remaining | Program budget  | Monthly, Annual |
| Funds encumbered | Enrollment phase | Monthly, Annual |
| Funds encumbered | Installation phase | Monthly, Annual |
| **Contractors and Workforce Development** | Contractors enrolled and active | Contractor Management Portal (CMP) | Monthly, Annual |
| Contractor scorecard and feedback  | Contractor Management Portal (CMP) | Monthly, Annual |
| Program complaints and resolutions | Ad hoc tracking | Monthly, Annual |
| Workforce opportunities | Contractor Management Portal (CMP) | Monthly, Annual |
| **Project Data** | Projects in Pipeline | Each stage of pipeline | Monthly, Annual |
| Project Locations | Physical address | Monthly, Annual |
| Number of Counties Served  | Project pipeline | Monthly, Annual |
| Project Classification—DAC | Per project/program total | Monthly, Annual |
| Project Classification—HTR | Per project/program total | Monthly, Annual |
| Site Information | Number of Units Served | Monthly, Annual |
| Site Information | Age of building(s) | Monthly, Annual |
| Site Information | Common Area Sq. Ft. | Monthly, Annual |
| Site Information | Tenant Unit Sq. Ft.  | Monthly, Annual |
| Site Information | Ownership | Monthly, Annual |
| Customer Information | Demographics, as reasonably available, of tenants and ownership | Monthly, Annual |

## Unique Value Metrics

Unique Value Metrics (UVMs) are the quantifiable measurements of activities that demonstrate SoCalREN’s impacts. Each metric speaks directly to the value that SoCalREN provides to the State and the communities it serves. The SoCalREN HTR MF DI Program provides contributions to the following SoCalREN Residential Sector UVMs:

* Disadvantaged multifamily properties served
* Tenant units served
* Total project costs in DAC
* Total project costs in Rural/HTR

## Quantitative Program Targets

In addition to the program savings goals, the following goals have been established for 2024:

* Serve 160 multifamily buildings in DAC ZIP codes or meeting HTR criteria.
* Provide bill savings measures to 2,400 tenant units.
* Establish a team of local Direct Install Contractors to serve a diverse geographic region.

## To-Code Savings Claims

The Program includes measures that are above code except for lighting. Lighting recommendations typically include replacing existing incandescent or CFLs with LED fixtures which are mandated by national lighting standards.

1. **Where to‐code savings potential resides:** Small, independently owned multifamily buildings represent a significant opportunity for to-code savings because these buildings have not been well served by IOU EE programs in the past. Additionally, this subsegment faces several of the most difficult barriers to overcome (information, first cost, and split incentive).
2. **Equipment types, building types, geographical locations, and/or customer segments promising cost‐effective to‐code savings:** The most common opportunity for to-code savings will be lighting, where many units will still have incandescent and CFL lamps and fixtures. Through its simple and proactive DI delivery model, the Program will quickly and cost-effectively implement accelerated replacement of these and other measures to maximize energy savings for tenants and owners.
3. **Barriers preventing code‐compliant equipment replacements:** Because of the traditional barriers at play in the small apartment sector, owners will not spend the additional capital to replace failed equipment with costlier above-code equipment. For example, if there are fixtures that use T12 lamps, the owner will continue to buy replacement T12 lamps, rather than replace the entire fixture with T8 or TLED fixtures. Tenants will not upgrade their units because of the extra cost, and the fact that they don’t own the property, and may not be planning to live in the unit long enough to realize the full benefits of above code EE.
4. **Issues preventing natural turnover:** Natural turnover is not occurring within the small multifamily segment, mainly due to owners’ reluctance to spend any more money than absolutely necessary on maintenance and upgrade of the property.
5. **Program interventions to accelerate equipment turnover:** The direct install delivery method ensures immediate replacement of existing inefficient equipment without the need for owner or tenant outlay of cash.

