Department of Community Services and Development

Low-Income Weatherization Program

Program Guidelines

FISCAL YEAR 2015-16 APPROPRIATION PROCUREMENTS:

SINGLE-FAMILY ENERGY EFFICIENCY
SINGLE-FAMILY SOLAR PHOTOVOLTAICS

January 30, 2017

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DEPARTMENT OF COMMUNITY SERVICES AND DEVELOPMENT

LOW-INCOME WEATHERIZATION PROGRAM (LIWP) PROGRAM GUIDELINES

Fiscal Year 2015-16 Appropriation Procurements:
Single-Family Energy Efficiency
Single-Family Solar Photovoltaics

PREFACE

This version of Program Guidelines issued by the Department of Community Services' (CSD) Low-Income Weatherization Program (LIWP) establishes the framework for the forthcoming phase of LIWP program implementation for LIWP's Single-Family Energy Efficiency Program and Solar Photovoltaics (PV) Program components. CSD's current Single-Family/Small Multi-Family Energy Efficiency Program service providers who received funding from CSD's Fiscal Year (FY) 2014-15 state budget appropriation will continue to offer services through early 2017 as outlined in the 2014-15 Single-Family Program Guidelines, initially released in 2014 and updated in 2015 and 2016. The 2014-15 Program Guidelines also continue to apply to CSD's existing statewide single-family solar PV provider, GRID Alternatives, and a solar PV pilot program. The 2015-16 Program Guidelines, set forth below, establish the basis for more sustainable modes of program administration and implementation through program redesign for the Single-Family Energy Efficiency and Solar PV Program components, and will apply to Regional Administrators to be selected through a competitive procurement process currently in progress.

I. INTRODUCTION

CSD has developed these Program Guidelines in accordance with Government Code Section 12087.5 for the implementation of the forthcoming phase of the Single-Family Energy Efficiency and Solar PV Program components of LIWP, which is part of California Climate Investments, utilizing CSD's FY 2015-16 LIWP appropriation. With program oversight and direction provided by the California Air Resources Board (ARB), CSD and a network of contracted LIWP Providers (also referred to as Regional Administrators) will offer services to reduce Greenhouse Gas (GHG) emissions and provide specified co-benefits to qualifying households in designated disadvantaged communities (also known as DACs – see Section III), as identified by the California Environmental Protection Agency (CalEPA), unless otherwise authorized or required by law.

Though CSD's state budget appropriations for LIWP include funding for multi-family dwellings, these Program Guidelines do not apply to that program component. CSD issued separate program guidelines for the Large Multi-Family Energy Efficiency and Renewables Program in 2015 (revised in 2016), available at:

2014-15 Large Multi-Family Program Guidelines

II. CALIFORNIA CLIMATE INVESTMENTS

Assembly Bill (AB) 32, also known as the California Global Warming Solutions Act of 2006, mandates the return of state GHG emissions to 1990 levels by the year 2020. AB 32 established California as a global leader in reducing GHG and prescribes a comprehensive and long-term approach to addressing climate change in a way that aims to improve the environment and natural resources while maintaining a robust economy.

AB 32 required ARB to adopt regulations, including market-based compliance mechanisms, to achieve maximum technologically feasible and cost-effective GHG emission reductions. As part of the implementation of AB 32 market-based compliance measures, ARB adopted a cap-and-trade program that caps the allowable statewide emissions and provides for the auctioning of emission credits.

In 2012, the Legislature passed and Governor Brown signed into law three related bills: AB 1532 (Perez, Chapter 807); SB 535 (De Leon, Chapter 830); and SB 1018 (Budget and Fiscal Review Committee, Chapter 39). These bills established the Greenhouse Gas Reduction Fund (GGRF) to receive cap-and-trade auction proceeds and to provide the framework for how the auction proceeds will be administered to support programs that further the purposes of AB 32. Every three years, the California Department of Finance (DOF) submits a plan to the Legislature, identifying priority investments (California Climate Investments) that will help achieve GHG reduction goals. The Legislature appropriates monies from the GGRF in accordance with this 3-year investment plan. The plans applying to the program components outlined in these Program Guidelines are the "Cap and Trade Auction Proceeds Investment Plan: Fiscal Years 2013-14 through 2015-16" and the "Cap and Trade Auction Proceeds Second Investment Plan: Fiscal Years 2016-17 through 2018-19".

CSD was allocated $75M for the implementation of LIWP in FY 2014-15. SB 101, Chapter 321, Statutes of 2015 (chaptered September 22, 2015), amended the FY 2015-16 Budget Act to appropriate $78.78 million for the continuation of LIWP. AB 1613, Chapter 370, Statutes of 2016, provided an additional allocation of $20 million to LIWP in the FY 2016-17 Budget. CSD intends that these FY 2015-16 Single-Family Energy Efficiency and Solar PV Program Guidelines be amended to apply to any funds from the FY 2016-17 appropriation for CSD that are allocated to the program components outlined herein.

III. DISADVANTAGED COMMUNITIES

SB 535 (De Leon, Chapter 830) requires that at least 25 percent of the GGRF must be invested to benefit disadvantaged communities and at least 10 percent be invested within the disadvantaged communities. In order to help meet SB 535's mandate, 100 percent of the households served by LIWP with FY 2015-16 allocations are currently required to be located within disadvantaged communities.

CalEPA's Office of Environmental Health Hazard Assessment (OEHHA) developed CalEnviroScreen 2.0 to identify certain census tracts as "disadvantaged communities." A census tract is a small subdivision of a county. In general, each census tract contains an average of about 4,000 people, though they may range from 1,200 to 10,000. There are over 8,000 census tracts in California.

CalEnviroScreen 2.0 uses 19 indicators divided into two broad categories: "Pollution Burden," which includes exposures as well as environmental effects, and "Population Characteristics," which includes sensitive populations and socioeconomic factors, as follows:

POLLUTION BURDEN:	POPULATION CHARACTERISTICS:
Ozone Concentrations	Children and Elderly
Particulate Matter (PM) 2.5 Concentrations	Low Birth-Weight Births
Diesel PM Emissions	Asthma Emergency Visits
Drinking Water Quality	Educational Attainment
Pesticide Use	Linguistic Isolation
Toxic Releases from Facilities	Poverty
Traffic Density	Unemployment
Cleanup Sites	
Groundwater Threats	
Hazardous Waste	
Impaired Water Bodies	
Solid Waste Sites and Facilities	

Each census tract in the state was assigned a value for each of the indicators, and, based on the final scores, census tracts were ranked relative to one another. In October 2014, CalEPA identified the 25 percent of census tracts with the highest score as disadvantaged communities for the purpose of investing auction proceeds. These disadvantaged communities are comprised of 1,993 individual tracts, containing 9.4 million people and distributed amongst 29 California counties. These counties are shown below, but only the designated disadvantaged community census tracts in these counties are currently eligible for LIWP:

Alameda	Butte	Contra Costa	Fresno	Imperial
Kern	Kings	Los Angeles	Madera	Merced
Monterey	Orange	Riverside	Sacramento	San Bernardino
San Diego	San Francisco	San Joaquin	San Mateo	Santa Barbara
Santa Clara	Santa Cruz	Solano	Stanislaus	Tehama
Tulare	Ventura	Yolo	Yuba	

A map of the designated disadvantaged communities is attached as Exhibit I. More information is available at:
http://www.calepa.ca.gov/EnvJustice/GHGInvest/default.htm.

To confirm that an address is located in a shaded disadvantaged community census tract, refer to the address look-up tool available at:
http://www.arb.ca.gov/cc/capandtrade/auctionproceeds/535top25map.htm.

Since all LIWP investments need to benefit disadvantaged communities, Regional Administrators must ensure that projects are implemented in accordance with the disadvantaged community criteria in ARB's Funding Guidelines.[1]

Service providers will also need to be responsive to changes in service areas that may result from updates to CalEnviroScreen 2.0 and/or the application of CalEnviroScreen 3.0 which is anticipated to be released in 2017. While there may be some variation in the disadvantaged communities identified in the future, CSD does not anticipate any impact to FY 2015-16 funding allocations or initial service delivery plans.

