Inland Regional Energy Network (I-REN)
Informational Binder

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INLAND REGIONAL ENERGY NETWORK

Regional Energy Networks (RENs) Introduction

Introduction

- Background
- How did RENs start?
- What is a Regional Energy Network (REN)?
- What RENs do
- Where does the funding come from?

Background – How did RENs start?

- ARRA funding – American Recovery & Reinvestment Act of 2009
  - Local government partnerships (LGPs)
  - Energy Upgrade California (EUC)
- LGSEC – Local Government Sustainability Energy Coalition
  - Lobbied for regional administration of Energy Efficiency (EE) programs by local governments
- CPUC Decision 12-05-015
  - Invited proposals from new groups (RENs) for EE funds independent of IOUs
  - Two proposals submitted
- BayREN and SoCalREN

Background – CPUC beginnings

D.12-11-015 (November 2012):

- Approved RENs as pilot programs
- Funding for 2013-14
- Limited to
  - Hard-To-Reach (HTR)
  - Filling gaps
  - Activities IOUs don't intend to undertake
- Not held to a **cost-effectiveness** standard
- IOU fiscal agent only
- Approved as of January 1, 2013

Compares benefits (in energy savings) and costs to help judge whether program is successful

Background – CAEECC origins

California Energy Efficiency Coordinating Committee

- 2013: Joint Parties (led by NRDC) initiated discussions regarding Rolling Portfolio (RP) concept with the CPUC to address need for more stakeholder input and stop/start of EE funding
- 2014-15: CPUC Rulemaking addressing the RP; included workshops and filings
- CAEECC was created to provide a venue for stakeholders to discuss EE matters under the purview of the CPUC while ensuring transparent access to information and opportunities to get involved.

Background – Rolling Portfolios

D.14-10-046

- Bridge funding for 2015 worked through many RP issues
- Program Administrators (PAs) annual budget established through 2025 (RENs "or until we make a change")
- PAs required to file an Annual Budget Advice Letter (ABAL):
  - Budget
  - Goals
  - Program Changes
  - Present to CAEECC

Background – Rolling Portfolios continued

D.15-10-028

- Approved RP process and role of CAEECC
- Removed fund shifting rules
- Business Plan Guidance:
  - January 2017 – file date
  - High level summary
  - Stakeholder process

Background – More on CAEECC

Purpose

- Facilitate an open and transparent process
- Review and support the initial design and augmentation of business plans and related items
- Seek to find efficiencies in various formal and informal processes
- Improve accessibility and transparency of EE activities
- Provide a scheduled forum to discuss ideas or to resolve differences

Background – More CAEECC, please!

Goals

- Support high-quality EE programs that reduce GHG emissions in line with state climate and energy goals while responding to customer needs and market dynamics
- Improve collaboration and communication among parties and with Commission staff
- Reduce differences in positions through informal discussions, narrowing need for CPUC involvement
- Increase speed of Commission review of filings

Background – Business Plans

D.18-05-041

- Business Plans approved
- IOU portfolio TRC – 1.25
- Affirmed RENs are not held to a cost-effectiveness standard
- Approved a 3rd REN – 3C REN
- JCMs – Joint Cooperation Memos – required for PAs in same service territory to help ensure those PAs proposed activities will complement and not duplicate each other, and that RENs comply with D.12-11-015

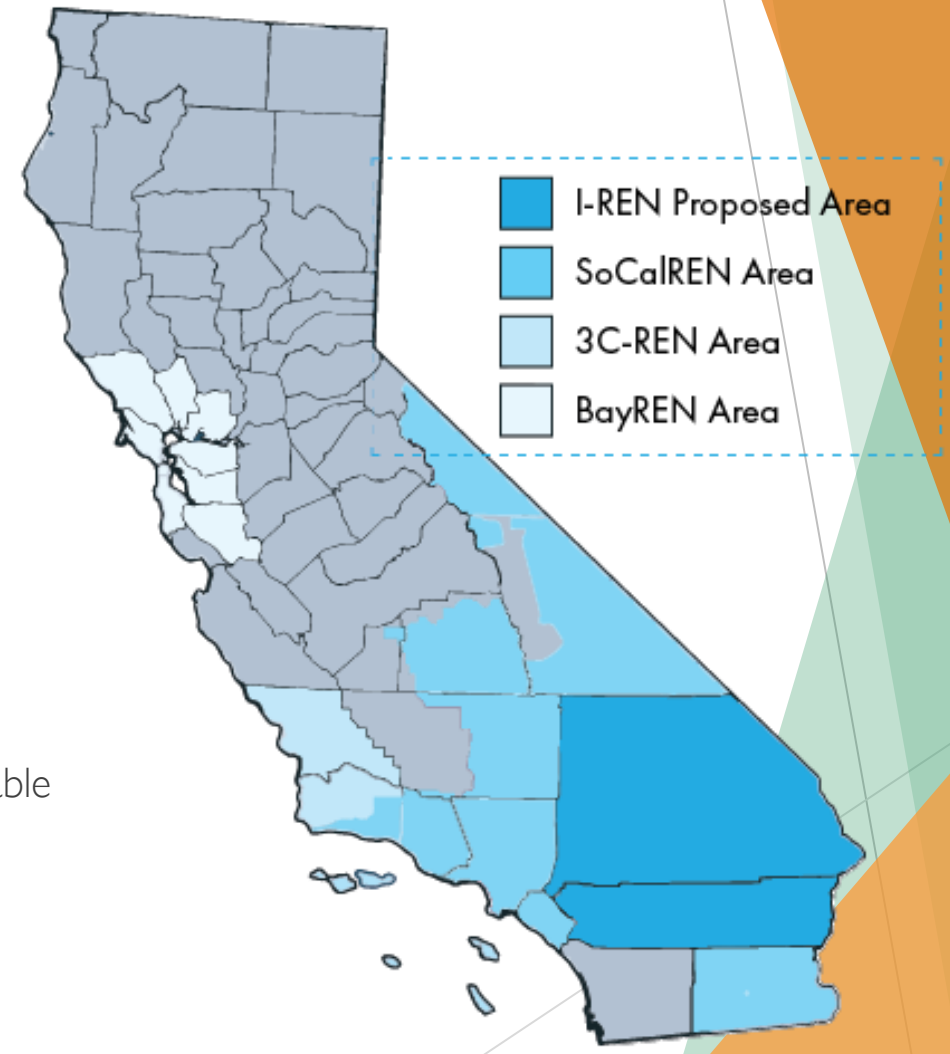
Background – RENs thrive!

D.19-12-021

- RENs no longer pilot: "they are a reality within the landscape of the Commission's EE policy"
- "RENS have the unique opportunity to leverage not only multiple local government entities into a single delivery channel, but they also may be able to utilize funding from multiple sources to deliver more comprehensive and holistic programs, especially to hard-to-reach customers."
- REN program criteria expanded to include CCAs
- Confirmed not held to CE standard due to size of portfolios and markets served

What is a REN?

- RENs are coalitions of local governments created to administer energy efficiency programs independent of Investor-Owned Utilities (IOU)
  - Provide programs and services that IOUs are unable to implement
  - Provide programs and services that serve hard to reach communities
  - Develop and implement programs and services that are replicable throughout California



What RENs do

- RENS are required to:
  - Fill gaps
  - Serve Hard-To-Reach (HTR) & Disadvantaged Communities (DAC)
  - Implement scalable Programs
- Example across the state:
  - Identify and implement programs in public facilities
  - Provide trainings
  - Develop pathways for workforce development entry and progression
  - Residential and multi-family energy efficiency program

Where does the funding come from?

- RENs are funded by California utility ratepayers through the Public Goods charge levied on regular bills by IOUs, such as SCE and SoCal Gas
- Customers already pay this charge, and the funds are being transferred to the CPUC
- There is approximately $600,000,000 available annually from the Public Goods charge
  - RENs funding comes from this source
  - Unspent funds do carry over from year-to-year
- There is no charge for member agencies to participate in a REN

INLAND REGIONAL ENERGY NETWORK

Inland Regional Energy Network (I-REN) Introduction

WRCOG | CVAG | SBCOG

Riverside & San Bernardino Counties

Introduction

- Background
- What is a REN?
- Why a REN in the Inland Empire?
- Inland Regional Energy Network (I-REN) –Sectors Explained
- Benefits to participating cities/agencies
- Next Steps

I-REN Background

- December 3, 2018: The WRCOG Executive Committee authorized a joint cooperative agreement amongst WRCOG, CVAG, and SBCOG to move forward with the coordination and development of a REN between the three agencies.
- May 6, 2019: The WRCOG Executive Committee authorized the execution and submittal of a Professional Services Agreement with Frontier Energy & Bluepoint Planning for the development of a Business Plan, or application, to the CPUC to establish the Inland Regional Energy Network, or I-REN.
- February 26, 2021: The I-REN Business Plan was submitted to the CPUC for consideration to authorize I-REN as a Program Administrator in the State of California, thereby enabling access to the Public Goods Charge funds administered by the CPUC.
- November 2021: CPUC approved I-REN's Business Plan. I-REN becomes a Program Administrator (PA)

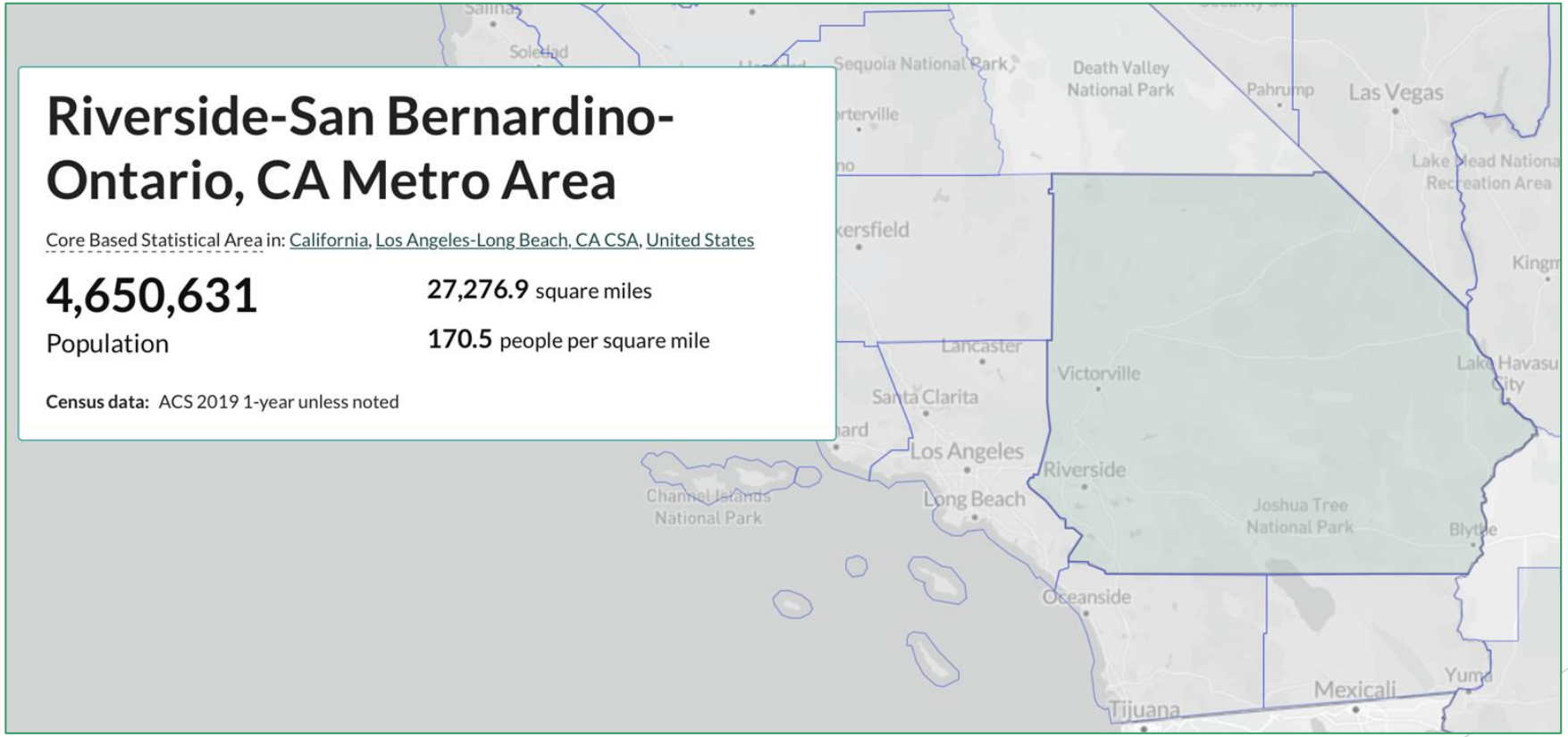
What is I-REN?

- A collaborative effort between WRCOG, CVAG, and SBCOG
- Activities focused and designed for Riverside and San Bernardino Communities
- Approved for program years 2022-2027
- Approved for three sectors:
  - Public (municipal owned facilities)
  - Codes & Standards
  - Workforce Education & Training

Why a new REN in the Inland Empire?

- Provide consistent and expanded EE programs to a region where COGs have long term partnerships with their 52 cities and Board of Supervisors from both Counties.
- Region is distinct from other Southern California areas, with its own robust culture and identity.
- Increasing impacts from climate is increasing the urgency and need.
- Member agencies have nearly a decade of collective experience and existing relationships from implementing energy efficiency programs locally for their constituents.
- Build capacity in EE in our regions for long-term benefits.

I-REN Service Territory

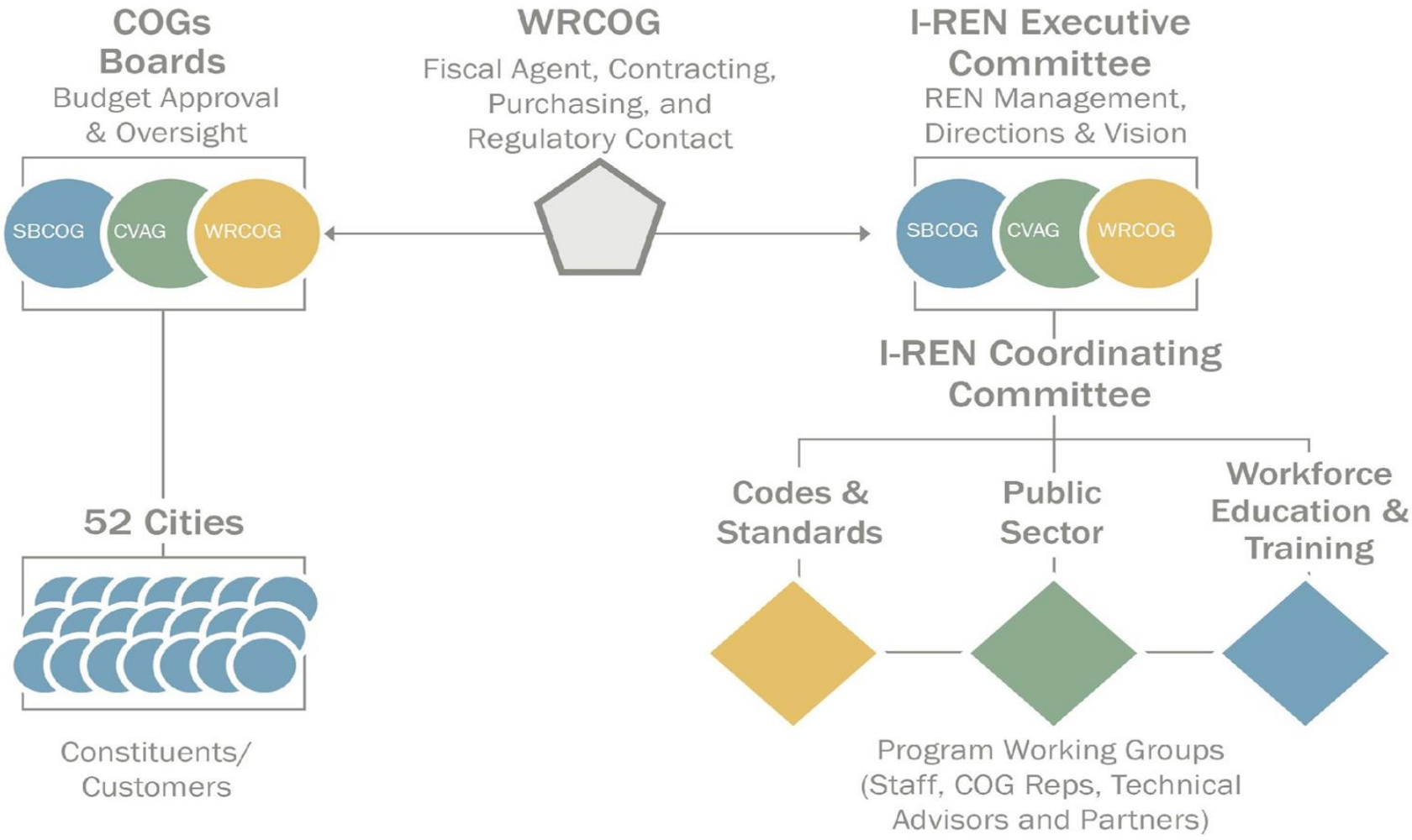


Public Sector **Workforce Education & Training** **Codes & Standards**

I-REN sectors - Explained

1. Public Sector
   - Strategic Energy Planning - identify opportunities, investment in municipal and community buildings.
   - Establish a Building Upgrade Concierge (BUC) services with digital and person-to-person technical assistance.
   - Incentives for meter-based savings (Normalized metered energy consumption or NMEC) achieved over 3-5 years.
2. Workforce, Education & Training (WE&T)
   - Work with local providers and schools, to bring comprehensive, equitable and targeted training opportunities to the region.
   - Improve workforce development and help enhance availability of skilled worker and connection with businesses.
3. Codes & Standards (C&S)
   - Develop activities to support C&S compliance and enforcement (training, outreach, and technical assistance).
   - Focus on empowering and supporting local building department staff to be energy efficiency leaders in their own communities.

I-REN Operational Structure



Budget

	2022	2023	2024	2025	2026	2027	Total
Public Sector	6,288,194	6,191,722	6,629,390	7,074,566	7,074,566	7,074,566	40,333,004
Workforce Education & Training	2,253,295	2,393,426	2,437,164	2,674,650	2,674,650	2,674,650	15,107,835
Codes & Standards	1,444,107	1,503,952	1,564,110	1,626,674	1,626,674	1,626,674	9,392,191
Evaluation Measurement & Verification * I-REN Portion	114,441	115,604	121,810	130,349	130,349	130,349	742,902
Total	**10,102,037**	**10,204,704**	**10,752,474**	**11,506,239**	**11,506,239**	**11,506,239**	**65,577,932**

Direct benefits to participating city/agency:

- Up to $25,000 each year for technical services (Public Sector)
- Access to Building Upgrade Concierge (BUC) – (Public Sector)
- Access to energy modeling services (Public Sector/Codes & Standards)
- Access to benchmarking (Public Sector/Codes & Standards)
- Access to quarterly Title 24 training (Codes & Standards)
- I-RENs Intern Program – ("REN-Turns?") – (Workforce Education & Training)

There is no charge for member agencies to participate in I-REN

Thank you!

The Coachella Valley Association of Governments (CVAG) is an organization through which its members do things for themselves, together.

CVAG is the regional planning agency coordinating government services within the Coachella Valley. By providing solutions to the common issues of the local governments and tribes that are its members, CVAG promotes a better quality of life and balanced growth for residents of Central and Eastern Riverside County.

Coachella Valley Association of Governments Member Jurisdiction Roster:
City Of Blythe
City of Cathedral City
City of Coachella
City of Desert Hot Springs
City of Indian Wells
City of Indio
City of La Quinta
City of Palm Desert
City of Palm Springs
City of Rancho Mirage
County of Riverside
Agua Caliente Band of Cahuilla Indians
Cabazon Band of Cahuilla Indians
Torres Martinez Desert Cahuilla Indians
Twenty-Nine Palms Band of Mission Indians

The purpose of the San Bernardino Council of Governments is to speak with a collective voice on important issues that affect its member agencies. Representatives from 24 cities and towns, and the San Bernardino County Board of Supervisors have a seat on the SBCOG Board of Directors. This governing board sets policy for the organization.

Recognizing that many issues and concerns are not constrained by political boundaries, SBCOG focuses on regional matters. SBCOG provides a forum to reduce duplication of effort and to share information. Working together we are better advocates for our communities and strengthen San Bernardino County's standing in the region and State.

San Bernardino Council of Governments Member Jurisdiction Roster:

City of Adelanto
Town of Apple Valley
City of Barstow
City of Big Bear Lake
City of Chino
City of Chino Hills
City of Colton
City of Fontana
City of Grand Terrace
City of Hesperia
City of Highland
City of Loma Linda
City of Montclair
City of Needles
City of Ontario
City of Rancho Cucamonga
City of Redlands
City of Rialto
City of San Bernardino
County of San Bernardino
City of Twentynine Palms
City of Upland
City of Victorville
City of Yucaipa
Town of Yucca Valley

The purpose of the Western Riverside Council of Governments (WRCOG) is to unify Western Riverside County so that it can speak with a collective voice on important issues that affect its members. Representatives from 18 cities, the Riverside County Board of Supervisors, and the Eastern and Western Municipal Water Districts, have seats on the WRCOG Executive Committee, the group that sets policy for the organization, and the Riverside County Superintendent of Schools is an ex-officio member.

Recognizing that many issues related to growth are not constrained by political boundaries, WRCOG focuses on a number of regional matters important to our future. By working together through its committee structure and utilizing resources, WRCOG is cost-effective by reducing duplication of effort and sharing information, enabling strong advocacy and strengthening Western Riverside's standing in the region and the State. In all its efforts, WRCOG strives to "respect local control, provide regional perspective, and make a difference" to elevate the quality of life throughout the subregion.

Western Riverside Council of Governments Member Agencies:

City of Banning
City of Beaumont
City of Calimesa
City of Canyon Lake
City of Corona
City of Eastvale
City of Hemet
City of Jurupa Valley
City of Lake Elsinore
City of Menifee
City of Moreno Valley
City of Murrieta
City of Norco
City of Perris
City of Riverside
City of San Jacinto
City of Temecula
City of Wildomar
County of Riverside
Eastern Municipal Water District
Western Municipal Water District
Riverside County Superintendent of Schools

Placeholder: Cost-Sharing Agreements

Placeholder: Frontier Contract for Development of Business Plan

Western Riverside Council of Governments

County of Riverside • City of Banning • City of Beaumont • City of Calimesa • City of Canyon Lake • City of Corona • City of Eastvale
City of Hemet • City of Jurupa Valley • City of Lake Elsinore • City of Menifee • City of Moreno Valley • City of Murrieta • City of Norco
City of Perris • City of Riverside • City of San Jacinto • City of Temecula • City of Wildomar • Eastern Municipal Water District
Western Municipal Water District • Riverside County Superintendent of Schools

2/16/2021

Commissioner Marybel Batjer
California Public Utilities Commission
505 Van Ness Ave.
San Francisco, CA 94102

Subject: Business Plan submittal of the Inland Regional Energy Network (I-REN)

Dear President Batjer:

On behalf of the Western Riverside Council of Governments, Coachella Valley Association of Governments, and the San Bernardino Council of Governments, we are pleased to submit the final business plan for the Inland Regional Energy Network's (I-REN) to the California Public Utilities Commission for review and consideration in becoming an approved program administrator to operate a new Regional Energy Network within the Counties of Riverside and San Bernardino.

Within this plan, the I-REN team looks to support the Inland Empire within the programmatic sectors of Workforce Education & Training, Codes & Standards, and Public to assist with meeting the state's energy efficiency goals but to also to continue to provide energy efficiency support within the Inland Empire. I-RENs mission is to actively participate in California's Clean Energy initiatives and build a stronger cleaner energy economy and community. Through this mission, I-REN will connect residents, business, and local governments to a wide range of energy efficiency resources to increase energy savings and equitable access through San Bernardino and Riverside Counties.

We look forward to the review from the CPUC and its staff on the I-REN business plan along with working with all program administrators within the state in the foreseeable future. Please do not hesitate to contact me with any questions at cdailey@wrcog.us.

Sincerely,

Casey Dailey
Director of Energy & Environmental Programs

Cc: Commissioner Genevieve Shiroma
Commissioner Martha Guzman Aceves
Commissioner Clifford Rechtschaffen
Commissioner Darcie Houck

Inland Regional Energy Network (I-REN)

2021-2025

Energy Efficiency Business Plan

WRCOG | CVAG | SBCOG

Submitted February 2021

WRCOG Western Riverside Council of Governments

CVAG

sb cog San Bernardino Council of Governments

I-REN Business Plan Contents

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Chapter 3: Codes & Standards

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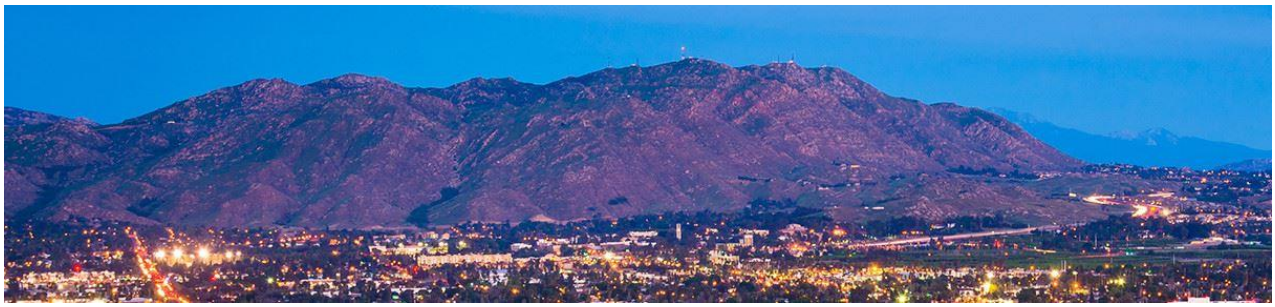

Inland Regional Energy Network Business Plan

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Executive Summary

I-REN Mission

To actively participate in California's Clean Energy initiatives and build a stronger clean energy economy and community.

Locally Administered and Delivered EE Programs

> *"RENs also have the unique opportunity to be able to leverage not only multiple local government entities into a single program delivery channel, but they also may be able to utilize funding from multiple sources to deliver more comprehensive and holistic programs, especially to hard-to-reach customers."*[1]

Initiated in 2019, the proposed Inland Regional Energy Network (I-REN) is a consortium of the Western Riverside Council of Governments, Coachella Valley Association of Governments, and San Bernardino Council of Governments that serve the counties of San Bernardino and Riverside. These partners have joined together to submit this Business Plan in order to establish locally administered, designed, and delivered energy efficiency (EE) programs.

Historically, the Inland Empire has faced challenges in receiving equitable opportunities to participate in energy efficiency and advanced energy. As dedicated representatives of local government, the I-REN consortium members bring established connections from their work serving this region and can provide support to fill gaps in existing energy efficiency services. I-REN will establish a locally administered regional energy network to ensure ratepayers in this region can become active participants in meeting California energy efficiency goals.

In addition, I-REN sees a critical need to accelerate action in the region, catalyzing current local government activities related to climate change through targeted and tailored energy efficiency programs, layering other efforts to increase impact. I-REN will focus their first Business Plan on assisting and empowering local government—county and municipal—and building the professional workforce. To that end this Business Plan will cover three main sectors: Public Sector, Codes and Standards, and Workforce Education and Training. They anticipate in future filings to grow into residential and commercial offerings as necessary to fill gaps and needs in the region.

Collectively known as the Inland Empire, the I-REN service area includes 11% of California's population, but its geographic arrangement, population, and distance from the state's major metropolitan areas result in inconsistent and insufficient service to the region. Further, the region is distinct from other southern California areas—particularly Los Angeles—with its own robust character, culture, and identity. As a collective, the councils of government that make up I-REN have implemented energy efficiency services locally for the better part of a decade, and have established the skill sets, knowledge, and networks to identify and address the unique challenges and opportunities head-on. The issues and concerns of the region require a consistent local presence to help transition to a clean economy and to reduce energy use effectively.

[1] California Public Utilities Commission (CPUC), Decision 19-12-021, December 5, 2019, page 18.

About I-REN

I-REN is a coalition of three councils of government, the Western Riverside Council of Governments (WRCOG), the Coachella Valley Association of Governments (CVAG), and the San Bernardino Council of Governments (SBCOG), encompassing San Bernardino County, Riverside County, and all of the jurisdictions within the region. Together, I-REN represents 52 cities, 78 unincorporated county areas, 17 tribes and 11% of the population of California.

WRCOG: WRCOG is a joint powers authority whose purpose is to unify Western Riverside County so that it can speak with a collective voice on important issues that affect its members. Representatives from 18 cities in Western Riverside County, the County of Riverside, and the Eastern and Western Municipal Water Districts have seats on the WRCOG Executive Committee, the policy-setting Board for the Agency. WRCOG currently operates a Local Government Partnership (LGPs) and has been successful over the years in energy efficiency retrofit projects and education for both residential and commercial customers. Since its inception in 2010, the Partnership has achieved savings of over 16 million kWh and over 9,000 therms.

CVAG: CVAG is the regional planning agency coordinating government services in the Coachella Valley. By providing solutions to the common issues of the local governments and tribes that are its members, CVAG promotes a better quality of life and balanced growth for residents of Central and Eastern Riverside County. CVAG secured Strategic Plan funding and implemented the "Green for Life" program, which helped seven cities and one tribe to reach ambitious energy savings goals. Through this grant, participants completed greenhouse gas inventories, Climate Action Plans, Energy Action Plans, and much more. The Green for Life program was run in tandem with the Desert Cities Energy Partnership (DCEP) to achieve further energy savings. DCEP included representatives from 10 CVAG member cities, one tribe, and representatives from Southern California Edison (SCE) and Southern California Gas (SoCalGas). While in operation, the 10-year DCEP program achieved savings of 5.2 million kWh and 22,000 therms. CVAG still maintains a strong working relationship with SCE and SoCalGas.

SBCOG: With membership comprised of representatives from 24 cities and the San Bernardino County Board of Supervisors, SBCOG focuses on regional matters and provides a forum to reduce duplication of effort and share information to advocate for local communities. SBCOG / San Bernardino Regional Energy Partnership (SBREP) received strategic planning funding to implement benchmarking for cities in the partnership with the goal of seeing where city facilities ranked amongst others in the region of similar size/operations. Since it was formed in late 2015, SBREP has reduced more than 3 million kWh and helped participating cities receive more than $1 million in incentives combined. To date, 13 cities have participated in SBREP.

WHAT IS A COUNCIL OF GOVERNMENT (COG)?

COGs are voluntary associations that represent member local governments, mainly cities and counties, to provide cooperative planning, coordination, and technical assistance on issues of mutual concern that cross jurisdictional lines.

COGs serve to develop consensus on many issues that need to be addressed in a subregional or regional context. If properly structured, COG duties complement and do not duplicate jurisdictional activities, and unify members on matters of mutual concern, but are independent of the responsibilities traditionally exercised by the individual members within their own communities.

Jurisdictions typically agree to form COGs following discussion and negotiation on common goals and objectives, which are usually consummated by execution of a Joint Powers Agreement (JPA). In most cases, adoption of a JPA is specifically authorized by state law. In California, JPA authority is granted under Section 6500 et. seq. of the Government Code.

I-REN Organization

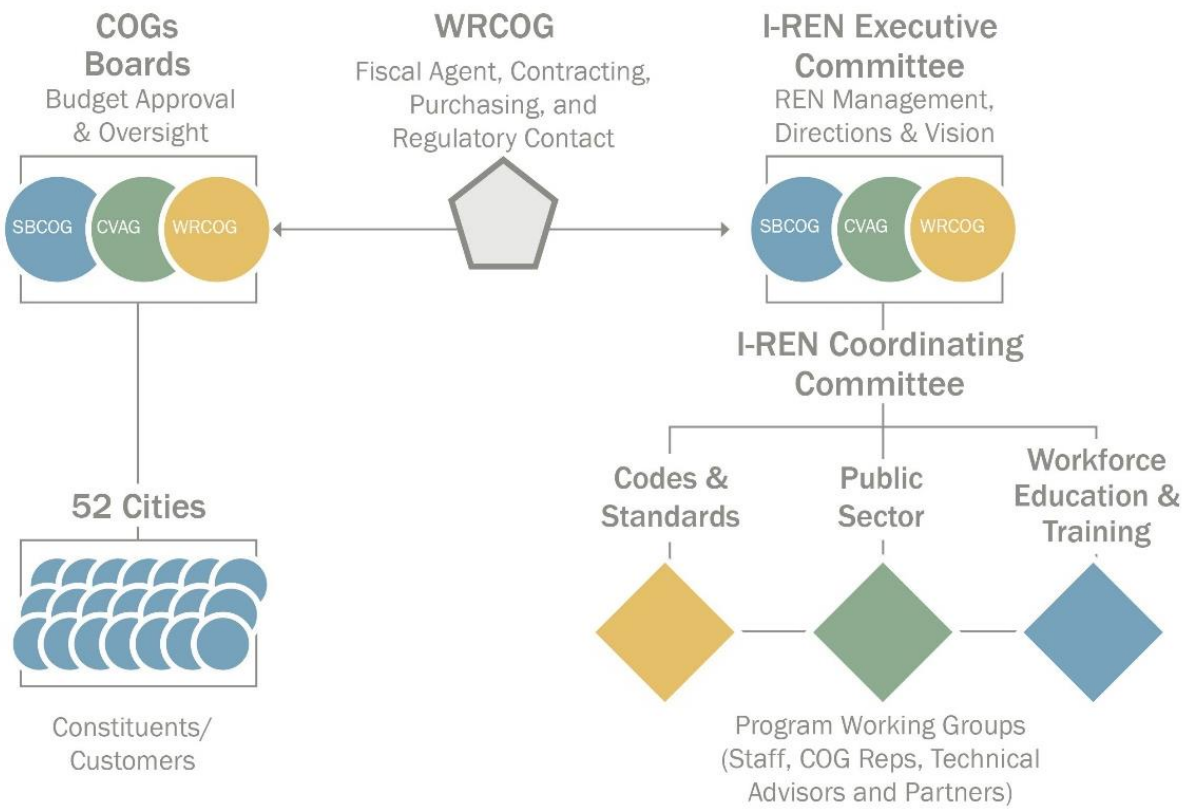

Figure 1-1. I-REN Governance

The I-REN organization builds on the robust and active Committee structure currently used for the three COGs (also referred to herein as the **I-REN governing agencies**). The graphic in Figure 1-1 illustrates the organization and the roles.

The COGs each have an Executive Committee which sets policy and oversees the budgets for the COGs. For I-REN, they will provide an oversight role to ensure accountability and service to the member cities. Representatives from the cities, the County Board of Supervisors, and the Municipal Water Districts collectively have seats on the Executive Committees for WRCOG, CVAG, and SBCOG. By working together through the committee structure and utilizing resources, the COGs are cost-effective by reducing duplication of effort and sharing information, enabling strong advocacy and strengthening the Region's standing.

WRCOG will serve as the fiscal agent, purchasing and contracting entity, and primary regulatory contact manager for I-REN. They will not have more decision-making power than the other COGs but will work through the committee structure to ensure equal engagement for the entire region.

Representatives from each COG will in turn be represented on the I-REN Committee and have equal power in I-REN decision making and management. The I-REN Committee will set all strategic direction,

vision, and specific policies related to the operation and management of REN activities, and will jointly consider regulatory issues.

The I-REN Committee will be advised by three programmatic working groups composed of I-REN staff, COG representatives, technical advisors, and partners. The Program Working Groups will focus on program design, implementation, marketing and outreach, and other day-to-day implementation activities. They will provide information, program proposals, and program tracking and monitoring reports to the I-REN Committee on a regular basis to ensure smooth operations and to address any issues or concerns that may arise.

I-REN Vision & Goals

The I-REN governing agencies have collectively developed a vision and three guiding goals to help shape its Business Plan, its future, and anticipated activities:

VISION

I-REN's vision is to connect residents, businesses, and local government to a wide range of energy efficiency resources to increase energy savings and equitable access throughout San Bernardino and Riverside counties.

GOAL 1.

Build capacity and knowledge to enable local governments to effectively leverage energy efficiency services and to demonstrate best practices. (Public Sector Chapter)

GOAL 2.

Ensure there is a trained workforce to support and realize energy efficiency savings goals across sectors. (WE&T Chapter)

GOAL 3.

Work closely with local building departments and the building industry to support, train, and enable long-term streamlining of energy code compliance. (Codes and Standards Chapter)

Definition of Market

The Riverside-San Bernardino-Ontario Metropolitan Statistical Area (MSA)[2], which includes the counties of Riverside and San Bernardino, makes up approximately 11% of California's total population, but their square mileage comprises approximately 17% of California's land area.

While the Los Angeles and San Francisco MSAs are the largest in the state by population, the Riverside-San Bernardino-Ontario MSA is a very close third – yet it has had historically low participation in energy efficiency programs and has been historically underserved by utility energy efficiency programs. This may be due in part to its distance of two- to three-hours to the Los Angeles MSA – many utility-run programs are administered from within the Los Angeles MSA, and naturally the program implementers focus their resources locally.

I-REN is excited for the opportunity to administer regionally appropriate resources locally within the third-largest MSA in the state and by leveraging existing local relationships the I-REN governing agencies are best suited to serve their respective communities.

- Riverside County: Population 2,189,641 (2010 Census), covering 7,208 square miles; population density of 304 people/square mile
- San Bernardino County: Population 2,035,210, covering 20,105 square miles (largest county in the United States by area); population density of 101 people/square mile

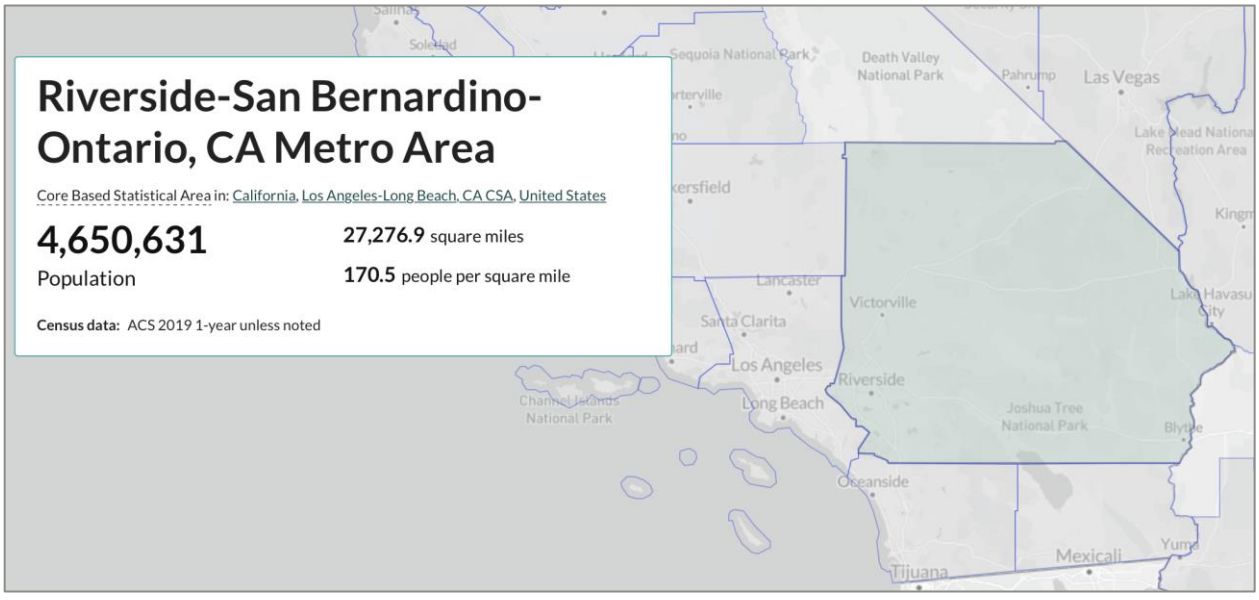

Figure 1-2. I-REN Service Territory Map[3]

[2] "Metropolitan Statistical Area (MSA) is a geographical area with a population of 50,000 or more, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties." Definition Provided by the California Employment Development Department.

[3] Source: https://censusreporter.org/profiles/31000US40140-riverside-san-bernardino-ontario-ca-metro-area/

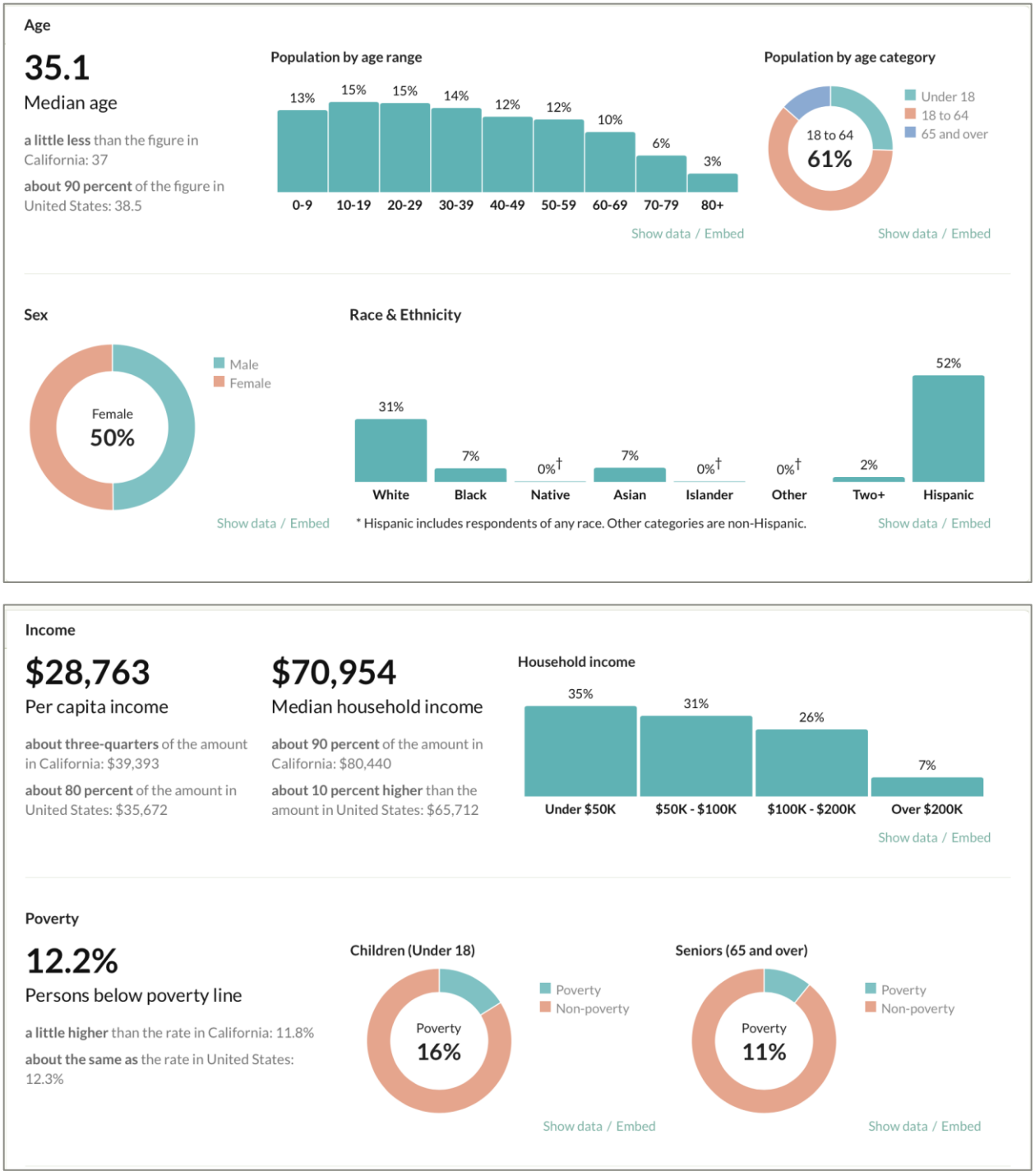

Figure 1-3. Riverside-San Bernardino-Ontario MSA Demographic & Income Data[4]

[4] Source: https://censusreporter.org/profiles/31000US40140-riverside-san-bernardino-ontario-ca-metro-area/

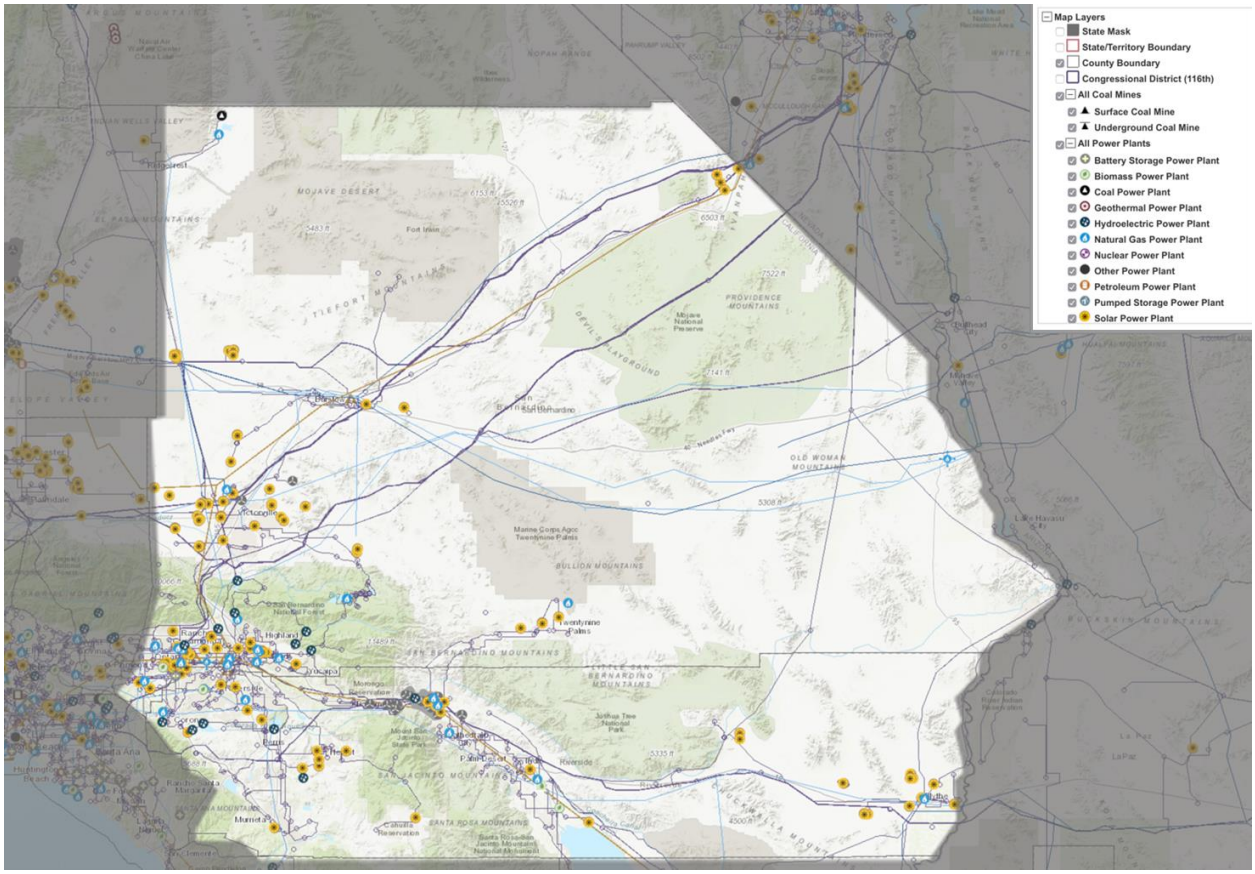

Figure 1-4. I-REN Territory Energy Infrastructure[5]

[5] Source: Energy Information Administration (EIA) https://www.eia.gov/state/?sid=CA

Addressing I-REN Regional EE and California's Energy Needs

The I-REN region is a diverse geography with mountains, deserts, distinct urban areas, tribal areas, and vibrant communities and towns. The region is served by SCE and SoCalGas and is included in the SoCalREN territory. While there are multiple Program Administrators (PAs) in the region, the actual services to local communities are limited and are not meeting the needs of this growing area. The reduction of LGPs in particular is impacting the ability of the local jurisdictions to aggressively reduce energy use in local government buildings and build the capacity to tackle the State's greenhouse gas (GHG) reduction goals.

REGIONAL CHALLENGES

Include but are not limited to:

- Large territory with geographically isolated rural and frontier areas
- High poverty rates, with unemployment exacerbated by COVID-19
- Lack of accessible workforce training resources, especially for disadvantaged workers
- Insufficient resources to serve DACs and tribal lands
- Extreme climate change impacts with increasingly hot and dry weather

The illustration in Figure 1-4 from Energy Information Administration (EIA) is a good demonstration of how the Inland Empire is used as a bridge for services to the large Los Angeles MSA, with pipelines, powerlines, etc. crisscrossing the territory. State goals included in SB 350, AB/SB32, and others all point to the need to increase the services and opportunities for energy savings in the inland areas of California. In Summer of 2020, the California Independent System Operator (CAISO) and SCE issued multiple heat wave warnings and flex alerts, asking all energy consumers to reduce usage during stressful times on the electricity grid. Coupled with massive fire events across the state, it is even more important for I-REN to implement and begin assisting its communities, and thus, the State.

The region's continued growth and increasingly hot and dry weather will likely result in an overall increase in energy consumption in the coming years. In addition, the I-REN territory has large sections of the region that are characterized as disadvantaged communities (DACs) as defined by SB 535, tribal lands, or with a population with a median income 60% below the statewide median, as seen in the maps and data on the pages that follow. These factors contribute to a substantial need for focused, consistent, local engagement to serve these communities and to help reduce energy consumption over time.

A combination of workforce limitations, relative geographic isolation and low density make large parts of the I-REN territory difficult to serve. However, the need to serve the population is real. The I-REN region represents 11% percent of the State's population and through ratepayer fees customers in both urban and rural areas of the region contribute to the funding the investor owned utilities (IOUs) receive to provide energy efficiency services. Utility workforce education and training programs are nearly absent, and LGPs are being phased out, and local jurisdictions are facing increased pressures to put resources and attention to other major issues from housing to job development.

I-REN has coordinated with the other PAs in the region, and consulted with the other RENs in the state, to ensure that this Business Plan is positioned to fill gaps, provide services appropriate to a REN, and address needs that cannot or are not being addressed by other PAs. As a new program implementer, I-REN aims to scale its role and goals appropriately to match its strengths and fit the needs of its constituents to ensure that it offers the region and the California Public Utilities Commission (CPUC or Commission) a portfolio of programs that has measurable value in increasing energy savings, community resilience, and long-term economic and environmental sustainability.

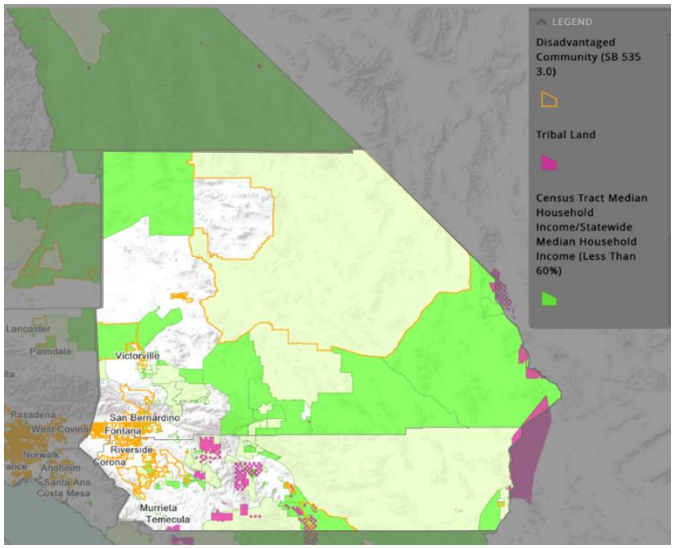

Figure 1-5. Disadvantaged communities and tribal lands in I-REN Territory
Source: CEC GIS Portal

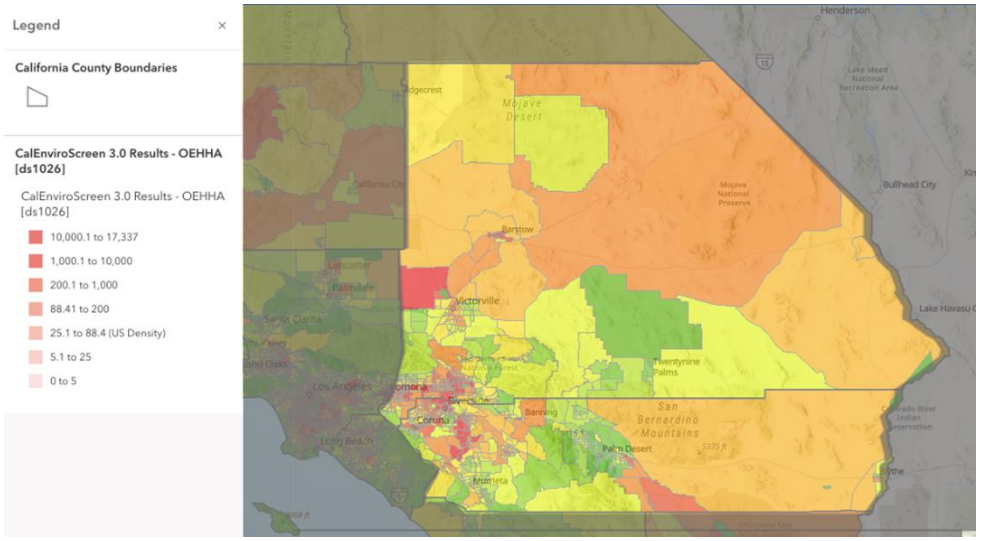

Figure 1-6. CalEnviroScreen 3.0 Results for I-REN Territory
Source: CalEnviroScreen 3.0

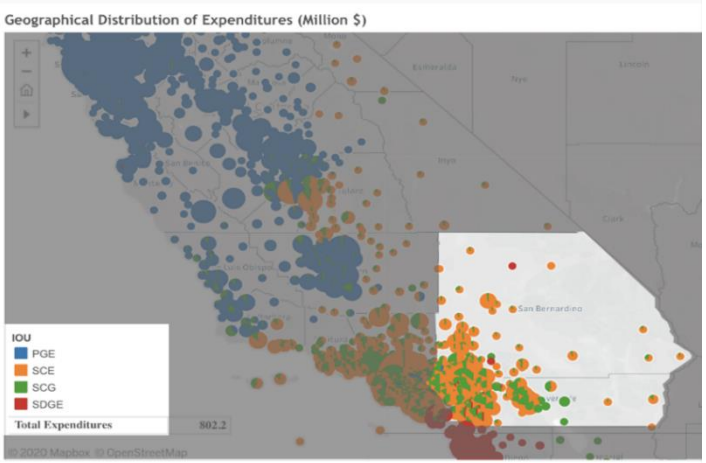

Figure 1-7. Geographical Distribution of Energy Efficiency Expenditures
Source: EESTATS Website, Geographic Distribution of Expenditures, 2016 data set

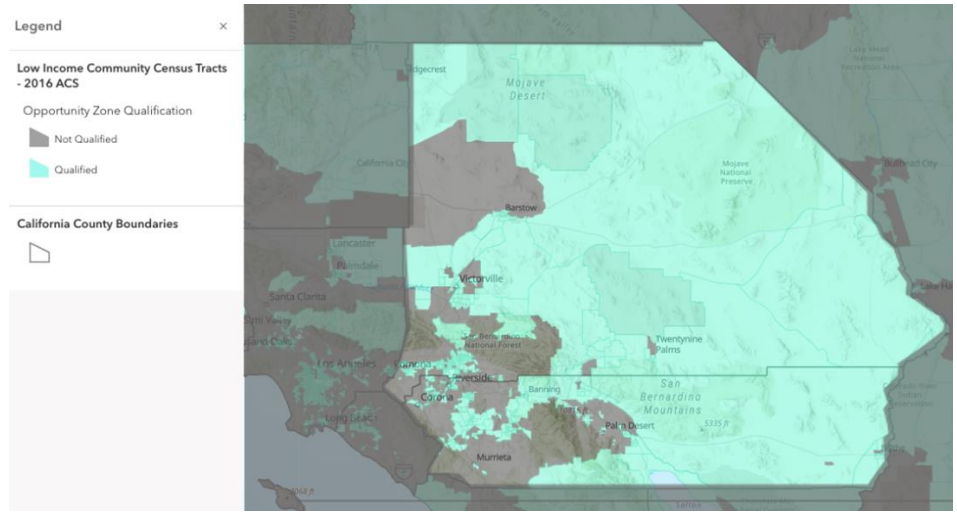

Figure 1-8. Low Income Opportunity Zones in I-REN Territory
Source: Low Income Community Census Tracts - U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

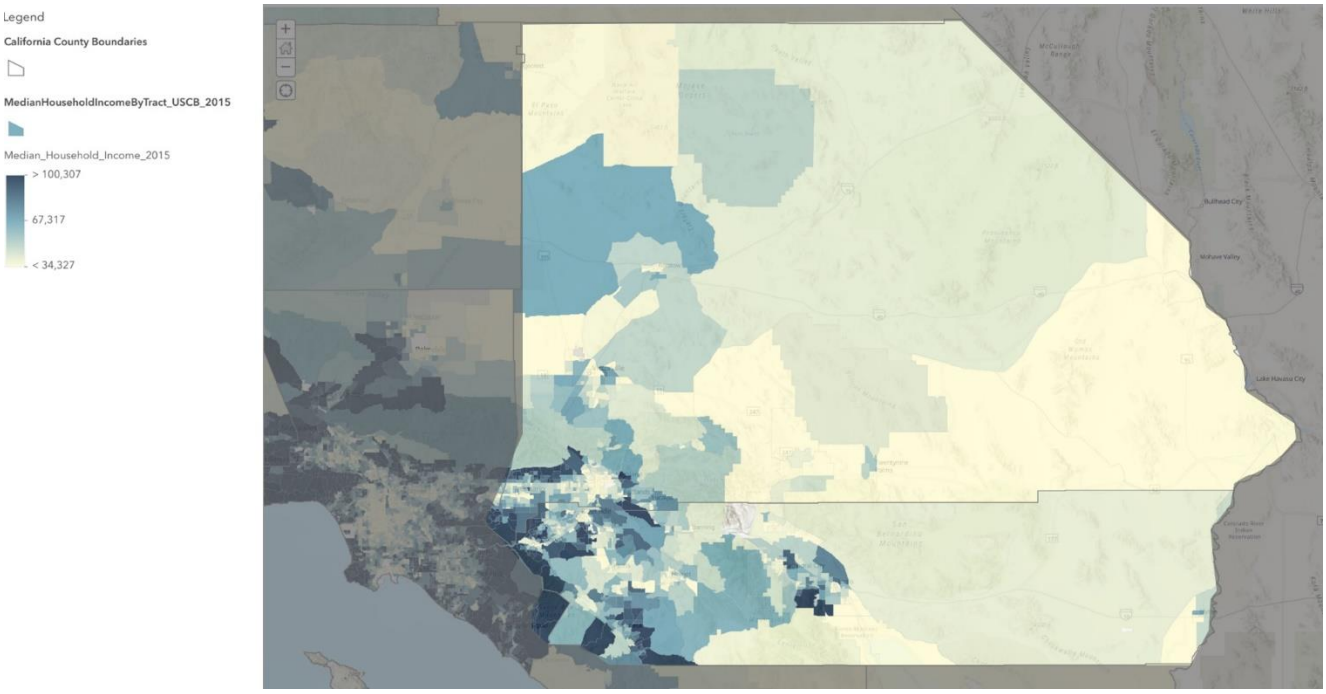

Figure 1-9. Median Household Income in I-REN Territory
Source: United States Census Bureau, 2015

Table 1-1. Inland Empire Cities & Percentage of Population Living in Poverty[6]

San Bernardino County		
Cities	**Number of Cities**	**Rate of Poverty**
Chino, Chino Hills, Grand Terrace, Rancho Cucamonga, Redlands, Upland	6	0% - 10%
Apple Valley, Big Bear Lake, Colton, Fontana, Hesperia, Highland, Loma Linda, Montclair, Ontario, Rialto, Victorville, Yucaipa, Yucca Valley	13	10% - 20%
Needles, San Bernardino, Twentynine Palms	3	20% - 30%
Adelanto, Barstow	2	30% - 40%
Riverside County		
Cities	**Number of Cities**	**Rate of Poverty**
Beaumont, Canyon Lake, Corona, East Vale, Indian Wells, Lake Elsinore, Menifee, Murrieta, Norco, Temecula	10	0% - 10%
Calimesa, Hemet, Indio, Jurupa Valley, La Quinta, Moreno Valley, Palm Desert, Palm Springs, Perris, Rancho Mirage, Riverside, San Jacinto, Wildomar	13	10% - 20%
Banning, Blythe, Cathedral City, Coachella	4	20% - 30%
Desert Hot Springs	1	30% - 40%

[6] Husing, Ph.D., John E., Economics & Politics, Inc. *Inland Empire Quarterly Economic Report: Inland Empire City Profile 2020.* October 2020. Available online.

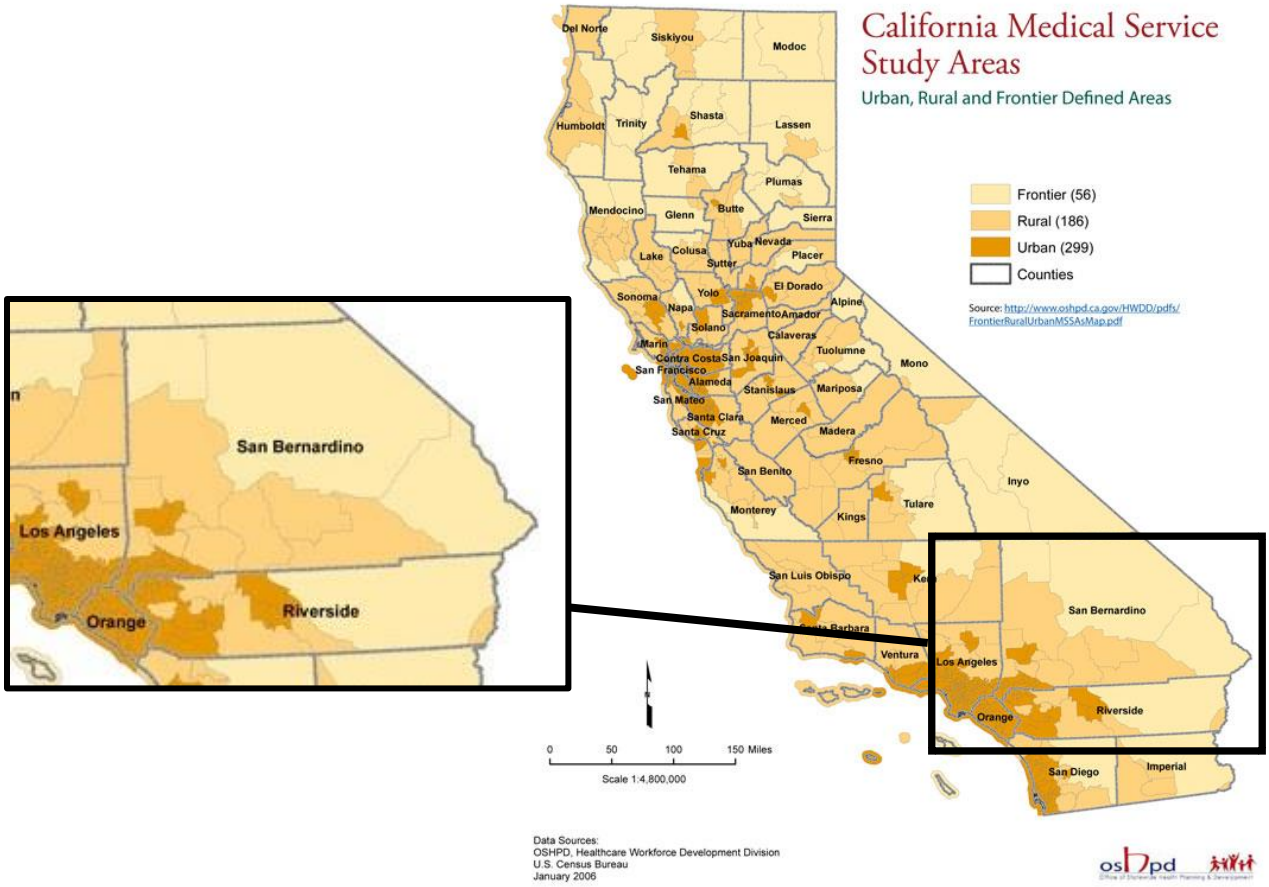

Figure 1-10. Urban, Rural and Frontier Defined Areas in I-REN Territory

Business Plan Sectors

In developing this Business Plan, I-REN aims to document its goals, strategies and tactics to increase the access and availability of energy efficiency services to its constituents and ensure value to the ratepayers in the region and the state. The plan consists of three main sectors, which align with the major I-REN work areas and are interrelated in their focus on supporting local jurisdictions and the energy efficiency workforce.

PUBLIC SECTOR

The I-REN Public Sector offering strives to establish robust and comprehensive wrap-around services for the local jurisdictions in the I-REN territory. Briefly, this includes Strategic Energy Planning to help identify opportunities, strategic investments in municipal and community buildings, establishing a Building Upgrade Concierge (BUC) service with digital and person-to-person technical assistance, and incentives for meter-based savings (Normalized Metered Energy Consumption or NMEC) achieved over three to five years. In their role as organizations dedicated to local government, the I-REN governing agencies have developed extensive networks and expertise with key partners in the public sector across

the region, and plan to leverage this history to continue facilitating energy efficiency upgrades. With 52 cities, 78 unincorporated county areas, and 17 tribal areas, there are significant needs. Further, many of these local governments tend to be under-resourced and lack the capacity, knowledge, and ability to effectively update their buildings. This will fill a gap in energy efficiency services by existing utilities, community choice aggregators (CCAs), or RENs.

CODES & STANDARDS: CROSS-CUTTING SECTOR

I-REN will implement a well-rounded set of activities related to supporting improved codes and standards compliance and enforcement through training, outreach, and technical assistance. The I-REN region includes many smaller jurisdictions that face significant challenges with codes and standards enforcement and compliance. The local building department staff in these jurisdictions are key to realizing energy savings from implementation and enforcement of codes and standards. For that reason, I-REN proposes to focus much of its C&S Sector work on empowering and supporting these local building department staff to be energy efficiency leaders in their own communities, through improved communications, protocols, and systems for increased efficiency. I-REN sees an opportunity to leverage its strong network with public sector staff to offer resources and support, while also providing targeted training and outreach to support building and construction industry actors to foster increased compliance with codes and standards.

WORKFORCE EDUCATION AND TRAINING: CROSS-CUTTING SECTOR

The I-REN team will work closely with local providers, as well as coordinating with other industry leaders statewide to bring more comprehensive, equitable and targeted training opportunities to the region. In addition, I-REN will work to improve workforce development and help enhance the availability of skilled workers and connections with businesses. Due in part to its geographic distance from major MSAs, the I-REN service area has historically had limited engagement in necessary workforce development opportunities. There is substantial demand but not a strong enough pool of skilled workers to meet that demand. The majority of IOU energy efficiency (EE) workforce training has typically taken place in the Los Angeles area or in border cities distant from many workers. I-REN sees an opportunity to strengthen its workforce by delivering trainings locally and using regional connections, especially with the Community Colleges and California State Universities (CSUs), and knowledge to engage and build workforce networks. Through these activities I-REN can help bridge the divide between training providers, job seekers, and employers to support the growth of a clean energy workforce and economy in the Inland Empire.

Purpose of Business Plan

The three primary agencies that constitute I-REN are pursuing the development of a new REN driven by the need to create equity and access in the region to energy efficiency programs. The Commission has recognized the value that local governments bring to energy efficiency program delivery and with the development of the REN model has provided an essential tool for local governments to leverage their expertise, networks, and deep connections to their communities to help reach state energy and climate goals.

While current energy data is not available by county, information from the CPUC's EESTATS website illustrates the lack of energy efficiency dollar expenditures in the region (Figure 1-7).

Similar to the Central Coast and the relatively new 3C-REN, Central/Inland California has historically been difficult to serve through current channels and will remain so unless there is an entity to directly serve and tailor programs for the region. As illustrated in the chart below, the I-REN region represents 4.5 million people and over 27,000 square miles, a substantial region with a need for its own independent REN dedicated to serving its communities.

Table 1-2. REN Population and Service Area Comparison

Organization	Counties	# of Cities	Total Population	Service Area (Sq. Miles)	Population per Sq. Mile
BayREN	9	101	7,753,023	6,907	1,123
3C-REN	3	25	1,581,504	7,877	201
SoCalREN	12	220	20 Million +	50,000 +	400 +
I-REN	2	52	4.5 Million	27,263	170

Increasing resources and technical services is essential to the health and success of the region. The I-REN region is at a disadvantage due to climate impacts that will continue to worsen year over year. The Inland Empire already has a greater number of cooling degree days (CDD) than most of Southern California and these are projected to increase by more than a month of additional CDD each year over the next decade. According to Cal-Adapt, the I-REN counties will experience an average of 41 additional cooling days per year in the next ten years (for a total of 304 CDD per year on average), compared to 1995-2005 data.

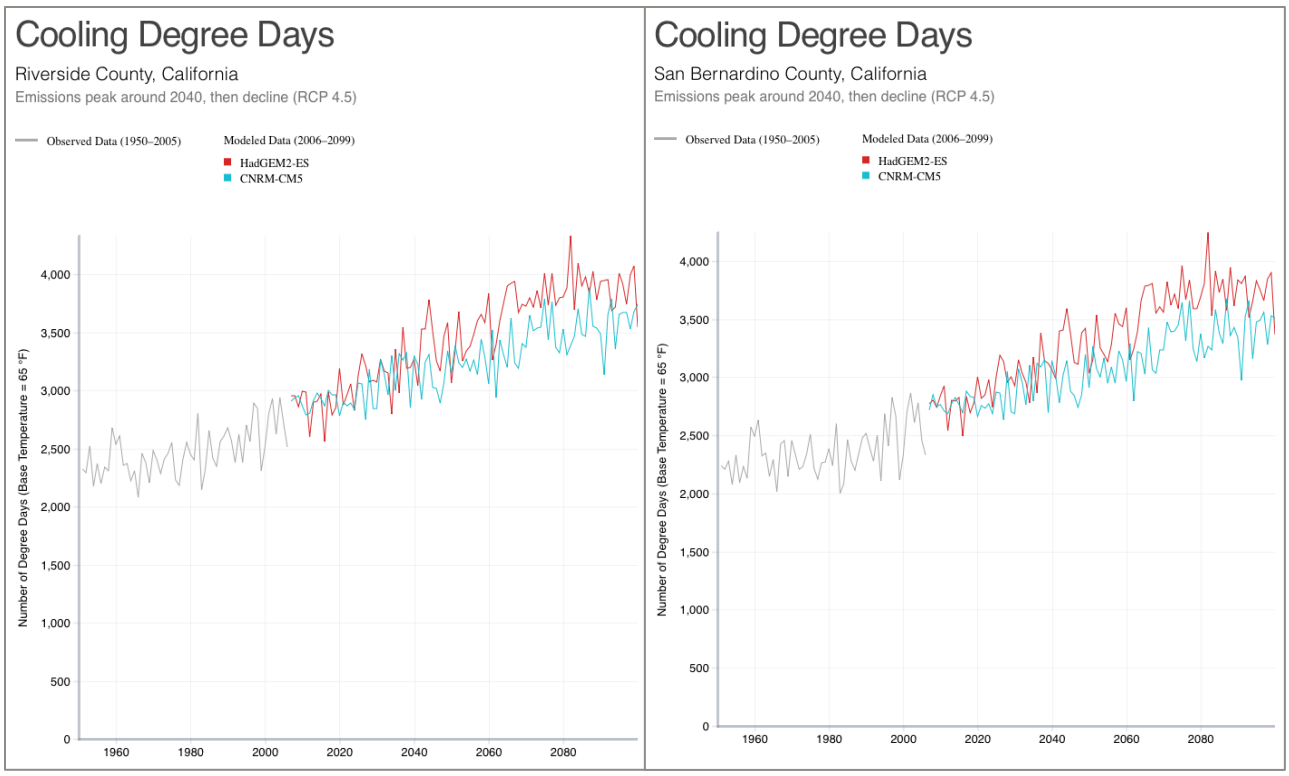

Figure 1-11. Cooling Degree Days in the I-REN Counties

Riverside and San Bernardino County Cooling and Heating Days are increasing substantially. Blue line is cooling days, red line is heating days. Source: Cal-Adapt

Overview

Supporting California's Energy Goals & Needs

The I-REN Business Plan has been informed by a range of state and regulatory policies and legislation. The following is a summary of the key policies and legislation that are considered and incorporated into this Business Plan.

Strategic Plan and Associated Action Plans

Senate Bill (SB) 350 Supporting Plans: Several plans have been developed to define and better outline how to achieve the goals required in SB 350 specific to doubling energy efficiency from existing buildings and for addressing barriers to low-income communities. This includes California Energy Commission (CEC) Staff report "Framework for Establishing the Senate Bill 350 Energy Efficiency Savings Doubling Targets," CEC report "Senate Bill 350: Doubling Energy Efficiency Savings by 2030," and the CEC "SB 350 Low-Income Barriers Study Recommendations." I-REN has reviewed these documents and considered their recommendations and insights into this Business Plan.

Existing Buildings Energy Efficiency (EBEE) Action Plan: The EBEE Action Plan provides detailed strategies and tactics for increasing energy efficiency in all existing buildings, including all residential buildings. The EBEE Action Plan outlines a series of priorities for local government leadership in energy efficiency, codes, and workforce that have been considered and incorporated when appropriate into this Business Plan.

California Energy Efficiency Strategic Plan (CEESP) and the Big Bold Goals: The 2011 CEESP outlines bold goals for achieving Zero Net Energy (ZNE) in all new residential buildings beginning in 2020 and directs program administrators to move away from single measure programs to deeper whole-house programs.

State Legislation and Goals

SB 100: The bill signed by Governor Brown calls for utilities to procure 60 percent renewable energy by 2030 and 100 percent carbon-free energy by 2045, and relevant to I-REN, to double the energy efficiency of existing buildings. The law makes California the largest jurisdiction to legally commit to clean energy. The goal to double energy efficiency for existing buildings will be a substantial lift and require coordination and collaboration with all PAs in the region.

Assembly Bill (AB) 1482; SB 246; SB 379; AB 2800: A range of state laws calling for preparation of state climate adaptation strategy, establishing the Governor's Office of Planning and Research (OPR) Integrated Climate Adaptation and Resiliency Program, requiring local governments to include adaptation and resiliency strategies in general plans, and requiring state agencies to account for climate change when planning new infrastructure, respectively. I-REN is facing immediate impacts due to climate change and intends to leverage its EE portfolio to not just reduce energy consumption but to improve the resilience of the communities in the region.

AB 841: Authorizes a one-time redirection of unspent energy efficiency funds from IOUs to schools. Programs would be designed to upgrade heating ventilation and air conditioning (HVAC) systems, increase energy efficiency, and address potential lead in water fixtures. I-REN's Public Sector initiatives align well with this new law and I-REN will look to build an approach to support this effort either directly or in coordination with regional PAs.

AB 32/SB 32: California Global Warming Solutions Act of 2006 – AB 32/SB 32 are the leading legislation in California directing substantial reductions in carbon emissions. The latest extension of SB 32 mandates the reduction of GHG gas emissions to 40 percent below the 1990 levels by 2030. As a consortium of local governments, this bill is central to I-REN's engagement and interest in deep energy savings and GHG gas reductions in the built environment. Climate Action Plans being developed throughout the region will be able to leverage and enhance I-RENs activities, particularly local governments.

SB 350 Clean Energy and Pollution Reduction Act of 2015: The primary aspect of this law relevant to I-REN is the mandate to increase energy efficiency by 50 percent in existing buildings by 2030 and its focus on addressing the needs of disadvantaged communities more effectively in accessing energy efficiency and solar resources, and workforce development. This Business Plan's goals and strategies draw substantially from this mandate.

SB 1414: Requires increased code compliance and requirement for confirmation of appropriate permits for installation of new HVAC and heat pumps systems. I-REN will incorporate these requirements into its programs and work with building departments to establish successful approaches to implement this across the region.

Regulatory Requirements

> *"The decision authorizes the continued operation of existing RENs and invites new REN proposals as business plans to be filed with the Commission, if they meet certain additional requirements as defined in this decision. Any new REN will be required to demonstrate unique value in achieving state goals, represent more than one local government entity, to coordinate with existing program administrators in their geographic area prior to filing their business plan, to vet their proposal with stakeholders through the California Energy Efficiency Coordinating Committee (CAEECC), and to explain their REN governance structure in their business plan filing."*[7]

I-REN is offering this Business Plan as a formal proposal to form a REN as outlined by the CPUC. I-REN has reviewed the CPUC guidance and pertinent decisions and is confident that it is well suited and needed to ensure equitable and effective energy efficiency services and resources to the region. This Business Plan provides details regarding the existing gaps, and lack of services needed in the region as required by the CPUC's guidance. The following outlines the specific CPUC guidance and direction addressed in the Business Plan.

The CPUC in Decision 12-11-015, Decision 16-08-019, Decision 18-05-041, and refined in decision 19-1-021 the REN's activities to three areas:

1. Activities that utilities or CCA program administrators cannot or do not intend to undertake.
2. Pilot activities where there is no current utility or CCA program offering, and where there is potential for scalability to a broader geographic reach, if successful.
3. Activities serving hard-to-reach markets, whether or not there is another utility or CCA program that may overlap.[8]

> *"What we seek to avoid with "overlap" concerns, is duplicative administrative costs that may be associated with multiple administrators operating in one area, disproportionate funding concentrated on one geographic area, and/or multiple program administrators conducting similar activities. In addition, we want to avoid customers receiving confusing or multiple competing offers for the same type of measure or project."*[9]

I-REN has focused on these three criteria areas and the need to provide value for ratepayers in the development of this Business Plan. The I-REN governing agencies have worked for nearly 18 months coordinating, developing and refining the presented sectors to ensure they do not overlap and instead fill clear gaps, address hard-to-reach communities, and assess opportunities to pilot new ideas that could be scaled beyond the I-REN region.

[7] CPUC, Decision 19-12-021, December 5, 2019, page 2.
[8] CPUC Decision 19-12-021, December 5, 2019, page 31.
[9] CPUC Decision 19-12-021, December 5, 2019, page 24-25.

Specifically, I-REN has engaged in the following coordination activities:

- Met with SCE, SoCalGas, and SoCalREN to discuss proposed programs and received Letters of Commitment to Cooperate (included in Appendix C).
- Connected with and secured support letters from numerous cities across the I-REN territory, as well as county officials and other regional organizations such as Southern California Association of Governments and Western Community Energy (letters included in Appendix C).
- Presented initial Strategic Framework and the Draft Business Plan to the Full California Energy Efficiency Coordinating Committee (CAEECC), once in May 2020 and then again in December 2020.
- Regularly attended and participated in CAEECC and Underserved Working Group meetings.
- Responded to and incorporated input from CAEECC stakeholders in Business Plan where appropriate (see Appendix D).
- Coordinated with CPUC Energy Division Staff and conducted a series of Ex Parte communications with Commission Staff and Commissioners to introduce I-REN, the proposed programs, and discuss I-REN's Business Plan submittal.

Providing Value

I-REN's Business Plan has been designed to be targeted, feasible, and actionable to provide a solid foundation for building and growing a successful REN and energy efficient portfolio in the region. The I-REN Business Plan is informed by the stakeholder process indicated above and shaped by I-REN's collective history of working in energy efficiency and clean energy through grant programs and previous local government programs. This relevant experience is summarized in selected examples below.

- WRCOG's LGP, known as the Western Riverside Energy Partnership (WREP), has existed for 10 years in WRCOG territory and has grown over those years to 18 members along with the County of Riverside to collectively support energy efficiency upgrades & community engagement.
- WRCOG's Streetlight initiative is a regional program for 11 agencies that provided financing and rebates for energy efficient street lighting to regional jurisdictions.
- WRCOG's CCA program, Western Community Energy (WCE), supports six member agencies which buys cleaner electricity and sells it at a lower cost to its customers.
- CVAG participated in the Desert Cities Energy Partnership (DCEP), a 10-year LGP including CVAG and its 10 member cities and utilities servicing its jurisdiction.
- CVAG's Property Assessed Clean Energy (PACE) program has service agreements with seven private firms to service CVAG's jurisdiction. PACE started in the Coachella Valley in 2007, starting with the City of Palm Desert and later transitioning to a regional approach through CVAG.
- CVAG received a Strategic Plan grant in the amount of $4.1 million to assist its cities with completing Greenhouse Gas inventories, Climate Action Plans, Energy Action Plans, and many more policies relevant to energy efficiency and reduction of their carbon footprints.
- CVAG's voluntary Green Building program is designed to encourage customers and contractors to go beyond Title 24 requirements.
- CVAG's Community Choice Aggregation (CCA) program, called Desert Community Energy (DCE), buys cleaner electricity and sells it at lower costs to its customers.
- SBCOG coordinated San Bernardino County's ZEV Readiness and Implementation Plan.
- SBCOG's Climate Resiliency Study "Resilient IE" includes the participation of all 24 cities in San Bernardino County.
- SBCOG's San Bernardino Regional Energy Partnership includes collaboration with 13 cities and the region's IOUs.

I-REN Value Metrics

There are three primary areas that I-REN sees establishing unique value with this Business Plan:

1. Building local government capacity to implement energy efficiency upgrades for municipal buildings and for improving code compliance.

2. Supporting economic sustainability and a strong local workforce by connecting effective and equitable opportunities for local EE training and demand for EE upgrades.

3. Establishing long-lasting, scalable tools through the Building Upgrade Concierge (BUC) that can be used in every city in the region for purposes including but not limited to sharing timely and accurate EE information, identifying rebates and incentives available through any PA's programs, and helping explain financing resources.

Aligning with Commission Decision Making

The I-REN Business Plan is designed to align with the current PA Business Plan timeframe to 2025. The objective is to develop an initial foundation and framework that will guide I-REN through its launch phase and into a sustainable future as a program implementer beyond 2025, with a focus on adaptability and flexibility.

I-REN recognizes that the Commission is considering changes to PA Business Plan processes and timing. The primary driving issues are COVID-19 impacts, changes to cost effectiveness, and updates to the Potential and Goals study. This Plan has been developed with these issues in mind and I-REN asserts that as a REN, it is not impacted by cost effectiveness rules nor the updates to the Potential and Goals study. This is due to the fact that the Potential and Goals Study does not specifically provide actionable data based on REN territories or REN programs and D.19-12-021 affirmed that RENs do not have a cost effectiveness threshold requirement.

The majority of the activities outlined in I-REN's Business Plan are non-resource programs, designed to support and enhance the activities of other PAs, with a targeted local government resource program not currently provided to its member audiences.

Major Trends

The following major trends will influence the design and impact I-REN's portfolio, including: COVID-19 and related economic stressors, racial inequity, increasing climate change impacts, geography, and the need for high performance buildings and a skilled workforce.

I-REN's proposed offerings have elements that can support each of these substantial issues and help to better serve the region, ensuring that ratepayer dollars are being allocated equitably to DAC, rural, tribal, and other communities who need the funds and who have been historically underserved.

Figure 1-12. Riverside Mission Hotel

Additional trends have been identified in each Sector chapter specific to that area.

COVID-19, Unemployment, and Economic Stresses on Local Government

The public health impacts from COVID-19 and associated economic challenges have severely affected the Inland Empire and will impact the region for the foreseeable future. In one example, research from the Economic Roundtable identified Riverside County workers as tied for having the highest risk in California for job loss due to COVID-19 economic impacts. "The burden of unemployment is unequally distributed. It rests most heavily on young adults, Latinos, and workers in restaurant, hotel, personal care, and janitorial jobs. Young adults graduating from school and attempting to enter the job market face extremely difficult challenges," the report concluded.[10]

Local governments will continue to face economic stresses in this region, particularly those cities reliant on sales taxes. Retail and commercial activity will be impacted negatively for the foreseeable future and may not rebound for years. It is uncertain what the specific and ongoing implications might be, but for the purpose of planning for I-REN, it is assumed based on what happened in the 2007-2010 recession that local government staffing will be frozen or reduced, that there will be less funding available for non-essential capital improvements, and planning funding will also be negatively impacted. The other cascading impacts from COVID-19 such as job loss, housing insecurity, health disparities and more will affect the region's local jurisdictions, and it is anticipated that it will continue to be difficult to engage and leverage local government staff as effectively while they respond to the ongoing pandemic and weather its long-term effects going forward. Economic development and affordability are important

[10] Lansner, Jonathan. Orange County Register. (April 17, 2020). Riverside County workers at highest risk for coronavirus-related layoff, by this math. Available online. Accessed November 2020.

issues to the I-REN region, which has seen population growth greater than other parts of California while having lower median income, prior to the COVID-19 pandemic.[11]

The I-REN portfolio will directly help local governments mitigate some of these issues by providing additional resources to the region, and enabling ongoing workforce development, economic activity, and capital improvements. As the COVID-19 pandemic and related economic crisis continues to unfold, the cross-cutting, interrelated activities proposed for I-REN's Public Sector, WE&T, and C&S programs will support local governments and building professionals in navigating the changes ahead.

Social and Racial Inequity

The issue of racial inequity and the widespread outpouring of support for a rehaul of community policing and systemic racial policies are critical concerns that I-REN can and will address within its portfolio. Some of the implications that are within I-REN's ability to address include the unequal access to energy efficiency dollars, the lack of support for small and underserved communities, ineffective programs for tribal communities, as well as overall lack of diversity. Proactive outreach to disadvantaged communities to assist increase the availability of a sustainable and equitable workforce will be important. I-REN's racial makeup is significantly more Hispanic and Latino than the rest of California, with fewer Asian residents. The majority of the region's residents - 51.6%, or 2.39 million - are Hispanic. Of those, approximately 1.5 million are primarily Spanish speaking.[12] This diversity requires I-REN to ensure that its programs, services, and resources are available and accessible to everyone.

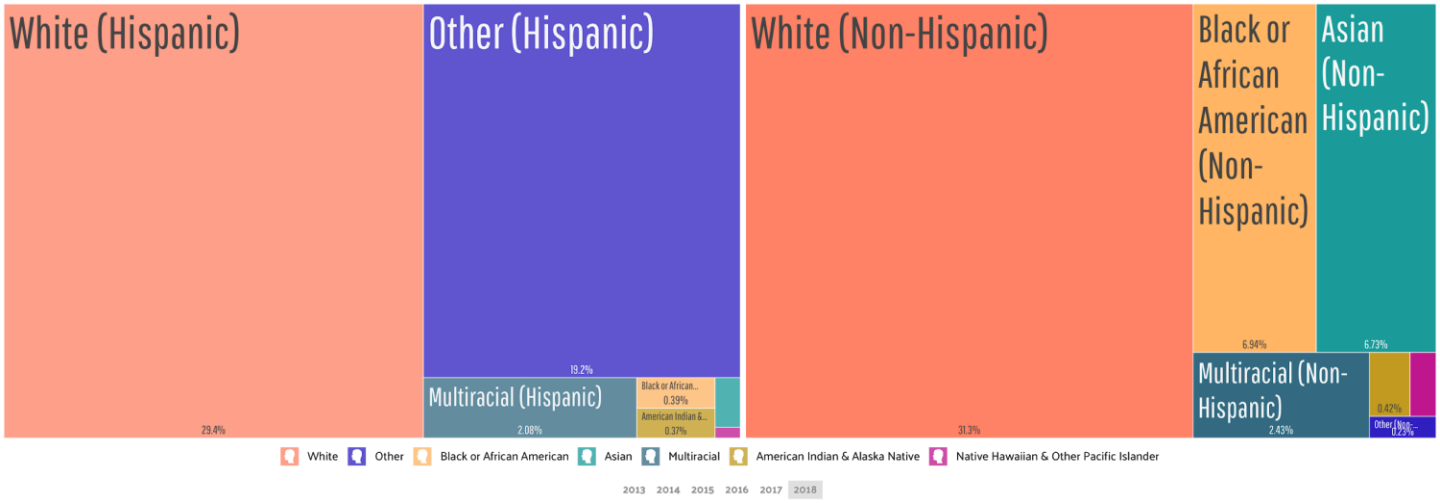

Figure 1-13. Inland Empire Racial Demographics[13]

[11] Jones, B., Elkind, E., Duncan, K., & Hanson, M. (2017). The Net Economic Impacts of California's Major Climate Programs in the Inland Empire. *UC Berkeley: Berkeley Law*. Available online. Accessed April 2020. http://laborcenter.berkeley.edu/pdf/2017/Inland-Empire-Net-Impacts.pdf

[12] https://datausa.io/profile/geo/riverside-san-bernardino-ontario-ca#demographics

[13] Source: https://datausa.io/profile/geo/riverside-san-bernardino-ontario-ca

Climate Change

As discussed earlier in this chapter, climate change is a slow moving but major challenge and trend with the broadest impacts to the I-REN service territory. Climate change is anticipated to impact Riverside and San Bernardino counties with increased extreme and variable weather resulting in increasingly hotter summers and more extreme winter storms. Drought and wildfire impacts will also increase, particularly as more homes and communities build into the wildlands urban interface. The Inland Empire already has some of the worst smog in the region contributing to health impacts and poor air quality. I-REN's Public Sector programs will work with local governments to upgrade public buildings' energy systems, particularly HVAC. Upgrades will be designed to offer safe and healthy hubs for community members, as well as better buildings for public sector workers. Together these improvements will help to improve the ability of the region to withstand these impacts while also reducing energy usage and greenhouse gas impacts related to energy use.

Geography

Geography is a major consideration for I-REN as a motivation to create a REN, and as a barrier that needs to be directly and consistently addressed. The I-REN service territory covers over 27,000 square miles – an area nearly the size of the state of South Carolina – with a range of communities, populations, and needs. Vast areas of the region are historically underserved by traditional IOU and other PA programs as they are far away from major cities, have a lack of an available workforce, and lower socio-economic standing making them less attractive to travel to provide services. I-REN, as a local government coalition, has a mission to equitably serve these outlying communities. Moreover, these communities are already part of the I-REN governing agencies' organizational structures and can be more effectively engaged and served through I-REN than any other existing organization.

High Performance Buildings and a Skilled Workforce

As the State moves to implement a near-ZNE residential code, and high performing existing buildings, the gap in the skills of the existing workforce will be exacerbated. The future reality of more complex building design, construction, and operation will require technical training and engagement with all contractor types to make sure that advanced measures, technologies, and approaches are installed and implemented correctly to achieve the anticipated savings. In addition, these complex concepts will require improved "soft skills" to communicate effectively to job crews, customers, building departments, and others. I-REN will incorporate these future-focused topics as they collaborate with training providers and industry stakeholders for their WE&T sector initiatives. In alignment with I-REN's value metrics, I-REN will structure its WE&T activities to help ensure the Inland Empire workforce has equitable opportunities to learn these new skills and technologies, especially in rural, DAC, low income, and other vulnerable communities.

Evolving from Past Cycles & I-REN's Role

I-REN sees this initial Business Plan submittal as the first step in establishing a strong foundation for a larger and more comprehensive portfolio of programs. This Business Plan is focused on building capacity and enabling local governments to become better leaders for energy efficiency, expanding the workforce, and solidifying the ability to enforce codes and standards.

Ultimately, I-REN envisions growing its offerings into the Residential and Commercial Sectors, particularly targeting hard-to-reach audiences in the region. I-REN sees the opportunity as the IOUs transition their residential programs in the coming years to step in and fill the gaps anticipated for hard-to-reach and less cost-effective EE to help address equity and access for all residents and disadvantaged communities. Equally, I-REN anticipates working with small and medium commercial businesses in the future to address their needs for EE. The region has a relatively large number of tribal communities and while I-REN will begin working with tribes during this Business Plan timeframe, it is anticipated that the focus will be on building relationships, listening, and collaborating to establish a better approach to meeting the unique requirements of tribal communities.

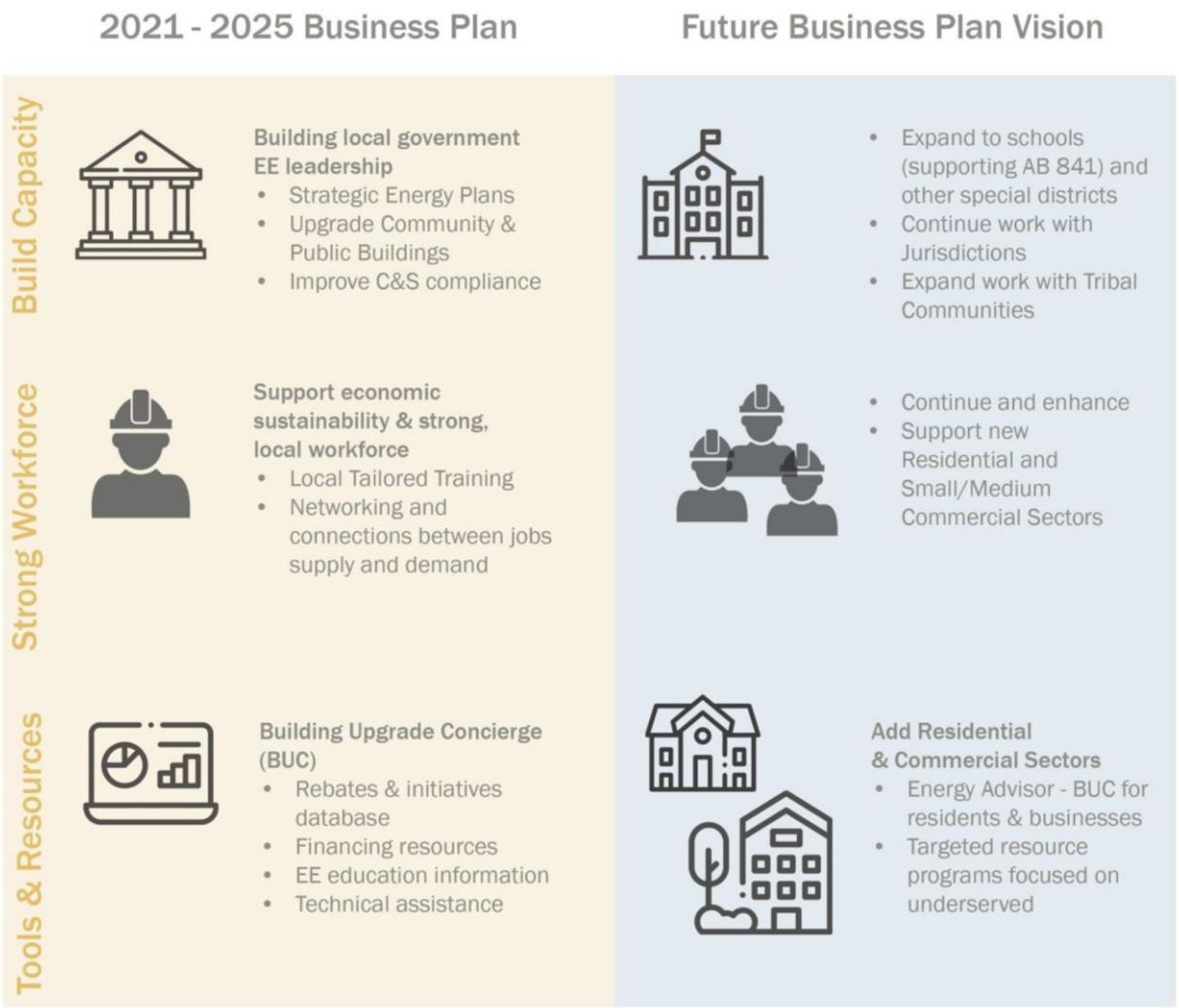

Figure 1-14. I-REN's Business Plan and Vision for the Future

Intervention Strategies and Goals

Figure 1-15. I-REN Strategic Framework

Challenges & Barriers

The I-REN region faces numerous barriers that in the past have hindered participation in energy efficiency programs. I-REN has developed its strategic interventions to address specific barriers (Table 1-3) faced by market actors in each of the three sectors it proposes to serve. This approach is based on insights from the I-REN governing agencies' work with their local jurisdictions, and with consideration also given to previous attempts by other PAs to address these sectors in this region. Those lessons learned informed I-REN's planning process, as well as best practices from successful programs elsewhere in the state.