## Pilots

The Program will develop up to three SoCalREN Multifamily Energy Showcase projects that will be used as examples of best practices and new technologies applicable to smaller multifamily buildings. Sites will be selected based on a number of factors, such as owner’s interest and willingness to be an “ambassador” to other owners of small apartments, suitability of the site to be representative of a majority of apartment types, and climate zones. The measures installed will go beyond the standard list and may include electrification EE measures such as heat pump HVAC and water heating systems, high efficiency gas appliances, advanced controls to enable demand response, insulation, window films, and LED lighting.

## Program Logic Model

The Logic Model for the SoCalREN Small HTR MF DI Program is displayed below:

Exhibit 5. Program Logic Model



## Process Flow Chart

The Process Flow Chart for the SoCalREN Small HTR MF DI Program is displayed below:

Exhibit 6. Process Flow Chart



## Diagram of Program

The Diagram of the SoCalREN Small HTR MF DI Program is displayed below:

Exhibit 7. Diagram of Program



## Workforce Education and Training[[6]](#footnote-7)

The Program will work closely with SoCalREN’s Workforce Education & Training Program (SCR-WET-D1) to help direct install contractors employ and train disadvantaged workers.

## Workforce Standards[[7]](#footnote-8)

Decision Addressing Workforce Requirements and Third-Party Contract Terms and Conditions, Decision 18-10-008 October 11, 2018, states that the minimum workforce standards apply “to large non-residential HVAC and lighting controls projects (p. 71).” It further states that “all projects involving installation, modification, or maintenance of heating, ventilation, and air conditioning (HVAC) measures in non-residential buildings (p. 76)” are subject to the standards. Therefore, the Workforce Requirements do not apply to this Residential Sector Program.

However, all projects completed through the Program are performed by participating contractors who are either licensed General (B) Contractors or hold a specialty license for a particular trade (e.g., C-10 electrical contractor). The Program requires contractors to follow all state and local building codes.

## Disadvantaged Worker Plan[[8]](#footnote-9)

The Program serves as a gateway for the SoCalREN Green Path Careers program to help place graduates with Program contractors. The SoCalREN Green Path Careers program provides contractors with access to a trained workforce who can assist in the energy assessment phase and mitigate the cost barrier of hiring entry-level workers.

## Additional Information

Not Applicable

# Appendix: Supporting Information and Documents

## Program Manuals and Program Rules

All information required in the table below is detailed in the SoCalREN Small HTR MF DI Program Manual.

Exhibit 8. Supportive Materials Index

| **#** | **Information****Required** | **Short Description** | **Location Name/URL link** |
| --- | --- | --- | --- |
| **1** | **Eligible Measures or Measure Eligibility** | A list of eligible measures, or measure eligibility requirements | Included in Program Manual |
| **2** | **Customer Eligibility Requirements** | Requirements for program participation (for example, annual energy use or peak kW demand) | Included in Program Manual |
| **3** | **Contractor Eligibility Requirements** | List of any contractor (and/or developer, manufacturer, retailer or other "participant") eligibility requirements. (For example: specific IOU-required training courses, specific contractor accreditations, and/or specific technician certifications.) | Included in Program Manual |
| **4** | **Participating Contractors, Manufacturers, Retailers, Distributors** | Information as to whether:* Program or sub-program delivery channel is downstream, midstream, or upstream, and
* Program is an incentive and/or buy-down type program.
 | Included in Program Manual |
| **5** | **Additional Services** | Descriptions of any additional sub-program delivery, measure installation, marketing and outreach, training, and/or other services provided, if not yet described above. | Included in Program Manual |
| **6** | **Audits** | Information as to whether:* Pre- and post-audits are required
* Funding or incentive levels have been set for audits, and
* The eligibility requirements for audit incentives.
 | Included in Program Manual |
| **7** | **Sub-Program Quality Assurance Provisions** | List of quality assurance and quality control requirements, including accreditations and/or certifications or other credentials of individuals or organizations performing this work. | Included in Program Manual |
| **8** | **Post Inspections** | Post Inspections are required for select projects. | Included in Program Manual |

## Incentive Tables, Measure Packages, Software Tools

This is an example of typical measures applicable to this program:

Exhibit 9. Eligible Measures

| **Measure Package Name** | **Measure Version ID** |
| --- | --- |
| Ductless HVAC, Residential, Fuel Substitution | SWHC044-04 |
| Heat Pump HVAC, Residential, Fuel Substitution | SWHC045-03 |
| Smart Thermostat, Residential | SWHC039-08 |
| Ceiling Insulation, Residential | SWBE006-03 |
| Boiler, Multifamily | SWWH010-02 |
| Domestic Hot Water Loop Temperature Controller, Multifamily & Commercial | SWWH016-03 |
| Demand Control for Centralized Water Heater Recirculation Pump, Multifamily & Commercial | SWWH015-03 |
| Oven, Gas, Residential | SWAP017-03 |
| Clothes Dryer, Residential | SWAP003-04 |
| Faucet Aerator, Residential | SWWH001-04 |
| Furnace, Residential | SWHC031-03 |
| Water Heater Pipe Wrap, Residential | SWWH026-03 |
| Low-Flow Showerhead, Residential | SWWH002-04 |
| Heater for Pool or Spa, Commercial and Multifamily | SWRE003-03 |
| Tankless Water Heater, Residential | SWWH013-03 |
| Storage Water Heater, Residential | SWWH012-03 |
| Heat Pump Water Heater, Residential, Fuel Substitution | SWWH025-07 |
| UL Type B LED Mogul Base Lamp HID Retrofits for Outdoor Area/Pole and Decorative Fixtures | SWLG020-02 |
| Hot Water Tank Insulation, Nonresidential and Multifamily | SWWH018-04 |
| Brushless Fan Motor Replacement, Residential | SWHC038-04 |
| Duct Seal, Residential | SWSV001-06 |
| Hot Water Pipe Insulation, Nonresidential and Multifamily | SWWH017-05 |
| Smart Fan Controller, Residential | SWHC059-02 |

**Measure Costs**

Below are the estimated DI costs for measures anticipated to be installed. Costs are based on actual contractor’s quoted prices and full measure costs as indicated in existing measure packages when not available.

Exhibit 10. Measure Costs

|  |  |  |
| --- | --- | --- |
| **Measures** | **Normalized Unit** | **DI Cost[[9]](#footnote-10)** |
| Hot Water Tank Insulation, Nonresidential and Multifamily | Area-ft2 | $16.75 |
| Brushless Fan Motor Replacement, Residential | SurfArea-ft2 | $0.40 |
| Duct Seal, Residential | Area-ft2-BA | $0.39 |
| Low-Flow Showerhead, Residential | Each | $25.00 |
| Faucet Aerator, Residential | Each | $7.00 |
| Hot Water Pipe Insulation, Nonresidential and Multifamily | Len-ft | $15.00 |
| Smart Thermostat, Residential | Household | $200.00 |
| Smart Fan Controller, Residential | Area-ft2-BA | $0.32 |
| UL Type B LED Mogul Base Lamp HID Retrofits for Outdoor Area/Pole and Decorative Fixtures | Lamp | $214.41 |

## Program Manual

* + - 1. **Program Overview**

The Southern California Regional Energy Network (SoCalREN) Small Hard-to-Reach Multifamily Direct Install Program (Small HTR MF DI Program or “the Program”) provides turnkey installation of energy efficiency measures that will reduce electric, natural gas, and water consumption of small (50 units or fewer) apartment buildings that are classified as Hard-to-Reach (HTR) or are located within Disadvantaged Communities (DACs). The measures will be applicable to both individual residential units and common areas, thereby reducing energy costs for both owners and tenants. The program will include outreach needed to enroll buildings in the program, basic energy awareness training for tenants and owners, training and management of direct install contractors, and opportunities for contractors to provide employment and training for disadvantaged workers.