IV. LIWP Background and Overview

a. CSD's History and Programs

CSD has been serving low-income communities for 50 years. Originally known as the "State Office of Economic Opportunity," the office was created as a result of the federal Economic Opportunity Act of 1964.

A State department under the California Health and Human Services Agency, CSD has traditionally partnered with a network of private, non-profit and local government organizations, who are dedicated to helping low-income families and individuals achieve and maintain self-sufficiency, manage their home energy needs and reside in housing free from the dangers of lead hazards.

CSD administers the following federal programs intended to reduce poverty and improve the lives of low-income Californians:

- U.S. Department of Health & Human Services Community Services Block Grant (CSBG)
- U.S. Department of Health & Human Services Low-Income Home Energy Assistance Program (LIHEAP)
- U.S. Department of Energy Weatherization Assistance Program (DOE WAP)
- U.S. Department of Housing and Urban Development (HUD), Lead-Based Paint Hazard Control Program

b. Initial Implementation of LIWP

With the first LIWP appropriation in 2014, CSD leveraged the federal LIHEAP resources with LIWP to help defray program overhead and service delivery costs, thus allowing LIWP program investments to focus exclusively on energy efficiency installation activities in single-family and small multi-family dwellings. For the initial phase of this LIWP program component, CSD allocated funding to certain agencies in CSD's existing statewide network of service providers serving designated disadvantaged communities. These agencies are continuing as LIWP Providers through early 2017.

With LIWP funding, CSD was also able to expand its weatherization program to incorporate renewable energy. This program expansion required CSD to undertake significant program development, publish guidelines and execute procurements that included identifying and

[1] Disadvantaged community criteria are contained in ARB's "Funding Guidelines for Agencies that Administer California Climate Investments", Volume 2, Table 2.A-4, dated December 2015, available at: www.arb.ca.gov/ccifundingguidelines.

contracting with new entities to provide these services. One provider was selected to provide Single-Family Solar PV services on a state-wide basis, and this provider will continue to provide service through May 2018 to ensure continuity of services while CSD transitions to a new LIWP service delivery model outlined in Section V.

CSD also awarded funds to a solar PV pilot project that involves a consortium of several agencies from within CSD's network of weatherization agencies that was subsequently expanded and is continuing through May 2017.

Though CSD's existing network of service providers was essentially "shovel ready" to implement LIWP, a number of program modifications were required to integrate LIWP with CSD's existing program design and comply with California Climate Investments' administrative rules and programmatic objectives. Obstacles that were identified and addressed included working exclusively within disadvantaged communities, requiring projects to be focused on reducing GHG emissions in a cost-effective manner, methods of effectively leveraging federal LIHEAP funds with LIWP, and systems for identifying energy efficiencies and reporting of energy savings and other co-benefits.

Prompted by a mid-point evaluation of LIWP expenditure and project activity, CSD shifted a portion of LIWP funding from the Single-Family/Small Multi-Family Energy Efficiency Program component to Single-Family Solar PV installations during the initial implementation of the program.

Planning also commenced on a new program model that would overcome some of the challenges posed by integrating the use of LIHEAP funding in the Single-Family/Small Multi-Family Energy Efficiency Program, methods of selecting local service deliverers, and the separate administration of the Single-Family/Small Multi-Family Energy Efficiency and Solar PV Programs. CSD believes a more sustainable mode of program administration and implementation is achievable through program redesign in the Single-Family Energy Efficiency and Solar PV Program components.

These Program Guidelines have been developed to apply to the redesigned Single-Family Energy Efficiency and Solar PV Programs. Regional Administrators will be selected through an open and competitive procurement process, as outlined in Section V.

V. REVISED SERVICE DELIVERY MODEL FOR LIWP'S SINGLE-FAMILY ENERGY EFFICIENCY AND SOLAR PV COMPONENTS

CSD's revised Single-Family Energy Efficiency and Solar PV program model is premised on the coordination of services at the regional level through subvention or local assistance contracts with Regional Administrators selected on a competitive basis. The selection process will afford access to contractors outside CSD's existing network of low-income weatherization service providers whose service areas are largely county-based. A regional approach to program implementation will better enable CSD to address the challenges posed by the wide distribution of disadvantaged communities, varying climatic conditions from area to area, funding availability, and varying production costs. Regionalization will also afford economies of scale without losing local focus and geographical specialization (see Exhibit II).

Services under the revised program model will be limited to single-family dwellings (defined in Section VI) to ensure all households are also assessed for high-impact measures such as insulation and Solar PV. Services for small multi-family buildings will be made available under a revised and expanded multi-family dwelling program as additional LIWP appropriations become available.

a. Selection of Regional Administrators

A Request for Information (RFI) was issued in March 2016 to engage stakeholders and identify interested, qualified parties who could administer these programs on a regional basis. CSD finalized and released a competitive Request for Proposal (RFP) in November 2016. It is anticipated that Regional Administrators selected though this process will be contracted to provide services through April 2018 with the initial allocations from CSD's FY 2015-16 LIWP appropriation. CSD will post a list of all applications received, prior to final selection of Regional Administrators.

It is CSD's intent that Regional Administrators will engage additional subcontractors and pursue strategic partnerships as needed through procurement processes sanctioned by CSD. While initial allocations, contract periods, and work plans may be limited by the funds available and current expenditure deadlines, the program model set forth in these Program Guidelines will afford greater adaptability across Investment Plan cycles, fluctuations in funding allocations, and program changes. Allowing administrators to develop service delivery strategies and capacities that are responsive to geographical, economic and climate conditions in each region, and that are independent of the federal LIHEAP constraints, will allow for an accelerated rate of expenditure, enhanced service delivery, and more sustainable modes of local program administration.

b. Role of the Regional Administrators

Regional Administrators will be responsible for coordinating the following program elements, either by performing them directly or overseeing other entities that are responsible for their accomplishment:

- Procurement and Management of Subcontractors
- Identification of Projects and Target Areas
- Marketing and Outreach
- Intake and Establishing Household Eligibility (See Section VI)
- Project Evaluation and Assessment
- Devising Cost-Effective Methods of Service Delivery
- Customer Education
- Oversight of Work Performed
- Quality Assurance and Warranties
- Adherence to Workforce Development Requirements
- Maximizing Opportunities for Other Co-benefits/Economic Benefits to Disadvantaged Communities
- Fiscal and Administrative Reporting to CSD

c. Integration of Energy Efficiency and Solar PV

In the initial implementation of LIWP, energy efficiency services and solar PV operated as two separate and distinct programs, resulting in some duplication of effort and challenges in referrals and coordination. Under the revised program model, the administration of Energy Efficiency and Solar PV components will be integrated at the regional level in order to ensure eligible households are assessed for the full complement of available LIWP measures. Regional Administrators will receive separate allocations for Energy Efficiency and Solar PV, and will be responsible for implementation of both program components, including oversight and expenditure reporting.

d. Eligibility for Regional Administrators

CSD will utilize Local Assistance/Subvention Agreements with contracted Regional Administrators. Only Local Governmental Agencies and non-profit entities will be eligible to compete for Regional Administrator contracts. RFP respondents may apply to serve multiple regions or the entire state and will be required, under the terms of the RFP, to propose an organizational structure and operational plans that will address LIWP service delivery objectives and meet LIWP program requirements, with particular regard to the unique needs of qualifying low-income households. CSD anticipates that a variety of organizational structures and relationships will be proposed by respondents. The RFP will afford maximum flexibility and opportunities for innovation, consistent with applicable legal requirements, program goals and objectives, as well as with optimal service delivery mechanisms.

e. Procurement Process

CSD shall, in accordance with the basic principles set forth in the Public Contract Code (PCC) and the State Contracting Manual (SCM), applicable to local assistance/subvention agreements, with particular regard to SCM § 3.17, devise a Departmental procurement policy for use under LIWP, which policy shall be posted on the Department's LIWP procurement website at: http://www.csd.ca.gov/LIWP/RFP/BiddersLibrary.aspx

The policy will draw upon the transparent, fair and competitive processes set forth in the PCC and SCM, though procurements will be exempt from Department of General Services (DGS) review, in accordance with published opinions of the Attorney General of the State of California, and all procedural detail concerning procurement, including protest procedure, shall be set forth in the RFP of each procurement conducted under these Program Guidelines.

f. Scope of Procurement

CSD may, at its discretion, utilize the initial solicitation for Regional Administrator(s) to award contracts and program allocations in subsequent years, provided the program scope, key program characteristics and supplemental funding amounts are largely consistent with the initial solicitation. If CSD determines that the programmatic and financial character of LIWP, as set forth in these guidelines, changes substantially, or that the best interests of the state require a new solicitation, then the initial solicitation shall no longer be used for subsequent contract awards and a new procurement shall be conducted.