Table 1-3. Barriers and Strategies for All I-REN Sectors

Problem	Barriers	Solutions	Strategies
Public Sector			
Local government staff lack the time and capacity to pursue complex energy efficiency projects.	Lack of understanding of best practices for energy efficiency solutions.	Technical assistance, locally focused resources, and person-to-person support are needed to develop and implement strategic energy plans for the Public Sector.	S1.1
There are a variety of EE programs and funding sources but it's unclear which apply to local government facilities or how to participate.	Confusion on types of incentives or financing programs and lack of staff resources to apply.	Tailored, locally focused program options are needed, as well as technical assistance and resources to prompt participation in I-REN and other PA programs.	S1.1 S1.2
Due to budgetary restrictions and complicated approval processes, public sector agencies may wait until burnout to replace equipment. At that time, they are forced to decide quickly, often without access to outside funding sources.	Disconnect between funding sources and timing of energy efficiency upgrades, which can increase building operating costs due to increased maintenance needs and higher energy use.	Strategic energy planning can help create a roadmap to plan for equipment upgrades. Technical assistance and locally focused programs can help agencies leverage resource programs and financing to reduce costs.	S1.1 S1.2
Older, inefficient equipment continues to function so it is not replaced due to cost and staff resource issues, yet it drives up building operating costs through increases in required maintenance and higher energy use.	Lack of drivers or need for local government agencies to replace existing working, but inefficient equipment.	Technical assistance combined with an incentive or financing option could make the difference in a public sector agency moving to a higher efficiency option for their facility.	S1.1 S1.2

Problem	Barriers	Solutions	Strategies
Navigating EE program participation and funding sources is complex and requires a dedicated "Energy Champion" who can devote time and attention to the subject.	Frequent changes in the Energy Champions, with high turnover in staff and overall lack of government staff capacity.	Person-to-person technical assistance and support is critical for maintaining relationships through staffing turnover.	S1.1
Local governments each have their own bureaucratic structure, and it's often unclear how they can enroll in EE programs or apply for financing opportunities.	Varied governance, and funding rules that limit ability to take advantage of typical IOU funding/LGP.	Technical assistance resources, and person-to-person support can help agency staff navigate the enrollment and approval process.	S1.1
Codes & Standards			
Codes and standards are continually being updated.	Lack of capacity and time to learn details of Title 24, Part 6 and implement effective means to review or enforce.	Technical assistance, tools, training, and resources can help local building department staff and permit applicants keep up with changes to codes and standards.	S3.1 S3.3
Some local building departments have limited staff resources for enforcing energy codes.	Energy efficiency is a low priority for building departments. Focus is on life and safety issues.	Ongoing training and outreach can help identify and fill gaps in building department capacity, while reinforcing the importance of energy codes and helping encourage local leadership in EE and C&S.	S3.1
Some local building departments have limited capacity to monitor and enforce changes, leading to uneven compliance across the region.	Lack of enforcement of permitting of HVAC systems for existing buildings as well as other energy code elements for new construction, especially related to the 2019 code cycle.	Outreach to construction firms and local building departments can help ensure consistent and timely information is being distributed across jurisdictions to support both compliance and enforcement.	S3.2
Both permit applicants (e.g., construction firms) and local building department staff have complicated	Technical questions and issues with permitting, codes, etc.	Technical assistance can help provide targeted support for permit applicants and local building departments, and other tools, and resources can offer accessible	S3.3

Problem	Barriers	Solutions	Strategies
requirements to follow for compliance and enforcement.		information to answer frequently-asked questions and help address known issues.	
Workforce Education & Training			
When employers are hiring for skilled positions in advanced energy and energy efficiency, they can't find people to hire.	Inability to find and retain skilled and qualified workers for the demand.	Foster connections between workforce and industry. Promote relevant training opportunities in collaboration with WIBs to upskill the workforce. Collaborate with employers to provide continuing education for professional development and employee retention.	S2.1 S2.2
Codes and standards compliance and energy efficiency programs require certain certifications and qualifications for builders to participate.	A limited number of builders in the region have the required certifications and qualifications.	Promote relevant training opportunities in collaboration with WIBs to upskill the workforce. Collaborate with employers to provide continuing education for professional development and employee retention.	S2.1
Energy efficiency and advanced energy projects and programs require qualifications that the local workforce does not have.	Lack of qualified workforce in Riverside/San Bernardino Counties, especially in the more remote areas.	Foster connections between workforce and industry. Promote relevant training opportunities in collaboration with WIBs to upskill the workforce.	S2.1
Job seekers cannot find jobs in energy efficiency and advanced energy.	Lack of job opportunities in energy efficiency and advanced energy in the region.	Foster connections between workforce and industry. Identify and illuminate the pathways to energy efficiency and advanced energy jobs.	S2.2
Contractors aren't aware of energy efficiency projects, or they cannot or choose not to perform this work.	Lack of interest or knowledge of the opportunities and benefits of energy efficiency projects.	Foster connections between workforce and industry. Promote relevant training opportunities to upskill the workforce. Collaborate with employers to provide continuing education for professional development and employee retention.	S2.1 S2.2

Problem	Barriers	Solutions	Strategies
Training is too far away and is offered infrequently or scheduled during work hours when it's inconvenient for contractors to attend. Also, existing training may be irrelevant to contractors or local projects' needs.	Training opportunities' availability, timing, and location pose challenges for contractors to be able to attend and are not designed for the particular needs of the local market.	Promote relevant training opportunities to upskill the workforce. Improve access to training by increasing the number of sites and delivery mechanisms, as well as options for timing that accommodates the workforce's schedule. Collaborate with employers to provide continuing education for professional development and employee retention.	S2.1

Portfolio Metrics & Budget

Metrics

Portfolio Level - All Sector Metrics

Table 1-4. Portfolio Level Metrics

Portfolio Level Metric	Baseline Year	Short Term Target 2021[14]	Short Term Target 2022	Short Term Target 2023	Mid Term Target (2024-2025)
CO2-equivalent of net annual kWh savings	2022	N/A	1,026	1,173	1,351
First year annual kW gross	2022	N/A	759	856	1,000
First year annual kW net	2022	N/A	720	813	949
First year annual kWh gross	2022	N/A	4,401,355	4,596,706	5,335,690
First year annual kWh net	2022	N/A	4,175,629	4,361,224	5,062,128
First year annual Therm gross	2022	N/A	127,668	155,636	181,325
First year annual Therm net	2022	N/A	121,315	147,884	172,295
Lifecycle ex-ante kW gross	2022	N/A	3,220	3,511	4,081
Lifecycle ex-ante kW net	2022	N/A	3,209	3,499	4,067
Lifecycle ex-ante kWh gross	2022	N/A	18,780,846	19,037,308	22,006,804
Lifecycle ex-ante kWh net	2022	N/A	17,825,745	18,069,440	20,887,250
Lifecycle ex-ante Therm gross	2022	N/A	512,633	624,822	727,940
Lifecycle ex-ante Therm net	2022	N/A	487,087	593,666	691,644
First year annual kW gross in Disadvantaged Communities	2022	N/A	190	214	250

[14] The resource program portion of I-REN's Public Sector will launch in year two, therefore there are no targets for 2021, the intended first year of their business plan activity.

Portfolio Level Metric	Baseline Year	Short Term Target 2021[14]	Short Term Target 2022	Short Term Target 2023	Mid Term Target (2024-2025)
First year annual kW net in Disadvantaged Communities	2022	N/A	180	203	237
First year annual kWh gross in Disadvantaged Communities	2022	N/A	1,100,339	1,149,177	1,333,922
First year annual kWh net in Disadvantaged Communities	2022	N/A	1,043,907	1,090,306	1,265,532
First year annual Therm gross in Disadvantaged Communities	2022	N/A	31,917	38,909	45,331
First year annual Therm net in Disadvantaged Communities	2022	N/A	30,329	36,971	43,074
Lifecycle ex-ante kW gross in Disadvantaged Communities	2022	N/A	805	878	1,020
Lifecycle ex-ante kW net in Disadvantaged Communities	2022	N/A	802	875	1,017
Lifecycle ex-ante kWh gross in Disadvantaged Communities	2022	N/A	4,695,212	4,759,327	5,501,701
Lifecycle ex-ante kWh net in Disadvantaged Communities	2022	N/A	4,456,436	4,517,360	5,221,812
Lifecycle ex-ante Therm gross in Disadvantaged Communities	2022	N/A	128,158	156,206	181,985
Lifecycle ex-ante Therm net in Disadvantaged Communities	2022	N/A	121,772	148,416	172,911
First year annual kW gross in Hard-to-Reach Markets	2022	N/A	N/A	N/A	N/A
First year annual kW net in Hard-to-Reach Markets	2022	N/A	N/A	N/A	N/A
First year annual kWh gross in Hard-to-Reach Markets	2022	N/A	N/A	N/A	N/A
First year annual kWh net	2022	N/A	N/A	N/A	N/A
First year annual Therm gross	2022	N/A	N/A	N/A	N/A
First year annual Therm net	2022	N/A	N/A	N/A	N/A

Portfolio Level Metric	Baseline Year	Short Term Target 2021[14]	Short Term Target 2022	Short Term Target 2023	Mid Term Target (2024-2025)
Lifecycle ex-ante kW gross	2022	N/A	N/A	N/A	N/A
Lifecycle ex-ante kW net	2022	N/A	N/A	N/A	N/A
Lifecycle ex-ante kWh gross	2022	N/A	N/A	N/A	N/A
Lifecycle ex-ante kWh net	2022	N/A	N/A	N/A	N/A
Lifecycle ex-ante Therm gross	2022	N/A	N/A	N/A	N/A
Lifecycle ex-ante Therm net	2022	N/A	N/A	N/A	N/A
PAC Levelized Cost ($/kW)	2022	N/A	$0.41	$0.36	$0.31
PAC Levelized Cost ($/kWh)	2022	N/A	$4.41	$3.79	$3.18
PAC Levelized Cost ($/therm)	2022	N/A	$2,632.75	$2,182.44	$1,883.26
TRC Levelized Cost ($/kW)	2022	N/A	$0.48	$0.42	$0.37
TRC Levelized Cost ($/kWh)	2022	N/A	$5.37	$4.42	$3.81
TRC Levelized Cost ($/therm)	2022	N/A	$0.41	$0.36	$0.31

Public Sector Metrics

Table 1-5. Public Sector Metrics

Public Sector Metric	Baseline Year	Short Term Target 2021	Short Term Target 2022	Short Term Target 2023	Mid Term Target (2024-2025)
First year annual kW gross	2022	N/A	759	856	1,000
First year annual kW net	2022	N/A	720	813	949
First year annual kWh gross	2022	N/A	4,401,355	4,596,706	5,335,690

Public Sector Metric	Baseline Year	Short Term Target 2021	Short Term Target 2022	Short Term Target 2023	Mid Term Target (2024-2025)
First year annual kWh net	2022	N/A	4,175,629	4,361,224	5,062,128
First year annual Therm gross	2022	N/A	127,668	155,636	181,325
First year annual Therm net	2022	N/A	121,315	147,884	172,295
Lifecycle ex-ante kW gross	2022	N/A	3,220	3,511	4,081
Lifecycle ex-ante kW net	2022	N/A	3,209	3,499	4,067
Lifecycle ex-ante kWh gross	2022	N/A	18,780,846	19,037,308	22,006,804
Lifecycle ex-ante kWh net	2022	N/A	17,825,745	18,069,440	20,887,250
Lifecycle ex-ante Therm gross	2022	N/A	512,633	624,822	727,940
Lifecycle ex-ante Therm net	2022	N/A	487,087	593,666	691,644
CO2-equivalent of net annual kWh savings	2022	N/A	1,026	1,173	1,351
Percent annual net kW per project building or facility	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator
Percent annual net kWh per project building or facility	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator
Percent annual net Therms per project building or facility	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator
Average annual net kw savings per project building floor plan area	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator
Average annual net kw savings per project building floor plan area	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator
Average annual net Therm savings per project building floor plan area	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator
Average annual Net kW savings per annual flow through project water/wastewater facilities	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator

Public Sector Metric	Baseline Year	Short Term Target 2021	Short Term Target 2022	Short Term Target 2023	Mid Term Target (2024-2025)
Average annual Net kWh savings per annual flow through project water/wastewater facilities	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator
Average annual Net Therms savings per annual flow through project water/wastewater facilities	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator
Percent of Public Sector accounts participating in programs	2021	TBD	TBD	TBD	TBD
Percent of estimated floorplan area (i.e., ft2) of all Public Sector buildings participating in building projects	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator
Percent of Public Sector water/wastewater flow enrolled in non-building water/wastewater programs	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator
PAC Levelized Cost ($/kW)	2022	N/A	$0.41	$0.36	$0.31
PAC Levelized Cost ($/kWh)	2022	N/A	$4.41	$3.79	$3.18
PAC Levelized Cost ($/therm)	2022	N/A	$2,632.75	$2,182.44	$1,883.26
TRC Levelized Cost ($/kW)	2022	N/A	$0.48	$0.42	$0.37
TRC Levelized Cost ($/kWh)	2022	N/A	$5.37	$4.42	$3.81
TRC Levelized Cost ($/therm)	2022	N/A	$0.41	$0.36	$0.31
Total program-backed financing distributed to Public Sector customers requiring repayment	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator
Percent of Public Sector buildings with current benchmark	2021	TBD	TBD	TBD	TBD
Average energy use intensity of all Public Sector buildings	2021	TBD	TBD	TBD	TBD

Public Sector Metric	Baseline Year	Short Term Target 2021	Short Term Target 2022	Short Term Target 2023	Mid Term Target (2024-2025)
Percent of floorplan area of all Public Sector buildings with current benchmark	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator

Codes & Standards Metrics

Table 1-6. Codes & Standards Metrics

Codes & Standards Metric	Baseline Year	Short Term Target 2021	Short Term Target 2022	Short Term Target 2023	Mid Term Target (2024-2025)
Net GWh savings	2021	N/A	N/A	N/A	N/A
Net MMTherms savings	2021	N/A	N/A	N/A	N/A
Net MW savings	2021	N/A	N/A	N/A	N/A
Number of measures supported by CASE studies in rulemaking cycle (current work)	2021	N/A	N/A	N/A	N/A
Number of measures adopted by CEC in rulemaking cycle (indicator of past work)	2021	N/A	N/A	N/A	N/A
Number of T-20 measures supported by CASE studies in rulemaking cycle (current work)	2021	N/A	N/A	N/A	N/A
Number of measures adopted by CEC in current year	2021	N/A	N/A	N/A	N/A
Number of federal standards adopted for which a utility advocated (IOUs to list advocated activities)	2021	N/A	N/A	N/A	N/A
Percent of federal standards adopted for which a utility advocated (#IOU supported / # DOE adopted)	2021	N/A	N/A	N/A	N/A
The number of local government Reach Codes	2021	N/A	N/A	N/A	N/A

Codes & Standards Metric	Baseline Year	Short Term Target 2021	Short Term Target 2022	Short Term Target 2023	Mid Term Target (2024-2025)
implemented (this is a joint IOU and REN effort)					
Number of training activities (classes, webinars) held, number of market actors participants by segment (e.g. building officials, builders, architects, etc.) and the total size (number of the target audience) by sector. (M) Number of training activities	2021	TBD	12	12	TBD
Number of training activities (classes, webinars) held, number of market actors participants by segment (e.g. building officials, builders, architects, etc.) and the total size (number of the target audience) by sector. (M) Number of participants	2021	TBD	360	360	TBD
Increase in code compliance knowledge pre/post training	2021	N/A	N/A	N/A	TBD
The percentage increase in closed permits for building projects triggering energy code compliance within participating jurisdictions	2021	N/A	N/A	N/A	N/A
Number and percent of jurisdictions with staff participating in an Energy Policy Forum	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator
Number and percent of jurisdictions with staff participating in an Energy Policy Forum	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator
Number and percent of jurisdictions receiving Energy Policy technical assistance.	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator
Number and percent of jurisdictions receiving Energy Policy technical assistance.	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator

Codes & Standards Metric	Baseline Year	Short Term Target 2021	Short Term Target 2022	Short Term Target 2023	Mid Term Target (2024-2025)
Buildings receiving enhanced code compliance support and delivering compliance data to program evaluators	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator

Workforce Education and Training Metrics

Table 1-7. Workforce Education and Training Metrics

Workforce Education and Training Metric	Baseline Year	Short Term Target 2021	Short Term Target 2022	Short Term Target 2023	Mid Term Target (2024-2025)
Number of collaborations by Business Plan sector to jointly develop or share training materials or resources.	2021	TBD	4	8	12
Number of participants by sector	N/A	TBD	90	120	150
Percent of participation relative to eligible target population for curriculum	N/A	N/A	TBD	TBD	TBD
Percent of total WE&T training program participants that meet the definition of disadvantaged worker.	N/A	TBD	TBD	TBD	TBD
Percent of incentive dollars spent on contracts* with a demonstrated commitment to provide career pathways to disadvantaged workers	N/A	N/A	TBD	TBD	TBD
Number Career & Workforce Readiness (CWR) participants who have been employed for 12 months after receiving the training	N/A	N/A	TBD	TBD	TBD

Portfolio Budget

The following budget tables summarize I-REN's portfolio and sector level budgets estimated based on proposed activities and tactics. I-REN's proposed budget will be responsive to CPUC decisions and direction. The budget will be responsive to market forces and needs, and will adjust based on information by internal and external program stakeholders and program assessments.

Table 1-8 shows I-REN's proposed budget for the portfolio and by sector.

I-REN's portfolio budget summarizes expected administration, direct implementation, incentives, marketing and evaluation measurement and verification costs. The budget was informed by both planned program activities as well as the caps and targets in the Energy Efficiency Policy Manual.

I-REN will work with SCE and SoCalGas to establish processes that streamline and expedite reimbursement for cost so that I-REN member agencies, subcontractors and vendors can be paid and reimbursed promptly and efficiently.

Table 1-8. I-REN Portfolio and Sector Budgets

	I-REN Portfolio Budget ($)					
Sector	**2021**	**2022**	**2023**	**2024**	**2025**	**Total**
Public Sector	4,314,226	6,288,194	6,191,722	6,629,390	7,074,566	**30,498,098**
Workforce Education & Training	2,312,208	2,253,295	2,393,426	2,437,164	2,674,650	**12,070,743**
Codes & Standards	1,416,066	1,446,107	1,503,952	1,564,110	1,626,674	**7,556,909**
Evaluation Measurement & Verification	92,154	114,441	115,604	121,810	130,349	**574,358**
Total	**8,134,654**	**10,102,037**	**10,204,704**	**10,752,474**	**11,506,239**	**50,700,108**

Public Sector ($)						
Budget Category	**2021**	**2022**	**2023**	**2024**	**2025**	**Total**
Administration	431,423	628,819	619,172	662,939	707,457	**3,049,810**
Marketing and outreach	258,854	377,292	371,503	397,763	424,474	**1,829,886**
Direct implementation - non incentive	3,623,949	3,782,083	3,701,047	3,818,688	3,942,635	**18,868,402**
Direct implementation - incentives	-	1,500,000	1,500,000	1,750,000	2,000,000	**6,750,000**
Total	**4,314,226**	**6,288,194**	**6,191,722**	**6,629,390**	**7,074,566**	**30,498,098**

Codes & Standards ($)						
Budget Category	**2021**	**2022**	**2023**	**2024**	**2025**	**Total**
Administration	141,607	144,611	150,395	156,411	162,667	**755,691**
Marketing and outreach	84,964	86,766	90,237	93,847	97,600	**453,414**
Direct implementation - non incentive	1,189,495	1,214,730	1,263,320	1,313,852	1,366,407	**6,347,804**
Direct implementation - incentives	-	-	-	-	-	**-**
Total	**1,416,066**	**1,446,107**	**1,503,952**	**1,564,110**	**1,626,674**	**7,556,909**

Workforce Education & Training ($)						
Budget Category	**2021**	**2022**	**2023**	**2024**	**2025**	**Total**
Administration	231,221	225,329	239,343	243,716	267,465	**1,207,074**
Marketing and outreach	138,732	135,198	143,606	146,230	160,479	**724,245**
Direct implementation - non incentive	1,942,255	1,892,768	2,010,477	2,047,218	2,246,706	**10,139,424**
Direct implementation - incentives	-	-	-	-	-	**-**
Total	**2,312,208**	**2,253,295**	**2,393,426**	**2,437,164**	**2,674,650**	**12,070,743**

Portfolio Energy Savings & Cost-Effectiveness Targets

Decision 19-12-021 affirmed that RENs do not have a cost effectiveness threshold requirement,[15] although I-REN has designed its portfolio to make efficient use of ratepayer funds while serving the needs of the region. With a large majority of funding in non-resource programs – Codes and Standards and Workforce Education and Training, two areas in which I-REN is particularly well equipped to serve – I-REN's portfolio cost-effectiveness results are not as high as could be seen with a larger portfolio heavy in resource programs. In 2021 results are zero because it is anticipated that the resource program under the Public Sector will claim its first energy savings in its second year, 2022. Estimated cost-effectiveness and savings targets for I-REN's overall program portfolio are shown in Table 1-9, and the estimated cost-effectiveness for resource program activity in the Public Sector is shown in Table 1-10.

Table 1-9. I-REN Overall Program Portfolio Energy Savings & Cost-Effectiveness Targets

Program Portfolio	2021	2022	2023	2024	2025
Net kWh	0	4,175,629	4,361,224	4,361,224	5,763,031
Net kW	0	720	813	813	1,084
Net Therms	0	121,315	147,884	147,884	196,707
CO2	0	1,736	2,039	1,937	2,781
NOx	0	640	668	668	883
Total Resource Cost (TRC)	0	0.17	0.19	0.19	0.25
Program Administrator Cost (PAC)	0	0.20	0.22	0.23	0.30
Ratepayer Impact Measure (RIM)	0	0.15	0.16	0.17	0.20

Table 1-10. I-REN Public Sector Resource Activity Cost-Effectiveness Targets

Public Sector Resource Activity	2021	2022	2023	2024	2025
Total Resource Cost (TRC)	0	0.45	0.51	0.47	0.61
Program Administrator Cost (PAC)	0	0.74	0.81	0.79	1.03
Ratepayer Impact Measure (RIM)	0	0.35	0.35	0.36	0.37

[15] CPUC, Decision 19-12-021, December 5, 2019, Conclusions of Law paragraph 11.

Accounting Practices

I-REN will follow accounting practices consistent with local government accounting programs, Generally Accepted Accounting Principles, CPUC's Energy Efficiency Policy Manual and any additional accounting guidance provided in decisions and Energy Division reporting and filing templates.

WRCOG's Chief Financial Officer (CFO) will be responsible for overseeing the financial management and accounting for I-REN which will include oversight of the annual budgets and managing and maintaining program expenditures.

Solicitation Plan

As local government agencies, I-REN will follow current bidding and solicitation rules set by the I-REN Committee and WRCOG as the lead agency. These rules were designed to ensure fair and equitable bidding in accordance with state and local laws.

As a local government, WRCOG's procurement processes are open and transparent, and all contracts must be reviewed and executed by the Board, comprised of elected officials. Contract approvals are agendized and discussed at public Board meetings that are subject to the Brown Act. Compliance with state requirements found in statute and local rules and procedures related to competitive solicitations are built into WRCOG's procurement guidelines. Also, as a local government, WRCOG is subject to the Public Records Act, so procurement documents and correspondence are available to the public.

WRCOG as the lead agency for I-REN will utilize WRCOG contracting and purchasing procedures. WRCOG's contracting process consists of a competitive solicitation process that allows interested parties to submit proposals to WRCOG for consideration of various project sizes / scopes. WRCOG and assigned team members screen project proposals and invite bidders for an interview if selected. Once the interviews conclude, WRCOG recommends the top bidder to its committee structure where a formal action is taken in order to move forward with bringing on the selected bidder for the project. As part of the competitive solicitation process, WRCOG also coordinates with the non-selected bidders if they would like a debrief on their proposal so that the non-selected bidder can better understand how to make themselves more competitive for future solicitation processes.

The approval committee structures that make a decision and recommendation for competitive solicitations are the Administration & Finance Committee along with WRCOG's executive board known as the Executive Committee. For contract purposes, the final and approved contract known as the Professional Services Agreement (PSA) is signed by WRCOG's Executive Director only if approved at the Executive Committee. Signatures will consist of WRCOG legal and WRCOG Executive Director.

WRCOG maintains an internal Financial Manual, which guides the Agency's actions as it relates to many fiscal matters. The Manual addresses accounting issues such as accounts payable, accounts receivable, budgeting, and contracts. The Manual does not provide any guidance regarding the issuance of an RFP. Staff updates the internal Manual regularly to address regulatory changes and to maintain internal consistency with other documents such as the WRCOG Employee Policies and Procedures Manual. The Financial Manual is to be updated when this RFP Policy is updated.

WRCOG's current Request for Proposals (RFP) protocol:

- No RFP is required if the value of the resulting contract is $100,000 or less, which falls under the Executive Director's Single Signature Authority. WRCOG may still choose to issue an RFP for services less than this amount, depending on individual circumstances.
- An RFP is required when the value of the contract is between $100,000 and $200,000, unless the Executive Director makes a finding that one or more of the following conditions occurs:

  - The issue and/or required services are time critical and release of an RFP would cause an undue delay;
  - The service requires unique expertise or knowledge of the region which is not generally available; therefore, an RFP is unlikely to generate a significant number of responses; and/or
  - WRCOG is responding to a request from a member agency.

- If a contract is then issued without an RFP based on these circumstances, then the Staff Report requesting approval of the contract in question must cite these circumstances and demonstrate why no RFP is required.
- An RFP is automatically required for any contract in excess of $200,000.

Inland Regional Energy Network Business Plan

Chapter 2: Public Sector

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Introduction

The councils of government (COGs) that make up I-REN have direct relationships and a history of collaborating with the many government jurisdictions in their territory. This existing foundation of connections is reflected in the numerous letters of support I-REN has received from local and regional jurisdictions through the stakeholder coordination process to prepare this Business Plan (see Appendix C: Letters of Commitment & Support). I-REN will use these relationships and regional expertise to effectively build local government capacity and knowledge to complete energy efficiency upgrades to public facilities and buildings in a strategic and effective manner. Further, these public sector activities will strive to demonstrate and communicate best practices for the community, in alignment with the Existing Buildings Energy Efficiency Action Plan, Strategy 1.7 for Local Government Leadership. I-REN's Public Sector offerings will include a combination of technical assistance, targeted incentives, and financing resources to accomplish this goal.

Audience Served

I-REN's public sector offerings will serve the members of the three Councils of Government (COGs) represented in I-REN, including the counties of Riverside and San Bernardino, the cities, school districts, water districts, special districts, and tribes. These regional programs will target, but not be limited to, upgrades to existing public buildings and facilities with high energy use and older equipment. While the offerings will consider all public building types, there will be a focus on community-serving buildings such as community centers, libraries, senior centers, schools, and fire and police buildings. Through energy efficiency projects in these facilities, I-REN can provide benefits that will flow to disadvantaged, low income, and other vulnerable communities where these facilities serve as cooling centers offering protection from the region's extreme heat. The I-REN programs will be multi-benefit in nature, layering energy efficiency strategies with greenhouse gas reductions, wildfire mitigation, community resilience and climate adaptation measures.

PUBLIC SECTOR GOAL & STRATEGIES

Goal 1. Build capacity and knowledge to enable local governments to effectively leverage energy efficiency services and to demonstrate best practices.

S1.1 Develop a regional Building Upgrade Concierge (BUC) for local governments, special districts, and tribal communities with technical guidance and tools to inform and enable priority energy improvements.

S1.2 Establish incentives and leverage existing financing mechanisms to assist local governments with implementing energy efficiency projects in public buildings.

BUDGET

2021-2025 Budget (total): $30.5M

Challenges and Solutions

I-REN's local governments have limited incentives to complete energy upgrades and are challenged to maintain and upgrade these facilities due to lack of funding for capital improvements, a lack of awareness related to energy efficiency and other energy efficiency program opportunities, limited time and staff resources, along with conflicting priorities. Further, State mandates such as building energy benchmarking (AB 802) requirements, energy code compliance, and climate adaptation planning are additional unfunded regulations and requirements on

local governments and are difficult to meet given competing priorities. These challenges are exacerbated now due to the COVID-19 pandemic, the associated economic downturn and increased pressure on local government agencies to respond to a variety of issues.

To address these challenges, I-REN will leverage its existing public sector partnerships and networks across the region to offer technical assistance, implement resource program options, and improve access to financing. Implementing these initiatives will further I-REN's goals of encouraging resilience and continuous capacity building for local governments, thereby strengthening their ability to serve their community through energy efficiency projects in their own facilities, while also saving on building operations costs and contributing to local and statewide goals for energy savings, climate resilience, and greenhouse gas emissions reduction.

Strategies

Strategies to achieve I-REN's goals for the Public Sector will place added emphasis on "aggressive efficiency for jurisdiction-owned buildings,"[1] and energy efficiency improvements to existing buildings that serve low income, moderate income, and disadvantaged communities. I-REN has centered its Public Sector approach around two strategies:

S1.1 Develop a regional Building Upgrade Concierge (BUC) for local governments, special districts, and tribal communities with technical guidance and tools to inform and enable priority energy improvements.

I-REN will provide person-to-person technical assistance to local governments to support energy efficiency projects including, but not limited to, strategic energy planning and benchmarking. I-REN will also develop tools and resources to increase public sector participation in other federal, state, and local programs.

S1.2 Establish incentives and leverage existing financing mechanisms to assist local governments with implementing energy efficiency projects in public buildings.

I-REN will deliver a resource offering to provide incentives for meter-based savings (Normalized Metered Energy Consumption or NMEC) achieved over three to five years. I-REN will also leverage sustaining financing mechanisms to support HVAC upgrades in public buildings. If a third-party program becomes available that serves this need and makes this resource offering duplicative, I-REN will focus its full Public Sector budget on providing technical assistance and strategic energy planning through the BUC. I-REN has designed its Public Sector offerings to be flexible and its goals and targets can be adjusted accordingly to meet the needs of the region.

Through their extensive work with local governments and their committee structure, the I-REN governing agencies have become a trusted voice and advocate for the public sector in their two counties. By collaborating with their member jurisdictions and using their established communication networks, I-REN can provide regionally focused public sector solutions to help local governments succeed as energy efficiency leaders.

[1] Existing Buildings Energy Efficiency Action Plan, Strategy 1.7 Local Government Leadership. https://efiling.energy.ca.gov/getdocument.aspx?tn=206015 Accessed October 2020.

Market Characterization

Market Actors

The California Public Utilities Commission (CPUC) defines the public sector as encompassing a broad range of organizations and facilities, including federal, state, and local governments such as cities, counties, and special districts. The public sector also includes educational institutions such as higher education campuses, community colleges, and K-12 schools. The market actors who impact and are impacted by energy efficiency work in the public sector include but are not limited to the following:

- **Local Governments:** The elected officials and other staff at local jurisdictions responsible for decision-making around budgets and spending for publicly-owned facilities. These individuals include elected officials, county boards of supervisors, tribal councils, special district supervisors, city managers, planners, community development staff, and sustainability staff. Building Department staff also play a role, which offers an important cross-cutting opportunity for work with the I-REN Codes & Standards sector initiatives.
- **Facility Staff:** Depending on the size of the facility and/or the resources of the jurisdiction, public sector facilities may or may not have dedicated facility managers, operations staff, or building engineers. Facility staff may be responsible for one building or a campus of various buildings and infrastructure. In smaller jurisdictions and smaller facilities, staff with other primary job functions may have secondary responsibilities for operations and building maintenance. Facility staff may have widely varying levels of responsibility and training on energy efficiency program participation, strategic energy planning, equipment replacement, and ongoing operations and maintenance. These staff are critical for improving energy efficiency in public sector buildings and they also can benefit from I-REN's Workforce Education & Training sector initiatives to enhance their skill set.
- **Building Professionals:** These individuals are responsible for specifying and installing replacement equipment in public sector facilities, whether through energy efficiency programs or directly funded by the jurisdiction. This includes contractors, energy managers, energy consultants, architects, designers, and other building professionals. This group is important to I-REN's Public Sector work as well as Codes & Standards and Workforce Education & Training.

Other Partners and Stakeholders

In addition to primary market actors, the public sector programs will engage and work with the following groups.

- **Energy Efficiency Programs:** Resource and non-resource programs offered by RENs, CCAs, and IOUs can be a driver of retrofit activity and energy efficiency improvements in the public sector, along with program implementation firms and energy service companies (ESCOs). I-REN will offer a resource program as part of its initiatives in the Public Sector, and it will also provide resources to direct jurisdictions toward the best-fit solution for implementing their strategic energy plans, in collaboration with other program administrators (PAs).
- **Financing Resources:** Funding for energy efficiency projects in the public sector can come from many different sources: from the utility (on-bill financing), from energy savings performance

contracts with service providers, from revolving lending products, and from traditional lenders such as financial institutions.

- **Community Members:** Residents pay for local government facilities through their tax dollars, and directly benefit from these facilities in a variety of ways. Local government jurisdictions can model best practices in energy efficiency to their constituents through projects at facilities where their communities interact.

Sector Landscape

> *"The Inland Empire is one of the hottest regions of the state, and per capita residential electricity use is higher than for the state as a whole. Therefore, the requirements in SB 350 and other statutes and regulations to promote energy efficiency have special significance for the Inland Empire, with its enormous efficiency potential."*[2]

In the I-REN service territory, these public sector jurisdictions include two counties, 52 cities, 115 special districts, unincorporated communities, and 15 tribal areas, ranging in size from less than a dozen tribal members in the Augustine Band of Cahuilla Indians to more than 300,000 residents in the City of Riverside.[3] For additional information and analysis on I-REN's public sector jurisdictions please see Appendix B: Public Sector Market Analysis.

The Inland Empire has economic strengths with a growing economy pre-COVID, but also has many socio-economic vulnerabilities. The I-REN territory represents approximately 11% of California's population and has approximately 16% living in poverty (compared to 14.7% living in poverty in California), with 38% of those being Hispanic and 34% white.[4]

The I-REN service territory is among the hottest and driest regions of California and experiences harsh climate conditions in summer months. Vulnerable populations such as children, the elderly, and low-to-moderate income families benefit from public gathering spaces that offer protection from extreme heat. Further, these conditions require air conditioning in most buildings resulting in high utility bills and energy use.

Tracking and understanding the total energy savings potential is challenging for the Inland Empire. Typical datasets such as those available from the CEC or CPUC are inconsistent in how public buildings are counted or characterized, and are often lumped into commercial buildings, with some considered institutional. Further, I-REN does not have access to specific energy use data in its territory and the Potential and Goals study aggregates information using the IOU service territory, not by county.

> *"Between 2010 and 2016, IOU energy efficiency expenditures in the Inland Empire totaled approximately $612 million (in 2017 dollars). These funds were divided between residential and non-residential energy efficiency construction and program administration. Construction activity received $365 million in investments. Twenty-five percent of these*

[2] Betony Jones, primary author, Green Economy Program Center for Labor Research and Education (CLRE) UC Berkeley, for Next 10, "The Net Economic Impacts of California's Major Climate Programs in the Inland Empire", August 2017, page 42.

[3] U.S. Census Bureau, 2010.

[4] https://datausa.io/profile/geo/riverside-san-bernardino-ontario-ca#economy

funds were directed to residential efficiency projects with 75 percent going to non-residential projects. Program administration expenditures totaled $247 million."[5]

Based on available data from the region's IOUs, the potential for savings and assistance for I-REN's territory and local governments is clear. Using information from Southern California Edison (SCE) and SoCalGas's (SCG) Public Sector Chapter Business Plans, it is estimated that the public sector represents approximately 15-16% of overall energy use respectively. HVAC represents 10% of energy use in SCE's region, with lighting representing over 53%. Whole building energy represents 25% of energy use.

In 2018, SCE estimated approximately 85 GWh of potential energy savings and 12 MW of potential demand savings for the public sector in their territory. The SCE public sector consists of 75,000 service accounts spread across 50,000 square miles. The I-REN service territory, at 27,263 square miles in size, makes up more than half of SCE's territory. State and federal government make up 19% of energy usage in the public sector, while **local government and education comprise 81% of public sector energy usage** (two segments I-REN proposes to serve through its Public Sector initiatives).[6] Further, SCG reports for its territory that local government energy use (therms) is approximately 35% of the overall usage for 5,428 accounts and educational providers equal 45% with 7,212 accounts.

It is important to note that approximately 84% of natural gas use in SCG territory is for electric generation, and not directly impacted by energy efficiency measures.[7] This large percentage of energy use may be able to be addressed more holistically through I-REN managed initiatives than is possible through SCG, as I-REN will have the ability to **leverage long-term engagement with these jurisdictions** and technical assistance planning.

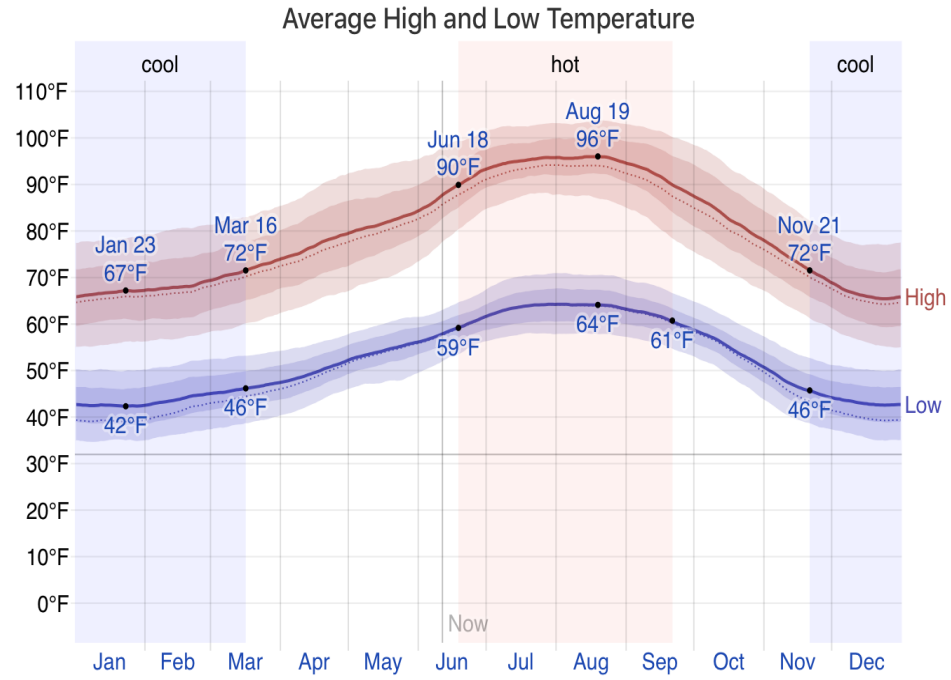
As a result of facility disrepair, delayed maintenance on aging HVAC equipment, and extreme high temperatures during the cooling season (See Figure 2-1), public agencies in the I-REN counties are often burdened with high energy bills at their facilities. Public sector buildings may also have secondary end uses specific to the type of facility, for example, pool pumps and foodservice equipment at community centers with swimming facilities and commercial kitchens. However, the local government agencies and districts that make up the I-REN public sector are challenged in trying to improve the energy efficiency of their equipment and facilities, given various barriers including but not limited to insufficient funding for capital improvements, a lack of awareness around energy efficiency and IOU programs, complicated and long cycles times for approval processes for budgets and spending, and limited time and staff resources.

I-REN will build on its existing connections in the public sector to help these local government agencies and districts improve their facilities' energy performance, to contribute to energy conservation and greenhouse gas reduction goals and **position local government agencies as energy efficiency leaders in their communities**.

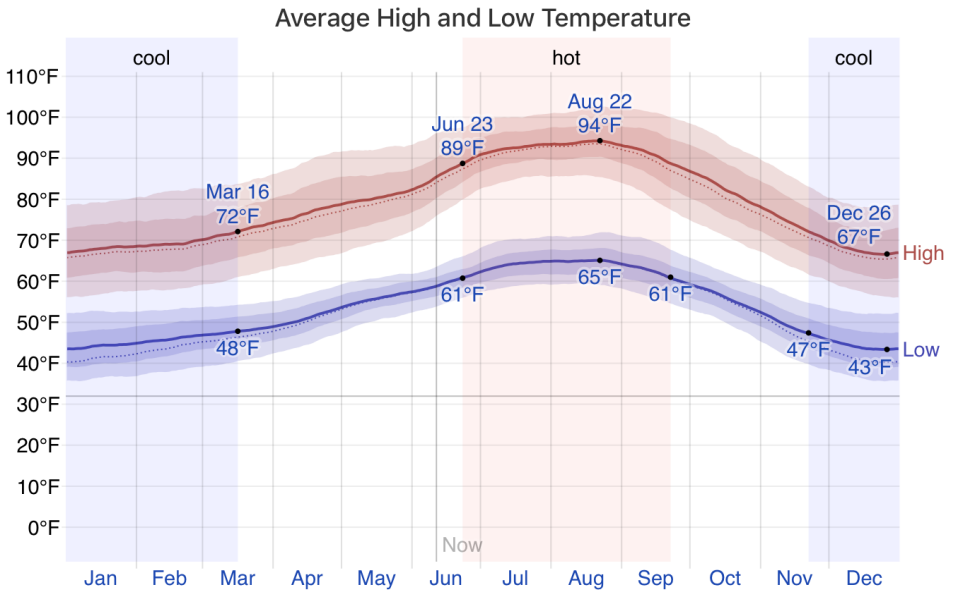
[5] Betony Jones, primary author, Green Economy Program Center for Labor Research and Education (CLRE) UC Berkeley, for Next 10, "The Net Economic Impacts of California's Major Climate Programs in the Inland Empire", August 2017, page 43.

[6] Southern California Edison Business Plan, p. 165.

[7] SoCal Gas Business Plan, Submitted January 17, 2017, page 243-244.



The daily average high (red line) and low (blue line) temperature, with 25th to 75th and 10th to 90th percentile bands. The thin dotted lines are the corresponding average perceived temperatures.



The daily average high (red line) and low (blue line) temperature, with 25th to 75th and 10th to 90th percentile bands. The thin dotted lines are the corresponding average perceived temperatures.

Figure 2-1. Average High and Low Annual Temperatures, San Bernardino and Riverside Counties

Top: County of San Bernardino Average Temperatures.
Bottom: County of Riverside Average Annual Temperatures.
(Weatherspark.com)

Table 2-1. Estimated Public Sector Agencies & Facilities in Riverside and San Bernardino Counties[8, 9]

	Riverside County	San Bernardino County
Airports (county/municipal-owned, public use)	13 airports	16 airports
Cemetery	8 special districts	2 special districts
Colleges	26 colleges	22 colleges
Community Services	6 special districts	12 special districts
County Sheriff	18 contracted cities	14 city patrol stations and 8 county stations
Fire Stations	101 stations	58 stations
Healthcare	3 special districts	4 special districts
K-12 Schools	608 schools	623 schools
Libraries	35 libraries and 3 library districts	32 libraries
Local Police	29 city departments	10 city departments
Mosquito & Vector Control	3 special districts	1 special district
Parks & Recreation	4 special districts	2 special districts
Public Utilities	1 municipal utility	1 special district
Resource Conservation	6 special districts	3 special districts
Sanitary	2 special districts	1 special districts
School Districts	24 districts	32 districts
Water	22 special districts	27 special districts

Major Trends

> *"Public sector customers are generally characterized as: not profit-motivated; have fixed utility budgets; require a public process on key decisions, including finding and project approval; implement on a fiscal year rather than a calendar year; and follow unique purchasing guidelines. These characteristics are unlike most commercial businesses."* [10]

There are three major trends that will influence the design and impact of I-REN's Public Sector program offerings: COVID-19, racial inequity, and increasing climate change impacts. Each of these substantial issues have elements that can be supported by I-REN's proposed offerings and help to better serve the region, ensuring that ratepayer dollars are being allocated to communities who need the funds and who have been historically underserved.

The public sector is dominated by city government and other agencies funded by various tax mechanisms from sales taxes to property taxes. Economic downturns such as what happened in the recession in 2007-2010 have large impacts on local governments and result in a reduction of services and staffing levels. The impacts from COVID-19 and the anticipated economic challenges will impact the region for the foreseeable future, particularly for those cities reliant on sales taxes. It is uncertain what the specific implications might be, but for the purpose of planning for I-REN, it is assumed that staffing will be reduced, that there will be less funding available for non-essential capital improvements, and planning funding will also be negatively impacted. Further, it is anticipated that it will be more difficult to engage and leverage local government staff as effectively while they respond to the ongoing pandemic.

In addition, the issue of racial inequity and the pervasive outpouring of support for a rehaul of community policing and systemic racial policies is a critical concern that I-REN can and will address with the Public Sector programs (as well as its other programs). Some of the implications that are within I-REN's ability to address include the unequal access to energy efficiency dollars, the need for additional support and commitment for small and underserved communities, ineffective programs for tribal communities, as well as overall lack of diversity. Many of these communities have been historically underinvested in and have greater needs for facility improvements, particularly community serving facilities such as libraries, community centers and the like. By supporting energy efficiency projects in these types of facilities, I-REN can provide equitable and locally administered assistance to public sector agencies where benefits will flow directly to disadvantaged and vulnerable communities.

> *"The region's climate is becoming more extreme, with daily average high temperatures projected to increase by up to 8-14ºF by the end of century. Rainfall rates are currently low (approximately 5 inches per year) and highly variable from year to year. This variability is projected to increase over the coming decades, with extreme drought and extreme wet events both becoming more common. In turn, increasing frequencies of these*

[8] Special District Data Source: California Special Districts Association. Accessed October 2020. https://mydashgis.com/CSDA/map

[9] Aggregated numbers from broad research from City, County, and other websites. These numbers provide a broad, order-of-magnitude estimate of the type and number of public sector buildings in the region.

[10] SCG Business Plan, January 17, 2017, Page 244.

> *extreme events will increase the risk of flash flooding and wildfire, given the close relationship between precipitation variability and growth of invasive grasses that serve as the major fuel for wildfire in the region." California's Fourth Climate Change Assessment, Inland Deserts Region Report* [11]

Climate change is a slow moving but major challenge and trend with the broadest impacts to the I-REN service territory. Climate change is anticipated to impact Riverside and San Bernardino counties with increased extreme and variable weather resulting in increasingly hotter summers and more extreme winter storms. Drought and wildfire impacts will also increase, particularly as more homes and communities build into the wildlands urban interface. The Inland Empire already has some of the worst smog in the region contributing to health impacts and poor air quality.

I-REN's Public Sector programs will work with local governments to upgrade public buildings' energy systems, particularly HVAC. Upgrades will be designed to offer safe and healthy hubs for community members, as well as better buildings for public sector workers. Together these improvements will help to improve the ability of the region to withstand these climate change impacts while also reducing energy usage and greenhouse gas impacts related to energy use.

[11] Hopkins, Francesca. (University of California, Riverside). 2018. Inland Deserts Summary Report. California's Fourth Climate Change Assessment. Publication number: SUM-CCCA4-2018-008.

Intervention Strategies and Objectives

In its approach to serving the public sector, I-REN is guided by an overarching goal:

Goal 1. Build capacity and knowledge to enable local governments to effectively leverage energy efficiency services and to demonstrate best practices.

I-REN's governing agencies have a foundation of strong relationships with local governments and jurisdictions in their service territory, and their approach to the public sector has been carefully designed to build on those successes. With their existing connections, I-REN is well-positioned to reach local agencies with the strategies and tactics outlined in this chapter.

Table 2-2. Intervention Strategies, Tactics, and Objectives

	Intervention Strategy	Tactic	Objective
Technical Assistance	S1.1 Develop a regional Building Upgrade Concierge (BUC) for local governments, special districts, and tribal communities with technical guidance and tools to inform and enable priority energy improvements.	T1.1.1: Establish person-to-person support for local governments to get higher levels of assistance and support for their EE projects. T1.1.2: Develop or enhance strategic energy plans to connect local government goals related to climate, resilience, and economic development to energy efficiency programs and adoption. T1.1.3: Create resources for the public sector to tap into EE and distributed energy resources programs offered by other providers and IOUs.	*Local governments have support and resources to develop and implement their strategic energy plans and energy efficiency projects.*
Incentives & Financing	S1.2 Establish incentives and leverage existing financing mechanisms to assist local governments with implementing energy efficiency projects in public buildings.	T1.2.1: Deliver a resource offering to provide incentives for savings based on Normalized Metered Energy Consumption (NMEC) achieved over three to five years. T1.2.2: Leverage sustaining financing mechanisms for HVAC upgrades in public buildings.	*Help local governments afford and finance a range of energy efficiency upgrades.*

Approach to Overcoming Barriers

Some of the greatest challenges to participation in the public sector in the I-REN service area may also be indicators of unrealized energy savings potential. I-REN has designed its Public Sector strategies and tactics to help local government agencies, tribal leadership, and staff at school districts and special districts overcome these participation barriers to improve their facilities' energy performance and harvest "stranded" energy savings.

Table 2-3. Barriers and Strategies for I-REN Public Sector

Problem	Barriers	Solutions	Strategies
Local government staff often lack the time and capacity to pursue complex energy efficiency projects.	Lack of understanding of best practices for energy efficiency solutions.	Technical assistance, locally focused resources, and person-to-person support are needed to develop and implement strategic energy plans for the public sector.	S1.1
There are a variety of EE programs and funding sources, but it is often unclear which apply to local government facilities or how to participate.	Confusion on types of incentives or financing programs and lack of staff resources to apply.	Tailored, locally focused program options are needed, as well as technical assistance and resources to prompt participation in I-REN and other PA programs.	S1.1 S1.2
Due to budgetary restrictions and complicated approval processes, public sector agencies may wait until burnout to replace equipment. At that time, they are forced to make quick decisions, without access to outside funding sources.	Disconnect between funding sources and timing of energy efficiency upgrades, which can increase building operating costs due to increased maintenance needs and higher energy use.	Strategic energy planning can help create a roadmap to plan for equipment upgrades. Technical assistance and locally focused programs can help agencies leverage resource programs and financing to reduce costs.	S1.1 S1.2
Older, inefficient equipment continues to function, so it is not replaced due to up-front cost and staff resource issues, yet it increases building operating costs through required maintenance and higher energy use.	Lack of drivers or need for local government agencies to replace existing working, but inefficient equipment.	Technical assistance combined with an incentive or financing option could make the difference in a public sector agency moving to a higher efficiency option for their facility.	S1.1 S1.2
Navigating EE program participation and funding sources is complex and requires a dedicated “Energy Champion” who can devote time and attention to the subject.	Frequent changes in the Energy Champions, with high turnover in staff and overall lack of government staff capacity.	Person-to-person technical assistance and support is critical for maintaining relationships through staffing turnover.	S1.1
Local governments each have their own bureaucratic structure, and it is often unclear how they can enroll in EE programs or apply for financing opportunities.	Varied governance, and funding rules that limit ability to take advantage of typical IOU funding or Local Government Partnerships (LGPs).	Technical assistance resources, and person-to-person support can help agency staff navigate the enrollment and approval process.	S1.1

Strategy 1.1 Develop a regional Building Upgrade Concierge (BUC) for local governments, special districts, and tribal communities with technical guidance and tools to inform and enable priority energy improvements.

Objective: Local governments have support and resources to develop and implement their strategic energy plans and energy efficiency projects.

Tactic 1.1.1: Establish person-to-person support for local governments to get higher levels of assistance and support for their EE projects.

Insufficient staff time and resources is one of the major barriers to implementing energy efficiency retrofits in public sector buildings. This has been exacerbated over the past year due to the COVID-19 pandemic, with local governments on the front lines addressing the public health crisis and enduring the associated economic downturn. Local jurisdictions have had to implement mandatory closures of facilities, as well as intensive planning and logistical efforts to prepare for safely reopening facilities to the public.

RENterns: Building Capacity to Support Public Sector EE Projects

As part of its continued efforts to collaborate and work with local governments, I-REN proposes to support public sector energy efficiency projects with "RENterns." Interested local government agencies would be provided interns from the Inland Empire that will support agencies with energy efficiency programs such as climate action planning, energy benchmarking, energy efficiency projects and other sustainability initiatives. This effort will continue to foster building capacity as it will provide participating local governments additional support to meet ENERGY goals.

The idea of RENterns originates from the success of WRCOG's Public Service Fellowship program, which has trained more than 75 Fellows over five years. The success of the Fellowship Program has led to alumni being hired in the region, while other alumni use their experiences in the program to trailblaze new professional development opportunities like graduate school.

I-REN will provide concierge-style support by phone, email, and in-person when feasible, to help fill gaps in staff capacity and resources at these local government jurisdictions. I-REN can also provide additional staffing support through its RENterns initiative described at left. As the pandemic and associated economic challenges continue to affect Southern California, local governments may be even more cost-conscious than before, and some may have sustained cuts to staffing or funding.

I-REN's technical assistance support will build local government's capacity to tackle these complex projects, from helping with benchmarking to navigating options and approaches for maximizing their investments and energy savings. I-REN will offer person-to-person support to help these local governments in making efficient equipment purchases and to implement energy efficiency projects. Resulting energy bill savings will benefit local governments and contribute to both local and statewide goals for energy efficiency and greenhouse gas reduction.

Local governments, special districts, and tribal jurisdictions vary widely in their current situation with regard to energy efficiency project implementation. Some may have already

implemented projects and need to ensure their facility staff are engaged in ongoing commissioning. Some may have put projects on hold over the past year due to the pandemic and now need to revisit them. Others, especially smaller and more rural jurisdictions, may need to start from the beginning.

I-REN will meet these departments and facilities staff where they are, assess their current situation and resources, and offer guidance to move them forward. In addition to staff resource constraints, other common barriers facing the public sector include complex program requirements to receive funding, risk aversion to new or unproven technology, a lack of data to support their decision-making process, or limited technical expertise and knowledge of energy projects. I-REN can offer personalized support to identify and address barriers by building and sustaining relationships with local jurisdiction staff.

I-REN activities to implement this tactic include but would not be limited to the following:

- Identify and establish rapport with department decision makers and facility staff.
- Assess jurisdictions' needs and collaborate on an approach to address them.
- Guide staff to technical resources and compelling data to assist in decision making.
- Offer problem-solving support for staff navigating lengthy approval and procurement processes.
- Maintain communication to monitor status and encourage progress.
- Follow up on completed projects to ensure efficient operations and ongoing maintenance, and address facility staff turnover and retraining needs.
- Provide RENtern staff as well as in-person, phone, and email support to individuals, and offer training and workshops for departments if desired.

Tactic 1.1.2: Develop or enhance strategic energy plans to connect local government goals related to climate, resilience, and economic development to energy efficiency programs and adoption.

> *"A strategic energy plan is a roadmap to achieving community energy goals in both the near and long term." - US DOE*[12]

The I-REN service territory is a patchwork of jurisdictions, including some that have developed a strategic energy plan and some that have not. Some jurisdictions that do have strategic energy plans may have been unable to effectively implement them, lacking clear priorities and understanding of the best impact or challenged by time and staffing constraints. Jurisdictions without strategic energy plans may be unsure of the value proposition in undertaking that level of planning effort given the challenges they have faced over the past several months.

Through this tactic I-REN will assess the current state of strategic energy planning and provide technical assistance to begin the process or help move the process forward. Strategic energy planning is a critical exercise for organizing a community around goals for not just energy efficiency but also climate change mitigation, resilience, and economic development.

[12] U.S. Department of Energy Office of Energy Efficiency & Renewable Energy. "Community Greening: How to Develop A Strategic Energy Plan." Prepared by the National Renewable Energy Laboratory (NREL), February 2010. Available online.

The US DOE identifies a step-by-step approach for strategic energy planning based on community, city, state, and tribal experience. I-REN will adapt this overall approach to be targeted and effective for its constituents and will support the process with activities including but not limited to those identified below:

- **Identify/Convene Stakeholders:** I-REN will utilize existing committee structure connections from the three COGs that make up the I-REN governing agencies to bring various stakeholders to the table.
- **Develop Energy Vision, Energy Baseline, and Specific Goals:** I-REN can serve as a facilitator for parts of this process, giving input on energy efficiency best practices and possible objectives for consideration.
- **Identify and Evaluate Programs and Funding Sources:** I-REN can provide information on its own resources and financing options as well as other program administrators' offerings, to ensure the best outcome for each jurisdiction.
- **Compile and Implement the Plan:** I-REN can guide jurisdictions in organizing sites and projects into phases for implementation, leveraging available energy usage data and building benchmarking to prioritize community facilities with high energy use.
- **Evaluate Progress and Fine-Tune Plan:** DOE recommends periodic stakeholder meetings and reviews to ensure continued success. I-REN can provide consistency and follow-through as a facilitator of these meetings and can help provide recognition to celebrate successes and create local case studies to demonstrate achievements in the region.

Addressing Climate Resilience & Leveraging Other Funding Sources

I-REN governing agency WRCOG was awarded a grant by the Bay Area Council to focus on climate resiliency projects to help its member agencies tackle climate resiliency. The grant that has been awarded to WRCOG will be used to develop a climate resiliency framework that can be utilized by local governments as a guiding template to implement battery storage systems / microgrids.

With climate resiliency becoming a key focal point for the state and its sustainability efforts, the I-REN team will learn from WRCOG's climate resiliency framework to support the I-REN region with climate resiliency projects. Funding for implementation of these projects cannot come from energy efficiency funds from the CPUC, but the I-REN team can support its agencies with identification of funding through grants from the DOE, CEC, CPUC, and event by utilizing programs offered by the utilities as well as leveraging I-REN financing mechanisms if needed.

Tactic 1.1.3: Create resources for the public sector to tap into EE and distributed energy resources programs offered by other providers and IOUs.

In this tactic, I-REN will act as a clearinghouse for information about energy efficiency programs available in the region for the public sector, and will create and promote regionally-focused tools and resources to increase energy efficiency program participation among their constituents.

The I-REN service territory has long been characterized by low participation in energy efficiency programs. In the public sector, barriers such as staffing constraints and confusing program requirements put an undue burden on local governments trying to figure out where and how they can participate. I-REN's approach addresses these barriers head-on and leverages their existing connections to other program administrators and in-house capabilities for marketing and outreach.

The I-REN governing agencies have established communication channels and working relationships with all 52 cities in their service territory, county board of supervisors, water districts, school district superintendents and other public sector agencies. Through their committee structure they facilitate meetings and planning efforts around sustainability, and host educational forums to bring awareness to environmental issues, energy efficiency and water conservation, in collaboration with other agencies. Each of these opportunities is marketed through the I-REN governing agencies' established communication networks, making I-REN a trusted voice in the region--especially for local governments.

By creating a regionally-focused set of tools and resources, I-REN can offer targeted information for general consumption while also using the data set as an internal reference for I-REN staff efforts under Tactic 1.1.1 to provide one-on-one technical assistance and in Tactic 1.1.2 for identifying program opportunities to leverage when implementing strategic energy plans.

Activities to implement this tactic could include but are not limited to the following:

- Assess the current energy efficiency programs available in the region to the public sector.
- Collaborate with program administrators to get information on eligibility requirements and participation processes.
- Compile content with user-friendly, regionally focused packaging.
- Create a suite of tools including but not limited to online resources, information databases, and printed materials.
- Distribute and promote materials through e-communicators, social media, web, and at in-person events.
- Update materials periodically to reflect feedback on ease of use, and to reflect program changes.

Strategy 1.2 Establish incentives and leverage existing financing mechanisms to assist local governments with implementing energy efficiency projects in public buildings.

Objective - Help local governments afford and finance a range of energy efficiency upgrades.

Tactic 1.2.1: Deliver a resource offering to provide incentives for savings based on Normalized Metered Energy Consumption (NMEC) achieved over three to five years.

I-REN proposes to offer a resource program with incentives for measures including but not limited to HVAC tune ups and retrofits; exterior and interior lighting and smart controls; and operations and maintenance. The program would be open to all public sector facilities including those operated by county and city government, school districts, special districts, and tribes.

Program outreach will focus initially on public gathering spaces such as community and neighborhood centers, health and recreation centers, senior centers, teen centers, and libraries. Implementing energy efficiency projects at these locations will serve multiple goals, including but not limited to those described here:

- Upgrades and retrofits to HVAC and lighting equipment both interior and exterior will improve comfort and safety at facilities that benefit vulnerable populations such as children, elders, and low income, disadvantaged, and underserved communities.
- Higher efficiency equipment, appliances and controls such as cooling-dominated HVAC loads as well as improvements to operations and maintenance will lower energy bills for local governments, reducing overhead and freeing up funds for other projects.
- Completion of projects at these high-visibility locations will support achieving local and statewide energy efficiency and greenhouse gas reduction goals while also positioning local governments as energy efficiency leaders within their communities.

The program will use an NMEC approach to calculate savings and demonstrate persistence of savings. By using NMEC to calculate savings, the program will help protect against unrealized savings. Combined with technical assistance and reinforcement of operations and management best practices, public sector customers will experience maximized savings.

I-REN governing agency WRCOG brings public sector program administration experience from its successful and highly-regarded Regional Streetlight Program (Figure 2-2), which reduces costs to local jurisdictions through cost-effective and energy efficient lighting retrofits and regional operations and maintenance. The program was designed to save the subregion $70 million over 20 years. The program involved a demonstration project to gain feedback from community stakeholders including interested jurisdictional elected officials and staff, engineers, community and environmental groups, and residents.

Figure 2-2. WRCOG Regional Streetlight Program Outreach Example

Note that if a third-party program becomes available that serves this need and makes this resource offering duplicative, I-REN will focus its full Public Sector budget on providing technical assistance and strategic energy planning through the BUC. I-REN has designed its Public Sector offerings to be flexible and its goals and targets can be adjusted accordingly to meet the needs of the region.

Tactic 1.2.2: Leverage sustaining financing mechanisms for HVAC upgrades in public buildings.

> *Energy efficiency financing is defined by Lawrence Berkeley National Laboratory as "debt or debt-like products that support the installation of energy efficiency measures by allowing costs to be spread over time."*[13]

Figure 2-3 shows a wide variety of financing mechanisms available for energy efficiency projects, from traditional loans and financing from banking institutions to specialized products designed specifically for energy efficiency. However, the public sector is challenged by many barriers in trying to take advantage of these options. Staff time and resources are constrained, the array of options is confusing, and it can be unclear how local governments, special districts, and tribes would participate, given their unique position as publicly funded agencies.

I-REN can bridge this gap by identifying financing mechanisms and creative funding sources, evaluating their appropriateness for various public sector jurisdictions and facility types in the I-REN service territory, and then assembling a tailored set of options to present to local governments, special districts, and tribes. I-REN can support local jurisdiction staff and decision-makers in navigating through the complexities of financing options (see Figure 2-3), choosing a pathway and applying for funds, and then serve as a technical assistance resource for project implementation and reporting.

For its initial focus, I-REN proposes to target HVAC upgrades in community buildings including but not limited to recreation centers, libraries, senior centers, and the like. HVAC replacement at a large facility is costly, and the intervention of financing through I-REN's Public Sector initiative could mean the difference between replacing a system with baseline equipment and moving up to a more efficient system that will deliver better performance and bill savings, as well as supporting energy savings and climate action goals.

Financing Mechanisms

Potential funding mechanisms may include but would not be limited to the following:

- On-bill financing
- Savings-backed arrangements such as performance contracting
- Revolving loan funds
- California Climate Investments using Cap-and-Trade auction proceeds
- New financing mechanisms from the banking industry
- Community energy projects
- Green bonds and climate bonds

[13] Greg Leventis et al. "Current Practices in Efficiency Financing: An Overview for State and Local Governments," Ernest Orlando Lawrence Berkeley National Laboratory, November 2016. Available online.

Other Sources of Funding

In addition to traditional and specialized financing options, I-REN can help its public sector jurisdictions identify and gain access to other funding sources including but not limited to the following:

- State, e.g. California Energy Commission grants
- Federal, e.g. Department of Energy, Energy Efficiency & Renewable Energy funding

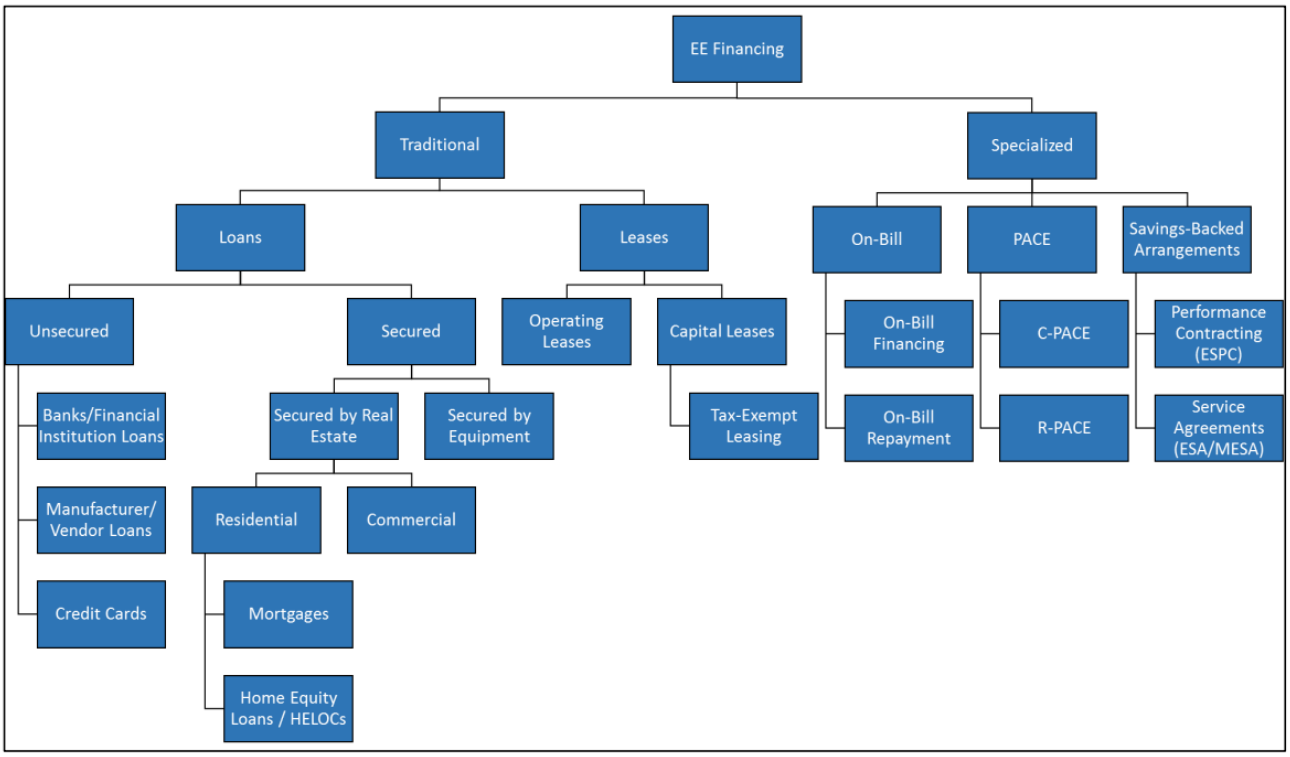


Figure 1-1: Typology of energy efficiency financing products

Figure 2-3. Typology of Energy Efficiency Financing Products[14]

Source: LBNL, February 2016

[14] Greg Leventis et al. "Current Practices in Efficiency Financing: An Overview for State and Local Governments," Ernest Orlando Lawrence Berkeley National Laboratory, November 2016. Available online.

Anticipated Programs

I-REN anticipates providing program offerings to the public sector including but not limited to the following:

- **Technical Assistance and Strategic Energy Planning** – short-term and mid-term technical support for local governments, special districts, school districts, and tribes to increase energy efficiency in publicly-owned facilities. Additional support and technical services to design high performing, energy efficient buildings.
- **Public Buildings NMEC Program** – a resource program (in year two of I-REN program administration) to provide incentives and financing for savings based on Normalized Metered Energy Consumption (NMEC) achieved over three to five years, with a special focus on HVAC improvements to community-serving buildings.

Note that I-REN has designed its Public Sector offerings to be flexible and its goals and targets can be adjusted to meet the needs of the region, including focusing its full Public Sector budget on providing technical assistance and strategic energy planning if needed due to the emergence of duplicative third-party programs that serve this need.

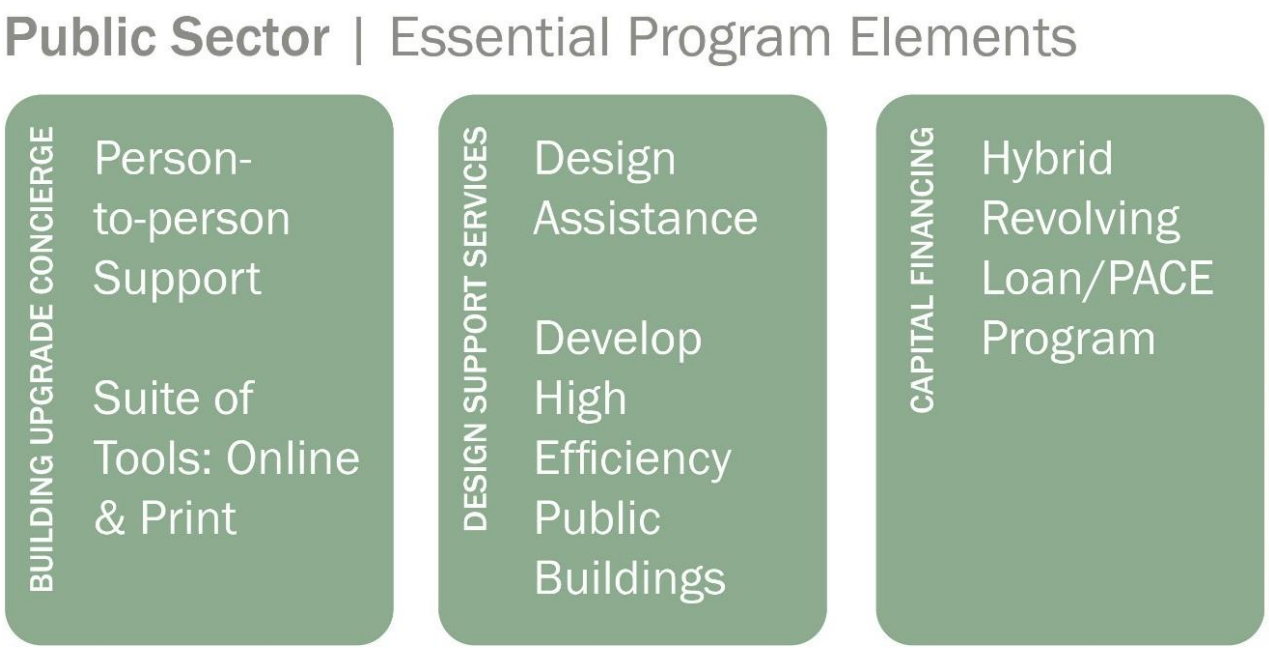


Figure 2-4. I-REN Public Sector Essential Program Elements

Evolving Approach

As a new REN, I-REN will build upon the work currently underway through its governing agencies and local government partnerships to implement the strategies outlined here, in collaboration with the key partners described in the section that follows. Based on measurement and verification, and on monitoring progress toward performance metrics through the near and midterm activities, I-REN will adjust strategies for future implementation beyond the 2021-2025 timeline.

Leveraging I-REN's Existing Key Partners

I-REN has worked for many years to build relationships (shown in Table 2-4) with local governments, building and planning departments, code officials and permit staff, private construction and architectural firms, and other market actors who will impact work in the public sector. These relationships are maintained through frequent engagement and through I-REN's numerous outreach activities and communication platforms, through which I-REN has become a trusted voice and advocate for local communities in the region. Local governments in the counties of Riverside and San Bernardino look to the I-REN governing agencies for information and collaboration on energy efficiency and sustainability-related opportunities.

One of the challenges of working with local government agencies for public sector energy efficiency is the turnover in both staff and elected positions, which can mean the loss of a department's "Energy Champion." In their many existing collaborations with local governments, the I-REN governing agencies take a proactive approach to maintaining the lines of communication across these transitions, working with the outgoing official or staff member before they depart and then reaching out to the successor to establish the new relationship.

I-REN will build on these existing relationships to foster additional connections with new partners as described earlier in the chapter (sections entitled "Market Actors" and "Other Partners and Stakeholders").

Table 2-4. I-REN's Key Partnerships with Market Actors in the Public Sector

Key Partners	Relevant Examples of Past/Present Collaboration
Local governments, including two counties, 52 cities, 115 special districts, and 15 tribal areas	The three I-REN governing agencies have all had or currently have LG partnerships – with various connections including City Manager, Planning, local utilities. They bring multiple local experts into the conversation on a monthly/quarterly basis. WRCOG's existing partners consist of Public Agencies (18 members), Water Districts (2 members), and Riverside County Superintendent of Schools. Collaboration has included various Energy, Environmental, and Transportation / Planning Programs such as LGP, PACE, Western Community Energy (WCE, the WRCOG's Community Choice Aggregation), Transportation Uniform Mitigation Fee (TUMF) program, Solid Waste Cooperative, Clean Cities Coalition, and Planning / Grant Writing Assistance Programs.

Key Partners	Relevant Examples of Past/Present Collaboration
	WRCOG has committee structures engaged with planning directors and public work directors. They work with building department decision-makers and coordinate with permit technicians and all other staff face to face. CVAG's 10 member cities looks to CVAG to keep them updated on energy efficiency programs and measures. CVAG has participated in the Desert Cities Energy Partnership (DCEP) LGP with each of their member cities and the utility companies servicing the CVAG jurisdiction. CVAG also obtained a Strategic Plan grant in the amount of $4.1 million to assist its cities with completing Greenhouse Gas inventories, Climate Action Plans, Energy Action Plans, and many more policies relevant to energy efficiency and reduction of their carbon footprints. The DCEP allowed the CVAG member cities to achieve great energy savings for a 10-year period, due to close collaboration and monthly meetings. CVAG also has existing relationships with each of its cities through its Solid Waste & Recycling Committee (TWG) that reports to the Energy & Environmental Resources Committee (E&E), which then reports to its Executive Committee. The TWG committee is made up of representatives of each city who are involved in sustainability and recycling. The E&E committee is made up of elected representatives from each city; they discuss all topics related to energy and sustainability and provide recommendations to the Executive Committee, which is made up of elected representatives from each city. SBCOG brings experience working with South Coast Air Quality Management District, and other councils of governments throughout Southern California. SBCOG cities recently participated in a county-wide Zero Emission Vehicle (ZEV) Readiness and Implementation Plan funded through the CEC. Climate Resiliency Study "Resilient IE" is currently underway, which includes the participation of all 24 cities in San Bernardino County. SBCOG brings experience working closely with law enforcement, such as California Highway Patrol, as well as rail support facilities in the region.
Local Community Colleges	CVAG staff is part of a committee with College of the Desert to offer feedback and expertise in the creation and development of their workforce & training certification program, which allows students to take classes to become trained in installation and repair on systems such as HVAC, environmental management systems and more.
K-12 Schools	CVAG has hosted and presented at various sustainability expos which were held for hundreds of middle school and high school students to learn about various programs and measures related to energy efficiency and recycling.
IOUs/Other Program Administrators	SBCOG has experience conducting outreach through the San Bernardino Regional Energy Partnership in collaboration with SCE and SoCalGas and working closely with 12 cities in the region.

Key Partners	Relevant Examples of Past/Present Collaboration
Building Professionals	WRCOG has collaborated with the Riverside Chapter Building Industry Association (BIA) through in WRCOG's Transportation Uniform Mitigation Fee (TUMF) Program. In addition, WRCOG previously served on the Board of the U.S. Green Building Council Inland Empire Chapter (USGBC-IE). CVAG has connections to the local building industry through its work with the PACE program described earlier, as well as through the Desert Cities Energy Partnership (DCEP). Through the DCEP, CVAG partnered with local universities to provide Title 24 training classes to local building contractors, architects, and building and safety officials.
PACE and other financing and funding sources	Through WRCOG, the Regional Streetlight Program solicited a Request for Bid (RFB) that was used to select a financial provider to support members with the financing/ purchase of the various streetlights within the WRCOG subregion. WRCOG has supported its member agencies in applying and receiving grants through its on-Call Grant support program to help agencies implement projects in the areas of Transportation, Environmental, Energy, and Water. CVAG administers a Property Assessed Clean Energy (PACE) program and has service agreements with seven private firms to service CVAG's jurisdiction. PACE started in the Coachella Valley in 2007, starting with the City of Palm Desert and later transitioning to a regional approach through CVAG. SBCOG received a grant to demonstrate more than 200 compressed natural gas (CNG) and liquid natural gas (LNG) Peterbilt and Freightliner trucks. This partnership included Ryder Systems, which demonstrated the CNG and LNG trucks with various companies. SBCOG also received a grant from the Mobile Source Air Pollution Reduction Review Committee to purchase, install and maintain multiple electric vehicle charging stations for three locations: SBCOG east parking lot area, San Bernardino Metrolink Station, and San Bernardino Transit Center.

Budget and Metrics

Budget

The budget shown in Table 2-5 will facilitate the forecasted short and mid-term metrics targets with the expectation that increased participation and project volume is achieved as initial efforts scale and gain traction.

Table 2-5. Public Sector Budget

Budget ($)	2021	2022	2023	2024	2025
Administration	431,423	628,819	619,172	662,939	707,457
Marketing and outreach	258,854	377,292	371,503	397,763	424,474
Direct implementation - non incentive	3,623,949	3,782,083	3,701,047	3,818,688	3,942,635
Direct implementation - incentives	-	1,500,000	1,500,000	1,750,000	2,000,000
Total	**4,314,226**	**6,288,194**	**6,191,722**	**6,629,390**	**7,074,566**

Energy Savings & Cost-Effectiveness Targets

Although RENs are not required to achieve a specific cost-effectiveness metric, I-REN endeavors to be as cost-efficient as possible in using ratepayer funds. Table 2-6 shows the estimated cost-effectiveness for I-REN's resource program activity in the Public Sector.

Table 2-6. I-REN Public Sector Resource Activity Anticipated Cost-Effectiveness

Public Sector Resource Activity	2021	2022	2023	2024	2025
Net kWh	0	4,175,629	4,361,224	4,361,224	5,763,031
Net kW	0	720	813	813	1,084
Net Therm	0	121,315	147,884	147,884	196,707
CO2	0	1,736	2,039	1,937	2,781
NOx	0	640	668	668	883
Total Resource Cost (TRC)	0	0.45	0.51	0.47	0.61
Program Administrator Cost (PAC)	0	0.74	0.81	0.79	1.03
Ratepayer Impact Measure (RIM)	0	0.35	0.35	0.36	0.37

Metrics

Based on the intervention strategies I-REN developed for the Public Sector, the following metrics are proposed to track program performance.

Public Sector Metrics

Table 2-7. Public Sector Metrics

Public Sector Metric	Baseline Year	Short Term Target 2021	Short Term Target 2022	Short Term Target 2023	Mid Term Target (2024-2025)
First year annual kW gross	2022	N/A	759	856	1,000
First year annual kW net	2022	N/A	720	813	949
First year annual kWh gross	2022	N/A	4,401,355	4,596,706	5,335,690
First year annual kWh net	2022	N/A	4,175,629	4,361,224	5,062,128
First year annual Therm gross	2022	N/A	127,668	155,636	181,325
First year annual Therm net	2022	N/A	121,315	147,884	172,295
Lifecycle ex-ante kW gross	2022	N/A	3,220	3,511	4,081
Lifecycle ex-ante kW net	2022	N/A	3,209	3,499	4,067
Lifecycle ex-ante kWh gross	2022	N/A	18,780,846	19,037,308	22,006,804
Lifecycle ex-ante kWh net	2022	N/A	17,825,745	18,069,440	20,887,250
Lifecycle ex-ante Therm gross	2022	N/A	512,633	624,822	727,940
Lifecycle ex-ante Therm net	2022	N/A	487,087	593,666	691,644
CO2-equivalent of net annual kWh savings	2022	N/A	1,026	1,173	1,351
Percent annual net kW per project building or facility	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator
Percent annual net kWh per project building or facility	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator

Public Sector Metric	Baseline Year	Short Term Target 2021	Short Term Target 2022	Short Term Target 2023	Mid Term Target (2024-2025)
Percent annual net Therms per project building or facility	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator
Average annual net kw savings per project building floor plan area	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator
Average annual net kw savings per project building floor plan area	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator
Average annual net Therm savings per project building floor plan area	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator
Average annual Net kW savings per annual flow through project water/wastewater facilities	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator
Average annual Net kWh savings per annual flow through project water/wastewater facilities	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator
Average annual Net Therms savings per annual flow through project water/wastewater facilities	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator
Percent of Public Sector accounts participating in programs	2021	TBD	TBD	TBD	TBD
Percent of estimated floorplan area (i.e., ft2) of all Public Sector buildings participating in building projects	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator
Percent of Public Sector water/wastewater flow enrolled in non-building water/wastewater programs	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator
PAC Levelized Cost ($/kW)	2022	N/A	$0.41	$0.36	$0.31
PAC Levelized Cost ($/kWh)	2022	N/A	$4.41	$3.79	$3.18
PAC Levelized Cost ($/therm)	2022	N/A	$2,632.75	$2,182.44	$1,883.26

Public Sector Metric	Baseline Year	Short Term Target 2021	Short Term Target 2022	Short Term Target 2023	Mid Term Target (2024-2025)
TRC Levelized Cost ($/kW)	2022	N/A	$0.48	$0.42	$0.37
TRC Levelized Cost ($/kWh)	2022	N/A	$5.37	$4.42	$3.81
TRC Levelized Cost ($/therm)	2022	N/A	$0.41	$0.36	$0.31
Total program-backed financing distributed to Public Sector customers requiring repayment	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator
Percent of Public Sector buildings with current benchmark	2021	TBD	TBD	TBD	TBD
Average energy use intensity of all Public Sector buildings	2021	TBD	TBD	TBD	TBD
Percent of floorplan area of all Public Sector buildings with current benchmark	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator

Cross-Cutting & Coordinating Activities

Marketing, Education & Outreach

The I-REN governing agencies bring experience in marketing, education, and outreach to the public sector from a long history of work with the local governments they serve. Through their committee structures and established communication platforms, the I-REN governing agencies have become a trusted voice and advocate in their two counties. They can use this position to coordinate marketing, education, and outreach (ME&O) activities within the region through their network of member jurisdictions. In the public sector, the bulk of this ME&O will fall under the category of outreach and relationship building.

Coordination with other program administrators will be important for I-REN's proposed Public Sector Tactic 1.1.3, and I-REN has already opened the lines of communication and begun to discuss ways to collaborate, in order to reduce market confusion and ensure the best outcome for ratepayers.

I-REN anticipates its Public Sector-related marketing could include but would not be limited to the following activities shown in Table 2-8, in alignment with the proposed Public Sector intervention strategies and tactics.

Table 2-8. Marketing Activities for I-REN C&S Sector

Intervention Strategy	Tactic	Marketing Activities
S1.1 Develop a regional Building Upgrade Concierge (BUC) for local governments, special districts, and tribal communities with technical guidance and tools to inform and enable priority energy improvements.	T1.1.1: Establish person-to-person support for local governments to get higher levels of assistance and support for their EE projects. T1.1.2: Develop or enhance strategic energy plans to connect local government goals related to climate, resilience, and economic development to energy efficiency programs and adoption. T1.1.3: Create resources for the public sector to tap into EE and distributed energy resources programs offered by other providers and IOUs.	*Outreach to local jurisdictions and agencies to educate them about the program offerings, to provide presentations at meetings and with key decision makers.* *Develop content for an e-newsletter targeted to local government audiences, a comprehensive website with a listing of events, resources and tools for local governments, targeted use of social media, and other channels to promote public sector resources.* *Collaborate with local governments, tribes, and special districts to design and deliver messaging to the community to promote local leadership in energy efficiency by highlighting success stories from local strategic energy plans and projects.*
S1.2 Establish incentives and leverage existing financing mechanisms to assist local governments with	T1.2.1: Deliver a resource offering to provide incentives for savings based on Normalized Metered Energy	*Develop a marketing and outreach plan to support resource and financing initiatives. Promote the initiatives through the I-REN governing agencies' existing marketing*

Intervention Strategy	Tactic	Marketing Activities
implementing energy efficiency projects in public buildings.	Consumption (NMEC) achieved over three to five years. T1.2.2: Leverage sustaining financing mechanisms for HVAC upgrades in public buildings.	*channels, local government connections, building industry communication networks, and other channels.*

Workforce Education & Training

Workforce Education & Training (WE&T) is an important area for cross-cutting coordination, with synergies between I-REN's Public Sector and WE&T initiatives that include and are not limited to the following:

- Identify and help to engage contractors and building firms who provide services to local governments/public sector to locate and work in the I-REN territory.
- Coordinate potential training programs in the WE&T to help enhance energy efficiency services to local governments, such as facility manager and operations trainings, advanced controls training, and the like.
    - I-REN's service territory includes several relatively new cities incorporated in recent years; these cities are building their local capacity and establishing their infrastructure. They will benefit from training and education for their public sector facility staff.
- Establish training programs and resources for local government agencies and tribes to better manage and maintain low energy use targets.
- Provide interns ("RENterns") to support agencies with energy efficiency projects and other sustainable initiatives. The idea of RENterns originates from WRCOG's Public Service Fellowship program, which has trained more than 75 Fellows over five years. The success of the Fellowship Program has led to alumni being hired in the region and pursuing additional education and training such as graduate school.

I-REN will coordinate its WE&T and Public Sector activities to maximize the benefits to their constituents in these sectors.

Codes & Standards

Codes and Standards (C&S) is another important area for cross-cutting coordination with the Public Sector. I-REN's C&S sector activities incorporate training for local building department staff, to help those individuals perform their jobs and build capacity in their departments to better enforce codes and standards. This supports better code compliance in publicly owned buildings, especially as some of the relatively new cities in I-REN's territory begin to explore building their own public infrastructure and facilities.

These synergies support I-REN's Public Sector approach, which focuses on empowering local governments as leaders in energy efficiency through their own publicly owned facilities. I-REN will

coordinate its C&S and Public Sector activities to maximize the benefits to their constituents in these sectors.

EM&V Considerations

The current lack of energy efficiency data about the public sector places added importance on the role of EM&V. I-REN will collaborate with the CPUC and stakeholders to ensure that data collection activities are embedded in Public Sector program design to capture the information necessary to meet evaluation requirements and to help expand the understanding of energy efficiency potential and best practices in this relatively new sector.

I-REN's EM&V considerations for its Public Sector programs include data collection to inform CPUC evaluation activities and support internal program performance tracking and continuous improvement. I-REN has also identified studies, either already in progress or proposed, that will help to characterize the market and support the development of baselines to enable more reliable EM&V of Public Sector program impacts.

Data Collection Needs

I-REN data collection will support both external EM&V by the CPUC and internal research study activities. I-REN's data collection needs directly correspond to identified metrics and indicators, and the intervention strategies developed for the Public Sector.

To support external EM&V activities, I-REN will collect data to keep the CPUC and stakeholders apprised of program progress. I-REN will work collaboratively with Energy Division staff to ensure data collection meets their needs, to enable evaluation that can:

1) inform the program selection process,

2) provide early feedback to program implementers,

3) produce impact evaluations at the end of the funding period, and

4) feed the planning process for future program cycles.[15]

Data collection will also support I-REN's internal EM&V activities and inform the measuring of progress toward established program goals and targets, CPUC metrics and indicators, and PA determined value metrics. Data collection and real-time program performance tracking will support the delivery of timely feedback to implementers and/or program administration staff. This in turn will support continuous improvement and inform future program planning efforts.

Table 2-9 shows the research questions and data collection needs I-REN has identified for the Public Sector, in alignment with CPUC metrics and indicators and I-REN's internal goals and value metrics.

[15] Energy Efficiency Policy Manual, version 6, April 2020, p.44.

Table 2-9. I-REN Public Sector Data Collection

Topic Focus	Research Questions/Data Collection Needs	EM&V Objective	Timeframe
Energy savings and greenhouse gas (GHG) emissions reduction	• Net and gross first year annual kW, kWh, and Therms • Net and gross lifecycle ex-ante kW, kWh, and Therms • CO2-equivalent of net annual kWh savings	Track program performance	Short-term/ Mid-term
Public sector benchmarking and strategic energy planning	• What percent of public sector buildings and total floorplan area have a current benchmark? • What percent of public sector jurisdictions and total floorplan area have a current strategic energy plan?	Understand and track the public sector market	Short-term
Energy intensity of public sector buildings	• What is the average energy use intensity of all public sector buildings?	Identify highest needs and track program performance	Short-term
EE program penetration in the eligible market	• What percent of service accounts are participating in programs? • What percent of total public sector floorplan area is participating in building projects?	Understand and track the public sector market	Short-term/ Mid-term
Depth of I-REN interventions	• How many service accounts are participating? • What is the average square footage of properties? • What is the per-application energy usage of buildings that have been retrofitted? • What percent of public sector water/wastewater flow is enrolled in non-building water/wastewater programs?	Track program performance	Mid-term
Investment in EE	• What is the total amount of program-backed financing loaned through I-REN programs?	Track program performance	Mid-term

Anticipated Study Needs

PA-led studies may inform program target setting, value metrics, and highlight opportunities for improved data and measurement collection. Because the Public Sector is a new market segment for energy efficiency programs, carved out from Commercial, very little data exists and few relevant evaluation studies have been completed.

One of the major areas for I-REN's study considerations is to better characterize and understand the size, scope, and breadth of public sector needs for energy efficiency in the Inland Empire. The I-REN proposes to develop and manage a study to first inventory the number and type of public sector buildings in the territory, including determining the type of energy systems, operating costs and procedures, and utility usage.

A Statewide Public Sector Market Study has been identified as an "urgent need" to help PAs understand the potentials and challenges of the Public Sector.[16] The objective of this PG&E-led study has been identified as "Develop a quantitative and qualitative characterization of the four subsegments within the Public Sector that provides PAs with information about industry standard practices, baseline saturation of high impact measures, and the unique market barriers that differentiate Public Sector customers from those in the Commercial Sector." When available, I-REN will use the study's data and findings to inform ongoing improvements to program processes.

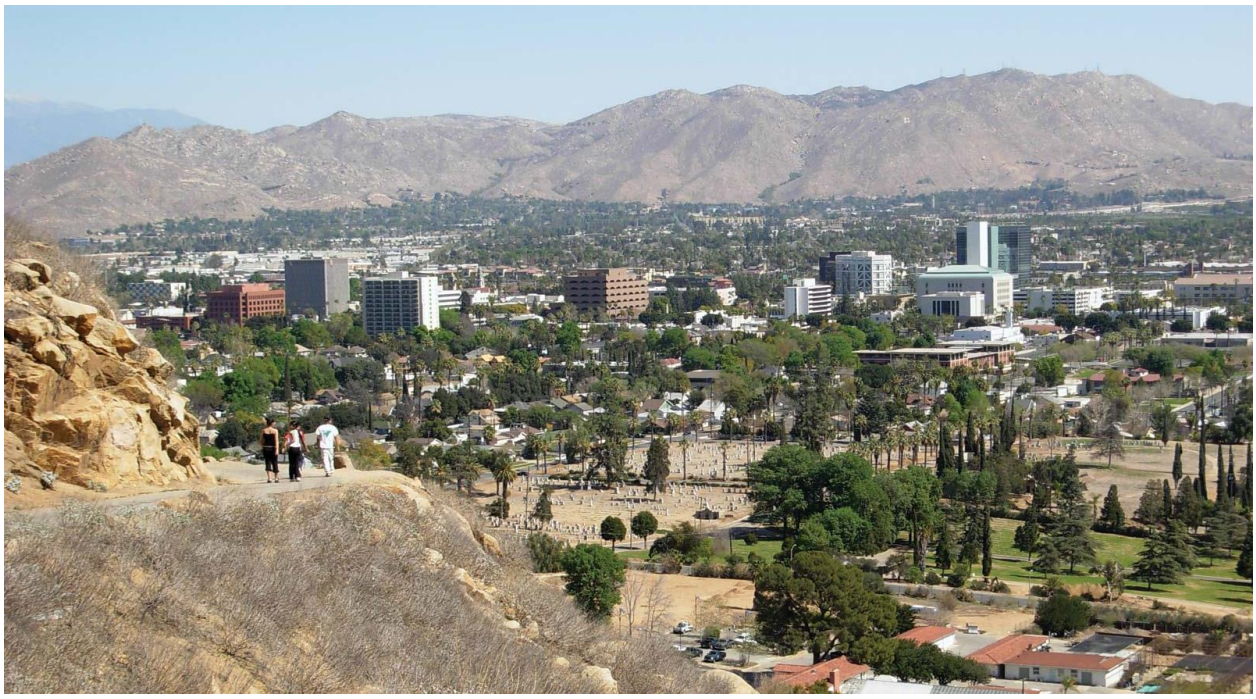
I-REN will also look to the CAEECC Underserved Working Group's sub-working group Public Sector Research Team from University of California, Santa Barbara as they develop and implement their workplan to identify underserved public sector customers within energy efficiency programs. As indicated in a December 2020 presentation to CAEECC, the research team proposes to focus on socioeconomic indicators including linguistic isolation, poverty, and unemployment in the CalEnviroScreen dataset to analyze gaps in program participation.[17] As this research is conducted and data is made available, I-REN will use the resulting insights to inform targeted strategies to improve equity and access for underserved local governments in the Inland Empire through its Public Sector initiatives.

Coordination with other Program Administrators

I-REN is in communication with other PAs operating in the region to identify areas of potential coordination for Public Sector activities. I-REN will ensure its activities are differentiated and avoid duplication of effort, while maintaining cooperation with other PAs.

[16] 2209 - Statewide Public Sector Market Study. Study ID: 2019_Public_503. Energy Project Status Reporting System. Accessed November 2020. https://psr.energydataweb.com/#!/project-status-view-edit/503

[17] "Identifying underserved public sector customers within energy efficiency programs." Presentation by University of California, Santa Barbara Public Sector Research Team to CAEECC-Hosted Sub-Working Group on Underserved Customers Meeting. December 16, 2020. Slide deck available online.



Inland Regional Energy Network Business Plan

Chapter 3: Codes & Standards (Cross-Cutting)

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Introduction

I-REN is proposing a dynamic and targeted set of programs for the Codes and Standards (C&S) Sector to assist its local government agencies in better understanding and enforcing energy building codes. In addition, I-REN will support the region's building industry to better conform and implement these codes. Compliance with California Energy Code (Title 24, Part 6) and California Green Building Standards Code (Title 24, Part 11) is required for new construction of, and additions and alterations to, residential and nonresidential buildings.

The authorities having jurisdiction or "AHJs" that provide permits for these projects and enforce codes and standards are found at the city and county level and are expected to enforce the California Energy Code without additional budget resources. Increased contractor compliance with the Energy Code, particularly related to residential HVAC, is identified as an important strategy to increase energy efficiency and home safety. The CEC has established a goal to increase compliance by 80% by 2021.[1]

Energy code enforcement has historically been difficult for local jurisdictions, particularly smaller communities with fewer resources. Conflicting priorities and a focus on life and safety codes relegates energy code to a secondary (or tertiary) position. I-REN's service territory includes many AHJs that face significant challenges in enforcing energy codes and standards with their current resources and capacity. These jurisdictions are small in population size, geographically dispersed, challenged by extreme climate conditions, and disadvantaged by pollution and other factors.

As an organization led by and dedicated to serving local governments, I-REN can provide flexible and adaptable solutions to help bridge the gap and assist these jurisdictions. I-REN's C&S initiatives will offer locally focused training, education, and tools to support codes and standards implementation, enforcement, and compliance activities.

CODES & STANDARDS GOAL & STRATEGIES

Goal 3. Work closely with local building departments and the building industry to support, train, and enable long-term streamlining of energy code compliance

S3.1 Establish an ongoing training program to assist building department staff and the building industry to support, understand, and effectively implement energy efficiency codes and standards.

S3.2 Implement an outreach program to engage, educate and involve regional construction firms and building departments, and support compliance and regional energy efficiency programs and customers.

S3.3 Develop technical assistance tools and resources to assist building departments and the building industry with understanding, evaluating, and permitting of energy codes.

BUDGET

2021-2015 Budget (total): $7.6M

[1] California Energy Commission, "2019 California Energy Efficiency Action Plan," December 2019, page 40.