* + - 1. **Eligible Measures or Measure Eligibility**

Measure packages eligible for installation through this program are as follows:

* Ductless HVAC, Residential, Fuel Substitution
* Heat Pump HVAC, Residential, Fuel Substitution
* Smart Thermostat, Residential
* Ceiling Insulation, Residential
* Boiler, Multifamily
* Domestic Hot Water Loop Temperature Controller, Multifamily & Commercial
* Demand Control for Centralized Water Heater Recirculation Pump, Multifamily & Commercial
* Oven, Gas, Residential
* Clothes Dryer, Residential
* Faucet Aerator, Residential
* Furnace, Residential
* Water Heater Pipe Wrap, Residential
* Low-Flow Showerhead, Residential
* Heater for Pool or Spa, Commercial and Multifamily
* Tankless Water Heater, Residential
* Storage Water Heater, Residential
* Heat Pump Water Heater, Residential, Fuel Substitution
* UL Type B LED Mogul Base Lamp HID Retrofits for Outdoor Area/Pole and Decorative Fixtures
* Hot Water Tank Insulation, Nonresidential and Multifamily
* Brushless Fan Motor Replacement, Residential
* Duct Seal, Residential
* Hot Water Pipe Insulation, Nonresidential and Multifamily
* Smart Fan Controller, Residential
	+ - 1. **Customer Eligibility Requirements**

 The requirements of the program are as follows:

* Building must have at least five and no more than 50 attached units
* Southern California Edison (SCE) and/or Southern California Gas Company (SoCalGas) customers
* Property must be located in a DAC or classified as HTR per CPUC criteria[[10]](#footnote-11)
	+ - 1. **Contractor Eligibility Requirements**

All contractors participating in the Program must hold a Contractors State License Board (CSLB) license and comply with all state and local codes.

* + - 1. **Participating Contractors, Manufacturers, Retailers, Distributors**

The program is a direct install model that does not offer incentives. Custom measures may be used when applicable. Upon project closeout, participating contractors will be paid the agreed upon contract rate for measure procurement and installation.

Below are the estimated DI costs for measures anticipated to be installed. Costs are based on actual contractor’s quoted prices and full measure costs as indicated in existing measure packages when not available.

Table 1. Measure Costs

|  |  |  |
| --- | --- | --- |
| **Measures** | **Normalized Unit** | **DI Cost[[11]](#footnote-12)** |
| Hot Water Tank Insulation, Nonresidential and Multifamily | Area-ft2 | $16.75 |
| Brushless Fan Motor Replacement, Residential | SurfArea-ft2 | $0.40 |
| Duct Seal, Residential | Area-ft2-BA | $0.39 |
| Low-Flow Showerhead, Residential | Each | $25.00 |
| Faucet Aerator, Residential | Each | $7.00 |
| Hot Water Pipe Insulation, Nonresidential and Multifamily | Len-ft | $15.00 |
| Smart Thermostat, Residential | Household | $200.00 |
| Smart Fan Controller, Residential | Area-ft2-BA | $0.32 |
| UL Type B LED Mogul Base Lamp HID Retrofits for Outdoor Area/Pole and Decorative Fixtures | Lamp | $214.41 |

* + - 1. **Additional Services**

The Program will deliver information, training and direct installation of energy and water saving measures. Information will be aimed at raising tenants' and owners' awareness of the importance and benefits of reducing energy and water use, with simple pointers about how to manage and reduce usage and save money on utility bills. Town Hall style gatherings will be held in collaboration with city and county agencies, coordinated through SoCalREN’s Public Agency program. For each building enrolled in the program, simple, easy-to-understand education will be delivered to tenants and owners and provided with additional supporting materials, such as tip sheets and refrigerator magnets to provide additional tenant education.

* + - 1. **Audits**

Audits/pre-assessments will be conducted by every participating contractor at the start of the project. Pre-assessments have the primary goal of gathering detailed information about the existing infrastructure, equipment, and the number of units. Pre-assessments help determine the eligibility and specifications for the direct install measures that the property can receive. Each contractor must capture the following information with each pre-assessment:

* Existing equipment inventory
* Historic utility Bills

All contractors performing direct installations must hold a current CSLB license.

* + - 1. **Post Inspections**

On-site inspections will be conducted for a randomized 10 percent of projects. The selection for on-site inspection is a system generated parameter that is completed after the project has moved through the Desk Review process. Site inspections include verification of equipment installation, operation, and eligibility. If no discrepancies are found during the inspection, the project is approved for payment and moves into the incentive disbursement process. If discrepancies were found during the inspection, a punch list is provided to the DI contractor listing the issues to be resolved prior to payment. Once the contractor addresses the punch list items, the project is reinspected to verify that all outstanding items have been resolved.