If the RFP process fails to identify a suitably qualified Regional Administrator for one or more regions, CSD will work to identify ways to build capacity and develop relationships to ensure services can be made available to eligible households in all regions.

Information on Regional Administrators and services will be made available at: http://www.csd.ca.gov/Services/FindServicesinYourArea.aspx

VI. Household Eligibility and Assessment

All households served must be located in a disadvantaged community (See Section III). All measures installed and services provided to eligible households residing in single-family homes or mobile homes in disadvantaged communities are provided at no cost to the applicant. Households may apply for services by contacting CSD or the appropriate Regional Administrator directly, and Regional Administrators will also be required to perform or coordinate marketing and outreach. "Single-family homes" include detached and attached or semi-attached residences (e.g. zero lot-line homes, halfplexes or townhomes) providing that the property has the legal standing of a single-

family home with a separate lot (deeded separately with its own parcel number) and without a condominium ownership structure or home owners association where architectural approval is needed for changes to the exteriors of the buildings or erection of anything on the roof. Households residing in mobile homes are also eligible to receive most LIWP services if they are qualified under the same eligibility guidelines that apply to single-family homes outlined in this Section. In most cases Regional Administrators will offer services on a first-come first-served basis until their funding allocations have been exhausted, except in cases where Regional Administrators have proposed special community-based outreach and intake programs, i.e. coordinated neighborhood approaches such as neighborhood eligibility, as discussed below.

This Section outlines measures and eligibility for the Basic LIWP Energy Efficiency Measures Package and the Enhanced LIWP Measures Package. CSD determines measures for inclusion in LIWP based on analysis of anticipated Savings-to-Investment Ratios (1.0 or greater), with the exception of some low-cost measures where the frequency of measure installation is likely to achieve a market rate where the SIR approaches or exceeds this threshold. In addition, CSD develops technical installation standards that apply to certain measures, and may apply cost caps to ensure SIR estimates and cost-effectiveness are both maintained.

A multi-phase assessment process will apply to each qualified single-family or mobile home to determine the package of measures to be installed, based on eligibility as outlined below. If a home qualifies, it will be assessed to determine if measures in the Enhanced Package may be feasible for installation. If the assessment indicates that no measures in the Enhanced Package are appropriate, only the appropriate measures in the Basic Package will be installed.

A listing of the available LIWP measures in various categories is included as Exhibit V.

a. Single-Family Energy Efficiency: Basic LIWP Measures Package

Single-family and mobile homes occupied by qualifying renters or qualifying homeowners are eligible to receive Basic LIWP Measures. Regional Administrators will be permitted to establish a mechanism for substantiating owner permission for measure installation in rental properties without completion of the CSD form required for Enhanced Measures (see Section VI b) below). Basic LIWP measures available to all qualified households include LED lightbulbs, low-flow showerheads, and aerators. Household eligibility for Basic LIWP Measures must be established in one of the following ways:

1. Household Income Verification

Household income eligibility is set at or below 80 percent of the area median income (or AMI). AMI is subject to annual changes based upon the U.S. Department of Housing and Urban Development's income guidelines. Information on current income eligibility in each county (80 percent of AMI is deemed “low-income”) is available at:

http://hcd.ca.gov/housing-policy-development/housing-resource-center/reports/state/inc2k16.pdf

In the initial implementation of LIWP, eligibility was linked to the LIHEAP’s program eligibility (at or below 60 percent of state median income [SMI]). Typically, the new eligibility standard of 80 percent AMI will allow more households to be served, and will help address the issue of “saturation” where households have been previously served under LIHEAP or other energy efficiency programs, and provides the opportunity for LIWP to reach a market offering greater energy saving potential. However, in certain counties and for households of certain sizes, applicants may qualify under the 60 percent SMI standard but not qualify under an 80 percent AMI standard if the maximum allowable income is lower in that county. For this reason CSD

will maintain income qualification tables so that LIWP Providers can qualify households based on the higher allowable maximum income (80 percent AMI or 60 percent SMI) for households of various sizes.

2. Categorical Eligibility

Categorical eligibility may be used in lieu of income eligibility to determine eligibility for households to receive services and the Basic LIWP Measure package. Qualifying programs for categorical household eligibility will be based on Energy Savings Assistance Program guidelines and include the following:

- Bureau of Indian Affairs General Assistance
- Energy Savings Assistance (ESA) Program
- Low-Income Home Energy Assistance Program (LIHEAP)
- Medi-Cal
- Medi-Cal for Families
- NSLP (National School Lunch Program)
- SNAP (Federal Supplemental Nutritional Assistance Program) CALFRESH
- SSI (Supplemental Security Income)
- TANF (Temporary Assistance for Needy Families) CALWORKS
- Tribal Head Start
- Tribal TANF
- WIC (Women, Infants and Children)

CSD will post detailed eligibility information on the LIWP website at:

http://www.csd.ca.gov/LIWP

3. Neighborhood Eligibility

CSD recognizes the challenges that may be faced by Regional Administrators in conducting outreach, assessing eligibility, and providing services to all disadvantaged community census tracts when they are widely disbursed across large regional areas. These challenges will be exacerbated by the short timeline for ramp-up and building capacity for service delivery. In order to reduce Regional Administrator overhead and focus project investments in communities where the needs are greatest, CSD has identified certain communities where Regional Administrators and their subcontractors may be authorized to take a coordinated neighborhood approach and offer a limited range of measures to all households in single-family and mobile homes in those census tracts. Exhibit IV lists census tracts that are represented in both the top 5 percentile of disadvantaged communities ranked as most burdened by the indicators in CalEnviroScreen 2.0, and the disadvantaged communities in the highest 5 percentile rank for poverty population based on U.S. census data.

It is anticipated that making these limited offerings available in targeted neighborhoods will assist LIWP Providers in gaining householder agreement for participation and streamlined qualification for advanced levels of energy efficiency services (see below). Regional Administrators will be required to have the capacity to provide all measures and provide a production plan that implements deep energy retrofits and maximizes GHG reductions with measures in the Enhanced LIWP Package.

b. Single-Family Energy Efficiency: Enhanced LIWP Measures Package

Single-family and mobile homes occupied by qualifying renters or qualifying homeowners are eligible to receive Enhanced LIWP Measures, with some exceptions for solar measures. Only single-family homes (not mobile homes) are eligible for solar measures, and only single-family homes occupied by qualifying homeowners are eligible to receive Solar PV. Household Income Verification, as outlined in Section VI a.1. above, must also be established by Regional Administrators or their subcontractors for a household to be eligible for Solar PV. For other Enhanced Measures, Regional Administrators or their subcontractors may establish household eligibility through Household Income Verification or Categorical Eligibility (as outlined in Section VI a.2. above). Owners of rental properties will be required to complete a CSD form to verify permission for installation of any Enhanced Measures and certify that rents will not be increased for a period of two years solely due to measures installed.