Strategies

I-REN has centered its strategies on three key areas in C&S:

3.1. Support local jurisdictions' building departments to build capacity and understanding to better enforce and manage Energy Code Compliance and oversight

I-REN's locally-focused interventions will equip building department staff to identify potential issues, provide guidance to permit applicants, and streamline the permitting process. With increased knowledge and capacity, local building department staff will have the tools and additional resources to support their code enforcement and compliance, as well as cultivate the associated energy savings from efficient building practices.

3.2. Engage and support local builders and the building industry to comply with energy codes.

I-REN will help engage, educate, and inform contractors and building professionals in the Inland Empire about codes, compliance, and resources available to enable higher compliance and effectiveness. This will be through a link to the Workforce Education and Training Cross-Cutting Sector programs, as well as through direct engagement under the C&S Sector programs.

3.3. Provide regional tools, training, and resources to promote energy codes.

I-REN will provide a bridge between the Statewide Codes Team and the local industry by curating best practices into locally relevant resources, materials, regional forums, and trainings.

I-REN is well positioned to lead this work because of its extensive network of local connections with public and private sector stakeholders in the C&S community. Through their committee structure and strong relationships with cities and local jurisdictions, the three COGs that make up I-REN's governing agencies are actively engaged with building departments from jurisdictions throughout the region. In their role as COGs they already serve as a trusted resource for information as well as a facilitator for statewide coordination with other program administrators, CEC, CPUC, CCAs, International Code Council (ICC), and other stakeholders. The communication networks and local connections the I-REN governing agencies have fostered are crucial for engaging these local building departments and delivering the support they need to excel in their C&S enforcement roles and foster increased compliance.

The COVID-19 pandemic has had a significant effect on the global economy and that of the United States and the State of California. While the pandemic continues to unfold, it is clear that the role of local governments is of critical importance in advocating for their communities in times of crisis. The contractor and building communities were particularly hurt in the last recession and will likely be impacted in this crisis. Creating C&S Sector programs that can enable streamlined work for both local government and contractors, while enabling safer and better buildings is an opportunity and need. To the extent that construction and renovation continues to be an economic driver in the I-REN region, local building departments will continue to be responsible for permitting and enforcement of energy codes and standards. Through the proposed C&S sector initiatives, I-REN can provide training, education, and resources to support building department staff in the performance of their jobs, thereby contributing to economic development and energy efficiency associated with building activity in this region.

Market Characterization

Market Actors

> *"Energy efficiency savings are maximized only if they are installed following manufacturer guidelines by a well-trained workforce. Long-lasting, impactful energy efficiency savings require local commitment, and local communities need to be the focal point for training and workforce development."* - *California Energy Commission* [2]

Among the numerous market actors that comprise the broader C&S community (Table 3-1), local governments are responsible for permitting and enforcing code requirements in new construction and existing buildings. They are also tasked with coordinating across this wide field of stakeholders and market actors to improve awareness of codes and standards requirements and increase compliance.

In the I-REN region there are 52 local government AHJs, ranging from large cities to smaller, more rural municipalities, and several Indian Tribes. The local building department staff at these AHJs are key to realizing energy savings from implementation and enforcement of codes and standards. For that reason, I-REN proposes to focus much of its C&S Sector work on empowering and supporting these local building department staff to be energy efficiency leaders in their own communities—consistent with the Existing Buildings Energy Efficiency Action Plan Strategy 1.7 Local Government Leadership. In order to encourage rigorous code enforcement at the local level, a strong foundation of regional support is needed—and that is what I-REN proposes to provide through its C&S Sector programs.

On the compliance side of the C&S "enforcement and compliance" equation is a large community of building professionals, which includes architects, designers, contractors, energy consultants, and third party code plans examiners, inspectors, raters, verifiers. This community also includes contractors skilled in a wide variety of trades: electricians, HVAC technicians, insulation installers, plumbers, and many more. This diverse community is of critical importance for performing high-quality installation of efficient equipment in compliance with codes and standards.

[2] California Energy Commission, "2019 California Energy Efficiency Action Plan," December 2019, page 108.

Table 3-1. I-REN Codes & Standards Sector Market Actors

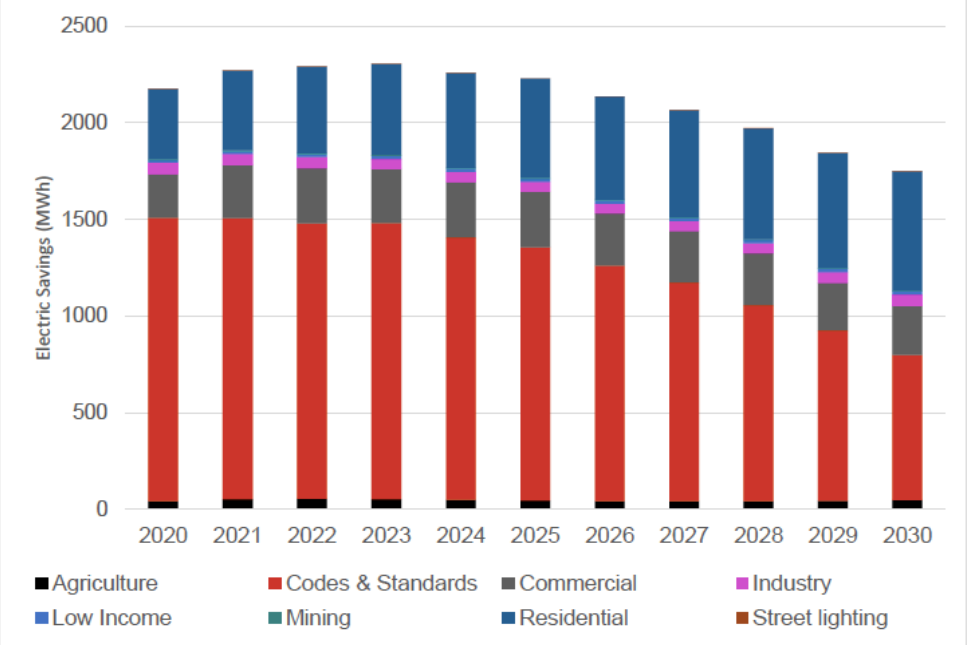
Market Actor Type	Examples
Building Department Staff	Chief building officials, permit technicians, plans examiners, building inspectors, etc.
Other Local Government Staff	Planners and community development staff, sustainability staff, city managers, public works directors, and elected officials.
Building Professionals	Architects, designers, contractors, energy consultants, and third-party code plans examiners, inspectors, raters, and verifiers.
Other Permit Applicants	Commercial building owners and managers; multifamily housing developers, owners, and managers; homeowners.
Partner Agencies and Utilities	California Public Utilities Commission, California Energy Commission, Building Standards Commission, Investor Owned Utilities, Municipal Utilities, etc.
Industry, Stakeholder and Professional Groups	International Code Council (ICC) Chapters, American Institute of Architects (AIA), Local Realtor® Associations, California Building Industry Association (CBIA) chapters (Riverside & San Bernardino County Chapters), the U.S. Green Building Council and Inland Empire US GBC local chapter, California Building Officials (CALBO), Building Owners and Managers Association (BOMA) chapters, California Energy Alliance (CEA), American Public Works Association (APWA) Southern California Chapter, etc.

Sector Landscape

The I-REN service territory of Riverside and San Bernardino counties covers more than 27,000 square miles and includes the state's third-largest Metropolitan Statistical Area (MSA). The region has seen **steady growth over the last decade** following the Great Recession, as people moved away from coastal areas with a higher cost of living. The California Finance Department reported that between 2010 and 2019, the Inland Empire added 407,476 people to reach a population of 4,632,327.[3]

Previous efforts emphasizing increased compliance with energy codes and standards in new construction to produce energy savings and emission reductions has resulted in stranded savings in existing homes and buildings. The CPUC's 2019 Potential and Goals Study, cited in the 2019 California Energy Efficiency Action Plan, recently identified C&S activity in existing buildings as the major driver of potential savings statewide (Figure 3-1).

Existing buildings pose unique challenges for code compliance, in comparison to new construction, but they far outnumber new buildings in the Inland Empire even despite the growth and new construction in the I-REN counties. The housing stock in Riverside and San Bernardino counties, nearly 1.6 million residential units, was largely built in the era before the 1978 building standards took effect. This indicates a **significant opportunity for C&S-related energy savings and carbon reduction** in I-REN's existing residential building stock through code compliant equipment installation, additions, alterations, and renovations.

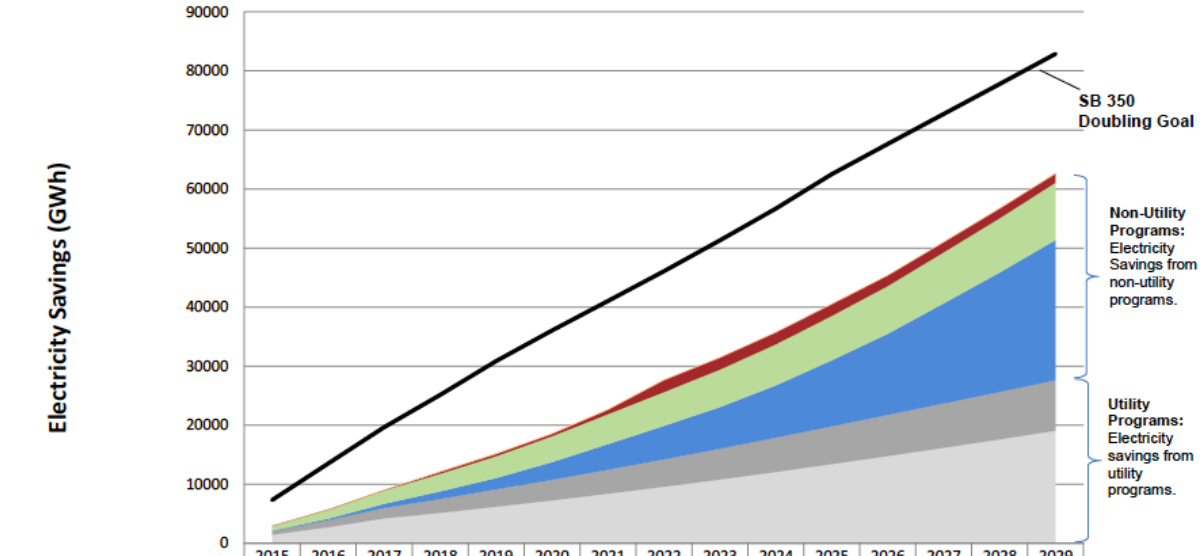


Source: Navigant, 2019 PG Study

Figure 3-1. Statewide Electric Savings Market Potential (MWh)[4]

[3] Inland Empire Quarterly Economic Report. Economics & Politics, Inc. October 2019. Available Online. Accessed October 2020. http://www.johnhusing.com/QER%20Reports/QER%20October%202019.pdf

[4] California Energy Commission, "2019 California Energy Efficiency Action Plan," December 2019, page 54.



	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Agriculture & Industry	2	33	58	95	118	121	116	109	94	83	76	75	82	99	127
Behavioral & Market Trans.	32	39	47	296	366	375	732	2002	1998	1986	1963	1762	1693	1617	1492
Financing	757	1513	2270	2994	3704	4401	5074	5736	6360	6967	7536	8099	8653	9202	9748
Codes & Standards	93	243	673	1280	1899	2980	4325	5655	7037	8841	11172	13729	16948	20215	23746
POU Programs	596	1190	1790	2360	2945	3501	4069	4645	5232	5822	6406	6977	7520	8042	8540
IOU Programs	1427	2685	4179	5112	6169	7230	8373	9550	10768	12052	13385	14748	16145	17580	19050
SB 350 Doubling Goal	7,286	13,46	19,60	25,10	30,81	36,01	41,03	46,04	51,28	56,66	62,51	67,60	72,69	77,78	82,87

Figure 3-2. Senate Bill 350 Goal for Doubling Energy Efficiency Savings by 2030

Senate Bill 350 Doubling Energy Efficiency Savings by 2030, pg. 17 illustrates the high percentage of planned savings from codes and standards by non-utility programs.

New construction is also a focus of C&S activities. When single family residential new construction slowed elsewhere in California after the 2008 housing crisis, the Inland Empire continued to see new single family housing starts due to the greater availability and lower cost of developable land.[5] Data from the 2018 US Census indicates that the I-REN territory represents **13% of California's total new residential permits**, despite having 11.6% of the population. In 2018, more than 78% of new permits in the Riverside-San Bernardino-Ontario, CA MSA were for single family homes.

2018 Annual Permits Data for New Houses

Location (MSA)	Total	1 unit	2 units	3 and 4 units	5 or more	Structures with 5 or more
State of California						
Housing Units Authorized	113,502	58,831	2,590	2,050	50,031	1,763
Valuation	$ 27,844,627	$ 17,843,585	$ 480,909	$ 389,207	$ 9,130,926	
Riverside-San Bernardino-Ontario, CA						
Housing Units Authorized	14,809	11,591	166	279	2,773	233
Valuation	$ 3,538,857	$ 3,080,304	$ 25,194	$ 42,882	$ 390,477	
Percentage of Calif. permits	13%	20%	6%	14%	6%	13%
Los Angeles-Long Beach-Anaheim, CA						
Housing Units Authorized	29,524	10,042	1,528	522	17,432	506
Valuation	$ 7,348,035	$ 3,507,156	$ 307,236	$ 108,602	$ 3,425,041	
Percentage of Calif. permits	26%	17%	59%	25%	35%	29%

(Source https://www.census.gov/construction/bps/msaannual.html)

Figure 3-3. 2018 Permit Data: State of California, Inland Empire, and Los Angeles-area MSAs

The building industry in the Inland Empire may see benefits from recent and ongoing legislative efforts at the state level to encourage construction of more affordable housing.[6] Overbuilding has not been a problem in the Inland Empire in recent years. The City of Riverside, for example, has seen **growth that outpaces the supply of housing** and is "in need of much more residential construction to keep up with demand from its rising population."[7]

Additional information from the Construction Industry Research Board (CIRB) 2015 Annual Energy Permit Summary, indicates that the I-REN territory had about **10% of the state's HVAC changeout permits**. It is widely understood that the actual number of HVAC units installed are much higher than are permitted (approximately ⅓ of all units), indicating a large opportunity for I-REN to achieve higher energy savings with increased support of the local jurisdictions and builder community.[8]

[5] Building the Future: Construction in Southern California. LAEDC Institute for Applied Economics. September 2016. Available online. Accessed October 2020. https://laedc.org/wp-content/uploads/2016/12/Construction_FINAL_20161110.pdf

[6] Legislative Steps Toward More Affordable Housing. Reyes, Carrie B. First Tuesday Journal. Available online. Accessed October 2020.

[7] Riverside Housing Indicators. September 8, 2020. First Tuesday Journal. Available online. Accessed October 2020.

[8] DNV-GL, Final Report: 2014-2016 HVAC Permit and Code Compliance Market Assessment Volume I, Prepared for the CPUC, September 2017, page 3.

Major Trends

The newest standards released in 2019 introduced one of the highest levels of efficiency and performance in residential buildings California has ever seen, adding solar, and an equivalent to zero net energy requirement. Substantial changes in multifamily codes are expected in the next cycle with the potential for zero or low carbon residential codes in the following cycle. These new requirements have increased complexity and multiple pathways for builders to consider. Local government and industry professionals will need consistent support to ensure that these codes can be effectively implemented and enforced.

Economic development was already of importance to the I-REN region, which has seen population growth greater than other parts of California while having lower median income.[9] As the COVID-19 pandemic and related economic crisis continues to unfold, the cross-cutting workforce development activities proposed for I-REN's C&S sector program will have a role to play in helping local governments and building professionals navigate the changes ahead.

With education and outreach, I-REN proposes to provide leadership in the effort to shift the narrative around C&S. The proposed sector activities can help to ease the burden of compliance and enforcement while emphasizing the many benefits that accrue from the interconnectedness of C&S compliance with energy efficiency, energy bill savings, and comfort for building occupants. Due to the pandemic, issues of public health and links to indoor air quality may be of even greater interest than before.

Other trends and issues that may affect I-REN's C&S community include the following:

- Learning, complying, and implementing the 2019 code
- Building decarbonization
- Heat pump water heaters and electrification measures
- ZNE preparedness / "plug and play" grid
- Systems integration and demand flexibility
- Virtual inspections and online permitting required from COVID-19

[9] Jones, B., Elkind, E., Duncan, K., & Hanson, M. (2017). The Net Economic Impacts of California's Major Climate Programs in the Inland Empire. *UC Berkeley: Berkeley Law*. Available online. Accessed October 2020. http://laborcenter.berkeley.edu/pdf/2017/Inland-Empire-Net-Impacts.pdf

Intervention Strategies and Objectives

In its approach to serving the C&S community, I-REN is guided by an overarching goal:

Goal 3: Work closely with local building departments and the building industry to support, train, and enable long-term streamlining of energy code compliance.

To achieve this goal, I-REN will provide direct support and assistance to local building departments as well as regional construction firms responsible for complying with permitting requirements. I-REN's intervention strategies address the barriers faced by the C&S community in order to streamline code enforcement and permitting, and increase energy efficiency in the region through C&S.

Table 3-2. Intervention Strategies, Tactics, and Objectives

	Intervention Strategy	Tactic	Objective
Training	S3.1 Establish an ongoing training program to assist building department staff and the building industry to support, understand, and effectively implement energy efficiency codes and standards.	T3.1.1 Develop training curriculum to address gaps in compliance with current requirements. Offer ongoing training on changes and trends in C&S. Tactic 3.1.2 Support local governments and the building industry during transitions to new codes to deliver effective messaging and resources and increase timely compliance with updated requirements.	*Improve understanding of energy efficiency codes and standards among local building departments and the building industry to increase implementation and compliance.*
Outreach	S3.2 Implement an outreach program to engage, educate and involve regional construction firms and building departments, and support compliance and regional EE programs and customers.	T3.2.1 Foster the development of an online Code Hub community for sharing best practices amongst building departments and the building industry. T3.2.2 Expand local jurisdiction relationships to host regional forums for the building industry and public sector.	*Make code compliance a valuable element of the region's energy efficiency goal attainment with engagement regionwide.*
Technical Assistance	S3.3 Develop technical assistance tools and resources to assist building departments and the building industry with understanding, evaluating, and permitting the energy codes.	T3.3.1 Identify and address the areas of greatest need for improved code compliance, in collaboration with local governments and the building industry. T3.3.2 Improve consistency in code enforcement and compliance resources across the region by facilitating cooperation between local governments. T3.3.3 Evaluate and develop model ordinances and policies for use regionally.	*Deliver locally informed resources and tools that streamline code compliance and enforcement and increase permit closeout.*

Approach to Overcoming Barriers

I-REN's intervention strategies are designed to overcome the problems and barriers described in Table 3-3, with tactics and activities to achieve the overarching goal of elevating energy codes and standards compliance through training, outreach, and assistance to local government jurisdictions and other stakeholders in the C&S community.

The C&S sector faces unique barriers to increased energy efficiency. This is especially true in the I-REN service territory, given its size and distance from the Los Angeles MSA. I-REN proposes to offer a C&S program tailored to the specific needs of this region, even though the sector has been targeted by other non-local programs. This approach is consistent with CPUC's policy in D.12.11-2015 that Regional Energy Networks (RENs) should implement energy efficiency initiatives in hard-to-reach markets "whether or not there is a current utility program that may overlap."[10] In designing their approach to the C&S sector, I-REN has selected strategies and tactics based on insights from the I-REN governing agencies, with consideration also given to previous attempts by other PAs to address the C&S sector in this region. Those lessons learned informed I-REN's planning process, as well as best practices from successful C&S programs elsewhere in the state.

The proposed interventions rely on relationships and communication. I-REN is uniquely positioned to serve the C&S sector because the I-REN governing agencies already have extensive connections throughout the region with local building and planning departments, including code officials and permitting staff at all levels, and many of the private construction and architectural firms who frequently apply for permits.

[10] California Public Utilities Commission, Decision 12-11-015, Decision Approving 2013-2014 Energy Efficiency Programs and Budgets, November 8, 2012, Page 17.

Table 3-3. Barriers and Strategies for I-REN Codes & Standards Sector

Problem	Barriers	Solutions	Strategies
Codes and standards are continually being updated and becoming more complex.	Lack of capacity and time to learn details of Title 24, Part 6 and implement effective means to review or enforce.	Technical assistance, tools, training, and resources can help local building department staff and permit applicants keep up with changes to codes and standards.	S3.1, S3.3
Some local building departments have limited staff resources for enforcing energy codes.	Energy efficiency is a low priority for building departments. Focus is on life and safety issues.	Ongoing training and outreach can help identify and fill gaps in building department capacity, while reinforcing the importance of energy codes and helping encourage local leadership in EE and C&S.	S3.1
Some local building departments have limited capacity to monitor and enforce changes, leading to uneven compliance across the region.	Lack of enforcement of permitting of HVAC systems for existing buildings as well as other energy code elements for new construction, especially related to the 2019 code cycle.	Outreach to construction firms and local building departments can help ensure consistent and timely information is being distributed across jurisdictions to support both compliance and enforcement.	S3.2
Both permit applicants (e.g. construction firms) and local building department staff have complicated requirements to follow for compliance and enforcement.	Technical questions and issues with permitting, codes, etc.	Technical assistance can help provide targeted support for permit applicants and local building departments, and other tools, and resources can offer accessible information to answer frequently-asked questions and help address known issues.	S3.3

Strategy 3.1 Establish an ongoing training program to assist building department staff and the building industry to support, understand, and effectively implement energy efficiency codes and standards.

Objective: Improve the understanding of energy efficiency codes and standards among local building departments and the building industry to increase implementation and compliance.

Tactic 3.1.1: Develop training curriculum to address gaps in compliance with current requirements. Offer ongoing training on changes and trends in C&S.

Local building departments are critically important to increasing energy efficiency through improved code implementation and enforcement. Yet these individuals face numerous barriers in the performance of their jobs: a constantly changing and often confusing set of requirements to be enforced, limited time and staff resources, and the need to prioritize life and safety-related codes.

The community of professionals responsible for code implementation and permitting includes numerous job titles: Chief Building Officials, Permit Technicians, Plans Examiners, Building Inspectors, etc. I-REN proposes to develop a role-based training curriculum that is tailored to supporting these individuals in the performance of their job responsibilities. Training will augment available curriculum and fill gaps where needed and build on successful topics and strategies from other PAs.

"Journey mapping" is a technique that can be used to gain insight into the challenges faced by these professionals as they move through their daily tasks, and those insights will inform training modalities for each role. Training can be offered in person, via webinar, or on demand. Locations, delivery mechanisms, topics, and other aspects of training will be informed by data gathered as part of Tactic 3.3.1, so that I-REN's offerings prioritize the areas of greatest need.

To complement and enhance public sector training, I-REN will also coordinate and offer private sector training to help architects, builders, and other trades better comply with energy codes and navigate the process to get permits.

To avoid duplication of effort, I-REN is communicating and exchanging ideas with other PAs operating in the region. Though other programs and initiatives have targeted the C&S sector, many local building departments and the building industry in general in the I-REN region have been underserved and will benefit greatly from locally focused training opportunities. I-REN will differentiate its C&S training offerings and coordinate with other training providers where necessary to make the best use of its constituents' ratepayer dollars.

Additionally, training in C&S is an important area for crossover activities related to economic development and Workforce Education & Training (WE&T).

Activities to support this tactic may include and would not be limited to the following:

- Design training curriculum based on journey mapping and gaps identified in Tactic 3.3.1.
- Maximize accessibility through different training modalities including in-person (if possible given social distancing needs due to COVID-19), live webinars, and/or online on-demand training. Training sessions could be general admission and/or hosted by a specific local building department for their staff.
- Register as an ICC Preferred Provider to offer ICC-approved training and continuing education units (CEUs).
- Coordinate with other PAs to avoid duplication of effort.
- Integrate private and public sector training opportunities to enhance cross-learning and coordination.
- Incorporate periodic updates to reflect changes to codes and standards and trends in the C&S community.

Key partners for these activities will include those listed in Table 3-4 as well as other existing providers of training and educational resources on C&S.

Tactic 3.1.2: Support local governments and the building industry during transitions to new codes and standards to deliver effective messaging and resources and increase timely compliance with updated requirements.

Codes and standards requirements are updated frequently, and local governments as well as the building community as a whole are often challenged to stay current during times of transition. This is especially true for smaller AHJs in disadvantaged communities and rural areas as they may lack the time and capacity to track the updates and changes. As a trusted regional partner, I-REN can provide support to these local governments and the building community to help them understand updated C&S requirements and make timely changes to their implementation and enforcement processes.

This work requires effective and well-timed communication from a credible source. Each of the three agencies that comprise I-REN has had or currently has Local Government Partnerships (LGPs) with connections including city managers, planning department staff, local utilities, and others. I-REN is already engaging with these local experts on a monthly and/or quarterly basis. I-REN governing agency staff are also involved with hosting webinars and forums with local governments and building industry professionals on various topics, fostering collaboration and consistency across the region.

In addition to in-person and web meetings and workshops, I-REN governing agencies have established digital communication channels that can be leveraged for C&S outreach. For example, WRCOG distributes a quarterly e-communicator to more than 1,900 contacts with news and updates relevant to local government and the building industry, such as utility program opportunities. I-REN staff have the in-house capability to ramp up these communications to provide timely, important information to the C&S community. For example, during Spring 2020 at the onset of the COVID-19 pandemic and associated shelter-in-place mandates, they shifted to releasing a briefing more frequently—every week—with updates tailored to their members.

With this experience in providing in-person, online, and email messaging to local governments and the building industry, I-REN proposes to promote increased understanding and compliance with C&S updates by engaging in activities including but not limited to the following:

- Host targeted local workshops timed to coincide with Title 24 and state building code update years (2022 and 2025), in-person if possible.
- Offer online workshops and materials.
- Engage in e-communications and distributing presentation materials and messaging to local government and building industry contacts.
- Generate social media content, podcasts, and other creative forms of outreach and communication.
- Participate in state and local code update processes with agencies such as the California Building Standards Commission (CBSC) or CEC.

Key partners for these activities will include local government officials, planning and building departments, and construction and building industry professionals such as those listed in Table 3-4.

Strategy 3.2 Implement an outreach program to engage, educate, and involve regional construction firms and building departments, and support compliance and regional EE programs and customers.

Objective: Make code compliance a valuable element of the region's energy efficiency goal attainment with engagement regionwide.

Tactic 3.2.1: Foster the development of an online Code Hub community for sharing best practices amongst building departments and the building industry.

I-REN proposes to develop and deploy a web-based Code Hub that will serve as an online community for C&S sector stakeholders. On the Code Hub, community members can submit questions to be answered by others in the community and/or by an expert Code Coach. Community members can also share best practices on topics related to their role and experience in the C&S sector, whether they are a permit technician or code enforcement official or a general contractor applying for a permit.

Especially in a large service territory like I-REN's, a technology-based solution like the proposed Code Hub is an effective way to overcome some of the challenges and barriers associated with time and distance. In today's world, many people are accustomed to using message boards and online forums to get answers to their questions and to interact socially and professionally. The Code Hub will promote a sense of community by connecting stakeholders in the C&S sector who have similar responsibilities, allowing them to "crowdsource" their questions to their peers, contribute their ideas and tips to help others, and also get input from experts.

The Code Hub will be designed to be searchable and organized by relevant topics, to allow community members to easily navigate to the information they need. Questions and discussions will be moderated and secure, and the interface will meet all accessibility standards. The Code Hub will be promoted through local government communication channels and I-REN's committees, e-communicators, and social media. The Code Hub will be integrated into the overall BUC system proposed for the I-REN Public Sector, to provide a single technical resource for local jurisdictions and the industry.

The I-REN governing agencies bring experience developing websites and online tools, for example SBCOG's recently developed vanpool website, and working with information technology vendors to collaborate and design user-friendly web-based resources.

Key partners for these activities may include code implementers on both the enforcement and compliance side. Partners should include local ICC Chapters, local AIA chapters, associations of contractors for new construction and retrofits (residential and nonresidential), local government building department and sustainability offices, environmental advocacy groups, associations of technology manufactures and vendors, and others in the C&S community.

Tactic 3.2.2: Expand local jurisdictions' relationships to host regional forums for the building industry and public sector.

Effective outreach to permit applicant market actors will help these individuals understand their roles and responsibilities in the C&S sector, leading to increased code compliance. This broad segment of market actors include private construction firms, architectural firms, general contractors, installers of HVAC and other equipment, and many other building professionals who have a responsibility to comply with C&S for construction and renovation activities in residential and nonresidential buildings.

I-REN is already engaged with many of these market actors and brings the existing connections to jumpstart a series of regional forums on code compliance for this segment of market actors. Building firms regularly attend committee meetings hosted by the I-REN governing agencies to learn about opportunities that may benefit them, such as utility programs or transportation projects. In addition, the I-REN governing agencies are experienced in working collaboratively with other PAs to host regional forums and workshops. For example, CVAG has hosted Energy Code Ace workshops in partnership with SCE and SoCalGas. CVAG has also hosted Energy & Water summits attended by more than 500 participants, to educate and update constituents about energy efficiency programs and strategies in collaboration with other agencies in the region. I-REN's proposed C&S regional forums would leverage this prior experience and existing partnerships to avoid duplication of effort.

Topics may include but would not be limited to Title 24 standards, Zero Net Energy (ZNE), low carbon buildings, beneficial electrification, building decarbonization, specific technologies like heat pump water heaters, and other requirements or trends affecting the building industry. These regional forums also allow an exchange of ideas where I-REN can gain insight to the implementation side of codes and standards, directly from the individuals responsible for compliance. These insights can inform the development of training and workshops, outreach materials, and other activities. Moreover, these regional forums offer an important opportunity for crossover activities related to economic development and WE&T.

Activities for this tactic could include and would not be limited to the following:

- Design a series of regional forums. These could be general admission events with participants from various firms, or targeted events at the workplace for large firms with numerous staff.
- Expand accessibility to forums through different modalities including in-person and/or online to accommodate social distancing needs due to COVID-19. Online forums could be accessed live or on demand via recordings.
- Plan the market actor types and locations to be targeted, using data from Tactic 3.3.1 to prioritize areas of greatest need.
- Promote regional forums to building professionals through existing communication channels.
- Launch regional forum series and track data regarding participation and feedback received.
- Gather contact information, distribute forum materials, and maintain lines of communication.
- Use feedback and discussions to inform development of future regional forums and other C&S activities.

Key partners for these activities will include local government officials, planning and building departments, and construction and building industry professionals such as those listed in Table 3-4. There may also be opportunities to collaborate with other PAs in the region to maximize reach.

Strategy 3.3 Develop technical assistance tools and resources to assist building departments and the building industry with understanding, evaluating, and permitting the energy codes.

Objective: Deliver locally informed resources and tools that streamline code compliance and enforcement and increase permit closeout.

Tactic 3.3.1: Identify and address the areas of greatest need for improved code compliance, in collaboration with local governments and the building industry.

This important tactic will assess the current state of code enforcement and compliance in the I-REN territory using primary and secondary data. The analysis resulting from this tactic will inform the detailed planning process to kick off other activities across I-REN's strategic framework for the C&S sector, such as developing training, planning outreach efforts, and designing technical resources and tools. This data will also help form baselines for some of the metrics to measure I-REN C&S sector program performance.

I-REN brings direct in-house experience developing and implementing surveys of their member local governments and constituents to assess gaps in program areas. Their staff compile and analyze the responses, prepare reports and outreach materials to share their findings, and ultimately use those insights to make improvements to programs.

Rigorous data collection will be a near-term effort to support implementation of other activities in the C&S sector. Key partners for this effort include the C&S enforcement and permitting community, such as local government agencies and building departments, as well as frequent permit applicants such as private construction and architectural firms. The proposed activities to implement this tactic may include but are not limited to the following:

- Collaborate with local governments to design and deploy an effective survey instrument, via an online survey platform already utilized by I-REN.
- Conduct additional in-depth phone interviews as needed to survey key decision makers and/or to fill identified gaps in response data.
- Review secondary data sources obtained in collaboration with local government agencies and code officials.
- Compile results and preparation of report materials for sharing with local governments.
- Analyze results, in cooperation with local governments, to inform program planning efforts and evaluation, measurement and verification (EM&V).

Key partners for these activities will include local government officials, planning and building departments, and construction and building industry professionals such as those listed in Table 3-4.

Tactic 3.3.2: Improve consistency in code enforcement and compliance resources across the region by facilitating cooperation between local governments.

Much of the work currently performed by the I-REN governing agencies is directly related to this tactic: facilitating cooperation by local government officials and planning staff in order to reduce duplication of efforts and encourage consistency across the region on a variety of topics. This work occurs through the committee structure in place between CVAG, SBCOG, and WRCOG, composed of local government staff, City Managers, and elected officials. Members of the regional building industry are also involved with and benefit from the I-REN governing agencies' committees and communications. Because of its role as stakeholder consensus-builder for these parties, I-REN is well-positioned to lead the collaborative process of assessing and updating the various tools and resources around code enforcement and compliance in this region.

Resources and materials may be out of date and will need revisions to reflect current requirements, technologies, and trends. There may also be opportunities to look at adding new content or features to streamline the enforcement and compliance processes. The ongoing COVID-19 pandemic and associated shelter-in-place mandates have highlighted the need for adaptability in local government services. For example, "Online Building Departments" can allow permit applications and related documentation to be submitted with payment on a website, to reduce in-person interactions. Some building departments already utilize these features, while others do not have access. With I-REN's assistance, code enforcement and compliance resources and materials can be made more consistent across the region and can be updated to reflect current requirements.

The talented staff at the COGs that comprise I-REN are experienced in developing resources specifically targeted to local governments. Their in-house teams specialize in creative marketing and outreach to engage with their audience. They frequently develop flyers and materials and host events and workshops as well as podcasts and webinars. They are experienced in using email and social media to promote events and opportunities and have in-house graphic designer and videographer staff.

Improving consistency in code enforcement and compliance resources available across the I-REN territory will involve but not be limited to the following activities:

- Assess the existing resources and communication channels. These may be widely varied: websites, online tools, training modules, checklists, how-to guides, frequently-asked questions, e-newsletters, social media posts, podcasts, printed materials, scripts and talking points for phone and in-person assistance, etc.
- Collaborate with AHJs and local governments to develop updated content based on current requirements, best practices, and new solutions for streamlining the code enforcement and compliance process. Materials will be technically accurate and tailored to address the areas of greatest need identified in Tactic 3.3.1.
- Distribute materials through the AHJs, local government, and regional building professionals' communication channels.
- Ensure materials are reaching code enforcement officials and/or permit applicants as identified in the needs assessment.

Key partners for these activities will include local government officials, planning and building departments, and construction and building industry professionals such as those listed in Table 3-4.

Tactic 3.3.3: Evaluate and develop model ordinances and policies for use regionally.

One of the greatest benefits of a regional organization working with local jurisdictions is the ability to leverage the knowhow of a large body of professionals and then to distribute that knowledge and resources to less advantaged groups. The I-REN team will enable this regional collaboration by identifying important areas for policy improvements, such as future reach codes, efficiency and fire ordinances, et.al., and work with jurisdictions to create model ordinances and policies that can be adopted by interested local governments. This tactic will also enable I-REN to test and pilot various approaches to common concerns and establish an effective regional response that can be easily and affordably adopted region-wide. This effort will ensure dollars spent are well utilized and have the greatest impact possible.

Specifically, I-REN will survey and interview key jurisdictions as needed to understand the major areas for concern and potential policies. Then working through their committee structure, they will develop regionally appropriate model ordinances and vet and refine them with participating local governments. Once finalized, these model resources will be made available to any jurisdiction in the region. I-REN will provide ongoing technical assistance to adjust and implement the ordinances as well as provide ongoing monitoring and tracking to address any needed changes or updates.

Anticipated Programs

I-REN's anticipated program offerings are new non-resource programs proposed to provide short-term and mid-term support for the C&S community to streamline compliance across the region. Anticipated programs include but are not limited to the following:

- C&S Training and Education – a non-resource program to establish and implement training and education for building department staff and the building industry to support, understand, and effectively implement energy efficiency codes and standards.
- C&S Technical Support Program – a non-resource program to develop technical assistance tools and resources to assist building departments and the building industry with understanding, evaluating, and permitting the energy codes.

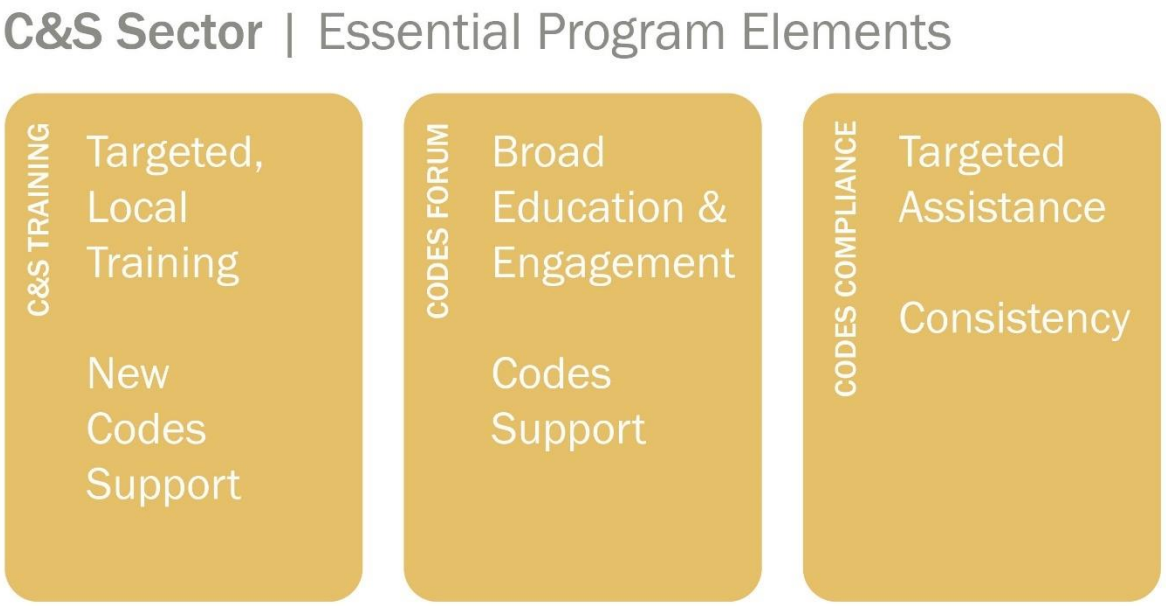


Figure 3-4. I-REN Codes & Standards Sector Essential Program Elements

Evolving Approach

As a new REN, I-REN will consult with other existing RENs providing similar activities and implement best practices as well as build upon the work currently underway through the COGs and LGPs. I-REN will implement the strategies outlined here in collaboration with the key partners described in the section that follows. Based on EM&V and on monitoring progress toward performance metrics through the near- and mid-term activities, I-REN will adjust strategies for future implementation beyond the 2021-2025 timeline.

Leveraging I-REN's Existing Key Partners

I-REN's greatest strength is their extensive network of relationships with local governments, building and planning departments, code officials and permit staff, private construction and architectural firms, and other market participants with responsibilities in the C&S sector.

These relationships have been built over decades and are maintained through frequent engagement and through the I-REN governing agencies' committee structures, numerous outreach channels, and ongoing programs and initiatives. Local governments of the Inland Empire and various industry stakeholders already look to the I-REN governing agencies for information on energy efficiency programs and sustainability.

Table 3-4 shows examples from the I-REN governing agencies' experience with these collaborative activities. These key partnerships will be of critical importance for I-REN's work in the C&S sector. I-REN will build on these existing relationships to foster additional connections with partners as described earlier in the chapter (section entitled "Market Actors").

Table 3-4. I-REN's Key Partnerships in the Codes & Standards Sector

Key Partners	Relevant Examples of Previous & Ongoing Collaboration
Local Governments: **WRCOG: 18 Cities** **CVAG:10 Cities** **SBCOG: 24 Cities & Five Board of Supervisors**	The three I-REN COGs have all had or currently have LGPs and various connections including City Manager, Planning, and local utilities. They bring multiple local experts into the conversation on a monthly/quarterly basis. WRCOG's partners consist of Public Agencies (18 members), Water Districts (2 members), and Riverside County Superintendent of Schools. Collaboration has included various Energy, Environmental, and Transportation / Planning Programs such as LGP, PACE, Western Community Energy (WCE, the WRCOG's Community Choice Aggregation), Transportation Uniform Mitigation Fee (TUMF) program, Solid Waste Cooperative, Clean Cities Coalition, and Planning / Grant Writing Assistance Programs. CVAG's membership includes 10 cities and CVAG has participated in the Desert Cities Energy Partnership (DCEP) LGP with each of their member cities and the utility companies servicing the CVAG jurisdiction, as described earlier in the Public Sector chapter. The DCEP allowed the CVAG member cities to achieve great energy savings for a 10-year period, due to close collaboration and monthly meetings. CVAG also has existing relationships with each of its cities through its Solid Waste & Recycling Committee (TWG) that reports to the Energy & Environmental Resources Committee (E&E), which then reports to its Executive Committee. Each city looks to CVAG to keep them updated on energy efficiency programs and measures. The SBCOG Board consists of the mayor of each of the 24 cities in the county, as well as the five members of the San Bernardino County Board of Supervisors. SBCOG has close relationships and partnerships with each city, and has worked on numerous projects such as regional ridesharing, building transportation infrastructure, coordination of a Zero Emission Vehicle Readiness and Implementation Plan for the County, and a Climate Resiliency Study "Resilient IE." In addition, SBCOG has numerous committees to foster collaboration among stakeholders, including a City/County Manager Technical Advisory Committee.

Local Universities and Community Colleges	Through DCEP, CVAG hosted annual Energy Summits that were well attended. CVAG partnered with the local universities (CalState San Bernardino and UC Riverside) to hold multiple Title 24 training classes. CVAG has also partnered with the Palm Springs campus of UC Riverside to host C&S trainings in partnership with the IOUs and Energy Code ACE.
Building Professionals, including private firms such as architects, construction, and others	CVAG administers a Property Assessed Clean Energy (PACE) program and has service agreements with seven private firms to service CVAG's jurisdiction. PACE started in the Coachella Valley in 2007, starting with the City of Palm Desert and later transitioning to a regional approach through CVAG. Through DCEP, CVAG partnered with local universities as mentioned above to hold multiple Title 24 training classes, which were offered to local building contractors, architects, and building and safety officials. As the Transportation Authority for the County of San Bernardino region, SBCOG brings relationships with numerous building and construction industry related firms. SBCOG also brings connections to engineering, building, and construction firms through WTS International, an industry organization dedicated to advancing equity and access for women in the transportation industry, where a member of SBCOG's I-REN leadership team previously served as president of the Inland Empire chapter.
Industry, Stakeholder and Professional Groups	Riverside Chapter Building Industry Association (BIA) has been involved with WRCOG's TUMF Program with feedback on Transportation Program Growth and is a potential partner for C&S outreach and educational workshops. In addition, WRCOG previously served on the Board of the USGBC-IE.
3C-REN, SoCalREN, BayREN	These existing RENs provide a ready-made advisory group of local government Program Administrators implementing similar programs. Coordinating with this group will help to inform and strengthen the initial and ongoing offerings from I-REN.
Investor Owned Utilities (IOUs)	I-REN has been in communication with SCE and SoCalGas to establish commitments to cooperate as Program Administrators in the region and will continue to work closely with the IOUs to ensure offerings are coordinated and non-duplicative. The I-REN governing agencies have relevant experience partnering with the IOUs to deliver regional outreach and codes and standards training. CVAG has partnered with the Palm Springs campus of UC Riverside to host C&S trainings in partnership with SCE, SoCalGas, and Energy Code ACE. SBCOG has experience conducting outreach through the San Bernardino Regional Energy Partnership in collaboration with SCE and SoCalGas and working closely with 13 cities in the region.
Regional, State, and other Government Partners	To leverage shared resources and promote consistency in its C&S work, I-REN will collaborate with government agencies at the state level, such as CPUC, CEC, Energy Division, Building Standards Commission, and others. I-REN will also collaborate at the regional level, and brings a wealth of experience and existing relationships from its work with various regional entities including South Coast Air Quality Management District (South Coast AQMD) and the Mobile Source Air Pollution Reductions Review Committee (MSRC) Technical Advisory Committee and the MSRC Board. I-REN also bring experience working with Southern California Association of Governments (SCAG) as well as other COGs and transportation authorities throughout Southern California (LA Metro, RCTC, OCTA and VCTC).

Budget and Metrics

Budget

The budget shown in Table 3-5 will facilitate the forecasted short- and mid-term metrics targets with the expectation that increased participation and project volume is achieved as initial efforts scale and gain traction.

Table 3-5. Codes & Standards Budget

Budget ($)	2021	2022	2023	2024	2025
Administration	141,607	144,611	150,395	156,411	162,667
Marketing and outreach	84,964	86,766	90,237	93,847	97,600
Direct implementation - non incentive	1,189,495	1,214,730	1,263,320	1,313,852	1,366,407
Direct implementation - incentives	-	-	-	-	-
Total	**1,416,066**	**1,446,107**	**1,503,952**	**1,564,110**	**1,626,674**

Metrics

Based on the intervention strategies I-REN developed for C&S, the following metrics are proposed to track program performance.

Table 3-6. Program Performance Metrics

Codes & Standards Metric	Baseline Year	Short Term Target 2021	Short Term Target 2022	Short Term Target 2023	Mid Term Target (2024-2025)
Net GWh savings	2021	N/A	N/A	N/A	N/A
Net MMTherms savings	2021	N/A	N/A	N/A	N/A
Net MW savings	2021	N/A	N/A	N/A	N/A
Number of measures supported by CASE studies in rulemaking cycle (current work)	2021	N/A	N/A	N/A	N/A
Number of measures adopted by CEC in rulemaking cycle (indicator of past work)	2021	N/A	N/A	N/A	N/A
Number of T-20 measures supported by CASE studies in rulemaking cycle (current work)	2021	N/A	N/A	N/A	N/A
Number of measures adopted by CEC in current year	2021	N/A	N/A	N/A	N/A
Number of federal standards adopted for which a utility advocated (IOUs to list advocated activities)	2021	N/A	N/A	N/A	N/A
Percent of federal standards adopted for which a utility advocated (#IOU supported / # DOE adopted)	2021	N/A	N/A	N/A	N/A
The number of local government Reach Codes implemented (this is a joint IOU and REN effort)	2021	N/A	N/A	N/A	N/A
Number of training activities (classes, webinars) held, number of market actors participants by segment (e.g. building officials, builders,	2021	TBD	12	12	TBD

Codes & Standards Metric	Baseline Year	Short Term Target 2021	Short Term Target 2022	Short Term Target 2023	Mid Term Target (2024-2025)
architects, etc.) and the total size (number of the target audience) by sector. (M) Number of training activities					
Number of training activities (classes, webinars) held, number of market actors participants by segment (e.g. building officials, builders, architects, etc.) and the total size (number of the target audience) by sector. (M) Number of participants	2021	TBD	360	360	TBD
Increase in code compliance knowledge pre/post training	2021	N/A	N/A	N/A	TBD
The percentage increase in closed permits for building projects triggering energy code compliance within participating jurisdictions	2021	N/A	N/A	N/A	N/A
Number and percent of jurisdictions with staff participating in an Energy Policy Forum	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator
Number and percent of jurisdictions with staff participating in an Energy Policy Forum	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator
Number and percent of jurisdictions receiving Energy Policy technical assistance.	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator
Number and percent of jurisdictions receiving Energy Policy technical assistance.	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator
Buildings receiving enhanced code compliance support and delivering compliance data to program evaluators	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator

Cross-Cutting & Coordinating Activities

Marketing, Education & Outreach

Through their longstanding partnerships with the local governments they serve, the I-REN governing agencies have become a trusted voice and advocate in their two counties. They can use this position to coordinate Marketing, Education and Outreach (ME&O) activities within the region through their network of member jurisdictions.

The COVID-19 pandemic has highlighted the importance of timely and accurate communication from reliable sources, from all levels of government. I-REN can serve as a facilitator for coordination with other PAs and statewide programs and initiatives for emergency communication planning and other ME&O activities.

Effective marketing and outreach activities are fundamentally important to I-REN's strategies for C&S. The I-REN governing agencies bring in-house capacity to design, develop, and deploy creative marketing content for various channels, from printed materials and website content to email communicators, social media, videos, and podcasts. They are skilled at designing well-branded promotional campaigns to engage their local government audience.

I-REN anticipates its C&S-related marketing could include but would not be limited to the following activities shown in Table 3-7, in alignment with the proposed C&S intervention strategies and tactics.

Table 3-7. Marketing Activities for I-REN C&S Sector

Intervention Strategy	Tactic	Marketing Activities
S3.1 Establish an ongoing training program to assist building department staff and the building industry to support, understand, and effectively implement energy efficiency codes and standards.	T3.1.1 Develop training curriculum to address gaps in compliance with current requirements. Offer ongoing training on changes and trends in C&S. Tactic 3.1.2 Support local governments and the building industry during transitions to new codes to deliver effective messaging and resources and increase timely compliance with updated requirements.	*Promote training through I-REN governing agencies' existing marketing channels, through local government partnerships, and through building industry communication networks.* *Build a social media presence with local industry and professional groups, leveraging the existing connections from the I-REN governing agencies.* *Collaborate with local governments to design and deliver effective messaging to building departments and private industry during code transitions.*
S3.2 Implement an outreach program to engage, educate and involve regional construction firms and building departments, and support compliance and regional EE programs and customers.	T3.2.1 Foster the development of an online Code Hub community for sharing best practices amongst building departments and the building industry. T3.2.2 Expand local jurisdiction relationships to host regional forums for the building industry and public sector.	*Develop marketing content for e-communicators, social media, and other channels to promote the online Code Hub and building professionals' regional forums.*
S3.3 Develop technical assistance tools and resources to assist building departments and the building industry with understanding, evaluating, and permitting the energy codes.	T3.3.1 Identify and address the areas of greatest need for improved code compliance, in collaboration with local governments and the building industry. T3.3.2 Improve consistency in code enforcement and compliance resources across the region by facilitating cooperation between local governments. T3.3.3 Evaluate and develop model ordinances and policies for use regionally.	*Develop and deploy effective survey instruments to gather data and use that data to inform the design of resources to assist building departments and industry professionals.*

Workforce Education & Training

The C&S sector offers many opportunities for cross-cutting WE&T activities. The I-REN governing agencies' experience collaborating with key educational partners such as universities and community colleges will be an advantage when launching their training activities in the C&S sector.

I-REN's approach to serving the C&S sector incorporates training for local building department staff, to help those individuals perform their jobs and build capacity in their departments to better enforce codes and standards. This is important for developing a skilled workforce in some of the rural jurisdictions with less resources in their local building departments, and for areas that include underserved and disadvantaged communities, in line with the directive in Senate Bill 350.

I-REN's service territory also includes several relatively new cities incorporated in recent years; these cities are building their local capacity and establishing their infrastructure. They will benefit from C&S and energy efficiency-related training and education for their local government employees.

Building professionals in the private sector are another target of I-REN's strategies for C&S, and they will benefit from I-REN's training and outreach opportunities contributing to their professional development and supporting the development of a capable regional workforce trained in advanced energy efficient building practices in order to comply with codes and standards. I-REN will align its C&S training activities with its WE&T program to maximize benefits to the region's local government workforce and building professionals.

EM&V Considerations

As a new REN, I-REN is interested in collaborating with the CPUC, CEC, Energy Division, other PAs, and the region's C&S community to support statewide and regional efforts around C&S EM&V Roadmaps and Plans. I-REN will collaborate with the CPUC and other stakeholders to ensure that data collection activities are embedded in C&S program design to capture the information necessary to meet evaluation requirements and also to help expand the understanding of REN program impacts in this cross-cutting sector.

For its C&S programs, I-REN's EM&V considerations include data collection to inform CPUC evaluation activities as well as to support internal program performance tracking and continuous improvement. I-REN has also identified an anticipated area of study, supported by assessment and data collection tactics described here and in its C&S intervention strategies.

Data Collection Needs

I-REN data collection will support both external EM&V by the CPUC and internal research study activities. I-REN's data collection needs correspond to identified C&S metrics and indicators, and the intervention strategies developed for the C&S sector.

To support external EM&V activities, I-REN will collect data to keep the CPUC and stakeholders apprised of program progress. I-REN will work collaboratively with Energy Division staff to ensure data collection meets their needs, to enable evaluation that can:

1) inform the program selection process,

2) provide early feedback to program implementers,

3) produce impact evaluations at the end of the funding period, and

4) feed the planning process for future program cycles.[11]

Table 3-8 shows the research questions and data collection needs I-REN has identified for C&S. Data collection will support I-REN's internal EM&V activities and inform the measuring of progress toward established program goals and targets, CPUC metrics and indicators, and PA determined value metrics. Data collection and real-time program performance tracking will enable the delivery of timely feedback to implementers and/or program administration staff and support continuous improvement and future program planning efforts.

I-REN will also work with CEC and other stakeholders to ensure that I-REN C&S programs and data collection support statewide legislation and goals such as SB 1414 and the requirement for confirmation of appropriate permits for installation of new heating ventilation and air conditioning (HVAC) and heat pumps systems. I-REN will incorporate these requirements into its programs and work with building departments to establish successful approaches to implement this across the region.

Table 3-8. I-REN Codes & Standards Data Collection

Topic Focus	Research Questions/Data Collection Needs	EM&V Objective	Timeframe
C&S regional characterization	• What is the current state of code enforcement and compliance in the I-REN territory? • What C&S and permitting resources exist to support local building departments? • What compliance barriers exist for local building departments? • Which local jurisdictions show interest in reach codes/ordinances?	Understand the C&S sector market and identify highest needs	Short-term/ Mid-term
Depth of I-REN interventions	• How many trainings and regional forums are hosted with I-REN support? • How many individuals attend trainings and forums? • What number and percent of jurisdictions receive training, technical assistance, and other I-REN C&S resources? • How many local jurisdictions implement reach codes/ordinances?	Track program performance	Mid-term
C&S compliance improvement	• How has code compliance knowledge increased among training participants? • What is the percent increase in closed permits that are associated with or trigger C&S requirements?	Understand and track C&S compliance improvements	Mid-term

[11] Energy Efficiency Policy Manual, version 6, April 2020, p.44.

Anticipated Study Needs

PA-led studies may inform program target setting, value metrics, and highlight opportunities for improved data and measurement collection. One of the major areas for I-REN's study considerations is to better understand the current baseline of C&S compliance in the Inland Empire, in order to identify the areas of greatest need and provide targeted support through its C&S initiatives. I-REN proposes to develop and manage a study to characterize C&S compliance barriers, permitting practices and trends, and availability of training and educational resources. The assessment tactics described in I-REN's C&S intervention strategies will support this area of study. One of the key activities proposed by I-REN to support this study area is the data collection described in *Tactic 3.3.1 Identify and address the areas of greatest need for improved code compliance, in collaboration with local governments and the building industry*.

The information and analysis from this study will be used to develop training, plan outreach efforts, and design technical resources and tools. This data will also help form baselines against which to measure program performance during deployment. I-REN anticipates collecting this data initially to gain near-term feedback, then repeating the assessment after a few years to examine program progress and make improvements for program delivery in the mid-term timeframe and beyond.

Coordination with other PAs

I-REN is in communication with other PAs operating in the region to identify areas of potential coordination for C&S activities, and the I-REN governing agencies bring experience coordinating with other PAs through their LGP work. I-REN will ensure its activities are differentiated and avoid duplication of effort, while maintaining cooperation with other PAs.

Inland Regional Energy Network Business Plan

Chapter 4: Workforce Education & Training (Cross-Cutting)

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Introduction

"In the complex work of energy efficiency, higher skill often translates into more energy savings. According to the California Energy Commission, poorly installed HVAC systems increase energy use by 20 to 40 percent. What seems like a moderate increase becomes a significant concern when you consider that up to 85 percent of replacement HVAC systems in California are installed incorrectly."[1]

Workforce Education and Training (WE&T) initiatives may now be more important than ever due to the COVID-19 pandemic the U.S. faced for the majority of 2020 and continues to face in 2021. As a locally-focused and locally-led advocate for economic development in the Inland Empire, I-REN is distinct in its ability to respond to this crisis and help support the region's recovery. The COGs that make up I-REN's governing agencies have direct connections to local governments and community stakeholders to make this effort as effective as possible.

Agility and collaboration will be required to mount a response to the economic devastation caused by the pandemic. In comparison to larger institutions with a wider focus, local governments have a better ability to pivot and be flexible in serving their constituents. Local governments and community stakeholders are already on the frontline in managing the public health crisis and they will continue to have a critical role in economic development and resiliency. At the same time, those local governments are going to be overwhelmed by the new demands upon them and the reduction in resources to do their jobs.

WORKFORCE EDUCATION & TRAINING GOAL & STRATEGIES

Goal 2. Ensure there is a trained workforce to support and realize energy efficiency savings goals across sectors.

S2.1 Establish local partnerships with existing and potential training providers in the region to deliver targeted, equitable, and relevant energy efficiency training for contractors and other industry stakeholders.

S2.2 Facilitate industry engagement and development of job pathways to identify demand and jobs for a trained workforce.

BUDGET

2021-2025 Budget (total): $12M

I-REN will serve as a facilitator and resource for stakeholder collaboration in addressing the WE&T needs in the Inland Empire. These activities will promote job market recovery and progress toward statewide goals regarding energy efficiency, air quality, and support for underserved, rural, tribal, and disadvantaged communities (DACs). Both Senate Bill (SB) 350 and SB 535 prioritize these communities for initiatives to improve air quality, increase energy efficiency, and address economic conditions. SB 350 emphasizes workforce development and increased project penetration in underserved communities.[2] I-REN has an opportunity to support these goals through its WE&T initiatives.

[1] https://www.bluegreenalliance.org/resources/california-public-utility-commission-agrees-a-skilled-trained-and-diverse-workforce-is-the-key-to-achieving-efficiency-goals/

[2] California Senate Bill 350, Sec. 8.25943.a.1;.c.7-8.

WE&T Strategies

I-REN has centered its WE&T approach around two strategies:

2.1. Establish local partnerships with existing and potential training providers in the region to deliver targeted, equitable, and relevant energy efficiency training for contractors and other industry stakeholders.

I-REN will assess the current training marketplace in the Inland Empire and work with local providers, including higher education providers, high schools, adult schools, and professional training companies to tailor content to be relevant to the region's needs and ensure that disadvantaged communities are a focus. I-REN will collaborate with training providers to improve access to a broad spectrum of training opportunities in person, online, and in the field.

2.2. Facilitate industry engagement and development of job pathways to identify demand and jobs for a trained workforce.

I-REN will convene and collaborate with state, regional, and local stakeholders, including workforce investment boards (WIBs) and economic development departments to develop a unified mission around the region's energy efficiency workforce, highlighting pathways for job seekers to enter the green jobs market and to increase access for disadvantaged communities. I-REN will facilitate identifying opportunities for employers and local workforce partners to network and connect.

With its governing agencies' existing networks of contractors and training providers, I-REN is well positioned to help bridge the gap between the energy industry and the workforce. I-REN is building partnerships with local community colleges, local universities and local WIBs to establish a comprehensive network of WE&T offerings.

I-REN also brings close connections with local government planning and building departments across the region. I-REN's proposed WE&T initiatives offer important opportunities for collaboration across other sectors through its work in the Public Sector and Codes & Standards (C&S)-- both of which are important drivers of energy efficiency and advanced energy activity and employment in the region.

Market Characterization

> *"Over the next decade, the state will face a shortfall of more than one million... highly skilled workers. Overcoming this challenge will be critical to California's future economic prosperity. It will also require aligning each region's expansive training and education programs with the needs of employers to develop more workers with skills that translate into jobs."*[3]

Market Actors

The wide-reaching field of market actors who make up the WE&T community include existing building industry employers in the public sector and in private industry, trainers, job seekers and their advocates, and education providers, as well as other individuals and organizations in local communities who may be directly or indirectly affected by WE&T initiatives. I-REN will focus initially on existing building industry employers/employees, promoting energy efficiency training opportunities and increasing their knowledge base of how and why to build expertise in this area. I-REN has extensive connections in the region and regularly engages with leaders in these areas as part of their committee structure (see Table 4-6. I-REN's Key Partnerships & Collaboration Experience in the WE&T Sector).

Existing Building Industry Support

Private sector employers for energy efficiency and advanced energy-related jobs include a wide variety of building professionals, such as architects, designers, contractors, energy consultants, and third-party code plans examiners, inspectors, raters, verifiers. This community also includes contractors skilled in a wide variety of trades: electricians, HVAC technicians, insulation installers, plumbers, and many more. This diverse community is of critical importance for performing high-quality installation of efficient equipment in compliance with codes and standards. These professionals are on the frontlines with customers, in charge of helping specify equipment, installation, scope of work, and advising on permits.

I-REN's WE&T initiatives will support these firms and individuals in becoming more involved, better educated and engaged, so they can make a significant difference in making homes and businesses more energy efficient (as well as healthier and more comfortable) by getting the required permits, using the most energy efficient equipment, and employing advanced practices in building science.[4] There is an opportunity to increase and expand this group's participation in energy efficiency programs as well, by increasing their knowledge and awareness through WE&T activities. This may be particularly true of smaller HVAC companies, and electricians and plumbers who have not considered making energy efficiency a focus of their work.

[3] California Economic Summit, "2016 Roadmap to Shared Prosperity", Summit Summary, 2015, page 5, www.caeconomy.org.

4 "Workforce Issues and Energy Efficiency Programs: A Plan for California's Utilities (WE&T Guidance Plan)." Prepared by the UC Berkeley Center for Labor Research and Education. Available online. May 2014.

New Job Seekers/Second Careers

Job seekers could include students looking to enter the workforce during or after high school, and students in community colleges, universities, trade schools, and other educational institutions. Job seekers include individuals who are unemployed, or underemployed. This group also includes people who are looking to change jobs or careers to work in energy efficiency and advanced energy, or those currently working in the industry who seek to make lateral career moves or advance in their fields.

The public sector offers opportunities for energy efficiency and advanced energy-related employment. Generally, public projects are larger at scale, which results to higher wages for contractors.[5] By integrating newer and more efficient technologies within the public sector, there will be a need for facility managers or building engineers who are responsible for monitoring, maintaining, and replacing equipment such as HVAC systems. Also within the public sector are local jurisdictions' building and planning departments who are responsible for issuing permits and enforcing codes and standards including building officials, permit technicians, plans examiners, and building inspectors.

Other Market Actors

Workforce development organizations and training providers are an important market actor and partner for proposed WE&T initiatives. Organizations like Workforce Investment Boards (WIBs) advocate for and provide resources to support job seekers, and work to connect job seekers with employers. They work alongside economic development organizations and serve both displaced and incumbent workers.

Training providers offer education to help job seekers gain skills, upskill training to assist workers in advancing in their careers, and continuing education to ensure workers stay current with emerging technologies and trends.

Other market actors and members of the community who affect or are affected by energy efficiency WE&T initiatives include and are not limited to the following:

- Utility energy efficiency programs, which incentivize energy efficiency projects, thereby bringing jobs to the region and establishing a set of standards for local construction and installation of efficient equipment and technologies.
- Students in the K-12 education system who are not yet of working age but are learning about energy efficiency and advanced energy as a career path for their future.
- Families who rely on the income generated by energy efficiency jobs, and the communities and local economies where they reside and purchase goods and services.

[5] "Putting California on the High Road: A Jobs and Climate Action Plan for 2030" California Workforce Development Board (CWDB). Prepared by the UC Berkeley Center for Labor Research and Education. June 2020. Available online.

Sector Landscape

The story of the Inland Empire's WE&T sector is one of resilience and growth, despite persistent challenges and inequity. The COVID-19 pandemic has had devastating effects on the economy nationally and in the Inland Empire, and these effects are likely to persist through the program years covered by I-REN's business plan. In addition to assessing and anticipating the pandemic's impacts, it is important to understand the job market and workforce situation that existed in the I-REN service territory prior to the pandemic.

Market Demand and Supply

The Centers for Excellence for Labor Market Research conducted an analysis of the market supply and demand for jobs related to energy and utilities and assessed the number of people trained annually by Inland Empire Community College Programs. In three areas assessed—HVAC, Construction Crafts and Welding—the number of available jobs far exceeded the number of individuals graduating with a certificate in these particular areas. At the same time, the enrollments in each area are robust and indicate a potential pool of people who could join the workforce.

Figure 4-1 and Figure 4-2 on the following pages detail this information for HVAC and Construction Crafts demand, community college enrollment, and people graduation with those jobs. Figure 4-3 is a recent outreach piece for the Inland Empire indicating the number of jobs in energy efficiency related industries. Collectively, this information indicates the robust job demand for a trained green workforce, the availability of active partners, and the need for continued engagement and development of the workforce in the area – moving people from enrollment to completion and work. What appears to be a persistent gap between supply and demand should be addressed regionally and comprehensively.

Further, there has been substantial analysis and effort in WE&T related to the energy efficiency market in recent years. The IOUs have been charged with updating and reforming their programs by stakeholders and by two reports developed for the CPUC and IOUs by the Don Vial Center on Employment in the Green Economy, Institute for Research on Labor and Employment, University of California, Berkeley, the 2011 California WE&T Needs Assessment and the follow-up report (the 2014 WE&T Guidance Plan). The overall objective of these two plans is to **help identify how to create a permanent long-term green workforce that has effective standards, certifications, and licenses, along with good pay and clear career paths.**

While I-REN cannot address all these needs, they are poised to be an important resource in the workforce network to move this objective forward. The Guidance Plan distinguishes between **market-building activities** (creating the green workforce) and **skills building activities**. I-REN's Strategy 2.1 is skills-building focused, while Strategy 2.2 is market-building focused.

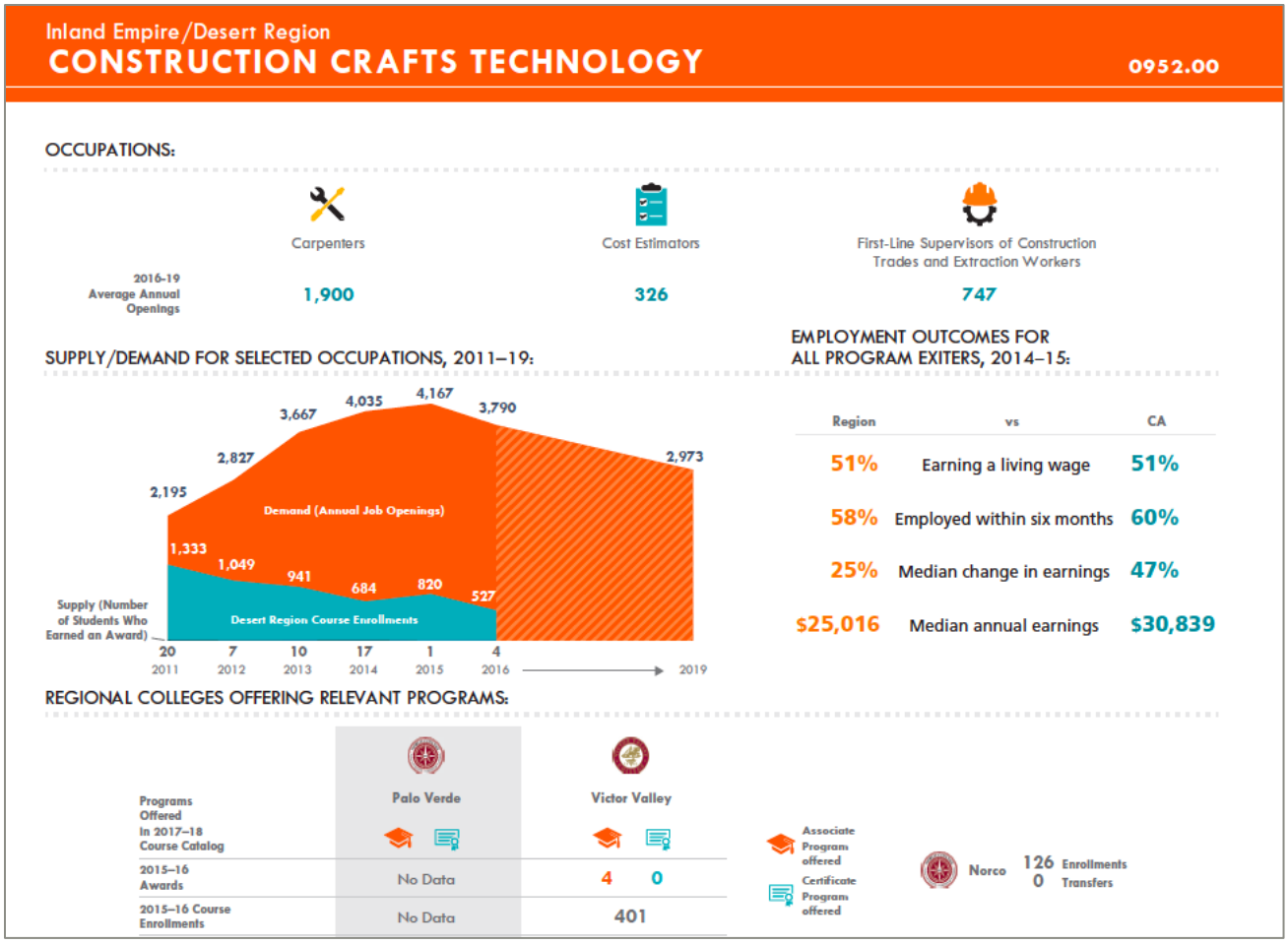


Figure 4-1. Inland Empire Construction Labor Market Research[6]

[6] "Inland Empire/Desert Region Sector Profile Report," COE for Labor Market Research, 2017.

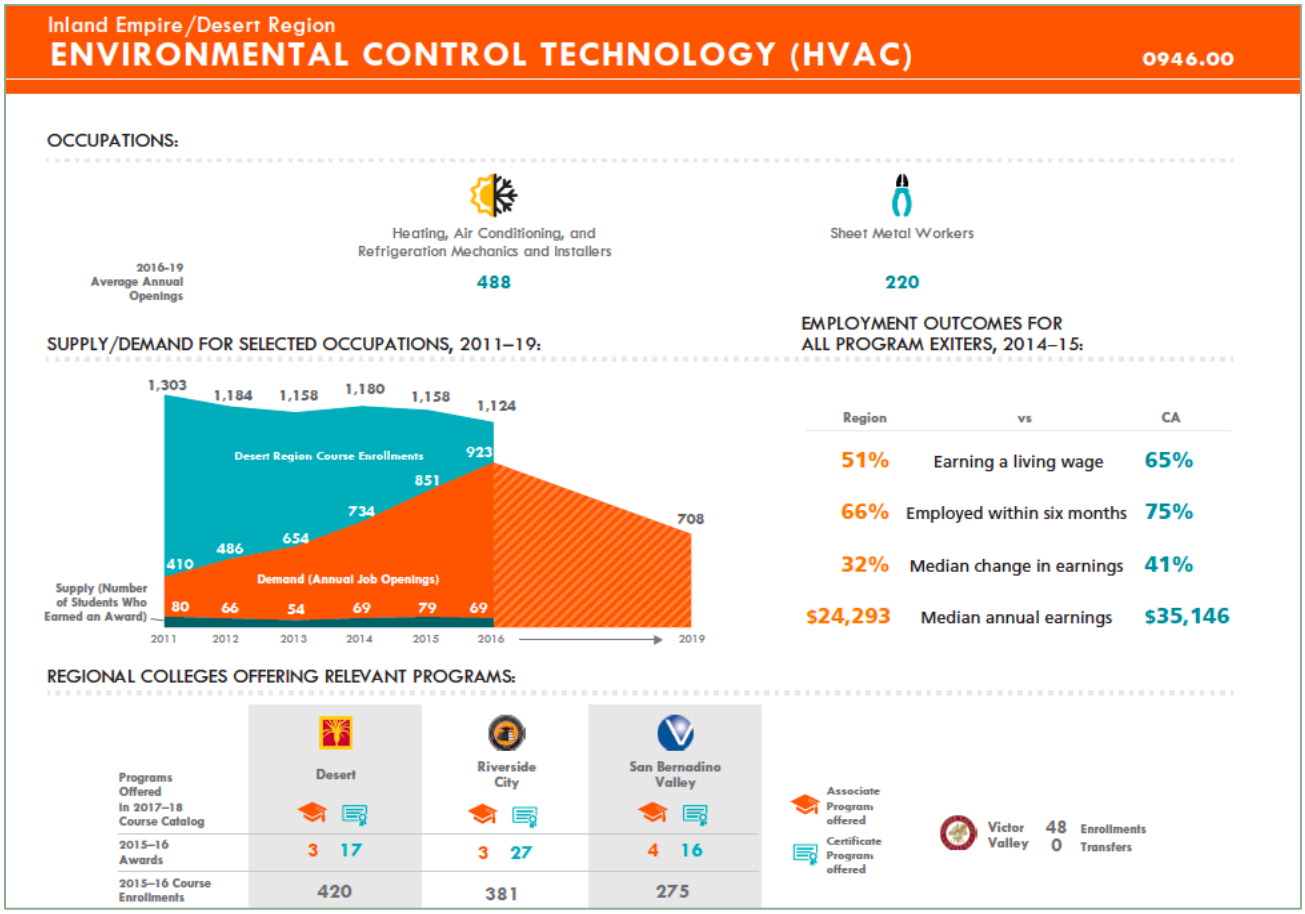


Figure 4-2. Inland Empire HVAC Labor Market Research[7]

[7] "Inland Empire/Desert Region Sector Profile Report," COE for Labor Market Research, 2017.

Figure 4-3. Inland Empire Projected Jobs 2017-2022, Energy, Construction and Utility, 2018.

Skills-Building: Leveraging Training and Education Opportunities

> *"The Guidance Plan also recommends a stronger emphasis on and redesign of programs dedicated to EE skills-building—i.e., to incorporate EE skills into the broader skills set of the professional and trades workers in occupations that most impact energy use. To achieve the goals ... the IOUs need to align with, leverage, and influence the rest of California's rich workforce training and education infrastructure." WE&T Guidance Plan, page 8.*

As highlighted in the WE&T Guidance Plan, I-REN does not intend to develop new curriculum or replicate existing efforts; instead, their focus is on developing and leveraging the many partners already in the I-REN region and helping to create better programs and series of classes. By working with WE&T providers in San Bernardino and Riverside counties, particularly community colleges, I-REN can help bridge the divide between job supply and demand.

As illustrated in Figure 4-4, currently SoCalGas nor SCE has "Energy Centers" (the IOUs' term for training centers) in the I-REN territory, requiring contractors at times to travel substantial distances to attend energy efficiency classes. In contrast, regional community colleges do have programs in this area that can and should be leveraged.

The I-REN governing agencies have existing partnerships with local colleges and community colleges, successfully providing instructional energy efficiency classes and events at local campuses where they have typically achieved high participation rates. Further, I-REN will employ 3C-REN's approach to harness other successful training programs like Energy Code ACE and bring them to the region. I-REN governing agency CVAG's staff is part of a committee with College of the Desert, a local community college, to offer feedback and expertise in the creation and development of their workforce and training certification program. This program allows students to take classes to become trained in installation and repair on systems such as HVAC, environmental management systems and more.

Offering training at familiar, nearby locations makes it easier for job seekers and workers to attend. I-REN can use its connections and experience to help ensure training opportunities are accessible throughout the region.

Table 4-1. Existing Regional Programs with relevance to WE&T

College	District/City	Potential Programs to leverage
San Bernardino County		
Barstow Community College	BCCD/Barstow	Industrial Maintenance Electrical & Instrumentation - Programs
Chaffey College	Rancho Cucamonga	HVAC programs
San Bernardino Valley College	SBCCD/San Bernardino	Heating, Ventilation, Air Conditioning and Refrigeration AA/Certificate
Victor Valley College	Victorville	Construction & Manufacturing Technology Program
CSU San Bernardino (CSUSB)	San Bernardino	Workplace Training and Online Career Training Programs
Riverside County		
College of The Desert	Palm Desert	Building & Energy Systems Professionals AS Degree, Air Conditioning & Refrigeration Certificate, Building Energy Consultant
Riverside Community College	Riverside	Air Conditioning and Refrigeration Certification
UC Riverside	Riverside and Palm Springs	Cross-cutting trainings in C&S

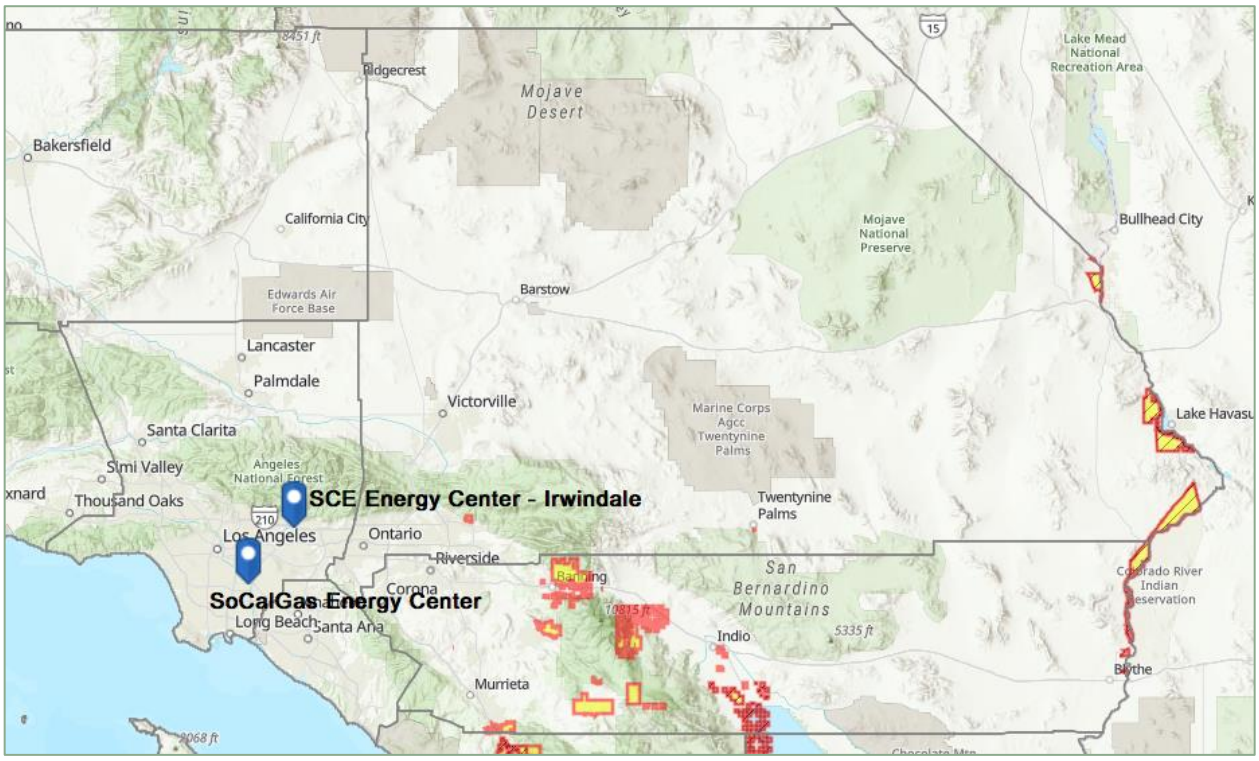


Figure 4-4. Energy Centers located outside Riverside and San Bernardino Counties

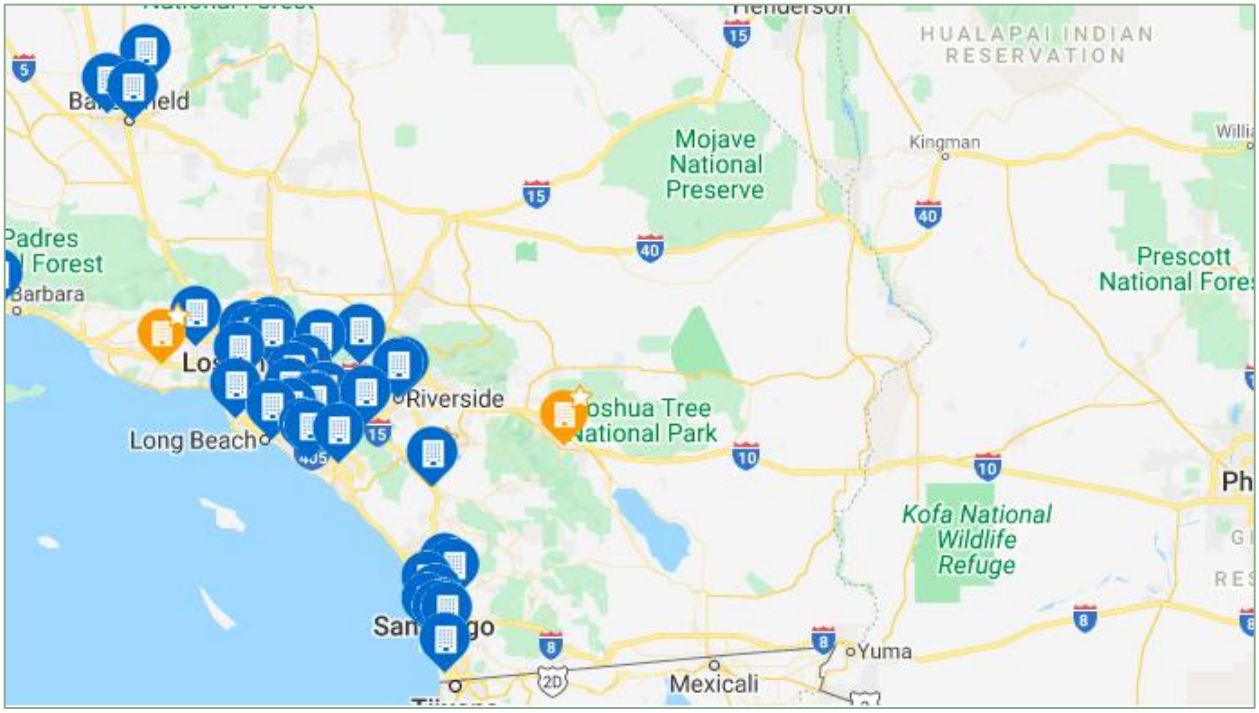


Figure 4-5. BPI Certified contractors

(Source: http://www.bpi.org/locator-tool)

In the further inland areas of Riverside and San Bernardino counties, there appears to be a lack of individuals and firms with advanced training and certifications such as the ones offered by the Building Performance Institute (BPI). As illustrated by Figure 4-5, there only a handful of BPI certified firms in the Inland Empire and with few exceptions they are mainly clustered around the cities of San Bernardino and Riverside. This is likely exacerbated by the lack of BPI testing centers, which are all located near San Francisco and Sacramento, and other high-quality energy efficiency training locations in the area. I-REN has an opportunity to build partnerships with BPI and other providers to increase the number of skilled and certified contractors in the region.

An important part of I-REN's WE&T initiative will involve working with state, regional, and local stakeholders to provide upskill and advanced training for incumbent workers or workers with an existing skill set in energy efficiency-related trades. I-REN's WE&T initiative will support training programs and certifications that are more accessible than a four-year degree, to assist workers in obtaining "good and promising" jobs in construction trades, such as electrical and HVAC trades, which demand a high level of technical training and experience.

The I-REN governing agencies bring experience in building effective partnerships in the Inland Empire to foster economic development. For example, WRCOG is launching Innovation 2030, an initiative featuring projects and programming that will be focused on all parts of the energy spectrum including generation, savings, transportation, grid, and more. See Figure 4-6 for more details. I-REN's work in the WE&T sector will complement the Innovation 2030 initiative and partnerships.

Potential Partners

I-REN will identify and build partnerships with organizations and agencies including but not limited to those shown below to collaborate on I-REN's WE&T initiatives. The I-REN governing agencies have a strong foundation of existing connections with these types of organizations, as described later in this chapter in Table 4-6.

Education (Building and Expanding Relationships)

- K-12 Schools and Districts
- Pre-Apprenticeship Programs
- Inland Empire/Desert Regional Consortium (Community Colleges (CCC))
- California Community Colleges
- Colleges/Universities

Trade Associations

- Air Conditioning Contractors of America (ACCA)
- Institute of Heating and Air Conditioning Industries (IHACI)
- American Institute of Architects (AIA)
- American Public Works Association (APWA), Southern California Chapter, including Coachella Valley, High Desert, and Inland Empire Branches
- Association of Energy Engineers (AEE)
- Building Industry Association (BIA)
- Local Chapter Building Associations (Desert Valley Building Association (DVBA) for Coachella Valley)
- International Association of Plumbing and Mechanical Officials (IAPMO)
- International Union of Operating Engineers (IUOE)
- International Brotherhood of Electric Workers (IBEW)
- Laborers' International Union of North America (LiUNA!)
- California Labor Management Cooperation Committee (LMCC)
- Sheet Metal Workers Union

Industry & Non-Profit Organizations

- California Advanced Lighting Controls Training Program (CALCTP)
- California Energy Alliance
- National Comfort Institute
- Natural Resources Defense Council (NRDC)
- Energy Service Companies (ESCOs)
- Economic and Community Development Corporations

Certification Organizations

- North American Technician Excellence (NATE)
- National Council on Qualifications for the Lighting Professions (NCQLP)
- Building Performance Institute (BPI)
- Builder Operator Certification (BOC)
- Home Energy Rating System (HERS)
- Consumer Home Energy Efficiency Rating System (CHEERS)

Government Agencies

- California Energy Commission
- California Air Resources Board (CARB)
- California Department of Education
- California Community Services and Development (CSD)
- California Workforce Investment Boards (WIBs)
- California Division of Apprenticeship Standards, Apprenticeship Council and building/construction trade apprenticeship programs

Innovation 2030

WRCOG's Leadership for Economic Development in the Inland Empire

Innovation 2030, a project of the Western Riverside County Council of Governments (WRCOG), seeks to establish an innovation driven economy in the Inland Southern California region by 2030. Innovation 2030 will foster an environment conducive to entrepreneurship and innovation and facilitate a transition away from low-skill, low-wage jobs that dominate the region's economy. In doing so, Innovation 2030 will help to futureproof the region, making the community more resilient against automation due to the logistics industry as a recent study, conducted by the University of Redlands has shown that more than 60% of the I-REN region's jobs are in jeopardy over the next 2 decades. Additionally, this impending challenge has only been accelerated by the impacts of COVID-19. Innovation 2030 will better align employment opportunities with job-skills training and K-12 through university education, and improve economic outcomes for all residents, including the most disadvantaged community members.

Innovation 2030 projects and programming would be focused on all parts of the energy spectrum from: generation, saving, transportation, grid, etc. Its model would entail targeted outreach programs aimed at entrepreneurs in the energy sector, recruit them and provide them with entrepreneurial support such as:

- ***Storytelling Masterclass for Innovators***: Storytelling that attracts investment and makes sales
- ***Investment Masterclass Program***: Proven techniques to raise millions for entrepreneurs and investors
- ***Innovation 2030 Impact Investment Fund***: Harnessing sources of capital for the region's entrepreneurs
- ***Young Entrepreneurs***: Paid internships for the region's most promising students in the region's most exciting startups
- ***Cities Innovate Program***: Teaching cities to serve entrepreneurs better, faster, and cheaper, from one-stop "create a business" to regional pilot programs
- ***First Chance Program***: Enabling underserved groups by bringing entrepreneurship into the communities

Innovation 2030 would also provide effective partnerships with the region's utilities by providing possible testing, job-training, certifications, and innovations related to the energy field. A focus on alignment between education systems and the workforce is critical now more than ever, especially when it comes to an aging workforce and the need for retraining new and in-demand skillsets in a COVID-19 economy and climate.

Lastly, the Innovation 2030 effort is led by Fred Walti, the Co-Founder of the Los Angeles Cleantech Incubator (LACI) an incubator known for its world-class programming for entrepreneurs in the energy, sustainability and cleantech space. It is recognized for its innovative partnership with the Los Angeles Department of Water and Power, Southern California Edison and other major stakeholders. The intent of Innovation 2030 would be to take this 'proof of concept' programming to the Inland Southern California region, a very vulnerable and underserved community area and propel its local economy towards resiliency in the future.

Figure 4-6. Innovation 2030: I-REN COG Leadership for Economic Development in the Inland Empire

Market-Building: Supporting a Green Workforce

Over the last decade the Inland Empire has seen economic growth following the recovery from the Great Recession of 2008, and since 2012 the region added 385,000 new jobs as of January 2020.[8] Yet annual per capita incomes in the Inland Empire have persistently lagged behind statewide averages. In 2018, Inland Empire workers earned on average less than 64% of the statewide average per capita income. This reflects a larger trend of growing income disparity in California, cited in the 2011 statewide WE&T needs assessment as one of the major problems plaguing the state's economy.[9]

Table 4-2. Average Per Capita Annual Income: Inland Empire vs. California as a whole[10]

Area	Average Per Capita Personal Income (2018)
California	$63,557
Riverside County	$40,637
San Bernardino County	$40,316

The COVID-19 pandemic has put additional strain on the region's economy and workforce over the past year, with unemployment in the region spiking dramatically in late spring of 2020. In August 2020 the average unemployment rate for the I-REN counties was 11%-- nearly three times the region's average annual unemployment rate in 2019.[11] Research from the Economic Roundtable identified Riverside County workers as tied for having the highest risk in California for job loss due to COVID-19 economic impacts. "The burden of unemployment is unequally distributed. It rests most heavily on young adults, Latinos, and workers in restaurant, hotel, personal care, and janitorial jobs. Young adults graduating from school and attempting to enter the job market face extremely difficult challenges," the report concluded.[12]

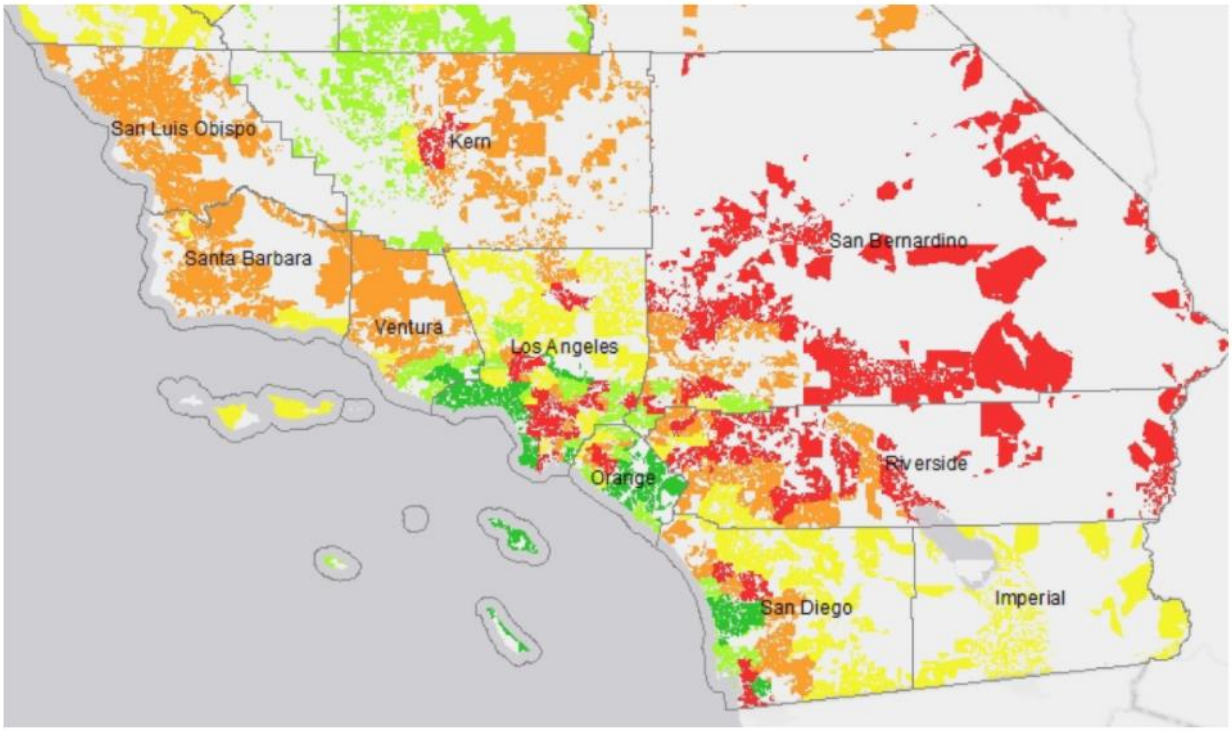
[8] Economist John Husing quoted by Jack Katzanek with The Press Enterprise, "Inland job growth to slow to 2012 levels in 2020, forecast says" Article from January 15, 2020. Accessed October 2020. https://www.pe.com/2020/01/15/inland-job-growth-to-slow-to-2012-levels-in-2020-forecast-says/

[9] California Workforce Education and Training Needs Assessment, Donald Vial Center on Employment in the Green Economy, Institute for Research on Labor and Employment, University of California, Berkeley, 2011. p.12.

[10] State of California Employment Development Department. Accessed October 2020. https://www.labormarketinfo.edd.ca.gov/cgi/databrowsing/LocalAreaProfileComQSResults.asp?menuChoice=localAreaCom&selectedindex=36&area1=0604000065&countyName=&area2=0604000071&countyName=&area3=0601000000&countyName=&submitIt=Compare+Areas

[11] State of California Employment Development Department. Accessed October 2020. https://www.labormarketinfo.edd.ca.gov/cgi/databrowsing/LocalAreaProfileComQSResults.asp?menuChoice=localAreaCom&selectedindex=36&area1=0604000065&countyName=&area2=0604000071&countyName=&area3=0601000000&countyName=&submitIt=Compare+Areas

[12] Lansner, Jonathan. Orange County Register. (April 17, 2020). Riverside County workers at highest risk for coronavirus-related layoff, by this math. Available online. Accessed November 2020.



Map shows job-loss risk, from highest (red) to lowest (green). (Source: Economic Roundtable)

Figure 4-7. Job Loss Risk in the Inland Empire due to the COVID-19 pandemic[13]

Research shows that prior to 2020, the Inland Empire region had a deficit in well-paying jobs and job pathways to success, and that this deficit disproportionately affects minorities and marginalized communities. The Brookings Metropolitan Policy Program's report from early 2019 found that the Inland Empire faced a deficit of roughly 347,500 "good or promising jobs," meaning employment that can sustain a family or a position that will lead to another job that can sustain a family.[14]

According to the California Advanced Energy Employment Survey, in 2015 the Inland Empire lagged behind other regions in the share of advanced energy jobs as a percentage of total jobs.[15] The Centers of Excellence for Labor Market Research determined that the level of jobs available compared to the number of individuals trained locally in the community colleges is large (see Figure 4-1 and Figure 4-2). This is indicative of the challenges the Inland Empire has faced in accessing education and training needed to grow their advanced energy economy and workforce. This could also be a result of the region being underserved in utility energy efficiency programs that would bring projects and incentive dollars to the region, resulting in jobs for energy efficiency-related construction trades. The construction and utilities sectors represent seven percent of the Inland Empire's total jobs, but they include 17 percent of

[13] Ibid.

[14] Advancing Opportunity in California's Inland Empire, by Chad Shearer, Isha Shah, and Marek Gootman. Metropolitan Policy Program at Brookings. February 2019. Available at: https://www.brookings.edu/wp-content/uploads/2019/02/Full-Report_Opportunity-Industries_Inland-California_Final_Shearer-Shah-Gootman.pdf Accessed October 2020. p.6.

[15] Advanced Energy Jobs in California: Results of the 2016 California Advanced Energy Employment Survey. Advanced Energy Economy, 2016. p. 16

its family-sustaining jobs and four percent of promising jobs for workers with less than a four-year college education.[16]

Table 4-3. Employment in Energy Efficiency, 2015 [17]

Region	Population	Advanced Energy Jobs	Total Jobs	% of Total Jobs
Southern California	17,635,918	229,153	8,145,109	2.8%
Inland Empire	4,693,171	40,377	1,531,663	2.6%
Central Coast	1,504,111	20,138	655,819	3.1%
Greater San Francisco Bay	7,161,311	113,020	3,750,379	3.0%
Greater Sacramento	1,896,552	30,399	832,042	3.7%
Rest of California	6,609,205	74,616	2,396,978	3.1%
California Total	**39,500,268**	**507,703**	**17,311,990**	**2.9%**

In its market-building strategy, I-REN will work with industry stakeholders in the region to identify and support the development of green workforce pathways. There are many organizations already working toward individual goals related to job placement-- WIBs, economic development departments, and others. Rather than duplicating their efforts, I-REN can serve as a facilitator to bring those organizations together and ensure that advanced energy and energy efficiency jobs are part of the focus in the region.