**DOCUMENT QUALITY CONTROL TRACKER—REMOVE BEFORE FILING**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Item** | **Assigned to** | **Date Completed QC Round 1** | **Date Completed QC Round 2** |
| **Data Review** |
| 1 | Projected Program Budget Table, Item 1G | Scott | 7/25/24 | 8/1 |
| 2 | Gross Program Impacts Table, Item 1H (CEDARS) | Alfredo | 7/25/24 | 8/1 |
| 3 | Program Cost-Effectiveness (TRC) Table, Item 1I (CEDARS) | Alfredo | 7/25/24 | 8/1 |
| 4 | Program Cost-effectiveness (PAC) Table, Item 1J (CEDARS) | Alfredo | 7/25/24 | 8/1 |
| 5 | Campaign Goals, Item 1K (confirm with original IP and Proposal) | Savi | 7/25/24 | 8/1 |
| 6 | Program Delivery and Customer Service Energy Savings delivery goals Table, Item 2B | Alfredo | 7/25/24 | 8/1 |
| 7 | Exhibit 1. 2024 Energy Savings Projections (CEDARS) | Alfredo | 7/25/24 | 8/1 |
| 8 | Quantitative Program Targets (confirm with original IP) | Savi | 7/25/24 | 8/1 |
| 9 | Exhibit 2. Eligible Measures Table, Item 2B | Savi | 7/25/24 | 8/1 |
| 10 | Exhibit 8. Eligible Measures, Item 3B | Savi/Alfredo | 7/26/24 | 8/1 |
| 11 | Exhibit 9. Measure Costs, Item 3B | Savi/Scott | 7/26/24 | 8/1 |
| 12 | Verify internet link Section 2d CAETRM | Courtney Owen | 7/25/24 | 8/1 |
| **Narrative Content Review** |
| 1 | Readability and content review | Scott | 7/25/24 | 8/1 |
| 2 | Proofreading QC | Courtney | 7/25/24 | Heather 7/26 |
| 3 | Footnotes review | Courtney | 7/26/24 | 8/1 |
| **Sign-Offs** |
| 1 | LA County | Lujuana |  |  |
| 2 | ICF | Scott |  | 8/1/24 |
| 3 | Other |  |  |  |

1. IP Guidance from D.15-10-028: "*Describe how the energy efficiency (EE) program will deliver savings (upstream, downstream, direct install, etc.), how it will reach customers, and the services and [sic] it will provide*." [↑](#footnote-ref-2)
2. CPUC Decision 18-05-041, page 42. [↑](#footnote-ref-3)
3. Apartment Hunters: Programs Searching for Energy Savings in Multifamily Buildings, ACEEE, December 2013 [↑](#footnote-ref-4)
4. An Overview of Affordable Multifamily Programs: Best Practices and Context for Utilities, ACEEE, September 2021 [↑](#footnote-ref-5)
5. IP Guidance from D.15-10-028: "*It is in the implementation plans that we want to see at least one metric for each program/strategy/sub-sector/intervention strategy; more than one where appropriate*…. *Implementation plans will contain metrics, as already discussed. PAs are free to start with a clean slate in developing metrics and associated reporting requirements, but for all programs will continue to provide monthly cost reports, and for resource programs will provide monthly savings data as well*." [↑](#footnote-ref-6)
6. D.18-05-041, page 20-21 and Ordering Paragraph 7 [↑](#footnote-ref-7)
7. D.18-10-008, Ordering Paragraph 1-2 and Attachment B, Section A-B, page B-1. [↑](#footnote-ref-8)
8. D.18-10-008, Attachment B, Section D, page B-9. [↑](#footnote-ref-9)
9. The Program will review and update measure costs to align with current market conditions. [↑](#footnote-ref-10)
10. CPUC Decision 18-05-041, page 42. [↑](#footnote-ref-11)
11. The Program will review and update measure costs to align with current market conditions. [↑](#footnote-ref-12)