In addition to the measures available as part of the Basic LIWP Package, Enhanced measures may be available based on household assessment. Enhanced LIWP measures that may be available to qualified households include insulation or insulation upgrades, HVAC system replacement, solar water heating, and Solar PV. In addition to Household Income Verification or establishment of Categorical Eligibility, an analysis of energy use based on utility bills and/or an energy audit may also be required depending on the measures. Measures that require an energy audit or solar assessment are indicated in Exhibit V, Charts of LIWP Measures' Packages. The components included in the measure package are determined by the direct, on-site energy savings that can be achieved by the measures and the cost-effectiveness of the measures. Regional Administrators will have the option of auditing measure by measure or by utilizing a packaged measure approach for multiple improvements.

Factors that affect the feasibility of Enhanced LIWP measures include:

- Climate Zone (See Exhibit III) – an air conditioning unit that may prove cost-effective in the Central Valley may not be cost-effective on the coast where temperatures are more moderate
- Existing levels of insulation
- Age and condition of existing systems and appliances
- The number of occupants in the home and their existing energy use patterns
- Whether conditions of the property permit the measures to be installed

Additional considerations apply for the assessment for Solar Water Heater (SWH) and/or Solar PV installation. Installation of SWH or Solar PV may be assessed as feasible on a percentage of homes or structures (e.g. garage or carport or other out-building) based on considerations including:

- Proper orientation of home or structure
- Available unshaded roof space
- Condition of roof

Exhibit V provides specific details on conditions applying to each measure.

The LIWP Provider will assess each home or structure and make the final determination of eligibility for measures, subject to any guidelines or approvals required by CSD. LIWP

Providers will be encouraged to provide the deepest energy retrofits available to each household based on the multi-phase assessment process.

VII. FY 2015-16 LIWP APPROPRIATION ALLOCATIONS

The table below shows the LIWP components, as described above, and the amount of funding allocated to each component type from the FY 2015-16 appropriation under these Program Guidelines.

CSD's state-wide Large Multi-Family Provider (the Association for Energy Affordability) and Single-Family Solar Photovoltaics Provider (GRID Alternatives) will continue through May 2018 with supplemental funding from the FY 2015-16 appropriation totaling approximately $17.1 M. Since these service providers are subject to the provisions of the FY 2014-15 Large Multi-Family and Single-Family Program Guidelines respectively, this amount is not included in the table below. The remainder of the FY 2015-16 appropriation will be allocated to state operations and agencies selected through a competitive procurement process, and these Program Guidelines will apply, so only those amounts are included in the table below:

Task/Project Type	Number of Dwellings to Be Served	Allocation of FY 2015-16 LIWP Funds*
State Operations		$4.1 M
Single-Family Energy Efficiency	10,000	$34.6 M
Single-Family Solar PV	1,150	$23 M
TOTAL		$61.7 M

*For the purpose of this chart, numbers are rounded to the nearest $100,000. Allocations include Administrative, Support and Overhead costs of Providers – allocations will be determined through the competitive procurement process and subsequent negotiations.

a. ESTIMATED ALLOCATIONS TO REGIONAL ADMINISTRATORS

As outlined in Section V, CSD plans to implement a new Single-Family Energy Efficiency and Solar PV Program model that uses the competitive selection of Regional Administrators to coordinate services. It is anticipated a model that allocates funding to five regions (See Exhibit II) will achieve administrative efficiencies for CSD by reducing the number of program administrators; allow for larger allocations of funds that will more adequately support the development of a standalone program; and consolidate program offerings for better service coordination and an improved customer experience.

CSD recognizes that Regional Administrators receiving allocations under the new competitive procurement model will be faced with a short timeline for the identification of projects and the expenditure of funds. While the numbers of eligible households in each of the five regions varies, only a limited number of these homes can be served with the monies allocated, given the brief period of funding availability. Each Regional Administrator will be allotted an allocation that is sufficient for ramp-up and building capacity for service delivery over the course of the short program timeframe. In recognition of this need, CSD plans to create a base allocation of $2.5 M for energy efficiency services in each region, then allocate the remaining dollars proportionally to

each region, based on estimates of the low-income population residing in the DAC census tracts of each region, as reflected in the federal poverty population data.

Allocations for Solar PV are based on an estimate of the frequency of installation of Solar PV being assessed as an eligible and feasible measure in households being provided with energy efficiency upgrades in each region. Other factors may be evaluated and allocations adjusted prior to the release of the RFP.

The regions, the number of DACs in each county, the corresponding poverty population in the DACs identified, and projected allocations to each region, are outlined below. It is expected that these initial allocations will enable Regional Administrators to build a framework for enhanced regional capacities in the event additional LIWP funding becomes available. Over the course of the procurement and contracting processes and, in the event LIWP funding levels change, CSD may find it necessary to make adjustments to the projected allocations specified below. Accordingly, the figures presented are intended for planning purposes and to give stakeholders and the public an appreciation for current program funding projections in light of available resources and program objectives.

Region 1, Northern California:
Butte (3), Sacramento (43), Solano (2), Tehama (1), Yolo (3) and Yuba (3).
Total DAC census tracts: 55
Poverty Population in DACs: 142,227
Estimated Energy Efficiency Allocation: $3.1 M
Estimated Solar PV Allocation: $2.1 M

Region 2, San Francisco Bay Area:
Alameda (32), Contra Costa (23), Monterey (7), San Francisco (3), San Mateo (2), Santa Clara (23), and Santa Cruz (1).
Total DAC census tracts: 91
Poverty population in DACs: 208,156
Estimated Energy Efficiency Allocation: $3.4 M
Estimated Solar PV Allocation: $2.3 M

Region 3, Central Valley:
Fresno (131), Kern (73), Kings (14), Madera (13), Merced (36), San Joaquin (64), Stanislaus (50), Tulare (50).
Total DAC census tracts: 431
Poverty population in DACs: 1,283,447
Estimated Energy Efficiency Allocation: $8.1 M
Estimated Solar PV Allocation: $5.4 M

Region 4, Los Angeles Metropolitan:
Los Angeles (1,018), Santa Barbara (1), Ventura (8).
Total DAC census tracts: 1,027
Poverty Population in DACs: 2,350,373
Estimated Energy Efficiency Allocation: $12.7 M
Estimated Solar PV Allocation: $8.4 M

Region 5, Southern California:
Imperial (13), Orange (86), Riverside (104), San Bernardino (160), San Diego (26).
Total DAC census tracts: 389
Poverty Population in DACs: 1,114,702

Estimated Energy Efficiency Allocation: $7.3 M
Estimated Solar PV Allocation: $4.9 M

Regional Administrators will be required to develop Work Plans for serving eligible households in their areas.

Limits will apply to administrative expenses of Regional Administrators. For contract purposes, the federal definition of "Administrative Costs" as stated in Office of Management and Budget (OMB) Circular A-122 (2 CFR 230) under "Indirect Costs" shall be used, as follows:

> "'Administration' is defined as general administration and general expenses such as the director's office, accounting, personnel, library expenses and all other types of expenditures not listed specifically under one of the subcategories of 'Facilities.'"

Contractors may charge "facility costs" to the Administration budget line item. OMB Circular A-122 provides: "'Facilities' is defined as depreciation and use allowances on buildings, equipment and capital improvement, interest on debt associated with certain buildings, equipment and capital improvements, and operations and maintenance expenses."

Regional Administrator applicants will be required to submit information on marketing and outreach expenses required for implementation of marketing plans, separate from administrative expenses.

VIII. LIWP GOALS

LIWP's primary goal is to install cost-effective energy efficiency measures and solar PV for qualifying households to reduce direct on-site energy use and GHG emissions. Incidental to this primary goal, LIWP will provide co-benefits, such as reducing household energy bills, reducing air pollution and helping to achieve air quality standards, improving public health, creating jobs and job training opportunities, and stimulating the economy.

a. GOAL #1: REDUCE GHG

Each dwelling will be comprehensively assessed and evaluated both visually and through the use of diagnostic tools to determine a suite of GHG-reducing energy efficiency and solar measures for installation.

b. GOAL #2: PROVIDE CO-BENEFITS TO DISADVANTAGED COMMUNITIES

While GHG reduction is the primary goal of LIWP, the Investment Plans described in Section II of this document also place an emphasis on "co-benefits" to be achieved, incidental to the primary goal (#1). Specifically, the Investment Plans establish the following goals, among others, for the use of the proceeds:

- Maximize economic, environmental and public health benefits
- Foster job creation
- Direct investment toward the most disadvantaged communities and households

In achieving GHG reductions by increasing energy efficiency or renewable energy generation, LIWP also lowers household energy bills, leaving more money for necessities like food, transportation, housing and medicine. When households have more money available, they usually spend those dollars in their local community, compounding the benefits of local economic

investment. For each census tract served, CSD will estimate and report the annual dollars saved to households in that census tract from savings on energy bills.