I-REN will also leverage its existing relationships with the building industry to help connect workforce advocates and employers. By convening and collaborating with these stakeholders I-REN's market-building initiatives will help illuminate the pathways for job seekers in the region to find advantageous employment to sustain their families and build careers in energy efficiency and advanced energy.

Major Trends

Unprecedented unemployment and economic contraction are the most significant trends affecting the WE&T sector, and the extent and depth of these challenges are major unknowns. As the pandemic and ensuing economic crisis continue to unfold, I-REN's WE&T initiatives and the cross-cutting activities proposed for the Public Sector and C&S will have an important role to play in guiding the region's job seekers and employers through current and future obstacles and opportunities.

[16] Advancing Opportunity in California's Inland Empire, by Chad Shearer, Isha Shah, and Marek Gootman. Metropolitan Policy Program at Brookings. February 2019. Available at: https://www.brookings.edu/wp-content/uploads/2019/02/Full-Report_Opportunity-Industries_Inland-California_Final_Shearer-Shah-Gootman.pdf Accessed October 2020. p. 37

[17] Ibid.

Other trends and issues that may affect I-REN's WE&T community include the following:

- Increasing the diversity of the energy efficiency workforce, including gender and race diversity, is essential to create greater equity and to meet the needs of the growing industry.
- Closing the skills gap and increasing the capabilities of the workforce to perform increasingly higher levels of advance building and technical building is fundamental to this industry and requires better coordination between elementary school and secondary school curriculum.
- Soft skills development has potential to increase the ability of the building industry to innovate business models, work and communicate effectively with customers, and be more resilient.
- The possibility of a "Green New Deal" and increased need and desire to address and adapt to climate change.
- Increased levels of certifications, particularly Building Performance Institute BPI, and similar.

Of these trends one of the most important is the need to increase the workforce's technical and analytical capabilities. Figure 4-8 illustrates how new green jobs require a higher level of analytical skills. As energy efficiency becomes more connected to advanced techniques, and complex modeling tools, the workforce needs to be better at using these skills.

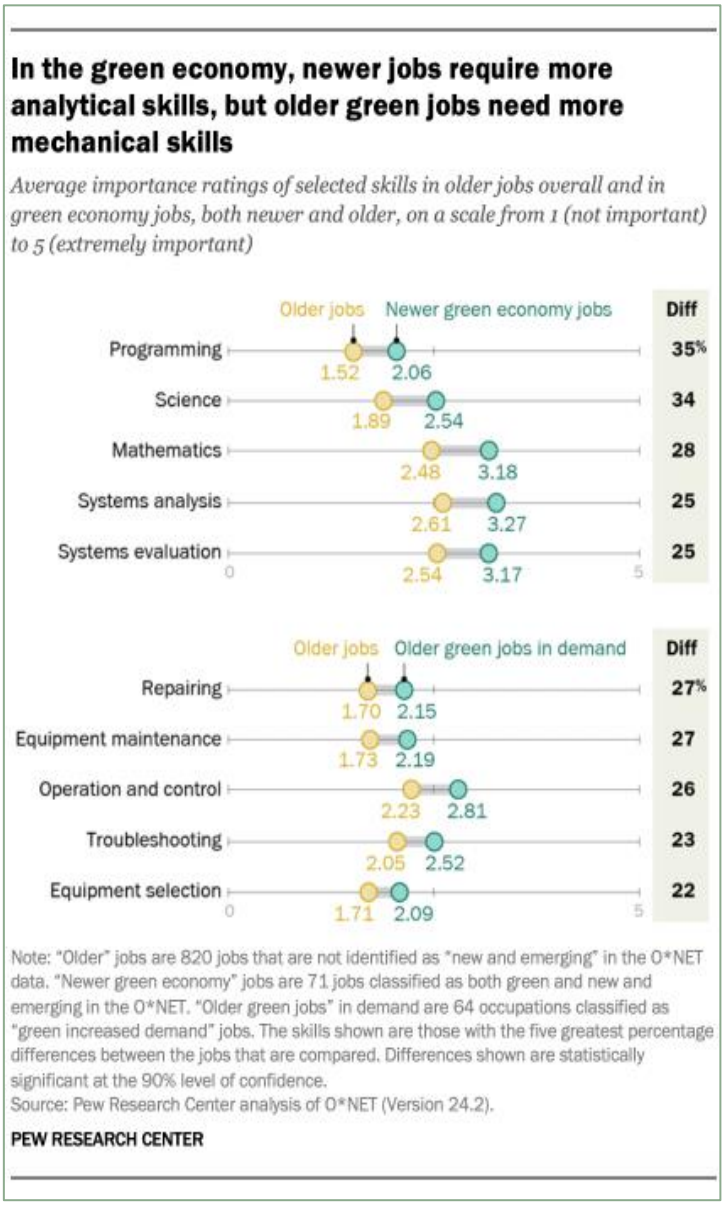


Figure 4-8. Green Economy Job Skills

Kochhar, Rakesh, "New, emerging jobs and the green economy are boosting demand for analytical skills," Pew Research Center

Intervention Strategies and Objectives

In its approach to serving the WE&T sector, I-REN is guided by an overarching goal:

Goal 2: Ensure there is a trained workforce to support and realize energy efficiency savings goals across sectors.

The primary role of I-REN is to ensure workforce training and education programs in the Inland Empire are aware of emerging technologies and changing production processes related to energy efficiency and advanced energy, and to work with trade associations and training partners to assess new skill sets that arise from these changes in the industry. I-REN's WE&T sector strategies are designed to expand the skills and capacity for the local workforce to do energy efficiency work, by partnering with local education providers to deliver targeted training and facilitate pathways to high-road jobs in energy efficiency-related occupations. This effort will identify and address gaps in the existing marketplace in the region, using best practices and existing studies as well as industry engagement. Through these initiatives I-REN will coordinate with other training providers to enable a better trained energy efficiency workforce in Riverside and San Bernardino counties to support and realize energy efficiency savings goals in the region.

Table 4-4. Intervention Strategies, Tactics, and Objectives

	Intervention Strategy	Tactic	Objective
Local training for the existing workforce	S2.1 Establish local partnerships with existing and potential training providers in the region to deliver targeted, equitable, and relevant energy efficiency training for contractors and industry.	T2.1.1 Assess training opportunities available in the region. T2.1.2 Offer "train the trainer" support to providers on energy efficiency topics and trends. Encourage providers to focus on the needs of the local market. T2.1.3 Facilitate the development of multiple sites/delivery mechanisms for contractor and industry training programs.	*Create a robust local network of training programs that increase capacity and knowledge related to energy efficiency in the building industry.*
Developing the region's new green workforce	S2.2 Facilitate industry engagement and development of job pathways to identify demand and jobs for a trained workforce.	T2.2.1 Convene and engage partners and organizations to define and establish a green workforce. T2.2.2 Reinforce pathways from high school, trade schools, and colleges into jobs in the energy efficiency workforce, in collaboration with established community partners. T2.2.3 Facilitate identifying opportunities for building companies and local workforce partners to network and connect.	*Increase the number of skilled energy efficiency workers in the region.*

Approach to Overcoming Barriers

I-REN's intervention strategies are designed to overcome the problems and barriers described in Table 4-5, with tactics and activities to achieve the overarching goal of ensuring there is a trained workforce to support and realize energy efficiency savings goals in the region.

As indicated in the initial market analysis presented above, there is a gap between the demand and supply of existing trades people to provide energy efficiency services in the I-REN service territory. For contractors looking to expand their skills, career advancement and access to high-road jobs, the pathways for obtaining additional certifications can be complicated, costly, and limited by timing or distance.

Table 4-5. Barriers and Strategies for I-REN WE&T Sector

Problem	Barriers	Solutions	Strategies & Tactics
When employers are hiring for skilled positions in advanced energy and energy efficiency, they can't find people to hire.	Inability to find and retain skilled and qualified workers for the demand.	Foster connections between workforce and industry. Promote relevant training opportunities in collaboration with WIBs to upskill the workforce. Collaborate with employers to provide continuing education for professional development and employee retention.	S2.1 S2.2
Codes and standards compliance and energy efficiency programs require certain certifications and qualifications for builders to participate.	A limited number of builders in the region have the required certifications and qualifications.	Promote relevant training opportunities in collaboration with WIBs to upskill the workforce. Collaborate with employers to provide continuing education for professional development and employee retention.	S2.1
Energy efficiency and advanced energy projects and programs require qualifications that the local workforce does not have.	Lack of qualified workforce in Riverside/San Bernardino counties, especially in the more remote areas.	Foster connections between workforce and industry. Promote relevant training opportunities in collaboration with WIBs to upskill the workforce.	S2.1 S2.2
Job seekers cannot find jobs in energy efficiency and advanced energy.	Lack of job opportunities in energy efficiency and advanced energy in the region.	Foster connections between workforce and industry. Identify and illuminate the pathways to energy efficiency and advanced energy jobs.	S2.2

Problem	Barriers	Solutions	Strategies & Tactics
Contractors aren't aware of energy efficiency projects, or they cannot or choose not to perform this work.	Lack of interest or knowledge of the opportunities and benefits of energy efficiency projects.	Foster connections between workforce and industry. Promote relevant training opportunities to upskill the workforce. Collaborate with employers to provide continuing education for professional development and employee retention.	S2.1 S2.2
Training is too far away and is offered infrequently or scheduled during work hours when it's inconvenient for contractors to attend. Also, existing training may be irrelevant to contractors or local projects' needs.	Training opportunities' availability and location pose challenges for contractors to be able to attend and are not designed for the particular needs of the local market.	Promote relevant training opportunities to upskill the workforce. Improve access to training by increasing the number of sites and delivery mechanisms. Collaborate with employers to provide continuing education for professional development and employee retention.	S2.1

Strategy 2.1 Establish local partnerships with existing and potential training providers in the region to deliver targeted, equitable, and relevant energy efficiency training for contractors and other industry stakeholders.

Objective: Create a robust local network of training programs that increase capacity and knowledge related to energy efficiency in the building industry.

Tactic 2.1.1: Assess training opportunities available in the region

I-REN will employ rigorous data collection to assess the training offerings in the region. This effort is crucial for informing a plan of action that will address gaps, build on promising opportunities, and avoid duplication of effort. This exercise also helps establish connections or build on existing partnerships among regional stakeholders. I-REN will examine the training marketplace through multiple lenses:

- **Stakeholders:** Who are the organizations currently providing training in the region? Who are the other organizations or entities that guide workers or employers to training providers? What support will workers need after completing a training program?
- **Content:** What topics, technologies, and skills are covered in currently available training? Are they appropriate for the needs of local employers? Are they appropriate for meeting the requirements of energy efficiency projects in the region?
- **Modalities:** How is training delivered? Modalities could include in-person classroom training, workplace training sponsored by an employer, field training at a project location, online classes or on-demand self-paced offerings, etc.
- **Metrics:** What metrics need to be tracked to ensure that trainings are effective? What impact do trainings have on job placement and access to high-road jobs? What tools and instruments have been developed to track student progress?
- **Geography:** For in-person training, where in the region are these trainings offered? When these training opportunities are mapped to population centers and locations of energy efficiency project activity in the region, do they overlap and where are the gaps? How far do participants have to travel to attend?
- **Equity:** Are underserved communities, DACs, tribes, and other marginalized groups able to take advantage of training opportunities? If so, what are the strengths among current offerings? If not, what are the barriers to increasing participation?
- **Access:** What are the barriers to accessing and hosting training, especially for disadvantaged workers? What are the costs for participants, employers, and providers? What are the knowledge thresholds or prerequisites? What is the timing of classroom training sessions? For online training, are there barriers associated with access to technology, e.g. are online offerings mobile-friendly or PC-required? What policies need to be implemented to ensure the local workforce has access to training that lead to high-road jobs.
- **Program and market needs**: What are the programs that will be offered by IOUs or other PAs that require specific skills? Are there opportunities to connect directly to active or planned programs to enhance the feasibility of the training for individuals? What energy-efficiency career pathways have been established for workers in the region?

Implementing this assessment may involve but not be limited to the following activities:

- Collaboration with stakeholders to design and deploy an effective survey instrument, via an online survey platform already utilized by I-REN.
- Additional in-depth phone interviews as needed to survey key decision makers and/or to fill identified educational, program, and policy gaps in response data.
- Review of secondary data sources obtained in collaboration with stakeholders.
- Compilation of results and preparation of report materials for sharing with stakeholders.
- Analysis of results, in cooperation with stakeholders, to inform program planning and EM&V.

Tactic 2.1.2: Offer "train the trainer" support to providers on energy efficiency topics and trends. Encourage providers to focus on the needs of the local market.

Based on the information gathered in Tactic 2.1.1, I-REN will collaborate with training providers and the IOUs to address gaps in educational offerings and determine the most effective way to bridge those gaps in the region. I-REN can also be a facilitator to ensure training opportunities are aligned with State energy efficiency goals including those outlined in SB 350 regarding doubling energy efficiency savings by 2030, along with policies and labor standards that support local workforce development.

One area of particular interest to I-REN is HVAC installation, especially due to the Inland Empire's high cooling load. I-REN can work with existing educational providers to focus curriculum on advanced training for existing HVAC contractors. This "upskill" training would help them acquire advanced technical knowledge to support them in earning higher wages. Content could include but would not be limited to beyond code, smart sizing, and advanced building science skills.

In order to position the training providers to provide this advanced content, I-REN can provide "train the trainer" educational support. Through their work with both the public and private sectors the I-REN governing agencies bring connections to professionals in various trades who can lend their expertise to this effort.

I-REN can work with providers to develop and/or tailor content around energy efficiency topics and trends including but not limited to the following:

- Mechanical HVAC basics
- Passive house and zero net carbon/energy
- Heat pump water heaters, and other electrification measures
- Certified Energy Manager (CEM)
- Operations and facilities management
- Building Performance Institute (BPI) trainings
- Codes training including solar and battery installation and smart energy systems
- Building Envelope sealing (duct blower tests, insulation/radiant barrier checks, etc.)
- HERS and CHEERS certifications

Tactic 2.1.3: Facilitate the development of multiple sites/delivery mechanisms for contractor and industry training programs.

In a service territory as expansive as the Inland Empire, expanding the number of training sites and promoting multiple delivery mechanisms are crucial for improving access to workforce education. The data collected in Tactic 2.1.1 will inform I-REN's plans for this effort. Based on identified areas of need, I-REN will work with providers to develop approaches to expand training opportunities in the region.

Significant barriers exist for training providers in hosting in-person training in far-flung rural areas. If they offer a training event and attendance is lacking, providers are discouraged from serving that area in the future. I-REN can help providers identify underserved areas with a significant population that could benefit from training, and I-REN can also facilitate cooperation among other utilities and stakeholders to co-sponsor events. For example, I-REN is already in conversation with SoCalGas about collaborating to bring training opportunities to the region. Through co-sponsorship and I-REN's extensive network of connections with local governments, I-REN can help promote training events with marketing and outreach to increase awareness and encourage participation.

I-REN can also provide outreach to employers to support decision-making around onsite training in the workplace or hands-on field training for employees. Workplace training shows the employer's support for professional development and can aid in employee retention, while also improving the company's ability to take on energy efficiency projects that require highly skilled work. On-the-job training can also provide workers the opportunity to receive pay while being trained.

Industry stakeholders have asserted that hands-on training, such as the California Advanced Lighting Controls Training Program (CALCTP), is preferred.[18] I-REN is in contact with CALCTP to explore possibilities for partnering to offer training in the region. CALCTP certifies electricians in advanced lighting controls and offers one of the two approved Acceptance Testing Technicians training programs. They are a key collaborator for both WE&T and cross-cutting activities in support of I-REN's C&S initiatives. For areas of the region where in-person training is challenging for cost reasons or limited participation numbers, I-REN will work with local stakeholders and employers to assess the applicability of online training options for supplementing local training. I-REN can recommend regionally appropriate training to pursue and assist with messaging and outreach to guide participants.

[18] Opinion Dynamics. PY2013-2014 California Statewide Workforce Education and Training Program Contractor Training Market Characterization. June 2016. P.6

Strategy 2.2 Facilitate industry engagement and development of job pathways to identify demand and jobs for a trained workforce.

Objective: Increase the number of skilled energy efficiency workers in the region

Tactic 2.2.1: Convene and engage partners and organizations to define and establish a green workforce.

To define and foster the development of a green workforce in the Inland Empire, a collaborative relationship-based approach is crucial to success.

One of I-REN's greatest strengths is its engaged audience of stakeholders, described in Table 4-6. This network will form the foundation for convening partners and organizations who are members of the WE&T community. This could include but may not be limited to local government agencies; local and regional building industry professionals; WIBs and job placement organizations; labor unions; WE&T providers and educational institutions; and many others. I-REN can serve as a facilitator to lead the process of collaborating with key stakeholders on the topic of WE&T and the region's green workforce.

As part of its established committee structure, I-REN regularly engages with leaders in both the public sector and private industry. In establishing what the green workforce means to the Inland Empire, it will be important to consider the green job opportunities within cross-cutting areas such as the Public Sector and C&S community. For example, to maximize the benefits of energy efficiency in the region, local governments have a need for well-trained facility managers in publicly owned buildings, and knowledgeable permitting staff in building departments. Similarly, local and regional contractors and other members of the building community have a need for skilled workers to implement efficient construction and equipment installation practices.

Through this engagement tactic I-REN can gain valuable insight into each entity's role in this work, while creating connections between stakeholders and fostering a collective vision and mission for developing the Inland Empire's green workforce.

This important exercise will examine questions and themes including but not limited to the following:

- What are the advanced energy and energy efficiency jobs in the region?
- How do job seekers find these jobs?
- Do these jobs lead to career advancement?
- Who are the organizations supporting job seekers and where do they operate?
- What support services are in demand?
- What skills and trades do employers look for in hiring for these positions?
- Which skills are lacking in the current market?
- Codes and standards compliance and enforcement
- Public Sector facility management
- Energy efficiency resource program participation

Tactic 2.2.2: Reinforce pathways from high school, trade schools, and colleges into jobs in the energy efficiency workforce, in collaboration with established community partners.

I-REN will examine the information gathered from Tactic 2.1.1 and Tactic 2.2.1 and work with established community partners to identify the pathways that a student job seeker might follow in order to join the energy efficiency or advanced energy workforce.

"Journey mapping" is a technique that can be used to gain insight into the steps a student would take as they explore their options for employment. I-REN can work with community partners to establish specific and detailed example profiles of job seekers to use in this process. Examining these profiles and following the individual's journey can help I-REN and its partners to discover the resources that are available and the barriers that are encountered by the types of individuals this WE&T tactic will support.

The collaborative journey mapping process can be especially helpful in learning about the lived experience of students from DACs and underserved communities as they seek to enter the workforce, and the unique challenges they face. I-REN's key partners for this effort are experts in advocating for the communities they serve. In many cases they may have engaged in this type of journey mapping activity and can leverage that insight for this effort.

As the facilitator, I-REN's role is to listen first, learn from the community experts, and collaborate to make measurable improvements. I-REN can identify synergies between partners and encourage cooperation in developing messaging that will illuminate the identified pathways for students in various situations. I-REN can then use its resources and extensive reach to deliver this messaging across the region, through its 52 local government partners and private industry connections. I-REN can also leverage its RENterns initiative (described at right) as a pathway for students to enter the workforce in a role supporting local governments' energy efficiency and sustainability projects.

For this tactic I-REN will bring key partners to the table including but not limited to:

- Riverside County Workforce Development Board
- San Bernardino County Workforce Development Board
- California Youth Energy Services
- High schools in Riverside and San Bernardino counties
- Inland Empire/Desert Regional Consortium
- Youth development programs
- Community colleges
- Trade Schools
- Universities

RENterns: A Pathway to Advanced Energy Education & Employment

In a cross-cutting activity from the Public Sector chapter, I-REN plans to provide internship opportunities for "RENterns" to support local government agencies with energy efficiency projects, climate action planning, energy benchmarking, and other sustainability initiatives.

This initiative highlights the synergies between I-REN's Public Sector and WE&T activities. RENterns will help build capacity within local governments to complete energy efficiency projects while gaining job skills for future careers in advanced energy.

The idea of RENterns originates from WRCOG's successful Public Service Fellowship program, which has trained more than 75 Fellows over five years. The Fellowship Program has led to alumni being hired in the region, while other alumni use their experiences in the program to trailblaze new professional development opportunities like graduate school.

Tactic 2.2.3: Facilitate identifying opportunities for building companies and local workforce partners to network and connect.

Building on the groundwork of relationships and market insights from Tactic 2.2.1, I-REN can create opportunities for networking and connection among employers, workforce partners, the building industry, and the community, as appropriate. In the short-term this may be limited to online and virtual environments but will expand when possible to in-person and hybrid events.

More populous areas of the I-REN territory may have an established history of green job fairs and other events that could be leveraged to encourage these connections. I-REN can work with organizers to emphasize green jobs within the scope of larger events, or to plan new events focused on advanced energy and energy efficiency. I-REN can also provide outreach assistance to ensure participation by key stakeholders.

Rural areas and smaller job markets will especially benefit from I-REN's support for WE&T networking events. These areas may not have any existing infrastructure for job fairs or similar events. If they do, the events may not be tailored to advanced energy and energy efficiency. I-REN can work with local partners to develop event concepts, which could include targeted invitation-only mixers with a smaller crowd, or job fairs that are open to the public.

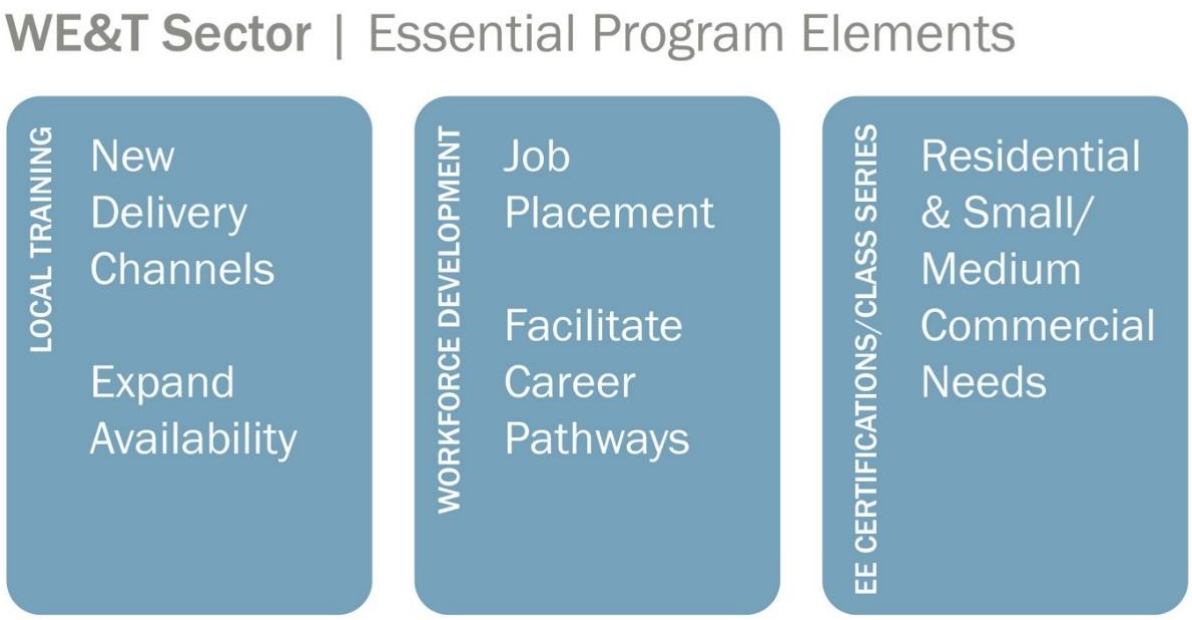
I-REN brings a wealth of experience in developing, promoting, and hosting events for local communities. In its committee work, the I-REN governing agencies are already engaged with many of the region's WE&T market actors. Regional construction firms regularly attend the I-REN governing agencies' committee meetings, as do public sector employers such as city planners and building departments. I-REN's support for WE&T networking events offers an excellent opportunity to create connections across I-REN's Public Sector and C&S initiatives.

In addition, the I-REN governing agencies are experienced in working collaboratively with other PAs to host regional events and would leverage those connections to co-sponsor and conduct outreach and marketing to promote WE&T networking events.

Anticipated Programs

I-REN anticipates offering two non-resource programs to provide short and mid-term support for training and educating the regional workforce to realize energy efficiency savings goals for the residential and commercial markets. Those programs include but are not limited to the following:

- Training and Education – establish local partnerships with existing and potential training providers in the region to assess the training resources available in the region, offer "train the trainer" support to providers on energy efficiency topics and trends with a focus on the needs of the local market, and develop sites and delivery mechanisms to help ensure equitable access to training.
- Workforce Development – facilitate industry engagement and develop job pathways by convening local partners in the community, reinforcing pathways from schools into jobs in the energy efficiency workforce, and encouraging connections between industry and workforce development organizations.



Evolving Approach

As a new REN, I-REN will coordinate with existing RENs doing this work to identify and build on best practices and build upon the work currently underway through the COGs and local government partnerships. I-REN will implement the strategies outlined here in collaboration with the key partners described in the section that follows. Based on EM&V and on monitoring progress toward performance metrics through the near and mid-term activities, I-REN will make adjustments to strategies for future implementation beyond the 2021-2025 timeline.

Leveraging I-REN's Existing Key Partners

I-REN's governing agencies have extensive networks of existing partners that will be important for collaborating on WE&T initiatives, and their work with local governments at the city and county level offer opportunities for cross-cutting activities with I-REN's proposed work in the Public Sector and C&S. I-REN is also building partnerships with local community colleges, local universities, and local workforce investment boards (WIBs) to establish a comprehensive network of WE&T offerings.

The following table shows relevant examples of the I-REN governing agencies' experience working with key partners in the region. I-REN will build on its existing relationships to include additional key partners representing all market actor segments as described earlier in the chapter (section entitled "Potential Partners").

Table 4-6. I-REN's Key Partnerships & Collaboration Experience in the WE&T Sector

Key Partners	Relevant Examples of Collaboration
Local Universities: **Cal State San Bernardino** **UC Riverside**	Through the 10-year Desert Cities Energy Partnership (DCEP) local government partnership, CVAG partnered with the local universities to hold multiple Title 24 training classes, which were offered to local building contractors, architects, and building and safety officials. CVAG has also partnered with the Palm Springs campus of UC Riverside to host codes and standards trainings in partnership with the IOUs and Energy Code ACE.
Local Community Colleges: **College of the Desert**	CVAG staff is part of a committee with College of the Desert to offer feedback and expertise in the creation and development of their workforce & training certification program, which allows students to take classes to become trained in installation and repair on systems such as HVAC, environmental management systems and more.
Middle Schools and High Schools	CVAG has hosted and presented at various sustainability expos which were held for hundreds of middle school and high school kids to learn about various programs and measures related to energy efficiency and recycling.
Trade associations, advocacy and stakeholder groups, and other industry organizations	Through I-REN's stakeholder coordination work and presentations to CAEECC, I-REN gained support and offers of assistance from groups such as the Natural Resources Defense Council (NRDC), California Labor Management Cooperation Committee, and the local Sheet Metal Workers union. These partners will be important for collaboration on I-REN's goal to improve the equity of WE&T opportunities for DAC, rural, underserved, and other vulnerable communities. The Riverside Chapter of the Building Industry Association (BIA) has been involved with WRCOG's TUMF Program with feedback on Transportation Program growth and is a potential partner for outreach and educational workshops. WRCOG leadership also brings connections to the USGBC Inland Empire Chapter (USGBC-IE), having previously served on the board.

Key Partners	Relevant Examples of Collaboration
Employers, such as engineering, building, architecture, and construction-related firms	WRCOG hosts committee meetings where local and regional building firms are active participants. CVAG has hosted bus tours to various energy efficiency facilities to increase awareness of environmental and energy saving methods used by these facilities, including tours to an Anaerobic Digestion facility and a Zero Net Energy development. CVAG administers a Property Assessed Clean Energy (PACE) program and has service agreements with private firms to service CVAG's jurisdiction. As the Transportation Authority for the County of San Bernardino region, SBCOG brings relationships with numerous building and construction industry related firms. SBCOG brings connections to engineering, building, and construction firms through WTS International, an industry organization dedicated to advancing equity and access for women in the transportation industry, where a member of SBCOG's I-REN leadership team previously served as president of the Inland Empire chapter. This connection aligns with I-REN's goal to expand equity of WE&T opportunities in the region. SBCOG also works with its 24 cities and hundreds of employer sites throughout the region to promote ridesharing, reduce congestion and help improve air quality.
Other Program Administrators	SBCOG has experience conducting outreach as part of the San Bernardino Regional Energy Partnership with SCE and SoCalGas, working closely with 13 cities. CVAG partnered with SCE, SoCalGas, and Energy Code ACE to host codes and standards trainings at UC Riverside's Palm Springs campus. Through its stakeholder coordination work, I-REN has continued to build working relationships with SCE and SoCalGas, as well as other RENs such as SoCalREN and BayREN.
Local Governments	The three I-REN governing agencies have all had or currently have LG partnerships – with various connections including City Manager, Planning, local utilities. They bring multiple local experts into the conversation on a monthly/quarterly basis. WRCOG has committee structures engaged with planning directors and public work directors. They work with building department decision-makers and coordinate with permit technicians and all other staff face to face. CVAG has hosted many annual Energy & Water summits, which were attended by over 500 participants, in order to educate and update about relevant programs, energy efficient programs, and strategies from like-minded agencies. SBCOG Cities participated in a county-wide ZEV Readiness and Implementation Plan funded through the CEC. The Climate Resiliency Study "Resilient IE" is currently underway, which includes the participation of all 24 cities in San Bernardino County.

Budget and Metrics

Budget

The budget shown in Table 4-7 will facilitate the forecasted short and mid-term metrics targets with the expectation that increased participation and project volume is achieved as initial efforts scale and gain traction.

Table 4-7. Workforce Education & Training Budget

Budget ($)	2021	2022	2023	2024	2025
Administration	231,221	225,329	239,343	243,716	267,465
Marketing and outreach	138,732	135,198	143,606	146,230	160,479
Direct implementation - non incentive	1,942,255	1,892,768	2,010,477	2,047,218	2,246,706
Direct implementation - incentives	-	-	-	-	-
Total	**2,312,208**	**2,253,295**	**2,393,426**	**2,437,164**	**2,674,650**

Metrics

Based on the intervention strategies I-REN developed for WE&T, the following metrics are proposed to track program performance.

Table 4-8. Program Performance Metrics

Workforce Education and Training Metric	Baseline Year	Short Term Target 2021	Short Term Target 2022	Short Term Target 2023	Mid Term Target (2024-2025)
Number of collaborations by Business Plan sector to jointly develop or share training materials or resources.	2021	TBD	4	8	12
Number of participants by sector	N/A	TBD	90	120	150
Percent of participation relative to eligible target population for curriculum	N/A	N/A	TBD	TBD	TBD
Percent of total WE&T training program participants that meet the definition of disadvantaged worker.	N/A	TBD	TBD	TBD	TBD
Percent of incentive dollars spent on contracts* with a demonstrated commitment to provide career pathways to disadvantaged workers	N/A	N/A	TBD	TBD	TBD
Number Career & Workforce Readiness (CWR) participants who have been employed for 12 months after receiving the training	N/A	N/A	TBD	TBD	TBD

Cross-Cutting & Coordinating Activities

Marketing, Education & Outreach

The I-REN governing agencies serve as a trusted voice and advocate for local communities within their two counties. They can use this position to coordinate Marketing, Education and Outreach (ME&O) activities to promote workforce education and training in the region. I-REN can serve as a facilitator for coordination with other PAs and statewide programs and initiatives ME&O activities.

Effective marketing and outreach activities are fundamentally important to I-REN's strategies for WE&T. The I-REN governing agencies bring in-house capacity to design, develop, and deploy creative marketing content for various channels, from printed materials and website content to email communicators, social media, videos, and podcasts. They are skilled at designing well-branded promotional campaigns to engage their local government audiences.

I-REN anticipates its WE&T-related marketing could include but would not be limited to the following activities, in alignment with the proposed intervention strategies and tactics.

Table 4-9. Marketing Activities for I-REN WE&T Sector

Intervention Strategy	Tactic	Marketing Activities
S2.1 Establish local partnerships with existing and potential training providers in the region to deliver targeted, equitable, and relevant energy efficiency training for contractors and industry.	T2.1.1 Assess training opportunities available in the region. T2.1.2 Offer "train the trainer" support to providers on energy efficiency topics and trends. Encourage providers to focus on the needs of the local market. T2.1.3 Facilitate the development of multiple sites/delivery mechanisms for contractor and industry training programs.	*Develop and deploy effective survey instruments to gather data on current training opportunities.* *Collaborate with training providers and employers to design and deliver effective messaging to increase awareness and encourage participation in training events.* *Conduct relationship building meetings and outreach events - online and in person.*
S2.2 Facilitate industry engagement and development of job pathways to identify demand and jobs for a trained workforce.	T2.2.1 Convene and engage partners and organizations to define and establish a green workforce. T2.2.2 Reinforce pathways from high school, trade schools, and colleges into jobs in the energy efficiency workforce, in collaboration with established community partners. T2.2.3 Facilitate identifying opportunities for building companies and local workforce partners to network and connect.	*Develop and deploy materials to promote stakeholder events through I-REN governing agencies' existing marketing channels, through local government partnerships, and through building industry communication networks.* *Develop and deploy messaging in collaboration with educational and workforce partners to illuminate the green job pathways in the region.*

Codes & Standards

I-REN's WE&T initiatives offer an important cross-cutting opportunity to support C&S. I-REN's approach to serving the C&S sector focuses heavily on training for local building department staff, to help those individuals perform their jobs and build capacity in their departments to better enforce codes and standards. This is significant for WE&T as it helps build a skilled workforce in some of the rural jurisdictions with less resources in their local building departments.

I-REN's service territory also includes several relatively new cities incorporated in recent years; these cities are building their local capacity and establishing their infrastructure. They will benefit from training and education for their local government employees.

Another of I-REN's cross-cutting strategies for both WE&T and C&S involves outreach to building professionals in the private sector, contributing to their professional development and supporting the development of a capable regional workforce trained in advanced energy efficient building practices.

By aligning its C&S training activities and WE&T activities, I-REN can help to maximize benefits to the region's workforce, local governments, and building professionals.

EM&V Considerations

The recently-published report from the California Workforce Development Board (CWDB) "Putting California on the High Road: A Jobs and Climate Action Plan for 2030" (referred to herein as "June 2020 CWDB report") highlights the importance of data collection, tracking and evaluation studies to develop beneficial WE&T initiatives and improve them over time.[19] Accordingly, for its WE&T cross-cutting sector programs, I-REN proposes data collection and identifies an anticipated study need to support both external EM&V by the CPUC and internal research and program development activities.

As a new REN, I-REN is interested in collaborating with the CPUC, CEC, Energy Division, other PAs, and the WE&T community to support statewide and regional efforts around WE&T EM&V Roadmaps and Plans. I-REN will collaborate with the CPUC and other stakeholders to ensure that data collection activities are embedded in C&S program design to capture the information necessary to meet evaluation requirements and also to help expand the understanding of REN program impacts in this cross-cutting sector.

Data Collection Needs

I-REN's data collection needs correspond to identified metrics and indicators, and the intervention strategies outlined for its WE&T sector programs. To support external EM&V activities, I-REN will collect data to keep the CPUC and stakeholders apprised of program progress. I-REN will work collaboratively with Energy Division staff to ensure data collection meets their needs, to enable evaluation that can:

1) inform the program selection process,

[19] "Putting California on the High Road: A Jobs and Climate Action Plan for 2030" California Workforce Development Board (CWDB). Prepared by the UC Berkeley Center for Labor Research and Education. June 2020. Available online.

2) provide early feedback to program implementers,

3) produce impact evaluations at the end of the funding period, and

4) feed the planning process for future program cycles.[20]

Data collection will also support I-REN's internal EM&V activities and inform the measuring of progress toward established program goals and targets, CPUC metrics and indicators, and PA determined value metrics. I-REN's value metrics emphasize equity and building workforce capacity.

Real-time program performance tracking enabled by data collection will support the delivery of timely feedback to implementers and/or program administration staff. This in turn will support continuous improvement and inform future program planning efforts. Table 4-10 shows the research questions and data collection needs I-REN has identified for its WE&T initiatives, in alignment with CPUC metrics and indicators and I-REN's internal goals and value metrics, and informed by the June 2020 CWDB report.

Table 4-10. I-REN Workforce Education & Training Sector Data Collection

Topic Focus	Research Questions/Data Collection Needs	EM&V Objective	Timeframe
WE&T regional characterization	• Who are the training providers, job placement partners, and other WE&T stakeholders? • What topics, technologies, and skills are covered in available training content? • How is training delivered? • Where are in-person trainings located, relative to Inland Empire population centers and demand? • Do DACs, tribes, and other underserved or vulnerable populations have equitable training opportunities? • What are the barriers to increased access and equity? • What job skills are needed to participate in EE programs offered by other Pas?	Understand the WE&T sector market and identify areas of highest need	Short-term
Depth of I-REN interventions	• How many 'train the trainer' or upskill trainings are conducted? • How many collaborations occur with other organizations to jointly develop or share training materials or resources? • How many partners and organizations are convened for green workforce leadership and engagement? • How many RENterns are placed in positions to support local governments? • How many RENterns go on to pursue further education or careers related to EE, advanced energy, climate resilience, and sustainability? • How are I-REN collaborations expanding WE&T access for workers from DACs, tribes, and other underserved or vulnerable populations?	Program performance tracking	Short-term/ Mid-term

[20] Energy Efficiency Policy Manual, version 6, April 2020, p.44.

I-REN's WE&T sector strategic interventions center on fostering partnerships and facilitating industry engagement rather than developing and delivering curriculum. However, additional EM&V efforts could include examining the feasibility of working with training providers to collect data on secondary effects of I-REN interventions. This could include collaborating with key partners to assess the feasibility of collecting and evaluating data to track key metrics identified in the June 2020 CWDB report:[21]

- Enrollees and number of graduates
- Attainment of industry-recognized credentials
- Job placement and job retention
- Initial wages and wage mobility over time

Anticipated Study Needs

The June 2020 CWDB report highlights the importance of identifying data collection and analysis methods and the resources to support them prior to making field investments. Accordingly, I-REN anticipates the need for an initial study to identify current resources as well as gaps and barriers in the I-REN region's WE&T sector. This effort aligns with the intervention strategy described in *Tactic 2.1.1: Assess training opportunities available in the region*.

The proposed study will assess the region's WE&T stakeholders as well as training content, modalities, geography, equity, access, and program and market needs. I-REN will use the information and analysis from this study to foster partnerships and develop targeted approaches to WE&T sector activities. This data will also inform ongoing data collection activities and help form baselines against which to measure program performance during deployment and ensure that ratepayer investments are used judiciously to benefit communities and workers with the greatest need.

I-REN anticipates collecting this data initially to gain near-term feedback, then repeating the assessment after a few years to examine program progress and make improvements for program delivery in the mid-term timeframe and beyond.

In addition to I-REN's proposed data collection and study activities, the recently-released Energy Division & Program Administrator Energy Efficiency EM&V Plan Version 10 for 2019 – 2021 includes multiple studies underway that could provide useful insights for I-REN to incorporate in its WE&T initiatives.[22] I-REN will review the results of these studies are they are made available and incorporate findings however is appropriate to enhance I-REN WE&T program design and delivery.

Coordination with other PAs

I-REN is in communication with other PAs operating in the region to identify areas of potential coordination for WE&T activities. I-REN will ensure its activities are differentiated and avoid duplication of effort, while maintaining cooperation with other PAs to improve access to relevant training opportunities across the I-REN counties.

[21] "Putting California on the High Road: A Jobs and Climate Action Plan for 2030" California Workforce Development Board (CWDB). Prepared by the UC Berkeley Center for Labor Research and Education. June 2020. Available online.
[22] Energy Division & Program Administrator Energy Efficiency Evaluation, Measurement and Verification Plan FINAL 2019 – 2021 Version 10. California Public Utilities Commission, Energy Division. December 30, 2020. Available online.

Appendix A: CPUC Checklist

Table A-1. CPUC Checklist with I-REN Notes

Map to NRDC Compilation Document	Business Plan Element	I-REN Notes / Indicate Complete
New Requirements for BP Motion per D.19-12-021		**Ch. 1: Portfolio Summary**
	Represent more than one LG	About I-REN, page 1.4-1.6
	Present BP proposal at CAEECC	Regulatory Requirements, page 1.19
BP must contain per D.19-12-021		**Ch. 1: Portfolio Summary, Appendices**
	New and Unique Value	Providing Value, page 1.21
	Governance Structure	I-REN Organization, page 1.5
	Letter of Commitment to Cooperate	Appendix C: Letters of Commitment & Support
	CAEECC & Other Stakeholder Feedback Resolution	Appendix D: Stakeholder Input Resolution
	Energy Savings Targets	Goals & Budget, beginning page 1.27
	Goals & Metrics	Goals & Budget, beginning page 1.27
	Benefits & Costs (TRC, PACT)	Goals & Budget, beginning page 1.27
REN Activities Criteria		**Ch. 1: Portfolio Summary**
	Meet at least one of three	Regulatory Requirements, page 1.19
Portfolio Summary		**Ch. 1: Portfolio Summary**
0	**Executive Summary**	**Ch. 1: Portfolio Summary**
	Company description	About I-REN, page 1.4-1.6
	Definition of market	Definition of Market, page 1.7-1.14
	Mission Statement	I-REN Mission, page 1.3
	Purpose of Business Plan	Purpose of Business Plan, page 1.15
I.A.1, II.D.2	**Overview**	**Ch. 1: Portfolio Summary**
	About EE/DSM	Addressed throughout Business Plan
	CA Energy Needs	Supporting California's Energy Goals & Needs, page 1.17-1.18

Appendix A: CPUC Checklist

Map to NRDC Compilation Document	Business Plan Element	I-REN Notes / Indicate Complete
	Regulatory Requirements	Regulatory Requirements, page 1.19
	Strategic Plan	Supporting California's Energy Goals & Needs, page 1.17-1.18
	Legislation (e.g., AB 758, SB 350, AB 802, AB 793)	Supporting California's Energy Goals & Needs, page 1.17-1.18
	IOUs/PAs/CPUC/etc. overall role	Evolving from Past Cycles & I-REN's Role, page 1.26
I.A.2	*Broad socioeconomic and utility industry trends relevant to PA's EE programs (population, economics and markets, technology, environment/climate)*	Major Trends, page 1.23-1.25
I.B.1	*Vision (e.g., How PA thinks about and uses EE over next 10 years)*	I-REN Vision & Goals, page 1.6, and Evolving from Past Cycles & I-REN's Role, page 1.26
I.5	*Compare/contrast to past cycles*	Evolving from Past Cycles & I-REN's Role, page 1.26
I.B.2	**Goals & Budget**	**Ch. 1: Portfolio Summary, 'Goals & Budget' Section**
I.B.2 & I.C.2.a	*Energy Saving Goals*	Goals & Budget, beginning page 1.27
I.C.2.a	*Portfolio Budget (sector and portfolio level per xls checklist)*	Goals & Budget, beginning page 1.27
I.C.2.a, I.C.2.d	*Cost-effectiveness (sector and portfolio level per xls checklist)*	Goals & Budget, beginning page 1.27
I.C.2.b	*Explanation of Admin Budgets (e.g., Direct/Indirect Labor, Professional/Admin personnel)*	Goals & Budget, beginning page 1.27
I.C.2.c	*Explanation of accounting practices*	Goals & Budget, beginning page 1.27
I.C.3 and I.C.4	**Intervention strategies (high level)**	**Ch. 1 Portfolio Summary, 'Intervention Strategies' Section**
	Overall issues/challenges/barriers	Challenges & Barriers, page 1.34
	High level summary of strategies and tools (e.g., AMI data, AB 802, procurement model, up/mid/downstream, etc.)	Intervention Strategies, page 1.33
I.C.4; I.D	**Solicitation plan**	**Ch. 1: Portfolio Summary, 'Solicitation Plan' Section**
I.C.4	*Solicitation strategies/areas that could be SW*	Solicitation Plan, page 1.38
I.D; II.F	*Proposal for transitioning the majority of portfolios to be outsourced by the end of 2020.*	Solicitation Plan, page 1.38

Appendix A: CPUC Checklist

Map to NRDC Compilation Document	Business Plan Element	I-REN Notes / Indicate Complete
Sector Chapter (commercial, residential, public, agricultural, industrial, x-cutting)		**Ch. 2: Public Sector, Ch. 3: Codes & Standards, and Ch. 4 Workforce Education & Training. See chapter subsections as indicated below.**
II.A	**Summary tables**	
II.A	*Table with CE, TRC, PAC, emissions, savings, budget*	Sector Chapter: Budget and Metrics
I.C.7; II.E.1.b	*Metrics for sector*	Sector Chapter: Budget and Metrics
II.D	**Market characterization (overview and market/gap and other analysis)**	
II.D.1	*Electricity/NG*	Sector Chapter: Introduction/ Market Characterization
II.D.2	*State goals include acknowledgement of goals set by Strategic Plan, SB 350, AB758, guidance as appropriate)*	Ch. 1: Portfolio Summary, Supporting California's Energy Goals & Needs, page 1.17-1.18
II.D.3	*EE potential and goals*	Sector Chapter: Market Characterization
II.D.5	*Customer landscape (e.g., segments/subsegments, major end uses, participation rates, etc.)*	Sector Chapter: Market Characterization
II.D.6	*Major future trends that are key for the PA and its customers*	Sector Chapter: Major Trends
II.D.7	*Barriers to EE and other challenges to heightened EE (e.g., regulatory, market, data)*	Sector Chapter: Approach to Overcoming Barriers
II.2.a	**Description of overarching approach to the sector**	
	Goals/strategies/approaches	Sector Chapter: Introduction, Intervention Strategies and Objectives
I.C.6; I.D	*How portfolio meets Commission guidance*	Ch. 1: Portfolio Summary, Regulatory Requirements, page 1.19; addressed throughout Business Plan
II.C	*Description of how this chapter addresses the performance challenges/barriers*	Sector Chapter: Approach to Overcoming Barriers
I.C.4 a-c	**Intervention strategies (detailed)**	
II.D.2.a; II.E.3	*What specific strategies are being pursued (e.g., near, mid, long AND existing, modified, new)*	Sector Chapter: Intervention Strategies and Objectives
I [cmt with excerpt]	*Why specific strategies were chosen (e.g., ID current weaknesses, best practices, or other rationale to support choice)*	Sector Chapter: Intervention Strategies and Objectives
II.E.1.a; II.E.4	*How approaches advance goals discussed above*	Sector Chapter: Intervention Strategies and Objectives
I.C.4; I.E; II.D.4	*How strategies use lessons learned from past cycles and EM&V*	Sector Chapter: EM&V Considerations; Ch. 1: Portfolio Summary, Evolving from Past Cycles & I-REN's Role, page 1.26

Appendix A: CPUC Checklist

Map to NRDC Compilation Document	Business Plan Element	I-REN Notes / Indicate Complete
I	*How will interventions support/augment current approaches or solve challenges*	Sector Chapter: Approach to Overcoming Barriers, Intervention Strategies and Objectives
II.D.2	*Explanation for how these strategies address legislative mandates from AB 802, SB350, and AB 793, as well as other Commission directives for this sector, including strategic plan.*	Ch. 1: Portfolio Summary, Supporting California's Energy Goals & Needs, page 1.17-1.18
I.C.4	*Future expectations for intervention strategies*	Sector Chapter: Evolving Approach; Ch. 1: Portfolio Summary, Evolving from Past Cycles & I-REN's Role, page 1.26
I.C.1; II.E.6	*Description of pilots*	Sector Chapter: Anticipated Programs
II.F	*Key Partners*	Sector Chapter: Key Partners
I.C.5; I.D; II.B; II.C	**Compare/contrast to past cycles**	Sector Chapter: Evolving Approach; Ch. 1: Portfolio Summary, Evolving from Past Cycles & I-REN's Role, page 1.26
	Budget changes as appropriate	N/A
	Modification to sector strategies	N/A
	Cross-cutting (sector chapters and ME&0)	
II.E.2; II.H, II.K	*Program Administrator marketing and integration with SW MEO as applicable*	Sector Chapter: Marketing, Education & Outreach
II.E.5; II.H	*Workforce, education, and training*	Sector Chapter: Cross-Cutting & Coordinating Activities
II.H	*Emerging Technologies*	N/A
II.H	*Codes & Standards*	Sector Chapter: Cross-Cutting & Coordinating Activities
II.G	**Cross PA and Offering Coordination**	
II.G	*How strategies are coordination among regional PAs*	Sector Chapter: Intervention Strategies and Objectives, Key Partners, Cross-Cutting & Coordinating Activities
II.G	*Proposal of statewide program administrator/approaches for this sector*	N/A
II.G	*How the sector strategies are coordinated with statewide program activities*	Sector Chapter: Intervention Strategies and Objectives, Key Partners, Cross-Cutting & Coordinating Activities
II.G	*How are strategies coordinated with other state agencies and initiatives (e.g., AB 758)*	Sector Chapter: Intervention Strategies and Objectives, Key Partners, Cross-Cutting & Coordinating Activities
II.I	**EM&V Considerations (statement of needs)**	
II.I	*Data collection needs*	Sector Chapter: EM&V Considerations
II.I	*Anticipated study needs*	Sector Chapter: EM&V Considerations

Map to NRDC Compilation Document	Business Plan Element	I-REN Notes / Indicate Complete
II.J	**Demand Response**	N/A
ED Guidance (p.8)	*How EE measures use up-to-date DR enabling technologies to be "DR ready"*	N/A
ED Guidance (p.8)	*How duplication of costs for ME&O, site visits, etc. is avoided for dual-purpose technologies*	N/A
ED Guidance (p.9)	*How strategies facilitate customer understanding of peak load, cost, and opportunities to reduce*	N/A
II.K	**Residential Rate Reform**	N/A
ED Guidance (p.9)	*How BPs will help reduce load during TOU periods*	N/A
ED Guidance (p.9)	*How BP will diminish barriers to load reduction during TOU periods*	N/A
ED Guidance (p.9)	*How strategies will provide info to customers and/or provide a tool to show how program may impact customer energy usage during different TOU periods*	N/A
ED Guidance (p.9)	*How strategies will analyze whether a customer may experience greater savings by switching to a different, opt-in TOU rate*	N/A
ED guidance (p.9)	*ME&O re: rate reform*	N/A
II.L	**Integrated Demand Side Resources**	N/A
II.M	**Zero-Emission Vehicles (EVs)**	N/A
II.N	**EnergySavings Assistance (Multi-family Focused)**	N/A
Appendices		
	Additional Customer Data	N/A
	Cited research	Appendix B: Public Sector Market Analysis
	CAEECC stakeholder input resolution	Appendix D: Stakeholder Input Resolution

Appendix B: Public Sector Market Analysis

Measure Selection and Savings Methodology

To estimate the energy savings for the I-REN Public Sector resource program, measures were selected based on their statewide availability as well as their viability towards a broad range of implementation opportunities.

The following categories of measures were identified as having high potential for application to the Public Sector, based on the specific application criteria listed.

Table B-1. Public Sector Measure Categories

Measure Category	Energy End Use
Plug loads	Exercise machines, tools, computers, office equipment, refrigerators, food prep equipment
Standard lighting	Virtually all indoor spaces except for specialty lighting listed below
Whole-Building HVAC	Likely to have rooftop unit or similar approach to HVAC; med-large buildings; may be in addition to or in lieu of central plant
Mechanical shop	Equipment plug loads, pumps /compressors /hydraulics, possibly high ventilation demand
High bay lighting	Assembly spaces, gyms, warehouses
Specialty Outdoor Lighting	Large parking areas, athletic fields, stadiums
Significant plumbing installation	High number of plumbing fixtures and subsequent demand for hot and cold water. Gyms, assembly spaces, airports, jails and prisons, commercial kitchens, large offices, etc.
Central plant	Pumps, boilers, chillers/cooling water
Gas appliances	Cooking and/or water heating equipment
High water heating loads	boilers/steam generators, heated pools, showers, laundering, ware washing, cooking, spa/sauna
Cooling-dominated HVAC loads	Assembly spaces, gyms, offices (typically), classrooms (typically), commercial kitchens, etc.
Water pumps	Pool, water treatment station, agricultural irrigation operations, hot water recirculation
Laboratories	Wet or dry. Depending on use may have high loads for: ventilation/exhaust; space heating/cooling; refrigeration; plug loads; water heating/cooling. Other specialized loads may exist on case-by-case basis
Other specialty lighting	Theatrical lighting, greenhouses, others
Data Center	Dedicated server room for large data operations
High Exhaust or Ventilation Loads	Labs, industrial / commercial operations, some healthcare, etc.

Measure Category	Energy End Use
Process Loads from misc. equipment	Airport/jail security, airport baggage equipment, warehouse conveyances, etc.
Heating-dominated HVAC loads	Occupied spaces in CZs with seasonal heating
Water Heating Process Loads	For commercial / industrial use, distinct from water heating for restrooms /showers /pools
Process Cooling and Heating Loads	For commercial and industrial use.

Target implementation was then based on a market assessment of available target opportunities as well as implementation feasibility during the first few years of program implementation across a broad variety of facilities in the targeted area.

A broad measure mix was then assembled based on both implementation feasibility as well as energy savings yield for each of the previously mentioned categories, and year over year savings yield was computed based on implementation potential and target penetration.

Yearly projections reflect a gradual increase in program participation as well as a slight increase in implementation costs (2.2% based on average yearly inflation rate).

Appendix C: Letters of Commitment & Support

Over the last year I-REN has worked with Southern California Edison, Southern California Gas, and Southern California Regional Energy Network to identify ways to coordinate in the region and "minimize negative overlap that could lead to customer confusion or duplicative administrative costs." [1]

I-REN is proud to have received Letters of Commitment to Cooperate from Southern California Edison, Southern California Gas, and Southern California Regional Energy Network. In accordance with D.19-12-021, I-REN is filing these letters with its Business Plan application, to be followed by a Joint Cooperation Memo after business plan approval.

I-REN has also received numerous Letters of Support from cities, Riverside and San Bernardino county officials, Western Community Energy, and the Southern California Association of Governments. These letters are indicative of I-REN's strong existing relationships in the region, built over many years through the work of WRCOG, CVAG, and SBCOG with the local jurisdictions they serve.

[1] D.19-12-021, p. 81, Findings of Fact paragraph 6.

Contents

Letters of Commitment to Cooperate from other Program Administrators:

- Southern California Edison (SCE)
- Southern California Gas (SoCalGas)
- Southern California Regional Energy Network (SoCalREN)

Letters of Support for I-REN:

- Regional, County, and other Organizations
  - Southern California Association of Governments (SCAG)
  - County of San Bernardino
  - County of Riverside Fourth District Supervisor
  - Western Community Energy
- WRCOG Member Cities
  - City of Banning
  - City of Canyon Lake
  - City of Eastvale
  - City of Jurupa Valley
  - City of Lake Elsinore
  - City of Menifee
  - City of Moreno Valley
  - City of Murrieta
  - City of Temecula
  - City of Wildomar
- CVAG Member Cities
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  - City of Indian Wells
  - City of Indio
  - City of La Quinta
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- SBCOG Member Jurisdictions
  - City of Chino
  - City of Chino Hills
  - City of Colton
  - City of Highland
  - City of Montclair
  - City of San Bernardino
  - City of Twentynine Palms
  - Town of Yucca Valley

Letters of Commitment to Cooperate

The following pages contain Letters of Commitment to Cooperate from Southern California Edison, Southern California Gas, and Southern California Regional Energy Network.

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REGIONAL ENERGY NETWORK

LETTER OF COMMITMENT TO COOPERATE BETWEEN INLAND REGIONAL ENERGY NETWORK (I-REN) AND SOUTHERN CALIFORNIA EDISON COMPANY (SCE)

PURPOSE

The purpose of this Letter of Commitment to Cooperate is to make the initial clarifying statement to highlight the cooperation between Western Riverside Council of Governments (WRCOG), as lead implementer of Inland Regional Energy Network (I-REN), and Southern California Edison Company (SCE).

BACKGROUND

I-REN, on behalf of the Coachella Valley Association of Governments, San Bernardino Council of Governments, and WRCOG, hereby submits this Letter of Commitment to Cooperate pursuant I-REN's Business Plan proposal to the California Public Utilities Commission (Commission).

On December 5, 2019, the Commission adopted the Decision Regarding Frameworks for Energy Efficiency Regional Energy Networks and Market Transformation.[1] The decision authorizes the continued operation of existing RENs and invites new REN proposals as business plans to be filed with the Commission if they meet certain additional requirements as defined in this decision. These new requirements for new RENs include:

1. RENs will be required to demonstrate unique value in achieving state goals;
2. RENs will represent more than one local government entity;
3. RENs will coordinate with existing program administrators in their geographic area prior to filing their business plans;
4. RENs will vet their proposal with stakeholders through the California Energy Coordinating Committee (CAEECC);
5. RENs will explain their governance structure in their business plan filing.

Program Parameters

I-REN and SCE will coordinate on the following program sectors below:

Public

Workforce Education & Training

[1] D. 19-12-021

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Codes & Standards

Terms

The term of the agreement shall be updated to initiate the development of the Joint Cooperation Memo if I-REN's Business Plan is approved by the Commission. Upon approval, I-REN and SCE will work together on finalizing the program parameters to minimize duplication and avoid customer confusion. The parties will also work to develop and submit a Joint Cooperation Memo outlining similar programs and methods for cooperation.

[Signatures on the following page]

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SIGNATURE PAGE TO

LETTER OF COMMITMENT TO COOPERATE
BETWEEN
INLAND REGIONAL ENERGY NETWORK (I-REN)
AND
SOUTHERN CALIFORNIA EDISON (SCE)

IN WITNESS WHEREOF, the Parties hereto have made and executed this Letter of Commitment to Cooperate as of the date first written above.

WRCOG

Western Riverside Council of Governments

By: DocuSigned by: Casey Dailey E4982150C991414C... 11/30/2020

Casey Dailey
Director of Energy & Environmental Programs

SCE

Southern California Edison Company

By: DocuSigned by: Michael Bushey D8A1E8E51CB1429... 12/1/2020

Michael Bushey
Director, DSM Program Operations

REGIONAL ENERGY NETWORK

LETTER OF COMMITMENT TO COOPERATE
BETWEEN
WESTERN RIVERSIDE COUNCIL OF GOVERNMENTS AND
SOUTHERN CALIFORNIA GAS COMPANY

PURPOSE

Pursuant to California Public Utilities Commission ("CPUC" or "Commission") Decision D.19-12-021 ("Decision"), the purpose of this Letter of Commitment to Cooperate is to make the initial clarifying statement to highlight the cooperation between Western Riverside Council of Government ("WRCOG") as the Program Administrator ("PA") of the Inland Regional Energy Network ("I-REN") and Southern California Gas Company ("SoCalGas"), an Investor Owned Utility. The WRCOG on behalf of the Coachella Valley Association of Governments ("CVAG"), San Bernardino Council of Governments ("SBCOG") and itself in the matter of forming and administering I-REN hereby submits this Letter of Commitment to Cooperate along with the I-RENs Business Plan proposal to the CPUC.

BACKGROUND

The Commission adopted the Decision on December 5, 2019. The Decision authorized the continued operation of all existing Regional Energy Networks ("RENs") and invited proposals for new RENs to be filed with the Commission via a motion in the open energy efficiency rulemaking, if they meet certain additional requirements as defined in the Decision. The additional requirements for new RENs are as follows:

1. RENs will be required to demonstrate unique value in achieving state goals;

2. RENs will represent more than one local government entity;

3. RENs will coordinate with existing program administrators in their geographic area prior to filing their business plans;

4. RENs must vet their proposal with stakeholders through the California Energy Efficiency Coordinating Committee ("CAEECC");

5. RENs must explain their REN governance structure in their business plan filing;

6. RENs must provide an estimate of benefits and costs according to the Total Resource Cost and Program Administer Cost Tests;

7. RENs must provide a proposed set of energy savings targets;

8. RENs must provide a proposed set of goals and metrics.

Program Coordination

WRCOG and SoCalGas will coordinate on the following program sectors:

Public

Workforce Education & Training

Codes & Standards

Working with other Program Administrators, WRCOG and SoCalGas will initiate the development of the Joint Cooperation Memo if I-REN's Business Plan is approved by the Commission. Upon approval, WRCOG and SoCalGas will work together along with other Program Administrators on finalizing the program parameters and coordination details for the final submittal of the Joint Cooperation Memo.

[Signatures on the following page]

SIGNATURE PAGE TO

LETTER OF COMMITMENT TO COOPERATE
BETWEEN
Western Riverside Council of Governments
AND
Southern California Gas Company

IN WITNESS WHEREOF, the Parties hereto have made and executed this Letter of Commitment to Cooperate as of the date first written above.

WRCOG

WESTERN RIVERSIDE COUNCIL OF GOVERNMENTS

By:

Casey Dailey
Director of Energy & Environmental Programs

Date: __12/2/2020_____

Investor Owned Utility

Southern California Gas Company

By:

Brian Prusnek
Director – Customer Programs & Assistance

Date: _____11/25/2020_____

SAN BERNARDINO COUNCIL OF GOVERNMENTS, COACHELLA VALLEY ASSOCIATION OF GOVERNMENTS, WESTERN RIVERSIDE COUNCIL OF GOVERNMENTS
AND
SOUTHERN CALIFORNIA REGIONAL ENERGY NETWORK (SoCalREN)

LETTER OF COMMITMENT TO COOPERATE

PURPOSE

The purpose of this Letter of Commitment to Cooperate is to make an initial clarifying statement to highlight the cooperation between the Western Riverside Council of Governments, San Bernardino Council of Governments, and the Coachella Valley Association of Governments, and the Southern California Regional Energy Network (SoCalREN) in the implementation of a new proposed Regional Energy Network, Inland Regional Energy Network (I-REN), with overlapping territory in Riverside and San Bernardino Counties.[1]

The Joint Parties submit this Letter of Commitment to Cooperate pursuant to the California Public Utilities Commission ("Commission") to Decision (D.) 19-12-021, Ordering Paragraph (OP) 2.[2]

BACKGROUND

On June 5, 2018, the Commission issued D.19-12-021, *Decision Regarding Frameworks For Energy Efficiency Regional Energy Networks and Market Transformation,* which adopted the guidelines for the continued operation of existing RENs and allows for the proposals of new RENs as business plans to be filed with the Commission. In addition, D.19-12-021 requires that any new REN proposals must include a "Letter of Commitment" to cooperate between each energy efficiency program administrator within the proposed overlapping service areas. Specifically, the directive states:

> "[…], to ensure appropriate coordination with all other program administrators operating within the region that the new REN proposes to serve, we will require that initial "letters of commitment" to cooperate be included with the business plan proposal to the Commission. These "letters of commitment" will be necessarily higher level than JCMs required of existing administrators, as pointed out by WRCOG and SCE in comments on the proposed decision. But the "letters of commitment" from each of the other existing administrators in the prospective REN's geographic area should indicate that the prospective REN has coordinated with them, and that they have agreed to coordinate and cooperate to ensure no program conflicts, should the new REN proposal be approved by the Commission."[3]

DISCUSSION

Should the new I-REN proposal be approved by the Commission, the Joint Parties have agreed to coordinate and cooperate to ensure no program conflicts. The Joint Parties will coordinate their respective program offerings and resources to minimize duplicative offerings and work in an

[1] Hereto referred to as the "Joint Parties."
[2] D.19-12-021 at 88
[3] Ibid., p. 22.

approach where collaboration will support efforts for services to remain complementary and supplemental to the markets' needs. The Joint Parties will work toward minimizing duplication of programs and provide choice amongst all offerings of Program Administrators allowing the customer to be the decision maker.

The Joint Parties will coordinate and cooperate as the market and program administration expands and gains new market actors. This approach is in the best interest of the customer providing a range of options to help them meet their energy efficiency goals.

[Signatures on the following page]

SIGNATURE PAGE TO

SAN BERNARDINO COUNCIL OF GOVERNMENTS, COACHELLA VALLEY ASSOCIATION OF GOVERNMENTS, WESTERN RIVERSIDE COUNCIL OF GOVERNMENTS
AND
SOUTHERN CALIFORNIA REGIONAL ENERGY NETWORK (SoCalREN)

LETTER OF COMMITMENT TO COOPERATE

IN WITNESS WHEREOF, the Parties hereto have made and executed this Letter of Commitment to Cooperate as of the date first written above.

INLAND REGIONAL ENERGY NETWORK

WESTERN RIVERSIDE COUNCIL OF GOVERNMENTS

By: Casey Dailey
Casey Dailey (Nov 23, 2020 10:22 PST)

Casey Dailey
Director of Energy & Environmental Programs
Western Riverside Council of Governments

Nov 23, 2020

SOUTHERN CALIFORNIA REGIONAL ENERGY NETWORK

COUNTY OF LOS ANGELES

By: Minh Le
Minh Le (Nov 23, 2020 09:21 PST)

Minh Le
General Manager
ISD- Environmental Energy Services
County of Los Angeles

Nov 23, 2020

Draft Letter of Commitment_SCR (SoCalREN Edits)_cd

Final Audit Report 2020-11-23

Created:	2020-11-23
By:	Minh Le (msle@isd.lacounty.gov)
Status:	Signed
Transaction ID:	CBJCHBCAABAAPXJBpv245zstBFPgFr-H8Rn10_-Ngdlr

"Draft Letter of Commitment_SCR (SoCalREN Edits)_cd" History

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Adobe Sign

Letters of Support

The following pages contain Letters of Support from cities, Riverside and San Bernardino county officials, and other regional organizations.

SCAG
INNOVATING FOR A BETTER TOMORROW

SOUTHERN CALIFORNIA
ASSOCIATION OF GOVERNMENTS
900 Wilshire Blvd., Ste. 1700
Los Angeles, CA 90017
T: (213) 236-1800
www.scag.ca.gov

REGIONAL COUNCIL OFFICERS

President
Bill Jahn, Big Bear Lake

First Vice President
Rex Richardson, Long Beach

Second Vice President
Clint Lorimore, Eastvale

Immediate Past President
Alan D. Wapner, San Bernardino
County Transportation Authority

COMMITTEE CHAIRS

Executive/Administration
Bill Jahn, Big Bear Lake

Community, Economic &
Human Development
Peggy Huang, Transportation
Corridor Agencies

Energy & Environment
Linda Parks, Ventura County

Transportation
Cheryl Viegas-Walker, El Centro

April 13, 2020

Mr. Rick Bishop
Executive Director
Western Riverside Council of Governments
3390 University Ave. #200
Riverside, CA 92501

RE: Letter of Support – CVAG, SBCOG, and WRCOG Regional Energy Network Development

Dear Mr. Bishop:

On behalf of the Southern California Association of Governments, I would like to submit this letter of support for the Inland Regional Energy Network's (I-REN) application to the California Public Utilities Commission (CPUC) to become a REN Program Administrator of energy efficiency funds.

The Coachella Valley Association of Governments (CVAG), San Bernardino Council of Governments (SBCOG), and Western Riverside Council of Governments (WRCOG) have implemented energy efficiency programs and services locally in the combined regions of Riverside and San Bernardino Counties for nearly a decade. In this time, they have honed the skillsets, knowledge, and networks to identify and address the needs of their constituents. The member agencies have a deep familiarity with the Counties of Riverside and San Bernardino, their boards have elected officials and local government staff representation, and they are aware of the challenges and opportunities associated with the I-REN service territory's geographic arrangement and distance from major metropolitan areas.

Based on the member agencies' regional experience, I-REN proposes to provide services to market sectors including, but not limited to, the following three areas. I-REN's approach to serving these markets is detailed in the Sector Descriptions that accompany this letter.

1. **Public Sector**: Technical assistance support for municipal agencies looking to upgrade their community centers, libraries, cooling centers, and senior centers.
2. **Workforce Education & Training**: Partnership opportunities with local academia to develop and offer work force programs that can support high school / community college students with jobs in the field of energy efficiency.
3. **Codes and Standards**: Technical support to local contractors, city planning staff, and local planning firms to better understand the new energy efficiency building codes.

With the leadership of I-REN as a dedicated and regional community-focused Program Administrator, these sectors can benefit from improved energy efficiency in the public sector, increased compliance with codes and standards, and advancements in workforce development. I-REN brings the necessary local experience to continue and expand their

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current work addressing the needs of underserved customers and ensuring affordable access to energy efficiency programs across the region.

We support I-REN's efforts and respectfully request that the CPUC give full and fair consideration to this important proposal.

Sincerely,

Kome Ajise
Executive Director

385 North Arrowhead Avenue, 5th Floor, San Bernardino, CA 92415-0120 | Phone: 909.387.4821 Fax: 909.387.5430
www.SBCounty.gov

SAN BERNARDINO COUNTY

County Administrative Office
Governmental & Legislative Affairs

Josh Candelaria
Director

April 14, 2020

RE: Inland Empire Regional Energy Network – **SUPPORT**

To whom it may concern:

The County of San Bernardino is pleased to support for the Inland Regional Energy Network (I-REN) application to the California Public Utilities Commission (CPUC) to become a REN Program Administrator of energy efficiency funds.

The County supports the efforts of I-REN application and its initiatives designed to fill gaps in existing program offerings from other providers, and provide technical assistance support for municipal agencies looking to upgrade community centers, libraries, senior centers, cooling centers and daycare centers. In addition this initiative that will work with local building departments to offer support and training for compliance with the California Building Energy Efficiency Code and engage with building departments, local contractors, and regional construction firms through mentorships, education, and outreach activities; and the promotion of online resources and communities.

The final piece is a Workforce, Education and Training aimed to address the current limited number of qualified contractors providing energy efficiency services within the region. I-REN will identify partnership opportunities with local academia to develop and offer work force programs that can support high school, community college and occupational/technical school students with job opportunities in the field of energy efficiency.

I-REN brings the necessary local experience to continue and expand their current work addressing the needs of underserved customers and ensuring affordable access to energy efficiency programs across the region.

For the reasons listed above, the County supports Inland Regional Energy Network application. If you have any questions regarding the County's position, please contact Josh Candelaria, Governmental and Legislative Director, at 909 387-4821 or jcandelaria@sbcounty.gov.

Sincerely,

Curt Hagman
Fourth District Supervisor
Chair, San Bernardino County Board of Supervisors

BOARD OF SUPERVISORS
Robert A. Lovingood, First District | Janice Rutherford, Second District | Dawn Rowe, Third District | Curt Hagman, Chairman, Fourth District | Josie Gonzales, Vice Chair, Fifth District
Gary McBride, Chief Executive Officer

County of Riverside

RIVERSIDE OFFICE:
4080 Lemon Street, 5th Floor
Riverside, CA 92502-1647
(951) 955-1040
Fax (951) 955-2194

DISTRICT OFFICE/MAILING ADDRESS
73-710 Fred Waring Drive, Suite 222
Palm Desert, CA 92260-2574
(760) 863-8211
Fax (760) 863-8905

SUPERVISOR V. MANUEL PEREZ
FOURTH DISTRICT

October 5, 2020

RE: Letter of Support for Inland Regional Energy Network

To Whom It May Concern:

I am pleased to provide this letter of support for the Inland Regional Energy Network (I-REN) in its application to the California Public Utilities Commission to become a REN Program Administrator of energy efficiency funds.

I support the efforts of I-REN and its member agencies – the Western Riverside Council of Governments, the Coachella Valley Association of Governments and the San Bernardino Council of Governments – as they pursue ongoing energy efficiency opportunities within the region, as well as their proposed I-REN program sector initiatives, including, but not limited to the following:

- **Public Sector:** This initiative is designed to fill gaps in existing program offerings from other providers, and provide technical assistance support for municipal agencies looking to upgrade community centers, libraries, senior centers, cooling centers and daycare centers. The I-REN approach is to connect energy efficiency with community resilience. Its service territory experiences harsh climate conditions in summer months, and communities benefit from these public gathering places that offer protection from extreme heat. This will fill a gap in current utility-delivered service offerings.

- **Codes and Standards (C&S):** Through this initiative, I-REN will work with local building departments to offer support and training for compliance with the California Building Energy Efficiency Code (Title 24). I-REN will engage with building department staff, local contractors and regional construction firms through mentorship, marketing, education and outreach (ME&O) activities; and the promotion of online resources and communities such as Energy Code Ace.

- **Workforce, Education and Training (WE&T):** I-REN's WE&T initiatives aim to address the limited number of qualified contractors providing energy efficiency services within the region. I-REN will identify partnership opportunities with local educational institutions to develop and offer workforce programs that can support high school, community college and occupational/technical school students with job opportunities in the field of energy efficiency.

With the leadership of I-REN as a dedicated and regional community-focused Program Administrator, these sectors can benefit from improved energy efficiency in the public sector, increased compliance with codes and standards, and advancements in workforce development. I-REN brings the necessary local experience to continue and expand its current work addressing the needs of underserved customers and ensuring affordable access to energy efficiency programs across the region.

As supervisor for Riverside County's Fourth District, representing the eastern two-thirds of Riverside County, I respectfully offer my support of I-REN in its application to become a REN Program Administrator, and I look forward to collaborating with them in this important work.

Sincerely,

V. MANUEL PEREZ
Supervisor, Fourth District

VMP:das

cc: Nils Strindberg, California Public Utilities Commission Energy Division

WESTERN COMMUNITY ENERGY
YOUR NEIGHBORHOOD POWER AUTHORITY

RESOLUTION NO. 2020-22

A RESOLUTION OF THE BOARD OF DIRECTORS OF WESTERN COMMUNITY ENERGY SUPPORTING SUBMITTAL OF A PROPOSAL TO THE CALIFORNIA PUBLIC UTILITIES FOR SUPPORT OF THE I-REN BUSINESS PLAN

WHEREAS, Senate Bill 350 (2015, De Leon) requires the State Energy Resources Conservation and Development Commission to establish annual targets for statewide energy efficiency savings and AB/SB 32 (2006, Pavley) further tasks the State Air Resources Board to ensure that statewide greenhouse gas emissions are reduced to 40% below the 1990 level by 2030; and

WHEREAS, the Inland Regional Energy Network Business Plan supports the goals of SB 350 and AB/SB32 by working with local governments and its communities to set energy efficiency saving targets and reduce its greenhouse gas emissions through current / new developed facilities; and

WHEREAS, the Executive Committee of the Western Riverside Council of Governments (WRCOG) has authorized WRCOG to submit a proposal for the Inland Regional Energy Network (I-REN) and WRCOG has requested that WCE support WRCOG's proposal; and

WHEREAS, a successful proposal for the I-REN will provide a funding opportunity to plan and further implement energy efficiency programs to local governments in the region of both Riverside and San Bernardino Counties.

NOW, THEREFORE, THE WESTERN COMMUNITY ENERGY BOARD OF DIRECTORS DOES HEREBY RESOLVE, DETERMINE AND ORDER AS FOLLOWS:

1. That the Board of Directors supports WRCOG's proposal to the California Public Utilities Commission in pursuit of establishing an I-REN to offer energy efficiency services to local governments and the communities of Riverside and San Bernardino Counties.

PASSED AND ADOPTED by the Board of Directors on December 9, 2020.

Ben Benoit, Chairperson
Western Community Energy

Rick Bishop, Secretary
Western Community Energy

Approved as to form:

Steven DeBaun
Western Community Energy Legal Counsel

AYES: 6 NAYS: 0 ABSENT: 1 ABSTAIN: 0

City of Banning

Office of the City Manager

January 17, 2020

Rick Bishop
Executive Director
Western Riverside Council of Governments
3390 University Ave., Suite 200
Riverside, CA 92501

Subject: Letter of Support for CVAG, SBCOG, and WRCOG Regional Energy Network Development

Dear Mr. Bishop:

The City of Banning is pleased to support the development of a Regional Energy Network (REN) in partnership with the Western Riverside Council of Governments (WRCOG), Coachella Valley Association of Governments (CVAG) and the San Bernardino Council of Governments (SBCOG). We commit to supporting this initiative by actively assisting with identifying and engaging future energy projects, supporting outreach at existing community themed events, and providing ongoing feedback on how to continue to grow the programs for the REN.

We are eager to be involved and continue to learn more about the program areas as they are being developed. The City will support the program areas listed below for ongoing energy efficiency opportunities within the region:

1. Public: Technical assistance support for municipal agencies looking to upgrade their community centers, libraries, cooling centers, and senior centers.
2. Workforce Education & Training: Partnership opportunities with local academia to develop and offer work force programs that can support high school / community college students with jobs in the field of energy efficiency.
3. Codes & Standards: Technical support to local contractors, city planning staff, and local planning firms to better understand the new energy efficiency building codes.

With the recent California Public Utilities Commission approval on the future of RENs, we see this as a great opportunity to develop a REN within the Counties of Riverside and San Bernardino.

Please feel free to contact me at (951) 922-3104 or dschulze@banningca.gov should you have any questions.

Sincerely,

Douglas Schulze
City Manager

CITY OF CANYON LAKE

February 27, 2020

Rick Bishop
Executive Director
Western Riverside Council of Governments
3390 University Ave., Suite 200
Riverside, CA 92501

Subject: Letter of Support for CVAG, SBCOG, and WRCOG Regional Energy Network Development

Dear Mr. Bishop:

The City of Canyon Lake is pleased to support the development of a Regional Energy Network (REN) in partnership with the Western Riverside Council of Governments (WRCOG), Coachella Valley Association of Governments (CVAG) and the San Bernardino Council of Governments (SBCOG). We commit to supporting this initiative by actively assisting with identifying and engaging future energy projects, supporting outreach at existing community themed events, and providing ongoing feedback on how to continue to grow the programs for the REN.

We are eager to be involved and continue to learn more about the program areas as they are being developed. The City will support the program areas listed below for ongoing energy efficiency opportunities within the region:

1. Public: Technical assistance support for municipal agencies looking to upgrade their community centers, libraries, cooling centers, and senior centers.
2. Workforce Education & Training: Partnership opportunities with local academia to develop and offer work force programs that can support high school / community college students with jobs in the field of energy efficiency.
3. Codes & Standards: Technical support to local contractors, city planning staff, and local planning firms to better understand the new energy efficiency building codes.

With the recent California Public Utilities Commission approval on the future of RENs, we see this as a great opportunity to develop a REN within the Counties of Riverside and San Bernardino.

Please feel free to contact me at (951) 246-2025 or chrismann@cityofcanyonlake.com should you have any questions.

Sincerely,

Chris Mann
City Manager

CITY OF EASTVALE
12363 Limonite Avenue | Suite 910 | Eastvale, CA 91752
951.361.0900

January 28, 2020

Rick Bishop
Executive Director
Western Riverside Council of Governments
3390 University Ave., Suite 200
Riverside, CA 92501

Subject: Letter of Support for CVAG, SBCOG, and WRCOG Regional Energy Network Development

Dear Mr. Bishop:

The City of Eastvale is pleased to support the development of a Regional Energy Network (REN) in partnership with the Western Riverside Council of Governments (WRCOG), Coachella Valley Association of Governments (CVAG) and the San Bernardino Council of Governments (SBCOG). We commit to supporting this initiative by actively assisting with identifying and engaging future energy projects, supporting outreach at existing community themed events and providing ongoing feedback on how to continue to grow the programs for the REN.

We are eager to be involved and continue to learn more about the program areas as they are being developed. The City will support the program areas listed below for ongoing energy efficiency opportunities within the region:

1. Public: Technical assistance support for municipal agencies looking to upgrade their community centers, libraries, cooling centers, and senior centers.
2. Workforce Education & Training: Partnership opportunities with local academia to develop and offer workforce programs that can support high school/community college students with jobs in the field of energy efficiency.
3. Codes & Standards: Technical support to local contractors, city planning staff, and local planning firms to better understand the new energy efficiency building codes.

With the recent California Public Utilities Commission approval on the future of RENs, we see this as a great opportunity to develop a REN within the Counties of Riverside and San Bernardino.

Please feel free to contact me at (951) 703-4425 or ggibson-williams@eastvaleca.gov should you have any questions.

Sincerely,

Gina Gibson-Williams
Community Development Director

City of Jurupa Valley

Anthony Kelly, Jr. Mayor, Lorena Barajas Mayor Pro Tem,
Micheal Goodland, Council Member, Chris Barajas, Council Member, Brian Berkson, Council Member

Rick Bishop
Executive Director
Western Riverside Council of Governments
3390 University Ave., Suite 200
Riverside, CA 92501

Subject: **Letter of Support for CVAG, SBCOG, and WRCOG Regional Energy Network Development**

Dear Mr. Bishop:

The City of Jurupa Valley is pleased to support the development of a Regional Energy Network (REN) in partnership with the Western Riverside Council of Governments (WRCOG), Coachella Valley Association of Governments (CVAG) and the San Bernardino Council of Governments (SBCOG). We commit to supporting this initiative by actively assisting with identifying and engaging future energy projects, supporting outreach at existing community themed events, and providing ongoing feedback on how to continue to grow the programs for the REN.

We are eager to be involved and continue to learn more about the program areas as they are being developed. The City will support the program areas listed below for ongoing energy e opportunities within the region:

1. Public: Technical assistance support for municipal agencies looking to upgrade their community centers, libraries, cooling centers, and senior centers.
2. Workforce Education & Training: Partnership opportunities with local academia to develop and offer work force programs that can support high school / community college students with jobs in the field of energy efficiency.
3. Codes & Standards: Technical support to local contractors, city planning staff, and local planning firms to better understand the new energy efficiency building codes.

With the recent California Public Utilities Commission approval on the future of RENs, we see this as a great opportunity to develop a REN within the Counties of Riverside and San Bernardino.

Please feel free to contact me at (951) 332-6464 or rbutler@jurupavalley.org should you have any questions.

Sincerely,

Rod B. Butler

Rod Butler
City Manager

8930 Limonite Ave., Jurupa Valley, CA 92509-5183
Phone: (951) 332-6464, FAX (951) 332-6995
www.jurupavalley.org

CITY OF LAKE ELSINORE
DREAM EXTREME

January 22, 2020

Rick Bishop
Executive Director
Western Riverside Council of Governments
3390 University Ave., Suite 200
Riverside, CA 92501

Subject: Letter of Support for CVAG, SBCOG, and WRCOG Regional Energy Network Development

Dear Mr. Bishop:

The City of Lake Elsinore is pleased to support the development of a Regional Energy Network (REN) in partnership with the Western Riverside Council of Governments (WRCOG), Coachella Valley Association of Governments (CVAG) and the San Bernardino Council of Governments (SBCOG). We commit to supporting this initiative by actively assisting with identifying and engaging future energy projects, supporting outreach at existing community themed events, and providing ongoing feedback on how to continue to grow the programs for the REN.

We are eager to be involved and continue to learn more about the program areas as they are being developed. The City will support the program areas listed below for ongoing energy efficiency opportunities within the region:

1. Public: Technical assistance support for municipal agencies looking to upgrade their community centers, libraries, cooling centers, and senior centers.
2. Workforce Education & Training: Partnership opportunities with local academia to develop and offer work force programs that can support high school/community college students with jobs in the field of energy efficiency.
3. Codes & Standards: Technical support to local contractors, city planning staff, and local planning firms to better understand the new energy efficiency building codes.

With the recent California Public Utilities Commission approval on the future of RENs, we see this as a great opportunity to develop a REN within the Counties of Riverside and San Bernardino.

Please feel free to contact me at (951) 674-3124, ext 204 or gyates@lake-elsinore.org should you have any questions.

Sincerely,

Grant Yates, City Manager
CC: Lake Elsinore City Council

951.674.3124
130 S. Main Street
Lake Elsinore, CA 92530
www.lake-elsinore.org

MENIFEE
New. Better. Best.

29844 Haun Road | Menifee, CA 92586
951-672-6777 | Fax 951-679-3843

cityofmenifee.us

January 21, 2020

Rick Bishop
Executive Director
Western Riverside Council of Governments
3390 University Ave., Suite 200
Riverside, CA 92501

Subject: **Letter of Support for CVAG, SBCOG, and WRCOG Regional Energy Network Development**

Dear Mr. Bishop:

The City of Menifee is pleased to support the development of a Regional Energy Network (REN) in partnership with the Western Riverside Council of Governments (WRCOG), Coachella Valley Association of Governments (CVAG) and the San Bernardino Council of Governments (SBCOG). We commit to supporting this initiative by actively assisting with identifying and engaging future energy projects, supporting outreach at existing community themed events, and providing ongoing feedback on how to continue to grow the programs for the REN.

We are eager to be involved and continue to learn more about the program areas as they are being developed. The City will support the program areas listed below for ongoing energy efficiency opportunities within the region:

1. Public: Technical assistance support for municipal agencies looking to upgrade their community centers, libraries, cooling centers, and senior centers.

2. Workforce Education & Training: Partnership opportunities with local academia to develop and offer workforce programs that can support high school / community college students with jobs in the field of energy efficiency.

3. Codes & Standards: Technical support to local contractors, City Planning staff, and local Planning firms to better understand the new energy efficiency Building Codes.

With the recent California Public Utilities Commission approval on the future of RENs, we see this as a great opportunity to develop a REN within the Counties of Riverside and San Bernardino.

Please feel free to contact me at (951) 723-3700 or avilla@cityofmenifee.us should you have any questions.

Sincerely,

Armando G. Villa
City Manager

City Manager's Office
14177 Frederick Street
P. O. Box 88005
Moreno Valley CA 92552-0805
Telephone: 951.413.3020

February 4, 2020

Rick Bishop
Executive Director
Western Riverside Council of Governments
3390 University Ave., Suite 200
Riverside, CA 92501

Subject: Letter of Support for CVAG, SBCOG and WRCOG Regional Energy Network Development

Dear Mr. Bishop:

The City of Moreno Valley is pleased to support the development of a Regional Energy Network (REN) in partnership with the Western Riverside Council of Governments (WRCOG), Coachella Valley Association of Governments (CVAG) and the San Bernardino Council of Governments (SBCOG). We commit to supporting this initiative by actively assisting with identifying and engaging future energy projects, supporting outreach at existing community themed events, and providing ongoing feedback on how to continue to grow the programs for the REN.

We are eager to be involved and continue to learn more about the program areas as they are being developed. The City will support the program areas listed below for ongoing energy efficiency opportunities within the region:

1. Public: Technical assistance support for municipal agencies looking to upgrade their community centers, libraries, cooling centers, and senior centers.

2. Workforce Education & Training: Partnership opportunities with local academia to develop and offer work force programs that can support high school / community college students with jobs in the field of energy efficiency.

3. Codes & Standards: Technical support to local contractors, city planning staff, and local planning firms to better understand the new energy efficiency building codes.

With the recent California Public Utilities Commission approval on the future of RENs, we see this as a great opportunity to develop a REN within the Counties of Riverside and San Bernardino.

If you have any questions, please feel free to contact me at 951-413-3020 or citymanager@moval.org.

Sincerely,

Mike Lee
Interim City Manager

CITY OF MURRIETA

January 21, 2020

Rick Bishop
Executive Director
Western Riverside Council of Governments
3390 University Avenue, Suite 200
Riverside, CA 92501

RE: Letter of Support for CVAG, SBCOG, and WRCOG Regional Energy Network Development

Dear Mr. Bishop:

The City of Murrieta is pleased to support the development of a Regional Energy Network (REN) in partnership with the Western Riverside Council of Governments (WRCOG), Coachella Valley Association of Governments (CVAG) and the San Bernardino Council of Governments (SBCOG). We commit to supporting this initiative by actively assisting with identifying and engaging future energy projects.

We are eager to be involved and continue to learn more about the program areas as they are being developed. The City will support the program areas listed below for ongoing energy efficiency opportunities within the region:

1. Public: Technical assistance support for municipal agencies looking to upgrade their community centers, libraries, cooling centers, and senior centers.
2. Workforce Education & Training: Partnership opportunities with local academia to develop and offer work force programs that can support high school / community college students with jobs in the field of energy efficiency.
3. Codes & Standards: Technical support to local contractors, city planning staff, and local planning firms to better understand the new energy efficiency building codes.

With the recent California Public Utilities Commission approval on the future of RENs, we see this as a great opportunity to develop a REN within the Counties of Riverside and San Bernardino.

Please feel free to contact me at (951) 461-6008 or KSummers@MurrietaCA.gov should you have any questions.

Sincerely,

Kim Summers
City Manager

City of Temecula
City Council/City Manager
41000 Main Street • Temecula, CA 92590
Phone (951) 694-6444 • TemeculaCA.gov

January 28, 2020

Rick Bishop
Executive Director
Western Riverside Council of Governments
3390 University Ave., Suite 200
Riverside, CA 92501

Subject: Letter of Support for CVAG, SBCOG, and WRCOG Regional Energy Network Development

Dear Mr. Bishop:

The City of Temecula is pleased to support the development of a Regional Energy Network (REN) in partnership with the Western Riverside Council of Governments (WRCOG), Coachella Valley Association of Governments (CVAG) and the San Bernardino Council of Governments (SBCOG). We commit to supporting this initiative by actively assisting with identifying and engaging future energy projects, supporting outreach at existing community themed events, and providing ongoing feedback on how to continue to grow the programs for the REN.

We are eager to be involved and continue to learn more about the program areas as they are being developed. The City will support the program areas listed below for ongoing energy efficiency opportunities within the region:

1. Public: Technical assistance support for municipal agencies looking to upgrade their community centers, libraries, cooling centers, and senior centers.
2. Workforce Education & Training: Partnership opportunities with local academia to develop and offer work force programs that can support high school / community college students with jobs in the field of energy efficiency.
3. Codes & Standards: Technical support to local contractors, city planning staff, and local planning firms to better understand the new energy efficiency building codes.

With the recent California Public Utilities Commission approval on the future of RENs, we see this as a great opportunity to develop a REN within the Counties of Riverside and San Bernardino.

Please feel free to contact me or our Public Works Director, Patrick Thomas at 951-506-5163 or Patrick.thomas@temeculaca.gov should you have any questions.

Sincerely,

Aaron Adams
City Manager

cc: Greg Butler, Assistant City Manager
Patrick Thomas, Public Works Director
Luke Watson, Community Development Director

Dustin Nigg, Mayor, Dist. 2
Bridgette Moore, Mayor Pro Tem, Dist. 4
Ben J. Benoit, Council Member, Dist. 1
Joseph Morabito Council Member, Dist. 3
Marsha Swanson, Council Member, Dist. 5

23873 Clinton Keith Rd, Ste 201
Wildomar, CA 92595
951.677.7751 Phone
951.698.1463 Fax
www.CityofWildomar.org

October 12, 2020

Rick Bishop
Executive Director
Western Riverside Council of Governments
3390 University Ave. #200
Riverside, CA 92501

Subject: Letter of Support for CVAG, SBCOG, and WRCOG Regional Energy Network Development

Dear Mr. Bishop:

The City of Wildomar is pleased to support the development of a Regional Energy Network (REN) in partnership with the Western Riverside Council of Governments (WRCOG), Coachella Valley Association of Governments (CVAG) and the San Bernardino Council of Governments (SBCOG). We commit to supporting this initiative by actively assisting with identifying and engaging future energy projects, supporting outreach at existing community themed events, and providing ongoing feedback on how to continue to grow the programs for the REN.

We are eager to be involved and continue to learn more about the program areas as they are being developed. The City will support the program areas listed below for ongoing energy efficiency opportunities within the region:

1. Public: Technical assistance support for municipal agencies looking to upgrade their community centers, libraries, cooling centers, and senior centers.
2. Workforce Education & Training: Partnership opportunities with local academia to develop and offer work force programs that can support high school / community college students with jobs in the field of energy efficiency.
3. Codes & Standards: Technical support to local contractors, city planning staff, and local planning firms to better understand the new energy efficiency building codes.

With the recent California Public Utilities Commission approval on the future of RENs, we see this as a great opportunity to develop a REN within the Counties of Riverside and San Bernardino.

Please feel free to contact me at 951-677-7751 x209 or gnordquist@cityofwildomar.org should you have any questions.

Sincerely,

Gary Nordquist, City Manager

Cathedral City

September 28, 2020

Subject: Letter of Support for Inland Regional Energy Network

To whom it may concern:

The City of Cathedral City is pleased to provide this letter of support for the Inland Regional Energy Network (I-REN) in submitting an application to the California Public Utilities Commission (CPUC) to become a REN Program Administrator of energy efficiency funds.

The City of Cathedral City supports the efforts of I-REN and its member agencies of Western Riverside Council of Governments, Coachella Valley Association of Governments, and San Bernardino Council of Governments with their ongoing energy efficiency opportunities within the region, as well as their proposed I-REN program sector initiatives, including but not limited to the following;

- **Public Sector**: Initiatives are designed to fill gaps in existing program offerings from other providers, and provide technical assistance support for municipal agencies looking to upgrade community centers, libraries, senior centers, cooling centers and daycare centers. The I-REN approach is to connect energy efficiency with community resilience. Its service territory experiences harsh climate conditions in summer months, and communities benefit from these public gathering places that offer protection from extreme heat. This will fill a gap in current utility-delivered service offerings.

- **Codes and Standards (C&S)**: Through this initiative, I-REN will work with local building departments to offer support and training for compliance with the California Building Energy Efficiency Code (Title 24). I-REN will engage with building department staff, local contractors, and regional construction firms through mentorship; marketing, education, and outreach (ME&O) activities; and the promotion of online resources and communities such as Energy Code Ace.

- **Workforce, Education and Training (WE&T)**: I-REN's WE&T initiatives aim to address the limited number of qualified contractors providing energy efficiency services within the region. I-REN will identify partnership opportunities with local academia to develop and offer workforce programs that can support high school, community college and occupational/technical school students with job opportunities in the field of energy efficiency.

With the leadership of I-REN as a dedicated and regional community-focused Program Administrator, these sectors can benefit from improved energy efficiency in the public sector, increased compliance

with codes and standards, and advancements in workforce development. I-REN brings the necessary local experience to continue and expand their current work addressing the needs of underserved customers and ensuring affordable access to energy efficiency programs across the region.

We respectfully offer our enthusiastic support of I-REN in its application to become a REN Program Administrator, and we are excited to collaborate with them in this important work.

Sincerely,

John Aguilar
Mayor
City of Cathedral City

cc. Nils Strindberg, CPUC Energy Division

INDIAN WELLS
CALIFORNIA

October 2, 2020

Subject: Letter of Support for Inland Regional Energy Network

To whom it may concern:

The City of Indian Wells is pleased to provide this letter of support for the Inland Regional Energy Network (I-REN) in submitting an application to the California Public Utilities Commission (CPUC) to become a REN Program Administrator of energy efficiency funds.

The City of Indian Wells supports the efforts of I-REN and its member agencies of Western Riverside Council of Governments, Coachella Valley Association of Governments, and San Bernardino Council of Governments with their ongoing energy efficiency opportunities within the region, as well as their proposed I-REN program sector initiatives, including but not limited to the following;

- **Public Sector**: Initiatives are designed to fill gaps in existing program offerings from other providers, and provide technical assistance support for municipal agencies looking to upgrade community centers, libraries, senior centers, cooling centers and daycare centers. The I-REN approach is to connect energy efficiency with community resilience. Its service territory experiences harsh climate conditions in summer months, and communities benefit from these public gathering places that offer protection from extreme heat. This will fill a gap in current utility-delivered service offerings.

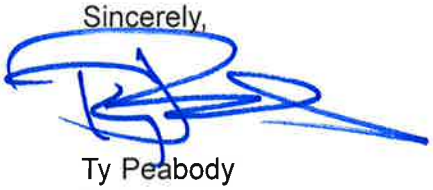
- **Codes and Standards (C&S)**: Through this initiative, I-REN will work with local building departments to offer support and training for compliance with the California Building Energy Efficiency Code (Title 24). I-REN will engage with building department staff, local contractors, and regional construction firms through mentorship; marketing, education, and outreach (ME&O) activities; and the promotion of online resources and communities such as Energy Code Ace.

- **Workforce, Education and Training (WE&T)**: I-REN's WE&T initiatives aim to address the limited number of qualified contractors providing energy efficiency services within the region. I-REN will identify partnership opportunities with local academia to develop and offer workforce programs that can support high school, community college and occupational/technical school students with job opportunities in the field of energy efficiency.