By allocating funding to projects in disadvantaged communities, LIWP also provides opportunities for job creation, job training and related economic benefits in these communities. LIWP providers will be encouraged to maximize these benefits through a variety of methods that may vary based on the demographics and needs of their local communities. Methods may include:

- Partnering with local Workforce Investment Boards to offer internships/hands-on training to individuals who have received classroom or other training elsewhere
- Directly hiring workers from disadvantaged communities to fill existing vacancies or positions created as a result of LIWP
- Negotiating employment agreements with hired subcontractors to hire one or more individuals from the disadvantaged community
- Giving preference to subcontractors from the disadvantaged community areas

LIWP Providers will be required to develop Workforce Development Strategies with input from and approval by CSD.

IX. REPORTING AND AUDITING

Reporting and recordkeeping requirements will be the responsibility of both CSD and Regional Administrators and their subcontractors. All reports must be consistent with the quantification methodologies and reporting guidance developed by ARB[2] and the requirements established by CSD in these Program Guidelines. ARB's funding and reporting guidelines are available at: www.arb.ca.gov/ccifundingguidelines

Regional Administrators will be required to report to CSD basic project information that demonstrates the energy and GHG savings achieved, disadvantaged community benefits, and other implementation metrics. Project level information includes, but is not limited to project location, project type, building characteristics, specific energy efficiency measures installed per project, diagnostics performed, historical building energy usage, estimated energy savings, Solar PV system design and specifications and Solar Water Heater design and specifications. Regional Administrators will be required to electronically report completed measures and measure information to CSD each month.

Regional Administrators will also be required to track and report to CSD additional information on co-benefits, which may include, but not be limited to, workforce information in accordance with the recordkeeping and reporting guidance developed by ARB (e.g. jobs and training opportunities created, hours worked, and whether employees are residents of disadvantaged communities), and dollars spent in a disadvantaged community census tract.

The level and duration of reporting and record retention will vary depending upon project type and will be specified in the Regional Administrator contracts. At a minimum, Regional Administrators will be required to report to CSD basic information for projects conducted during the funding or contract term and maintain records for three years after contract close. CSD may also impose other reporting requirements that will allow CSD to track and manage progress towards goals, and to report, as

[2] ARB is the state agency responsible for collecting and reporting data from multiple agencies receiving GGRF funding. As a result, CSD is dependent upon ARB to provide specific reporting requirements.

necessary, to other agencies and organizations who seek updates on the progress of GGRF spending.

For project auditing, the State shall have the right to inspect the work and associated records at any and all reasonable times as part of LIWP oversight. This right shall extend to any subcontracts, and Regional Administrators shall include provisions ensuring such access in all contracts or subcontracts. The State retains the right to audit LIWP or any LIWP Providers.

X. QUANTIFICATION OF OUTCOMES

CSD has worked with ARB to establish GHG reduction methodologies that provide guidance on data collection and describe how GHG reductions will be quantified for LIWP projects. Quantification Methodologies apply to measures in both the Basic and Enhanced LIWP Packages. Quantification Methodologies are available at:
http://www.arb.ca.gov/cc/capandtrade/auctionproceeds/quantification.htm

In order to generate consistent data for LIWP, CSD will perform all calculations to quantify energy savings and GHG emission reductions. CSD will determine energy savings and the associated GHG reduction estimates using data reported to CSD by LIWP Providers during program implementation. Reported measure details combined with historical energy consumption data (either actual or estimated) will form the basis for determining per-building energy and GHG savings.

a. APPROACH AND METHOD FOR QUANTIFYING ENERGY SAVINGS

CSD has worked with ARB to identify methods for quantifying energy savings for LIWP measures. These methods may include a “deemed savings approach,” which uses energy industry standards and data to calculate savings averages for commonly-installed measures, or an “actual savings” approach using actual utility billing data to quantify energy efficiency over a defined period of time (e.g. twelve months prior and twelve months post installation of energy efficiency measures), or a combination of both. CSD and ARB may utilize both approaches due to the challenges in obtaining actual utility billing data, the highly mobile nature of many low-income households, and variances which impact residential energy consumption such as changes in the climate, household composition, and consumer behavior.

For energy efficiency measures, the deemed savings approach relies on the Database for Energy Efficient Resources (DEER). DEER is a California Energy Commission (CEC) and California Public Utilities Commission (CPUC) sponsored database available at http://www.energy.ca.gov/deer. DEER is designed to provide well-documented estimates of energy and peak demand savings values, measure costs, and effective useful life (EUL). When individual measures are not available in DEER, other industry standard resources may be utilized, as outlined in ARB’s Quantification Methodology for CSD.

For Solar Water Heaters (SWH), the California Solar Initiative’s (CSI) solar thermal calculator is the methodology used for estimating annual energy savings. The CSI solar thermal calculator is an online calculation tool that provides an estimate of the energy displacement for SWH systems based upon performance of the SWH system, location, and system design. CSI solar thermal calculator inputs are outlined in ARB’s Quantification Methodology for CSD.

For Solar PV, including community solar systems, the National Renewable Energy Laboratory’s (NREL) PVWatts calculator is the methodology used to estimate electricity savings from LIWP solar PV installations. NREL's PVWatts Calculator is a web application that estimates the electricity production of a grid-connected roof or ground-mounted photovoltaic system based on inputs outlined in ARB’s Quantification Methodology for CSD.

Utility billing data would be used if an energy audit tool required billing data to establish a baseline and predict future energy savings. Utility bills could also potentially be used for verifying the energy savings estimates.

b. Approach and Method for Quantifying GHG Reduction

CSD will calculate lifetime GHG reductions from electricity savings from energy efficiency measures by multiplying deemed savings by an emission factor for electricity[3] (Metric Tons of Carbon Dioxide equivalent [MTCO2e] per kWh) and the EUL of the measure. Lifetime GHG reductions from natural gas savings are calculated by multiplying deemed natural gas savings for the measure by an emission factor for natural gas (MTCO2e per therm) and the EUL of the measure.

For Solar Water Heaters, lifetime GHG reductions are calculated from the annual estimated energy savings from the CSI solar thermal calculator (kWh or therms) multiplied by the relevant emission factor and EUL, factoring in an annual rate of system degradation of 0.5 percent per year.

For Solar PV, lifetime GHG reductions are calculated from the PVWatts calculator's estimate of annual kWh generated, multiplied by the emission factor for electricity and the EUL, factoring in an annual rate of system degradation.

c. Approach and Method for Quantifying Household Savings

To estimate household energy cost savings (dollars saved on energy bills on an annual basis), CSD will multiply anticipated energy savings by the household's blended utility rates to arrive at an estimated, annual dollar savings per household.

d. Approach and Method for Quantifying Workforce Development and Other Co-Benefits

As discussed in Section IX b., participating LIWP Providers will be encouraged to provide opportunities for employment, job training and economic benefits to disadvantaged communities' residents. CSD will aggregate jobs created, project hours worked, and other information necessary to document benefits to disadvantaged communities.

Additionally, CSD will also work to quantify economic investment and impacts generated through provider expenditures for supplies and specialty contractor services within disadvantaged communities.

XI. Quality Assurance and Monitoring

CSD has developed energy efficiency and renewables' measure standards for Regional Administrators. As the administrator of DOE WAP and LIHEAP, CSD has a Quality Assurance (QA) Unit comprised of both in-house staff and a subcontracted inspection company. The QA team inspects a percentage of completed projects to ensure all measures were installed according to measure standards. QA may include the following:

- *Energy Efficiency Work-In-Progress Inspection:* Work-In-Progress Inspections will identify Provider compliance and programmatic issues during the initial stages of production.