With the leadership of I-REN as a dedicated and regional community-focused Program Administrator, these sectors can benefit from improved energy efficiency in the public sector, increased compliance with codes and standards, and advancements in workforce development. I-REN brings the necessary local experience to continue and expand their current work addressing the needs of underserved customers and ensuring affordable access to energy efficiency programs across the region.

We respectfully offer our enthusiastic support of I-REN in its application to become a REN Program Administrator, and we are excited to collaborate with them in this important work.

Sincerely,



Ty Peabody
Mayor
City of Indian Wells

cc. Nils Strindberg, CPUC Energy Division

February 13, 2020

Subject: **Letter of Support for Inland Regional Energy Network**

To whom it may concern:

The City of Indio is pleased to provide this letter of support for the Inland Regional Energy Network (I-REN) in submitting an application to the California Public Utilities Commission (CPUC) to become a REN Program Administrator of energy efficiency funds.

Indio supports the efforts of I-REN and its member agencies of Western Riverside Council of Governments, Coachella Valley Association of Governments, and San Bernardino Council of Governments with their ongoing energy efficiency opportunities within the region, as well as their proposed I-REN program sector initiatives, including but not limited to the following;

- **Public Sector**: Initiatives are designed to fill gaps in existing program offerings from other providers, and provide technical assistance support for municipal agencies looking to upgrade community centers, libraries, senior centers, cooling centers and daycare centers. The I-REN approach is to connect energy efficiency with community resilience. Its service territory experiences harsh climate conditions in summer months, and communities benefit from these public gathering places that offer protection from extreme heat. This will fill a gap in current utility-delivered service offerings.

- **Codes and Standards (C&S)**: Through this initiative, I-REN will work with local building departments to offer support and training for compliance with the California Building Energy Efficiency Code (Title 24). I-REN will engage with building department staff, local contractors, and regional construction firms through mentorship; marketing, education, and outreach (ME&O) activities; and the promotion of online resources and communities such as Energy Code Ace.

- **Workforce, Education and Training (WE&T)**: I-REN's WE&T initiatives aim to address the limited number of qualified contractors providing energy efficiency services within the region. I-REN will identify partnership opportunities with local academia to develop and offer workforce programs that can support high school, community college and occupational/technical school students with job opportunities in the field of energy efficiency.

With the leadership of I-REN as a dedicated and regional community-focused Program Administrator, these sectors can benefit from improved energy efficiency in the public sector, increased compliance with codes and standards, and advancements in workforce development. I-REN brings the necessary local experience to continue and expand their current work addressing the needs of underserved customers and ensuring affordable access to energy efficiency programs across the region.

We respectfully offer our enthusiastic support of I-REN in its application to become a REN Program Administrator, and we are excited to collaborate with them in this important work.

Sincerely,

Glenn Miller
Mayor, City of Indio

cc. Nils Strindberg, CPUC Energy Division

September 30, 2020

Subject: Letter of Support for Inland Regional Energy Network

To Whom It May Concern:

The City of La Quinta is pleased to provide this letter of support for the Inland Regional Energy Network (I-REN) in submitting an application to the California Public Utilities Commission (CPUC) to become a REN Program Administrator of energy efficiency funds.

The City of La Quinta supports the efforts of I-REN and its member agencies of Western Riverside Council of Governments, Coachella Valley Association of Governments, and San Bernardino Council of Governments with their ongoing energy efficiency opportunities within the region, as well as their proposed I-REN program sector initiatives, including but not limited to the following;

- **Public Sector**: Initiatives are designed to fill gaps in existing program offerings from other providers, and provide technical assistance support for municipal agencies looking to upgrade community centers, libraries, senior centers, cooling centers and daycare centers. The I-REN approach is to connect energy efficiency with community resilience. Its service territory experiences harsh climate conditions in summer months, and communities benefit from these public gathering places that offer protection from extreme heat. This will fill a gap in current utility-delivered service offerings.

- **Codes and Standards (C&S)**: Through this initiative, I-REN will work with local building departments to offer support and training for compliance with the California Building Energy Efficiency Code (Title 24). I-REN will engage with building department staff, local contractors, and regional construction firms through mentorship; marketing, education, and outreach (ME&O) activities; and the promotion of online resources and communities such as Energy Code Ace.

- **Workforce, Education and Training (WE&T)**: I-REN's WE&T initiatives aim to address the limited number of qualified contractors providing energy efficiency services within the region. I-REN will identify partnership opportunities with local academia to develop and offer workforce programs that can support high school, community college and occupational/technical school students with job opportunities in the field of energy efficiency.

With the leadership of I-REN as a dedicated and regional community-focused Program Administrator, these sectors can benefit from improved energy efficiency in the public

sector, increased compliance with codes and standards, and advancements in workforce development. I-REN brings the necessary local experience to continue and expand their current work addressing the needs of underserved customers and ensuring affordable access to energy efficiency programs across the region.

We respectfully offer our enthusiastic support of I-REN in its application to become a REN Program Administrator, and we are excited to collaborate with them in this important work. Thank you.

Sincerely,

Linda Evans

Linda Evans, Mayor
City of La Quinta

cc: La Quinta City Council
Nils Strindberg, CPUC Energy Division

City of Palm Springs

Office of the City Council

Mayor Geoff Kors • Mayor Pro Tem Christy Holstege

Lisa Middleton • Grace Garner • Dennis Woods

3200 E. Tahquitz Canyon Way • Palm Springs, California 92262

Tel: 760.323.8200 • Fax: 760.323.8207 • TDD 760.864.9527 • www.palmspringsca.gov

October 1, 2020

Subject: Letter of Support for Inland Regional Energy Network

To whom it may concern:

The City Council of the City of Palm Springs is pleased to provide this letter of support for the Inland Regional Energy Network (I-REN) in submitting an application to the California Public Utilities Commission (CPUC) to become a REN Program Administrator of energy efficiency funds.

We, the City Council of the City of Palm Springs, support the efforts of I-REN and its member agencies of Western Riverside Council of Governments, Coachella Valley Association of Governments, and San Bernardino Council of Governments with their ongoing energy efficiency opportunities within the region, as well as their proposed I-REN program sector initiatives, including but not limited to the following;

- **Public Sector**: Initiatives are designed to fill gaps in existing program offerings from other providers, and provide technical assistance support for municipal agencies looking to upgrade community centers, libraries, senior centers, cooling centers and daycare centers. The I-REN approach is to connect energy efficiency with community resilience. Its service territory experiences harsh climate conditions in summer months, and communities benefit from these public gathering places that offer protection from extreme heat. This will fill a gap in current utility-delivered service offerings.

- **Codes and Standards (C&S)**: Through this initiative, I-REN will work with local building departments to offer support and training for compliance with the California Building Energy Efficiency Code (Title 24). I-REN will engage with building department staff, local contractors, and regional construction firms through mentorship; marketing, education, and outreach (ME&O) activities; and the promotion of online resources and communities such as Energy Code Ace.

- **Workforce, Education and Training (WE&T)**: I-REN's WE&T initiatives aim to address the limited number of qualified contractors providing energy efficiency services within the region. I-REN will identify partnership opportunities with local academia to develop and offer workforce programs that can support high school, community college and occupational/technical school students with job opportunities in the field of energy efficiency.

With the leadership of I-REN as a dedicated and regional community-focused Program Administrator, these sectors can benefit from improved energy efficiency in the public sector, increased compliance with codes and standards, and advancements in workforce development. I-REN brings the necessary local experience to continue and expand their current work addressing the needs of underserved customers and ensuring affordable access to energy efficiency programs across the region.

We respectfully offer our enthusiastic support of I-REN in its application to become a REN Program Administrator, and we are excited to collaborate with them in this important work.

Sincerely,

Geoff Kors, Mayor

Christy Holstege, Mayor Pro Tem

Lisa Middleton, Council Member

Dennis Woods, Council Member

cc. Nils Strindberg, CPUC Energy Division

EUNICE M. ULLOA
Mayor

TOM HAUGHEY
Mayor Pro Tem

CITY of CHINO

MARK HARGROVE
MARC LUCIO
PAUL A. RODRIGUEZ Ed.D.
Council Members

MATTHEW C. BALLANTYNE
City Manager

February 25, 2020

San Bernardino County
Transportation Authority
1170 West 3rd Street, 2nd Floor
San Bernardino, CA 92410

RE: Letter of Support for Inland Empire Regional Energy Network

To Whom it may concern:

The City of Chino (the "City") is pleased to provide this letter of support for the Inland Regional Energy Network (I-REN) in applying to the California Public Utilities Commission (CPUC) to become a REN Program Administrator of energy efficiency funds.

Additionally, the City supports I-REN and its member agencies with their ongoing energy efficiency opportunities along with their proposed I-REN program sector initiatives that include but are not limited to the following:

- Public Sector: Initiatives are designed to fill gaps in existing program offerings from other providers and provide technical support for municipal agencies looking to upgrade community centers, libraries, senior centers, cooling centers and daycare centers. The I-REN territory experiences extreme climate conditions in the summer; our communities will benefit from these public gathering places. Additionally, this will fill a gap in current utility-delivered service offerings.

- Codes and Standards: Through this initiative, I-REN will work with local building departments to offer support and training for compliance with the California Building Energy Efficiency Code (Title 24). I-REN will engage with building departments, local contractors, and regional construction firms through mentorships, education, outreach activities, and the promotion of online resources and communities.

13220 Central Avenue, Chino, California 91710
Mailing Address: P.O. Box 667, Chino, California 91708-0667
(909) 334-3250 • (909) 334-3720 Fax
Web Site: www.cityofchino.org

- Workforce, Education and Training: I-REN's Workforce, Education and Training initiatives aim to address the current limited number of qualified contractors providing energy efficiency services within the region. I- REN will identify partnership opportunities with local academia to develop and offer work force programs that can support high school, community college and occupational/technical school students with job opportunities in the field of energy efficiency.

With I-REN as a dedicated and regional community-focused Program Administrator, these sectors can benefit from improved energy efficiency. I-REN brings the necessary local experience to continue and expand their current work in addressing the needs of underserved customers and ensuring affordable access to energy efficiency programs across the region. As such, we respectfully support I-REN in its application to become a REN Program Administrator.

Sincerely,

Matthew C. Ballantyne
City Manager
City of Chino

cc. Niles Strindberg, CPUC Energy Division

City of Chino Hills

14000 City Center Drive
Chino Hills, CA 91709
(909) 364-2600
www.chinohills.org

February 10, 2020

San Bernardino Council of Governments
1170 West Third Street, Second Floor
San Bernardino, CA 92410

Subject: **Letter of Support for Inland Empire Regional Energy Network**

To whom it may concern:

The City of Chino Hills is pleased to provide this letter of support for the Inland Regional Energy Network (I-REN) in submitting an application to the California Public Utilities Commission (CPUC) to become a REN Program Administrator of energy efficiency funds.

Chino Hills supports the efforts of I-REN and its member agencies of San Bernardino Council of Governments, Western Riverside Council of Governments and Coachella Valley Association of Governments with their ongoing energy efficiency opportunities within the region, as well as their proposed I-REN program sector initiatives, including but not limited to the following:

- Public Sector: Initiatives are designed to fill gaps in existing program offerings from other providers, and provide technical assistance support for municipal agencies looking to upgrade community centers, libraries, senior centers, cooling centers and daycare centers. The I-REN territory experiences extreme climate conditions in the summer, and communities benefit from those public gathering places that offer protection from extreme heat. This will fill a gap in current utility-delivered service offerings.

- Codes and Standards: Through this initiative, I-REN will work with local building departments to offer support and training for compliance with the California Building Energy Efficiency Code (Title 24). I-REN will engage with building departments, local contractors, and regional construction firms through mentorships, education, and outreach activities, and the promotion of online resources and communities.

- Workforce, Education and Training: I-REN's Workforce, Education and Training initiatives aim to address the current limited number of qualified contractors providing energy efficiency services within the region. I-REN will identify partnership opportunities with local academia to develop and offer work force programs that can support high school, community college, and occupational/technical school students with job opportunities in the field of energy efficiency.

With the leadership of I-REN as a dedicated and regional community-focused Program Administrator, these sectors can benefit from improved energy efficiency. I-REN brings the necessary local experience to continue and expand their current work addressing the needs of underserved customers and ensuring affordable access to energy efficiency programs across the region.

City Council: Art Bennett ▪ Brian Johsz ▪ Ray Marquez ▪ Cynthia Moran ▪ Peter J. Rogers

We respectfully offer our enthusiastic support of I-REN in its application to become a REN Program Administrator, and we are excited to collaborate with them in this important work.

Sincerely,

Benjamin Montgomery
City Manager

BM:DB:SO:JM:dk

cc: Niles Strindberg, CPUC Energy Division
Daniel Bobadilla, P.E., Director of Public Works/ City Engineer
Sean O'Connor, Maintenance and Operations Manager
Jarrod Manual, Facilities Maintenance Supervisor

1-5-2021

Subject: Letter of Support for Inland Empire Regional Energy Network

To Whom it may concern::

The City of Colton is pleased to provide this letter of support for the Inland Regional Energy Network (I-REN) in submitting an application to the California Public Utilities Commission (CPUC) to become a REN Program Administrator of energy efficiency funds.

The City of Colton supports the efforts of I-REN and its member agencies of San Bernardino Council of Governments, Western Riverside Council of Governments and Coachella Valley Association of Governments with their ongoing energy efficiency opportunities within the region, as well as their proposed I-REN program sector initiatives, including but not limited to the following;

- Public Sector: Initiatives are designed to fill gaps in existing program offerings from other providers, and provide technical assistance support for municipal agencies looking to upgrade community centers, libraries, senior centers, cooling centers and daycare centers. The I-REN territory experiences extreme climate conditions in the summer, and communities benefit from those public gathering places that offer protection from extreme heat. This will fill a gap in current utility-delivered service offerings.

- Codes and Standards: Through this initiative, I-REN will work with local building departments to offer support and training for compliance with the California Building Energy Efficiency Code (Title 24). I-REN will engage with building departments, local contractors, and regional construction firms through mentorships, education, and outreach activities; and the promotion of online resources and communities.

- Workforce, Education and Training: I-REN's Workforce, Education and Training initiatives aim to address the current limited number of qualified contractors providing energy efficiency services within the region. I-REN will identify partnership opportunities with local academia to develop and offer work force programs that can support high school, community college and occupational/technical school students with job opportunities in the field of energy efficiency.

With the leadership of I-REN as a dedicated and regional community-focused Program Administrator, these sectors can benefit from improved energy efficiency. I-REN brings the necessary local experience to continue and expand their current work addressing the needs of underserved customers and ensuring affordable access to energy efficiency programs across the region.

We respectfully offer our enthusiastic support of I-REN in its application to become a REN Program Administrator, and we are excited to collaborate with them in this important work

Sincerely,

Jessica Sutorus

Jessica Sutorus
Environmental Conservation Supervisor
City of Colton

cc. CPUC Energy Division

CIVIC CENTER
650 N. LA CADENA DRIVE
COLTON, CA 92324
PH: (909) 370-5060
FX: (909) 370-5192
WEB: www.coltonca.gov

2-11-20

Subject: Letter of Support for Inland Empire Regional Energy Network

To Whom it may concern::

The City of Highland is pleased to provide this letter of support for the Inland Regional Energy Network (I-REN) in submitting an application to the California Public Utilities Commission (CPUC) to become a REN Program Administrator of energy efficiency funds.

The City of Highland supports the efforts of I-REN and its member agencies of San Bernardino Council of Governments, Western Riverside Council of Governments and Coachella Valley Association of Governments with their ongoing energy efficiency opportunities within the region, as well as their proposed I-REN program sector initiatives, including but not limited to the following;

- Public Sector: Initiatives are designed to fill gaps in existing program offerings from other providers, and provide technical assistance support for municipal agencies looking to upgrade community centers, libraries, senior centers, cooling centers and daycare centers. The I-REN territory experiences extreme climate conditions in the summer, and communities benefit from those public gathering places that offer protection from extreme heat. This will fill a gap in current utility-delivered service offerings.

- Codes and Standards: Through this initiative, I-REN will work with local building departments to offer support and training for compliance with the California Building Energy Efficiency Code (Title 24). I-REN will engage with building departments, local contractors, and regional construction firms through mentorships, education, and outreach activities; and the promotion of online resources and communities.

- Workforce, Education and Training: I-REN's Workforce, Education and Training initiatives aim to address the current limited number of qualified contractors providing energy efficiency services within the region. I-REN will identify partnership opportunities with local academia to develop and offer work force programs that can support high school, community college and occupational/technical school students with job opportunities in the field of energy efficiency.

With the leadership of I-REN as a dedicated and regional community-focused Program Administrator, these sectors can benefit from improved energy efficiency. I-REN brings the necessary local experience to continue and expand their current work addressing the needs of underserved customers and ensuring affordable access to energy efficiency programs across the region.

We respectfully offer our enthusiastic support of I-REN in its application to become a REN Program Adminstrator, and we are excited to collaborate with them in this important work

Sincerely,

Joseph Hughes
City Manager
City of Highland

cc. Niles Strindberg, CPUC Energy Division

January 25, 2021

Subject: Letter of Support for Inland Empire Regional Energy Network

To Whom it may concern:

The City of Montclair is pleased to provide this letter of support for the Inland Regional Energy Network (I-REN) in submitting an application to the California Public Utilities Commission (CPUC) to become a REN Program Administrator of energy efficiency funds.

The City of Montclair supports the efforts of I-REN and its member agencies of San Bernardino Council of Governments, Western Riverside Council of Governments and Coachella Valley Association of Governments with their ongoing energy efficiency opportunities within the region, as well as their proposed I-REN program sector initiatives.

With the leadership of I-REN as a dedicated and regional community-focused Program Administrator, these sectors can benefit from improved energy efficiency. I-REN brings the necessary local experience to continue and expand their current work addressing the needs of underserved customers and ensuring affordable access to energy efficiency programs across the region.

We respectfully support of I-REN in its application to become a REN Program Administrator, and we are excited to collaborate with them in this important work.

Sincerely,

Steve Stanton
Engineering Division Manager
City of Montclair

cc. CPUC Energy Division

City of San Bernardino

Office of the City Manager | Robert D. Field, City Manager

January 7, 2021

Mr. Rick Bishop
Executive Director
Western Riverside Council of Governments
3390 University Ave. #200
Riverside, California 92501

Subject: Letter of Support for CVAG, SBCOG, and WRCOG Regional Energy Network Development

Dear Mr. Bishop:

The City of San Bernardino supports the development of a Regional Energy Network (REN) in partnership with the Western Riverside Council of Governments (WRCOG), the Coachella Valley Association of Governments (CVAG) and the San Bernardino Council of Governments (SBCOG). We commit to supporting this initiative by actively assisting with identifying and engaging future energy projects, supporting outreach at existing community themed events, and providing ongoing feedback on how to continue to grow the programs for the REN.

We are prepared to be involved and continue to learn more about the program areas as they are being developed. The City will support the program areas listed below for ongoing energy efficiency opportunities within the region:

Public: Technical assistance support for municipal agencies looking to upgrade their community centers, libraries, cooling centers, and senior centers.

Workforce Education & Training: Partnership opportunities with local academia to develop and offer work force programs that can support high school / community college students with jobs in the field of energy efficiency.

Codes & Standards: Technical support to local contractors, city planning staff, and local planning firms to better understand the new energy efficiency building codes.

With the recent California Public Utilities Commission approval on the future of RENs, we appreciate the opportunity to develop a REN within the Counties of Riverside and San Bernardino.

Should you have any questions, please contact Kris Jensen, Director of Public Works, at (909) 384-5140 or Jensen_Kr@sbcity.org.

Sincerely,

Robert D. Field
City Manager

CITY OFFICES:
6136 ADOBE ROAD
TWENTYNINE PALMS, CA 92277
(760) 367-6799
Fax (760) 367-4890
www.29palms.org

COUNCILMEMBERS
Joel A. Klink, Mayor
Daniel L. Mintz, Sr., Mayor Pro Tem
Steven Bilderain
Karmolette O'Gilvie
McArthur Wright

CITY MANAGER
Frank J. Luckino, MPA

February 20, 2020

Subject: Letter of Support for Inland Empire Regional Energy Network

To Whom it may concern:

The City of Twentynine Palms is pleased to provide this letter of support for the Inland Regional Energy Network (I-REN) in submitting an application to the California Public Utilities Commission (CPUC) to become a REN Program Administrator of energy efficiency funds.

The City of Twentynine Palms supports the efforts of I-REN and its member agencies of San Bernardino Council of Governments, Western Riverside Council of Governments and Coachella Valley Association of Governments with their ongoing energy efficiency opportunities within the region, as well as their proposed I-REN program sector initiatives, including but not limited to the following:

- Public Sector: Initiatives are designed to fill gaps in existing program offerings from other providers and provide technical assistance support for municipal agencies looking to upgrade community centers, libraries, senior centers, cooling centers and daycare centers. The I-REN territory experiences extreme climate conditions in the summer, and communities benefit from those public gathering places that offer protection from extreme heat. This will fill a gap in current utility-delivered service offerings.

- Codes and Standards: Through this initiative, I-REN will work with local building departments to offer support and training for compliance with the California Building Energy Efficiency Code (Title 24). I-REN will engage with building departments, local contractors, and regional construction firms through mentorships, education, and outreach activities; and the promotion of online resources and communities.

- Workforce, Education and Training: I-REN's Workforce, Education and Training initiatives aim to address the current limited number of qualified contractors providing energy efficiency services within the region. I-REN will identify partnership opportunities with local academia to develop and offer work force programs that can support high school, community college and occupational/technical school students with job opportunities in the field of energy efficiency.

With the leadership of I-REN as a dedicated and regional community-focused Program Administrator, these sectors can benefit from improved energy efficiency. I-REN brings the necessary local experience to continue and expand their current work addressing the needs of underserved customers and ensuring affordable access to energy efficiency programs across the region.

We respectfully offer our enthusiastic support of I-REN in its application to become a REN Program Administrator, and we are excited to collaborate with them in this important work.

Sincerely,

Frank J. Luckino
City Manager
The City of Twentynine Palms

cc. Niles Strindberg, CPUC Energy Division

January 21, 2021

Subject: **Letter of Support for Inland Empire Regional Energy Network**

To Whom it may concern:

The Town of Yucca Valley is pleased to provide this letter of support for the Inland Regional Energy Network (I-REN) in submitting an application to the California Public Utilities Commission (CPUC) to become a REN Program Administrator of energy efficiency funds.

The Town of Yucca Valley supports the efforts of I-REN and its member agencies of San Bernardino Council of Governments, Western Riverside Council of Governments and Coachella Valley Association of Governments with their ongoing energy efficiency opportunities within the region, as well as their proposed I-REN program sector initiatives, including but not limited to the following;

- Public Sector: Initiatives are designed to fill gaps in existing program offerings from other providers, and provide technical assistance support for municipal agencies looking to upgrade community centers, libraries, senior centers, cooling centers and daycare centers. The I-REN territory experiences extreme climate conditions in the summer, and communities benefit from those public gathering places that offer protection from extreme heat. This will fill a gap in current utility-delivered service offerings.

- Codes and Standards: Through this initiative, I-REN will work with local building departments to offer support and training for compliance with the California Building Energy Efficiency Code (Title 24). I-REN will engage with building departments, local contractors, and regional construction firms through mentorships, education, and outreach activities, and the promotion of online resources and communities.

- Workforce, Education and Training: I-REN's Workforce, Education and Training initiatives aim to address the current limited number of qualified contractors providing energy efficiency services within the region. I-REN will identify partnership opportunities with local academia to develop and offer work force programs that can support high school, community college and occupational/technical school students with job opportunities in the field of energy efficiency.

With the leadership of I-REN as a dedicated and regional community-focused Program Administrator, these sectors can benefit from improved energy efficiency. I-REN brings the necessary local experience to continue and expand their current work addressing the needs of underserved customers and ensuring affordable access to energy efficiency programs across the region.

The Town of Yucca Valley
57090 Twentynine Palms Highway • Yucca Valley, California 92284
760/369-7207 • Fax (760) 369-0626

We respectfully offer our enthusiastic support of I-REN in its application to become a REN Program Administrator, and we are excited to collaborate with them in this important work.

Sincerely,

Curtis Yakimow
Town Manager
Town of Yucca Valley

cc. Niles Strindberg, CPUC Energy Division

Appendix D: Stakeholder Input Resolution

Table D-1. CAEECC Issue Tracker with Stakeholder Feedback and I-REN Resolution Discussion

ID #	Chapter	Issue	I-REN Resolution Type	I-REN Resolution Discussion
1	Public	SoCalREN Suggested a more targeted focus on low income and disadvantaged communities. In particular, while San Bernardino has three of the most impoverished based on the last Census, the letters of support are from more affluent communities. Suggest ramping up engagement and marketing efforts to disadvantaged local governments and communities. Also, for Public Sector strategy, appreciate seeing SoCal REN strategies replicated – since a main purpose of RENs is to focus on hard-to-reach (HTR) communities.	Addressed in general section of BP or Testimony in Application; Deferred to Implementation Plan or Program Design Stage	I-REN intends to ensure engagement and service across the territory, particularly assisting those local governments who have been historically underserved or unable to access previous or current programs. Letters of support received to date are included in Appendix C of I-REN's Business Plan.
2	Public	BayREN Expressed an appreciation of the focus on governance, infrastructure, and coordination plan for statewide programs and other actors. Noted the plan looks well thought out. Plan speaks to one of the founding principles/needs of RENs: serving hard to reach communities. Acknowledged that certain activities such as Statewide Energy Efficiency Collaborative (SEEC) which were previously funded by IOUs, are especially important in current times of declining local government funding.	Deferred to Implementation Plan or Program Design Stage	I-REN intends to work with the other RENs to incorporate best practices and connect its local work with large state policy making efforts.

ID #	Chapter	Issue	I-REN Resolution Type	I-REN Resolution Discussion
3	Public	Small Business Utility Advocates Agreed with comments on SEEC, HTR, and low-income considering local government and economic conditions are very strained. This business plan is 2021-2025; small-medium business (SMB) plans is listed under the future business plan; asked if programs be offered to them sooner.		This plan focuses on three sectors (Public, Workforce, Codes & Standards). For the future I-REN is looking towards SMB and residential, but the current focus is building a foundation before expanding. I-REN has had discussions on third party solicitations and is working on as many parallel paths as possible.
4	WE&T, Public	SoCalREN Noted possible duplicative resource program between WET and public sector. The third party solicitation is set to sail at the same time that I-REN's business plan is reviewed. Asked how avoided duplication is being ensured.	Addressed in Sector Chapter of BP	I-REN added a Resource program for the Public sector based on the suggestion from Commission staff. If it's duplicative, WRCOG can adjust as appropriate. I-REN does not see any duplication currently nor has any been brought up in discussions with current PAs.
5	WE&T	BayREN Suggested working with Sheet Metal Workers Union or other CAEECC Members on workforce metrics. Sheet Metal Workers Union Stated that IOUs and RENs must focus on cost-effectiveness, and sometimes miss contractors who have greater expertise in engaging disadvantaged communities; noted that they are happy to discuss further offline.	Addressed in Sector Chapter of BP	I-REN is interested in working with stakeholders and organizations to help inform and shape a successful workforce program. I-REN will incorporate a clear goal for engaging and serving disadvantaged communities through its workforce training and education program. See WE&T Strategies in Chapter 4: Workforce Education & Training.

ID #	Chapter	Issue	I-REN Resolution Type	I-REN Resolution Discussion
6	WE&T	California Labor Management Cooperation Committee Offered to provide assistance on workforce and reaching disadvantaged communities.	Deferred to Implementation Plan or Program Design Stage	I-REN is interested in working with stakeholders and organizations to help inform and shape a successful workforce program.
7	WE&T	NRDC Suggested looking at the UC Berkeley Labor Center's recently released report on workforce demand and supply. NRDC's Bethany Jones was a witness for low-income workforce; can share a document that provides key solutions. RENs have more opportunities to explore strategies that IOU and MCE PAs need to comply with. 3C-REN Also offered support.	Deferred to Implementation Plan or Program Design Stage	See above.
8	WE&T	Sheet Metal Workers Local 104 Noted that slide 22 (goals and strategies) looks more like goals. Echoed comments on disadvantaged communities; wanted to see it incorporated into workforce offering. Noted that applying to building departments can be an issue, asked what the associated plan is.	Addressed in Sector Chapter of BP	I-REN will incorporate a clear goal for engaging and serving disadvantaged communities through its workforce training and education program. See WE&T Strategies in Chapter 4: Workforce Education & Training.

ID #	Chapter	Issue	I-REN Resolution Type	I-REN Resolution Discussion
9	WE&T	Energy Division Asked what the synergy is between I-REN's workforce education training and the CPUC low income energy assistance programs, and if there's overlapping goals/duplication, how it is being addressed. BayREN BayREN's residential programs aren't income qualified. Have seen success with MCE's multifamily program, and we have case studies to show how we've layered the two programs. In sum, we work in partnership to provide a more holistic and higher incentive for low income SoCalREN SoCalREN's Workforce Education Program is nationally recognized. SoCalREN analyzed all programs, including IOU workforce education. Recommended to I-REN, and RENs at large, to continuously look for creative ways to offer value without duplication; programs must be customized so they don't duplicate. There are still significant gaps that RENs can fill.	Deferred to Implementation Plan or Program Design Stage	I-REN is interested in making sure that WET offerings serve and address the specific needs of San Bernardino and Riverside Counties' residents and businesses. I-REN will be laser focused on locally driven program elements that will help to ensure there is no duplication. One of the most important reasons for being a REN is to bring this localized approach to a community.

ID #	Chapter	Issue	I-REN Resolution Type	I-REN Resolution Discussion
10	Multiple Sectors	Asked how I-REN is working to deal with overlap with existing programs in the relevant geographic area.	Addressed in general section of BP or Testimony in Application	I-REN has been in regular communication with SCE, SoCalGas and SoCalREN. The first strategy is to target any areas that haven't yet been touched, including disadvantaged communities, high desert, cities that haven't yet been engaged, and the Arizona and Nevada borders. If there is overlap, I-REN will ensure through coordinated efforts that there is no duplication of services.
12	NA	BayREN BayREN especially appreciated two aspects of the proposal: (1) Board oversight; and (2) Services to Tribes.	Addressed in general section of BP or Testimony in Application	I-REN appreciates these comments. I-REN's governance is described in the Portfolio Summary chapter and the approach to serving tribes is referenced throughout the Business Plan.

Appendix E: Acronyms & Abbreviations

AB	Assembly Bill
ACCA	Air Conditioning Contractors of America
AHJ	Authority Having Jurisdiction
AIA	American Institute of Architects
APWA	American Public Works Association
BOMA	Building Owners and Managers Association
BPI	Building Performance Institute
BSC	Building Standards Commission
BUC	Building Upgrade Concierge
C&S	Codes and Standards
CAISO (or ISO)	California Independent System Operator
CALBO	California Building Officials
CARB (or ARB)	California Air Resources Board
CBSC	California Building Standards Commission
CCA	Community Choice Aggregator
CCC	California Community Colleges
CDE	California Department of Education
CEA	California Energy Alliance
CEC	California Energy Commission
CEESP	California Energy Efficiency Strategic Plan
CEU	Continuing Education Unit
CO2	Carbon Dioxide
CPUC	California Public Utilities Commission
CSAC	California State Association of Counties
CSD	Community Services and Development

CSI	California Solar Initiative
CSU	California State University
CVAG	Coachella Valley Association of Governments
DAC	Disadvantaged Community
DAS	Division of Apprenticeship Standards
DEER	Database for Energy Efficient Resources
DOE	U.S. Department of Energy
DOF	Department of Finance
DSM	Demand Side Management
EBEE	Existing Buildings Energy Efficiency
ED	California Public Utilities Energy Division
EE	Energy Efficiency
EIA	Energy Information Administration
EM&V	Evaluation, Measurement and Verification
ESCO	Energy Service Company
ET	Emerging Technology or Emerging Technologies
GHG	Greenhouse Gas
GWh	Gigawatt Hour
HERS	Home Energy Rating System
HVAC	Heating, Ventilation and Air Conditioning
ICC	International Code Council
IHACI	Institute of Heating and Air Conditioning Industries
IOU	Investor Owned Utility
kW	Kilowatt
kWh	Kilowatt Hour
LG	Local Government
LGP	Local Government Partnerships
ME&O	Marketing, Education and Outreach
MSA	Metropolitan Statistical Area

MW	Megawatt
MWh	Megawatt Hour
NMEC	Normalized Metered Energy Consumption
NRDC	Natural Resources Defense Council
NREL	National Renewable Energy Laboratory
OPR	Governor's Office of Planning and Research
PA	Program Administrator
PACE	Property Assessed Clean Energy
PG&E	Pacific Gas and Electric Company
REN	Regional Energy Network
RFP	Request for Proposals
SB	Senate Bill
SBCOG	San Bernardino Council of Governments
SCE	Southern California Edison
SEP	Strategic Energy Plan
TRC	Total Resource Cost
WE&T	Workforce Education and Training
WIB	Workforce Investment Boards
WRCOG	Western Riverside Council of Governments
ZNE	Zero Net Energy

Inland Regional Energy Network Business Plan Presentation

WRCOG | CVAG | SBCOG

Riverside & San Bernardino Counties

CAEECC | December 2020

Western Riverside Council of Governments

- 18 cities, two water districts, Riverside County Board of Supervisors, and the Riverside County Superintendent of Schools
- Regional Planning Agency
- Western Riverside Energy Partnership
- Property Assessed Clean Energy
- Western Community Energy

Coachella Valley Association of Governments

- 10 cities, one tribe
- Energy & Environmental Department
- $4 million grant for Climate Action Plan / Energy Action Plan support
- Desert Cities Energy Partnership
- Property Assessed Clean Energy
- Desert Community Energy

San Bernardino Council of Governments

- 24 members, and the San Bernardino County Board of Supervisors
- Speak with a collective voice on important issues that affect its member agencies.
- San Bernardino Regional Energy Partnership

Why a new REN in the Inland Empire?

- Provide consistent and expanded EE programs to a region where COGs have long term partnerships with their 52 cities and Board of Supervisors from both Counties.
- Region is distinct from other Southern California areas, with its own robust culture and identity.
- Increasing impacts from climate is increasing the urgency and need.
- Member agencies have nearly a decade of collective experience and existing relationships from implementing EE locally for their constituents.

Why now?

- **Not submitting now could result in up to 4 years delay in starting new programs serving the region.**
- Neither the Potential and Goals decision nor the Cost Effectiveness updates impact the I-RENs Business Plan or offerings.
- I-REN has chosen sectors that are uniquely appropriate for a REN to serve (Public Sector, Codes & Standards, and Workforce Education & Training).
- I-REN can do this work efficiently and effectively for reasonable investment
- I-REN is *flexible* and *adaptable* to pending regulatory decisions and changes

PA Coordination & Local Government Support

Letters of Commitment to Cooperate from other PAs in the region:

- Received from SoCalREN
- Forthcoming from SCE and SoCalGas

Letters of Support received from local governments:

Regional
- Southern California Association of Governments (SCAG)
- County of San Bernardino
- County of Riverside Fourth District Supervisor

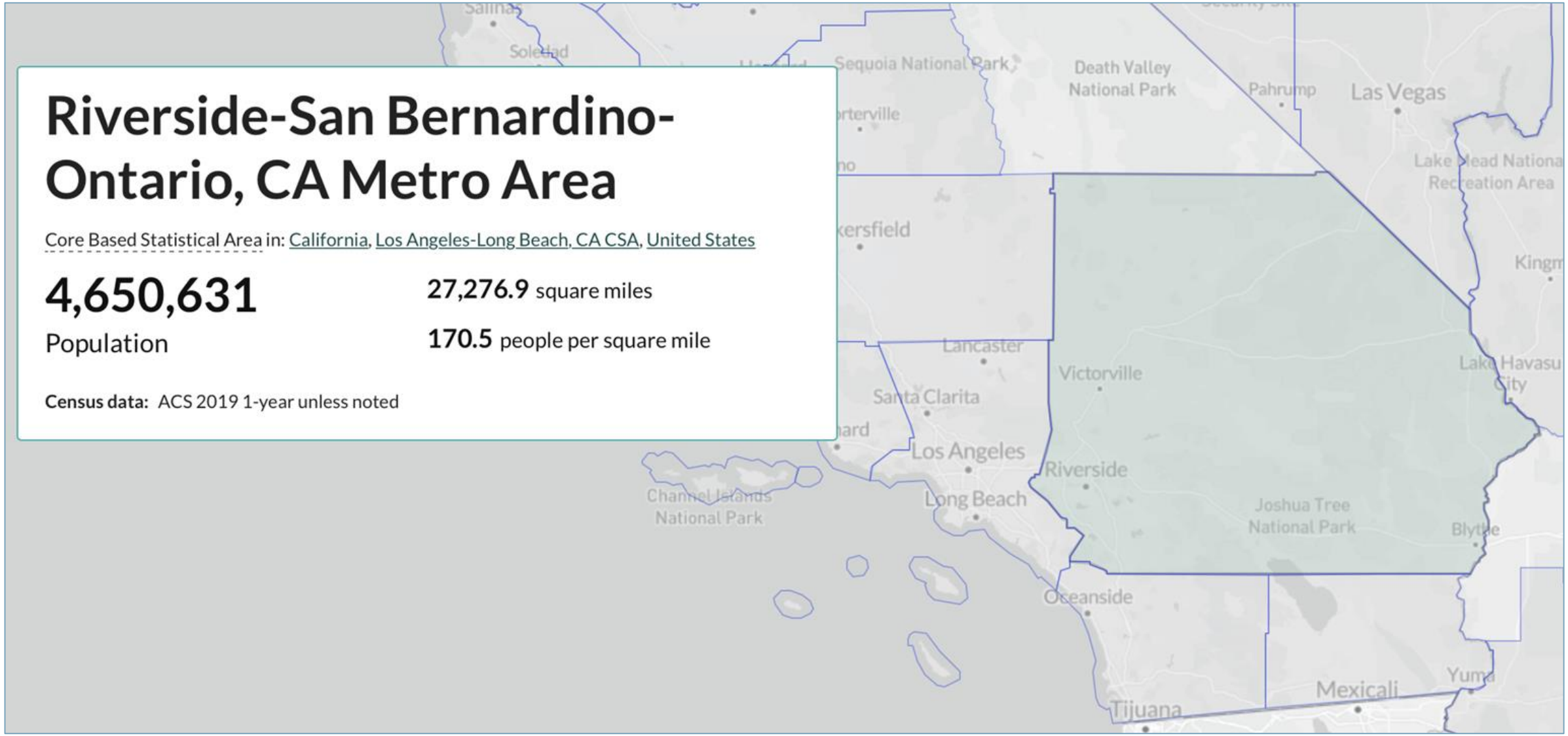
WRCOG
- City of Banning
- City of Canyon Lake
- City of Eastvale
- City of Jurupa Valley
- City of Lake Elsinore
- City of Menifee
- City of Moreno Valley
- City of Murrieta
- City of Temecula
- City of Wildomar

CVAG
- City of Cathedral City
- City of Indian Wells
- City of Indio
- City of La Quinta
- City of Palm Springs

SBCOG
- City of Chino
- City of Chino Hills
- City of Highland
- City of Twentynine Palms

ABOUT I-REN TERRITORY

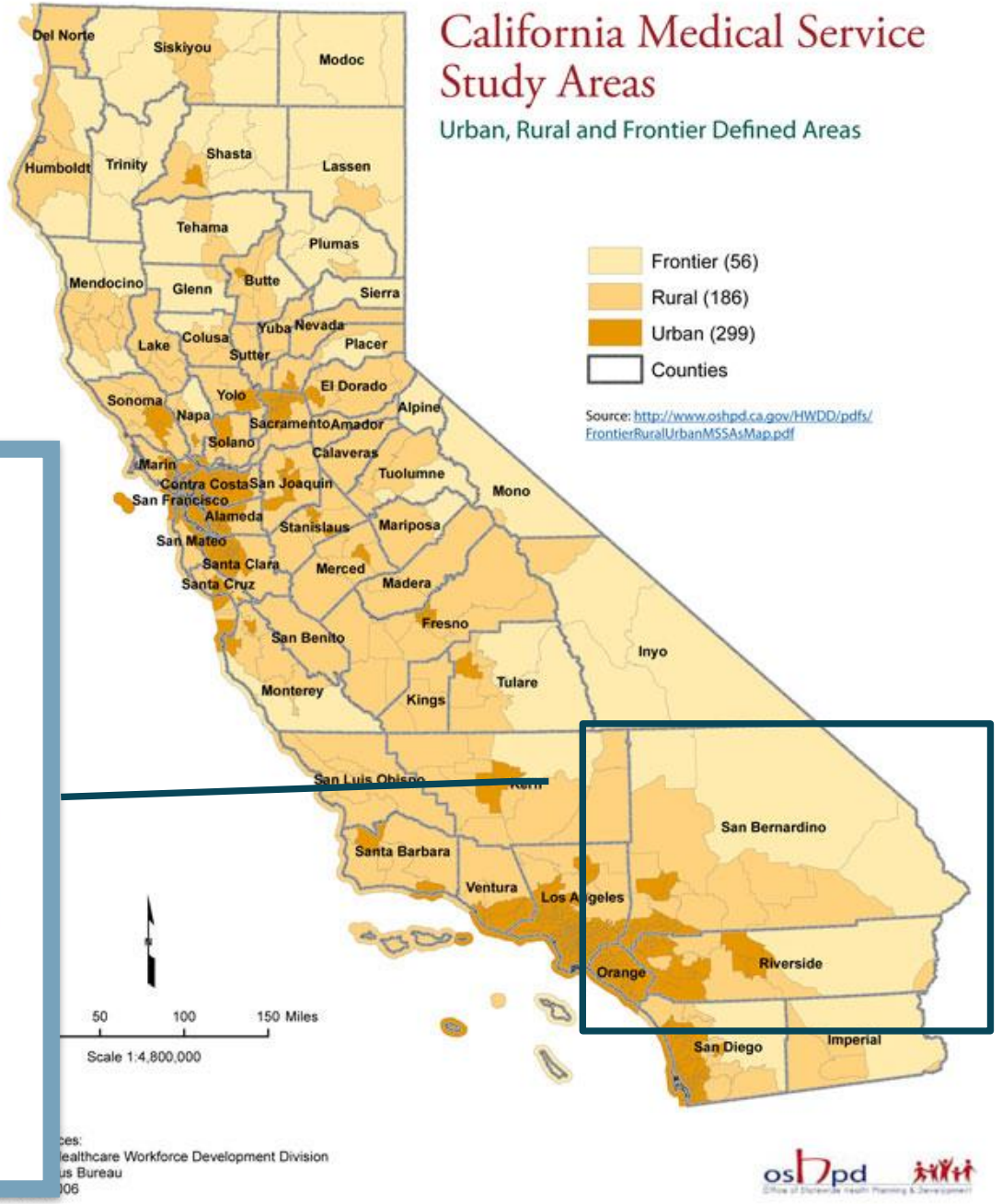
I-REN Service Territory



Inland Empire is large and needs its own REN

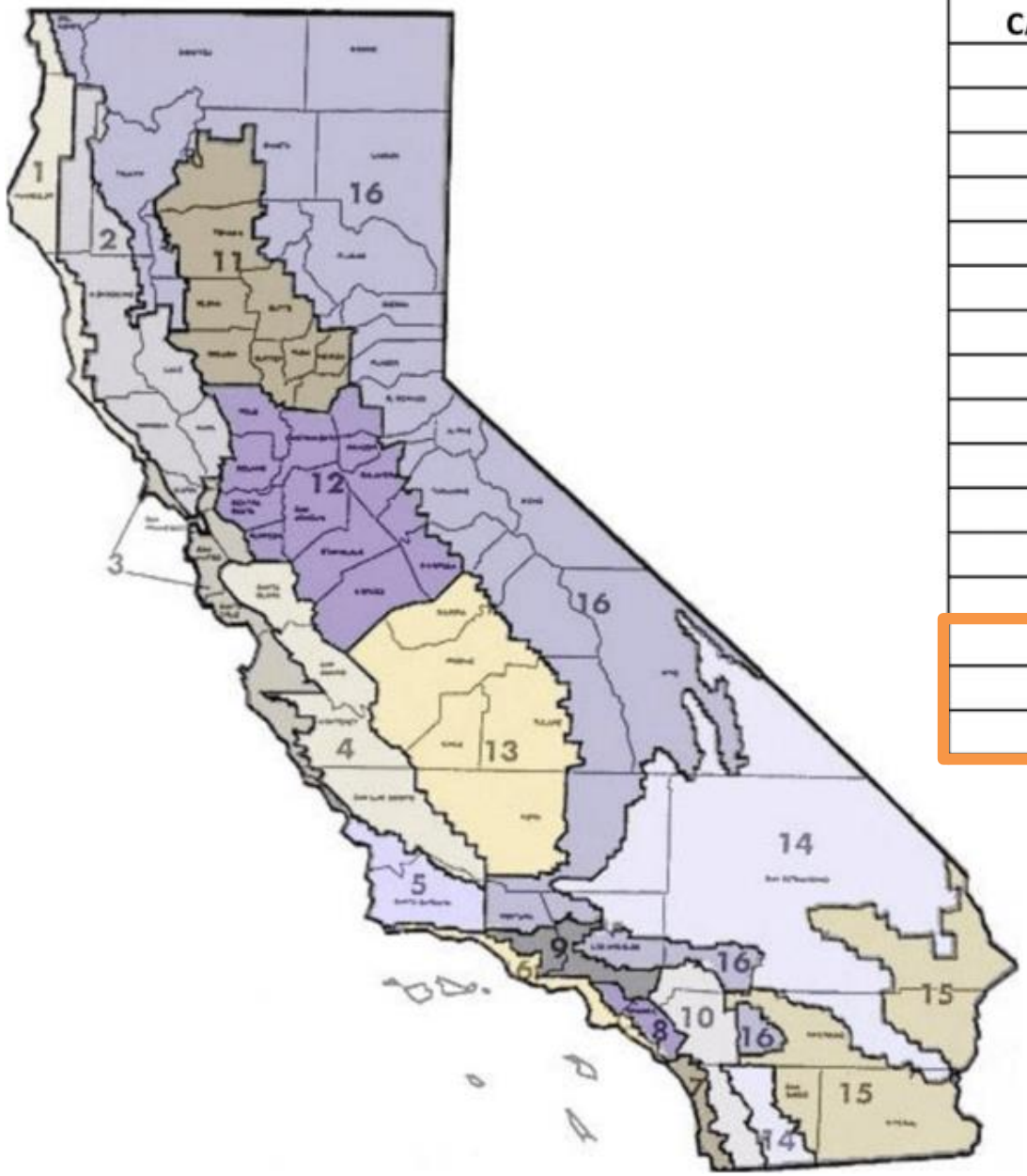
Organization	Counties	# of Cities	Total Population	Geography (Sq. Miles)	Population per Sq. Mile
I-REN	**2**	**52**	**4.5 Million**	**27,263**	**170**
BayREN	9	101	7,753,023	6,907	1,123
3C-REN	3	25	1,581,504	7,877	201
SoCalREN	12*	220	20 Million +	50,000 +	400+

Large areas of underserved rural and frontier areas



Climate Zones

Inland area represents greater number of heating and cooling degree days (HDD/CDD) than most of Southern California



CA Zone	Average	
	HDD	CDD
1	4295	15
2	3144	500
3	3071	183
4	2550	666
5	2654	464
6	1383	742
7	1497	865
8	1481	1072
9	1460	1456
10	1685	1620
11	3149	1354
12	2621	1226
13	2443	1599
14	2422	3056
15	1177	4760
16	5057	596

I-REN MISSION

To actively participate in California's Clean Energy initiatives and build a stronger clean energy economy and community.

OUR VISION

I-REN's vision is to connect residents, businesses, and local government to a wide range of energy efficiency resources to increase energy savings and equitable access throughout San Bernardino and Riverside Counties.

GOALS & STRATEGIES

Goal 1. Build capacity and knowledge to enable local governments to effectively leverage energy efficiency services and to demonstrate best practices.

Goal 2. Ensure there is a trained workforce to support and realize energy efficiency savings goals across sectors.

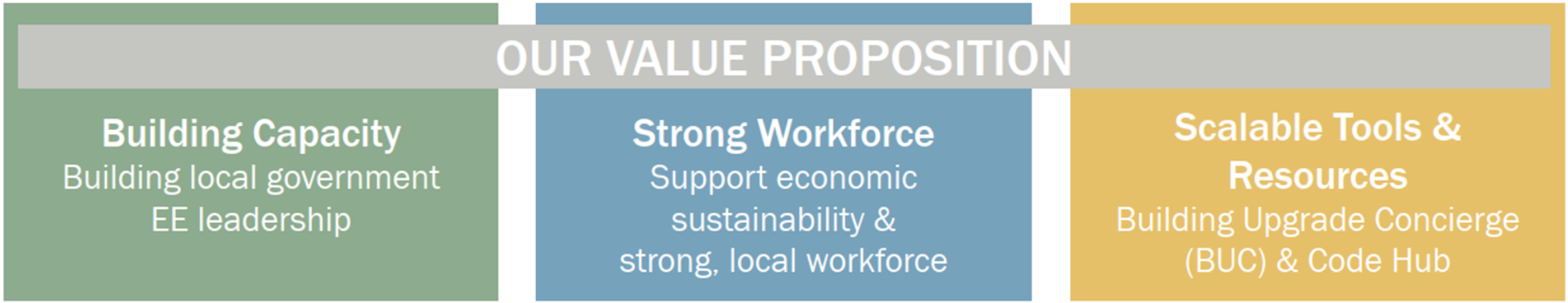
Goal 3. Work closely with local building departments and the building industry to support, train, and enable long-term streamlining of energy code compliance.

Business Plan Goals

Goal 1. Build capacity and knowledge to enable local governments to effectively leverage energy efficiency services and to demonstrate best practices. *(Public Sector Chapter)*

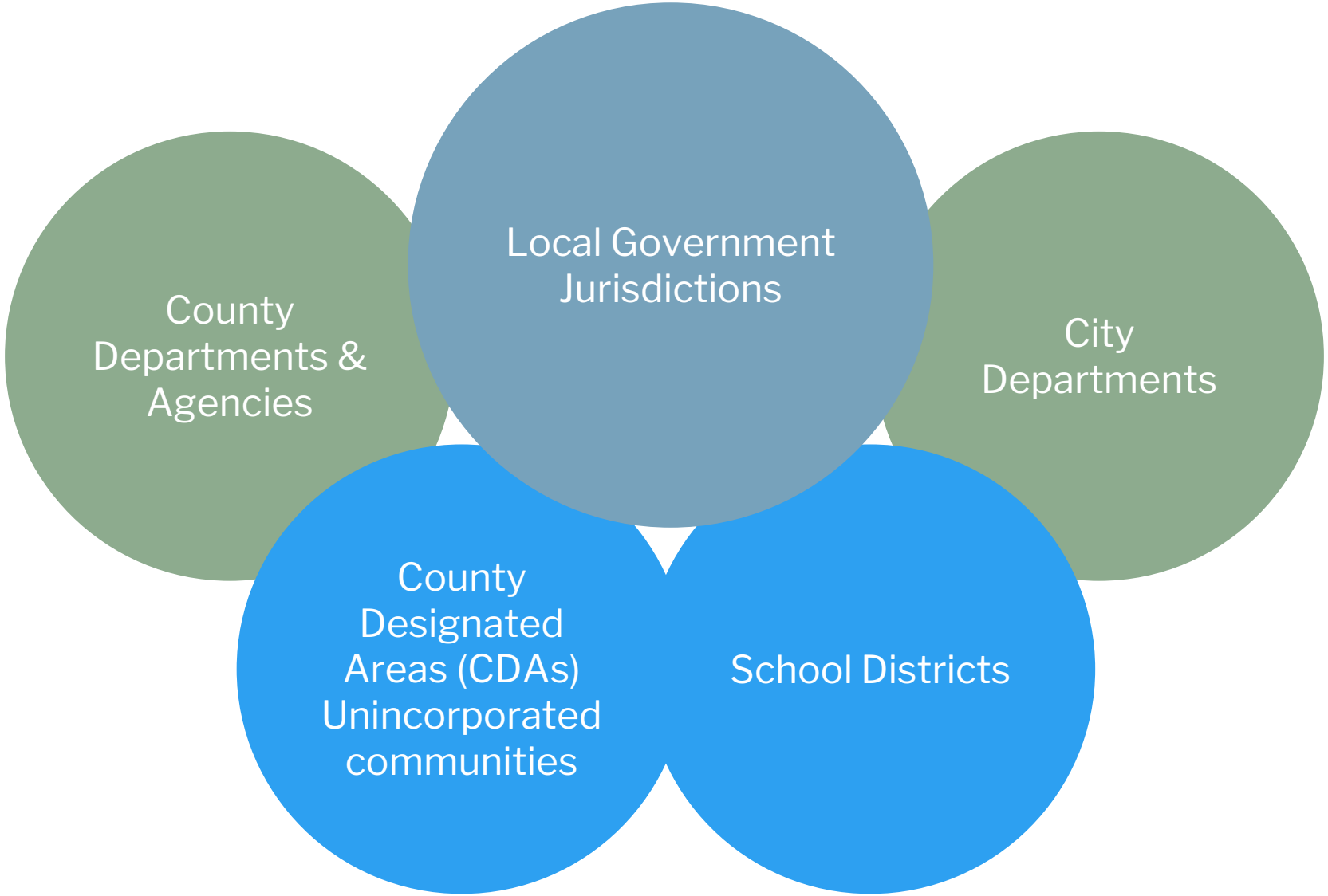
Goal 2. Ensure there is a trained workforce to support and realize energy efficiency savings goals across sectors. *(WE&T Chapter)*

Goal 3. Work closely with local building departments and the building industry to support, train, and enable long-term streamlining of energy code compliance. *(Codes and Standards Chapter)*



Public Sector

Key Market Actors



Problem, Barriers & Solutions

Problem	Barriers	Solutions	Strategies
Local government staff often lack the time and capacity to pursue complex energy efficiency projects.	Lack of understanding of best practices for energy efficiency solutions.	Technical assistance, locally focused resources, and person-to-person support are needed to develop and implement strategic energy plans for the public sector.	S1.1
There are a variety of EE programs and funding sources, but it is often unclear which apply to local government facilities or how to participate.	Confusion on types of incentives or financing programs and lack of staff resources to apply.	Tailored, locally focused program options are needed, as well as technical assistance and resources to prompt participation in I-REN and other PA programs.	S1.1 S1.2
Due to budgetary restrictions and complicated approval processes, public sector agencies may wait until burnout to replace equipment. At that time, they are forced to make quick decisions, without access to outside funding sources.	Disconnect between funding sources and timing of energy efficiency upgrades.	Strategic energy planning can help create a roadmap to plan for equipment upgrades. Technical assistance and locally focused programs can help agencies leverage resource programs and financing to reduce costs.	S1.1 S1.2
Older, inefficient equipment continues to function, so it is not replaced due to cost and staff resource issues.	Lack of drivers or need for local government agencies to replace existing working, but inefficient equipment.	Technical assistance combined with an incentive or financing option could make the difference in a public sector agency moving to a higher efficiency option for their facility.	S1.1 S1.2
Navigating EE program participation and funding sources is complex and requires a dedicated “Energy Champion” who can devote time and attention to the subject.	Frequent changes in the Energy Champions, with high turnover in staff and overall lack of government staff capacity.	Person-to-person technical assistance and support is critical for maintaining relationships through staffing turnover.	S1.1
Local governments each have their own bureaucratic structure, and it is often unclear how they can enroll in EE programs or apply for financing opportunities.	Varied governance, and funding rules that limit ability to take advantage of typical IOU funding or Local Government Partnerships (LGPs).	Technical assistance resources, and person-to-person support can help agency staff navigate the enrollment and approval process.	S1.1

Goal 1.

Build capacity and knowledge to enable local governments to effectively leverage energy efficiency services and to demonstrate best practices.

Strategies

S1.1 Develop a regional Building Upgrade Concierge (BUC) for local governments, special districts, and tribal communities with technical guidance and tools to inform and enable priority energy improvements.

S1.2 Establish incentives and leverage existing financing mechanisms to assist local governments with implementing energy efficiency projects in public buildings.

Essential Program Elements

BUILDING UPGRADE CONCIERGE

Person-to-person Support

Suite of Tools: Online & Print

DESIGN SUPPORT SERVICES

Design Assistance

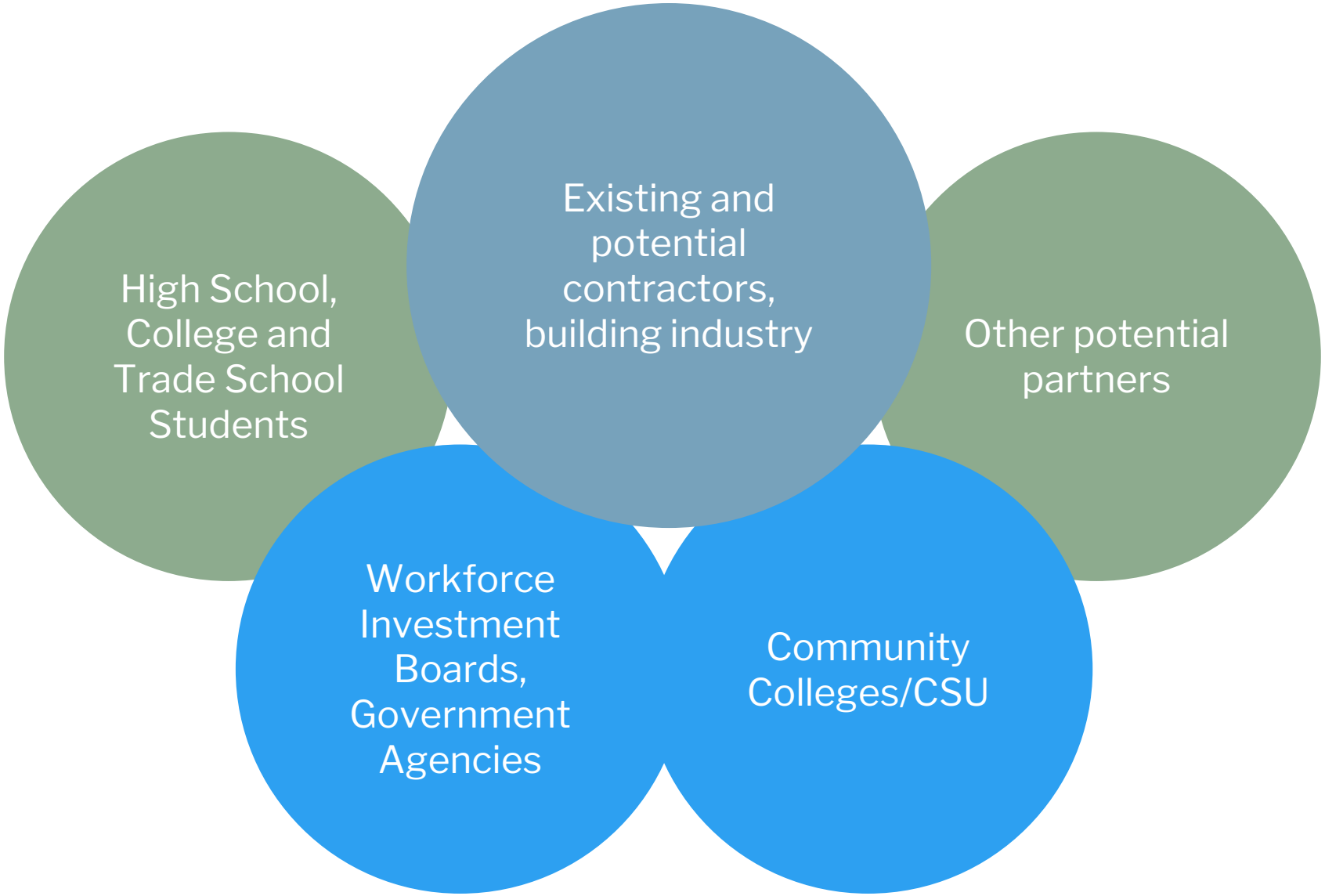
Develop High Efficiency Public Buildings

CAPITAL FINANCING

Hybrid Revolving Loan/PACE Program

Workforce Education & Training

Key Market Actors



Problem, Barriers & Solutions

Problem	Barriers	Solutions	Strategies
When employers are hiring for skilled positions in advanced energy and energy efficiency, they can't find people to hire.	Inability to find and retain skilled and qualified workers for the demand.	Foster connections between workforce and industry. Promote relevant training opportunities in collaboration with WIBs to upskill the workforce. Collaborate with employers to provide continuing education for professional development and employee retention.	S2.1 S2.2
Codes and standards compliance and energy efficiency programs require certain certifications and qualifications for builders to participate.	A limited number of builders in the region have the required certifications and qualifications.	Promote relevant training opportunities in collaboration with WIBs to upskill the workforce. Collaborate with employers to provide continuing education for professional development and employee retention.	S2.1
Energy efficiency and advanced energy projects and programs require qualifications that the local workforce does not have.	Lack of qualified workforce in Riverside/San Bernardino Counties, especially in the more remote areas.	Foster connections between workforce and industry. Promote relevant training opportunities in collaboration with WIBs to upskill the workforce.	S2.1 S2.2
Job seekers cannot find jobs in energy efficiency and advanced energy.	Lack of job opportunities in energy efficiency and advanced energy in the region.	Foster connections between workforce and industry. Identify and illuminate the pathways to energy efficiency and advanced energy jobs.	S2.2
Contractors aren't aware of energy efficiency projects, or they cannot or choose not to perform this work.	Lack of interest or knowledge of the opportunities and benefits of energy efficiency projects.	Foster connections between workforce and industry. Promote relevant training opportunities to upskill the workforce. Collaborate with employers to provide continuing education for professional development and employee retention.	S2.1 S2.2
Training is far away and offered infrequently or scheduled during work hours when it's inconvenient to attend. Existing training may be irrelevant to contractors or local projects' needs.	Training opportunities' availability and location pose challenges for contractors to be able to attend and are not designed for the particular needs of the local market.	Promote relevant training opportunities to upskill the workforce. Improve access to training by increasing the number of sites and delivery mechanisms. Collaborate with employers to provide continuing education for professional development and employee retention.	S2.1

Goal 2.

Ensure there is a trained workforce to support and realize energy efficiency savings goals across sectors.

Strategies

- **S2.1** Establish local partnerships with existing and potential training providers in the region to deliver targeted and relevant energy efficiency training for contractors and other industry stakeholders.

- **S2.2** Facilitate industry engagement and development of job pathways to identify demand and jobs for a trained workforce.

Essential Program Elements

LOCAL TRAINING

New Delivery Channels

Expand Availability

WORKFORCE DEVELOPMENT

Job Placement

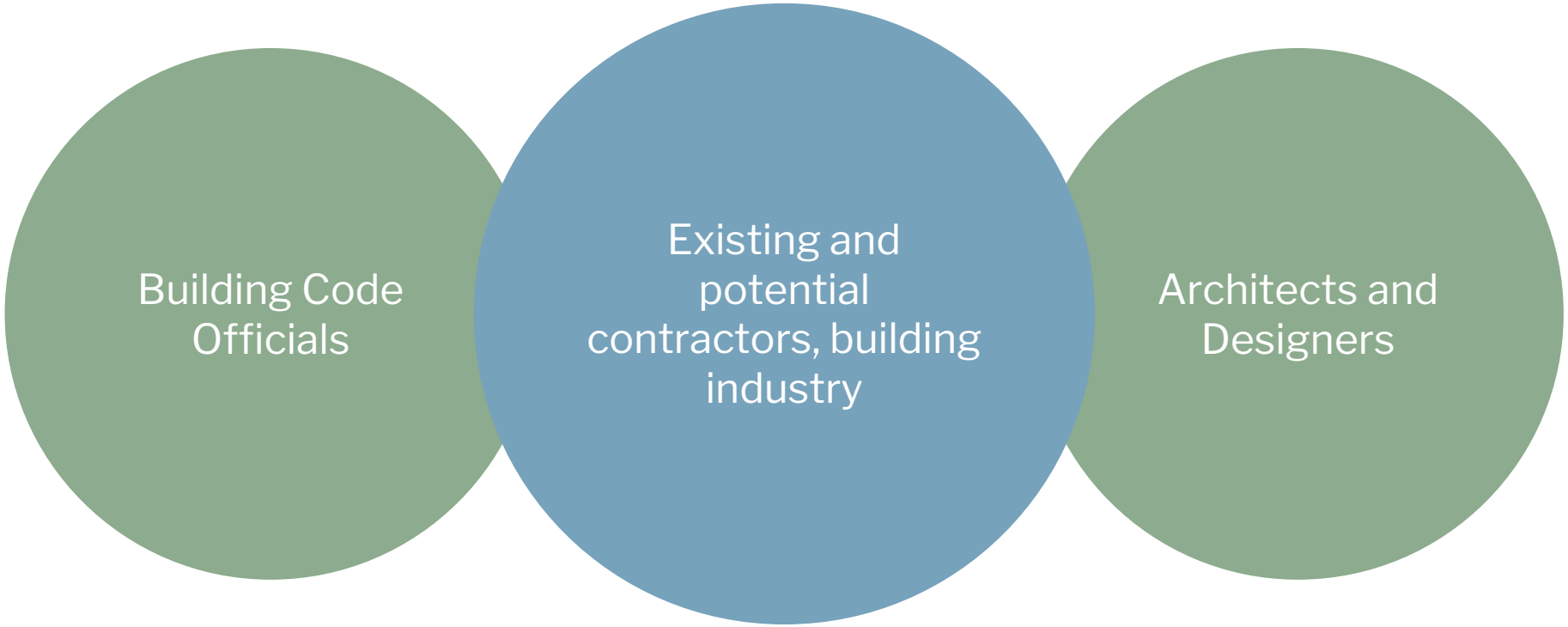
Facilitate Career Pathways

EE CERTIFICATIONS/CLASS SERIES

Residential & Small/ Medium Commercial Needs

Codes & Standards

Key Market Actors



Problem, Barriers & Solutions

Problem	Barriers	Solutions	Strategies
Codes and standards are continually being updated *and becoming more complex*.	Lack of capacity and time to learn details of Title 24, Part 6 and implement effective means to review or enforce.	Technical assistance, tools, training, and resources	S3.1, S3.3
Some local building departments have limited staff resources for enforcing energy codes.	Energy efficiency is a low priority for building departments. Focus is on life and safety issues.	Ongoing training and outreach	S3.1
Some local building departments have limited capacity to monitor and enforce changes, leading to uneven compliance across the region.	Lack of enforcement of permitting of HVAC systems for existing buildings as well as other energy code elements for new construction, especially related to the 2019 code cycle.	Outreach program for both construction firms and local building departments	S3.2
Both permit applicants (e.g. construction firms) and local building department staff have complicated requirements to follow for compliance and enforcement.	Technical questions and issues with permitting, codes, etc.	Technical assistance, tools, and resources	S3.3

Goal 3.

Work closely with local building departments to support, train, and enable long-term streamlining of energy code compliance.

Strategies

S3.1 Establish an ongoing training program to assist building department staff and the building industry to support, understand, and effectively implement Energy Efficiency Codes and Standards.

S3.2 Implement an outreach program to engage, educate and involve regional construction firms and building departments, and support compliance and regional EE programs and customers.

S3.3 Develop technical assistance tools and resources to assist building departments and the building industry with understanding, evaluating, and permitting of energy codes.

Essential Program Elements

C&S TRAINING

Targeted, Local Training

New Codes Support

CODES FORUM

Broad Education & Engagement

Codes Support

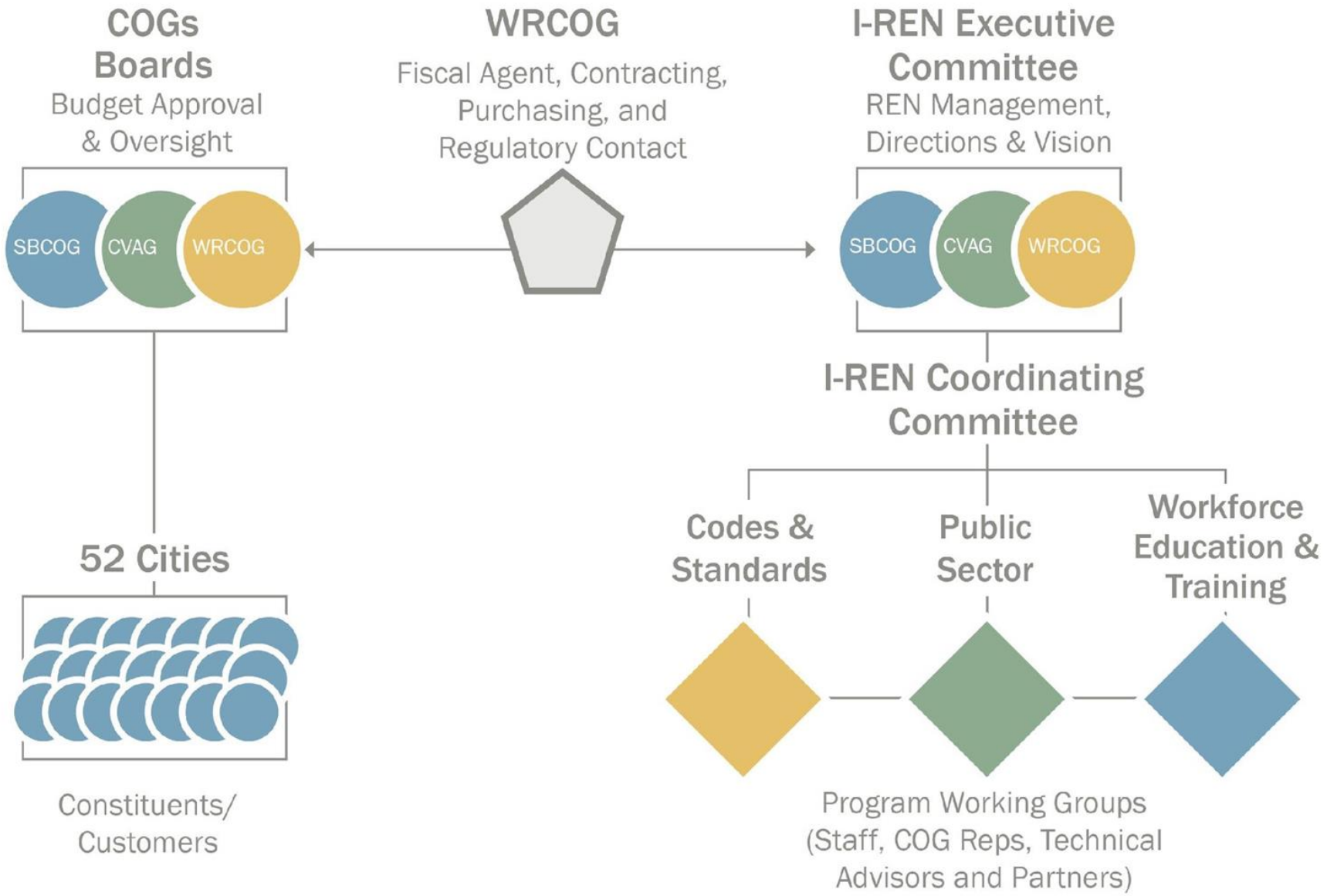
CODES COMPLIANCE

Targeted Assistance

Consistency

Administration

Governance Structure



I-REN Portfolio Budget

	2021	2022	2023	2024	2025	Total
Public Sector	4,314,226	6,288,194	6,191,722	6,629,390	7,074,566	30,498,098
Workforce Education & Training	2,312,208	2,253,295	2,393,426	2,437,164	2,674,650	12,070,743
Codes & Standards	1,416,066	1,446,107	1,503,952	1,564,110	1,626,674	7,556,909
Evaluation Measurement & Verification * I-REN Portion	92,154	114,441	115,604	121,810	130,349	574,358
Total	**8,134,654**	**10,102,037**	**10,204,704**	**10,752,474**	**11,506,239**	**50,700,108**

I-REN Portfolio Energy Savings & Cost-Effectiveness

	2021	2022	2023	2024	2025
Net kWh	0	4,175,629	4,361,224	4,361,224	5,763,031
Net kW	0	720	813	813	1,084
Net Therm	0	121,315	147,884	147,884	196,707
CO2	0	1,736	2,039	1,937	2,781
NOx	0	640	668	668	883
Total Resource Cost (TRC)	0	0.17	0.19	0.19	0.25
Program Administrator Cost (PAC)	0	0.20	0.22	0.23	0.30
Ratepayer Impact Measure (RIM)	0	0.15	0.16	0.17	0.20

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Thank you

Decision 21-11-013 November 18, 2021

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Concerning Energy Efficiency Rolling Portfolios, Policies, Programs, Evaluation, and Related Issues.	Rulemaking 13-11-005

APPROVAL OF INLAND REGIONAL ENERGY NETWORK ENERGY EFFICIENCY BUSINESS PLAN

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APPROVAL OF INLAND REGIONAL ENERGY NETWORK ENERGY EFFICIENCY BUSINESS PLAN

Summary

This decision approves the energy efficiency business plan of the Inland Regional Energy Network (I-REN), which includes Riverside and San Bernadino Counties, beginning in 2022 and continuing through 2027, with a total budget of approximately $65 million over this period. I-REN will conduct program activities in the public sector, workforce education and training, and codes and standards areas, and will also have a budget for evaluation and program planning activities.

Should I-REN wish to continue its activities beyond 2027, it will be required to align its next portfolio filing[1] with those of the other energy efficiency program administrators currently required to make portfolio filings again in 2026. After adoption of this decision, I-REN will become a program administrator, subject to all of the Commission's requirements for those administering energy efficiency program portfolios.

In addition, I-REN is required to submit a Tier 2 advice letter, detailing its portfolio segmentation strategy and updating its proposed sectoral and program metrics based on the work done by the California Energy Efficiency Coordinating Committee (CAEECC) market support sector metrics and equity metrics working groups, by no later than July 1, 2022. Subsequently, any updates to metrics should be included and updated in I-REN's annual report. Finally, I-REN is required to file a joint cooperation memorandum (JCM) for 2022 with the other program administrators operating in the same geographic areas as

[1] Portfolio filing requirements are included in Decision 21-05-031, Ordering Paragraph 5 (b).

a Tier 2 advice letter within 60 days of the issuance of this decision,[2] and will be required to file JCMs as required of all program administrators in their annual reports for program year 2023 and beyond.

This proceeding remains open.

1. Background

On February 26, 2021, the Western Riverside Council of Governments (WRCOG) filed, on behalf of Inland Regional Energy Network (I-REN), a motion for approval of its energy efficiency rolling portfolio business plan and budget.

Due to some confusion about the due date for responses, three motions for late-filing of responses were filed, as follows: Southern California Edison Company (SCE), on April 6, 2021; Southern California Gas Company (SoCalGas) on April 9, 2021; and a joint motion by the Association of Bay Area Governments (ABAG) and County of Ventura, on behalf of the Bay Area Regional Energy Network (BayREN) and the Tri-County Regional Energy Network (3C-REN), on April 13, 2021. The motions to late-file responses were granted by Administrative Law Judge (ALJ) ruling on April 19, 2021, and therefore, the three responses were filed on the above dates.

With ALJ permission, WRCOG filed a reply to the responses on April 22, 2021 on behalf of I-REN.

On July 6, 2021, an ALJ ruling (ALJ ruling) was issued seeking additional comments on the I-REN business plan and asking parties to respond to a set of specific questions.

Comments were filed in response to the ALJ ruling on July 21, 2021 by the following parties: BayREN and 3C-REN, jointly; County of Los Angeles on

[2] I-REN would overlap geographically with Southern California Edison, Southern California Gas, and Southern California Regional Energy Network.

behalf of the Southern California Regional Energy Network (SoCalREN); I-REN; the Public Advocates Office at the California Public Utilities Commission (Cal Advocates); SCE; and SoCalGas.

Reply comments in response to the ALJ ruling were filed on July 30, 2021 by I-REN, Pacific Gas and Electric Company (PG&E), and SCE.

1.1. I-REN Motion for Approval of its Business Plan and Budget

WRCOG filed the February 26, 2021, motion on behalf of itself, the San Bernardino Council of Governments (SBCOG) and the Coachella Valley Association of Governments (CVAG) to form I-REN, as a consortium to serve these public agencies and their constituencies within SCE and SoCalGas service territories.

The motion proposes to cover three specific program areas:

- Public Sector;
- Workforce Education & Training (WE&T); and
- Codes and Standards (C&S).

The proposed budget for I-REN for 2021-2025 is $50,700,108, which also covers evaluation, measurement, and verification (EM&V) costs.

Table 1 below is from the I-REN business plan and summarizes the I-REN business plan budget request.

Table 1. I-REN Business Plan Program Initial Budget Request ($)

Sector	2021	2022	2023	2024	2025	Total
Public Sector	4,314,226	6,288,194	6,191,722	6,629,390	7,074,566	30,498,098
WE&T	2,312,208	2,253,295	2,393,426	2,437,164	2,674,650	12,070,743
C&S	1,416,066	1,446,107	1,503,952	1,564,110	1,626,674	7,556,909
EM&V	92,154	114,441	115,604	121,810	130,349	574,348
Total	**8,134,654**	**10,102,037**	**10,204,704**	**10,752,474**	**11,506,239**	**50,700,108**

According to the motion, the request is designed to complement SCE's and SoCalGas' portfolios. The I-REN business plan also references guidance in

Decision (D.) 15-10-028 and was vetted through the stakeholder process at the CAEECC.

1.2. Initial Responses to I-REN Motion

SCE's response to the I-REN motion generally argues that the I-REN motion should be delayed and considered alongside the updated business plans of the other program administrators, which, at the time of the filing of the response, would have been September 2021. Since the filing of SCE's response, D.21-05-031 has set the date for filing of new business plans for February 15, 2022.

SCE also argues there is insufficient time to rule on this application and develop JCMs between the program administrators with overlapping service areas, since the JCMs for 2022 programs were filed on June 15, 2021.

Finally, SCE argues that the I-REN budget is too high and inconsistent with D.19-12-021, which provides guidance on appropriate REN budgets, and recommends budgets be proportional to the relevant utility budgets in the same geographic territory.[3] Based on this guidance, SCE argues that the I-REN budget should be no more than approximately $725,000 per year, whereas I-REN's proposed budget is more than 10 times higher.

SoCalGas' response to the I-REN motion also recommends, similar to SCE, that I-REN's proposal be considered at the same time as the review of the business plans of the other program administrators. However, SoCalGas notes that I-REN has been planning its proposal since 2019 and therefore an alternative would be to consider the portion of I-REN's application covering 2022 and 2023,

[3] *See* D.19-12-021 at 37-39, as well as D.14-01-033, Section 3.2.4.3.

while also requiring a long-term application in parallel with the other program administrators.

SoCalGas also highlights the importance of the JCMs and suggests that I-REN be directed to work with its partner program administrators to submit a JCM within 60 days of any approval of its business plan.

Finally, SoCalGas volunteers to serve as the fiscal agent utility on behalf of I-REN, should the Commission approve the I-REN business plan, and states that this has been discussed with I-REN and I-REN is amenable to this arrangement.

BayREN and 3C-REN argue that the WRCOG motion for I-REN provides a strong showing for the creation of a new Regional Energy Network and will provide vital programs in a hard-to-reach part of the State. BayREN and 3C-REN argue that extending the I-REN's proposed programs into the Inland Empire will benefit ratepayers by providing more comprehensive services in an efficient manner.

BayREN and 3C-REN also reference the Commission's Environmental and Social Justice Action Plan (ESJ Action Plan),[4] and claim the creation of I-REN will facilitate ESJ Action Plan goals. Finally, BayREN and 3C-REN point out that the I-REN proposal was already vetted at the CAEECC, and that feedback was incorporated into the proposal in the motion submitted by WRCOG on February 26, 2021.

1.3. I-REN Reply to Initial Responses

In reply to the responses to the original February 26, 2021, motion, WRCOG on behalf of I-REN (including SBCOG and CVAG) addresses the following topics:

[4] The Commission's plan is available at the following link: https://www.cpuc.ca.gov/news-and-updates/newsroom/environmental-and-social-justice-action-plan

- Expedited business plan approval in 2021 is needed for the customers who would be covered by I-REN;
- Commission guidance is requested regarding portfolio process, timing, and alignment with other program administrators;
- JCMs and local government partnerships (LGPs);
- I-REN's budget is appropriate and consistent with D.19-12-021; and
- I-REN supports the SoCalGas fiscal agent proposal.

I-REN specifically requests that the Commission consider its proposal and budget in 2021, in order to begin delivering programs as soon as possible, because the under-served customers in the region need services now. I-REN also represents that it is prepared to submit JCMs within 60 days of business plan approval, as suggested by SoCalGas.

I-REN responds to SCE's recommendation to reduce the I-REN budget based on SCE's interpretation of Commission guidance found in D.19-12-021, by showing the recent decline in SCE's total energy efficiency budgets between 2017 and 2021, with particular attention to the budgets allocated for non-statewide and non-regional programs, arguing that local government spending has declined and there is a gap that can be filled by I-REN.

2. Issues Before the Commission

The July 6, 2021 ALJ ruling sought responses to specific questions addressing the following general topics related to the I-REN motion:

- Funding period for initial I-REN business plan, with Option 1 presented as funding 2022 and 2023, and Option 2 allowing funding for 2022-2027;
- Reasonableness of I-REN business plan for filling program gaps and/or complementing other programs offered in their region, consistent with Commission requirements;

- Appropriateness of I-REN sector proposals;
- Relationship to the Commission's ESJ Action Plan and serving hard-to-reach communities; and
- Reasonableness of I-REN's proposed budgets.

This section addresses each of these topics in turn, as well as some other logistics and compliance issues.

2.1. Funding Period

This section addresses the option for the period of funding that should be approved for I-REN, as well as when I-REN should be required to file a subsequent business plan.

2.1.1. Comments of Parties

BayREN and 3C-REN generally support Option 2, as presented in the ALJ ruling, to allow I-REN's budget to be approved for a five-year period (2022-2027) initially, and then require I-REN to resubmit a new portfolio filing along with other program administrators after the next round of filings. SoCalREN agreed.

I-REN, in its opening and reply comments, also supported Option 2, arguing that it aligns I-REN with the other program administrators for future portfolio cycles, while building on the significant time and effort that already went into developing I-REN's initial business plan. I-REN argues that this option will avoid substantial duplication of effort that would be required for a filing in February 2022 if Option 1 is chosen.

SCE, SoCalGas, Cal Advocates, and PG&E, in reply comments, all support Option 1, which would approve any funding only for 2022 and 2023 and require I-REN to file a new business plan in February 2022 along with the other program administrators. SCE argues that this will allow I-REN to run programs for two years based on the current business plan, and then refile to allow I-REN to coordinate portfolios and define metrics in consultation with the other

administrators. SCE also argues that the time and effort spent on an application is far outweighed by other considerations, including the policy and technical updates to the portfolio approval process that have occurred since the I-REN motion was filed.

SoCalGas, in addition to supporting Option 1, argues that if I-REN is given program administrator status, the Commission should require I-REN to file a supplemental motion providing a total system benefit (TSB) calculation and TSB segmentation proposal for 2022 and 2023.

Cal Advocates also supports Option 1, stating that it is the only reasonable approach that would put I-REN on the same timeline as other program administrators and would support equal treatment of utility and non-utility program administrators alike. Cal Advocates also argues that it would be difficult for the Commission and stakeholders to evaluate the reasonableness of I-REN complementarity claims for the years 2024 through 2027 without the ability to simultaneously examine SCE's and SoCalGas' portfolio proposals for the same period.

PG&E, in reply comments, also highlights the importance of having all program administrators' filings align and thus agrees with Cal Advocates, SCE, and SoCalGas in supporting Option 1 and making funding for 2024 and beyond contingent on a new business plan filing in February 2022.

2.1.2. Discussion

On this issue, we appreciate the importance of alignment between program administrators and generally have sought to have all program administrators file their portfolio proposals concurrently, as much as possible. This reinforces the importance of coordination and cooperation, to minimize

duplication and overlap among program offerings, while ensuring that gaps are filled, where possible.

At the same time, D.19-12-021[5] makes it clear that Regional Energy Network (REN) proposals may be filed at any time to be evaluated by the Commission. Thus, it is likely that any new REN proposal would be unsynchronized with other program administrators' business plans at the beginning, and require some time to become aligned later.

In this case, we are considering the initial I-REN business plan near the end of 2021. Given this timing, it would be unreasonable to require I-REN to file another business plan only a few months later in February 2022 along with the other program administrators, as required by D.21-05-031. Neither I-REN nor the Commission will have much additional information about I-REN's implementation results to evaluate a new proposal by February 2022. I-REN will not have any track record yet, so it is unclear what metrics or information we would use in February 2022 that would be different from the proposal before us now.

In addition, we appreciate that I-REN and its local government sponsors have invested significant effort in developing and vetting the business plan proposal before us now, and we therefore intend to consider it fully in this decision. As discussed further below in this decision, we intend to fund a significant effort for I-REN. As with previous REN and non-REN program administrators, it often takes time for new program administrators and programs to ramp up and begin to deliver benefits to customers, and it is only fair to give

[5] *See* Ordering Paragraph 2 of D.19-12-021.

I-REN the opportunity to hit its stride before asking it to make another portfolio filing.

For all of these reasons, we choose Option 2, funding I-REN's efforts through the end of 2027. We also note that the business plans of the other program administrators were originally approved for an eight-year period in 2018, and we are moving toward a four-year portfolio funding approach consistent with D.21-05-031. Therefore, approving I-REN for a six-year period splits the difference and allows for a reasonable transition to the new paradigm, given that I-REN's proposal was filed under the prior rules. The issues of the level of funding and the specific programs to be approved are discussed further in subsequent sections of this decision.

We will also require I-REN to make a new portfolio filing, should it choose to do so, alongside the other program administrators in early 2026, as currently required by the schedule in D.21-05-031 or as amended by the Commission, assigned Commissioner, and/or ALJ subsequent to this decision. This schedule will require I-REN to communicate and collaborate with the other program administrators, particularly those with whom they have overlapping geographic coverage, during the development and filing of the next portfolio proposals in 2026, as recommended by SCE, SoCalGas, PG&E, and Cal Advocates in their comments.

2.2. Program Gap-Filling and Complementarity to Business Plans of other Program Administrators

The ALJ ruling asked parties to respond to how the question of how the I-REN business plan proposal specifically addresses the Commission requirements that REN programs fill gaps in and complement the portfolios of other program

administrators with overlapping geographic areas. These criteria were first adopted in D.12-11-015 and later refined in D.19-12-021.

2.2.1. Comments of Parties

I-REN, in responding to the ALJ ruling, points out that its proposal addresses the general reduction in program budget, particularly by SCE, in recent years, especially for LGPs. I-REN also cites to its expansive geographic region. In addition, I-REN points out that the sectors and programs proposed in their business plan are appropriate and specifically designed to address the needs of the I-REN region. They point out that the I-REN governing agencies spent nearly 18 months carefully crafting their region-specific and targeted approaches, incorporating stakeholder feedback and gaining widespread support from their communities.

SCE, in its comments, does not agree that I-REN demonstrates that it is filling gaps in SCE's portfolio, and states the concern that, if I-REN is allowed to continue this approach, it could set a precedent where RENs can file business plans and be approved without showing how they fill gaps in the utility energy efficiency program portfolios. SCE asks that the Commission require I-REN to supplement the showing in their motion, with specific reference to the threshold of review established in D.19-12-021.

SCE also argues that the burden should be on I-REN to prove that they are filling gaps and provide unique value, which SCE states is not shown in their motion. Further, SCE recommends that the Commission not approve any programs now that address gaps that are going to be filled with the transition to third-party designed programs. Ultimately, SCE recommends that I-REN align its business plan filing with all of the other program administrators in a new application for program years 2024-2027, to allow the Commission to effectively

evaluate the complex and interrelated energy efficiency landscape and to avoid any potential duplication of efforts and maximize the value to ratepayers.

SoCalGas, on the other hand, states that I-REN's proposal would fill gaps not so much with particular programs, but in providing more equitable access to energy efficiency overall. SoCalGas believes that the I-REN portfolio will provide added value and is supplemental to the program resources and offerings of the other program administrators in the region.

BayREN and 3C-REN support I-REN's proposal, stating that I-REN's service territory includes large tracts of disadvantaged communities and a median income that is 60 percent below the statewide median. They add that the reality is that most energy efficiency programs do not reach disadvantaged communities, and note that the I-REN plan is designed specifically to address this shortfall. BayREN and 3C-REN note that although some of I-REN's offerings may overlap, there is good reason for that because the rural and frontier regions are receiving limited services from energy efficiency programs overall.

In reply comments, PG&E states that it believes that I-REN's proposed C&S and WE&T activities overlap with other program administrators' offerings, and supports SCE's recommendation that the Commission consider how to avoid overlap with programs that are pending launch or currently under solicitation.

In response to SCE in particular, I-REN, in its reply comments, restates its commitment to avoid duplication of effort and to work collaboratively with the other program administrators. In addition, I-REN notes that they worked with each of the program administrators in their region to gain feedback on their planned strategies and interventions, prior to filing the business plan motion.

2.2.2. Discussion

The Commission's requirements for RENs are based, in part, on the desire to ensure energy efficiency program coverage over a wide range of communities, while also limiting the burden on ratepayer funding. Thus, our requirements are to encourage RENs to fill gaps and not duplicate activities of other program administrators.

However, our rules do not prohibit some potential for some territorial overlap or program duplication, for good reasons. In this case, we are satisfied that the I-REN proposal is designed to minimize duplication and to serve communities and customers that are historically unserved or at least underserved by the energy efficiency programs. In addition, it is clear that I-REN spent considerable time and attention vetting its proposals with the other program administrators as well as stakeholders and CAEECC, prior to making its filing. This effort, coupled with the commitment to continue coordinating and communicating with the other program administrators, convinces us that I-REN has met the Commission's requirements and will continue to focus its efforts on filling gaps and reaching the maximum number of participants possible, especially given the demographics of its region.

We appreciate I-REN's willingness to file a JCM 60 days after this decision, and will add this requirement to this decision, as suggested by SoCalGas in its comments on the proposed decision. I-REN shall file its JCM for program year 2022 as a Tier 2 advice letter. In addition, I-REN shall file its subsequent JCMs on the same schedule as other program administrators in their annual reports in 2023 and thereafter. On an ongoing basis, the JCMs required of all program administrators with overlapping geographic areas should help encourage ongoing communication and cooperation.

2.3. Sector Proposals

In this section, we address I-REN's sector and program proposals specifically. I-REN has proposed to fund activities in three areas: public sector; WE&T; and C&S. I-REN also proposes an EM&V budget, in order to conduct data collection activities and inform their program planning, particularly in the public sector, as well as to work with Commission impact evaluators.

2.3.1. Comments of Parties

I-REN represents that its program proposals and the sectors it proposes to serve are appropriate and specifically designed to address the needs of their region. They represent that the I-REN governing agencies spent nearly 18 months carefully crafting their region-specific and targeted approaches, incorporating stakeholder feedback and gaining community support. I-REN also comments that they have made a proposal with unique value, with programs and sectors chosen thoughtfully to build on their core strengths and experience as government agencies in the region.

BayREN and 3C-REN comment that I-REN appears to be taking a solid "walk before you run" approach to delivering their programs. They also believe that I-REN's proposed offerings are well suited for the Inland Empire and are likely to result in energy savings and workforce development, specifically in disadvantaged communities in the region.

SoCalGas comments that if I-REN coordinates effectively with the other program administrators within the overlapping geographic region, their portfolio will add value.

2.3.2. Discussion

In general, we agree with the approach I-REN has taken in their business plan to focus on sectors where local government experience and areas of

responsibility make early successes more likely. Public sector programs, C&S, and WE&T are all areas where other RENs have provided complementary and much-needed augmentation to other program administrators' program offerings, without creating duplication. Programs in the public sector, in particular, and in all of I-REN's proposed areas, are an obvious choice for RENs and other LGPs. Given the vast territory represented by I-REN, we agree that these sectors are areas they should begin targeting right away.

We also approve of I-REN's funding and proposed EM&V activities, since they will need to coordinate with Commission staff and the other program administrators on data collection, program planning, and Commission evaluation activities.

2.4. Hard-to-Reach and Environmental and Social Justice Action Plan issues

This section addresses I-REN's specific plans to address equity objectives and serve hard-to-reach customers and disadvantaged communities, in relation to the Commission's ESJ Action Plan.

2.4.1. Comments of Parties

I-REN states that their business plan was written with equity at the center of the sector and proposed program selection. I-REN points out that their geographic area has large sections that are characterized as disadvantaged communities, contain tribal lands, or have a population with a median income 60 percent below the statewide median, as seen in the maps and data they presented in their original business plan.

BayREN and 3C-REN comment that given the lower-income profile of the geographic area that I-REN proposes to serve, delivering the types of programs proposed by I-REN fits squarely within the parameters of the Commission's ESJ Action Plan.

SoCalREN encourages I-REN to cross-cut energy efficiency programs onto pre-existing government frameworks specifically designed for underserved and disadvantaged communities, reducing administrative, development, and other costs.

SCE, on the other hand, suggests that I-REN should be required to refile their business plan to align with the ESJ Action Plan.

2.4.2. Discussion

As proposed by I-REN, their business plan is designed squarely to address disadvantaged and underserved communities. This is one of the primary purposes the Commission had in mind when allowing REN proposals to come forward in the first place. Thus, this focus by I-REN is welcome and appropriate. We encourage I-REN to continue tracking the Commission's ESJ Action Plan and other policies as they evolve and to look for synergies, as suggested by SoCalREN, wherever possible. In general, inclusion of the types of communities served by I-REN will be important for California to reach its energy and climate goals.

With the adoption of this decision, I-REN becomes an energy efficiency program administrator and will need to adhere to all requirements from here forward. Related to the hard-to-reach and environmental and social justice issues, in particular, other administrators were guided to address in their 2024-2027 applications "how the portfolio design and budget incorporates guidance related to data collected to track customers being reached."[6] Thus, I-REN should consider now in their program design and implementation the

[6] See revised Attachment A to D.21-05-031 at https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/energy-efficiency/rolling-portfolio-program-guidance/caeecc_final-revision_attachment-a_clean.pdf

method and system to track customers being reached. I-REN will be asked to report on the energy savings and number of customers served in these categories, as required of all program administrators.[7]

As with I-REN's sector focus discussion above, we would like to see I-REN begin its focus on disadvantaged and underserved populations as soon as possible. Given the demographics that I-REN's geography represents, this is an important focus and one which the Commission heartily endorses.

2.5. Reasonableness of Budgets

In this section, we address the reasonableness of I-REN's proposed budgets. I-REN's original proposal anticipated approval of its business plan in 2021, and then contained budgets for 2021-2025, totaling approximately $50 million over a five-year period.

2.5.1. Comments of Parties

I-REN characterizes its budget as one that was developed carefully and from the bottom up. I-REN represents that its budget is necessary and appropriate to effectively launch programs and build momentum over the coming years. I-REN also explains that it used a process similar to what D.21-05-031 describes as "zero-based budgeting," where each function within the budget is analyzed independently for needs and costs. In addition, I-REN represents that its budget complies with D.19-12-021 requirements, as well as the original REN criteria requiring filling of gaps as introduced in D.12-11-015.

SCE suggests that I-REN's proposed budget is too high, and should be based on guidance in D.19-12-021, D.14-01-033, and Resolution E-4917. Based on

[7] See Attachment A of D.18-05-041.

this Commission guidance, SCE calculates that the budget should be between $750,000 and $1 million annually.

SoCalGas recommends that the I-REN budget not be considered for 2021, but that 2022 and 2023 and transition years be funded.

Cal Advocates also comments that I-REN's budget is unreasonably large. Instead, Cal Advocates agrees with SCE that the budget should be no more than $1 million annually.

PG&E's comments simply state that I-REN's budget should align with existing Commission guidance.

SoCalGas does not recommend an alternative I-REN budget, but states that it would be helpful to understand the financial justification for I-REN's proposed budget more fully, given the size of the population being served and that similar services would be offered by other program administrators. SoCalGas also requests that the EM&V budget be removed until the portfolio budget is calculated.

In reply comments, I-REN responded to SCE's comments that its budget is too high by discussing its previous comments about the precipitous decline in funding for non-statewide and non-regional programs and how that impacts funding levels for non-utility program administrators. I-REN also adds that the funding changes place even more importance on the Commission's emphasis on equity and serving hard-to-reach customers.

2.5.2. Discussion

On the question of the reasonableness of the I-REN proposed budget, we do not agree with Cal Advocates and SCE, which suggest dramatic reductions in the budget based on their interpretation of guidance in D.19-12-021, which states: "the RENs' budgets should be proportional to the incumbent IOU budgets, in the

same territory, for the number of customers served by non-statewide and non-regional programs, while taking into account plans to serve hard-to-reach customers."[8] Even while following that guidance, the Commission may exercise discretion to determine the reasonableness of REN budgets, based on the plans to serve hard-to-reach and underserved customers. We do that here. In addition, the language from D.19-12-021 does not represent an absolute standard, and the Commission may exercise its discretion generally to evaluate the reasonableness of the proposed budgets of any program administrator.

Using the SCE and Cal Advocates logic would have the result of dramatically reducing the budget not only of I-REN, but also of all the existing RENs with similar programs. I-REN's proposed budget is reasonably in line with other RENs who deliver similar programs and serve similarly large geographic areas. Though the I-REN total budget is less than half that of BayREN and SoCalREN, these two are more established RENs and they also conduct program activities outside of the three sectors that I-REN proposes. Thus, on balance the I-REN budget appears reasonable when compared against these two original RENs and when considering the I-REN's plan to serve hard-to-reach customers and disadvantaged communities.

Therefore, we approve a budget that is based on I-REN's original proposal, with some adjustment to account for the timing of this decision and our determination in Section 2.1 above about aligning I-REN's business plan and portfolio filing time period with that of other program administrators. I-REN's original proposal was for a five-year budget, but we are not approving funding for 2021 since it is almost over. Instead, we will add one extra year to the budget,

[8] D.19-12-021 at 39.

in order to synchronize I-REN's review schedule to that of the other program administrators. To account for these changes, we have removed the budget for 2021, which had been planned for a partial year of activity with approval coming earlier in the year than we are actually achieving with this decision. Instead, we add budget for the years 2026 and 2027. The amounts for 2026 and 2027 are consistent with the budget for 2025, under the assumption that the portfolio will be at full capacity by the third year of the programs, and therefore we can reasonably continue the budget at the requested 2025 level for two more years. Thus, the total budgeted amount is higher than originally requested by I-REN, but in line with the annual budgeted amounts and consistent with their planned activities.

The resulting approved total budget is contained in Table 2 below, with additional detail for the sector areas and budget categories.

The approved budget also includes funding for EM&V activities, to allow I-REN to conduct their own process, market and sector analysis and conduct appropriate data collection efforts for program planning and implementation purposes.

Table 2. I-REN Business Plan Program Approved Budgets ($)

Category	2022	2023	2024	2025	2026	2027	Total
Public Sector							
Administration	628,819	619,172	662,939	707,457	707,457	707,457	4,033,301
Marketing and outreach	377,292	371,503	397,763	424,474	424,474	424,474	2,419,980
Direct Implementation – non-incentive	3,782,083	3,701,047	3,818,688	3,942,635	3,942,635	3,942,635	23,129,723
Direct Implementation – incentives	1,500,000	1,500,000	1,750,000	2,000,000	2,000,000	2,000,000	10,750,000
Subtotal	**6,288,194**	**6,191,722**	**6,629,390**	**7,074,566**	**7,074,566**	**7,074,566**	**40,333,004**
Workforce Education and Training							
Administration	225,329	239,343	243,716	267,465	267,465	267,465	1,510,783

Category	2022	2023	2024	2025	2026	2027	Total
Marketing and outreach	135,198	143,606	146,230	160,479	160,479	160,479	906,471
Direct Implementation – non-incentive	1,892,768	2,010,477	2,047,218	2,246,706	2,246,706	2,246,706	12,690,581
Direct Implementation – incentives	-	-	-	-	-	-	-
Subtotal	**2,253,295**	**2,393,426**	**2,437,164**	**2,674,650**	**2,674,650**	**2,674,650**	**15,107,835**
Codes and Standards							
Administration	144,611	150,395	156,411	162,667	162,667	162,667	939,418
Marketing and outreach	87,766	90,237	93,847	97,600	97,600	97,600	564,650
Direct Implementation – non-incentive	1,214,730	1,263,320	1,313,852	1,366,407	1,366,407	1,366,407	7,891,123
Direct Implementation – incentives	-	-	-	-	-	-	-
Subtotal	**1,446,107**	**1,503,952**	**1,564,110**	**1,626,674**	**1,626,674**	**1,626,674**	**9,392,191**
EM&V	114,441	115,604	121,810	130,349	130,349	130,349	742,902
Total	**10,102,037**	**10,204,704**	**10,752,474**	**11,506,239**	**11,506,239**	**11,506,239**	**65,577,932**

2.6. Collections and Fiscal Management Logistics

In initial comments in response to the I-REN business plan, SoCalGas volunteered to serve as the fiscal and contracting agent for I-REN, should the business plan be approved. In reply, I-REN indicated agreement with this arrangement. Thus, we will appoint SoCalGas as the fiscal and contracting agent for I-REN, on behalf of SoCalGas and SCE.

SCE and SoCalGas should each account for their portion of the budget of I-REN in supplements to their budget advice letters filed this year, for 2022 and 2023 program year expenditures. I-REN does not need to make a budget advice letter filing for 2022 and 2023, since this decision already addresses their funding for that period. Beginning with the 2024 program year, I-REN should align its budget advice letter filing schedule with the other program administrators,

which means filing a Portfolio True-Up advice letter by September 1, 2023 to cover program years 2024 through 2027.[9]

2.7. Other Issues

Various other miscellaneous issues came up in the comments in response to the I-REN business plan and the ALJ ruling. First, I-REN proposes certain metrics to evaluate their program success. I-REN represents that their proposed metrics are based on the Commission's annual metrics reporting template developed in collaboration by all program administrators and Commission staff. I-REN also commits to incorporate the forthcoming guidance and metrics from the CAEECC market sector metrics and equity metrics working groups, as well as develop more complete metrics after its business plan is approved.

We will require that I-REN file a Tier 2 advice letter detailing its portfolio segmentation strategy and its updated sector and program metrics, informed by the CAEECC market sector metrics and equity metrics working groups' recommendations, by no later than July 1, 2022.

In addition, several parties, including SCE, note that the I-REN business plan was filed before D.21-05-031 was issued, and suggest that I-REN be required to re-file a refreshed business plan in response to that decision's requirements. After reviewing the I-REN business plan with D.21-05-031 requirements in mind, we find it unnecessary to require any re-filing to conform to these requirements. I-REN's original motion already covers the most important and necessary elements. Instead, I-REN will be required to comply with any Commission requirements, including those of D.21-05-031 and any amendments to it, at the

[9] *See* Table 4 and Ordering Paragraph 10 of D.21-05-031.

time it makes its next portfolio filing, assuming it chooses to do so, for program year 2028 and beyond.

3. Comments on Proposed Decision

The proposed decision of ALJ Fitch in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. Comments were filed on November 4, 2021, by the following parties: ABAG and County of Ventura, on behalf of BayREN and 3C-REN, jointly; Cal Advocates; SCE; SoCalGas; and WRCOG on behalf of I-REN.

Reply comments were filed on November 9, 2021 by ABAG and County of Ventura on behalf of BayREN and 3C-REN, respectively (jointly); PG&E; SCE; SoCalGas; and WRCOG on behalf of I-REN.

This section summarizes the main points in parties' comments. Where discussed below, the relevant changes have also been made in the text, findings, or conclusions of the decision, as appropriate.

BayREN and 3C-REN generally advocate for adoption of the proposed decision as drafted. BayREN and 3C-REN also specifically support the exemption for I-REN from the requirement to file a business plan in February 2022.

I-REN's comments express general appreciation for the proposed decision and its recognition of the unique needs of the I-REN geographic area, including the needs of the disadvantaged communities there. I-REN also expresses a commitment to comply with the requirements of the decision, including the filing of an advice letter with its JCM, as well as the filing of implementation plans 60 days after the contracts are finalized with its implementers, as required in D.18-05-041. We agree that this is one of the areas in which I-REN's

requirements should be in alignment with those of the other program administrators for energy efficiency, and we appreciate I-REN's commitment to fulfilling its regulatory responsibilities.

SoCalGas' comments include a number of suggested clarifications to the proposed decision. First, SoCalGas suggests that the budget advice letter filings for I-REN during the 2024-2027 program period be aligned with the requirements of the other program administrators. PG&E agrees with this suggestion in their reply comments. We also agree and have made this clarification in the decision.

In addition, SoCalGas suggests clarification to the manner in which SCE and SoCalGas should reflect the I-REN budget for 2022 and 2023 in their November 1, 2021 advice letter filings. We have made the changes that SoCalGas recommends, which includes a provision for SCE and SoCalGas to file supplemental advice letters with the necessary changes.

SoCalGas also suggests including the requirement for I-REN to file a JCM within 60 days of the effective date of this decision, to ensure more detailed coordination at the program level and a successful launch for I-REN. PG&E, in reply comments, agrees with this suggestion, and asks that statewide administrators with potential program overlaps also be included in the JCM development. SCE, in its reply comments, opposes the JCM requirement, since it diverges from the recently updated JCM requirements for other program administrators, which are now only required to include their JCMs in their annual reports. However, since I-REN is amenable to this suggestion and they are a new program administrator, the importance of coordination with existing program administrators will be valuable. Thus, we have included the requirement in the decision. The JCM is required for program year 2022 with all

program administrators with whom I-REN has overlapping programs, but not statewide programs, as suggested by PG&E, because this would be a new requirement that is not required of any other program administrators. After program year 2022, I-REN should include its JCMs in its annual reports, in the same manner as all other program administrators.

The final issue raised in SoCalGas' comments relates to the allocation of EM&V budget to I-REN. SoCalGas points out that the EM&V budgets are usually calculated as a percentage of the total budget in a particular utility program administrator's territory, and then allocated further. Thus, SoCalGas asks that the EM&V portion of the I-REN budget be removed, and then recalculated by SoCalGas on a proportional basis in its budget advice letter. BayREN and 3C-REN, in reply comments, oppose SoCalGas' proposal to allocate EM&V funds to I-REN only after the total budget is calculated, stating that the utility program administrators should not have primacy to allocate funds to the other non-utility program administrators.

In this situation, I-REN, in its original motion, proposed specific activities for their EM&V budget, which this decision approves. The EM&V budget is a little over 1 percent of their approved portfolio for the program period. Because I-REN is just getting started and has specific funding needs for research and data collection purposes, we direct SoCalGas to simply include the I-REN budgets, including the EM&V portion, in its budget advice letter. This should have minimal impact on SoCalGas' own budget for EM&V, or any other program administrator's EM&V budget. This is because the total EM&V budget is calculated on a percentage basis from the total budgets of all program administrators in a particular utility's service territory based on direction in D.16-08-019. Adding the I-REN total budget to the service territory total will

result in additional EM&V funding overall for all administrators in the same service area to share. I-REN's specific EM&V budget will come out of that total. Should SoCalGas or any other program administrator wish to propose a different funding amount for EM&V activities that they conduct wish to, they can do so in their portfolio applications due next year, for program year 2024 and beyond.

Cal Advocates and SCE, in their comments, and PG&E in its reply comments, argue that the proposed decision's adoption of I-REN's program budget deviates from the guidance given by the Commission for REN budgets in D.19-12-021, referencing D.14-01-033 definitions, which states that "the RENs' budgets should be proportional to the incumbent IOU budgets, in the same territory, for the number of customers served by non-statewide and non-regional programs, while taking into account plans to serve hard-to-reach customers."[10] SCE states that, if the Commission does not reduce the I-REN budget, we should modify this decision to include additional discussion of the evidence on which I-REN's budget is based and explain any new guidance. SoCalGas, in reply comments, also brings up the changes to cost-effectiveness requirements for energy efficiency portfolios as a whole, and seek Commission guidance on the manner in which reasonableness of budgets for RENs will be evaluated going forward.

Cal Advocates further argues that parties have been deprived of due process rights, because the Commission should have given notice and opportunity to be heard on the possibility that the guidance from D.19-12-021 may change.

[10] D.19-12-021 at 39.

We are not making any change to the I-REN total budget in the proposed decision on the basis of these arguments. First, the language in D.19-12-021 is one sentence that contains the word "should" and is otherwise open to broad interpretation depending on the RENs' plans to serve hard-to-reach customers, which is a relevant factor with I-REN. That decision also cites to D.14-01-003, which is a decision addressing CCA requirements; this is why the proposed decision referenced those types of program administrators. The language in D.19-12-021 offered general guidance, does not appear in any findings, conclusions, or ordering paragraphs, and does not represent any hard and fast standard or formula to which the Commission requires any REN proposals to adhere. It also does not state that this is the only criterion the Commission will consider when reviewing budget proposals. The appropriate budget for RENs is and has always been a discretionary decision for the Commission to make. In this proposed decision, the budgets of other similarly-focused and similarly-sized RENs are offered as reasoning for the Commission's approval, but this does not overturn any previous decision language, which was already subject to interpretation by the Commission.

In the case of I-REN, a large part of its budget and its purpose in being proposed is related to serving hard-to-reach and disadvantaged communities, as also pointed out by I-REN, BayREN, and 3C-REN in their reply comments. In this respect, the approved budget operates within the D.19-12-021 guidance, which takes into account plans to serve these communities and their importance in reaching the state's energy and climate goals. We have added findings to support this conclusion, as suggested by SCE. We also note that, as pointed out by BayREN and 3C-REN in reply comments, D.19-12-021, Ordering Paragraph 4, does not limit the REN budget size.

In addition, with respect to the due process arguments, I-REN's proposed budget was one of the primary issues in its motion. Cal Advocates and SCE had the opportunity to and did make arguments that the budget should be reduced in their comments on the record of this proceeding; they were not in any way deprived of the opportunity to do so. Further, this decision does not modify D.19-12-021, though, as noted above, the language in D.19-12-021 is written as guidance only, does not represent an absolute standard, and may be interpreted by the Commission when presented with budget proposals.

We accept SoCalGas' point that, in light of other changes to budget and cost-effectiveness requirements for program administrators overall, including portfolio segmentation approaches covered in D.21-05-031, further consideration of new or additional guidance for the RENs may be warranted. We may take this issue up more holistically in the future in this or a future proceeding, and if we do, we will provide an opportunity for parties to weigh in on any further guidance or requirements.

Cal Advocates also argues, in its comments, that I-REN should be required to submit a new budget application in February 2022 along with other energy efficiency program administrators, for program years 2024 and beyond. Cal Advocates further argues that without this, I-REN's portfolio will not be able to be evaluated for duplication with other program administrators. To address this concern, as stated above, we have already included the requirement for I-REN to negotiate and file a JCM in an advice letter within 60 days of the effective date of this decision, to ensure detailed program coordination with the other administrators.

4. Assignment of Proceeding

Genevieve Shiroma is the assigned Commissioner and Julie A. Fitch and Valerie U. Kao are the assigned ALJs in this proceeding.

Findings of Fact

1. I-REN made its business plan filing via a motion in this proceeding on February 26, 2021 and proposed to begin program activities during mid-late 2021.

2. I-REN's business plan was filed prior to the Commission adopting D.21-05-031.

3. According to the provisions of D.19-12-021, a business plan proposal may be made for Commission consideration by a prospective REN at any time.

4. D.19-12-021 provides guidance to RENs about budget proposals, including taking into account plans to service hard-to-reach customers and disadvantaged communities, but the Commission retains discretion to evaluate the reasonableness of the budget proposal of any prospective REN.

5. I-REN and its local government sponsors have invested significant effort and time over a period of 18 months developing and vetting their business plan proposal.

6. Local government program administrators often have relevant experience dealing with the public sector and codes and standards activities, in particular, and I-REN's lead participants have demonstrated experience in these areas.

7. The geographic area that I-REN proposes to serve with its business plan includes large tracts of disadvantaged communities and income levels that are significantly below the statewide average.

8. The Commission must assign a fiscal and contracting agent utility to handle administration of the budget for each REN.

9. All energy efficiency program administrators are subject to sector and program metrics to help gauge the success of their programs.

10. JCMs are a helpful mechanism to ensure coordination between program administrators serving the same geographic areas at the detailed program level.

Conclusions of Law

1. It would be unreasonable to require I-REN to file another business plan in February 2022 along with the other program administrators, according to the provisions of D.21-05-031, since neither I-REN nor the Commission will have additional information about I-REN's implementation results to evaluate a new proposal by that time and the Commission will have very recently considered this decision.

2. I-REN should be required to make a new portfolio filing along with the other program administrators for program year 2028 and beyond.

3. The Commission's criteria for evaluation of REN proposals were first adopted in D.12-11-015 and later refined in D.19-12-021.

4. I-REN's business plan complies with the requirements of D.12-11-015 and D.19-12-021 for targeting hard-to-reach customers, filling gaps, and complementing other program administrators' portfolios.

5. It is reasonable to approve I-REN's proposal to conduct energy efficiency activities in the areas of the public sector, workforce training and education, as well as codes and standards.

6. It is reasonable to fund EM&V activities as proposed by I-REN to conduct data collection and program planning.

7. The I-REN business plan's focus on equity and serving disadvantaged and underserved communities is welcome and consistent with the Commission's ESJ

Action Plan. I-REN should track the activities associated with the ESJ Action Plan on an ongoing basis.

8. Involving the types of customers and communities that I-REN's business plan will serve is important to help California meet its energy and climate goals.

9. I-REN should continue to coordinate and collaborate with other energy efficiency program administrators to look for synergies, and continue to monitor gaps and overlaps in their program offerings.

10. I-REN should be required to file a JCM for program year 2022 with each of the other program administrators operating within its geographic area, as a Tier 2 Advice Letter within 60 days of the issuance of this decision. JCMs should also be included in I-REN's annual reports beginning with the 2023 program year.

11. I-REN's annual budget proposals for the period 2022-2025 are reasonable in light of the guidance in D.19-12-021 for REN budgets, along with I-REN's plans to serve hard-to-reach customers and disadvantaged communities, and should be approved. The 2025 annual budget represents a mature program effort and should be extended for two more years in 2026 and 2027, to conform I-REN's schedule with that of the other program administrators.

12. I-REN should be required to make a subsequent portfolio proposal filing with the Commission along with the other energy efficiency program administrators according to the terms of D.21-05-031. The current schedule may be modified by the Commission and/or the assigned Commissioner or ALJ, but is currently set for February 2026.

13. It is reasonable to select SoCalGas as the fiscal and contracting agent for I-REN, since it is one of the utilities with an overlapping geography and

portfolio. SoCalGas should coordinate with SCE to transfer the electric portion of the funds to I-REN.

14. SCE and SoCalGas should update their 2022 and 2023 budget advice letter filings and/or supplements to account for I-REN funding approved in this decision, including for EM&V purposes.

15. I-REN should be required to file a full set of sector and program metrics, after taking into account the recommendations of the CAEECC metrics working groups, as well as its portfolio segmentation strategy, by Tier 2 Advice Letter no later than July 1, 2022.

16. With the approval of this decision, I-REN will be considered a full energy efficiency program administrator and should be required to comply with all Commission requirements for program administrators going forward.

O R D E R

IT IS ORDERED that:

1. The February 26, 2021 motion for approval of the Inland Regional Energy Network is granted.

2. The Inland Regional Energy Network shall receive energy efficiency funding in the amounts listed in Table 2, for program years 2022 through 2027. Southern California Edison Company and Southern California Gas Company shall reflect the Inland Regional Energy Network budgets in updates to their program advice letter filings for 2022 and 2023 and subsequent energy efficiency program budget filings.

3. The Southern California Gas Company shall serve as the fiscal and contracting agent for the Inland Regional Energy Network (I-REN) and shall coordinate administratively with Southern California Edison Company for the collection and distribution of the electric funds supporting I-REN's activities.

4. Within 60 days of the issuance of this decision, Inland Regional Energy Network shall file a Tier 2 Advice Letter including its joint cooperation memorandum for 2022 with each of the other energy program administrators serving overlapping geographic areas.

5. Inland Regional Energy Network shall file a Tier 2 advice letter by July 1, 2022, detailing its portfolio segmentation strategy and including final sector and program metrics, informed by the recommendations of the metrics working groups of the California Energy Efficiency Coordinating Committee.

6. Inland Regional Energy Network (I-REN) shall comply with all Commission requirements for energy efficiency program administrators as of the effective date of this decision, including, but not limited to, the requirements in Decisions (D.) 19-12-021 and D.21-05-031, and all reporting requirements. The only exception is that I-REN is exempted from the requirement in D.21-05-031 to make a new portfolio filing in February 2022.

7. Inland Regional Energy Network shall align its budget advice letter filings with the other program administrators' filing schedule, beginning with the September 1, 2023 Portfolio True-Up advice letter covering program years 2024 through 2027.

8. Rulemaking 13-11-005 remains open.

This order is effective today.

Dated November 18, 2021, at San Francisco, California.

MARYBEL BATJER
President
MARTHA GUZMAN ACEVES
CLIFFORD RECHTSCHAFFEN
GENEVIEVE SHIROMA
DARCIE L. HOUCK
Commissioners

WESTERN RIVERSIDE COUNCIL OF GOVERNMENTS
PROFESSIONAL SERVICES AGREEMENT 2023-80-2080-003

1. PARTIES AND DATE.

This Agreement is made and entered into this 21st day of February 2023, by and between the Western Riverside Council of Governments, a California public agency ("WRCOG"), and Frontier Energy, Inc., a California corporation ("Consultant"). WRCOG and Consultant are sometimes individually referred to as "Party" and collectively as "Parties."

2. RECITALS.

2.1 Inland Regional Energy Network

The Inland Regional Energy Network ("I-REN") is a consortium of WRCOG, San Bernardino Associated Governments ("SANBAG") and the Coachella Valley Association of Governments ("CVAG") for the purpose of establishing and operating a locally administered, designed, and delivered energy efficiency program. WRCOG is the administrative lead of I-REN and is responsible for entering into contracts on behalf of I-REN.

2.2 Consultant.

Consultant desires to perform and assume responsibility for the provision of certain professional services required by WRCOG on the terms and conditions set forth in this Agreement. Consultant represents that it is experienced in providing Codes & Standards training, education and technical support programs that meet the needs of the I-REN program as described in the Scope of Services, is licensed in the State of California, and is familiar with the plans of WRCOG.

2.3 Project.

WRCOG desires to engage Consultant to render such professional services for the **I-REN Codes & Standards program** ("Project") as set forth in this Agreement.

3. TERMS.

3.1 Scope of Services and Term.

3.1.1 General Scope of Services. Consultant promises and agrees to furnish to WRCOG all labor, materials, tools, equipment, services, and incidental and customary work necessary to fully and adequately supply the to assist the I-REN team with program design, outreach, implementation, and other tasks related to the development of Codes & Standards training, education, and support programs necessary for the Project ("Services"). The Services are more particularly described in Exhibit "A" attached hereto and incorporated herein by reference, and which are stated in the proposal to WRCOG and approved by I-REN's Executive Committee. All Services shall be subject to, and performed in accordance with, this Agreement, the exhibits attached hereto and incorporated herein by reference, and all applicable local, state and federal laws, rules and regulations.

3.1.2 Term. The term of this Agreement shall be from **February 21, 2023** to

December 31, 2025 with no more than two options to renew or amend unless earlier terminated as provided herein. Consultant shall complete the Services within the term of this Agreement and shall meet any other established schedules and deadlines.

3.2 Responsibilities of Consultant.

3.2.1 Control and Payment of Subordinates; Independent Contractor. The Services shall be performed by Consultant or under its supervision. Consultant will determine the means, methods, and details of performing the Services subject to the requirements of this Agreement. WRCOG retains Consultant on an independent contractor basis and not as an employee. Consultant retains the right to perform similar or different services for others during the term of this Agreement. Any additional personnel performing the Services under this Agreement on behalf of Consultant shall also not be employees of WRCOG and shall at all times be under Consultant's exclusive direction and control. Consultant shall pay all wages, salaries, and other amounts due such personnel in connection with their performance of Services under this Agreement and as required by law. Consultant shall be responsible for all reports and obligations respecting such additional personnel, including, but not limited to, social security taxes, income tax withholding, unemployment insurance, disability insurance, and workers' compensation insurance.

3.2.2 Schedule of Services. Consultant shall perform the Services expeditiously, within the term of this Agreement, and in accordance with the Schedule of Services set forth in Exhibit "B" attached hereto and incorporated herein by reference. Consultant represents that it has the professional and technical personnel required to perform the Services in conformance with such conditions. In order to facilitate Consultant's conformance with the Schedule, WRCOG shall respond to Consultant's submittals in a timely manner. Upon request of WRCOG, Consultant shall provide a more detailed schedule of anticipated performance to meet the Schedule of Services.

3.2.3 Conformance to Applicable Requirements. All work prepared by Consultant shall be subject to the approval of WRCOG.

3.2.4 Substitution of Key Personnel. Consultant has represented to WRCOG that certain key personnel will perform and coordinate the Services under this Agreement. Should one or more of such personnel become unavailable, Consultant may substitute other personnel of at least equal competence upon written approval of WRCOG. In the event that WRCOG and Consultant cannot agree as to the substitution of key personnel, WRCOG shall be entitled to terminate this Agreement for cause. As discussed below, any personnel who fail or refuse to perform the Services in a manner acceptable to WRCOG, or who are determined by the WRCOG to be uncooperative, incompetent, a threat to the adequate or timely completion of the Project, or a threat to the safety of persons or property, shall be promptly removed from the Project by the Consultant at the request of the WRCOG. The key personnel for performance of this Agreement are as follows:

Nancy Barba, Director

3.2.5 WRCOG's Representative. WRCOG hereby designates the Executive Director, or his or her designee, to act as its representative for the performance of this Agreement ("WRCOG's Representative"). WRCOG's Representative shall have the power to act on behalf of WRCOG for all purposes under this Contract. Consultant shall not accept

direction or orders from any person other than WRCOG's Representative or his or her designee.

3.2.6 Consultant's Representative. Consultant hereby designates Nancy Barba, Director, or his or her designee, to act as its Representative for the performance of this Agreement ("Consultant's Representative"). Consultant's Representative shall have full authority to represent and act on behalf of the Consultant for all purposes under this Agreement. The Consultant's Representative shall supervise and direct the Services, using his best skill and attention, and shall be responsible for all means, methods, techniques, sequences, and procedures, and for the satisfactory coordination of all portions of the Services under this Agreement.

3.2.7 Coordination of Services. Consultant agrees to work closely with WRCOG staff in the performance of Services and shall be available to WRCOG's staff, consultants, and other staff at all reasonable times.

3.2.8 Standard of Care; Performance of Employees. Consultant shall perform all Services under this Agreement in a skillful and competent manner, consistent with the standards generally recognized as being employed by professionals in the same discipline in the State of California. Consultant represents and maintains that it is skilled in the professional calling necessary to perform the Services. Consultant warrants that all employees and sub-contractors shall have sufficient skill and experience to perform the Services assigned to them. Finally, Consultant represents that it, its employees and sub-contractors have all licenses, permits, qualifications, and approvals of whatever nature that are legally required to perform the Services, and that such licenses and approvals shall be maintained throughout the term of this Agreement. As provided for in the indemnification provisions of this Agreement, Consultant shall perform, at its own cost and expense, and without reimbursement from WRCOG, SANBAG, and/or CVAG for any services necessary to correct errors or omissions which are caused by the Consultant's failure to comply with the standard of care provided for herein. Any employee of the Consultant or its sub-consultants who is determined by WRCOG to be uncooperative, incompetent, a threat to the adequate or timely completion of the Project, a threat to the safety of persons or property, or any employee who fails or refuses to perform the Services in a manner acceptable to WRCOG, shall be promptly removed from the Project by the Consultant and shall not be re-employed to perform any of the Services or to work on the Project.

3.2.9 Laws and Regulations. Consultant shall keep itself fully informed of and in compliance with all local, state and federal laws, rules and regulations in any manner affecting the performance of the Project or the Services, including all Cal OSHA requirements, and shall give all notices required by law. Consultant shall be liable for all violations of such laws and regulations in connection with Services. If the Consultant performs any work knowing it to be contrary to such laws, rules, and/or regulations, and without giving written notice to WRCOG, Consultant shall be solely responsible for all costs arising therefrom. Consultant shall defend, indemnify, and hold WRCOG, SANBAG, CVAG, their respective Directors, officials, officers, employees, volunteers and agents free and harmless, pursuant to the indemnification provisions of this Agreement, from any claim or liability arising out of any failure or alleged failure to comply with such laws, rules or regulations.

3.2.10 Insurance.

3.2.10.1 Time for Compliance. Consultant shall not commence the Services under this Agreement until it has provided evidence satisfactory to WRCOG that it has

secured all insurance required under this section, in a form and with insurance companies acceptable to WRCOG. In addition, Consultant shall not allow any sub-contractor to commence work on any subcontract until it has provided evidence satisfactory to WRCOG that the sub-contractor has secured all insurance required under this section.

3.2.10.2 Minimum Requirements. Consultant shall, at its expense, procure and maintain for the duration of the Agreement, insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Agreement by the Consultant, its agents, representatives, employees or sub-contractors. Consultant shall also require all of its sub-contractors to procure and maintain the same insurance for the duration of the Agreement. Such insurance shall meet at least the following minimum levels of coverage:

(A) Minimum Scope of Insurance. Coverage shall be at least as broad as the latest version of the following: (1) *General Liability*: Insurance Services Office Commercial General Liability coverage (occurrence form CG 0001 or exact equivalent); (2) *Automobile Liability*: Insurance Services Office Business Auto Coverage (form CA 0001, code 1 (any auto) or exact equivalent); and (3) *Workers' Compensation and Employer's Liability*: Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance.

(B) Minimum Limits of Insurance. Consultant shall maintain limits no less than: (1) *General Liability:* $1,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with general aggregate limit is used, either the general aggregate limit shall apply separately to this Agreement / location or the general aggregate limit shall be twice the required occurrence limit; (2) *Automobile Liability:* $1,000,000 per accident for bodily injury and property damage; and (3) *Workers' Compensation and Employer's Liability:* Workers' Compensation limits as required by the Labor Code of the State of California. Employer's Liability limits of $1,000,000 per accident for bodily injury or disease.

3.2.10.3 Professional Liability. Consultant shall procure and maintain, and require its sub-consultants to procure and maintain, for a period of five (5) years following completion of the Services, errors and omissions liability insurance appropriate to their profession. Such insurance shall be in an amount not less than $2,000,000 per claim. This insurance shall be endorsed to include contractual liability applicable to this Agreement and shall be written on a policy form coverage specifically designed to protect against acts, errors, or omissions of the Consultant. "Covered Professional Services" as designated in the policy must specifically include work performed under this Agreement. The policy must "pay on behalf of" the insured and must include a provision establishing the insurer's duty to defend.

3.2.10.4 Insurance Endorsements. The insurance policies shall contain the following provisions, or Consultant shall provide endorsements on forms supplied or approved by WRCOG to add the following provisions to the insurance policies:

(A) General Liability.

(i) Commercial General Liability Insurance must include coverage for (1) Bodily Injury and Property Damage; (2) Personal Injury / Advertising Injury; (3) Premises / Operations Liability; (4) Products / Completed Operations Liability; (5) Aggregate Limits that Apply per Project; (6) Explosion, Collapse and Underground (UCX) exclusion deleted; (7) Contractual Liability with respect to this Agreement; (8) Broad Form

Property Damage; and (9) Independent Consultants Coverage.

(ii) The policy shall contain no endorsements or provisions limiting coverage for (1) contractual liability; (2) cross liability exclusion for claims or suits by one insured against another; or (3) contain any other exclusion contrary to the Agreement.

(iii) The policy shall give WRCOG, its Directors, officials, officers, employees, volunteers and agents insured status using ISO endorsement forms 20 10 10 01 and 20 37 10 01, or endorsements providing the exact same coverage.

(iv) The additional insured coverage under the policy shall be "primary and non-contributory" and will not seek contribution from WRCOG's, SANBAG's, or CVAG's insurance or self-insurance and shall be at least as broad as CG 20 01 04 13, or endorsements providing the exact same coverage.

(B) Automobile Liability.

(i) The automobile liability policy shall be endorsed to state that: (1) WRCOG, SANBAG, CVAG, their respective Directors, officials, officers, employees, agents and volunteers shall be covered as additional insureds with respect to the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired, or borrowed by the Consultant or for which the Consultant is responsible; and (2) the insurance coverage shall be primary insurance as respects WRCOG, SANBAG, CVAG, their respective Directors, officials, officers, employees, agents, and volunteers, or if excess, shall stand in an unbroken chain of coverage excess of the Consultant's scheduled underlying coverage. Any insurance or self-insurance maintained by WRCOG, SANBAG, CVAG, their respective Directors, officials, officers, employees, agents, and volunteers shall be in excess of the Consultant's insurance and shall not be called upon to contribute with it in any way.

(C) Workers' Compensation and Employers Liability Coverage.

(i) Consultant certifies that he/she is aware of the provisions of Section 3700 of the California Labor Code which requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and he/she will comply with such provisions before commencing work under this Agreement.

(ii) The insurer shall agree to waive all rights of subrogation against WRCOG, its Directors, officials, officers, employees, agents, and volunteers for losses paid under the terms of the insurance policy which arise from work performed by the Consultant.

(D) All Coverages. Defense costs shall be payable in addition to the limits set forth hereunder. Requirements of specific coverage or limits contained in this section are not intended as a limitation on coverage, limits, or other requirement, or a waiver of any coverage normally provided by any insurance. It shall be a requirement under this Agreement that any available insurance proceeds broader than or in excess of the specified minimum insurance coverage requirements and/or limits set forth herein shall be available to WRCOG, SANBAG, CVAG, their respective Directors, officials, officers, employees, volunteers and agents as additional insureds under said policies. Furthermore, the requirements for

coverage and limits shall be (1) the minimum coverage and limits specified in this Agreement; or (2) the broader coverage and maximum limits of coverage of any Insurance policy or proceeds available to the named insured; whichever is greater.

(i) The limits of insurance required in this Agreement may be satisfied by a combination of primary and umbrella or excess insurance. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of WRCOG (if agreed to in a written contract or agreement) before WRCOG's own insurance or self-insurance shall be called upon to protect it as a named insured. The umbrella / excess policy shall be provided on a "following form" basis with coverage at least as broad as provided on the underlying policy(ies).

(ii) Consultant shall provide WRCOG at least thirty (30) days prior written notice of cancellation of any policy required by this Agreement, except that the Consultant shall provide at least ten (10) days prior written notice of cancellation of any such policy due to non-payment of premium. If any of the required coverage is cancelled or expires during the term of this Agreement, the Consultant shall deliver renewal certificate(s) including the General Liability Additional Insured Endorsement to WRCOG at least ten (10) days prior to the effective date of cancellation or expiration.

(iii) The retroactive date (if any) of each policy is to be no later than the effective date of this Agreement. Consultant shall maintain such coverage continuously for a period of at least three years after the completion of the work under this Agreement. Consultant shall purchase a one (1) year extended reporting period A) if the retroactive date is advanced past the effective date of this Agreement; B) if the policy is cancelled or not renewed; or C) if the policy is replaced by another claims-made policy with a retroactive date subsequent to the effective date of this Agreement.

(iv) The foregoing requirements as to the types and limits of insurance coverage to be maintained by Consultant, and any approval of said insurance by WRCOG, is not intended to and shall not in any manner limit or qualify the liabilities and obligations otherwise assumed by the Consultant pursuant to this Agreement, including but not limited to, the provisions concerning indemnification.

(v) If at any time during the life of the Agreement, any policy of insurance required under this Agreement does not comply with these specifications or is canceled and not replaced, WRCOG has the right but not the duty to obtain the insurance it deems necessary, and any premium paid by WRCOG will be promptly reimbursed by Consultant or WRCOG will withhold amounts sufficient to pay premium from Consultant payments. In the alternative, WRCOG may cancel this Agreement. WRCOG may require the Consultant to provide complete copies of all insurance policies in effect for the duration of the Project.

(vi) Neither WRCOG nor any of its Directors, officials, officers, employees, volunteers or agents shall be personally responsible for any liability arising under or by virtue of this Agreement.

3.2.10.5 Separation of Insureds; No Special Limitations. All insurance required by this Section shall contain standard separation of insureds provisions. In addition, such insurance shall not contain any special limitations on the scope of protection afforded to WRCOG, its Directors, officials, officers, employees, agents, and volunteers.

3.2.10.6 Deductibles and Self-Insurance Retentions. Any deductibles or self-insured retentions must be declared to and approved by WRCOG. Consultant shall guarantee that, at the option of WRCOG, either: (1) the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects WRCOG, its Directors, officials, officers, employees, agents, and volunteers; or (2) the Consultant shall procure a bond guaranteeing payment of losses and related investigation costs, claims, and administrative and defense expenses.

3.2.10.7 Acceptability of Insurers. Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII, licensed to do business in California, and satisfactory to WRCOG.

3.2.10.8 Verification of Coverage. Consultant shall furnish WRCOG with original certificates of insurance and endorsements effecting coverage required by this Agreement on forms satisfactory to WRCOG. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf and shall be on forms provided by WRCOG if requested. All certificates and endorsements must be received and approved by WRCOG before work commences. WRCOG reserves the right to require complete, certified copies of all required insurance policies, at any time.

3.2.10.9 Sub-consultant Insurance Requirements. Consultant shall not allow any sub-contractors or sub-consultants to commence work on any sub-contract until they have provided evidence satisfactory to WRCOG that they have secured all insurance required under this section. Policies of commercial general liability insurance provided by such sub-contractors or sub-consultants shall be endorsed to name WRCOG, SANBAG, and CVAG as additional insureds using ISO Form CG 20 38 04 13 or an endorsement providing the exact same coverage. If requested by Consultant, WRCOG may approve different scopes or minimum limits of insurance for particular sub-contractors or sub-consultants.

3.2.11 Safety. Consultant shall execute and maintain its work so as to avoid injury or damage to any person or property. In carrying out its Services, the Consultant shall at all times be in compliance with all applicable local, state, and federal laws, rules, and regulations, and shall exercise all necessary precautions for the safety of employees appropriate to the nature of the work and the conditions under which the work is to be performed. Safety precautions as applicable shall include, but shall not be limited to: (A) adequate life protection and life-saving equipment and procedures; (B) instructions in accident prevention for all employees and sub-contractors, such as safe walkways, scaffolds, fall protection ladders, bridges, gang planks, confined space procedures, trenching and shoring, equipment, and other safety devices, equipment and wearing apparel as are necessary or lawfully required to prevent accidents or injuries; and (C) adequate facilities for the proper inspection and maintenance of all safety measures.

3.3 Fees and Payments.

3.3.1 Compensation. Consultant shall receive compensation, including authorized reimbursements, for all Services rendered under this Agreement at the rates set forth in Exhibit "C" attached hereto and incorporated herein by reference. The total compensation shall not exceed two million three hundred seventy four thousand dollars ($2,374,000) without written approval of I-REN Executive Committee**.** Extra Work may be authorized, as described

below, and, if authorized, said Extra Work will be compensated at the rates and manner set forth in this Agreement.

3.3.2 Payment of Compensation. Consultant shall submit to WRCOG a monthly itemized statement which indicates work completed and hours of Services rendered by Consultant. The statement shall contain the invoice number and date; remittance address; Agreement number XXXX-XX-XXXX-XXX, and invoice total. The statement shall describe the amount of Services and supplies provided since the initial commencement date, or since the start of the subsequent billing periods, as appropriate, through the date of the statement. WRCOG shall, within 45 days of receiving such statement, review the statement and pay all approved charges thereon.

3.3.3 Reimbursement for Expenses. Consultant shall not be reimbursed for any expenses unless authorized in writing by WRCOG.

3.3.4 Extra Work. At any time during the term of this Agreement, WRCOG may request that Consultant perform Extra Work. As used herein, "Extra Work" means any work which is determined by WRCOG to be necessary for the proper completion of the Project, but which the Parties did not reasonably anticipate would be necessary at the execution of this Agreement. Consultant shall not perform, nor be compensated for, Extra Work without written authorization from WRCOG's Representative.

3.3.5 Prevailing Wages. Consultant is aware of the requirements of California Labor Code Sections 1720, et seq., and 1770, et seq., as well as California Code of Regulations, Title 8, Section 16000, et seq., ("Prevailing Wage Laws"), which require the payment of prevailing wage rates and the performance of other requirements on certain "public works" and "maintenance" projects. If the Services are being performed as part of an applicable "public works" or "maintenance" project, as defined by the Prevailing Wage Laws, and if the total compensation is $1,000 or more, Consultant agrees to fully comply with such Prevailing Wage Laws. WRCOG shall provide Consultant with a copy of the prevailing rates of per diem wages in effect at the commencement of this Agreement. Consultant shall make copies of the prevailing rates of per diem wages for each craft, classification, or type of worker needed to execute the Services available to interested parties upon request, and post copies at the Consultant's principal place of business and at the project site. Consultant shall defend, indemnify, and hold WRCOG, its Directors, officials, officers, employees, volunteers, and agents free and harmless from any claims, liabilities, costs, penalties or interest arising out of any failure or alleged failure to comply with the Prevailing Wage Laws.

3.4 Accounting Records.

3.4.1 Maintenance and Inspection. Consultant shall maintain complete and accurate records with respect to all costs and expenses incurred under this Agreement. All such records shall be clearly identifiable. Consultant shall allow a representative of WRCOG during normal business hours to examine, audit, and make transcripts or copies of such records and any other documents created pursuant to this Agreement. Consultant shall allow inspection of all work, data, documents, proceedings, and activities related to the Agreement for a period of three (3) years from the date of final payment under this Agreement.

3.5 General Provisions.

3.5.1 Termination of Agreement.

3.5.1.1 Grounds for Termination. WRCOG may, by written notice to Consultant, terminate the whole or any part of this Agreement at any time and without cause by giving written notice to Consultant of such termination, and specifying the effective date thereof, at least seven (7) days before the effective date of such termination. Upon termination, Consultant shall be compensated only for those services which have been adequately rendered to WRCOG, and Consultant shall be entitled to no further compensation. Consultant may not terminate this Agreement except for cause.

3.5.1.2 Effect of Termination. If this Agreement is terminated as provided herein, WRCOG may require Consultant to provide all finished or unfinished Documents and Data and other information of any kind prepared by Consultant in connection with the performance of Services under this Agreement. Consultant shall be required to provide such documents and other information within fifteen (15) days of the request.

3.5.1.3 Additional Services. In the event this Agreement is terminated in whole or in part as provided herein, WRCOG may procure, upon such terms and in such manner as it may determine appropriate, services similar to those terminated.

3.5.2 Delivery of Notices. All notices permitted or required under this Agreement shall be given to the respective Parties at the following address, or at such other address as the respective parties may provide in writing for this purpose:

Consultant: **Frontier Energy, Inc.**
12949 Alcosta Blvd, Suite 101
San Ramon, CA 94583-1323

WRCOG: **Western Riverside Council of Governments**
3390 University Avenue, Suite 200
Riverside, CA 92501
Attn: Casey Dailey

Such notice shall be deemed made when personally delivered or when mailed, forty-eight (48) hours after deposit in the U.S. Mail, first class postage prepaid and addressed to the Party at its applicable address. Actual notice shall be deemed adequate notice on the date actual notice occurred, regardless of the method of service.

3.5.3 Ownership of Materials and Confidentiality.

3.5.3.1 Documents & Data; Licensing of Intellectual Property. This Agreement creates a non-exclusive and perpetual license for WRCOG to copy, use, modify, reuse, or sub-license any and all copyrights, designs, and other intellectual property embodied in plans, specifications, studies, drawings, estimates, and other documents or works of authorship fixed in any tangible medium of expression, including but not limited to, physical drawings or data magnetically or otherwise recorded on computer diskettes, which are prepared or caused to be prepared by Consultant under this Agreement ("Documents & Data"). Consultant shall require all sub-contractors to agree in writing that WRCOG is granted a non-exclusive and perpetual license for any Documents & Data the sub-contractor prepares under this Agreement. Consultant represents and warrants that Consultant has the legal right to license any and all Documents & Data. Consultant makes no such representation and warranty in regard to Documents & Data which were prepared by design professionals other than Consultant or provided to Consultant by WRCOG. WRCOG shall not be limited in any way in its

use of the Documents & Data at any time, provided that any such use not within the purposes intended by this Agreement shall be at WRCOG's sole risk.

3.5.3.2 Intellectual Property. In addition, WRCOG shall have and retain all right, title, and interest (including copyright, patent, trade secret, and other proprietary rights) in all plans, specifications, studies, drawings, estimates, materials, data, computer programs or software and source code, enhancements, documents, and any and all works of authorship fixed in any tangible medium or expression, including but not limited to, physical drawings or other data magnetically or otherwise recorded on computer media ("Intellectual Property") prepared or developed by or on behalf of Consultant under this Agreement as well as any other such Intellectual Property prepared or developed by or on behalf of Consultant under this Agreement.

WRCOG shall have and retain all right, title and interest in Intellectual Property developed or modified under this Agreement whether or not paid for wholly or in part by WRCOG, whether or not developed in conjunction with Consultant, and whether or not developed by Consultant. Consultant will execute separate written assignments of any and all rights to the above referenced Intellectual Property upon request of WRCOG.

Consultant shall also be responsible to obtain in writing separate written assignments from any sub-contractors or agents of Consultant of any and all right to the above referenced Intellectual Property. Should Consultant, either during or following termination of this Agreement, desire to use any of the above-referenced Intellectual Property, it shall first obtain the written approval of the WRCOG.

All materials and documents which were developed or prepared by the Consultant for general use prior to the execution of this Agreement and which are not the copyright of any other party or publicly available and any other computer applications, shall continue to be the property of the Consultant. However, unless otherwise identified and stated prior to execution of this Agreement, Consultant represents and warrants that it has the right to grant the exclusive and perpetual license for all such Intellectual Property as provided herein.

WRCOG further is granted by Consultant a non-exclusive and perpetual license to copy, use, modify or sub-license any and all Intellectual Property otherwise owned by Consultant which is the basis or foundation for any derivative, collective, insurrectional, or supplemental work created under this Agreement.

3.5.3.3 Confidentiality. All ideas, memoranda, specifications, plans, procedures, drawings, descriptions, computer program data, input record data, written information, and other Documents & Data either created by or provided to Consultant in connection with the performance of this Agreement shall be held confidential by Consultant. Such materials shall not, without the prior written consent of WRCOG, be used by Consultant for any purposes other than the performance of the Services. Nor shall such materials be disclosed to any person or entity not connected with the performance of the Services or the Project. Nothing furnished to Consultant which is otherwise known to Consultant or is generally known, or has become known, to the related industry shall be deemed confidential. Consultant shall not use WRCOG's name or insignia, photographs of the Project, or any publicity pertaining to the Services or the Project in any magazine, trade paper, newspaper, television, or radio production or other similar medium without the prior written consent of WRCOG.

3.5.3.4 Infringement Indemnification. Consultant shall defend, indemnify,

and hold WRCOG, SANBAG, CVAG, their respective Directors, officials, officers, employees, volunteers, and agents free and harmless, pursuant to the indemnification provisions of this Agreement, for any alleged infringement of any patent, copyright, trade secret, trade name, trademark, or any other proprietary right of any person or entity in consequence of the use on the Project by WRCOG of the Documents & Data, including any method, process, product, or concept specified or depicted.

3.5.4 Cooperation; Further Acts. The Parties shall fully cooperate with one another and shall take any additional acts or sign any additional documents as may be necessary, appropriate, or convenient to attain the purposes of this Agreement.

3.5.5 Attorney's Fees. If either Party commences an action against the other Party, either legal, administrative, or otherwise, arising out of or in connection with this Agreement, the prevailing party in such litigation shall be entitled to have and recover from the losing party reasonable attorney's fees and all other costs of such action.

3.5.6 Indemnification. Consultant shall defend, indemnify, and hold WRCOG, SANBAG, CVAG, their respective Directors, officials, officers, consultants, employees, volunteers, and agents free and harmless from any and all claims, demands, causes of action, costs, expenses, liability, loss, damage or injury, in law or equity, to property or persons, including wrongful death, in any manner arising out of or incident to any alleged acts, omissions, or willful misconduct of Consultant, its officials, officers, employees, agents, consultants and contractors, arising out of or in connection with the performance of the Services, the Project or this Agreement, including without limitation the payment of all consequential damages and attorneys' fees and other related costs and expenses. Consultant shall defend, at Consultant's own cost, expense, and risk, any and all such aforesaid suits, actions, or other legal proceedings of every kind that may be brought or instituted against WRCOG, SANBAG, CVAG, their respective i Directors, officials, officers, consultants, employees, agents or volunteers. Consultant shall pay and satisfy any judgment, award, or decree that may be rendered against WRCOG, SANBAG, CVAG or their respective Directors, officials, officers, consultants, employees, agents, or volunteers, in any such suit, action or other legal proceeding. Consultant shall reimburse WRCOG, SANBAG, CVAG and their respective Directors, officials, officers, consultants, employees, agents, or volunteers, for any and all legal expenses and costs, including reasonable attorneys' fees, incurred by each of them in connection therewith or in enforcing the indemnity herein provided. Consultant's obligation to indemnify shall not be restricted to insurance proceeds, if any, received by WRCOG, SANBAG, CVAG, their respective Directors, officials, officers, consultants, employees, agents, or volunteers. This section shall survive any expiration or termination of this Agreement. Notwithstanding the foregoing, to the extent Consultant's Services are subject to Civil Code Section 2782.8, the above indemnity shall be limited, to the extent required by Civil Code Section 2782.8, to claims that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the Consultant.

3.5.7 Entire Agreement. This Agreement contains the entire Agreement of the Parties with respect to the subject matter hereof, and supersedes all prior negotiations, understandings or agreements. This Agreement may only be modified by a writing signed by both Parties.

3.5.8 Governing Law. This Agreement shall be governed by the laws of the State of California. Venue shall be in Riverside County.

3.5.9 Time of Essence. Time is of the essence for each and every provision of

this Agreement.

3.5.10 WRCOG's Right to Employ Other Consultants. WRCOG reserves the right to employ other consultants in connection with this Project.

3.5.11 Successors and Assigns. This Agreement shall be binding on the successors and assigns of the Parties.

3.5.12 Assignment or Transfer. Consultant shall not assign, hypothecate, or transfer, either directly or by operation of law, this Agreement or any interest herein without the prior written consent of WRCOG. Any attempt to do so shall be null and void, and any assignees, hypothecates or transferees shall acquire no right or interest by reason of such attempted assignment, hypothecation or transfer.

3.5.13 Construction; References; Captions. Since the Parties or their agents have participated fully in the preparation of this Agreement, the language of this Agreement shall be construed simply, according to its fair meaning, and not strictly for or against any Party. Any term referencing time, days, or period for performance shall be deemed calendar days and not work days. All references to Consultant include all personnel, employees, agents, and sub-contractors of Consultant, except as otherwise specified in this Agreement. All references to WRCOG include its Directors, officials, officers, employees, agents, and volunteers except as otherwise specified in this Agreement. The captions of the various articles and paragraphs are for convenience and ease of reference only, and do not define, limit, augment, or describe the scope, content, or intent of this Agreement.

3.5.14 Amendment; Modification. No supplement, modification, or amendment of this Agreement shall be binding unless executed in writing and signed by both Parties.

3.5.15 Waiver. No waiver of any default shall constitute a waiver of any other default or breach, whether of the same or other covenant or condition. No waiver, benefit, privilege, or service voluntarily given or performed by a Party shall give the other Party any contractual rights by custom, estoppel, or otherwise.

3.5.16 No Third-Party Beneficiaries. There are no intended third-party beneficiaries of any right or obligation assumed by the Parties.

3.5.17 Invalidity; Severability. If any portion of this Agreement is declared invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.

3.5.18 Prohibited Interests. Consultant maintains and warrants that it has not employed nor retained any company or person, other than a bona fide employee working solely for Consultant, to solicit or secure this Agreement. Further, Consultant warrants that it has not paid nor has it agreed to pay any company or person, other than a bona fide employee working solely for Consultant, any fee, commission, percentage, brokerage fee, gift, or other consideration contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty, WRCOG shall have the right to rescind this Agreement without liability. For the term of this Agreement, no member, Director, officer, official, agent volunteer, or employee of WRCOG, during the term of his or her service with WRCOG, shall have any direct interest in this Agreement, or obtain any present or anticipated material benefit arising therefrom.

3.5.19 Equal Opportunity Employment. Consultant represents that it is an equal opportunity employer, and it shall not discriminate against any sub-contractor, employee, or applicant for employment because of race, religion, color, national origin, handicap, ancestry, sex, or age. Such non-discrimination shall include, but not be limited to, all activities related to initial employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff, or termination. Consultant shall also comply with all relevant provisions of any of WRCOG's Minority Business Enterprise Program, Affirmative Action Plan, or other related programs or guidelines currently in effect or hereinafter enacted.

3.5.20 Labor Certification. By its signature hereunder, Consultant certifies that it is aware of the provisions of Section 3700 of the California Labor Code which requires every employer to be insured against liability for Workers' Compensation, or to undertake self-insurance in accordance with the provisions of that Code, and agrees to comply with such provisions before commencing the performance of the Services.

3.5.21 Authority to Enter Agreement. Consultant has all requisite power and authority to conduct its business and to execute, deliver, and perform the Agreement. Each Party warrants that the individuals who have signed this Agreement have the legal power, right, and authority to make this Agreement and bind each respective Party.

3.5.22 Counterparts. This Agreement may be signed in counterparts, each of which shall constitute an original.

3.6 Subcontracting.

3.6.1 Prior Approval Required. Consultant shall not subcontract any portion of the work required by this Agreement, except as expressly stated herein, without prior written approval of WRCOG. Subcontracts, if any, shall contain a provision making them subject to all provisions stipulated in this Agreement.

[SIGNATURES ON FOLLOWING PAGE]

SIGNATURE PAGE TO

WESTERN RIVERSIDE COUNCIL OF GOVERNMENTS
PROFESSIONAL SERVICES AGREEMENT

IN WITNESS WHEREOF, the Parties hereby have made and executed this Agreement as of the date first written above.

WESTERN RIVERSIDE COUNCIL OF GOVERNMENTS

By: _____
Kurt Wilson
Title: Executive Director

FRONTIER ENERGY, INC

Jean Krausse Jan 20, 2023

By: _____
Jean Krausse
Title: Vice President

APPROVED AS TO FORM:

By: _____
Steven DeBaun
General Counsel
Best Best & Krieger LLP

ATTEST:

Jan 20, 2023

By: _____
Jeremy Springer
Its: Chief Financial Officer

*A corporation requires the signatures of two corporate officers.

One signature shall be that of the Chairman of Board, the President or any Vice President, and the second signature (on the attest line) shall be that of the Secretary, any Assistant Secretary, the Chief Financial Officer or any Assistant Treasurer of such corporation.

If the above persons are not the intended signators, evidence of signature authority shall be provided to WRCOG.

EXHIBIT "A"

SCOPE OF SERVICES

I-REN's Codes & Standards Program Objectives

a. Improve the understanding of energy efficiency codes and standards among local building departments and the building industry to increase implementation and compliance and enforcement.
b. Make code compliance and enforcement a valuable element of the region's energy efficiency goal attainment with engagement regionwide.
c. Deliver locally informed resources and tools that streamline code compliance and enforcement and increase permit closeout.
d. Provide information to local governments on policy tools available at the local level, including reach codes.

SOW 1: Codes & Standards Training & Education Program

This SOW includes professional services for the tasks and deliverables described below, for implementation of I-REN's Codes & Standards Training & Education Program. This program is a non-resource program to establish and implement training and education for building department staff and the building industry to support, understand, and effectively implement energy efficiency codes and standards, including where gaps exist in the Statewide IOU Compliance Improvement program and enforcement activities. The program will also include outreach to engage, educate and involve regional construction firms, architects, industry experts, and building departments, and support compliance and enforcement within regional energy efficiency programs and customers.

To implement the program, the consultant will assist in developing a training curriculum to address gaps in compliance with current requirements and offer ongoing training on changes and trends in codes and standards. The consultant will promote training through I-REN governing agencies' existing marketing channels, through local government partnerships, and through building industry communication networks. The consultant will also collaborate with local governments to design and deliver effective messaging to building departments and private industry during code transitions. It is imperative that the consultant be knowledgeable of existing IOU programs and offerings when developing I-REN's programs to avoid duplication of efforts, which is a requirement of the CPUC.

STRATEGY DEVELOPMENT
The Frontier team provides I-REN with deep expertise in energy program strategy development and technical assistance to help local governments achieve their energy goals. We will draw on recent team perspectives and experience with 3C-REN and the BayREN Codes & Standards program to help I-REN refine existing or design new strategies using the four steps discussed below to maximize the Program's impact.

Research. We will leverage the team's expertise and informational channels, based on decades of Codes and Standards development and local government, utility, and industry relationships, to provide I-REN with cutting edge and technically sound analysis, market characterization, and performance data on advanced energy programs and technologies. This research will encompass major issues at the center of current T24 and local reach code implementation,

such as: heat pumps, renewable generation, and storage technologies; zero emission vehicles; grid integration and demand management strategies; contractor and workforce development; and incentive and financing options. This body of research provides I-REN with an accurate foundational understanding of the market and barriers and opportunities for code compliance and energy policies, on which it can build successful program models.

Design and Refine. The Frontier team can support any type of C&S Program initiative I-REN may elect to pursue. We have designed multiple programs for energy codes and standards implementation, technology commercialization, residential and commercial building retrofits, and building professional education and engagement. We have created program implementation plans, program manuals, program logic models, enrollment and application forms, tracking and reporting processes, and desktop quality assurance and field quality control protocols. We evolve programs through collaboration with embedded/internal and third-party EM&V activities, from technical assistance to trainings to IT solutions.

Implement. Our staff have earned the confidence of our local government partners. We can either lead or provide support to ensure I-REN representatives are fully able to implement program activities. We have in-house resources for technical analysis; events, workshops, and trainings; marketing and outreach; electronic and traditional communications; IT and web development, and data systems and data security. We also understand how and when to support the I-REN representatives based on our work with I-REN since its inception and decades of experience serving similar initiatives in the Bay Area and other local governments.

Measure and Evaluate. The Frontier team understands the importance of defining EM&V activities early during program design. Clearly documenting program goals, objectives, performance targets, and processes not only makes for successful EM&V but for successful programs. We are experienced with systems and tools used by other programs including Salesforce and energyOrbit. We can continue to assist Program development and refinement, drawing on our experience with past successful EM&V collaborations and our deep knowledge of the CPUC Technical and Regulatory process.

COMMUNICATION AND NETWORKING

The Frontier team will further amplify the opportunities and impacts of the C&S Program by ensuring meaningful and regular communication and networking opportunities to increase feedback loops and maximize the impact of program resources. We propose the following efforts to strengthen communication between staff and with other local governments and increase the spread and reach of those communications, both in outgoing channels from I-REN to its stakeholders and in input and feedback loops from those stakeholders to I-REN. We will:

Create a Central Hub. Easy access to current, complete and relevant information will allow I-REN staff the ability to leverage work in other communities to accelerate impact, avoid redundant efforts, and reduce administrative time. We will develop a C&S Intranet that I-REN representatives can use to easily access up-to-date information about regional and statewide C&S efforts, program metrics, committee minutes, internal resources, contact lists, and opportunities to connect with local building departments and building professionals (e.g., local ICC Chapter Meetings). This central location will help C&S county representatives get the latest information and reduce the amount of time they spend opening multiple windows (Google folders, emails, calendars). A public calendar could be added for internal and external events.

Strengthen Communication. Consistent communication platforms and strategies enhance regular communication and access to information. We will use Adobe Connect to create a C&S

"Virtual Meeting Room" to increase collaboration and gather more insight during C&S Committee meetings, and external meetings. Unlike Google Docs, Adobe Connect offers tools to encourage engagement and easily share content.

Make Connections. Access to expertise and information about relevant experiences from other regions and/or sectors create shared learning opportunities and support more action and impact. We will leverage Frontier Energy's and Make Hope Happen's network of local government staff, and industry experts to connect C&S county representatives with potential contacts for presentations at Regional Forums or to committees/ groups.

WHY THIS APPROACH
Past C&S efforts have delivered substantial benefits, and we envision continuing and refining these activities to maximize added value. Moving forward, this vision for the I-REN C&S Program encompasses:

Building a strong foundation for this program. Collaborating with the I-REN team on strategy development to address the most relevant building codes with significant potential savings in the Inland Empire. Prioritizing areas and topics that are of interest to code setting bodies and the authority having jurisdiction (AHJ) will help ensure savings opportunities are realized. I-REN is best positioned continue compliance improvement efforts "on the ground," including targeted compliance efforts and development of electronic compliance infrastructures, to ensure potential savings from advocacy are realized.

Supporting multifaceted objectives. California's diverse energy and climate-related policy goals include energy efficiency, demand reduction, renewable energy, onsite generation, grid connectivity, automated demand response, energy storage capacity, ZNE buildings, water efficiency, public health, zero emission vehicle infrastructure, sustainability, and equity. I-REN is uniquely positioned to accelerate progress toward these goals, with a C&S Program that is designed and implemented to drive and potentially unite these multifaceted objectives at the local level. We believe I-REN and the C&S Program can recognize and pursue activities that have both indirect energy impacts and non-energy benefits while maintaining energy efficiency as a foundational goal, as we have seen first-hand how this can be accomplished.

Task 1.1: Program Design

The consultant will provide leadership for program design activities in collaboration with the I-REN team. The program's design must be aligned with I-REN's Energy Efficiency Business Plan (I-REN BP),[1] CPUC Decision 21-11-013 approving the I-REN BP,[2] and all other applicable requirements for REN energy efficiency programs. The consultant will be responsible for each activity listed below:

- Conduct a kick-off meeting with the I-REN Team within two weeks of final contract execution.
- Develop a program delivery model that supports I-REN's goals for the Training & Education Program, overcomes public and private sector participation barriers, and prioritizes service to vulnerable communities.

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- Support I-REN in engaging with local and regional stakeholders to ensure the program design fits the needs of local governments and other stakeholders in the region.
- Define program eligibility guidelines and program team roles; document program processes and procedures.
- Establish coordination process with other I-REN energy efficiency programs, services, and implementers, e.g., the Codes & Standards Technical Support Program included in this RFP, to maximize program participation and benefits to customers.
- Identify administrators of other Codes & Standards programs and related offerings in the region and establish coordination process to assist I-REN public and private sector customers with enrolling and participating in those programs.
- Develop participant forms and other collateral.
- Conduct regular (e.g., weekly or biweekly) meetings with I-REN to provide status updates.
- Assist I-REN in the facilitation of a regularly scheduled Codes & Standards Working Group meeting.
- Track and document quantifiable measures to be used to report the successes of the programs.
- Whenever possible, incorporate existing successful models and programs into the I-REN program portfolio.

Deliverables:

- Develop a kick-off meeting agenda and notes and execute the meeting with the assistance of the I-REN team.
- Work with I-REN staff to develop key program documents which are crucial to getting the program on the right track from the start. The Frontier team will develop a Program Manual and Implementation Plan content in compliance with regulatory requirements. This will also include a definition of program eligibility guidelines, Program team roles and responsibilities, a program process flow diagram, and a logic model. When possible, Frontier will identify existing successful models of other programs and incorporate those practices into the I-REN program portfolio.
- Construct a program delivery model focused on the goals of the program, which includes overcoming public and private sector barriers for participation and puts a strong emphasis on service to vulnerable and disadvantaged communities. This will include supporting I-REN in engaging with local and regional stakeholders to ensure that the program design is fitting their needs. Their feedback will be critical in identifying those barriers and finding the best path forward.
- Utilizing our experience with similar programs, the Frontier team will assist the I-REN team in developing streamlined participant forms and other collateral which make involvement in the program as user-friendly as possible. This includes identifying administrators and processes of other Codes & Standards programs and related offerings in the region, so that we can assist public and private sector customers with any questions they might have about enrollment or participation in those programs.
- Critical to improving the program and molding the future of Codes & Standards in the region, the Frontier Team will provide monthly and quarterly status reports with all quantifiable measures to report the successes and areas of improvement of the programs. This will also include weekly meeting agendas and status updates, and any other ad hoc requests from the I-REN team.

Task 1.2: Outreach & Engagement

Program-specific marketing, outreach, and stakeholder engagement activities will be led by the consultant in collaboration with I-REN staff, I-REN's marketing consultant, and other I-REN program implementers as applicable. The consultant will be responsible for each activity listed below:

- Review existing I-REN branding, marketing strategies, templates, and other relevant materials and recommend needed changes.
- Recommend and assist in the development of marketing and outreach collateral in various formats targeted to Codes & Standards customer audiences.
- Develop culturally specific strategies to reach communities where language, socio-economic status, race, ethnicity, etc. have historically been a barrier.
- Assist in the development of marketing content for e-communicators, social media, and other channels to promote the training sessions, online Code Hub and building professionals' regional forums.
- Support outreach to potential speakers and presenters.
- Identify and implement strategies for outreach to local jurisdictions and agencies and building professionals to educate them about the program offerings, e.g., providing presentations at meetings and with key decision makers.
- Identify Codes & Standards champions and build relationships with them.
- Set targets and milestones for outreach and engagement (including hard-to-reach communities) and report on progress.

- Conduct regular (e.g., weekly, or biweekly) meetings with I-REN to provide status updates.

Deliverables:

- Upon contract execution, the Frontier team will review existing I-REN branding, marketing strategies, templates, and other relevant materials to determine which areas need to be prioritized for updating. The Frontier team will then make recommendations and assist in developing the necessary marketing and outreach collateral that is designed to target the customer audiences identified for Codes & Standards. This will include strategies to educate local jurisdictions, agencies, and building professionals to ensure they're up-to-date on program offerings. Frontier is experienced in collaborating with marketing firms to ensure program-specific materials align with overall REN communications and branding.
- The Frontier team puts a high priority on developing and successfully executing a strategy to engage and involve communities where language, socio-economic status, race, ethnicity, and gender have been a barrier. Frontier will engage with local Non-Government Organizations and regional stakeholders to identify these barriers from the people who are experiencing them and collaborate with the I-REN team to roll out a plan to reach those communities and involve them in shaping Codes & Standards.
- Our team will also prioritize identifying and involving key success stories and allies, such as Codes & Standards Champions, potential speakers and presenters, and case studies that highlight local wins we can use to create buy-in with the community. This will include an emphasis on finding such champions and success stories within the disadvantaged communities.
- Pulling from our team of experienced content creators, Frontier will develop an outreach plan to engage with local and regional stakeholders. This plan will utilize e-newsletters, social media, and other channels to promote Codes & Standards resources, but will also heavily emphasize a Code Hub where industry professionals can share best practices and collaborate. The Code Hub will also have a listing of events, resources, and tools for local governments and building professionals.
- The Frontier team will provide monthly and quarterly status reports with all quantifiable measures to report the successes and areas of improvement of the programs. This will also include weekly meeting agendas and status updates, and any other ad hoc requests from the I-REN team.

Task 1.3: Program Implementation

The consultant will lead all Training & Education Program implementation activities in coordination with the I-REN team. The consultant will develop a training curriculum to address gaps in compliance with current Codes & Standards requirements and changes and trends in Codes & Standards. The consultant will assist I-REN in supporting local governments and the building industry during transitions to new codes to deliver effective messaging and resources and increase timely compliance with updated requirements. The consultant will also foster the development of an online Code Hub community for sharing best practices amongst building departments and the building industry and assist with coordination of Regional Forums. The consultant will be responsible for each activity listed below:

- Deliver a minimum of four training sessions and one Regional Forum per year in each of I-REN's subregions.
- Collate information from attendee surveys following each training session.

- Perform updates of training module content and delivery mechanisms to ensure trainings are responsive to key target audience needs.
- Support participation in online training modules.
- Support coordination with International Code Council (ICC), and any required curriculum updates, to facilitate the ability of I-REN to award Continuing Education Units to attendees of I-REN trainings.
- Track and provide information on California and national codes, including updates to Title 24 Parts 6 (California Energy Code) and 11 (California Green Building Standards Code).
- Perform updates to training curriculums to reflect adopted changes to Title 24 Parts 6 and 11.
- Collect, report, and maintain metrics relative to training and education, including numbers of sessions, numbers of and contact information for attendees, and other relevant metrics as needed.
- Provide recommendations, based on analysis of metrics and knowledge of the field, for improvements to I-REN's training program and topics for potential new training sessions.
- Consistent with available budget and direction from I-REN, develop new training modules for in-person or online delivery.
- Conduct regular (e.g., weekly or biweekly) meetings with I-REN to provide status updates.

Deliverables:

- The Frontier team will develop a Training & Education Program Implementation Plan that includes timeframe/schedule, roles and responsibilities and proposed curriculum. This plan will also include a strategy to promote online training modules for local jurisdictions and building professionals and updates to the training modules and delivery mechanisms to ensure that the trainings are responsive to key target audience needs. Consistent with available budget and direction from I-REN, Frontier will develop new training modules for in-person or online delivery.
- Part of developing accurate training modules will be coordinating with the International Code Council and ensuring that any required curriculum updates are included to ensure the ability of I-REN to offer Continuing Education Units to attendees of I-REN trainings. Frontier will track and provide information on California and national codes, including updates to Title 24 Parts 6 and 11, which will be included in any updates to the training curriculum.
- Drawing from our experience at IHACI and coordinating online forums for contractors and building departments and jurisdictions, Frontier will deliver a minimum of 12 training sessions and three Regional Forums per year throughout the I-REN territory. This will include assistance with event logistics, and follow-up activities, documentation of participant interaction, and our team will collate information from the attendees following each event.
- Frontier will collect, report, and maintain metrics relative to training and education, including numbers of sessions, numbers of and contact information for attendees, and other relevant metrics as needed. Based on this data, Fronter will provide recommendations for improvements to I-REN's training program and topics for potential new training sessions.
- The Frontier team will provide monthly and quarterly status reports with all quantifiable measures to report the successes and areas of improvement of the programs. This will also include weekly meeting agendas and status updates, and any other ad hoc requests from the I-REN team.

Task 1.4: Other Services

The consultant will also be responsible for the activities listed below:

- Provide program-specific content and/or review of content as needed for I-REN regulatory documents and filings, e.g., Joint Cooperation Memorandum (JCM), Annual Report, Portfolio True-Up and Mid-Cycle Review Advice Letters, and responses to evaluator and intervenor data requests.
- Collect program data to inform CPUC reporting, program metrics, targets, indicators, and other measures of program performance.
- Contribute to program performance analysis and evaluation, measurement, and verification (EM&V) activities for tracking program achievements and informing continuous improvement.

Deliverables:

- Develop program-specific content and edits or updates to content for I-REN regulatory filings.
- Provide program data in alignment with CPUC reporting templates.
- Document metrics, indicators, and other performance measurements.
- Provide analysis of program performance and recommendations for future program improvements.

SOW 2: Codes & Standards Technical Support Program

This SOW includes professional services for the tasks and deliverables described below, for implementation of I-REN's Codes & Standards Technical Support Program. This program is a non-resource program to develop technical assistance tools and resources to assist building departments and the building industry with understanding, evaluating, and permitting the energy codes to support improved enforcement and compliance. I-REN will also develop regionally appropriate model ordinances, vet and refine them with participating local governments, provide ongoing technical assistance for adoption and implementation, and deliver model ordinance updates to reflect the triennial code cycle.

To implement the program, the consultant will assist in developing technical assistance tools and resources to assist building departments and the building industry with understanding, evaluating, and permitting the energy codes. This includes suggesting strategy, conducting research, designing programs and services, and supporting implementation of programs and services to increase energy code compliance rates. The consultant will promote training through I-REN governing agencies' existing marketing channels, through local government partnerships, and through building industry communication networks. The consultant will also assist I-REN in improving consistency in code enforcement and compliance resources across the region by facilitating cooperation among local governments.

The goal of the Technical Support program is to support local jurisdictions in hard-to-reach, disadvantaged, underserved, and environmental and social justice communities by delivering locally informed resources and tools that streamline code compliance and enforcement and increase permit closeout. This program will coordinate with local and statewide programs in providing technical assistance and layer efforts to maximize the benefits attainable in the region.

The Team will design a set of technical assistance tools and resources to assist building departments and the building industry with understanding, evaluating, and permitting the energy codes to support improved enforcement and compliance. In consultation with I-REN and their partners, the Team will conduct program assessments to understand the value of, and barriers to implementing compliance improvement activities together with findings and recommended changes and improvements; and strategic action plants that will be informed by market trends and local or statewide policies, to increase energy code compliance rates and align with I-REN direction, the C&S Implementation Plan, and I-REN Business Plan. The consultant will promote training through I-REN governing agencies' existing marketing channels, through local government partnerships, and through building industry communication networks. The team will leverage existing resources, such as permitting guides, permitting e-tools, load calculators, reference sheets, permitting checklists, and will be customized to fit the needs of the jurisdiction.

The Team's proposes to engage jurisdictions interested in advancing their activities related to climate change through targeted and tailored energy efficiency approaches defined in one of the following plans or documents: climate action plans, community development plans, local and regional resiliency plans, local building stocks and climate conditions, and local workforce capabilities and needs. The team will work with Making Hope Happen Foundation, Inland SoCal Housing Collective, and Inland Equity Partnership to provide boots-on-the ground engagement with jurisdictions.

Stakeholder input and discussion of technical, policy, and operational processes will be vital to the successful adoption and implementation of ordinances and energy code that advance local climate goals. The Team has been successful with a three-prong stakeholder engagement strategy deployed during phases of model reach code development and energy code updates that ensures stakeholders understand project opportunities and concerns.

Identification of key stakeholders. The Team, in coordination with I-REN and its partners, will leverage existing contacts to identify key stakeholders. The Team will work with I-REN to define timeline, specific objectives for engaging individual groups, and general desired outcomes. This process will be completed in a meeting with I-REN and/or local jurisdictions.

Conduct outreach and engagement. The Team, along with Making Hope Happen Foundation, Inland SoCal Housing Collective, and Inland Equity Partnership, will support I-REN to solicit stakeholders to engage in proposed meetings, charrettes, trainings. To ensure that a broad range of people attend these events, the Team will use client recommendations, social media channels, and their own contacts with industry associations to drive attendance to events and share content. This effort underpins having the right stakeholders present and engaged in the process to build support.

Share information and obtain feedback. The Team will support I-REN to engage diverse groups that can contribute to or will be affected by new ordinances or energy code changes to provide balanced input in code development and enforcement. Based on experience, important constituents for this process include code councils, developers, energy experts, community-based organizations, apartment associations, and economic and community development organizations. The Team will collaborate with I-REN to identify other organizations and constituent groups. The Team will work with I-REN and its partners to evaluate approaches for balancing the level of engagement from stakeholder groups during project phases, including: Larger public meetings focused on in-person information sharing but with a remote option. Small meetings with key organizations to build greater support for the process and approach. Small internal meetings with jurisdiction and appropriate councils.

Electronic distribution of materials (potentially with the inclusion for electronic comment).

The Team will support meeting facilitation to elicit feedback, document comments and questions, and provide notes and summaries of findings from stakeholder outreach. This three-pronged approach will be applied to each specific activity, as discussed below.

Lead Development of Model Reach Codes
Engage stakeholders to gain broad support and understand concerns to inform a draft of model reach codes. While this process will not capture the nuances of each jurisdiction, it will capture consistent and important conditions for implementation within the region. The Team will:
Support initial stakeholder engagement, draft stakeholder interview questions, and attend initial stakeholder meeting and up to six organizational meetings of specific groups.
Support stakeholder feedback process on draft model codes and attend charrettes and final stakeholder meeting.

Identify Tools and Processes for Adoption and Implementation
The Team will engage jurisdictions' stakeholders who will be involved in local adoption and implementation processes to obtain feedback on development and drafts of tools and templates. To streamline this process, a select number of jurisdictions will be targeted collaboratively with I-REN.

Develop Cost-Benefit Analysis
Test assumptions in the cost-benefit analysis with a target group of stakeholders to support a productive charrette and stakeholder engagement process for reach code development. Considerations that could be vetted may include, but are not limited to, costs for new construction or costs for remodel scope.

Provide Technical Assistance for Municipalities for Code Adoption
Conduct internal engagement from specified personnel at interested jurisdictions and a public stakeholder process to understand the specific code application for the jurisdiction and determine the ordinance requirements, triggers, and target for the local ordinance. The Team will coordinate with I-REN to identify jurisdictions and work with jurisdictional leads to identify local stakeholders. The Team will coordinate with jurisdictional staff to refine the ordinance to account for local processes and provide information for council/board and public meetings. The Team will support presentations about the specific ordinance structure, answer technical questions, and create a framework to obtain feedback for implementation. The Team will work with the jurisdiction to respond to meeting comments and incorporate feedback into a revised ordinance as needed.

Provide Technical Assistance for Municipalities for Code Implementation
Stakeholder engagement will focus on clear communication and accessible implementation for internal and external stakeholders who will be impacted by implementation and compliance with the ordinance. The Team will coordinate with jurisdictional staff to define the stakeholder groups and deliver trainings that will focus on the specific impacted building types and address the topics proposed, including:

<u>Overview and Technical Requirements.</u> The audience for this training will be key stakeholders, public professionals, and city staff who will benefit from understanding of ordinance and energy code (i.e., zoning, customer service staff, building department staff, sustainability department staff, etc.). The training will also provide general education to broader internal stakeholders and public stakeholders to support increased compliance and awareness. Training content may

include but not be limited to:
Overview and key components of ordinance and/or energy code.
Communication of ordinance requirements to stakeholders.
General education of benefits.
Technical review of ordinance requirement and standards.

Operational and Implementation Training. The audience for this training will be plan checkers, building inspectors, and other building department staff who will implement the ordinance and/or energy code. The training will support implementation staff as they learn compliance processes and work with permit applicants to ensure consistent application and a high level of compliance. Training content may include, but not be limited to:
Required compliance at appropriate stages in permit application (planning/zoning, building, etc.).
Review of compliance elements for plan check and field inspections.
Tools and processes required for implementation, including tracking process, permit triggers, compliance, and compliance documentation.
Process and documentation for enforcement of ordinance and energy code.

Task 2.1: Program Design

The consultant will provide leadership for program design activities in collaboration with the I-REN team. The program's design must be aligned with I-REN's Energy Efficiency Business Plan (I-REN BP),[3] CPUC Decision 21-11-013 approving the I-REN BP,[4] and all other applicable requirements for REN energy efficiency programs. The consultant will be responsible for each activity listed below:

- Conduct a kick-off meeting with the I-REN team within two weeks of final contract execution.
- Develop a program delivery model that supports I-REN's goals for the Technical Support Program, overcomes public and private sector participation barriers, and prioritizes service to vulnerable communities.
- Support I-REN in engaging with local and regional stakeholders to ensure the program design fits the needs of local governments and other stakeholders in the region.
- Define program eligibility guidelines and program team roles; document program processes and procedures.
- Establish coordination process with other I-REN energy efficiency programs, services, and implementers, e.g., the Codes & Standards Training & Education Program included in this RFP, to maximize program participation and benefits to customers.
- Identify administrators of other Codes & Standards programs and related offerings in the region and establish coordination process to assist I-REN public and private sector customers with enrolling and participating in those programs.
- Develop participant forms and other collateral.
- Conduct regular (e.g., weekly or biweekly) meetings with I-REN to provide status updates.
- Assist I-REN in the facilitation of a regularly scheduled Codes & Standards Working Group meeting.

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- Track and document quantifiable measures to be used to report the successes of the programs.
- Whenever possible, incorporate existing successful models and programs into the I-REN program portfolio.

Deliverables:

- Develop a kick-off meeting agenda and notes and execute the meeting with the assistance of the I-REN team.
- Work with I-REN staff to develop key program documents which are crucial to getting the program on the right track from the start. The Frontier team will develop a Program Manual and Implementation Plan content. This will also include a definition of program eligibility guidelines, Program team roles and responsibilities, a program process flow diagram, and a logic model. When possible, Frontier will identify existing successful models of other programs and incorporate those practices into the I-REN program portfolio.
- Construct a program delivery model focused on the goals of the program, which includes overcoming public and private sector barriers for participation and puts a strong emphasis on service to vulnerable and disadvantaged communities. This will include supporting I-REN in engaging with local and regional stakeholders to ensure that the program design is fitting their needs. Their feedback will be critical in identifying those barriers and finding the best path forward.
- Utilizing our experience with similar programs, the Frontier team will assist the I-REN team in developing streamlined participant forms and other collateral which make involvement in the program as user-friendly as possible. This includes identifying administrators and processes of other Codes & Standards programs and related offerings in the region, so that we can assist public and private sector customers with any questions they might have about enrollment or participation in those programs.
- Critical to improving the program and molding the future of Codes & Standards in the region, the Frontier Team will provide monthly and quarterly status reports with all quantifiable measures to report the successes and areas of improvement of the programs. This will also include weekly meeting agendas and status updates, and any other ad hoc requests from the I-REN team.

Task 2.2: Outreach & Engagement

Program-specific marketing, outreach, and stakeholder engagement activities will be led by the consultant in collaboration with I-REN staff, I-REN's marketing consultant, and other I-REN program implementers as applicable. The consultant will be responsible for each activity listed below:

- Review existing I-REN branding, marketing strategies, templates, and other relevant materials and recommend needed changes.
- Recommend and assist in the development of marketing and outreach collateral in various formats targeted to Codes & Standards customer audiences.
- Develop culturally specific strategies to reach communities where language, socio-economic status, race, ethnicity, etc. have historically been a barrier.
- Assist in the development of marketing content for e-communicators, social media, and other channels to promote the Technical Support Program.

- Identify and implement strategies for outreach to local jurisdictions and agencies and building professionals to educate them about the program offerings, e.g., providing presentations at meetings and with key decision makers.
- Collaborate with local governments, tribes, and special districts and building professionals to design and deliver messaging to the community to promote local leadership in Codes & Standards compliance by highlighting local success stories.
- Set targets and milestones for outreach and engagement (including hard-to-reach communities) and report on progress.
- Conduct regular (e.g., weekly or biweekly) meetings with I-REN to provide status updates.

Deliverables:

- Upon contract execution, the Frontier team will review existing I-REN branding, marketing strategies, templates, and other relevant materials to determine which areas need to be prioritized for updating. The Frontier team will then make recommendations and assist in developing the necessary marketing and outreach collateral that is designed to target the customer audiences identified for Codes & Standards. This will include strategies to educate local jurisdictions, agencies, and building professionals to ensure they're up-to-date on program offerings.
- The Frontier team puts a high priority on developing and successfully executing a strategy to engage and involve communities where language, socio-economic status, race, ethnicity, and gender have been a barrier. Frontier will engage with local Non-Government Organizations and regional stakeholders to identify these barriers from the people who are experiencing them and collaborate with the I-REN team to roll out a plan to reach those communities and involve them in shaping Codes & Standards. The team will set key performance metrics to ensure accountability for engaging hard-to-reach communities.
- Our team will also prioritize identifying and involving key success stories and allies, such as Codes & Standards Champions, and case studies that highlight local wins we can use to create buy-in with the community. This will include an emphasis on finding such champions and success stories within the disadvantaged communities.
- Pulling from our team of experienced content creators, Frontier will develop an outreach plan to engage with local and regional stakeholders. This plan will utilize e-newsletters, social media, and other channels to promote Codes & Standards resources, but will also heavily emphasize a Code Hub where industry professionals can share best practices and collaborate. The Code Hub will also have a listing of events, resources, and tools for local governments and building professionals.
- The Frontier team will provide monthly and quarterly status reports with all quantifiable measures to report the successes and areas of improvement of the programs. This will also include weekly meeting agendas and status updates, and any other ad hoc requests from the I-REN team.

Task 2.3: Program Implementation

The consultant will lead all Technical Support Program implementation activities in coordination with the I-REN team. The consultant will help I-REN address the areas of greatest need for improved code compliance, in collaboration with local governments and the building industry. The consultant will also provide general support for reach code development and implementation. The consultant will be responsible for each activity listed below:

- Develop and deploy effective survey instruments to gather data and use that data to inform the design of resources to assist building departments and industry professionals.
- Work with local jurisdictions' permit systems and data.
- Work with local jurisdictions, CEC, CALBO, HERS providers, and other key stakeholders on Title 24 Parts 6 and 11 documentation.
- Promote web and mobile permitting tools (e.g., SolarAPP+, CodeCycle) in training sessions and outreach materials.
- Promote use of permit guides or other materials (e.g., checklists, frequently asked questions, e-newsletters) to improve regional best practices for compliance improvement, including:
    a. Support distribution and placement of guides for public and staff use with local building departments;
    b. Update guides as necessary based upon feedback from users and participating agencies and businesses;
    c. Consistent with available budget and I-REN direction, create new guides or other materials for priority areas of compliance improvement.
- Develop training curriculum to address gaps in compliance with current Codes & Standards requirements, in coordination with the Codes & Standards Training & Education Program included in this RFP.
- Assist in developing model reach code ordinances for each Inland Empire climate zone; consistent with available budget and direction from I-REN, tailor ordinances for specific cities based on their building stock, calculate energy, cost and GHG reductions, document cost-effectiveness studies, and prepare adoption, outreach, and implementation materials, in each case using materials developed by the Statewide Codes & Standards Program where available.
- Track and provide information on California and national grant funding opportunities that support improved code compliance.
- Collaborate with local governments, tribes, and special districts and building professionals to design and deliver messaging to the community to promote local leadership in Codes & Standards compliance by highlighting local success stories.
- Collect and analyze metrics for all compliance improvement activities and use the results to suggest changes and improvements.
- Conduct regular (e.g., weekly or biweekly) meetings with I-REN to provide status updates.

Deliverables:

- Develop survey instruments.
- Provide training programs in coordination with the Codes & Standards Training & Education Program included in this RFP.
- Develop permit guides.
- Assist with reach code adoption and implementation materials.
- Provide documentation of participant interactions.
- Provide bi-annual reports on compliance improvement efforts, including metrics and recommendations for program improvement.
- Provide monthly and quarterly status reports.
- Conduct regular biweekly meetings.
- Provide meeting agendas and status updates.
- Provide summaries on California and national grant funding opportunities.

Task 2.4: Other Services

The consultant will also be responsible for the activities listed below:

- Provide program-specific content and/or review of content as needed for I-REN regulatory documents and filings, e.g., Joint Cooperation Memorandum (JCM), Annual Report, Portfolio True-Up and Mid-Cycle Review Advice Letters, and responses to evaluator and intervenor data requests.
- Collect program data to inform CPUC reporting, program metrics, targets, indicators, and other measures of program performance.
- Contribute to program performance analysis and evaluation, measurement and verification (EM&V) activities for tracking program achievements and informing continuous improvement.

Deliverables:

- Provide program-specific content and edits or updates to content for I-REN regulatory filings.
- Provide program data in alignment with CPUC reporting templates.
- Document and provide metrics, indicators, and other performance measurements.
- Provide analysis of program performance and recommendations for future program improvements.

EXHIBIT "B"

SCHEDULE OF SERVICES

Timeline for SOW 1: Proposed timeline per RFP, I-REN was interested in having a "soft launch" of one or more of its programs by the end of 2022, with full deployment for 2023.

	2022	2023				2024				2025			
	Q4	Q1	Q1	Q1	Q4	Q1	Q1	Q1	Q4	Q1	Q1	Q1	Q4
Contract Execution													
Task 1.1 Program Design													
Program Implementation Manual													
Program Manual													
1st Stakeholder & Organizational Meetings													
Program Delivery Model													
Monthly and Quarterly status reports													
Task 1.2 Outreach & Engagement													
Review existing branding & marketing strategies													
Recommendations and assist in developing new materials													
Develop Outreach Plan													
Develop and implement plan to involve non-English speaking and DACs													
Engage with non-English speaking & DACs to gather barriers and feedback.													
Identify success stories, champions, speakers/presenters, and local wins.													
Monthly and quarterly status reports													
Task 1.3 Program Implementation													
T&E Program Implementation Plan													
Plan and Implement Trainings and forums.													
Collect and provide report on metrics relative to T&E.													
Provide monthly and quarterly status reports.													
Task 1.4 Other Services													
Develop content for I-REN regulatory filings.													
Provide program data for CPUC reporting templates.													
Document performance measurements.													
Provide analysis of program performance													

Timeline for SOW 2: Proposed timeline per RFP, I-REN was interested in having a "soft launch" of one or more of its programs by the end of 2022, with full deployment for 2023. Major external dates of significance (i.e., the 2025 Title 24 update cycle) are noted. The Team will work with I-REN and its partners during project scoping to define an appropriate and responsive schedule to meet sponsoring local jurisdictions' needs. A proposed schedule is provided below based on general timelines for 2022 code adoption. Critical factors that will impact schedule refinement may include ability to leverage existing cost-effectiveness studies; need to coordinate with any program administrators for incentive-based codes; and feasibility of reaching various levels of stringency targeted by I-REN, its partners, or stakeholders.

	2022	2023				2024				2025			
	Q4	Q1	Q1	Q1	Q4	Q1	Q1	Q1	Q4	Q1	Q1	Q1	Q4
Contract Execution													
Task 2.1 Program Design													
Program Implementation Manual													
Program Manual													
1st Stakeholder & Organizational Meetings													
Program Delivery Model													
Monthly and Quarterly status reports													
Task 2.2 Outreach & Engagement													
Review existing branding & marketing strategies													
Recommendations and assist in developing new materials													
Develop Outreach Plan													
Engage with non-English speaking & DACs to gather barriers and feedback.													
Develop and implement plan to involve non-English speaking & DACs													
Identify success stories, champions, speakers/presenters, and local wins.													
Monthly and Quarterly status reports													
Task 2.3 Program Implementation													
Assist jurisdictions with energy code compliance and enforcement													
Research Existing Codes													
1st Stakeholder & Organizational Meetings for code compliance and reach code adoption													
Establish Model Ordinance Framework													
Draft Model Codes													
Develop Survey Instruments													
Conduct Periodic Surveys													
Develop Permit Guides at the request of local jurisdictions.													
Leverage general templates customizing to meet local needs, requirements, and goals for implementation.													
Develop Cost Effectiveness Analysis													
Identify Reach Code Implementation Tools/Processes													
Assist in reach code adoption													
Provide documentation of participant interactions													
Provide bi-annual reports on compliance improvement efforts													
Charrettes & 2nd Stakeholder Meeting for model ordinance													
Final Draft Model Codes													

	2022	2023				2024				2025			
	Q4	Q1	Q1	Q1	Q4	Q1	Q1	Q1	Q4	Q1	Q1	Q1	Q4
Local Stakeholder Engagement (as needed) for model ordinances													
Engage key stakeholders in readings for reach code approval													
CEC Model Ordinance Application/Approval													
File Model Ordinance with California Building Standards Commission													
Provide monthly and quarterly status reports. Conduct biweekly meetings, and summaries on grant funding opportunities.													
Task 2.4 Other Services													
Develop content for I-REN regulatory filings.													
Provide program data for CPUC reporting templates.													
Document performance measurements.													
Provide analysis of program performance													

EXHIBIT "C"

COMPENSATION
BILLING RATES

Budget for SOW 1

	Estimated Hours by Year				Estimated Labor Cost by Year				Estimated Direct Cost by Year				Total Estimated Cost by Year			
	2022	*2023*	*2024*	*2025*	*2022*	*2023*	*2024*	*2025*	*2022*	*2023*	*2024*	*2025*	***2022***	***2023***	***2024***	***2025***
Task 1.1: Program Design	220	346	326	272	$33,350	$54,082	$51,624	$39,928	$3,000	$2,000	$ 2,000	$ -	**$36,350**	**$56,082**	**$53,624**	**$39,928**
Task 1.2: Outreach & Engagement	158	372	372	368	$21,740	$53,388	$54,456	$54,352	$10,000	$80,790	$80,790	$55,790	**$31,740**	**$134,178**	**$135,246**	**$110,142**
Task 1.3: Program Implementation	70	1080	1080	840	$10,900	$152,904	$155,928	$128,352	$22,855	$80,000	$80,000	$80,000	**$33,755**	**$232,904**	**$235,928**	**$208,352**
Task 1.4: Other Services	30	732	732	492	$5,500	$97,764	$99,708	$71,052	$ -	$ -	$ -	$ -	**$5,500**	**$97,764**	**$99,708**	**$71,052**
Subtotals	**478**	**2,530**	**2,510**	**1,972**	**$71,490**	**$358,138**	**$361,716**	**$293,684**	**$35,855**	**$162,790**	**$162,790**	**$135,790**	**$107,345**	**$520,928**	**$524,506**	**$429,474**
Total Estimated Cost (Labor and Direct Cost)																**$1,582,253**

Budget for SOW 2

	Estimated Hours by Year				Estimated Labor Cost by Year				Estimated Direct Cost by Year				Total Estimated Cost by Year			
	2022	*2023*	*2024*	*2025*	*2022*	*2023*	*2024*	*2025*	*2022*	*2023*	*2024*	*2025*	*2022*	*2023*	*2024*	*2025*
Task 1.1 Program Design	125	246	246	198	$18,775	$39,962	$40,754	$35,426	$ -	$ -	$ -	$ -	$18,775	$39,962	$40,754	$35,426
Task 1.2: Outreach & Engagement	40	252	156	132	$6,650	$39,744	$28,548	$22,080	$10,000	$46,220	$46,220	$36,220	$16,650	$85,964	$74,768	$58,300
Task 1.3: Program Implementation	30	348	348	258	$5,250	$56,952	$58,044	$40,896	$19,355	$30,600	$30,600	$30,600	$24,605	$87,552	$88,644	$71,496
Task 1.4: Other Services	20	322	322	322	$2,750	$47,668	$48,606	$49,544	$ -	$ -	$ -	$ -	$2,750	$47,668	$48,606	$49,544
Subtotals	**215**	**1,168**	**1,072**	**910**	**$33,425**	**$184,326**	**$175,952**	**$147,946**	**$29,355**	**$ 76,820**	**$76,820**	**$66,820**	**$62,780**	**$261,146**	**$252,772**	**$214,766**
Total Estimated Cost (Labor and Direct Cost)																**791,464**

Estimated direct cost for both SOW 1 and SOW2 include but are not limited to:

- Travel, mileage, airfare, hotel
- Technology and communications platforms
- Materials production and collateral
- Marketing and outreach subcontractors
- Subcontractors: Making Hope Happen Foundation, Inland Equity Community Land Trust (ECLT), Inland SoCal Housing Collective
- Venue rental and logistics
- Training event hosting services including catering
- Instructor and training subcontractors

Hourly Billing Rates

Category	2022	2023	2024	2025
President	300	306	312	318
Vice President / Sr. Director	295	301	307	313
Director / Principal Consultant	275	281	287	293
Sr. Manager / Engineering Manager	245	250	255	260
Manager	218	222	226	231
Sr. Engineer / Sr. Program Manager	198	202	206	210
Engineer / Program Manager	165	168	171	174
Sr. Program Consultant / Sr. Analyst	150	153	156	159
Program Consultant / Analyst	130	133	136	139
Sr. Program Coordinator / Sr. Technician	110	112	114	116
Program Coordinator / Technician	95	97	99	101
Program Associate / Direct Install Technician	79	81	83	85
Administrative	75	75	75	75

Subcontractors

The following fully loaded rates are for a 36 month project period.