[3] Electricity emission factors are updated annually by the Air Resources Board for the purposes of California Climate Investments GHG Quantification Methodologies.

- *Post Installation Inspections:* Post Installation inspections will be performed on a percentage of households receiving energy efficiency measures and solar PV. Any jobs reported to be completed and billed must meet programmatic requirements. The purpose of the post installation inspection is to determine if GHG reduction and job benchmarks have been met.

CSD also has an in-house field monitoring unit primarily responsible for conducting on-site reviews of LIWP Providers. During monitoring visits, CSD Field Monitors verify the LIWP Provider's adherence to contractual obligations, including: methods of procurement, providing subcontractor oversight, work quality assurance, staff training, service territories, progress in completion of projects and production goals, project costs, review of client files, and more. Organizations that fail to adhere to contractual obligations may be in jeopardy of losing future funding or may be subject to the disallowance of expenditures and to the return of amounts paid.

XII. LIWP FUTURE

As LIWP is implemented, CSD may find cause to modify the program design to make program implementation more efficient. Such changes could include adjustments in monitoring, quality assurance inspections, measures to be installed, etc. If such changes are necessary, and CSD determines those changes to be substantive, CSD will modify these Program Guidelines.

Changes to these Program Guidelines will be posted on CSD's website. To receive notification of LIWP updates via email, including changes to these Guidelines, sign up on the LIWP webpage at:

http://www.csd.ca.gov/Services/LowIncomeWeatherizationProgram.aspx

EXHIBIT I: MAP OF DISADVANTAGED COMMUNITIES (DACS)

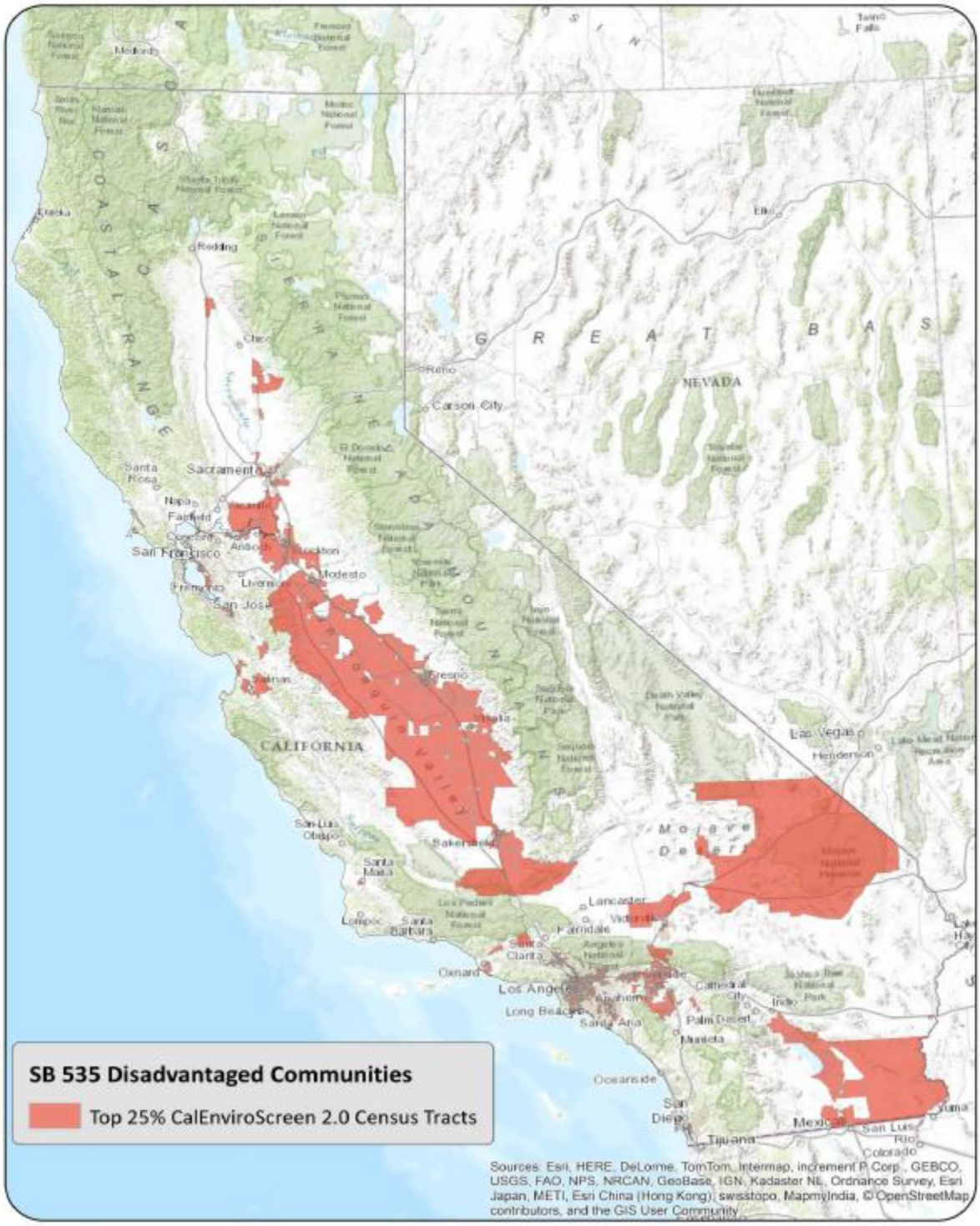

EXHIBIT II: MAP OF REGIONS FOR FY 2015-16 LIWP ALLOCATION REGIONAL ADMINISTRATION MODEL

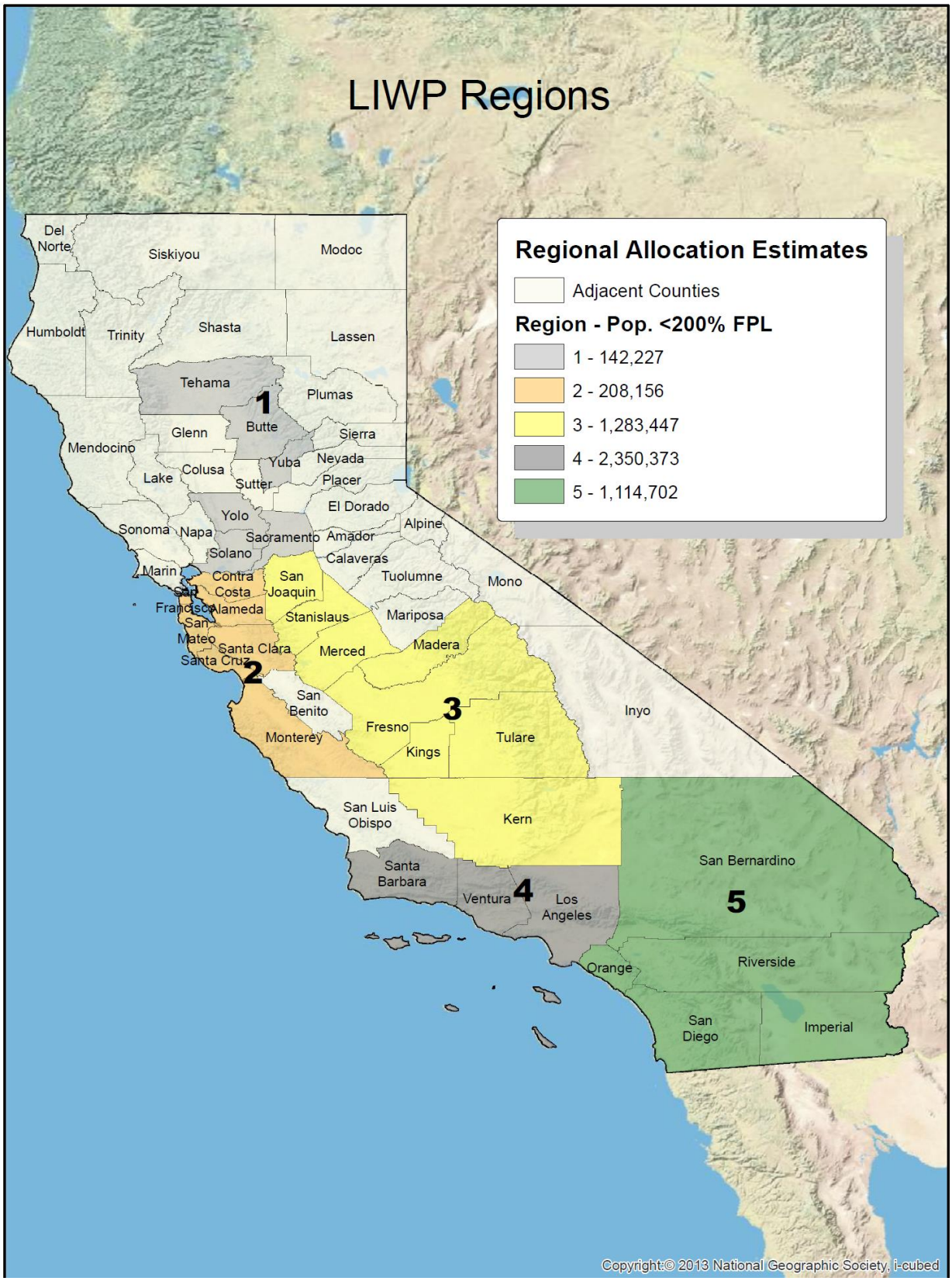

EXHIBIT III: MAP OF BUILDING CLIMATE ZONES

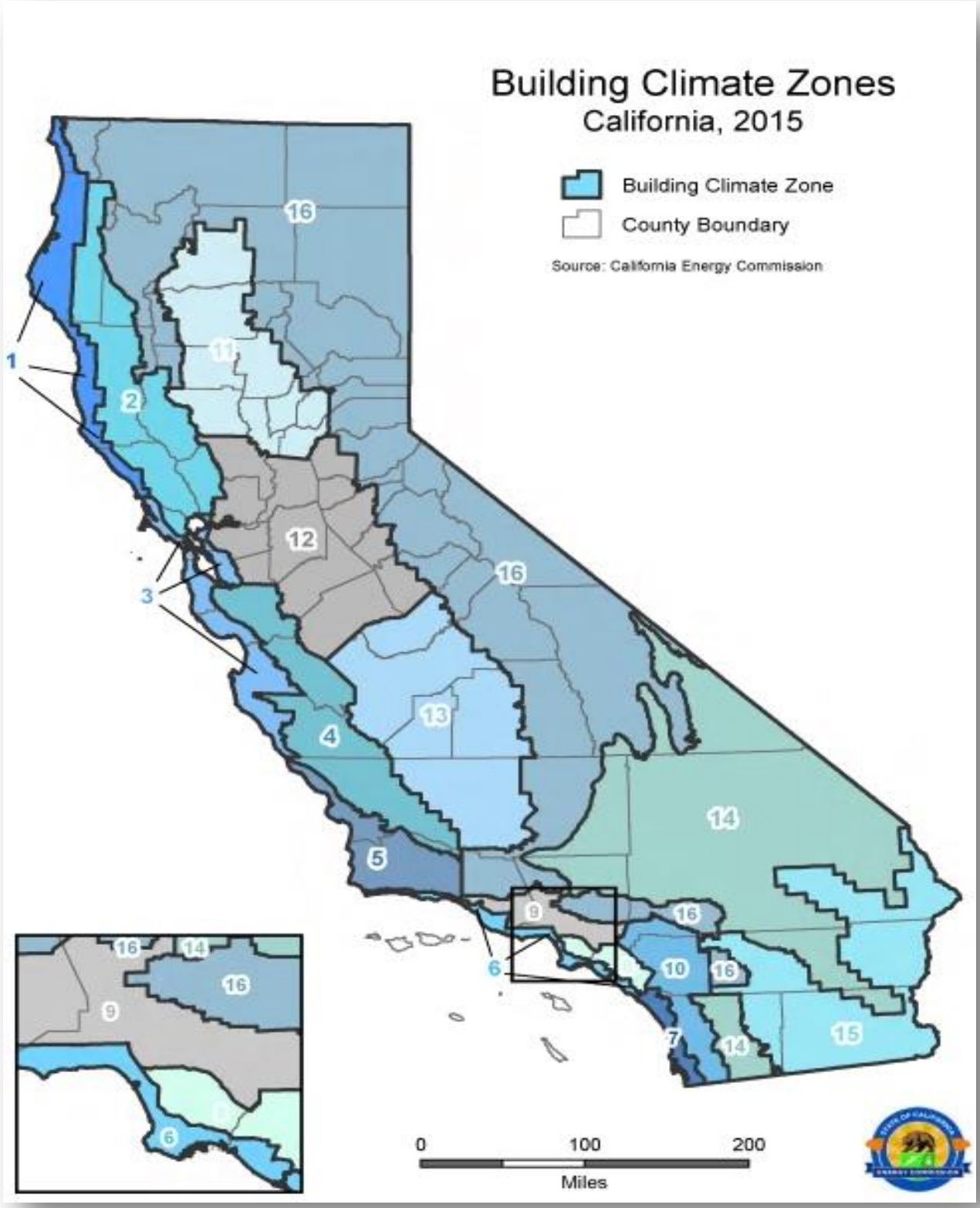

EXHIBIT IV: LIST OF CENSUS TRACTS FOR NEIGHBORHOOD ELIGIBILITY FOR BASIC LIWP PACKAGE

County	Region	Census Tract	Climate Zone	City	Poverty Population
Sacramento	1	6067004502	12	Sacramento	3,511
Yolo	1	6113010203	12	West Sacramento	3,777
Alameda	2	6001408800	3	Oakland	3,916
Fresno	3	6019000400	13	Fresno	3,845
	3	6019000600	13	Fresno	4,787
	3	6019000902	13	Fresno	4,206
	3	6019001201	13	Fresno	3,603
	3	6019001301	13	Fresno	3,653
	3	6019001304	13	Fresno	5,028
	3	6019001407	13	Fresno	3,465
	3	6019001410	13	Fresno	6,385
	3	6019002000	13	Fresno	4,220
	3	6019002501	13	Fresno	4,626
	3	6019002502	13	Fresno	4,569
	3	6019002601	13	Fresno	4,125
	3	6019002702	13	Fresno	4,478
	3	6019002800	13	Fresno	3,933
	3	6019002903	13	Fresno	3,701
	3	6019003202	13	Fresno	4,300
	3	6019003400	13	Fresno	3,518
	3	6019004205	13	Fresno	3,790
	3	6019005100	13	Fresno	3,639
	3	6019006501	13	Reedley	5,249
	3	6019007100	13	Selma	5,900
	3	6019008502	13	Parlier	4,606
Kern	3	6029000400	13	Bakersfield	3,745
	3	6029000600	13	Bakersfield	4,969
	3	6029001300	13	Bakersfield	6,053
	3	6029001400	13	Bakersfield	5,440
	3	6029002000	13	Bakersfield	5,679
	3	6029002200	13	Bakersfield	4,967
	3	6029002301	13	Bakersfield	7,482
	3	6029002400	13	Bakersfield	4,179
	3	6029002500	13	Bakersfield	6,992
	3	6029003000	13	Bakersfield	5,166
	3	6029003121	13	Bakersfield	6,409
	3	6029004800	13	Delano	7,510