Category	Rate
Making Hope Happen	
Contract Manager, Karen Suarez	75
Project Coordinator, TBD	40
Inland Equity Partnership	
Community Outreach Coordinator, Maribel Nunez	50
Inland SoCal Housing Authority	
Project Manager, Melanie Steele	75

MEMORANDUM OF AGREEMENT NO. 22-1002767

BY AND BETWEEN

COACHELLA VALLEY ASSOCIATION OF GOVERNMENTS

AND

SAN BERNARDINO ASSOCIATED GOVERNMENTS

AND

WESTERN RIVERSIDE COUNCIL OF GOVERNMENTS

FOR

2022-2027 INLAND REGIONAL ENERGY NETWORK (I-REN)

This 2022-2027 Inland Regional Energy Network (I-REN) Memorandum of Agreement (herein called "MOA") is made this November 28, 2022, by and among Coachella Valley Association of Governments (CVAG), San Bernardino Associated Governments (SANBAG) and Western Riverside Council of Governments (WRCOG), (collectively referred to as "MEMBER COGs, individually referred to as "MEMBER COG") with respect to the following recitals:

Whereas, representatives from the MEMBER COGs have pursued and will continue to pursue regional sustainability and energy efficiency opportunities across Riverside and San Bernardino counties; and

Whereas, the MEMBER COGs' primary role is to develop and administer a comprehensive Inland Regional Energy Network ("I-REN"), as defined in California Public Utilities Commission ("CPUC") Decision 21-11-013, and to prepare and submit any future grant applications on behalf of the three MEMBER COGs to fund other sustainability and energy efficiency activities; and

Whereas, WRCOG, on behalf of the MEMBER COGs, will serve as the I-REN Administrative Lead for purposes of coordinating planning activities locally, acting as the fiscal administrator, and executing agreements; and

Whereas, on May 31, 2018, CPUC Decision 18-05-041, Ordering Paragraph 38, was issued and directed Southern California Gas Company ("SoCalGas") to serve as the fiscal lead on behalf of SoCalGas and Southern California Edison, the two investor-owned utilities with territory in the MEMBER COGs' jurisdictions (collectively the "IOUs"); and

Whereas, as a condition precedent to this MOA, WRCOG and the IOUs will enter into the Inland Regional Energy Network 2022-2027 Energy Efficiency Programs and Budgets Agreement ("Programs Agreement") establishing the rights and responsibilities of WRCOG, acting on behalf of I-REN, and the IOUs; and

Whereas, these efforts will lead to the coordination of regional energy resource planning; development of a long-term, sustainable energy strategy; and increase in awareness of and access to conservation, efficiency, and renewable opportunities within the I-REN region (Riverside and San Bernardino counties); and

Whereas, the MEMBER COGs commit to an effective delivery of I-REN energy efficiency programs to the public sector and local workforce of their respective counties, the details of which are set forth in this MOA.

Whereas, upon receipt of funds from the CPUC (distributed by SoCalGas on behalf of the IOUs pursuant to the Programs Agreement) for I-REN program activities, WRCOG will reimburse each MEMBER COG, in amounts not to exceed those stated in Table 3.0 below, for allowable costs incurred for the express purpose of performing I-REN program activities and administration for the period commencing on the effective date and ending upon termination or expiration of this MOA;

Now, therefore, in consideration of the mutual duties set forth in this MOA, the MEMBER COGs agree to the following:

1. Administrative Lead COG. WRCOG shall serve as the fiscal agent, purchasing and contracting manager and primary regulatory contact manager for I-REN is and, as such, shall serve as the I-REN Administrative Lead COG on behalf of the MEMBER COGs. I-REN shall be managed under the oversight of the I-REN Executive Committee. The I-REN Executive Committee's structure, composition and duties are further described in the I-REN Governance and Operations Rules (Rules), attached hereto as Exhibit C and incorporated herein by reference. The Rules shall only be amended upon approval from the governing bodies of each of the MEMBER COGs. Notwithstanding any contrary provisions in section 3.1 of the Programs Agreement, WRCOG's Executive Director shall have the authority to take actions and execute agreements on behalf of WRCOG as the I-REN Administrative Lead COG following the approval of such actions and agreements as may be required by the I-REN Executive Committee in accordance with the procurement policy established pursuant to the Rules. WRCOG shall be responsible for:

    a) Monitoring progress on program objectives, deliverables and budget targets as set forth in this MOA.

    b) Reviewing all program-related documents, including review of all reporting required in this MOA, and any other reporting duties as may be required. Documents related to purchasing and contracting on behalf of I-REN, including but not limited to, professional services agreements, shall utilize WRCOG's template documents.

c) Coordinating the I-REN programs described in Section 2 of this MOA to minimize duplicative administrative and marketing costs.

d) Coordinating with the IOUs.

2. Program Activities. WRCOG, acting as the I-REN Administrative Lead COG, shall reimburse each MEMBER COG, from funds provided by the CPUC, for delivery of I-REN program activities as set forth in the Scope of Work attached hereto as Exhibit A and incorporated herein by reference.

a) I-REN shall be administered in accordance with the Rules, notwithstanding any contrary provisions in section 3.1 of the Programs Agreement.

b) The MEMBER COGs shall work cooperatively to implement I-REN programs and comply with CPUC requirements.

c) The MEMBER COGS shall comply with the security requirements of Article XVI, Exhibit C, and Exhibit D of the Programs Agreement regarding the use of Confidential Information.

d) The MEMBER COGs will perform all tasks and deliverables and shall comply with all applicable laws, policies, and regulations in carrying out I-REN program activities and other duties hereunder.

e) I-REN program activities are those set forth in Exhibits A, B and C of the Programs Agreement, which exhibits are incorporated herein by reference, and referred to as the I-REN Public Sector Program, I-REN Workforce Education & Training (WE&T) Program and I-REN Codes & Standards (C&S) Program.

f) The initial I-REN program activities as set forth in the approved I-REN Business Plan do not include loans associated with private property, and SANBAG will not be involved with arrangement or encouragement of loans for energy-related activities for private property through the I-REN program for the duration of this agreement, nor will SANBAG be responsible for loans for private property that may be arranged or encouraged by the other MEMBER COGs.

3. Budget. Table 3.0 below sets forth for the annual I-REN program budget, by year and by category (Public Sector, Codes & Standards and Workforce Education and Training), the maximum expenditure under this MOA for I-REN program activities and administration. Any amendment to an amount set forth in Table 3.0 must be approved in writing by the I-REN Executive Committee and approved by each of the MEMBER COGs. All reimbursements are subject to receipt of sufficient funds from the CPUC (distributed by SoCalGas on behalf of the IOUs pursuant to the Programs Agreement). To the extent the amounts set forth in Table 3.0 for years 2022-2027 differ from the amounts set forth for those years in Exhibit H of the Programs

Agreement (Commission Approved JCMs), the amounts set forth in Exhibit H shall govern.

Table 3.0:

I-REN Business Plan Program Approved Budgets ($)							
Category	2022	2023	2024	2025	2026	2027	Total
Public Sector							
Administration	628,819	619,172	662,939	707,457	707,457	707,457	4,033,301
Marketing and outreach	377,292	371,503	397,763	424,474	424,474	424,474	2,419,980
Direct Implementation – non-incentive	3,782,083	3,701,047	3,818,688	3,942,635	3,942,635	3,942,635	23,129,723
Direct Implementation – incentives	1,500,000	1,500,000	1,750,000	2,000,000	2,000,000	2,000,000	10,750,000
Subtotal	**6,288,194**	**6,191,722**	**6,629,390**	**7,074,566**	**7,074,566**	**7,074,566**	**40,333,004**
Workforce Education and Training							
Administration	225,329	239,343	243,716	267,465	267,465	267,465	1,510,783
Marketing and outreach	135,198	143,606	146,230	160,479	160,479	160,479	906,471
Direct Implementation – non-incentive	1,892,768	2,010,477	2,047,218	2,246,706	2,246,706	2,246,706	12,690,581
Direct Implementation – incentives	-	-	-	-	-	-	-
Subtotal	**2,253,295**	**2,393,426**	**2,437,164**	**2,674,650**	**2,674,650**	**2,674,650**	**15,107,835**
Codes and Standards							
Administration	144,611	150,395	156,411	162,667	162,667	162,667	939,418
Marketing and outreach	87,766	90,237	93,847	97,600	97,600	97,600	564,650
Direct Implementation – non-incentive	1,214,730	1,263,320	1,313,852	1,366,407	1,366,407	1,366,407	7,891,123
Direct Implementation – incentives	-	-	-	-	-	-	-

Subtotal	1,446,107	1,503,952	1,564,110	1,626,674	1,626,674	1,626,674	9,392,191
EM&V	114,441	115,604	121,810	130,349	130,349	130,349	742,902
Total	10,102,037	10,204,704	10,752,474	11,506,239	11,506,239	11,506,239	65,577,932

4. Claims and Payment.

a) Upon receipt of funds from the CPUC (distributed by SoCalGas on behalf of the IOUs pursuant to the Programs Agreement) (the "CPUC Funds") for I-REN program activities, WRCOG will reimburse the MEMBER COGs, not to exceed the program budgets set forth in Table 3.0, for Allowable Costs, as described in Exhibit B, which is attached hereto and incorporated herein by reference, incurred for the express purpose of performing I-REN program activities and administration, pursuant to the following procedure. I-REN program activities shall be limited to funding as provided by the CPUC Funds. Under no circumstances shall WRCOG be required to provide its own funding for I-REN program activities performed in its role as the I-REN Administrative Lead COG.

b) To obtain reimbursement from the CPUC Funds, a MEMBER COG shall submit to WRCOG a claim for reimbursement containing the following: (i) an invoice showing, at a minimum, the applicable Cost Category and Allowable Cost as described in Exhibit B, the amount of such cost and the date(s) such cost was incurred; (ii) all receipts, evidence of deliverables and other documentation reasonably necessary to substantiate the invoiced cost; (iii) a narrative report describing the I-REN program activity for which the cost was incurred; and (iv) any reports or other information required pursuant to Section 6 and Exhibit H of the Programs Agreement, which section and exhibit are incorporated herein by reference. A claim must be submitted no later than the last business day of the month after the month in which the cost was incurred; provided, however, that the Member COGs shall have until August 31, 2022, or 60 calendar days after the Member COGs have executed this MOA, whichever date is later, to submit claims for costs incurred from January 1 through June 30, 2022. Allowable labor costs shall comply with I-REN staff and contractor rates listed in Exhibit G of the Programs Agreement (Time & Materials Hourly Rate Schedule), which exhibit is incorporated herein by reference, as such rates are modified from time to time pursuant to the terms of the Programs Agreement.

c) Upon receipt of a claim, WRCOG shall review the claim and determine whether the claim is complete and seeks reimbursement of Allowable Costs as described in Exhibit B. If the claim is incomplete, WRCOG shall return the claim to the MEMBER COG with an explanation of the reason(s) for incompleteness. If the claim is complete, WRCOG shall approve the claim to the extent the claim seeks

reimbursement of Allowable Costs as described in Exhibit B and deny the claim as to the rest.

d) WRCOG shall have 30 calendar days after submission of a claim by a MEMBER COG to review the claim for completeness. A claim shall be deemed approved if not returned to the MEMBER COG within this 30-day period.

e) When a claim is approved or deemed approved, WRCOG will reimburse the MEMBER COG for the approved costs within 30 calendar days, to the extent that (i) WRCOG holds sufficient funds from the CPUC for reimbursement and (ii) the MEMBER COG has not exhausted the amount set forth for the applicable category of costs for the applicable year in Table 3.0. WRCOG has no obligation to make a reimbursement under this MOA unless and until there are sufficient CPUC FUNDS available. WRCOG assumes no liability to any person or entity, including, but not limited to, a MEMBER COG, for any delay in the distribution of funds by CPUC (or SoCalGas on behalf of the IOUs pursuant to the Programs Agreement) to WRCOG.

5. Reporting. Each MEMBER COG shall adhere to common reporting requirements for I-REN programs as required by the CPUC. For WRCOG to compile information to meet reporting deadlines, each MEMBER COG shall provide WRCOG with all required reporting from the previous month, on or before the 28th calendar day of the month. In addition to these reporting requirements, each MEMBER COG shall provide regular updates regarding I-REN activities to their respective legislative bodies.

6. Termination/Breach.

a) WRCOG may terminate this MOA for convenience, provided that such termination is consistent with section 17.3 of the Programs Agreement and WRCOG provide one year's written notice prior to the date of termination. In the event that WRCOG provides notice to terminate this MOA for convenience, the MEMBER COGs agree to work together in good faith to assign WRCOG's responsibilities to another management agency. Such good faith efforts shall also include working with the CPUC in order to establish another management agency. In the event the MEMBER COGs are unable to identify and agree on another management agency to serve as Administrative Lead for Program Activities, or if the CPUC does not approve of a new Administrative Lead, this MOA shall be terminated. Additionally, this MOA may be terminated by an order, decision, or resolution of the CPUC.

b) CVAG and/or SANBAG may withdraw from this MOA, without cause by providing 60 days' notice to WRCOG. MEMBER COGs agree that monies for carrying out program activities for I-REN not fulfilled by a withdrawing MEMBER COG may be used, by WRCOG, in its sole discretion, to carry out program activities for the Inland Empire (Riverside and San Bernardino counties) region.

c) The MEMBER COGs agree that if a MEMBER COG materially breaches its obligations in carrying out program activities for I-REN or fails to cure any material breach of this MOA within 30 days of receipt of a notice of breach from WRCOG, then WRCOG may, in its sole discretion, serve written notice to the MEMBER COG that WRCOG intends to terminate this MOA as to the breaching MEMBER COG and thereafter, if the material breach is not timely and reasonably cured, terminate this MOA with the breaching MEMBER COG. Monies for activities not fulfilled by the breaching MEMBER COG may be used by WRCOG, in its sole discretion, to carry out program activities for the Riverside and San Bernardino counties region.

d) In the event that there is a disagreement as to the allegation of a material breach, the MEMBER COGS agree to enter into good faith negotiations via a dispute resolution process in order to resolve the disagreement. The dispute resolution process shall begin with a formal meeting among the management staff of the MEMBER COGS to resolve the dispute. If management staff is unable to resolve said disputes, the matter shall be escalated to the Executive Director level through a formal meeting between the Executive Directors of the MEMBER COGS. If the disagreement is not resolved at the Executive Director level, the matter will proceed through process as outlined in Section 6(c) of this MOA.

7. Authority. Each MEMBER COG represents and warrants that the person signing this MOA has legal authority to sign this MOA and bind that party.

8. Indemnification by each MEMBER COG. Notwithstanding any contrary provisions in sections 3.1 and 13.1 of the Programs Agreement, each MEMBER COG shall indemnify, defend and hold harmless the other MEMBER COGs and their respective officials, officers, directors, agents, and employees from and against any and all third-party liability (including damages, losses, claims, demands, actions, causes of action and costs, along with reasonable attorney fees and expenses) to the extent caused by the negligence and/or willful misconduct of the indemnifying MEMBER COG or its employees, subcontractors, or agents. The obligations of each MEMBER COG under this section shall survive the termination of this MOA.

   Additionally, each MEMBER COG shall require all contractors and subcontractors performing I-REN program activities to indemnify, defend, and hold harmless the other MEMBER COGS and their respective officials, directors, agents, employees from and against any and all claims, demands, causes of action, costs, expenses, liability, loss, damage or injury, in law or equity, to property or persons, including wrongful death, in any manner arising out of or incident to any alleged acts, omissions, or willful misconduct of such indemnifying contractor or subcontractor, its officials, officers, employees, agents, consultants and contractors, arising out of or in connection with the performance of I-REN program activities, including without limitation the payment of all consequential damages and attorneys' fees and other related costs and expenses.

9. Insurance

a) Each MEMBER COG will maintain the following insurance coverage or self-insurance coverage, and shall require all contractors or subcontractors performing I-REN program activities to maintain this coverage, at all times during the term of this MOA, with companies having an A.M. Best rating of "A-, VII" or better, or equivalent:

i. Workers' Compensation: statutory minimum.
ii. Employer's Liability coverage: $1 million minimum.
iii. Commercial General Liability: $2 million minimum per occurrence/$4 million minimum aggregate. Such insurance shall acknowledge the IOUs and the other MEMBER COGs and their officers, agents and employees as additional insureds, contain standard cross-liability or severability of interest provisions, and waive all rights of subrogation against the IOUs and the other MEMBER COGs and their officers, agents, employees and other contractors or subcontractors.
iv. Commercial or Business Auto: $1 million minimum. Such insurance shall acknowledge the IOUs and the other MEMBER COGs and their officers, agents and employees as additional insureds.
v. Professional Liability (if applicable): $1 million minimum.

b) Evidence of Insurance. Upon request at any time during the term of this MOA, each MEMBER COG shall provide evidence that its insurance policies and the insurance policies as provided in this section are in full force and effect and provide the coverage and limits of insurance that each MEMBER COG has represented and warranted herein to maintain at all times during the term of this MOA.

c) Self-Insurance. If a MEMBER COG is self-insured, the MEMBER COG shall upon request forward documentation to the IOUs and/or to WRCOG that demonstrates to the IOUs' and WRCOG's satisfaction that the MEMBER COG self-insures as a matter of normal business practice. WRCOG will accept reasonable proof of self-insurance comparable to the above requirements.

d) Notice of Claims. Each MEMBER COG shall immediately report to the IOUs and WRCOG, and promptly thereafter confirm in writing, the occurrence of any injury, loss or damage incurred by MEMBER COG or any subcontractor or their receipt of notice or knowledge of any claim by a third party of any occurrence related to the I-REN programs, the Programs Agreement and/or this MOA that might give rise to such a claim.

e) Changes to Insurance Coverage. In the event a MEMBER COG, contractor or subcontractor requests modifications to the standard insurance coverage provided in Section 9(a) of this MOA, WRCOG, in its reasonable discretion, shall approve or disapprove such modifications.

f) Insurance Indemnification. Notwithstanding any contrary provisions in section 14.5 of the Programs Agreement, if a MEMBER COG fails to comply with any of the provisions of this section, or to the extent each MEMBER COG does not require its subcontractors to maintain the insurance coverage specified in this section, each MEMBER COG shall, at its own cost, defend, indemnify, and hold harmless the IOUs and/or each MEMBER COG and their affiliates and their officers, directors, agents, employees, assigns, and successors in interest, from and against any and all liability, damages, losses, claims, demands, actions, causes of action, costs, including attorney fees and expenses, or any of them, arising out of or in connection with the performance or non-performance of any I-REN program by each MEMBER COG or any subcontractor or their officers, directors, employees or agents to the extent that the IOUs and/or each other MEMBER COG would have been protected.

10. Limitation of Liability. Except for indemnification for third-party liability claims in accordance with Section 8 of this MOA, the liability of WRCOG to the other MEMBER COGs for WRCOG's acts or omissions as the I-REN Administrative Lead is limited to no more than the following: (1) for claims of nonpayment, the amount of the reimbursement due to each MEMBER COG pursuant to Section 4 of this MOA; (2) for all other claims, the amount of the reimbursement to each MEMBER COG pursuant to Section 4 of this MOA in the calendar year(s) in which the acts or omissions occurred.

11. Relationship of the Parties. The officers, employees and agents of each MEMBER COG are not and shall not be deemed to be the officers, employees, or agents of any other MEMBER COG. Notwithstanding anything contained in this MOA to the contrary, a MEMBER COG shall not be responsible for the performance or non-performance hereunder of any other MEMBER COG or whether such performance meets applicable legal and regulatory requirements, nor be obligated to remedy any other MEMBER COG's defaults or defective performance.

12. No Third-Party Beneficiary. This MOA is only for the benefit of the MEMBER COGs and not for the benefit of any third party.

13. Exhibits. In the event of an inconsistency between this MOA and the Exhibits as attached hereto, the MOA shall control.

14. Term. The term of this MOA commences Nov. 28, 2022 (with retroactive effect as of January 1, 2022, for submission of claims under section 4(b)), and expires December 31, 2027, unless sooner terminated pursuant to section 6.

15. Amendments. This MOA shall only be amended upon approval from the governing bodies of each of the MEMBER COGs. WRCOG shall only consent to amendments to Sections 3.1, 4.3, 7.13, 14.5, 18.2 and 19.1 and Articles XIII and XVI as well as Exhibits C and D of the Programs Agreement upon approval from the governing bodies of each of the MEMBER COGs.

16. Use of MEMBER COG's or I-REN's Name. Notwithstanding any contrary provisions in Section 10.4 of the Programs Agreement, WRCOG must receive approval from an authorized representative of the MEMBER COGs if the IOUs desire to use the name or logo of an individual MEMBER COG.

IN WITNESS WHEREOF, the MEMBER COGs enter into this MOA.

WRCOG

By: Kurt Wilson (Nov 28, 2022 09:38 PST)
Kurt Wilson
WRCOG Executive Director

Date: Nov 28, 2022

APPROVED AS TO FORM:

By: Steven DeBaun (Nov 22, 2022 17:43 PST)
Steven DeBaun
General Counsel

CONCURRENCE:

By: N/A

CVAG

By: Tom Kirk (Nov 22, 2022 10:42 PST)
Tom Kirk
CVAG Executive Director

Date: Nov 22, 2022

APPROVED AS TO FORM:

By: Michael Jenkins (Nov 22, 2022 12:43 PST)
Michael Jenkins
General Counsel

CONCURRENCE:

By: N/A

SANBAG

By: Ray Wolfe (Nov 17, 2022 08:11 PST)
Raymond W. Wolfe, PhD
Executive Director

Date: Nov 17, 2022

APPROVED AS TO FORM:

By: Juanda Daniel (Nov 16, 2022 16:58 PST)
Juanda Daniel
Assistant General Counsel

EXHIBIT A

Scope of Work

Task 1. Administration (Admin)
Admin activities include any actions necessary to support I-REN programs and ensure compliance with California Public Utilities Commission (CPUC) regulatory requirements. Admin activities include, but are not limited to, the following:

- Prepare, review, and submit reports and invoices
- Participate in CPUC regulatory activities (e.g., proceedings, rulemakings, workshops) either in person or via written comments

Task 2. Marketing, Education, and Outreach (ME&O)
ME&O activities include any communications activities designed to identify, reach, and motivate potential program participants to participate in a I-REN program. ME&O activities include, but are not limited to, the following:

- Development and deployment of marketing and outreach campaigns
- Preparation and distribution of explanatory mailers or other promotional materials
- Conducting or participating in outreach events
- Advertising, media, newspaper, website, and related marketing activities

Task 3. Direct Implementation (DI)
DI activities include any actions taken in the course of implementing I-REN programs related to program theory, planned program processes and direct interface with a program participant. DI activities include, but are not limited to, the following:

- Program planning, development, design, and implementation
- Development of program goals, budgets, and milestones
- Education and training of program participants and others (e.g., contractors, local governments)
- Providing program participant support and responding to participant inquiries (e.g., calls, emails, letters)
- Compiling and maintaining information (e.g., data, customer records) for program participants and projects

EXHIBIT B

Allowable Cost Categories

CPUC Allowable Costs Table[1]

Cost Categories	Allowable Costs
Administrative Cost Categories	**Managerial and Clerical Labor**
	IOU Labor - Clerical
	IOU Labor - Program Design
	IOU Labor - Program Development
	IOU Labor - Program Planning
	IOU Labor - Program/Project Management
	IOU Labor - Staff Management
	IOU Labor - Staff Supervision
	Subcontractor Labor - Clerical
	Subcontractor Labor - Program Design
	Subcontractor Labor - Program Development
	Subcontractor Labor - Program Planning
	Subcontractor Labor - Program/Project Management
	Subcontractor Labor - Staff Management
	Subcontractor Labor - Staff Supervision
	Human Resource Support and Development
	IOU Labor - Human Resources
	IOU Labor - Staff Development and Training
	IOU Benefits - Administrative Labor
	IOU Payroll Tax - Direct Implementation Labor[2]
	IOU Payroll Tax - Marketing/Advertising/Outreach Labor[3]
	IOU Payroll Tax - Administrative Labor
	IOU Payroll Tax - Administrative Labor
	IOU Payroll Tax - Administrative Labor
	IOU Pension - Administrative Labor
	IOU Pension - Direct Implementation Labor
	IOU Pension - Marketing/Advertising/Outreach Labor
	Subcontractor Labor- Human Resources
	Subcontractor Labor - Staff Development and Training
	Subcontractor Benefits - Administrative Labor
	Subcontractor Benefits - Direct Implementation Labor
	Subcontractor Benefits - Marketing/Advertising/Outreach Labor
	Subcontractor Payroll Tax - Administrative Labor
	Subcontractor Payroll Tax - Direct Implementation Labor
	Subcontractor Payroll Tax - Marketing/Advertising/Outreach Labor
	Subcontractor Pension - Administrative Labor
	Subcontractor Pension - Direct Implementation Labor
	Subcontractor Pension - Marketing/Advertising/Outreach Labor

	Travel[4] and Conference Fees[5]
	IOU Conference Fees[6]
Administrative Cost Categories (Continued)	IOU Labor - Conference Attendance
	IOU Travel - Airfare
	IOU Travel - Lodging
	IOU Travel - Meals
	IOU Travel - Mileage
	IOU Travel - Parking
	IOU Travel - Per Diem for Misc. Expenses
	Subcontractor - Conference Fees
	Subcontractor Labor - Conference Attendance
	Subcontractor - Travel - Airfare
	Subcontractor - Travel - Lodging
	Subcontractor - Travel - Meals
	Subcontractor - Travel - Mileage
	Subcontractor - Travel - Parking
	Subcontractor - Travel - Per Diem for Misc. Expenses
	Overhead (General and Administrative) - Labor and Materials
	IOU Equipment Communications
	IOU Equipment Computing
	IOU Equipment Document Reproduction
	IOU Equipment General Office
	IOU Equipment Transportation
	IOU Food Service
	IOU Office Supplies
	IOU Postage
	IOU Labor - Accounting Support
	IOU Labor - Accounts Payable
	IOU Labor - Accounts Receivable
	IOU Labor - Administrative
	IOU Labor - Facilities Maintenance
	IOU Labor - Materials Management
	IOU Labor - Procurement
	IOU Labor - Shop Services
	IOU Labor - Transportation Services
	IOU Labor - Automated Systems
	IOU Labor - Communications
	IOU Labor - Information Technology
	IOU Labor - Telecommunications
	Subcontractor Equipment Communications
	Subcontractor Equipment Computing
	Subcontractor Equipment Document Reproduction
	Subcontractor Equipment General Office
	Subcontractor Equipment Transportation
	Subcontractor Food Service
	Subcontractor Office Supplies
	Subcontractor Postage

	Subcontractor Labor - Accounting Support
Administrative Cost Categories (Continued)	Subcontractor Labor - Accounts Payable
	Subcontractor Labor - Accounts Receivable
	Subcontractor Labor - Facilities Maintenance
	Subcontractor Labor - Materials Management
	Subcontractor Labor - Procurement
	Subcontractor Labor - Shop Services
	Subcontractor Labor - Administrative
	Subcontractor Labor - Transportation Services
	Subcontractor Labor - Automated Systems
	Subcontractor Labor - Communications
	Subcontractor Labor - Information Technology
	Subcontractor Labor - Telecommunications
Marketing/Advertising/Outreach Costs	IOU - Advertisements / Media Promotions
	IOU - Bill Inserts
	IOU - Brochures
	IOU - Door Hangers
	IOU - Print Advertisements
	IOU - Radio Spots
	IOU - Television Spots
	IOU - Website Development
	IOU Labor - Marketing
	IOU Labor - Media Production
	IOU Labor - Business Outreach
	IOU Labor - Customer Outreach
	IOU Labor - Customer Relations
	Subcontractor - Bill Inserts
	Subcontractor - Brochures
	Subcontractor - Door Hangers
	Subcontractor - Print Advertisements
	Subcontractor - Radio Spots
	Subcontractor - Television Spots
	Subcontractor - Website Development
	Subcontractor Labor - Marketing
	Subcontractor Labor - Media Production
	Subcontractor Labor - Business Outreach
	Subcontractor Labor - Customer Outreach
	Subcontractor Labor - Customer Relations
Direct Implementation	**Financial Incentives to Customers**
	Activity - Direct Labor
	IOU Labor - Curriculum Development
	IOU Labor - Customer Education and Training
	IOU Labor - Customer Equipment Testing and Diagnostics
	IOU Labor - Facilities Audits
	Subcontractor Labor - Facilities Audits
	Subcontractor Labor - Curriculum Development
	Subcontractor Labor - Customer Education and Training

Direct Implementation (Continued)	Subcontractor Labor - Customer Equipment Testing and Diagnostics
	Installation and Service - Labor
	IOU Labor - Customer Equipment Repair and Servicing
	IOU Labor - Measure Installation
	Subcontractor Labor - Customer Equipment Repair and Servicing
	Subcontractor Labor - Measure Installation [7]
	Direct Implementation Hardware and Materials
	IOU Audit Applications and Forms
	IOU Direct Implementation Literature
	IOU Education Materials
	IOU Energy Measurement Tools
	IOU Installation Hardware
	Subcontractor - Direct Implementation Literature
	Subcontractor - Education Materials
	Subcontractor - Energy Measurement Tools
	Subcontractor - Installation Hardware
	Subcontractor -Audit Applications and Forms
	Rebate Processing and Inspection - Labor and Materials
	IOU Labor - Field Verification
	IOU Labor - Site Inspections
	IOU Labor - Rebate Processing
	IOU Rebate Applications
	Subcontractor Labor - Field Verification
	Subcontractor Labor - Rebate Processing
	Subcontractor - Rebate Applications
Evaluation, Measurement and Verification	IOU Labor - EM&V
	IOU Materials - EM&V
	IOU Benefits - EM&V Labor
	IOU Overhead - EM&V
	IOU Payroll Tax - EM&V Labor
	IOU Pension - EM&V Labor
	IOU Travel - EM&V
	Subcontractor Labor - EM&V
	Subcontractor Materials - EM&V
	Subcontractor Benefits - EM&V Labor
	Subcontractor Overhead - EM&V
	Subcontractor Payroll Tax - EM&V Labor
	Subcontractor Pension - EM&V Labor
	Subcontractor Travel - EM&V

The budget/cost items listed on the Allowable Costs sheet are the only costs that can be claimed for ratepayer funded energy efficiency work. If a utility finds that they or one of their contractors/program implementers have additional costs, the utility will obtain approval for that cost from the CPUC's Energy Division. Energy Division will determine whether that cost fits an existing category or cost item and whether it is an acceptable cost item. Upon ED approval, new cost items will be added to the Allowable Costs sheet and included in an updated reporting workbook. The costs reported should be only for costs actually expended. Any financial commitments are to be categorized as commitments. If the reporting entity does not have a cost as listed on the cost reporting sheet, then no cost is to be reported for that item.

[1] The CPUC Allowable Costs Table, dated 1/12/2006, was issued by Administrative Law Judge (ALJ) Meg Gottstein on 2/21/2006 as an Appendix to R.01-08-028, her ALJ Ruling on Reporting Requirements [for utility EE programs]. The Table is applicable to Utilities, Local Government Partnerships, and Third-Party Implementers.

[2] Correction made to Allowable Costs Table line item. The original line item read, "IOU Payroll Tax – Administrative Labor," which was a repeat of the previous line and a typographical error. The clear intent of the line item was, "IOU Payroll Tax – Direct Implementation Labor."

[3] Correction made to Allowable Costs Table line item. The original line item read, "IOU Payroll Tax – Administrative Labor," which was a repeat of the previous line and a typographical error. The clear intent of the line item was, "IOU Payroll Tax – Marketing/Advertising/Outreach Labor,"

[4] Employees should refer to the Edison International Travel & Employee Expense Policy (link provided in §5.2 of this Policy) for general guidance on the appropriateness of and limitations on travel expenses.

[5] For additional guidance and clarification on EE Travel and Conference Fees, see Item No. 2 on Page 2 of Attachment A and Item No. 4 on Page 2 of Attachment B.

[6] Per Item No. 2 on Page 2 of Attachment A and Item No. 4 on Page 2 of Attachment B, "IOU sponsorships of EE conferences (i.e., "platinum" "gold" level donations) be [are] explicitly prohibited from inclusion in EE ...."

[7] Correction made to Allowable Costs Table line item. The original line item read, "Subcontractor Labor – Customer Equipment Repair and Servicing," which was a repeat of the previous line and a typographical error. The clear intent of the line item was, "Subcontractor Labor – Measure Installation."

EXHIBIT C

I-REN Governance and Operations Rules

Purpose of Rules:

To provide the Inland Regional Energy Network (I-REN) member Councils of Governments (MEMBER COGs) and their staff with a simple and flexible governance and operations framework that:

- Defines roles and responsibilities, and delineates scopes of authority of the MEMBER COGs, I-REN Executive Committee, Administrative Lead COG, Program Managers, and Program Teams;
- Establishes processes and channels for effective and transparent communication and decision making; and
- Accommodates future expansion of programs and capacity to scale.

Overview of I-REN:

I-REN is a consortium of Coachella Valley Association of Governments (CVAG), San Bernardino Associated Governments (SANBAG), and Western Riverside Council of Governments (WRCOG), who have joined together to establish locally administered, designed, and delivered energy efficiency programs. I-REN's current portfolio of programs, as authorized by the California Public Utilities Commission (CPUC), includes:

- Workforce Education and Training (WE&T)
- Codes and Standards (C&S)
- Public Sector

The above program names are used for CPUC communications. For marketing purposes, I-REN has rebranded the programs as the following:

- WE&T: TBD
- C&S: TBD
- Public Sector: TBD

I-REN's overall Administrative Lead COG is WRCOG. Each individual program in I-REN's portfolio is administered by one or more Program Lead COGs based on their existing expertise, interest, and knowledge of the region. One representative from each Program Lead COG is selected - by the Program Lead COG - to be the Program Manager. Each program has a Program Team, including at least one representative from each member COG.

The table below showing I-REN's initial staffing is included to illustrate the above:

Sector	Program Lead COG(s)	Program Manager	Program Team Member Titles

Public Sector	SANBAG and WRCOG	SANBAG Program Manager– co-lead WRCOG Program Manager – co-lead	CVAG – Program Manager/Mgmt. Analyst SANBAG – Program Manager/Mgmt Analyst WRCOG – Program Manager/Mgmt. Analyst Consultant support
Workforce, Education and Training	SANBAG and WRCOG	SANBAG Program Manager– co-lead WRCOG Program Manager – co-lead	CVAG – Program Manager/Mgmt. Analyst SANBAG – Program Manager/Mgmt Analyst WRCOG – Program Manager/Mgmt. Analyst Consultant support
Codes and Standards	CVAG	CVAG Program Manager	CVAG – Program Manager/Mgmt. Analyst SANBAG – Program Manager/Mgmt Analyst WRCOG – Program Manager/Mgmt. Analyst Consultant support

* *Program Team members are encouraged to attend other meetings to facilitate coordination and learn about other program activities. Staff only involved in some program services or activities are included as Program Team members.*

Governance and Operations:

I-REN's governance and operations framework consists of four main roles. Each role is listed below with its associated responsibilities and scopes of authority, as well as any relevant processes and channels intended to promote and enhance effective and transparent communication and decision making.

1. **I-REN Executive Committee**:

I-REN is governed by an Executive Committee on which each MEMBER COG will have three votes. Each COG's governing board will determine how its voting power will be exercised, including the number of representatives it will have on the Executive Committee and whether its representatives will be elected officials, staff members, or a combination of elected officials and staff members. Decisions will be made based on majority of the total votes cast on a matter, with each MEMBER COG having its full three votes independent of the number of its representatives present at the meeting.

The I-REN Executive Committee has final responsibility to make all executive decisions including:

- Establishing portfolio-level strategy and overall I-REN prioritization;
- Establishing and managing portfolio-level budgets;
- Addressing and resolving high-level programmatic concerns and issues such as program design, branding and marketing, strategy, procurement, and consulting support;
- Authorizing responses to relevant CPUC regulatory filings, inquiries, data requests, etc.
- Authorizing procurements above the threshold set in the procurement policy to be established by the I-REN Executive Committee.

2. **I-REN Administrative Lead COG**: WRCOG will serve as the fiscal agent, purchasing and contracting manager and primary regulatory contact manager for I-REN and as such is responsible as I-REN Administrative Lead COG for administering I-REN on a day-to-day basis in accordance with the Memorandum of Agreement for the 2022-2027 Inland Regional Energy Network (I-REN) dated XXXXX, 2022, as the same may be amended from time to time, to which this Rules is an exhibit. WRCOG's administrative responsibilities include:

- Submitting monthly invoices to SoCalGas, I-REN's CPUC appointed Investor-Owned Utility (IOU) fiscal agent;
- Reporting to the CPUC on monthly, quarterly, and annual basis;
- Coordinating with CPUC Energy Division staff; and filing required regulatory submissions;
- Participating on the California Energy Efficiency Coordinating Committee (CAEECC);
- Managing all procurement and contracts;
- Providing oversight of budgets, expenses, and reimbursements;
- Coordinating with IOU leads for all regulatory requirements.
- Scheduling and drafting agendas for the I-REN Executive Committee, with input from the Program Managers.

WRCOG's Executive Director shall have the authority to take actions and execute agreements on behalf of WRCOG as the I-REN Administrative Lead COG following the approval of such actions and agreements as may be required by the I-REN Executive Committee in accordance with the procurement policy to be established by it referred to above.

3. **Program Managers**: As noted above, one representative from each Program Lead COG is selected - by the Program Lead COG - to be the Program Manager. Program Manager responsibilities include:

- Serving as the primary point of contact for all program-specific interactions with consultants and implementers. This includes project initiation, planning, execution, and monitoring and review. Project initiation will include gathering input from program team members. Intermediate deliverables at established milestones will also be distributed for Program Team member comment as appropriate;
- Recommending overall program decisions to the I-REN Executive Committee;
- Making program decisions to implement and operate the programs;
- Participating in local and state industry webinars, conferences and events, researching other similar programs, sharing and leveraging best practices to inform program design;

- Developing relationships with and understanding the needs of program stakeholders in all three COG subregions;
- Establishing a working group of such stakeholders to provide regular input to the Program Manager on the administration of the program;
- Coordinating with other Regional Energy Networks and IOUs regarding program design and delivery to enhance program performance and achieve mutual objectives;
- Developing and presenting program design and implementation strategies consistent with the Implementation Plan for Program Team member input and approval;
- Developing and updating annual Strategic Action Plans and work plans; and establishing and communicating program-level roles and priorities;
- Delegating tasks as appropriate to Program Team members;
- Managing program-level performance and providing program-level reporting to the I-REN Administrative Lead COG;
- Managing program-level budget;
- Scheduling and drafting agendas for Program Team meetings; sending agenda at least 24 hours prior to meeting; and sending meeting notes and action items within 24 hours after the meeting;
- Supporting CPUC regulatory filings (e.g. metrics) as necessary; and
- Coordinating and communicating with the I-REN Executive Committee, including preparing staff reports for the I-REN Executive Committee meetings.

4. **Program Teams**: Each I-REN program has a Program Team including at least one representative from each member COG as well as consultants and/or technical assistance providers. Program Team member responsibilities include:

- Developing relationships with and understanding the needs of stakeholders within the Program Team member's subregion;
- Taking primary accountability for program implementation and operation within the Program Team member's subregion, as directed by the Program Manager;
- Providing input and/or alternative suggestions for program design and implementation strategies presented by the Program Manager;
- Completing tasks and action items delegated by the Program Manager within the timeframe allotted;
- Understanding defined program-level roles and priorities and communicating with the Program Manager if and when clarification is needed;
- Identifying and communicating programmatic concerns and issues that warrant the consideration of the I-REN Executive Committee; and
- Attending and actively participating in weekly or bi-weekly Program Team meetings.

Inland Regional Energy Network (I-REN) Meetings

To further promote and enhance effective and transparent communication and decision- making, critical meetings with pre-established frequency and with invitations sent to all pertinent members have been identified and detailed in the matrix below. Each of the meetings has been previously referenced as a responsibility under each of the aforementioned roles.

Meeting Type	Frequency	Mode	Time

I-REN Executive Committee	Quarterly	In-Person / Virtual	TBD
Program Team / Member COG All-Staff*	Bi-Weekly (or Weekly as needed)	Virtual	TBD

**Member COG All-Staff meetings are meant to drive program implementation and resolve operational issues.*

The I-REN Executive Committee is subject to the Brown Act. Meeting information will be generated and distributed in a manner consistent with the requirements of the Brown Act.

If a Program Manager or Program Team member is not present at meetings, it is such person's responsibility to review shared meeting notes and deliver assigned action items. All I-REN related meetings, events or related travel shall include an invitation to XX@IREN.org.

INLAND REGIONAL ENERGY NETWORK
ENERGY EFFICIENCY
PROGRAMS AND BUDGETS AGREEMENT
FOR YEARS 2022-2027

THIS INLAND REGIONAL ENERGY NETWORK – ENERGY EFFICIENCY PROGRAMS AND BUDGETS AGREEMENT FOR YEARS 2022-2027 (hereinafter, and as further defined below, the "Programs Agreement") is entered into and made effective, subject to Section 7.13, as of [_____], 2022 (the "Effective Date"), by and among:

The Western Riverside Council of Governments (the "WRCOG"), a joint exercise of powers authority established pursuant to Chapter 5 of Division 7, Title 1 of the Government Code of the State of California (Section 6500 et. seq.) (the "Act") and that certain Joint Power Agreement entered into on [April 1, 1991], as amended from time to time (the " WRCOG JPA"), by and among the WRCOG Agencies (as defined in Section 2.21) on behalf of itself as well as in its capacity as the I-REN Authorized Agent (as defined in recital R3.); and

Southern California Gas Company ("SoCalGas"), an investor-owned, California public utilities corporation, with its principal place of business in Los Angeles, California, and a wholly owned subsidiary of Sempra Energy, a California Corporation; and

Southern California Edison ("SCE"), an investor-owned, California public utilities corporation, with its principal place of business in Rosemead, California, and a wholly owned subsidiary of Edison International, a California corporation; and

For purposes of Sections 3.1, 4.3, 7.13, 14.5, 18.2 and 19.1 and Articles XIII and XVI, as well as Exhibits C and D only, the Coachella Valley Association of Governments (the "CVAG"), a joint exercise of powers authority established pursuant to the Act and that certain Joint Power Agreement entered into on or about November 1973, as amended from time to time (the "CVAG JPA"), by and among the CVAG Agencies (as defined in Section 2.8); and

For purposes of Sections 3.1, 4.3, 7.13, 14.5, 18.2, and 19.1 and Articles XIII and XVI, as well as Exhibits C and D only, the San Bernardino Associated Governments (the "SANBAG"), a joint exercise of powers authority established pursuant to the Act and that certain Joint Power Agreement entered into on June 8, 1973, as amended from time to time (the "SANBAG JPA"), by and among the SANBAG Agencies (as defined in Section 2.17).

RECITALS

R1. On February 26, 2021, the WRCOG filed a motion with the Commission to recognize the consortium of the WRCOG, the CVAG and the SANBAG (collectively, the "Constituent COGS") as a regional energy network (a "REN") (as originally introduced by the Commission in its decision, *Decision Providing Guidance on 2013-2014 Energy Efficiency Portfolios and 2012 Marketing, Education and Outreach* (D.12-05-015)) to be known as, the Inland Regional Energy Network (the "I-REN"), and to approve the I-REN's proposed energy efficiency rolling portfolio business plan and budget (the "Business Plan & Budget") concerning the proposed program areas and certain administrative costs associated therewith incorporated into such motion, as further described herein. This motion was made in accordance with various decisions of the Commission, including *Decision Re Energy Efficiency Goals for 2016 and Beyond and Energy Efficiency Rolling Portfolio Mechanics* (D.15-10-028), *Decision Providing Guidance for Initial Energy Efficiency Rolling Portfolio Business Plan Filings* (D.16-08-019), *Decision Addressing Energy Efficiency Business Plans* (D.18-05-041), and *Decision Regarding Frameworks for Energy Efficiency Regional Energy Networks and Market Transformation* (D.19-12-021).

R2. On November 22, 2021, the Commission issued its decision, *Approval of Inland Regional Energy Network Energy Efficiency Business Plan* (D.21-11-013) (the "Decision"), pursuant to which, among other

things, the Commission (i) approved the I-REN as a REN and as a full energy efficiency program administrator, (ii) approved the Business Plan & Budget by authorizing energy efficiency funding in the aggregate amount of Sixty-Five Million Five Hundred Seventy-Seven Thousand Nine Hundred Thirty-Two Dollars and Zero Cents ($65,577,932.00) for the years 2022 through 2027, (iii) appointed SoCalGas to serve as the fiscal and contracting agent utility for the I-REN, and (iv) instructed SoCalGas and SCE to coordinate administratively with respect to the collection and distribution of electric funds supporting the I-REN's activities.

R3. Pursuant to that certain Memorandum of Agreement (the "MOA") (including the I-REN Governance and Operations Rules attached as Exhibit C thereto and incorporated therein by reference), dated as of November 28, 2022, by and among the Constituent COGS, and in accordance with Section 3.1, the Constituent COGS, by and through each of their respective executive committees, have agreed, adopted and approved that the WRCOG be the authorized Administrative Lead COG, fiscal agent, purchasing and contracting entity, and the primary regulatory contact manager for the I-REN as well as the authorized agent for and on behalf of the Constituent COGS under this Programs Agreement (the WRCOG, acting in such capacity and performing such roles is referred to herein as, the "I-REN Authorized Agent").

AGREEMENT

In consideration of the foregoing and the mutual covenants and agreements herein contained, and intending to be legally bound hereby, each of the WRCOG, on behalf of itself and the Constituent COGS, SCE and SoCalGas agree as follows:

ARTICLE I
Documents

Section 1.1 This base document (including its Recitals) along with the Exhibits expressly listed below, as well as any documents expressly incorporated herein, collectively form, and are referred to throughout and hereinafter as, the "Programs Agreement." The Parties intend that this Programs Agreement be read and interpreted as a single and unified document, without giving interpretive precedence to where a provision is located in the Programs Agreement. The Exhibits are as follows:

Exhibit A-1: the I-REN Public Sector Program Implementation Plan (a copy of which has been filed with CEDARS and updated from time to time).

Exhibit A-2: the I-REN Workforce Education and Training Program Implementation Plan (a copy of which has been filed with CEDARS and updated from time to time).

Exhibit A-3: the I-REN Codes & Standards Program Implementation Plan (a copy of which has been filed with CEDARS and updated from time to time).

Exhibit B Maximum Contract Sum and IOU Maximum Contribution

Exhibit C Security Incident Response Provision

Exhibit D Computing System and Security Review and Obligations

Exhibit E Monthly Invoicing and Reporting Requirements

Exhibit F Energy Efficiency Policy Manual Version 6, April 2020

Exhibit G Time & Materials Hourly Rate Schedule

Exhibit H Commission Approved JCMs

Exhibit I The MOA (including the Rules)

Exhibit J Program Coordinating Committees [***TBD***]

Exhibit K Description and Map of I-REN Service Territory

Section 1.2 This Programs Agreement constitutes the complete and exclusive statement of understanding among the Parties and supersedes any previous agreements, amendments, written or oral, and all communications among the Parties relating to the subject matter herein. To the extent that there is any conflict of, or inconsistency in, interpretation between this Programs Agreement and the Decision (or any other decision of the Commission), the Decision (or such decision of the Commission) shall be given interpretive priority. To the extent that there is a direct and explicit conflict between the body of the Programs Agreement and the Implementation Plan, as approved by the Commission, the Implementation Plan shall control. Captions and Section headings used in this Programs Agreement are for convenience only and are not intended to be used in interpreting this Programs Agreement.

ARTICLE II
Definitions

The terms and phrases in this Article 2, in quotes and with initial letter(s) capitalized, shall have the meanings set forth below whenever used in this Programs Agreement.

Section 2.1 "Administrative Lead COG" means WRCOG serving in its capacity as the fiscal agent, purchasing and contracting manager and primary regulatory contract manager for I-REN.

Section 2.2 "Authorized Work" means any and all goods, services, materials and deliverables and related obligations to be performed and undertaken by an administrator or implementor of an I-REN Program, pursuant to a contract between a Subcontractor (or Third-Party Contractor), on the one hand, and an I-REN Constituent Agency, on the other hand, as approved by the WRCOG, in its capacity as the I-REN Authorized Agent, in conformance with an Implementation Plan, this Programs Agreement and the Decision or as otherwise authorized by the Commission.

Section 2.3 "Business Day" is the measurement period of time, for purposes of this Programs Agreement, from one midnight to the following midnight, excluding Saturdays, Sundays, and holidays.

Section 2.4 "Calendar Day" is the measurement period of time, for purposes of this Programs Agreement, from one midnight to the following midnight, including Saturdays, Sundays, and holidays. Unless otherwise specified, all days in this Programs Agreement are Calendar Days.

Section 2.5 "CEDARS" means the California Energy Data and Reporting System.

Section 2.6 "CFA" means that certain Co-Funding Agreement, dated as of the Effective Date, by and between SCE and SoCalGas, pursuant to which SCE and SoCalGas have agreed to work together to coordinate administratively with respect to the collection and distribution of utility rate-payer funds supporting the I-REN's activities and to appoint SoCalGas as the lead fiscal and contracting agent utility for the I-REN.

Section 2.7 "Commission" means the California Public Utilities Commission.

Section 2.8 "CVAG Agencies" means, collectively, the following member, local government agencies and tribal governments of the CVAG as of the Effective Date (which may thereafter change from

time to time): the County of Riverside, the City of Coachella, the City of Indio, the City of La Quinta, the City of Indian Wells, the City of Palm Desert, the City of Rancho Mirage, the City of Cathedral City, the City of Palm Springs, the City of Desert Hot Springs, the City of Blythe, the Agua Caliente Band of Cahuilla Indians, the Cabazon Band of Mission Indians, the Torres Martinez Tribe, and the Twenty-Nine Palms Band of Mission Indians; "CVAG Agency" means any individual member, local government agency or and tribal government thereof.

Section 2.9 "Customer" or "Customers" means, whether singular or plural, whether residential, commercial or otherwise, those persons or entities receiving electrical service from SCE (i.e., electric utility ratepayers) or natural gas service from SoCalGas (i.e., natural gas utility ratepayers), who pay the 'public goods charge,' pursuant to Section 381 of the California Public Utilities Code, or the 'gas surcharge,' pursuant to the Sections 890-900 of the California Public Utilities Code, respectively, in each case, for public purposes programs, including energy efficiency programs approved by the Commission.

Section 2.10 "EM&V Activities" means those evaluation, measurement and verification activities undertaken by the I-REN or any I-REN Constituent Agency, including data collection, Commission evaluation activities, as well as process, market and sector analysis for I-REN Program planning and implementation pursuant to the Decision and other Commission requirements.

Section 2.11 "Incentive" has the meaning used in the Commission's Energy Efficiency Policy Manual, Version 6, April 2020, as may be supplemented or updated from time to time.

Section 2.12 "Implementation Plan" means the document filed by the WRCOG on behalf of I-REN and approved by the Commission, which addresses the design and implementation of the work and activities of one or more I-REN Programs, including the description of the I-REN's implementation strategies and tactics, program processes, program targets and deliverables conforming to the Decision or other written Commission decisions or directives, and attached to this Programs Agreement as one of its Exhibit As. For future Implementation Plan amendments and updates, once the Commission has approved the revised Implementation Plan, such approved Implementation Plan shall be attached as an Exhibit A and shall be automatically incorporated herein. Any subsequent changes or modifications by the Commission to an Implementation Plan shall also be automatically incorporated into and attached as an Exhibit A and shall be incorporated herein. As between Implementation Plans, the most recent Commission-approved Implementation Plan shall be controlling.

Section 2.13 "I-REN Constituent Agencies" means, collectively, the Constituent COGS, the WRCOG Agencies, the CVAG Agencies and the SANBAG Agencies; "I-REN Constituent Agency" means any individual member, local government agency(ies) thereof (including any constituent agency of the same).

Section 2.14 "JCM" means those certain Joint Cooperation Memorandums to be jointly filed with the Commission annually by the Parties as a Tier 2 Advice Letter pursuant to the Decision and as approved by the Commission during the term of this Program Agreements, as may be amended and updated from time to time.

Section 2.15 "Parties" means, collectively, the WRCOG, SCE and SoCalGas. CVAG and SANBAG have executed this Programs Agreement only for purposes of agreeing to Sections 3.1, 4.3, 7.13, 14.5, 18.2 and 19.1, Sections XIII and XVI and Exhibits C and D hereof, but are otherwise not considered Parties hereto; "Party" means, individually, each of the WRCOG, SCE or SoCalGas.

Section 2.16 "Program Expenditures" means actual (i.e., no mark-up for profit, administrative or other indirect costs), reasonable expenditures by any of the I-REN Constituent Agencies in solely targeted and direct support of an I-REN Program or Commission-approved EM&V Activity.

Section 2.17 "SANBAG Agencies" means, collectively, the following member, local government agencies of the SANBAG as of the Effective Date (which may thereafter change from time to time): the County of San Bernardino, the Town of Apple Valley, the City of Adelanto, the City of Barstow, the City of Big Bear Lake, the City of Chino, the City of Chino Hills, the City of Colton, the City of Fontana, the City of Grand Terrace, the City of Hesperia, the City of Highland, the City of Loma Linda, the City of Montclair, the City of Needles, the City of Ontario, the City of Rancho Cucamonga, the City of Redlands, the City of Rialto, the City of San Bernardino, the City of Twentynine Palms, the City of Upland, the City of Victorville, the City of Yucaipa and the Town of Yucca Valley; "SANBAG Agency" means any individual member, local government agency thereof. Notwithstanding the foregoing, the Party's agree that the Utilities will only have to recognize those constituents of the SANBAG Agencies (and any Authorized Work relating thereto) that comport in all respects with the Decision and its reference to the "San Bernardino Council of Governments."

Section 2.18 "Subcontractor" means a person or an entity (or any subcontractor thereof) contracting directly with any of the I-REN Constituent Agencies to furnish services or materials as part of or directly related to an I-REN Program and this Programs Agreement**.**

Section 2.19 "Third-Party Contractor" is a person or an entity participating in any of the I-REN Programs to furnish services or materials as part of or directly related to an I-REN Program. To be a Third-Party Contractor, the following conditions must be met: (1) the person or entity is not an employee, Subcontractor, or agent of any I-REN Constituent Agency, (2) the person or entity does not have a contractual relationship with any I-REN Constituent Agency relating to any of the I-REN Programs, and (3) the person or entity's participation in the I-REN Programs is not controlled, directly or indirectly, by any I-REN Constituent Agency.

Section 2.20 "Utility" means SCE or SoCalGas, individually; "Utilities" means SCE and SoCalGas, collectively.

Section 2.21 "WRCOG Agencies" means, collectively, the following member, local government agencies of the WRCOG as of the Effective Date (which may thereafter change from time to time): The County of Riverside , the City of Banning, the City of Beaumont, the City of Calimesa, the City of Canyon Lake, the City of Corona, the City of Eastvale City of Hemet, the City of Jurupa Valley, the City of Lake Elsinore, the City of Menifee, the City of Moreno Valley, the City of Murrieta, the City of Norco City of Perris, the City of Riverside, the City of San Jacinto, the City of Temecula, the City of Wildomar, the Eastern Municipal Water District, the Western Municipal Water District, and the Riverside County Superintendent of Schools; "WRCOG Agency" means any individual member, local government agency thereof.

ARTICLE III
I-REN Authorized Agent and I-REN Programs

Section 3.1 Appointment of I-REN Authorized Agent.

(a) By the approval of this Programs Agreement by each of the Constituent COGS, and in accordance with the MOA, each of the Constituent COGS hereby irrevocably appoints and constitutes the WRCOG as its respective exclusive agent, proxy and attorney-in-fact, with full power of substitution, to act on behalf of the Constituent COGS for the purposes specified herein (including the Recitals hereto) as the I-REN Authorized Agent including the full power and authority to act on the Constituent COGS behalf with repect to this Programs Agreement as well as the I-REN and the I-REN

Programs, including, without limitation, to act as the I-REN's authorized Administrative Lead COG, fiscal agent, purchasing and contracting entity, and primary regulatory contact manager, and to bind the Constituent COGS to the rights and obligations described herein. The Constituent COGS, by approving this Programs Agreement, further agree that such exclusive agency, proxy and attorney-in-fact and the powers and immunities granted to the I-REN Authorized Agent hereunder (i) are coupled with an interest, are therefore irrevocable without the consent of the I-REN Authorized Agent, and (ii) shall be binding upon the successors, heirs, executors, administers and legal representatives of each of the Constituent COGS and shall not be affected by, and shall survive, the bankruptcy, dissolution or liquidation of any of the I-REN Constituent Agencies.

(b) All decisions, actions, consents and instructions by the I-REN Authorized Agent shall be binding upon all of the Constituent COGS, and none of the Constituent COGS shall have the right to object to, dissent from, protest or otherwise contest any such decision, action, consent or instruction. The Utilities shall be entitled to rely on any decision, action, consent or instruction of the I-REN Authorized Agent as being the decision, action, consent or instruction of the Constituent COGS, and each of the Utilities are hereby relieved from any liability to any person for acts done by them in accordance with any such decision, act, consent or instruction.

(c) The I-REN Authorized Agent shall have such powers and authority as are necessary to carry out the functions assigned to it under this Programs Agreement. Without limiting the generality of the foregoing, the I-REN Authorized Agent shall have full power, authority and discretion to: (i) consummate the transactions contemplated by this Programs Agreement; (ii) negotiate disputes arising under, or relating to, this Programs Agreement; (iii) receive and disburse the payments it receives from SoCalGas pursuant to Section 7.6, whether to Third-Party Contractors, Subscontractors, the I-REN Constituent Agenies or otherwise; (iv) withhold any amounts received under this Programs Agreement or otherwise to satisfy any and all obligations or liabilities incurred by the I-REN Authorized Agent in the performance of its duties hereunder; (v) execute and deliver any amendment or waiver to this Programs Agreement (without the prior approval of the other Constituent COGS); and (vi) take all other actions to be taken or refrain from taking such action by or on behalf of the Constituent COGS in connection with this Programs Agreement.

(d) By the approval of this Programs Agreement and the MOA, each of the Constituent COGS hereby, severally, but not jointly, agrees to indemnify and hold harmless the I-REN Authorized Agent and its partners, managers, officers, agents and other representatives from and against any losses, liabilities, costs, claims, damages, expenses (including reasonable attorneys' fees and costs of other skilled professionals and in connection with seeking recovery from insurers), judgments, fines and amounts incurred by such persons arising out of actions taken or omitted to be taken by the WRCOG when acting in the capacity as the I-REN Authorized Agent except for those arising out of the WRCOG's gross negligence or willful misconduct.

(e) The Constituent COGS agree not to amend or modify the MOA without the written prior consent of the Utilities to the extent such amendment or modification would cause any of the Constituent COGS to be in breach of this Programs Agreement or otherwise adversely affect the obligations of any of the Constituent COGS, or the rights of the Utilities, hereunder.

Section 3.2 The I-REN's goal is to connect residents, businesses, and local governments to a wide range of energy efficiency resources to increase energy savings and equitable access throughout San Bernardino and Riverside counties. In order to achieve this goal, pursuant to and in accordance with this Programs Agreement, the Decision, other Commission decisions, the Commission approved Business Plan & Budget, the JCM, and the applicable Implementation Plans, the WRCOG, acting as the I-REN Authorized Agent, shall implement the following I-REN programs (collectively, as approved by the Commission, the "I-REN Programs," and each, individually, an "I-REN Program"):

(a) I-REN Public Sector Program. The goal of this I-REN Program is to build capacity and knowledge in order to enable local governments to effectively leverage energy efficiency services

and to demonstrate best practices in accordance with the I-REN Public Sector Program Implementation Plan. This I-REN Program will serve the I-REN Constituent Agencies, including cities, school districts, water districts, special districts, and tribal communities. This I-REN Program will target, but not be limited to, upgrades to existing public buildings and facilities with high energy use and older equipment. There will also be a focus on community-serving buildings such as community centers, libraries, senior centers, schools, and fire and police buildings. Through energy efficiency projects in these facilities, I-REN can provide benefits to disadvantaged, low income, and other vulnerable communities where these facilities serve as cooling centers offering protection from the region's extreme heat. This I-REN Program provides a range of offerings and services that include, but are not limited to, technical assistance and strategic energy planning, including a public building NMEC program, a resource program.

(b) I-REN Codes & Standards Program. The goal of this I-REN Program is to work closely with local building departments and the building industry to support, train, and enable long-term streamlining of energy code compliance in accordance with the I-REN Codes & Standards Program Implementation Plan. This I-REN Program will assist its local government agencies to better understand and enforce energy building codes and will also assist its local government agencies in development and implementation of reach codes and model ordinances. This I-REN Program will support the Inland Empire region's building industry to better conform to and implement the building codes. This I-REN Program could include but is not limited to identifying gaps in code compliance and working with the statewide IOU C&S Program to ensure that CAEECC-vetted, statewide and consistent support is provided to their constituents. The I-REN will leverage opportunities to support code compliance and enforcement to ensure that the staffs of local government building departments have adequate knowledge and awareness of energy-savings measures.

(c) I-REN Workforce Education & Training Program. The goal of this I-REN Program is to ensure that there is a trained workforce to support and realize energy efficiency savings goals across sectors in accordance with the I-REN Workforce Education and Training Program Implementation Plan. This I-REN Program will serve as a vital link between workforce skills and training providers such as community colleges and employers to build a more robust market and increase the number of skilled energy efficiency contractors in Inland Empire region. The Program will promote job market recovery and progress toward statewide goals regarding energy efficiency, air quality, and support for hard-to-reach, underserved, rural, tribal, and disadvantaged communities. This I-REN Program intends to create a robust local network of trainings to increase capacity, knowledge and awareness of energy efficiency and the number of skilled energy efficiency workers in the Inland Empire region.

(d) Subject to Article IV, including any changes that would directly or indirectly modify any material provision of this Programs Agreement, any future energy efficiency programs of the I-REN that are approved by the Commission pursuant to a future Commission decision and implemented in accordance with a Commission approved Implementation Plan, which such plan will be attached hereto as an additional Exhibit A.

ARTICLE IV
Roles and Deliverables

Section 4.1 Utilities. Pursuant to and in accordance with the Decision, the CFA, and this Programs Agreement, SoCalGas shall act as the fiscal and contracting agent utility for the I-REN in order to disburse Commission authorized funds pursuant to a valid invoice and based on the Business Plan & Budget to the I-REN Authorized Agent and conduct general management and monitoring activities in compliance with Commission directives. The Utilities' role shall encompass all of the usual fiscal and management functions as set forth in this Programs Agreement, including fiscal oversight and monitoring, and as otherwise determined by the Commission. The Utilities will be responsible for timely payments to the I-REN Authorized Agent for Authorized Work completed in accordance with an applicable Implementation Plan and as set forth in this Programs Agreement. Other than expressly described herein, the Utilities shall have no role in, or obligations with respect to, the I-REN Program design or implementation other than to transfer the funds described herein.

Section 4.2 I-REN Independent Authority. Pursuant to Commission decision, *Decision Approving 2013-2014 Energy Efficiency Programs And Budgets* (D.12-11-015), for initial authorization of Regional Energy Network and *Decision Regarding Frameworks for Energy Efficiency Regional Energy Networks and Market Transformation* (D.19-12-021), and Energy Efficiency Policy Manual Version 6 dated April 2020 (Exhibit F), and within the confines of the applicable I-REN Programs and Implementation Plans approved by the Commission, the WRCOG, as the I-REN Authorized Agent, on behalf of the I-REN amongst and between the Constituent COGS, has the independent authority to design, manage, deliver, and oversee the I-REN Programs, without the Utilities' direction as it relates to design and delivery of such I-REN Programs. The WRCOG, as the I-REN Authorized Agent, on behalf of I-REN, shall be independently accountable to the Commission for delivering the results outlined in I-REN's Implementation Plans, and neither SCE nor SoCalGas will have any responsibility or liability for WRCOG's failure to implement any I-REN Programs in accordance with Commission decisions, directives, policies, or rules.

Section 4.3 WRCOG Authority in I-REN Governance. The Constituent COGS have each executed the MOA, a copy of which is attached as Exhibit I and which is incorporated herein by reference, pursuant to which the WRCOG has been appointed as the I-REN Authorized Agent of the Constituent COGS in order to administer the I-REN and the I-REN Programs in accordance with this Programs Agreement.

Section 4.4 Modification of the Program by the Commission. The Parties each acknowledge and agree that this Programs Agreement and any I-REN Program shall at all times be subject to the authority and discretion of the Commission, including, but not limited to, review, modifications and denials, as the Commission may direct from time to time in the exercise of its jurisdiction. If the Commission modifies an I-REN Program, the Parties shall amend this Programs Agreement as necessary to incorporate such changes. Such corresponding amendment shall specify any changes, including without limitation, the Implementation Plans, increases or decreases in overall I-REN Program funding, or such other modification or change as directed by the Commission.

Section 4.5 Modification of the Program by the Parties. The WRCOG and the Utilities each acknowledge that the Utilities' function does not extend to the I-REN Program design or modification, or the effectiveness of the WRCOG's delivery of Authorized Work under this Programs Agreement. Without limiting the generality of the foregoing, the Utilities and the WRCOG may collaborate on and agree to I-REN Program designs, implementation strategies or modifications. If the WRCOG desires to modify an Implementation Plan, it must notify the appropriate Utility(ies) and Commission staff by providing the proposed modifications. With Commission approval, the WRCOG may modify the Implementation Plan by documenting the changes in the California Energy Data and Reporting System (CEDARS) website, maintained by the Commission. If the WRCOG wishes to eliminate an existing I-REN Program or propose a new program, the WRCOG must file an advice letter or take other action as directed by the Commission to obtain Commission approval.

Section 4.6 I-REN Program Start Up.

(a) Program Data, Invoicing and Reporting Tool. The WRCOG shall attend a workshop that provides training on the use of Utility invoicing and reporting, protocols and procedures, including the use of various invoicing and reporting tools (collectively, "IR Tools"). The WRCOG will attend IR Tool training as determined by SoCalGas in consultation with the WRCOG.

(b) Reporting

(i) IR Tools. After SoCalGas provides the WRCOG training on the IR Tools, the WRCOG will utilize the IR Tools, which serve three primary purposes:

(A) Enable the WRCOG to provide SoCalGas with required I-REN Program information that supports the costs incurred;

(B) Provide SoCalGas the capability to access the I-REN Program information for the purpose of fiscal management and coordination; and create reports; and

(C) Provide miscellaneous reporting support for the Utilities' internal and Commission reporting requirements.

(ii) Submission of Information into IR Tools. The WRCOG will update invoicing and reporting information using the IR Tools on a monthly basis in accordance with requirements set forth in this Programs Agreement. The WRCOG will work collaboratively with SoCalGas in tailoring the required files and data for each I-REN Program.

(iii) Monthly Invoicing and Reporting. All required monthly invoice reports can be generated via the IR Tools. The WRCOG will be responsible for implementing, adhering to, and the submission of, the items as described in Exhibit E of this Programs Agreement. The invoice reporting requirements may be amended from time to time, at which time SoCalGas will notify the WRCOG of the changes and issue a new Exhibit E. The WRCOG shall implement these modifications in a timely manner and they will be reflected in future invoice documentation.

(iv) Utilities' Regulatory Reporting and Filing. The WRCOG will timely implement, adhere to, and submit the items as requested by the Utilities for Commission regulatory reporting, filing or data request purposes. The WRCOG acknowledges that the Utility may, in its sole discretion, require the WRCOG to provide such other reports or documentation that the Utilities deem appropriate or necessary ("Ad Hoc Reports"). The WRCOG will comply with any request for such Ad Hoc Report(s) within a reasonable time or within the time requested by the Utility.

(v) I-REN Regulatory Reporting and Filing. Subject to each Utility's internal compliance, confidentiality and disclosure policies, the Utilities will cooperate and timely submit items as requested by the WRCOG for Commission regulatory reporting, filing or data request purposes. The Utilities acknowledge that the WRCOG may reasonably request the Utilities to provide such other reports or documentation that the WRCOG deems appropriate or necessary for the purpose of Commission regulatory reporting, filing or data request.

(vi) The WRCOG acknowledges that to the extent any authorized entity seeks to audit an I-REN Program, including the use of funds relating thereto, the Utility(ies) may direct the seeking entity to the WRCOG directly or require the WRCOG to provide any and all documentation or records required. The Utilities may make any of the records they develop and maintain accordance to this Programs Agreement, as well as any information obtained from any of the I-REN or the I-REN Constituent Agencies, available to the Commission upon request of the Commission.

(vii) The WRCOG agrees to the following I-REN monthly invoice and cost accounting schedule as follows:

Deliverable(s)	Due Date(s)
The WRCOG to prepare and submit monthly invoices and supporting documentation to SoCalGas.	Monthly, by the 15th Calendar Day for Authorized Work completed in the preceding month.
The WRCOG to prepare and submit quarterly invoice estimate for accrual to SoCalGas.	Quarterly by the 12th Calendar Day for the month of March, June, September, and December of each calendar year.
The WRCOG to prepare and submit relevant reporting data to SoCalGas.	As SoCalGas or WRCOG requests and/or requires, as set forth in this Programs Agreement.

(c) Particular I-REN Programs may have additional or different requirements and/or deadlines as communicated to the WRCOG, on behalf of the I-REN, in writing by SoCalGas. Any Commission-approved changes to the Implementation Plan shall be incorporated herein in accordance with this Article IV

(d) Relationship of the Parties. Each Party is wholly independent of the other Parties, and neither this Programs Agreement nor the exercise of any of the duties of the Parties pursuant to this Programs Agreement shall be deemed to create any joint venture, partnership, fiduciary, agency or employment relationship between the Parties. Nothing in this Agreement is intended to convey any rights or benefits upon any third party other than as expressly set forth herein.

ARTICLE V
Maximum Contract Sum

Section 5.1 The Maximum Contract Sum committed to this Programs Agreement from the Utilities is set forth in Exhibit B of this Programs Agreement. Exhibit B reflects the I-REN's Commission authorized Business Plan & Budget from the Decision for each I-REN Program calendar year from 2022 through 2027. Exhibit B may be amended and updated to reflect the latest Commission-approved I-REN budget or budget changes and the Utilities' maximum funding contribution for each I-REN Program calendar year without a need for formal amendment. Notwithstanding the foregoing, WRCOG shall provide the Utilities (1) notice of any request to the Commission to update, change, or extend its current authorized I-REN budget that impacts the maximum funding contribution of the Utilities; and (2) notice of any Commission-approved changes to the I-REN budget to be incorporated into Exhibit B.

Section 5.2 Except as otherwise set forth in an Implementation Plan, and future Commission written decisions, and unless the fund-shifting rules established by the Commission are changed, the WRCOG, as the I-REN Authorized Agent, has the sole discretion to re-allocate the I-REN Program budgets amongst and between individual projects supported by Authorized Work, subject to Commission approval. The WRCOG shall timely notify the Utilities of any approved fund shift or budget change. Any Commission-approved I-REN budget changes shall be automatically incorporated into and attached to Exhibit B and shall be incorporated herein.

Section 5.3 Cost Caps. The WRCOG shall use its best efforts to cap administrative costs at ten percent (10%) of the Maximum Contract Sum per year, and marketing and outreach costs to a maximum of six percent (6%) of the Maximum Contract Sum per year. The WRCOG acknowledges that it is the desire of the Commission to keep administrative and marketing costs as low as possible.

ARTICLE VI
Utilities' Relationship

Section 6.1 SoCalGas will serve as the primary utility administrator for this Programs Agreement, in compliance with Commission directives and the CFA, and shall act as a fiscal agent with responsibility for the timely distribution of funds to the WRCOG (as the I-REN Authorized Agent) for Authorized Work.

Section 6.2 SCE's rights are coextensive of the rights of SoCalGas under this Programs Agreement and are in no way limited by SoCalGas.

Section 6.3 As between SCE and SoCalGas the terms of their CFA shall control. The CFA may be amended by mutual agreement of the Utilities without notice, consent, or consultation from the WRCOG. Nothing in the CFA, or any amendment to it, shall affect any right or obligation of the WRCOG with respect to the Utilities.

ARTICLE VII
Invoicing, Reporting and Payments

The WRCOG shall deliver monthly invoices to SoCalGas by the 15th Calendar Day of each month for Program Expenditures incurred for Authorized Work completed in the preceding month. SoCalGas shall review the invoices concurrently with SCE to ensure (1) that the costs incurred are allowable costs related to I-REN Program activities that are consistent with the applicable Implementation Plan and (2) that sufficient Commission budgetary authorization exists. The following invoicing, reporting and payment requirements are applicable to each payment request pursuant to an invoice, which must be in accordance with the applicable project's scope of work for an I-REN Program and/or Commission-approved I-REN EM&V Activity:

Section 7.1 Time and Material Basis. All Authorized Work will be performed on a "time and material basis" and subject to the general provisions set forth below. In the event Authorized Work is performed on a basis other than time and materials, the Parties shall agree on general provisions for invoicing and reporting such Authorized Work and incorporate such provisions into this Programs Agreement by amendment prior to the consummation of any such Authorized Work and prior to the WRCOG invoicing the Utilities for the same.

Section 7.2 Energy Efficiency Incentive. Subject to Article IX, the WRCOG (as the I-REN Authorized Agent) will invoice the Utilities for funding to cover energy efficiency Incentives paid to a Customer (or such Customer's authorized contractor) for such Customer's energy efficiency improvement. The Utilities and WRCOG agree that the activities covered by the Incentive may be invoiced by the WRCOG in a manner other than on a 'time and materials' basis. Funding for the Incentive shall be invoiced by the WRCOG to SoCalGas along with completed energy efficient project and installed measure data identifying electric and/or gas Incentives. Notwithstanding the foregoing, consistent with Section 9.1, the Utilities have no obligation to pay for Incentive costs provided to a Customer that previously received Incentives for the same measure(s) through another utility ratepayer-funded program.

Section 7.3 General Provisions

(a) All charges shall be directly identifiable, with reasonably supported, written documentation, and required for the Authorized Work.

(b) The WRCOG shall notify SoCalGas' representative(s) responsible for the Programs Agreement at such time that it becomes reasonably apparent that the forecasted cumulative charges may exceed any budgets authorized under the Decision or applicable projects then in process (or otherwise forecasted) pursuant to the applicable Implementation Plan (whether by task, total amount authorized, or both).The WRCOG shall not proceed with or be reimbursed for any Authorized Work

performed, either beyond the effective period of the Programs Agreement, or exceeding the authorized amounts of the Programs Agreement absent a written, pre-authorized change order or amendment by the Commission.

(c) The WRCOG shall notify SoCalGas' representative responsible for the Programs Agreement as soon as possible upon the occurrence of any fund-shifting or re-allocation of the budget amongst and between outstanding individual projects supported by Authorized Work.

(d) Labor-Related Costs Under Time and Material Basis. To the extent applicable, the WRCOG shall invoice SoCalGas at the fixed hourly rates for the applicable labor categories stated in Exhibit G for time spent directly engaged in performance of the Authorized Work by any of the I-REN Constituent Agencies'. Such fixed hourly rates will be updated per I-REN Constituent Agencies' fiscal year and shall be inclusive of all the I-REN Constituent Agencies' overhead costs (including all taxes and insurance), administrative and general fees. All labor-related costs shall be charged at cost, without mark-up, and shall be necessary, reasonable and ordinary.

(e) The fixed hourly rates provided by the WRCOG for the respective fiscal year are specified in Exhibit G and may change at the discretion of the applicable I-REN Constituent Agencies from time to time; provided, that, the WRCOG shall, as soon as practicable, notify SoCalGas in writing of any change to the labor rates in Exhibit G, and such change shall be automatically incorporated into the Programs Agreement without need for a formal amendment. The Utilities neither endorse nor approved the fixed hourly rates.

(f) Expenses. All expenses shall be charged at cost, without mark-up, and shall be necessary, reasonable and ordinary. This prohibition on mark-ups shall be observed by all Subcontractors and Third-Party Contractors and shall be incorporated into any contracts by and between such persons and an I-REN Constituent Agency, such that, the applicable Subcontractor or Third-Party Contractor is not receiving payment relating to services that it did not directly provide. In furtherance of the foregoing, no I-REN Constituent Agency, Subcontractor or Third-Party Contractor, shall give, and no such person shall accept, any portion, split or percentage of any charge made or received in rendering any services (or goods) other than for services actually performed (or goods directly manufactured).

(g) Material Costs. Material costs shall be charged at cost without mark-up and substantiated with an invoice stating the unit price, quantity, and other information as required to identify the Authorized Work.

(h) Subcontract Costs and Subcontractors. Subcontracted Authorized Work shall be charged at the rates actually paid by the I-REN Constituent Agencies, not to exceed the rates set forth in the applicable contract between the I-REN Constituent Agency and the Subcontractor, or this Programs Agreement for the Authorized Work by the I-REN Constituent Agencies. The WRCOG shall provide SoCalGas the Subcontractor invoices (incorporating any Third-Party Contractor costs) for any invoice that includes Subcontractor costs. With respect to the Utilities, the WRCOG shall at all times be responsible for the Authorized Work, and for the acts and omissions of Subcontractors and persons directly or indirectly engaged by the Subcontractors, including Third-Party Contractors. All expenses shall be charged at cost, without mark-up.

(i) Out-of-Pocket Expenses. Miscellaneous costs such as telephone communications, routine copying, electronic mail, facsimiles, computer time and in-house technical software are deemed to be included in the I-REN Constituent Agencies' overhead costs and will not be reimbursed.

(j) Travel Costs. Approved air travel costs shall in no case exceed economy or coach fare, whichever is reasonably available or in accordance with I-REN Constituent Agencies' travel cost policy. A copy of an airfare receipt indicating the final expense for the trip taken and applicable supporting documents showing the starting point, travel destination, departure and return dates, and the purpose of the trip are required for each air travel reimbursement. Automobile travel from the offices of

the I-REN Constituent Agencies' agents or representatives to any I-REN Program job site, function or activity shall be paid at the fixed mileage rate stated in the Programs Agreement or, if not stated, at the applicable Internal Revenue Service standard mileage reimbursement rate or a reimburseable rate set by I-REN Constituent Agency's travel cost policy. Either a mileage log showing miles driven for each trip or a Google/MapQuest, or their equivalent, printout showing the travel path is required for each mileage reimbursement request.

(k) Records. The WRCOG shall maintain, for a period of five (5) years after final payment, complete accounting records (and supporting documentation) of all invoiced costs. The Utilities reserve the right to audit and copy any applicable documents related to the Authorized Work, including, hours, all costs and expenses invoiced, and task completion records. Each invoice shall list the purchase order number and the WRCOG's vendor number provided by the Utilities when applicable. In addition, the WRCOG shall cooperate in any audit of the I-REN Programs, any action or activity related to this Programs Agreement or the Decision undertaken by the Commission or other authorized entity, if applicable.

(l) Key Personnel. The WRCOG will appoint a Programs Agreement representative ("WRCOG Representative") who will be the primary contact between SoCalGas and the WRCOG, and who will be authorized to act on behalf of the WRCOG, as the I-REN Authorized Agent. Such appointment shall be communicated in writing to SoCalGas as soon as reasonably practicable following execution of this Programs Agreement. The WRCOG shall promptly notify SoCalGas of the intended reassignment or proposed replacement of the WRCOG Representative who will be submitting invoicing and reporting information to SoCalGas. No other key personnel shall undertake the aforementioned tasks without prior written notice to SoCalGas.

(m) Activities Outside of Program Scope. SoCalGas, as lead fiscal manager, for itself and on behalf of SCE, shall not be required to pay or reimburse the WRCOG or any other person for any activities undertaken that do not constitute Authorized Work as contemplated hereunder or are otherwise outside of the scope of an I-REN Program or this Programs Agreement, and the WRCOG may not include any costs or expenses for any such activities on an invoice submitted pursuant to this Programs Agreement.

Section 7.4 Invoicing Requirements: The WRCOG shall provide the following: Monthly electronic copy invoices are required by the **15th Calendar Day of each month** for Authorized Work completed in the preceding month with supporting documents described herein. These invoices and supporting documents are for Authorized Work performed by the I-REN Constituent Agencies and all of their respective Subcontractors (and their respective Third-Party Contractors). Each invoice shall indicate the sub-total expense for each of the I-REN Programs and itemized each I-REN Program expense in "Administrative," "Marketing" and "Direct Implementation." Each invoice shall include but not be limited to the following details: identify the contractor name, type (e.g., Third-Party Contractor or a Subcontractor), hiring I-REN Constituent Agency, contract start and end dates, details on any intermittency between the contract start and end dates, program start date, program end date (date program will no longer be offered to the public or criteria used to decide whether to end the program), customers eligible for the program (gas or electric, market segment, other criteria), value of contract, and any other data reasonably required by the Utilities.

Section 7.5 Advance Funding and Payment: In order to provide funding for the cost categories of an I-REN Program for CPUC approved "incentive" and "non-incentive" expenses, the IOUs may provide advance payments to WRCOG of such amounts and at such times as delineated in this Programs Agreement ("Advanced Payments"). As further described below, the Advanced Payments will be credited against payments of expenditures actually made by WRCOG. At the completion of the I-REN Programs, a reconciliation of expenses will be done to ensure that the IOUs only pay for those verified expenses actually incurred. The remaining balance relating to any Advanced Payments, if any, will be

applied to the final invoice, if unpaid, and any remaining balance will be refunded to the IOUs within thirty days from the date of the final reconciliation.

(a) Advance funding for energy efficiency incentive: WRCOG may receive Advanced Payments from IOUs for energy efficiency incentive expenses for I-REN's programs. The Parties understand that WRCOG intends to launch its resource program in second half of 2022 and that it will take time to build program momentum and project enrollments. The initial amount of Advanced Payments for an incentive shall be based on I-REN resource program's enrollment and incentive commitments for 2022. The initial Advanced Payments for such incentive shall be equal to 150% of I-REN's actual and documented incentive commitments as of the date the applicable resource program is launched to the extent launched in the year 2022; provided, that, in no event will the total Advanced Payments for such incentive funding per calendar year exceed the annual I-REN incentive budget related to such program. WRCOG shall set up a separate custodial bank account to hold all of the Advanced Payments relating to incentive funds. WRCOG will provide a monthly bank statement to SoCalGas showing account balance, interest earned (if applicable) and all transactions relating to the custodial bank account for the bank statement period along with reconciliation of incentive payments and completed energy efficiency projects on a per program basis. No subsequent Advanced Payments for incentive funding related to a given program shall be made until and unless at least 80% of the initial (or immediately prior, as applicable,) Advanced Payment relating to such program has been spent, as documented and reconciled by reference to incentive spending (drawdown) and the account balance of the incentive custodial bank account, which shall be communicated to SoCalGas. Notwithstanding anything herein to the contrary, in no event shall the cumulative Advanced Payments for incentive funding for a given calendar year exceed the total I-REN annual incentive budget. In furtherance of the foregoing, no Advanced Payment for incentive funding shall exceed 150% of the I-REN's actual energy efficiency project pipeline incentive commitments at the time of such funding that have not otherwise been covered by prior Advanced Payments relating to incentive funding or cause the cumulative annual incentive funding to exceed the I-REN annual incenive budget. No Advanced Payment subsequent to the initial Advanced Payment for incentive funding will be made by SoCalGas without WRCOG's reconciliation for each resource program between the dates of the actual incentive payouts from the custodial bank account and completed energy efficiency projects at measure level. WRCOG will process energy efficiency incentive payments in accordance with I-REN's program design, energy efficiency measure design and process protocol for I-REN's program. The incentive funds shall solely be used for energy efficiency incentive as defined in Section 2.11 of this Programs Agreement.

(b) Advance funding for I-REN non-incentive budget: WRCOG may receive Advanced Payments from IOUs for energy efficiency non-incentive expenses for I-REN's programs. In no event shall the Advanced Payments for the I-REN's non-incentive budget be used to finance WRCOG's program costs. WRCOG shall set up a separate custodial bank account to hold the Advanced Payments relating to non-incentive funds separate and apart from that custodial bank account created pursuant to Section 7.5(a).Within 30 calendar days of the date of this Programs Agreement, WRCOG shall provide monthly invoices with monthly cost accounting for all non-incentive expenditure on a per program basis for the first nine months of 2022. The initial Advanced Payment for funding non-incentive expenses shall be based on the average monthly non-incentive expenditure level indicated in the monthly cost accounting for the first nine months of 2022. The initial Advanced Payment amount will be an amount equal to 150% of the average monthly non-incentive expenditures over the first nine months of 2022. WRCOG shall provide monthly bank statements to SoCalGas showing the account balance, interest earned (if applicable) and all transactions in such custodial bank account for the bank statement period along with monthly invoice reports in accordance with Articles IV, V and VII of this Programs Agreement. Any subsequent Advanced Payments relating to non-incentive funding will be based on the actual reconciled non-incentive spending drawdown for each I-REN program in each cost category (administrative, marketing and direct implementation). No subsequent Advanced Payments for non-incentive funding related to a given program shall be made until and unless any one of the following conditions is met as determined by SoCalGas:

(i) At least 80% of the initial Advanced Payment relating to such program has been spent, as documented and reconciled by reference to up-to-date monthly invoice and

cost accounting of non-incentive spending (drawdown) as described in ARTICLE VII and the account balance of the non-incentive custodial bank account, which shall be communicated to SoCalGas;

(ii) At least 80% of the custodial bank account balance after the most recent Advance Payment has been spent, as documented and reconciled by reference to up-to-date monthly invoice and cost accounting of non-incentive spending (drawdown) as described in ARTICLE VII and the account balance of the non-incentive custodial bank account, which shall be communicated to SoCalGas;

(iii) The total amount of the current approved invoices exceeds the custodial bank account balance.

The amount of the subsequent Advance Payment after the initial Advance Payment shall be based on up to (but shall not exceed) 150% of the average monthly non-incentive expenditure of the immediately preceding months in the calendar year. In the case of Section 7.5 (b) (iii) above, the amount of the Advance Payment shall be based on up to (but shall not exceed) 150% of the average monthly non-incentive expenditure of the immediately preceding months in that year (including the amount of the current approved invoices referenced in Section 7.5 (b) (iii)), plus the difference between the approved total current invoices and the then custodial bank account balance. Beginning at the start of the fourth quarter of each calendar year, WRCOG shall provide SoCalGas annual reconciliation for spending, commitments and expenditure forecast for the calendar year to ensure program expenditure is under the annual authorized budget. WRCOG may request Advance Payment for the non-incentive budget at the beginning of each calendar year based on 150% of the 12-month monthly average of the immediately prior year's non-incentive expenditure if and only if WRCOG has provided SoCalGas annual cost accounting reconciliation for spending, commitments and budget for the prior calendar year and the custodial bank account balance is at least 80% spent at the time of request relative to the custodial bank account balance at the end of December of the prior year. No additional Advanced Payments for non-incentive funding shall be made by SoCalGas from and after the third quarter of 2027 (to cover fourth quarter of 2027). WRCOG will deplete or return to SoCalGas any remainng balance of the non-incentive Advanced Payments relating to non-incentive funding and prepare a final invoice in accordance with Section 7.8.

(c) Reconciliation and Documentation Requirement:

(i) By December 1 of each calendar year, as an annual incentive and commitment reconciliation, WRCOG shall provide SoCalGas committed and forecasted incentive payment amounts for electric and gas measures to be accounted for savings claims for the calendar year.

(ii) WRCOG shall provide SoCalGas monthly reconciliation reports on actual incentive payments drawn from the advanced incentive funding for all resource programs. The monthly reconciliation report shall include the monthly bank statement for each custodial bank account established for the respective incentive type showing all bank account activities. The monthly reconciliation report shall be submitted to SoCalGas within ten (10) business days after the end of each calendar month regardless of any potential delay in preparing for the regular monthly invoice or the lack of incentive payment activities.

(iii) Documentation required for incentive reconciliation: Documentation required for incentive reconciliation varies depending on the nature of the project. The following basic information is needed:

(A) Dated customer project application data

(B) Project scope with measure descriptions

(C) Incentive amount for each measure, total incentive amount, check number and date paid

(D) Signed customer authorization form or statement for incentive payment made to a Third-Party Contractor other than the customer if applicable

(E) Project and site data (No. of measure installed, measure description, installed address, customer name, service account number, etc.)

(F) Permit Number (if applicable and required by law)

(iv) Beginning at the start of the fourth quarter of each calendar year and by December 1 of each calendar year, as an annual non-incentive and commitment reconciliation, WRCOG shall provide SoCalGas committed non-incentive amount and forecasted non-incentive program costs for each program to be accounted for the calendar year. This annual advance non-incentive funding reconciliation is required to ensure program spending is within the authorized program budget for the calendar year.

Section 7.6 Invoicing Procedures:

(a) The WRCOG shall transmit to SoCalGas the monthly invoice files as directed by SoCalGas during the initial training for the IR Tools. The invoice file transmission will take place via a secured file transfer protocol (SFTP) provided by SoCalGas to protect customer or proprietary information.

(b) SoCalGas concurrently with SCE shall review the monthly invoice within 15 Business Days of receipt of an invoice from the WRCOG to determine if the invoice complies with the requirements set forth in this Programs Agreement; provided, however, that for any monthly invoices relating to any Prior Expenses received on or after the Execution Date for Authorized Work conducted during the period from January 1, 2022 through the Effective Date as further set forth in Section 7.12, SoCalGas and SCE shall have 30 Business Days to determine if the invoice complies with the requirements set forth in this Programs Agreement and thereafter make any reimbursements with respect thereto.

(c) Monthly Narrative. The WRCOG shall include with the monthly invoices a monthly narrative that includes a discussion on the following I-REN Program activities occurring during the month:

(i) Administrative activities;

(ii) Marketing activities;

(iii) Direct Implementation activities;

(iv) Other activities which support the review and approval of the WRCOG's invoices and that fall within the scope of the Decision.

(d) Invoice Deficiencies. In the event SoCalGas determines that the WRCOG's invoices or any of the invoices of any Third-Party Contractors or Subcontractors that are included for payment do not meet the invoicing requirements of this Programs Agreement, lack accounting transparency, and/or lack sufficient material document support, SoCalGas will notify the WRCOG of the deficiencies and the WRCOG shall correct such deficiencies promptly. SoCalGas has the right to review and approve the data and methods used to develop the invoice documentation. However, the failure to conduct such review or grant such approval shall not relieve the WRCOG from its responsibilities and obligations under this Programs Agreement.

Section 7.7 Payment. SoCalGas shall pay undisputed charges within fifteen (15) Business Days of invoice approval. SoCalGas has the right to withhold payment of those charges that SoCalGas disputes in good faith, pending the resolution of the dispute, and SoCalGas will provide the WRCOG with notice of the amounts being withheld and the reasons for the dispute; provided, that, SoCalGas shall pay the balance of any amounts charged that are not in dispute as provided herein. Any withholding of disputed amounts by SoCalGas shall not be deemed a breach of the Programs Agreement by SoCalGas. With respect to WRCOG withdraws from any non-incentive Advance Payments to cover the monthly non-incentive expenses, upon SoCalGas written approval of the submitted WRCOG monthly invoice in accordance with Article VII of this Programs Agreement, WRCOG will expense the approved invoice amount for non-incentive costs from the appropriate custodial bank account that holds the non-incentive Advance Payments.

Section 7.8 Final Invoice. The final invoice with respect to any I-REN Program shall be marked "FINAL" and must be received by SoCalGas within ninety (90) Calendar Days after December 31, 2027 (the "Cut-Off Date"). SoCalGas shall not be liable for payment of any invoices that are submitted to SoCalGas at any time after the Cut-Off Date.

Section 7.9 Additional Invoice, Payment and Reporting Requirements. Additional invoice, payment and reporting requirements may be set forth for each scope of work with respect to individual projects supported by Authorized Work.

Section 7.10 Ratepayer Benefit, Tracing, Segregation of Funds. The Parties agree that ratepayer-funded programs must directly benefit Customers in the service territory from which the funds are collected. The I-REN Programs implemented pursuant to this Programs Agreement are funded in whole or in part by funds collected from SoCalGas' and SCE's Customers for public purpose programs, and therefore must directly benefit SoCalGas' and SCE's Customers. For purposes of clarification:

(a) No I-REN Constituent Agency shall use I-REN Program funds for activities outside the Utilities' service territories or for the benefit of persons or entities other than Customers.

(b) No I-REN Constituent Agency shall use I-REN Program funds for activities in any non-joint Utility territory until such time that the WRCOG has determined to the reasonable satisfaction of the Utilities that the WRCOG can trace and segregate Program funds in order to avoid using Program funds for (i) electric program activities outside SCE territory and/or (ii) gas program activities outside SoCalGas territory.

(c) The WRCOG shall not submit any invoice seeking reimbursement for money that does not directly benefit SCE's Customers (for electricity programs) or SoCalGas' Customers (for gas programs). The Utilities are not required to pay any such invoice (or portion of such an invoice) unless the activities and services paid for by such invoice directly benefit the Utiliites' customers. If an invoice (or

portion of such an invoice) is paid by SoCalGas to WRCOG that is discovered to not meet this requirement, the WRCOG, upon request, shall refund to SoCalGas the amount paid for such activities that do not meet this requirement, or at SoCalGas' option, SoCalGas may offset those amounts against future payments owed to the WRCOG pursuant to the Programs Agreement.

Section 7.11 Audits.

(a) The WRCOG shall maintain, for a period of five (5) years after final payment, complete accounting records (and supporting documentation) of all invoiced costs. The Utilities and the Commission shall have the right to audit the WRCOG and the I-REN at any time during the term of this Programs Agreement and for five (5) years thereafter. In addition, each I-REN Constituent Agency shall cooperate in any audit of this any action or activity related to this Programs Agreement or the Decision undertaken by the Commission. An audit may include, but is not limited to, a review of financial records relating to the Authorized Work, I-REN Program marketing material, I-REN Program implementation documents, funds spent to date, tracing of expenditure of ratepayer funds to a Utility's Customers, information relating to the substantiation of I-REN Program expenditures, Incentives paid to date, Customers given Incentives to date, lists of employees and respective duties, lists of Third-Party Contractors and/or Subcontractors and their respective responsibilities or service provided.

(b) The Utilities may, in their sole discretion and at any time, request information or data relating to an I-REN Program, Authorized Work or this Programs Agreement, and the WRCOG shall provide such information in the format and within the time requested by the Utilities.

Section 7.12 The WRCOG shall not retain any ratepayer funds erroneously paid under this Programs Agreement. If, at any time, the Utilities discover that an amount was paid to the WRCOG in error, either through subsequent review or audit by SoCalGas, SCE, the Commission audit, or by another means, the amount erroneously paid to the WRCOG may, at the option of the Utility, be used to offset future payment(s) due to the WRCOG or must be repaid by the WRCOG to the Utility.

Section 7.13 Prior Authorized Work. To the extent that the Constituent COGs have caused any Authorized Work to be commenced or completed (or have otherwise contracted for the same) and have incurred Program Expenditures incurred for such Authorized Work on or after January 1, 2022 and prior to the Effective Date ("Prior Expenses"), strictly in accordance with the Decision and an Implementation Plan, each of the Constituent COGs hereby represents and warrants that all of the obligations and duties set forth in this Programs Agreement with respect to such person, had such agreement been in effect during such time, were fully complied with in all material respects. Provided that the foregoing remains true and correct, SoCalGas and SCE agree to treat such Prior Expenses in accordance with this Article VII.

ARTICLE VIII
Committees and Meeting Requirements

The Utilities and the WRCOG shall, as soon as practicable after the execution of this Programs Agreement, form Coordinating and/or Technical Committees consistent with the intent of the approved JCM. The roles and responsibilities for these committees are set forth in the applicable JCM. Meeting requirements for the Coordinating and Technical Committees are also set forth in Exhibit J. Additional coordination requirements between the Utilities and the WRCOG that are specific to an I-REN Program are set forth in that Program's Implementation Plans or approved JCM.

ARTICLE IX
Incentives and Cooperation

Section 9.1 If an I-REN Program participant has been identified as a Customer that has

previously received Incentives either through another utility ratepayer-funded program then no I-REN Constituent Agency shall, thereafter, knowingly provide an Incentive to such I-REN Program participant for the same measure, product or service. Without limiting the foregoing, the Parties shall cooperate in identifying Customers and I-REN Program participants who are ineligible for further Incentives due to prior participation in a program administered by a Utility.

Section 9.2 The WRCOG and the Utilities shall coordinate and cooperate with the goal of achieving seamless program offerings and to avoid customer confusion in the offering of products and services.

ARTICLE X
Ownership of Developments, Marketing Materials

Section 10.1 The WRCOG, on behalf of itself and each I-REN Constituent Agency, acknowledges and agrees that the Utilities, on behalf of their respective Customers, shall own all data, reports, information, manuals, computer programs, works of authorship, designs or improvements of equipment, tools or processes (collectively "Developments") created by the I-REN Constituent Agencies in the performance of this Programs Agreement. Developments do not include equipment or infrastructure purchased for research, development, education or demonstration related to energy efficiency. The Utilities hereby grant to the I-REN an irrevocable, royalty-free, non-exclusive license to use such Developments solely for the purpose of implementing the I-REN Programs, and shall execute such other documents as may be necessary or desirable to effectuate such grant.

Section 10.2 The WRCOG shall submit all marketing materials that contain reference to any Utilities to SoCalGas for review and approval prior to their release or communication. All such marketing materials may be approved or disapproved in each applicable Utility's sole and absolute discretion.