Kings	3	6031001100	13	Hanford	4,158
Madera	3	6039000502	13	Madera	6,462
	3	6039000900	13	Madera	6,802
Merced	3	6047000505	12	Atwater	3,866
San Joaquin	3	6077000700	12	Stockton	3,608
	3	6077000801	12	Stockton	4,259
	3	6077001500	12	Stockton	5,306
	3	6077001900	12	Stockton	3,887
	3	6077002300	12	Stockton	3,574
	3	6077002701	12	Stockton	3,698
Stanislaus	3	6099001400	12	Modesto	4,387
	3	6099001500	12	Modesto	3,799
	3	6099002200	12	Modesto	4,128
	3	6099002301	12	Modesto	5,663
	3	6099002402	12	Modesto	4,166
	3	6099003802	12	Turlock	4,123
Tulare	3	6107000900	13	Visalia	4,979
	3	6107003400	13	Porterville	4,475
	3	6107004200	13	Pixley	4,641
	3	6107004300	13	Earlimart	5,709
Los Angeles	4	6037192610	9	Los Angeles	3,516
	4	6037199000	9	Los Angeles	3,604
	4	6037203100	9	Los Angeles	3,509
	4	6037203200	9	Los Angeles	3,457
	4	6037206032	9	Los Angeles	4,013
	4	6037206300	9	Los Angeles	4,386
	4	6037208000	9	Los Angeles	4,560
	4	6037208401	9	Los Angeles	4,057
	4	6037228100	8	Los Angeles	3,677
	4	6037228800	8	Los Angeles	4,260
	4	6037231710	8	Los Angeles	4,014
	4	6037231800	8	Los Angeles	3,954
	4	6037231900	8	Los Angeles	4,445
	4	6037232120	8	Los Angeles	3,799
	4	6037239202	8	Los Angeles	3,515
	4	6037239701	8	Los Angeles	3,765
	4	6037240200	8	Los Angeles	3,928
	4	6037240500	8	Los Angeles	4,342
	4	6037242700	8	Los Angeles	3,916
	4	6037243100	8	Los Angeles	4,679
	4	6037402304	9	Pomona	3,761
	4	6037402501	9	Pomona	3,791
	4	6037402502	9	Pomona	4,432

	4	6037402702	9	Pomona	4,635
	4	6037402801	9	Pomona	3,622
	4	6037404801	9	Baldwin Park	3,696
	4	6037432402	9	El Monte	4,024
	4	6037432802	9	El Monte	4,161
	4	6037433200	9	El Monte	3,772
	4	6037433801	9	South El Monte	4,297
	4	6037433901	9	El Monte	3,887
	4	6037530302	9	Los Angeles	3,818
	4	6037530801	9	Los Angeles	4,428
	4	6037531201	9	Los Angeles	3,663
	4	6037531301	9	Los Angeles	4,212
	4	6037531302	8	Los Angeles	4,408
	4	6037534202	8	Bell	4,252
	4	6037535300	8	Los Angeles	4,009
	4	6037540000	8	Lynwood	3,745
	4	6037540502	8	Lynwood	3,944
	4	6037542200	8	Compton	4,630
	4	6037543100	8	Compton	3,596
	4	6037553802	8	Paramount	3,794
	4	6037572900	6	Long Beach	3,896
	4	6037575401	6	Long Beach	3,620
Orange	5	6059074403	8	Santa Ana	4,470
Riverside	5	6065030104	10	Riverside	4,124
	5	6065030400	10	Riverside	4,114
	5	6065030501	10	Riverside	3,536
	5	6065041101	10	Riverside	3,880
	5	6065041703	10	Corona	3,954
San Bernardino	5	6071000301	10	Montclair	5,953
	5	6071001600	10	Ontario	3,842
	5	6071002204	10	Fontana	3,685
	5	6071002401	10	Fontana	5,614
	5	6071002402	10	Fontana	5,702
	5	6071002501	10	Fontana	3,558
	5	6071002502	10	Fontana	4,165
	5	6071003301	10	Fontana	3,669
	5	6071003302	10	Bloomington	3,972
	5	6071004003	10	Bloomington	4,598
	5	6071004103	10	San Bernardino	4,002
	5	6071004201	10	San Bernardino	4,443
	5	6071004202	10	San Bernardino	3,765
	5	6071004700	10	San Bernardino	4,251
	5	6071004900	10	San Bernardino	5,010

	5	6071005300	10	San Bernardino	3,829
	5	6071005400	10	San Bernardino	5,192
	5	6071005500	10	San Bernardino	6,799
	5	6071005600	10	San Bernardino	5,047
	5	6071007000	10	Colton	4,111
	5	6071007200	10	San Bernardino	4,149
San Diego	5	6073004900	7	San Diego	3,536

EXHIBIT V: CHARTS OF LIWP MEASURES' PACKAGES

LIWP measures will be separated into two different measure packages dependent on the type of measure and conditional qualifications.

1) Basic LIWP Package

The basic package includes measures with deemed energy savings that are cost effective in all climate zones. These measures will be installed in all eligible homes based on basic measure qualification.

Basic LIWP Package Measures
HOT WATER FLOW RESTRICTOR, FAUCET RESTRICTOR
HOT WATER FLOW RESTRICTOR, LOW FLOW SHOWERHEAD
LED BULBS
LED NIGHT LIGHTS
TIER2 POWER STRIPS
THERMOSTATIC SHOWER VALVE AND SHOWERHEAD
VACANCY SENSOR

2) Enhanced LIWP Measures

For all Enhanced LIWP measures Household Income Verification or Categorical Eligibility is required to be established. For Solar PV, eligibility may only be established through Household Income Verification. In addition, one or more of the following conditions may apply as indicated in the table below:

- Measures have climate zone restrictions
- Measures require combustion appliance safety (CAS) testing
- Measures require an energy audit to demonstrate SIR = >1.0 for the measure or package of measures. Prescriptive questions will dictate audit feasibility for LIWP Providers.
- Specialty licenses are required in addition to Class-B license when installed by general contractor. All sub-contractors are required to have applicable specialty license.

Enhanced LIWP Measures*	**Climate Zone**	**CAS Test Required?**	**Energy Audit or Solar Assessment Required?**	**Req. Specialty License?**
CEILING FANS	All	No	No	No
CEILING INSULATION – R-30 or R-38 (must start with R-0 [Bare Attics])	All	Yes	No	No
CEILING INSULATION (if existing insulation is greater than R-0)	All	Yes	Yes	No
COOLING REPLACEMENT (CENTRAL ONLY)	All	Yes	Yes	C-20

DUCT REPAIR AND REPLACEMENT (Requires Diagnostic Test)	All	Yes	Yes	C-20
EFFICIENT FAN CONTROLLER (Must have central AC)	CZs 4, 8-16 ONLY	Yes	No	C-20
ELECTRONICALLY COMMUTATED BLOWER MOTOR (ECM) (Must have central AC)	CZs 9-15 ONLY	Yes	No	C-20
FLOOR INSULATION	All	Yes	Yes	No
HEATING REPLACEMENT (CENTRAL ONLY)	All	Yes	Yes	C-20
INFILTRATION REDUCTION MEASURES (various)	All	Yes	No	No
REFRIGERANT CHARGE w/ COIL CLEANING	CZs 8-16	Yes	No	C-20
REFRIGERATOR REPLACEMENT**	All	No	No	No
SMART THERMOSTAT (Must have central AC)**	CZs 1, 11, 13, 15	No	No	No
SOLAR WATER HEATING***	Must comply with CSI-Thermal guidelines	No	Yes	C-36
SOLAR PV	Must comply with SASH guidelines	No	Yes	C-10, C-46
WALL INSULATION, STUCCO AND WOOD (Must Start with R-0 [Bare Walls])	All	Yes	No	No
WATER HEATER BLANKET	All	Yes	No	No
WATER HEATER REPLACEMENT	All	Yes	Yes	C-36
WHOLE HOUSE FAN (one per dwelling)	CZs 9-13	Yes	No	No
WINDOW REPLACEMENT	All	Yes	Yes	No

* Regional Administrator applicant bids must factor in costs to obtain all required permits and meet other jurisdictional requirements relating to the measures

** Cost-caps may apply to ensure Savings-to-Investment Ratio (SIR) and cost-effectiveness maintained

*** Measure must be installed with leveraged rebates from Investor Owned Utilities