Section 10.3 Use of Utilities' Name. The WRCOG must receive prior review and written approval from a Utility for the use of such Utility's name or logo on any marketing or other I-REN Program materials. The WRCOG shall allow twenty (20) Business Days for such Utility review and approval. If the WRCOG does not received a response from such Utility within the twenty (20) Business Day period, then it shall be deemed that such Utility has disapproved such use.

Section 10.4 Use of WRCOG's or I-REN's Name: The Utilities must receive prior review and written approval from the WRCOG for the use of the name or logo of any I-REN Constituent Agency on any marketing or other I-REN Program materials using such information. The Utilities shall allow twenty (20) Business Days for the WRCOG's review and approval. If the Utilities do not receive a response from the WRCOG within the twenty (20) Business Day period, then it shall be deemed that the WRCOG has disapproved such use.

Section 10.5 No I-REN Constituent Agency shall in any way represent to third parties, Customers or I-REN Program participants that SoCalGas or SCE has endorsed or approved a product, a Third-Party Contractor, a Subcontractor, or their performance of any I-REN Program or any other energy efficiency services.

Section 10.6 Notwithstanding any provision in this Article X to the contrary, whether expressly or by implication, the I-REN Constituent Agencies shall disclose the source of funding for the I-REN Programs by stating prominently on marketing materials (including, but not limited to, printed materials, Websites or any social media) that, "the I-REN Programs are administered by the Western Riverside Council of Governments, on behalf of itself and each of Coachella Valley Association of Governments and the San Bernardino Associated Governments, and funded by SoCalGas and SCE utility ratepayers under the auspices of the California Public Utilities Commission."

ARTICLE XI
Jurisdictional Warranty

Section 11.1 The WRCOG warrants that it has full legal authority to implement the I-REN Programs as authorized by the Commission under this Programs Agreement.

Section 11.2 The WRCOG warrants that the geographic area in which the I-REN Programs under this Programs Agreement will be implemented is set forth on the attached Exhibit K.

ARTICLE XII
Compliance With Applicable Law, Policies and Commission Regulations

Section 12.1 Each of the Parties shall comply with all federal, state (including Commission), and local laws, rules, regulations, ordinances, decisions, policies and directives that are applicable to this Programs Agreement, including, but not limited to, labor and fair employment laws and prevailing wage laws, and all provisions required thereby to be included in contracts are hereby incorporated herein by this reference. Additionally, the WRCOG shall ensure compliance with the Commission's decisions with respect to "program administrators," including, without limitation, workforce standards regarding implementors.

Section 12.2 Such regulatory compliance activities, including costs to maintain compliance, shall be paid for solely by the I-REN for and on behalf of the applicable I-REN Constituent Agency through authorized funding provided under this Programs Agreement, if available, inclusive of any Commission-imposed penalties or disallowances. These include but are not limited to:

(a) Filing and/or submitting required regulatory documents;

(b) Complying with all Commission, statutory and other applicable requirements, rules and policies;

(c) Maintaining adequate records for future financial and management audits and/or reviews;

(d) Maintaining savings and engineering assumptions consistent with current Commission rules or baselines;

(e) Maintaining necessary preventative controls on expenses;

(f) Maintaining and tracking all monies by task and function, including complying with fund-shifting rules between the I-REN Programs;

(g) Responding to data requests and complying with all required reporting; and

(h) Any additional compliance requirements of the I-REN Constituent Agencies, that arise during the effective period of this Programs Agreement, but that were not anticipated in this Programs Agreement, shall be the sole responsibility of the I-REN Constituent Agencies.

Section 12.3 Changes in Applicable Laws. After the Effective Date, if any legal, regulatory, or administrative authority issues a decision, ruling, order, or directive of any kind that is binding upon the Parties and that requires modification or addition of terms, covenants or conditions of this Programs Agreement in order for the Parties to be in compliance with same, then the Parties shall meet as soon as practicable to discuss proposed modifications to this Programs Agreement only to the extent required to bring it into compliance with such applicable laws.

Section 12.4 The WRCOG shall follow General Order 156, setting forth the Commission's policy statement on utility utilization of resources from suppliers that constitute WMDVLGBTBE (as defined therein), to the extent not in conflict with Proposition 209 (codified as Article I Section 31 of the California Constitution).

Section 12.5 Background Checks. The WRCOG shall conduct background checks on any employee or Subcontractor (and each Subcontractor shall require that its Third-Party Contractors conduct background checks on its employees and contractors) who will undertake I-REN Program Authorized Work conducted at a Utility Customer's residence or a private business location. The background check requirements shall be determined by the WRCOG in its reasonable discretion, provided that, at a minimum, the background checks shall be consistent with the WRCOG's then-current background check requirements for WRCOG programs that contain similar job requirements. Employees of any I-REN Constituent Agencies or Subcontractors or Third-Party Contractors conducting activities under this Section 12.5:

(a) Shall report for work in a manner fit to do their job;

(b) Shall not be under the influence of or in possession of any alcoholic beverages or of any controlled substance (except a controlled substance as prescribed by a physician for such person so long as the performance or safety of the Authorized Work is not affected thereby); and

(c) Shall not have been convicted of any serious criminal offense, which by its time and nature, presents a discernible safety or property risk to the public.

Section 12.6 Non-Discrimination. No Party shall unlawfully discriminate, harass, or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, physical disability (including HIV and AIDS), mental disability, medical condition (cancer), age (over 40), marital status, and denial of family care leave. Each Party shall ensure that the evaluation and treatment of its employees and applicants for employment are free from such discrimination and harassment and shall comply with the provisions of the Fair Employment and Housing Act (Government Code Section 12990(a)-(f) et seq.) and the applicable regulations promulgated thereunder (California Code of Regulations, Title 2, Section 7285 et seq.). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code Section 12990(a)-(f), set forth in Chapter 5 of Division 4 of Title 2 of the California Code of Regulations, are incorporated by reference and made a part of this Programs Agreement. Each Party represents and warrants that it shall include the substance of the nondiscrimination and compliance provisions in all subcontracts for its Authorized Work obligations. Additionally, the Parties shall conform to the applicable employment practices requirements of Executive Order 11246 of September 24, 1965, as amended, and applicable regulations promulgated thereunder.

ARTICLE XIII
Indemnification

Section 13.1 By the Constituent COGS. The Constituent COGS, on behalf of themselves and each I-REN Constituent Agency carrying out Authorized Work or other implementation or design of an I-REN Program on behalf of a Constituent COG, shall, joint and severally, indemnify, defend and hold harmless SCE and SoCalGas, and their respective successors, assigns, affiliates, subsidiaries, current and future parent companies, officers, directors, agents, and employees, from and against any liability (including expenses, claims, losses, damages, liabilities or actions in respect thereof, along with reasonable attorneys' fees) of to the extent caused by the WRCOG's act(s) and/or omission(s), or by the act(s) and/or omission(s) of its employees, representatives Third-Party Contractors, Subcontractors, or agents, including, without limitation, with respect to the I-REN's compliance or non-compliance with the Commission's policy regarding program administrators, application or misapplication of program funds

(even if disbursed), as well as any of the Authorized Work or other implementation or design of an I-REN Program.

Section 13.2 By the Utilities. So long as the WRCOG, SANBAG, and CVAG are in compliance with the terms and conditions of this Programs Agreement, the Utilities shall, on a several but not joint basis, indemnify, defend and hold harmless the WRCOG, SANBAG, and CVAG, their respective special districts, elected and appointed officers, employees, and agents, from and against any and all third-party liability (including expenses, claims, losses, damages, liabilities or actions in respect thereof, along with reasonable attorneys' fees) to the extent caused by the Utilities' failure to make the uncontested payments described in Section 7.5.

Section 13.3 The obligations of SCE, SoCalGas, WRCOG, SANBAG, and CVAG under this section shall survive the termination of this Programs Agreement.

ARTICLE XIV
Insurance

Section 14.1 The WRCOG and each of the I-REN Constituent Agencies will maintain the following insurance coverage at all times during the term of this Programs Agreement, with companies having an A.M. Best rating of "A-, VII" or better, or equivalent: Such insurances shall acknowledge the Utilities, their officers, agents and employees as additional insureds, be primary for all purposes, contain standard cross-liability or severability of interest provisions, and waive all rights of subrogation against the Utilities, its officers, agents, employees and other contractors or subcontractors.

(a) Workers' Compensation: statutory minimum.
(b) Employer's Liability coverage: $1 million minimum.
(c) Commercial General Liability: $2 million minimum per occurrence/$4 million minimum aggregate.
(d) Commercial or Business Auto: $1 million minimum.
(e) Professional Liability (if applicable): $1 million minimum.

Section 14.2 Evidence of Insurance. Upon request at any time during the term of this Programs Agreement, the WRCOG shall provide evidence that its insurance policies and the insurance policies as provided in this Article XIV are in full force and effect and provide the coverage and limits of insurance that the WRCOG has represented and warranted herein to maintain at all times during the term of this Programs Agreement.

Section 14.3 Self-Insurance. If the WRCOG or any of the I-REN Constituent Agencies is self-insured, it shall upon request forward documentation to the Utilities that demonstrates to the Utilities' satisfaction that the WRCOG self-insures as a matter of normal business practice before commencing the Authorized Work.

Section 14.4 Notice of Claims. The WRCOG shall immediately report to the Utilities, and promptly thereafter confirm in writing, the occurrence of any injury, loss or damage incurred by the WRCOG, any other I-REN Constituent Agency or any Subcontractor or Third-Party Contractor or their receipt of notice or knowledge of any claim by a third party of any occurrence related to the I-REN Programs and/or to this Programs Agreement that might give rise to such a claim.

Section 14.5 Insurance Indemnification. If the WRCOG fails to comply with any of the provisions of this Article XIV, or to the extent any I-REN Constituent Agency carrying out Authorized Work or other implementation or design of an I-REN Program on behalf of a Constituent COG does not

require its Subcontractors to maintain the insurance coverage specified in Section 14.1, the I-REN Constituent Agencies, severally but not jointly, shall, at their own cost, defend, indemnify, and hold harmless the Utilities, their affiliates and their officers, directors, agents, employees, assigns, and successors in interest, from and against any and all liability, damages, losses, claims, demands, actions, causes of action, costs, including attorney's fees and expenses, or any of them, arising out of or in connection with the performance or non-performance of the Authorized Work.

ARTICLE XV
Limitation Of Certain Liabilities

NO PARTY SHALL BE LIABLE TO THE OTHER(S) FOR THE OTHER'S OR OTHERS' INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, WHETHER IN CONTRACT, TORT (INCLUDING NEGLIGENCE) OR STRICT LIABILITY INCLUDING, BUT NOT LIMITED TO, LOSS OF USE OF OR UNDER-UTILIZATION OF LABOR OR FACILITIES, LOSS OF REVENUE OR ANTICIPATED PROFITS, COST OF REPLACEMENT POWER OR CLAIMS FROM CUSTOMERS, RESULTING FROM A PARTY'S PERFORMANCE OR NONPERFORMANCE OF THE OBLIGATIONS HEREUNDER, OR IN THE EVENT OF SUSPENSION OF THE AUTHORIZED WORK OR TERMINATION OF THIS PROGRAMS AGREEMENT.

ARTICLE XVI
Confidential Information and Security Requirements

Section 16.1 Except as provided for in Section 16.3, no Utility shall be required to provide to any Constituent COG any Confidential Customer Information (as defined below), or any information that is deemed by the Utility to be proprietary, trade secret, or otherwise confidential. In the event a Utility agrees in writing to any such disclosure of such information, the Utility may require the applicable Constituent COG to enter into the agreements set forth in the attached Exhibit C and Exhibit D as well as a nondisclosure agreement and undergo a data security review as a condition to its disclosure. Notwithstanding the foregoing and in the event the Utilities provide any Confidential Customer Information pursuant to this Programs Agreement, the Parties agree that Confidential Customer Information is exempt from disclosure under the California Public Records Act, Cal. Gov't Code Sections 6250, et seq., under the exemptions provided in the California Public Records Act, including Sections 6254(e), 6254(k), and/or 6255(a), and will withhold from disclosure such materials unless ordered to do so by a court of competent jurisdiction.

Section 16.2 Confidential Customer Information. "Confidential Customer Information" is a Utility Customer's personal identifiable information including, but not limited to, such person's name, address, telephone number, account number and all billing and usage information, as well as any Utility Customer's information marked as "confidential."

Section 16.3 Except as explicitly provided for in this Section 16.3, and subject to Section 16.1, no Utility will disclose any Confidential Customer Information to a Constituent COG unless authorized in writing by the Customer, except for the following information, which will be made available on an as-needed basis and subject to the confidentiality and non-disclosure provisions of this Programs Agreement:

(a) The WRCOG (on behalf of a Constitutent COG) may request and receive confirmation that a purported Customer is currently served by one of the Utilities;

(b) The WRCOG (on behalf of a Constitutent COG) may request and receive information on a Utility Customer's past participation in an energy efficiency program if that Customer is located in the I-REN's service teritory.

Section 16.4 Each Constituent COG shall comply with the attached Exhibit C and Exhibit D with respect to any Confidential Customer Information provided under this Programs Agreement. The applicable Constituent COG shall immediately notify SCE and SoCalGas representatives if the WRCOG is, or becomes, unable to meet any of the requirements contained therein.

Section 16.5 No Constituent COG shall disclose any Confidential Customer Information of a Utility to any third party during the term of this Programs Agreement or after its completion, without first having obtained the prior written consent of such Utility, except as provided by law, lawful court order or subpoena and provided the applicable Constituent COG gives such Utility written notice of such order or subpoena promptly after its receipt and agrees to pursue a protective order with respect to any such disclosure.

Section 16.6 Any information provided to a Constituent COG is provided "as is," and the Utility shall not be liable for the accuracy or completeness of any information provided.

Section 16.7 Commission Proceedings. Nothing in this Article XVI shall prohibit a Constituent COG from disclosing non-confidential information (including aggregated and anonymized statistical data without specific Customer identifiers) concerning the I-REN Programs to the Commission in any Commission proceeding, or any Commission-sanctioned meeting or proceeding or other public forum.

Section 16.8 Return of Confidential Information. Confidential Customer Information (including all copies, backups and abstracts thereof) provided to any Constituent COG by a Utility, and any and all documents and materials containing such Confidential Customer Information or produced by a Constituent COG based on such Confidential Customer Information (including all copies, backups and abstracts thereof), during the performance of this Programs Agreement shall be returned (or destroyed at the Utility's option, with confirmation by affidavit thereof) upon written request by such Utility. Nothing in the Programs Agreement shall be construed as granting any rights in or to Confidential Customer Information to the receiving Party, except the right of use in accordance with the provisions in this Programs Agreement.

Section 16.9 Remedies. The Parties acknowledge that Confidential Customer Information is valuable and unique, and that damages may be an inadequate remedy for breach of this Article XVI and the obligations of the Parties are specifically enforceable. Accordingly, the Parties agree that in the event of a breach or threatened breach of this Article XVI by any Party, the Party whose Confidential Customer Information is implicated in such breach shall be entitled to an injunction preventing such breach, without the necessity of proving damages or posting any bond. Any such relief shall be in addition to, and not in lieu of, money damages or any other available legal or equitable remedy.

Section 16.10 Computing System Access and Security Review Obligations. The Parties acknowledge and agree that no Utility shall be required to allow any Party to access the Utility's computer systems unless and until the Parties execute an amendment incorporating mutually agreeable computing system access terms that are the same or substantially similar to Exhibit D.

Section 16.11 The obligations of each Party under this Article XVI shall survive the termination of this Programs Agreement.

ARTICLE XVII
Term and Termination

Section 17.1 Term. The term of this Programs Agreement shall be from the Effective Date until March 31, 2028, unless terminated earlier as provided in this section, provided however that all Authorized Work and services shall be completed by the dates specified in the scope of work with respect

to individual projects supported by Authorized Work or December 31, 2027, whichever is earlier. The 90-Calendar Day period following December 31, 2027 shall be for administrative purposes only.

Section 17.2 If the WRCOG possesses unspent funding authorized by the Decision after July 1, 2028, including moneys repaid pursuant to financing terms, such funds shall, in consultation with SoCalGas, as lead fiscal manager, for itself and on behalf of SCE, be returned to SoCalGas's and SCE's ratepayers unless otherwise directed by the Commission.

Section 17.3 Termination For Convenience. This Programs Agreement shall not be terminated for convenience of the Parties, except as by an order, decision, or resolution of the Commission. Notwithstanding the foregoing, the Commission, by decision, order, or resolution, may deem that all or a portion of this Programs Agreement be terminated. In the event of such termination, the Utilities shall pay for Authorized Work performed prior to the date of termination but in no event shall the Utilities be liable for lost or anticipated proceeds or overhead on uncompleted portions of the Authorized Work.

Section 17.4 Immediate Cause For Suspension. The Utilities can suspend this Programs Agreement for the following situations:

(a) Any Consituent COG has become insolvent, has failed to pay its bills, or has had checks for payment of its bills returned from suppliers and Subcontractors due to insufficient funds; or

(b) Any Consituent COG's commission of any material act of dishonesty, fraud and misrepresentation or material act causing public risk or harm. In the event of such suspension, the Utilities may seek Commission approval to terminate the Programs Agreement.

In a case of suspension and/or termination, the Utilities shall pay for Authorized Work satisfactorily performed prior to the date of suspension or termination but in no event shall the Utilities be liable for lost or anticipated proceeds or overhead on uncompleted portions of the Authorized Work.

Section 17.5 Declaration of Default. Any Party, by written notice of default, may declare a default of the whole or any part of this Programs Agreement by another Party, if the other Party has breached any of its obligations under the Programs Agreement.

Section 17.6 Opportunity to Cure. Upon delivery of a notice of default, the defaulting Party shall have a reasonable amount of time, but not greater than twenty (20) Business Days, to cure the default or demonstrate convincing progress toward a cure.

Section 17.7 Unless default is timely cured, or in the event the same default occurs more than three times in a 12-month period, the non-breaching Party may (i) notify Commission staff of the dispute; (ii) suspend payment of a particular invoice, or portion thereof, which may be subject to the dispute; (iii) suspend all further performance by the non-breaching Party until the breach is cured; (iv) seek an order, decision or resolution from the Commission authorizing and directing termination of all or part of this Programs Agreement; or (v) any combination of the above. In the event the Commission authorizes and directs that the non-breaching Party can terminate all or part of the Programs Agreement, the non-breaching Party shall notify the breaching Party of such decision and thereafter all or a portion of the Programs Agreement, as authorized by the Commission, shall be deemed terminated. Notwithstanding the foregoing, the Utilities may immediately suspend their obligations under this Program Agreement in the event the Utilities reasonably determine that any I-REN Constituent Agency has committed a material and non-curable breach of applicable laws, rules, regulations, Commission orders or directives, or is using confidential information or Confidential Customer Information in a manner not contemplated under this Programs Agreement. A material breach shall include failure by the WRCOG to comply with duties owed to the Commission and/or Commission staff as defined in the Decision.

Section 17.8 Breach of Duty of Confidentiality. In the event of a breach of any provision of Article XVI, the non-breaching Party is immediately relieved of any obligation to provide further Confidential Customer Information and/or computer system access and may demand immediate return of all Confidential Customer Information or other confidential information that may have been provided. This remedy is in addition to the remedies for material breach listed above.

Section 17.9 Subject to the provisions of this Programs Agreement, the WRCOG, as the I-REN Authorized Agent, shall be entitled to funds for all expenditures incurred or accrued up to the effective date of termination or suspension of the Programs Agreement, provided that any reports, invoices, documents or information required under the Programs Agreement are submitted in accordance with the terms and conditions of the Programs Agreement. The provisions of this Section 17.9 shall be the WRCOG's sole compensation resulting from any termination or suspension of this Programs Agreement. In the event of termination or suspension, the WRCOG shall (and shall cause each other person performing the same to) stop any Authorized Work then in progress and take action to bring the activities to an orderly conclusion, and the Parties shall work cooperatively to facilitate the termination of operations and of any applicable contracts.

ARTICLE XVIII
Other Provisions

Section 18.1 Notices. Any written notice, demand or request required or authorized in connection with this Programs Agreement shall be deemed properly given if delivered in person or sent by facsimile, nationally recognized overnight courier, or first-class mail, postage prepaid, to the address specified below, or to another address specified in writing by a Party as follows:

WRCOG:
Casey Dailey
Director of Energy & Environmental Programs
Western Riverside Council of Governments
3390 University Avenue, Suite 200
Riverside, CA 92501
Tel: (951) 405-6720
E-Mail: cdailey@wrcog.us

SCE:
George P. Coronel, Advisor
Southern California Edison Company
1515 Walnut Grove Avenue
Rosemead, CA 91770
Tel: (626) 302-0647
Email: george.coronel@sce.com

SoCalGas:
Chauncy C. Tou, Principal Customer Programs Advisor
Southern California Gas Company
555 W. Fifth Street, GT19A8
Los Ángeles, CA 90013
Phone: (213) 244-2823
E-mail: CTou@SoCalGas.com

With copy: _____

Section 18.2 Amendments. Except as otherwise explicitly set forth herein, this Programs Agreement may be changed only by written amendment(s) duly executed by the Utilities and the WRCOG.

Section 18.3 Validity. The Parties agree to the rule of contract interpretation which allows the Court to disregard invalid clauses so that it may otherwise hold the remaining provisions of this Programs Agreement as binding.

Section 18.4 Notification of Certain Matters. The WRCOG shall give prompt written notice to the Utilities of (i) the occurrence or non-occurrence of any change, condition or event, the occurrence or non-occurrence of which would render any representation or warranty of the WRCOG contained in this Agreement, if made on or immediately following the date of such event, untrue or inaccurate, (ii) any failure of the WRCOG or any of the I-REN Constituent Agencies to comply with or satisfy any covenant or agreement to be complied with or satisfied by it hereunder.

Section 18.5 Successors and Assigns. The Programs Agreement shall be binding on the Parties and their respective successors and assigns. No Party shall assign, delegate, or transfer the Programs Agreement or any interest under it without the prior written consent of the other Parties and the Commission. Any purported assignment of the Programs Agreement by the WRCOG either by operation of law, order of any court, or pursuant to any plan of merger, consolidation or liquidation, shall be deemed an assignment by the WRCOG for which prior consent is required, and any assignment made without any such consent shall be void and of no effect as among the Parties. Notwithstanding the foregoing, if a Utility is requested or required by the Commission to assign its rights and/or delegate its duties hereunder, in whole or in part, such assignment or delegation shall not require any other Parties' consent and the Utility shall be released from all obligations hereunder arising after the effective date of such assignment, both as principal and as surety.

Section 18.6 Remedies Cumulative. All remedies provided for in this Programs Agreement shall be cumulative and in addition to, and not in lieu of, any other remedies available to any Party at law or in equity.

Section 18.7 No Third-Party Beneficiaries. Except as provided in Sections 13.1, 13.2 and 14.5, nothing in this Agreement, express or implied, is intended to or shall confer upon any person (including without limitation, any I-REN Constituent Agency, Third-Party Contractor, Subcontractor or Customer) other than the Parties and their respective successors and permitted assigns any legal or equitable right, benefit, or remedy of any nature under or by reason of this Agreement.

Section 18.8 No Construction Against Drafter. No provision of this Programs Agreement shall be construed against any Party merely because that Party drafted the document. Each Party represents that it has had time to review and discuss provisions of the Programs Agreement with interested parties, including its attorneys, and understands the terms and obligations as written.

Section 18.9 Severability. If any section, provision, or portion of the Programs Agreement is held to be invalid, illegal, or void by a court of proper jurisdiction, or is terminated by the Parties by direction or by order of the Commission or by the Commission itself, or if an individual Program is terminated by the Parties or at the direction or order of the Commission, such decision shall not impair, affect, or invalidate the remainder of this Programs Agreement. To the extent necessary, the invalid provision shall be reformed so that each Party shall have the obligation to perform reasonably to give the other Party the benefit of its bargain. In the event that the invalid provision cannot be reformed, the remainder of the Programs Agreement shall subsist and continue in full force and effect, and the invalid provision shall be deemed stricken from the Programs Agreement.

Section 18.10 No Waiver. No waiver by any Party of any default or breach of any provision of this Programs Agreement shall constitute a waiver of any other default of breach. Failure of a Party to enforce at any time, or from time to time, any provision of this Programs Agreement shall not be construed as a waiver thereof.

Section 18.11 Survival. Despite the completion or termination of a Program or any service, scope of work with respect to individual projects supported by Authorized Work, Authorized Work, activities or deliverables under this Programs Agreement, or any portion of the Programs Agreement, the Parties shall continue to be bound by those provisions of the Programs Agreement which by their nature survive the completion or termination.

Section 18.12 Further Assurances. The Parties, at the request of another, shall perform those actions, including executing additional documents and instruments, reasonably necessary to give full effect to the full performance of the Programs Agreement.

Section 18.13 Conflict of Interest. The WRCOG represents and agrees that, to the best of its knowledge, it shall not, and shall cause each I-REN Constituent Agency not to hire or otherwise engage any current SoCalGas, SCE, or Commission employee, current employee's spouse, other person or entity that has a conflict of interest to perform any part of the activities contemplated under this Programs Agreement.

Section 18.14 Governing Law; Venue. This Programs Agreement shall be interpreted, governed, and construed under the laws of the State of California as executed and to be performed wholly within the State of California without regard to its conflict of laws provisions. Any action brought to enforce or interpret this Programs Agreement shall be filed in Riverside County, California.

Section 18.15 Counterparts. This Programs Agreement may be executed in one or more counterparts, each of which shall be deemed to be an original, but all of which together shall be deemed to be one and the same instrument, so long as duplicate originals are delivered to all Parties.

ARTICLE XIX
Authorization Warranties

Section 19.1 Each of the Constituent COGS represents and warrants that the person executing this Programs Agreement is its authorized agent who has actual authority to bind it to each and every term, condition, and obligation of this Programs Agreement, and that all requirements of such the Constituent COG have been fulfilled to provide such actual authority. The WRCOG has delivered to the Utilities the following documents, which are true and complete and current and effective as of the Effective Date and which shall remain effective throughout the term of this Programs Agreement: the WRCOG JPA, the CVAG JPA and the SANBAG JPA.

Section 19.2 SoCalGas represents and warrants that the person executing this Programs Agreement for SoCalGas is an authorized agent who has actual authority to bind SoCalGas to each and every term, condition, and obligation of this Programs Agreement and that all requirements of SoCalGas have been fulfilled to provide such actual authority.

Section 19.3 SCE represents and warrants that the person executing this Programs Agreement for SCE is an authorized agent who has the actual authority to bind SCE to each and every term, condition, and obligation of this Programs Agreement, and that all requirements of SCE have been fulfilled to provide such actual authority.

[Signature Pages to Follow]

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed as of the date first written above Effective Date by their respective duly authorized persons.

SCE:

By_____
Katie Sloan
VP Customer Programs & Services

SoCalGas:

By _____
Jimmie I. Cho
COO

WRCOG:

By_____
Kurt Wilson
Executive Director

APPROVED AS TO FORM:

By_____
Steven DeBaun
General Counsel

For purposes of Sections 3.1, 4.3, 7.13, 14.5, 18.2 and 19.1 and Articles XIII and XVI, as well as Exhibits C and D only:

CVAG:

By_____
Tom Kirk
Executive Director

APPROVED AS TO FORM:

By_____
Michael Jenkins
General Counsel

SANBAG CONTRACT NO. 23-1002898
SANBAG:

By_____
Raymond W. Wolfe, PhD
Executive Director

APPROVED AS TO FORM:

By_____
Juanda Daniel
Assistant General Counsel

Inland Regional Energy Network Technical Assistance and Strategic Energy Planning Program Implementation Plan

June 1, 2022

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PROGRAM OVERVIEW

The Inland Regional Energy Network's (I-REN) Technical Assistance and Strategic Energy Planning program will provide short-term and mid-term technical support for local governments, special districts, school districts, and tribes to increase energy efficiency in publicly owned facilities. Additional support and technical services will be provided to design high performing, energy efficient buildings. The program will implement a strategy of developing a regional Building Upgrade Concierge (BUC) for local governments, special districts, and tribal communities with technical guidance and tools to inform and enable priority energy improvements. I-REN will provide person-to-person support for local governments to get higher levels of assistance and support for their energy efficiency projects, through concierge-style support to help fill gaps in staff capacity and resources at these local government jurisdictions.

PROGRAM BUDGET AND SAVINGS

1. Program and/or Sub-Program Name

Technical Assistance and Strategic Energy Planning

2. Program / Sub-Program ID number

IREN-PUBL-001

3. Program / Sub-program Budget Table

Technical Assistance and Strategic Energy Planning	2022	2023	2024	2025	2026	2027
Administration	$358,819	$339,172	$352,739	$366,849	$366,849	$366,849
Marketing, Education, & Outreach	$162,000	$168,000	$186,120	$204,365	$204,365	$204,365
Implementation (Non-Incentives)	$2,582,083	$2,401,047	$2,466,688	$2,536,555	$2,536,555	$2,536,555
Incentives	$0	$0	$0	$0	$0	$0
Total	$3,102,902	$2,908,219	$3,005,547	$3,107,769	$3,107,769	$3,107,769

4. Program / Sub-program Gross Impacts Table

Projected Net Savings	2022	2023	2024	2025	2026	2027
Forecast kWh	-	-	-	-	-	-
Forecast kW	-	-	-	-	-	-
Forecast Therms	-	-	-	-	-	-

5. Program / Sub-Program Cost Effectiveness (TRC)

2022	2023	2024	2025	2026	2027
-	-	-	-	-	-

6. Program / Sub-Program Cost Effectiveness (PAC):

2022	2023	2024	2025	2026	2027
-	-	-	-	-	-

7. Type of Program / Sub-Program Implementer (PA-delivered, third party-delivered or Partnership):

Third party-delivered

8. Market Sector

Public

9. Program / Sub-program Type

Non-resource, equity segment

10. Market channel(s) (i.e., downstream, midstream, and/or upstream) and Intervention Strategies (e.g., direct install, incentive, finance, audit, technical assistance, etc.), campaign goals, and timeline

Technical assistance, Partnership-building, Outreach and education

IMPLEMENTATION PLAN NARRATIVE

11. Program Description

The councils of government (COGs) that make up I-REN have direct relationships and a history of collaborating with the many government jurisdictions in their territory. I-REN will provide person-to-person technical assistance to local governments to support energy efficiency projects including, but not limited to, strategic energy planning and benchmarking. I-REN will also develop tools and resources to increase public sector participation in other federal, state, and local programs.

12. Program Delivery and Customer Services

The program will develop a regional Building Upgrade Concierge (BUC) for local governments, special districts, and tribal communities with technical guidance and tools to inform and enable priority energy improvements. To achieve this, the program plans to implement the following tactics, with the overall objective of the program to ensure local governments have support and resources to develop and implement their strategic energy plans and energy efficiency projects.

- Establish person-to-person support for local governments to get higher levels of assistance and support for their EE projects.
- Develop or enhance strategic energy plans to connect local government goals related to climate, resilience, and economic development to energy efficiency programs and adoption.

- Create resources for the public sector to tap into EE and distributed energy resources programs offered by other providers and IOUs.

13. Program Design and Best Practices

The Technical Assistance and Strategic Energy Planning program's design was chosen by I-REN in response to challenges faced by local governments regarding EE improvements. I-REN's local governments have limited incentives to complete energy upgrades and are challenged to maintain and upgrade these facilities due to lack of funding for capital improvements, a lack of awareness related to energy efficiency and other energy efficiency program opportunities, limited time, and staff resources, along with conflicting priorities.

Strategies to achieve I-REN's goals for the Public Sector will place added emphasis on "aggressive efficiency for jurisdiction-owned buildings,"[1] and energy efficiency improvements to existing buildings that serve low income, moderate income, and disadvantaged communities. I-REN will provide person-to-person technical assistance to local governments to support energy efficiency projects including, but not limited to, strategic energy planning and benchmarking. I-REN will also develop tools and resources to increase public sector participation in other federal, state, and local programs.

14. Innovation

Some of the greatest challenges to participation in the public sector in the I-REN service area may also be indicators of unrealized energy savings potential. I-REN has designed its Public Sector strategies and tactics to help local government agencies, tribal leadership, and staff at school districts and special districts overcome these participation barriers to improve their facilities' energy performance and harvest "stranded" energy savings.

15. Metrics

Based on intervention strategies I-REN developed for Public Sector, the following are examples of metrics that will track program performance:

- Public Sector market penetration
- Public Sector financing

Additional metrics for this new program are forthcoming.

16. For Programs claiming to-code savings

Not applicable.

17. Pilots

Not applicable.

18. Workforce Education and Training

While there are no direct Workforce Education and Training efforts, this program aims to provide technical assistance, locally focused resources, and person-to-person support that are needed to develop and implement strategic energy plans for the public sector.

[1] Existing Buildings Energy Efficiency Action Plan, Strategy 1.7 Local Government Leadership. https://efiling.energy.ca.gov/getdocument.aspx?tn=206015 Accessed October 2020.

19. Workforce Standards

Not applicable.

20. Disadvantaged Worker Plan

It is a priority of this program to target and serve disadvantaged, and underserved communities.

21. Additional information

Not applicable.

SUPPORTING DOCUMENTS

1. Program Manuals and Program Rules

The Program Manual will be developed and incorporated into this Implementation Plan after program implementers are under contract.

2. Program Theory and Program Logic Model

Forthcoming.

3. Process Flow Chart

Forthcoming.

4. Incentive Tables, Workpapers, Software Tools

Not applicable.

5. Quantitative Program Targets

Targets will be established after program implementers are under contract.

6. Diagram of Program

Forthcoming.

7. Evaluation, Measurement & Verification (EM&V)

The current lack of energy efficiency data about the public sector places added importance on the role of EM&V. I-REN will collaborate with the CPUC and stakeholders to ensure that data collection activities are embedded in Public Sector program design to capture the information necessary to meet evaluation requirements and to help expand the understanding of energy efficiency potential and best practices in this relatively new sector.

8. Normalized Metered Energy Consumption (NMEC)

Not applicable.

Inland Regional Energy Network Public Buildings NMEC Program Implementation Plan

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PROGRAM OVERVIEW

The Inland Regional Energy Network's (I-REN) Public Buildings NMEC Program will (in year two of I-REN program administration) provide incentives and financing for savings based on Normalized Metered Energy Consumption (NMEC) achieved over three to five years, with a special focus on HVAC improvements to community-serving buildings. I-REN will also leverage sustaining financing mechanisms to support HVAC upgrades in public buildings. If a third-party program becomes available that serves this need and makes this resource offering duplicative, I-REN will focus its full Public Sector budget on providing technical assistance and strategic energy planning through the BUC. I-REN has designed its Public Sector offerings to be flexible and its goals and targets can be adjusted accordingly to meet the needs of the region. Through their extensive work with local governments and their committee structure, the I-REN governing agencies have become a trusted voice and advocate for the public sector in their two counties. By collaborating with their member jurisdictions and using their established communication networks, I-REN can provide regionally focused public sector solutions to help local governments succeed as energy efficiency leaders.

PROGRAM BUDGET AND SAVINGS

1. Program and/or Sub-Program Name

Public Buildings NMEC

2. Program / Sub-Program ID number

IREN-PUBL-001

3. Program / Sub-program Budget Table

Public Buildings NMEC	2022	2023	2024	2025	2026	2027
Administration	$270,000	$280,000	$310,200	$340,608	$340,608	$340,608
Marketing, Education, & Outreach	$215,292	$203,503	$211,643	$220,109	$220,109	$220,109
Implementation (Non-Incentives)	$1,200,000	$1,300,000	$1,352,000	$1,406,080	$1,406,080	$1,406,080
Incentives	$1,500,000	$1,500,000	$1,750,000	$2,000,000	$2,000,000	$2,000,000
Total	$3,185,292	$3,283,503	$3,623,843	$3,966,797	$3,966,797	$3,966,797

4. Program / Sub-program Gross Impacts Table

Projected Net Savings	2022	2023	2024	2025
Forecast kWh	4,175,629	4,361,224	4,361,224	5,763,031
Forecast kW	720	813	813	1084
Forecast Therms	121,315	147,884	147,884	196,707

5. Program / Sub-Program Cost Effectiveness (TRC)

2022	2023	2024	2025
0.45	0.51	0.47	0.61

6. Program / Sub-Program Cost Effectiveness (PAC):

2022	2023	2024	2025
0.74	0.81	0.79	1.03

7. Type of Program / Sub-Program Implementer (PA-delivered, third party-delivered or Partnership):

Third party-delivered

8. Market Sector

Public

9. Program / Sub-program Type

Resource, equity segment

10. Market channel(s) (i.e., downstream, midstream, and/or upstream) and Intervention Strategies (e.g., direct install, incentive, finance, audit, technical assistance, etc.), campaign goals, and timeline

Downstream, incentive, technical assistance

IMPLEMENTATION PLAN NARRATIVE

1. Program Description

I-REN proposes to offer a resource program with incentives for measures including but not limited to HVAC tune ups and retrofits; exterior and interior lighting and smart controls; and operations and maintenance. The program would be open to all public sector facilities including those operated by county and city government, school districts, special districts, and tribes.

2. Program Delivery and Customer Services

Program outreach will focus initially on public gathering spaces such as community and neighborhood centers, health and recreation centers, senior centers, teen centers, and libraries. Implementing energy efficiency projects at these locations will serve multiple goals, including but not limited to those described here:

- Upgrades and retrofits to HVAC and lighting equipment both interior and exterior will improve comfort and safety at facilities that benefit vulnerable populations such as children, elders, and low income, disadvantaged, and underserved communities.
- Higher efficiency equipment, appliances and controls such as cooling-dominated HVAC loads as well as improvements to operations and maintenance will lower energy bills for local governments, reducing overhead and freeing up funds for other projects.

- Completion of projects at these high-visibility locations will support achieving local and statewide energy efficiency and greenhouse gas reduction goals while also positioning local governments as energy efficiency leaders within their communities.

The program will use an NMEC approach to calculate savings and demonstrate persistence of savings. By using NMEC to calculate savings, the program will help protect against unrealized savings. Combined with technical assistance and reinforcement of operations and management best practices, public sector customers will experience maximized savings.

3. Program Design and Best Practices

Public Buildings NMEC Program‘s design was chosen by I-REN in response to challenges faced by local governments regarding EE improvements. I-REN’s local governments have limited incentives to complete energy upgrades and are challenged to maintain and upgrade these facilities due to lack of funding for capital improvements, a lack of awareness related to energy efficiency and other energy efficiency program opportunities, limited time, and staff resources, along with conflicting priorities.

Strategies to achieve I-REN’s goals for the Public Sector will be based around establishing incentives and leveraging existing financing mechanisms to assist local governments with implementing energy efficiency projects in public buildings. To achieve I-REN’s goal in the public sector of helping local governments afford and finance a range of energy efficiency upgrades, the Public Buildings NMEC Program will implement the following tactics:

- Deliver a resource offering to provide incentives for savings based on Normalized Metered Energy Consumption (NMEC) achieved over three to five years.
- Leverage sustaining financing mechanisms for HVAC upgrades in public buildings.

4. Innovation

Some of the greatest challenges to participation in the public sector in the I-REN service area may also be indicators of unrealized energy savings potential. I-REN has designed its Public Sector strategies and tactics to help local government agencies, tribal leadership, and staff at school districts and special districts overcome these participation barriers to improve their facilities’ energy performance and harvest “stranded” energy savings.

5. Metrics

Based on intervention strategies I-REN developed for Public Sector, the following are examples of metrics that will track program performance:

- Energy Savings
- Public Sector market penetration
- Public Sector financing

Additional metrics for this new program are forthcoming.

6. For Programs claiming to-code savings

Not applicable.

7. Pilots

Not applicable.

8. Workforce Education and Training

There are no Workforce Education and Training initiatives for this program.

9. Workforce Standards

Not applicable.

10. Disadvantaged Worker Plan

While this program does not aim specifically to target disadvantaged workers and communities, it is a consistent goal of I-REN's to reach and serve this demographic.

11. Additional information

Not applicable.

SUPPORTING DOCUMENTS

1. Program Manuals and Program Rules

The Program Manual will be developed and incorporated into this Implementation Plan after program implementers are under contract.

2. Program Theory and Program Logic Model

Forthcoming.

3. Process Flow Chart

Forthcoming.

4. Incentive Tables, Workpapers, Software Tools

Not applicable.

5. Quantitative Program Targets

Targets will be established after program implementers are under contract.

6. Diagram of Program

Forthcoming.

7. Evaluation, Measurement & Verification (EM&V)

The current lack of energy efficiency data about the public sector places added importance on the role of EM&V. I-REN will collaborate with the CPUC and stakeholders to ensure that data collection activities are embedded in Public Sector program design to capture the information necessary to meet evaluation requirements and to help expand the understanding of energy efficiency potential and best practices in this relatively new sector.

8. Normalized Metered Energy Consumption (NMEC)

I-REN will deliver a resource offering to provide incentives for meter-based savings (Normalized Metered Energy Consumption or NMEC) achieved over three to five years. I-REN will also leverage sustaining financing mechanisms to support HVAC upgrades in public buildings. Additional details regarding the I-REN public sector NMEC program are forthcoming after program implementers are under contract.

Inland Regional Energy Network Training and Education Program Implementation Plan

June 1, 2022

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PROGRAM OVERVIEW

The Inland Regional Energy Network's (I-REN) Training and Education Program is a non-resource program with the purpose of establishing local partnerships with existing and potential training providers in the region to assess the training resources available in the region, offer "train the trainer" support to providers on energy efficiency topics and trends with a focus on the needs of the local market, and develop sites and delivery mechanisms to help ensure equitable access to training.

PROGRAM BUDGET AND SAVINGS

1. Program and/or Sub-Program Name

Training and Education

2. Program / Sub-Program ID number

IREN-WET-001

3. Program / Sub-program Budget Table

Training and Education	2022	2023	2024	2025	2026	2027
Administration	$101,295	$103,217	$109,561	$108,342	$108,342	$108,342
Marketing, Education, & Outreach	$74,421	$81,675	$80,493	$95,474	$95,474	$95,474
Implementation (Non-Incentives)	$837,233	$847,277	$905,552	$879,600	$879,600	$879,600
Incentives						
Total	**$1,012,949**	**$1,032,169**	**$1,095,606**	**$1,083,416**	**$1,083,416**	**$1,083,416**

4. Program / Sub-program Gross Impacts Table

Projected Net Savings	2022	2023	2024	2025	2026	2027
Forecast kWh	-	-	-	-	-	-
Forecast kW	-	-	-	-	-	-
Forecast Therms	-	-	-	-	-	-

5. Program / Sub-Program Cost Effectiveness (TRC)

2022	2023	2024	2025	2026	2027
-	-	-	-	-	-

6. Program / Sub-Program Cost Effectiveness (PAC):

2022	2023	2024	2025	2026	2027

-	-	-	-	-	-

7. Type of Program / Sub-Program Implementer (PA-delivered, third party-delivered or Partnership):

Third party-delivered

8. Market Sector

Cross-Cutting

9. Program / Sub-program Type

Non-resource, market support segment

10. Market channel(s) (i.e., downstream, midstream, and/or upstream) and Intervention Strategies (e.g., direct install, incentive, finance, audit, technical assistance, etc.), campaign goals, and timeline

Outreach, Training and Education

IMPLEMENTATION PLAN NARRATIVE

1. Program Description

I-REN's Training and Education Program objective is to create a robust local network of training programs that increase capacity and knowledge related to energy efficiency in the building industry. Through this program, I-REN will employ data collection to assess the training offerings in the region. This effort is crucial for informing a plan of action that will address gaps, build on promising opportunities, and avoid duplication of effort. This exercise also helps establish connections or build on existing partnerships among regional stakeholders. In addition, from the data collection previously mentioned, I-REN will collaborate with training providers and the IOUs to address gaps in educational offerings and determine the most effective way to bridge those gaps in the region.

2. Program Delivery and Customer Services

I-REN's tactics for this Program will be to assess training opportunities available in the region by rigorous data collection exercises to establish connections or build on existing partnerships among regional stakeholders. This training marketplace analysis will be examined through multiple lenses, potentially including but not limited to the following:

- Stakeholders: Who are the organizations currently providing training in the region?
- Content: What topics, technologies, and skills are covered in currently available training?
- Modalities: How is training delivered?
- Metrics: What metrics need to be tracked to ensure that trainings are effective?
- Geography: For in-person training, where in the region are these trainings offered?
- Equity: Are underserved communities, DACs, tribes, and other marginalized groups able to take advantage of training opportunities?
- Access: What are the barriers to accessing and hosting training, especially for disadvantaged workers?

- Program and market needs: What are the programs that will be offered by IOUs or other PAs that require specific skills?

Additionally, I-REN will offer “train the trainer” support to providers on energy efficiency topics and trends. Encourage providers to focus on the needs of the local market. Through their work with both the public and private sectors the I-REN governing agencies bring connections to professionals in various trades who can lend their expertise to this effort. I-REN can work with providers to develop and/or tailor content around energy efficiency topics and trends potentially including but not limited to the following:

- Mechanical HVAC basics
- Passive house and zero net carbon/energy
- Heat pump water heaters, and other electrification measures
- Certified Energy Manager (CEM)
- Operations and facilities management
- Building Performance Institute (BPI) trainings
- Codes training including solar and battery installation and smart energy systems
- Building Envelope sealing (duct blower tests, insulation/radiant barrier checks, etc.)
- HERS, CHEERS and DOE Home Energy Scores certifications

3. Program Design and Best Practices

I-REN’s Training and Education program design was chosen by I-REN in response to the gap between demand and supply of existing trades people to provide energy efficiency services in the I-REN service territory. For contractors looking to expand their skills, career advancement and access to high-road jobs, the pathways for obtaining additional certifications can be complicated, costly, and limited by timing or distance.

To address this gap, I-REN’s program design will include the following strategies:

- Promote relevant training opportunities in collaboration with WIBs to upskill the workforce. Collaborate with employers to provide continuing education for professional development and employee retention.
- Foster connections between workforce and industry. Promote relevant training opportunities in collaboration with WIBs to upskill the workforce.
- Promote relevant training opportunities to upskill the workforce. Improve access to training by increasing the number of sites and delivery mechanisms. Collaborate with employers to provide continuing education for professional development and employee retention

4. Innovation

Based on I-REN’s market analysis, there is a gap between the demand and supply of existing trades people to provide energy efficiency services in the I-REN service territory. For contractors looking to expand their skills, career advancement and access to high-road jobs, the pathways for obtaining additional certifications can be complicated, costly, and limited by timing or distance.

Through I-REN's program design and best practices outlined above, this program aims to overcome these barriers and provide the Workforce Education and Training sector with new and innovative approaches to do so going forward.

5. Metrics

I-REN's Training and Education Program intends to track the following metrics to establish program progress:

- Number of collaborations
- Participants by sector
- Participation relative to eligible population
- Percent of incentive dollars spent contracts with a demonstrated commitment to provide career pathways to disadvantaged workers
- Number of participants that are employed for 12 months after training

6. For Programs claiming to-code savings

Not applicable.

7. Pilots

Not applicable.

8. Workforce Education and Training

I-REN's Training and Education Program is solely focused on providing workforce education and training as outlined above. I-REN will partner with employers, such as engineering, building, architecture, and construction-related firms, other PAs, and local governments to provide EE workforce education and training to these entities' stakeholders. Additional details forthcoming after program training partners and/or implementers are onboarded.

9. Workforce Standards

Not applicable.

10. Disadvantaged Worker Plan

It is a priority for this program to target disadvantaged workers. Disadvantaged worker participation in the program will be tracked consistently to ensure that this population is being served. Additional details forthcoming after program training partners and/or implementers are onboarded.

11. Additional information

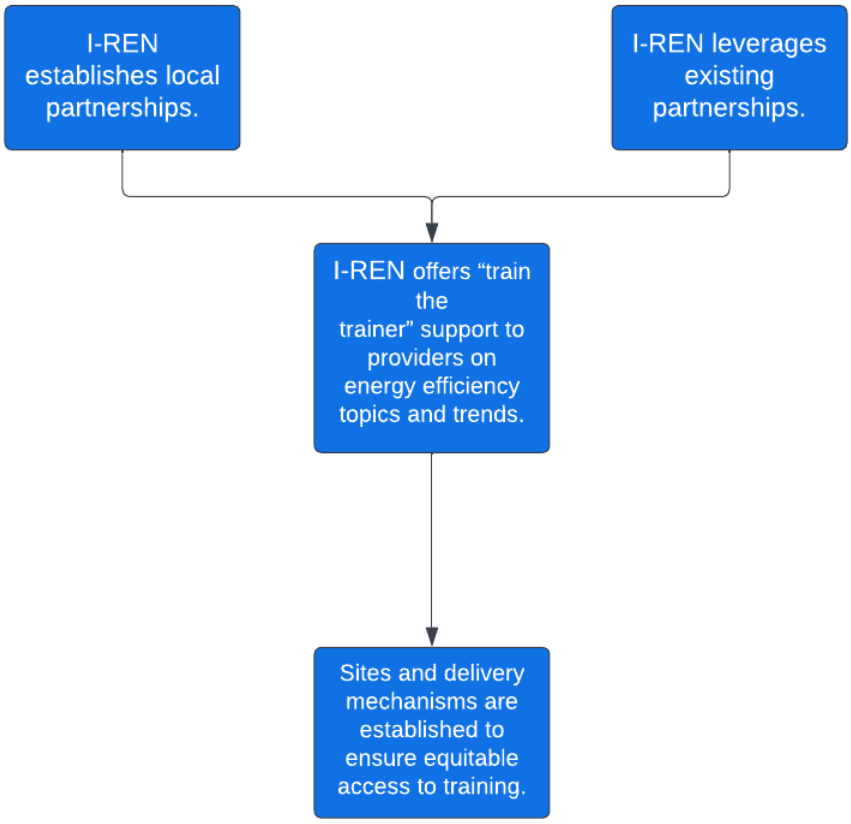
Not applicable.

SUPPORTING DOCUMENTS

1. Program Manuals and Program Rules

The Program Manual will be developed and incorporated into this Implementation Plan once trainers are onboarded.

2. Program Theory and Program Logic Model



3. Process Flow Chart

Forthcoming and more detailed components will be developed once trainers are onboarded.

4. Incentive Tables, Workpapers, Software Tools

Not applicable.

5. Quantitative Program Targets

Forthcoming and more detailed components will be developed once trainers are onboarded.

6. Diagram of Program

Forthcoming and more detailed components will be developed once trainers are onboarded.

7. Evaluation, Measurement & Verification (EM&V)

As a new REN, I-REN is interested in collaborating with the CPUC, CEC, Energy Division, other PAs, and the WE&T community to support statewide and regional efforts around WE&T EM&V Roadmaps and Plans. I-REN will collaborate with the CPUC and other stakeholders to ensure that data collection activities are embedded in C&S program design to capture the information necessary to meet evaluation requirements and also to help expand the understanding of REN program impacts in this cross-cutting sector.

8. Normalized Metered Energy Consumption (NMEC)

Not applicable.

Inland Regional Energy Network Workforce Development Program Implementation Plan

June 1, 2022

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PROGRAM OVERVIEW

The Inland Regional Energy Network's (I-REN) Workforce Development Program is a non-resource program with the purpose of facilitating industry engagement and develop job pathways by convening local partners in the community, reinforcing pathways from schools into jobs in the energy efficiency workforce, and encouraging connections between industry and workforce development organizations.

PROGRAM BUDGET AND SAVINGS

1. Program and/or Sub-Program Name

Workforce Development

2. Program / Sub-Program ID number

IREN-WET-002

3. Program / Sub-program Budget Table

Workforce Development	2022	2023	2024	2025	2026	2027
Administration	$124,034	$136,126	$134,155	$159,123	$159,123	$159,123
Marketing, Education, & Outreach	$60,777	$61,931	$65,737	$65,005	$65,005	$65,005
Implementation (Non-Incentives)	$1,055,535	$1,163,200	$1,141,666	$1,367,106	$1,367,106	$1,367,106
Incentives						
Total	**$1,240,346**	**$1,361,257**	**$1,341,558**	**$1,591,234**	**$1,591,234**	**$1,591,234**

4. Program / Sub-program Gross Impacts Table

Projected Net Savings	2022	2023	2024	2025	2026	2027
Forecast kWh	-	-	-	-	-	-
Forecast kW	-	-	-	-	-	-
Forecast Therms	-	-	-	-	-	-

5. Program / Sub-Program Cost Effectiveness (TRC)

2022	2023	2024	2025	2026	2027
-	-	-	-	-	-

6. Program / Sub-Program Cost Effectiveness (PAC):

2022	2023	2024	2025	2026	2027

-	-	-	-	-	-

7. Type of Program / Sub-Program Implementer (PA-delivered, third party-delivered or Partnership):

Third party-delivered

8. Market Sector

Cross-Cutting

9. Program / Sub-program Type

Non-resource, market support segment

10. Market channel(s) (i.e., downstream, midstream, and/or upstream) and Intervention Strategies (e.g., direct install, incentive, finance, audit, technical assistance, etc.), campaign goals, and timeline

Outreach, Training and Education

IMPLEMENTATION PLAN NARRATIVE

1. Program Description

I-REN's Workforce Development Program objective is to increase the number of skilled energy efficiency workers in the region. To achieve this objective, I-REN will implement a strategy of facilitating industry engagement and development of job pathways to identify demand and jobs for a trained workforce.

2. Program Delivery and Customer Services

I-REN's tactics for this Program include convening and engaging partners and organizations to define and establish a green workforce, reinforce pathways from high school, trade schools, and colleges into jobs in the energy efficiency workforce, in collaboration with established community partners, and facilitating identification of opportunities for building companies and local workforce partners to network and connect.

3. Program Design and Best Practices

I-REN's Workforce Development program design was chosen by I-REN in response to the gap between demand and supply of existing trades people to provide energy efficiency services in the I-REN service territory. For contractors looking to expand their skills, career advancement and access to high-road jobs, the pathways for obtaining additional certifications can be complicated, costly, and limited by timing or distance.

To address this gap, I-REN's program design will include the following strategies:

- Foster connections between workforce and industry. Identify and illuminate the pathways to energy efficiency and advanced energy jobs

4. Innovation

As part of its established committee structure, I-REN regularly engages with leaders in both the public sector and private industry. In establishing what the green workforce means to the Inland Empire, it will be important to consider the green job opportunities within cross-cutting areas such as the Public Sector and C&S community. For example, to maximize the benefits of energy efficiency in the region, local governments have a need for well-trained facility managers in publicly owned buildings, and knowledgeable permitting staff in building departments. Similarly, local, and regional contractors and other members of the building community have a need for skilled workers to implement efficient construction and equipment installation practices. Through this engagement tactic I-REN can gain valuable insight into each entity's role in this work, while creating connections between stakeholders and fostering a collective vision and mission for developing the Inland Empire's green workforce.

5. Metrics

I-REN's Workforce Development Program intends to track the following metrics to establish program progress:

- Number of collaborations
- Participants by sector
- Participation relative to eligible population
- Percent of incentive dollars spent contracts with a demonstrated commitment to provide career pathways to disadvantaged workers
- Number of participants that are employed for 12 months after training

6. For Programs claiming to-code savings

Not applicable.

7. Pilots

Not applicable.

8. Workforce Education and Training

I-REN's plan for workforce education and training within the Workforce Development Program consists of convening and engaging partners and organizations to define and establish a green workforce, with the objective of increasing the number of skilled energy efficiency workers in the region. Additionally, the Workforce Development Program will reinforce pathways from high school, trade schools, and colleges into jobs in the energy efficiency workforce, in collaboration with established community partners. Additional details forthcoming as program partners are onboarded.

9. Workforce Standards

Not applicable.

10. Disadvantaged Worker Plan

It is priority for this program to target disadvantaged workers. Disadvantaged worker participation in the program will be tracked consistently to ensure that this population is being served. Additional details forthcoming as program partners are onboarded.

11. Additional information

Not applicable.

SUPPORTING DOCUMENTS

1. Program Manuals and Program Rules

The Program Manual will be developed and incorporated into this Implementation Plan once program partners are onboarded.

2. Program Theory and Program Logic Model

3. Process Flow Chart

Forthcoming and more detailed components will be developed once program partners are onboarded.

4. Incentive Tables, Workpapers, Software Tools

Not applicable.

5. Quantitative Program Targets

Forthcoming and more detailed components will be developed once program partners are onboarded.

6. Diagram of Program

Forthcoming and more detailed components will be developed once program partners are onboarded.

7. Evaluation, Measurement & Verification (EM&V)

As a new REN, I-REN is interested in collaborating with the CPUC, CEC, Energy Division, other PAs, and the WE&T community to support statewide and regional efforts around WE&T EM&V Roadmaps and Plans. I-REN will collaborate with the CPUC and other stakeholders to ensure that data collection activities are embedded in C&S program design to capture the information necessary to meet evaluation requirements and also to help expand the understanding of REN program impacts in this cross-cutting sector.

8. Normalized Metered Energy Consumption (NMEC)

Not applicable.

Inland Regional Energy Network Codes and Standards Training and Education Implementation Plan

June 1, 2022

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PROGRAM OVERVIEW

The Inland Regional Energy Network's (I-REN) C&S Training and Education Program is a non-resource program to establish and implement training and education for building department staff and the building industry to support, understand, and effectively implement energy efficiency codes and standards. I-REN's locally focused interventions will equip building department staff to identify potential issues, provide guidance to permit applicants, and streamline the permitting process. With increased knowledge and capacity, local building department staff will have the tools and additional resources to support their code enforcement and compliance, as well as cultivate the associated energy savings from efficient building practices.

PROGRAM BUDGET AND SAVINGS

1. Program and/or Sub-Program Name

C&S Training and Education

2. Program / Sub-Program ID number

IREN-CS-001

3. Program / Sub-program Budget Table

C&S Training and Education	2022	2023	2024	2025	2026	2027
Administration	$77,430	$80,527	$83,748	$87,098	$87,098	$87,098
Marketing, Education, & Outreach	$51,620	$53,685	$55,832	$58,066	$58,066	$58,066
Implementation (Non-Incentives)	$731,284	$760,535	$790,957	$822,594	$822,594	$822,594
Incentives						
Total	$860,334	$894,747	$930,537	$967,758	$967,758	$967,758

4. Program / Sub-program Gross Impacts Table

Projected Net Savings	2022	2023	2024	2025	2026	2027
Forecast kWh	-	-	-	-	-	-
Forecast kW	-	-	-	-	-	-
Forecast Therms	-	-	-	-	-	-

5. Program / Sub-Program Cost Effectiveness (TRC)

2022	2023	2024	2025	2026	2027
-	-	-	-	-	-

6. Program / Sub-Program Cost Effectiveness (PAC):

2022	2023	2024	2025	2026	2027
-	-	-	-	-	-

7. Type of Program / Sub-Program Implementer (PA-delivered, third party-delivered or Partnership):

Third party-delivered

8. Market Sector

Cross-Cutting

9. Program / Sub-program Type

Non-resource, codes and standards segment

10. Market channel(s) (i.e., downstream, midstream, and/or upstream) and Intervention Strategies (e.g., direct install, incentive, finance, audit, technical assistance, etc.), campaign goals, and timeline

Training, outreach, technical assistance

IMPLEMENTATION PLAN NARRATIVE

11. Program Description

I-REN will implement a well-rounded set of activities related to supporting improved codes and standards compliance and enforcement through training, outreach, and technical assistance. The I-REN region includes many smaller jurisdictions that face significant challenges with codes and standards enforcement and compliance. The local building department staff in these jurisdictions are key to realizing energy savings from implementation and enforcement of codes and standards. For that reason, I-REN proposes to focus much of its C&S Sector work on empowering and supporting these local building department staff to be energy efficiency leaders in their own communities, through improved communications, protocols, and systems for increased efficiency. I-REN sees an opportunity to leverage its strong network with public sector staff to offer resources and support, while also providing targeted training and outreach to support building and construction industry actors to foster increased compliance with codes and standards.

12. Program Delivery and Customer Services

One of I-REN's goals for the C&S Training and Education Program is to foster working relationships with local building departments and the building industry to support, train, and enable long-term streamlining of energy code compliance. To achieve this goal, I-REN will provide direct support and assistance to local building departments as well as regional construction firms responsible for complying with permitting requirements. I-REN's intervention strategies address the barriers faced by the C&S community in order to streamline code enforcement and permitting, and increase energy efficiency in the region through C&S.

13. Program Design and Best Practices

I-REN's C&S Training and Education program's design was chosen by I-REN in response to challenges faced by Building Department staff, local governments, building professionals, and developers regarding compliance. To address these challenges and achieve the program's objective of Improving understanding of energy efficiency codes and standards among local building departments and the building industry to increase implementation and compliance, I-REN intends to implement the following strategy:

- Establish an ongoing training program to assist building department staff and the building industry to support, understand, and effectively implement energy efficiency codes and standards.

To ensure efficacy of this strategy, I-REN's C&S Training and Education Program will deploy the following tactics:

- Identify and address the areas of greatest need for improved code compliance, in collaboration with local governments and the building industry.

- Develop training curriculum to address gaps in compliance with current requirements. Offer ongoing training on changes and trends in C&S.

14. Innovation

The C&S sector faces unique barriers to increased energy efficiency. This is especially true in the I-REN service territory, given its size and distance from the Los Angeles MSA. I-REN proposes to offer a C&S program tailored to the specific needs of this region, even though the sector has been targeted by other non-local programs. This approach is consistent with CPUC's policy in D.12.11-2015 that Regional Energy Networks (RENs) should implement energy efficiency initiatives in hard-to-reach markets. In designing their approach to the C&S sector, I-REN has selected strategies and tactics based on insights from the I-REN governing agencies, with consideration also given to previous attempts by other PAs to address the C&S sector in this region. Those lessons learned informed I-REN's planning process, as well as best practices from successful C&S programs elsewhere in the state.

15. Metrics

Based on intervention strategies I-REN developed for C&S, the following are examples of metrics that will track program performance:

- Measures adopted
- Federal standards adopted
- Local government Reach Codes implemented
- Number of training activities held
- Increase in code compliance knowledge

Additional metrics for this new program are forthcoming.

16. For Programs claiming to-code savings

Not applicable.

17. Pilots

Not applicable.

18. Workforce Education and Training

Part of I-REN's C&S Training and Education Program will focus heavily on workforce education and training.

19. Workforce Standards

There are no workforce standards for this program.

20. Disadvantaged Worker Plan

I-REN's approach to serving the C&S sector incorporates training for local building department staff, to help those individuals perform their jobs and build capacity in their departments to better enforce codes and standards. This is important for developing a skilled workforce in some of the rural jurisdictions with less resources in their local building departments, and for areas that include underserved and disadvantaged communities, in line with the directive in Senate Bill 350.

21. Additional information

Not applicable.

SUPPORTING DOCUMENTS

1. Program Manuals and Program Rules

The Program Manual will be developed and incorporated into this Implementation Plan after program implementers are under contract.

2. Program Theory and Program Logic Model

Forthcoming.

3. Process Flow Chart

Forthcoming.

4. Incentive Tables, Workpapers, Software Tools

Not applicable.

5. Quantitative Program Targets

Targets will be established after program implementers are under contract.

6. Diagram of Program

Forthcoming.

7. Evaluation, Measurement & Verification (EM&V)

As a new REN, I-REN is interested in collaborating with the CPUC, CEC, Energy Division, other PAs, and the region's C&S community to support statewide and regional efforts around C&S EM&V Roadmaps and Plans. I-REN will collaborate with the CPUC and other stakeholders to ensure that data collection activities are embedded in C&S program design to capture the information necessary to meet evaluation requirements and also to help expand the understanding of REN program impacts in this cross-cutting sector.

8. Normalized Metered Energy Consumption (NMEC)

Not applicable.

Inland Regional Energy Network Codes and Standards Technical Support Program Implementation Plan

June 1, 2022

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PROGRAM OVERVIEW

The Inland Regional Energy Network's (I-REN) C&S Technical Support Program is a non-resource program with the purpose of developing technical assistance tools and resources to assist building departments and the building industry with understanding, evaluating, and permitting the energy codes. The Program aims to Identify and address the areas of greatest need for improved code compliance, in collaboration with local governments and the building industry.

PROGRAM BUDGET AND SAVINGS

1. Program and/or Sub-Program Name

C&S Technical Support

2. Program / Sub-Program ID number

IREN-CS-002

3. Program / Sub-program Budget Table

C&S Technical Support	2022	2023	2024	2025	2026	2027
Administration	$66,181	$69,868	$72,663	$75,569	$75,569	$75,569
Marketing, Education, & Outreach	$36,146	$36,552	$38,015	$39,534	$39,534	$39,534
Implementation (Non-Incentives)	$483,446	$502,785	$522,895	$543,813	$543,813	$543,813
Incentives						
Total	**$585,773**	**$609,205**	**$633,573**	**$658,916**	**$658,916**	**$658,916**

4. Program / Sub-program Gross Impacts Table

Projected Net Savings	2022	2023	2024	2025	2026	2027
Forecast kWh	-	-	-	-	-	-
Forecast kW	-	-	-	-	-	-
Forecast Therms	-	-	-	-	-	-

5. Program / Sub-Program Cost Effectiveness (TRC)

2022	2023	2024	2025	2026	2027
-	-	-	-	-	-

6. Program / Sub-Program Cost Effectiveness (PAC):

2022	2023	2024	2025	2026	2027

-	-	-	-	-	-

7. Type of Program / Sub-Program Implementer (PA-delivered, third party-delivered or Partnership):

Third party-delivered

8. Market Sector

Cross-Cutting

9. Program / Sub-program Type

Non-resource, codes and standards

10. Market channel(s) (i.e., downstream, midstream, and/or upstream) and Intervention Strategies (e.g., direct install, incentive, finance, audit, technical assistance, etc.), campaign goals, and timeline

Technical assistance, Outreach

IMPLEMENTATION PLAN NARRATIVE

11. Program Description

I-REN's C&S Technical Support Program will bring direct in-house experience developing and implementing surveys of their member local governments and constituents to assess gaps in program areas. Their staff compile and analyze the responses, prepare reports, and outreach materials to share their findings, and ultimately use those insights to make improvements to programs. Rigorous data collection will be a near-term effort to support implementation of other activities in the C&S sector. Key partners for this effort include the C&S enforcement and permitting community, such as local government agencies and building departments, as well as frequent permit applicants such as private construction and architectural firms. The objective of the program is to deliver locally informed resources and tools that streamline code compliance and enforcement and increase permit closeout.

12. Program Delivery and Customer Services

I-REN's primary tactic for this Program will be to Identify and address the areas of greatest need for improved code compliance, in collaboration with local governments and the building industry. The proposed activities to implement this tactic may include but are not limited to the following:

- Collaborate with local governments to design and deploy an effective survey instrument, via an online survey platform already utilized by I-REN.
- Conduct additional in-depth phone interviews as needed to survey key decision makers and/or to fill identified gaps in response data.
- Review secondary data sources obtained in collaboration with local government agencies and code officials.
- Compile results and preparation of report materials for sharing with local governments.
- Analyze results, in cooperation with local governments, to inform program planning efforts and evaluation, measurement and verification (EM&V).

13. Program Design and Best Practices

I-REN's C&S Technical Support program design was chosen by I-REN in response to challenges faced by Building Department staff, local governments, building professionals, and developers regarding compliance. To address these challenges and achieve the program's objective of Improving understanding of energy efficiency codes and standards among local building departments and the building industry to increase implementation and compliance, I-REN intends to implement the following strategy:

- Establish an ongoing training program to assist building department staff and the building industry to support, understand, and effectively implement energy efficiency codes and standards.

To ensure efficacy of this strategy, I-REN's C&S Training and Education Program will deploy the following tactics:

- Identify and address the areas of greatest need for improved code compliance, in collaboration with local governments and the building industry.

- Develop training curriculum to address gaps in compliance with current requirements. Offer ongoing training on changes and trends in C&S.

14. Innovation

One of the greatest benefits of a regional organization working with local jurisdictions is the ability to leverage the knowhow of a large body of professionals and then to distribute that knowledge and resources to less advantaged groups. The I-REN team will enable this regional collaboration by identifying important areas for policy improvements, such as future reach codes, efficiency, and fire ordinances, et.al., and work with jurisdictions to create model ordinances and policies that can be adopted by interested local governments. This tactic will also enable I-REN to test and pilot various approaches to common concerns and establish an effective regional response that can be easily and affordably adopted region-wide. This effort will ensure dollars spent are well utilized and have the greatest impact possible.

Specifically, I-REN will survey, and interview key jurisdictions as needed to understand the major areas for concern and potential policies. Then working through their committee structure, they will develop regionally appropriate model ordinances and vet and refine them with participating local governments. Once finalized, these model resources will be made available to any jurisdiction in the region. I-REN will provide ongoing technical assistance to adjust and implement the ordinances as well as provide ongoing monitoring and tracking to address any needed changes or updates.

15. Metrics

Based on intervention strategies I-REN developed for C&S, the following are examples of metrics that will track program performance:

- Measures adopted
- Federal standards adopted

- Local government Reach Codes implemented
- Number of training activities held
- Increase in code compliance knowledge

Additional metrics for this new program are forthcoming.

16. For Programs claiming to-code savings

Not applicable.

17. Pilots

Not applicable.

18. Workforce Education and Training

A key aspect of I-REN's C&S Technical Support program will be to assist building departments and the building industry with understanding, evaluating, and permitting the energy codes.

19. Workforce Standards

Not applicable.

20. Disadvantaged Worker Plan

I-REN's approach to serving the C&S sector incorporates training for local building department staff, to help those individuals perform their jobs and build capacity in their departments to better enforce codes and standards. This is important for developing a skilled workforce in some of the rural jurisdictions with less resources in their local building departments, and for areas that include underserved and disadvantaged communities, in line with the directive in Senate Bill 350.

21. Additional information

Not applicable.

SUPPORTING DOCUMENTS

1. Program Manuals and Program Rules

The Program Manual will be developed and incorporated into this Implementation Plan after program implementers are under contract.

2. Program Theory and Program Logic Model

Forthcoming

3. Process Flow Chart

Forthcoming

4. Incentive Tables, Workpapers, Software Tools

Not applicable.

5. Quantitative Program Targets

Targets will be established after program implementers are under contract.

6. Diagram of Program

Forthcoming

7. Evaluation, Measurement & Verification (EM&V)

As a new REN, I-REN is interested in collaborating with the CPUC, CEC, Energy Division, other PAs, and the region's C&S community to support statewide and regional efforts around C&S EM&V Roadmaps and Plans. I-REN will collaborate with the CPUC and other stakeholders to ensure that data collection activities are embedded in C&S program design to capture the information necessary to meet evaluation requirements and also to help expand the understanding of REN program impacts in this cross-cutting sector.

8. Normalized Metered Energy Consumption (NMEC)

Not applicable.

Exhibit B

Maximum Contract Sum and IOU Maximum Contribution

I-REN's Commission Authorized Budget for 2022-2027

I-REN Authorized Budgets for 2022-2027							
Cost Category	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**Total**
Public Sector							
Administration	628,819	619,172	662,939	707,457	707,457	707,457	4,033,301
Marketing	377,292	371,503	397,763	424,474	424,474	424,474	2,419,980
Direct Implementation	3,782,083	3,701,047	3,818,688	3,942,635	3,942,635	3,942,635	23,129,723
Incentive	1,500,000	1,500,000	1,750,000	2,000,000	2,000,000	2,000,000	10,750,000
Subtotal	**6,288,194**	**6,191,722**	**6,629,390**	**7,074,566**	**7,074,566**	**7,074,566**	**40,333,004**
Workforce Education and Training							
Administration	225,329	239,343	243,716	267,465	267,465	267,465	1,510,783
Marketing	135,198	143,606	146,230	160,479	160,479	160,479	906,471
Direct Implementation	1,892,768	2,010,477	2,047,218	2,246,706	2,246,706	2,246,706	12,690,581
Subtotal	**2,253,295**	**2,393,426**	**2,437,164**	**2,674,650**	**2,674,650**	**2,674,650**	**15,107,835**
Codes and Standards							
Administration	144,611	150,395	156,411	162,667	162,667	162,667	939,418
Marketing	87,766	90,237	93,847	97,600	97,600	97,600	564,650
Direct Implementation	1,214,730	1,263,320	1,313,852	1,366,407	1,366,407	1,366,407	7,891,123
Subtotal	**1,446,107**	**1,503,952**	**1,564,110**	**1,626,674**	**1,626,674**	**1,626,674**	**9,392,191**
EM&V	114,441	115,604	121,810	130,349	130,349	130,349	742,902
2022-27 Total	**10,102,037**	**10,204,704**	**10,752,474**	**11,506,239**	**11,506,239**	**11,506,239**	**65,577,932**

IOU Maximum Contribution

I-REN Sub-program	2022		2023		2024	
	SCE	SoCalGas	SCE	SoCalGas	SCE	SoCalGas
Public Sector	$ 4,779,027.44	$ 1,509,166.56	$ 4,705,708.72	$ 1,486,013.28	$ 5,038,336.40	$ 1,591,053.60
WE&T	$ 1,802,636.00	$ 450,659.00	$ 1,914,740.80	$ 478,685.20	$ 1,949,731.20	$ 487,432.80
Codes & Standards	$ 1,156,885.60	$ 289,221.40	$ 1,203,161.60	$ 300,790.40	$ 1,251,288.00	$ 312,822.00
	$ 7,738,549.04	**$ 2,249,046.96**	**$ 7,823,611.12**	**$ 2,265,488.88**	**$ 8,239,355.60**	**$ 2,391,308.40**
EM&V PA Split	$ 88,670.72	$ 25,770.28	$ 89,645.33	$ 25,958.67	$ 94,409.52	$ 27,400.48

I-REN Sub-program	2025		2026		2027	
	SCE	SoCalGas	SCE	SoCalGas	SCE	SoCalGas
Public Sector	$ 5,376,670.16	$ 1,697,895.84	$ 5,376,670.16	$ 1,697,895.84	$ 5,376,670.16	$ 1,697,895.84
WE&T	$ 2,139,720.00	$ 534,930.00	$ 2,139,720.00	$ 534,930.00	$ 2,139,720.00	$ 534,930.00
Codes & Standards	$ 1,301,339.20	$ 325,334.80	$ 1,301,339.20	$ 325,334.80	$ 1,301,339.20	$ 325,334.80
	$ 8,817,729.36	**$ 2,558,160.64**	**$ 8,817,729.36**	**$ 2,558,160.64**	**$ 8,817,729.36**	**$ 2,558,160.64**
EM&V PA Split	$ 101,036.68	$ 29,312.32	$ 101,036.68	$ 29,312.32	$ 101,036.68	$ 29,312.32

PROGRAMS AGREEMENT
EXHIBIT C

Security Incident Response Provisions

1. Nondisclosure of Customer Confidential Information

Customer Confidential Information is deemed to be Confidential Information under the Programs Agreement, except that the exceptions to the obligations of nondisclosure and non-use of Confidential Information in ARTICLE XVI, "Confidential Information and Security Requirements", of this Programs Agreement shall not apply to Customer Confidential Information. Notwithstanding anything to the contrary in the Programs Agreement, WRCOG's nondisclosure obligations with respect to Confidential Information that is also Customer Confidential Information shall survive any expiration or termination of the Programs Agreement in perpetuity. WRCOG shall hold the Customer Confidential Information in confidence and meet requirements of Applicable Laws and Applicable Standards relating to the custody, care and integrity of data and information.

2. Expiration or Termination of Programs Agreement

Notwithstanding anything to the contrary in the Programs Agreement, upon the expiration or termination of the Programs Agreement, or at any time upon request of Utility, WRCOG shall, within fifteen (15) days, either: (a) deliver to Utility all Customer Confidential Information in any medium, including all copies or parts of the Customer Confidential Information, in possession of WRCOG, its Subcontractors, and any of their respective employees, agents, or representatives, or (b) destroy or render non-readable and incapable of reconstruction all Customer Confidential Information. If destroyed, the destruction shall be certified in writing by WRCOG. Following expiration or termination of the Programs Agreement, or a request from Utility as described in the preceding sentences, WRCOG, its Subcontractors, and their respective employees may not retain any copy of the Customer Confidential Information for any purpose, including in anticipation of audits or litigation.

3. Subpoena Notification

Notwithstanding anything the contrary in the Programs Agreement, unless prohibited by law or court order, WRCOG shall, within 2 business days of receipt of a subpoena for disclosure of any Customer Confidential Information, provide notice as set forth in the Programs Agreement so that Utility and WRCOG may engage in good faith discussions about the appropriate response to the subpoena; provided however, if Utility informs WRCOG that it will seek to quash or modify the subpoena, then WRCOG shall delay responding to the subpoena to permit Utility time to quash or modify the subpoena. Nothing herein is intended to preclude WRCOG from complying with the subpoena when and as required to do so by law or court order. Additionally, WRCOG will provide Utility with an annual report identifying whether it has received any subpoenas for disclosure of Customer Confidential Information, and, if so, the dates of same. The annual report will be furnished to Utility no later than January 15 of the next calendar year.

4. Right to Audit

WRCOG will maintain, for a period of five (5) years after final payment of the last invoice of the calendar year, complete records of compliance with the terms of this Exhibit. Utility reserves the right to audit and copy any applicable documents related hereto. Utility may, at its discretion, assign the audit and duplication rights of this paragraph to a governmental agency or entity operating under the authority of a governmental agency. Any limitations on the number, frequency, scope or conduct of audits in the

Programs Agreement shall not apply to audits relating to Customer Confidential Information, nor shall any audit relating exclusively to Customer Confidential Information count against any limitation on the number or frequency of other audits permitted under the Programs Agreement.

5. Security Incidents

(A) Security Incident Response Plan: WRCOG shall develop, implement and maintain a written plan and process for preventing, detecting, identifying, reporting, tracking and remediating Security Incidents ("Security Incident Response Plan" or "SIRP"). A Security Incident shall mean an event or set of circumstances that results in a reasonable expectation of a compromise of the security, confidentiality or integrity of Customer Confidential Information under WRCOG's control ("Security Incident"). Examples of Security Incidents include:

(1) Security breaches to WRCOG's network perimeter or to internal applications resulting in potential compromise of Utility data or information;

(2) Loss of physical devices or media, e.g., laptops, portable media, paper files, etc., containing Utility data;

(3) Lapses in, or degradation of, WRCOG's security controls, methods, processes or procedures;

(4) The unauthorized disclosure of Customer Confidential Information; and

(5) Any and all incidents adversely affecting Utility's or its Affiliates', as the case may be, information assets.

(B) SIRP General Requirements: WRCOG's SIRP will include Security Incident handling and response procedures, specific contacts in an event of a Security Incident, the contacts' roles and responsibilities, and their plans to notify Utility or its Affiliates, as the case may be, concerning the Security Incident. The SIRP must be based on and meet all requirements of the following:

(1) U.S. federal and applicable state laws, statutes and regulations concerning the custody, care and integrity of data and information. WRCOG shall ensure that its SIRP and its business practices in performing work on behalf of Utility comply with California's Information Practices Act of 1977, California Civil Code §§ 1798.80 et seq., which addresses the provision of notice to Utility or its Affiliates, as the case may be, of any breach of the security of Customer Confidential Information if it is reasonably believed to have been acquired by an unauthorized person.

(2) Utility information management and information security policies and procedures as made available to WRCOG upon WRCOG's request ("Utility Policies and Procedures").

(C) WRCOG Response to Security Incident. The following will apply in the event of a Security Incident:

(1) WRCOG will submit a Security Incident Report (SIR) to Utility or its Affiliates, as the case may be. In the case of SCE, WRCOG shall submit the SIR by e-mailing the report to AVERT@sce.com ***and*** calling AVERT at (626)543-6003 in accordance with SCE Policies and Procedures and Applicable Laws. The SIR shall be given promptly, and in no event no more than one business day, upon discovery of a Security Incident as required by Applicable Laws and keep Utility or its Affiliates, as the case may be, informed of developments and new information. In the case of SoCalGas, WRCOG *further agrees that any breach or any other security incident that has the potential to compromise SoCalGas data must be reported to the Sempra Energy Security Operations Center (SOC@sempra.com (858) 613-3278) within 24 hours of knowledge of the breach followed by a plan for remediation within 72 hours*

(2) At Utility's or its Affiliates', as the case may be, request, WRCOG will meet with Utility or its Affiliates, as the case may be, to discuss the cause of the Security Incident, WRCOG's response, lessons learned and potential improvements to WRCOG's system security processes and procedures.

(D) Compromise of Customer Confidential Information.

(1) Additional SIRP Requirements for Customer Confidential Information. With respect to any Customer Confidential Information in the possession or under the control of WRCOG, to protect Customer Confidential Information from unauthorized access, destruction, use, modification or disclosure, WRCOG shall:

(a) Develop, implement and maintain reasonable security procedures and practices appropriate to the nature of the information to protect Customer Confidential Information from unauthorized access, destruction, use, modification, or disclosure; and

(b) Develop, implement and maintain data privacy and security programs with administrative, technical, and physical safeguards appropriate to the size and complexity of the WRCOG's business and the nature and scope of WRCOG's activities to protect Customer Confidential Information from unauthorized access, destruction, use, modification, or disclosure.

(2) Notice Requirements for Customer Confidential Information. In the event of a Security Incident where Customer Confidential Information was, or is reasonably believed to have been, acquired by an unauthorized person, WRCOG shall immediately provide the SIR required by Section 5 (C) of this Exhibit. This SIR shall state that Customer Confidential Information may be involved, and shall describe the suspected nature of the Customer Confidential Information.

(E) SIRP Review. At Utility's or its Affiliates', as the case may be, request, WRCOG shall review the SIRP at least annually with Utility's or its Affiliates', as the case may be, designated representatives to identify updates, changes or potential improvements; and a process to document these changes within ninety (90) days of these changes.

(F) Document Retention. WRCOG shall maintain all documentation relating to Security Incidents, whether in written or electronic form, including their identification, processing and resolution, for five (5) years after final resolution of the Security Incident, including the final resolution of all claims arising out of the Security Incident.

PROGRAMS AGREEMENT
EXHIBIT D

Computing System Access and Security Review Obligations

1. Computing System Access.

(A) If Utility determines Contractor requires access to Utility's Computing Systems in order to perform the work or services under the Programs Agreement (hereafter in this exhibit, "Services"), Utility may grant WRCOG access subject to the conditions in this Exhibit, but only for the purpose of WRCOG performing the Services in accordance with the terms of the Programs Agreement.

(B) WRCOG represents, warrants and covenants that it and its employees, Subcontractors and agents shall only access Utility's Computing Systems as necessary to perform the Services in accordance with the terms of the Programs Agreement.

(C) WRCOG shall promptly identify in writing to Utility those WRCOG employees, Subcontractors and agents who will require access to the Computing Systems in order to perform the Services. WRCOG shall execute, and shall cause each of its employees, Subcontractors and agents to execute the Computing System Use Acknowledgment ("CSUA") form and any other documents Utility may deem reasonably necessary to ensure WRCOG's compliance with this Exhibit. Upon receipt by Utility Information Security of WRCOG's signed CSUA form, and any other documents Utility may reasonably require, with regard to each person requiring Computing Systems access, Utility may issue appropriate computer or e-mail accounts, passwords, or access authorizations to WRCOG and its personnel. WRCOG acknowledges that these authorizations are for the specifically identified individuals only, and WRCOG shall ensure that these authorizations shall not be shared or transferred among its or Subcontractors' or agents' personnel. WRCOG shall ensure that the Computing Systems, any accessed Utility information or data, any user accounts, passwords or any other access authorizations remain secure during WRCOG's access. All information and data retrieved during WRCOG's access to Utility Computing Systems are Confidential Information and subject to Section 15, "Confidential Information and Security Requirements", of this Programs Agreement.

(D) WRCOG shall be responsible for any breach of this Exhibit by its employees, Subcontractors or agents, or by any other person who obtained access to the Computing Systems directly or indirectly from WRCOG. WRCOG shall notify Utility immediately in the event WRCOG has reason to know or suspect that a breach of this Exhibit has occurred. Utility may immediately revoke WRCOG's, Subcontractors' or their agents' access to Utility Computing Systems. Such revocation shall not relieve WRCOG of its obligations to perform the Services in accordance with the terms of the Agreement.

2. Security Review.

WRCOG represents and warrants to Utility that it and its Subcontractors and agents each has taken all commercially reasonable steps necessary to maintain the confidentiality, integrity and availability of its own computing systems. Utility or its authorized representative shall have the right to examine WRCOG's and its Subcontractors' and agents' records and reports relating to their respective security policies, practices and procedures at any time. These include, without limitation, any internal, external or regulatory audit reports or reviews relating to the security of WRCOG's or its Subcontractors' or agents' computing systems, and their compliance with their

respective security policies, practices and procedures. WRCOG represents and warrants that it has the authority to grant Utility and its authorized representatives access to its Subcontractors' and agents' records and reports.

your logo here

I-REN - Workforce Education & Training

Monthly Expenditures for March 2023

	2023 Current Month Spent
Admin	$2,116.00
Marketing	$70.00
Direct Implementation	$113.00
DI - Incentives	$26.00

Invoice Total **$2,325.00**

Bill To:

Invoice Date: 03-10-2022
Vendor # 5678
Attention: Chauncy Tou
Southern California Gas Company
555 W 5th Street, ML GT20B4
Los Angeles, CA 90013

Accounts Payable,

This is an invoice for Workforce Education & Training
for the period of March 2023
Invoice Number: 12345

Admin	$2,116.00
Marketing	$70.00
Direct Implementation	$113.00
DI - Incentives	$26.00
Amount Due This Invoice:	$2,325.00

Invoice contact for WRCOG at (213) 555-1234.
Name:
Email:

PLEASE REMIT PAYMENT TO:
Blue Moon
1 Main St
Los Angeles, CA 90001

Approved: Signature

Exhibit E

Monthly Invoicing and Reporting Requirements

The Invoice Reporting Tools (iRTools) is developed in consultation with WRCOG. The iRTools may be updated from time to time to accommodate I-REN program changes and improve invoice reporting process. All required monthly invoice reports and the invoice for advanced funding can be generated by the iRTools. An iRTool instruction is available as a user guide for the invoice templates.

WRCOG is required to submit monthly invoice report by the fifteenth (15th) calendar day each month to SoCalGas using the iRTools. The templates in the iRTools must be properly completed along with relevant supporting documents to serve the following purposes:

(1) Provide monthly cost accounting for program activities
(2) Provide information or back-up for program activities that supports the costs incurred
(3) Establish support for allowable costs in energy efficiency programs
(4) Provide information for utility cost sharing allocation (joint or single utility cost) when applicable

Invoice Requirements

(1) Monthly invoice

The monthly invoices will consist of one invoice for each program or area in I-REN portfolio. A simplified iRTool is set up for EM&V activities.

Each invoice will include relevant back-up documents (e.g., receipts, paid invoices, etc.) for cost incurred and contractor or sub-contractor's iRTool along with contractor's back-up documents if applicable.

(2) Invoice for incentive advance funding

The iRTool is configured to prepare invoices for incentive advance funding. The following information is required to determine the amount of incentive advance funding in accordance with Section 7.5 of the Programs Agreement.

(i) Initial advance funding for incentive

Documents to show EE project enrollments with measure details

Documents to show EE project commitments with measure details

Invoice to request incentive advance funding for each program

(ii) Subsequent advance funding for incentive

Custodial Bank statement to show account balance at the time of the request

Reconciliation of drawdown (incentive spending) supported by incentive payments to the customers or authorized contractor, per measure per customer account

New enrollment and/or new EE project commitments (incremental to the previous enrollments and/or EE project commitments) with measure details

Invoice to request incentive advance funding for each resource program

(3) Invoice for non-incentive advance funding

The iRTool is also configured to prepare invoices for non-incentive advance funding. The following information is required to determine the amount of non-incentive advance funding in accordance with Section 7.5 of the Programs Agreement.

(i) Initial advance funding for non-incentive

Documents to show the first nine (9) months of program expenditure in 2022 for each program in the I-REN portfolio

Invoice to request non-incentive advance funding for each program

(ii) Subsequent advance funding for non-incentive

Custodial bank statement to show account balance at the time of the request

Reconciliation of drawdown (non-incentive spending) supported by program expenditure

Invoice to request non-incentive advance funding for each program

Invoice Submission

All invoices are submitted to SoCalGas through EDT (Electronic Data Transfer), a Secure File Transfer Protocol (SFTP) provided by SoCalGas. The monthly invoices are due by the fifteenth (15^{th}) calendar day of each month. The invoice for advance payment may be submitted separately at a different time in accordance with Section 7.5 of the Programs Agreement.

All reports or data that may contain customer or proprietary information should be transmitted through EDT.

Registration is required for users of EDT. The registration for EDT is by invitation only. WRCOG will provide SoCalGas a list of staff who would need to use EDT for secure transmission. The following information is needed for each EDT user:

Email address
First Name
Last Name
Display Name
Company Name

A registration link will be emailed to the requester to set up user's log-in. Upon completion of user registration, the user can transmit to and receive from SoCalGas via the SFTP. The EDT log-in can be found in the following link.

https://edt.sempra.com/bds/login.do

ENERGY EFFICIENCY POLICY MANUAL

Version 6

April 2020

Applicable to post-2018 Energy Efficiency Programs

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ENERGY EFFICIENCY POLICY MANUAL Version 6.0
FOR POST-2018 PROGRAMS

i. Introduction

This document presents the California Public Utilities Commission's (CPUC's) policy rules and related reference documents for the administration, oversight, and evaluation of energy efficiency (EE) programs funded by ratepayers in California. The purpose of the Energy Efficiency Policy Manual is to provide the most up to date list of the rules established by Commission Decisions and Resolutions that govern the administration of energy efficiency programs. This manual enumerates standing Commission rules that continue to apply to the current portfolio even as subsequent decisions supersede past rules. Version 6.0 shall apply to all energy efficiency activities commencing in program year (PY) 2018 and beyond. The policy rules, terms and definitions contained herein pertain to efficiency activities funded through the following mechanisms:

- The gas public purpose program (PPP) surcharges, as authorized by §890- 900.
- Electric procurement rates, as authorized by the Commission.

The rules in this policy manual, unless specifically indicated, apply to all the following entities that are funded through the mechanisms above and include the four large investor-owned utilities (and their third party implementers and administrators), including:

  - Pacific Gas and Electric Company (PG&E),
  - Southern California Edison Company (SCE),
  - San Diego Gas & Electric Company (SDG&E) and
  - Southern California Gas Company (SoCalGas);
  - Community Choice Aggregators (CCA), and
  - Regional Energy Networks (RENs)

Chapter III focuses more specifically on the CCA and RENs:

More information on CCAs can be found here:

- https://www.cpuc.ca.gov/general.aspx?id=2567

More information on Regional Energy Networks can be found here (among other EE program administrator information):

- https://www.cpuc.ca.gov/General.aspx?id=4460

This manual does not address the following programs:

- Energy Savings Assistance Programs for low income customers,
- California Alternative Rates for Energy (CARE) for low-income customers,
- Interruptible rate or load management programs,
- Self-generation and demand-response programs developed in response to Assembly Bill (AB) 970 (§ 399.15(b)), or
- Small and/or Multijurisdictional Utilities (SMJUs).

This document, which supersedes all previous versions of the Energy Efficiency Policy Manual, provides may of the CPUC's policy rules ("Rules") stipulated in CPUC decisions and resolutions that apply on an ongoing basis to current (circa 2018) and future energy efficiency portfolios. This manual is compiled by staff and is not formally adopted by the CPUC. As such, it is intended to be a handy reference for many of the significant and/or more commonly applied efficiency portfolio Rules, but it is not an exhaustive compilation of all rules developed in CPUC decisions and resolutions that apply to the energy efficiency portfolios. In addition, while much of the CPUC's guidance referenced in this document applies specifically to IOUs who implement and administer EE programs, all program implementers (including third-party, CCA's, etc.) should seek to adhere to them as well, unless clearly exempt, and should confer with the IOU program administrators, who oversee the EE portfolio and all EE programs, for clarification as needed.

i. How to Use this Document

This document is intended to provide a high-level overview of the significant policies that impact energy efficiency programs in the State of California as determined by the California Public Utilities Commission. It does not provide in-depth detail about each policy area but provides a summary and links to the various regulatory documents that do. The purpose of this document is to provide a birds-eye view of the relevant policy rules that all energy efficiency program implementers should know while also providing them the tools and resources needed to develop more expertise in this area as they see fit. As previously noted, this document should NOT be considered a completely detailed source of information, in and of itself, but it does provide comprehensive access to all the relevant policy documents in the form of references and links. While links to all documents referenced in this

document are provided, these documents can also be found on the Commission's website by typing in the document number (all letters capitalized with no dashes) in the search bars located here:

https://www.cpuc.ca.gov/documents/#DocTypeSearches

ii. Common Terms and Definitions

Common terms and definitions will facilitate the administration and evaluation of energy efficiency activities. In particular, program definitions should be designed to facilitate to the extent possible: (1) the identification of energy efficiency activities by end-use savings potential, (2) the evaluation, measurement and verification (EM&V) of those activities based on Commission-adopted EM&V protocols, and (3) the coordination of program administration and evaluation with resource planning and procurement needs. To this end, all entities subject to these rules and all program implementers should use the definitions included in Appendix B when characterizing any proposed program activity. The burden is on them to justify any departure from those definitions.

I. Energy Efficiency Policy Objectives

1. **Energy Efficiency as a Procurement Resource.** CPUC and State energy policy, as expressed in the original 2005 Energy Action Plan (EAP) and reaffirmed in Decision (D).04-12-048, strives to make energy efficiency and demand response the IOUs' highest priority procurement resources. The 2008 EAP promotes ongoing support for the loading order and identifies energy efficiency and demand response as the State's preferred means of meeting growing energy needs. After cost-effective energy efficiency and demand response resources, we rely on renewable sources for power and distributed generation.[1] This is also consistent with Pub. Util. Code § 454.5(b)(9)(C),[2] which requires IOUs to first meet their "unmet energy resource needs through all available energy efficiency and demand reduction resources that are cost effective, reliable, and feasible." In order to promote the resource procurement policies articulated in the Energy Action Plan and by this CPUC, demand-side energy efficiency activities funded by ratepayers should offer programs that serve as alternatives to supply-side resource options (demand-side energy resource programs). By keeping energy resource procurement costs as low as possible through the deployment of a cost-effective portfolio of resource programs, over time all customers will share in the resource savings from energy efficiency. An additional type of EE program are non-resource demand-side programs

[1] http://docs.cpuc.ca.gov/word_pdf/REPORT/51604.pdf

[2] Hereafter all references to code sections are to the Public Utilities Code unless otherwise noted.

designed to promote market sector specific approaches that indirectly reduce energy usage (ex: marketing, education, and outreach programs)

2. **Energy Savings Goals**. One of the CPUC's objectives is to pursue all cost-effective energy efficiency opportunities over both the short and long term. The CPUC established electricity and natural gas savings goals, pursuant to Pub. Util. Code § 454.55 and 454.56. In D.04-09-060, the CPUC first provided numerical goals for electricity and natural gas savings by utility service territory. The CPUC-adopted energy savings goals are expressed in terms of Gigawatt hours, million-therms, and peak Megawatt load reductions. These goals are informed by periodic Energy Efficiency Potential and Goals Studies, and historically were updated in D.08-07-047, D.09-05-037, D.09-09-047, D.12-05-015, D.12-11-015,and D.17-09-025. Thee most recent goals decision; D.19-08-034 established goals for 2020 – 2030. Energy Efficiency goals shall continue to be updated periodically by the CPUC. The IOUs should develop their energy efficiency program portfolios so that they will meet or exceed these savings goals. The CPUC's intent is for goals to:

   (1) be appropriately aggressive; [3]

   (2) support long-term procurement planning; [4]

   (3) encourage a focus on long-term savings; [5] and

   (4) be based on the best available information. [6]

   In D.17-09-025, The *Decision Adopting Energy Efficiency Goals for 2018 – 2030*, the CPUC adopted energy savings goals for ratepayer-funded energy efficiency program portfolios for 2018 and beyond based on an assessment of economic potential using the Total Resource Cost test, the 2016 update to the Avoided Cost Calculator, and a greenhouse gas adder that reflects the California Air Resources Board Cap-and-Trade Allowance Price Containment Reserve Price. The CPUC also deferred the adoption of cumulative goals until the California Energy CPUC develops a method for calculating savings persistence and CPUC staff assesses the viability of that method for the purpose of EE goals.

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[3] D.04-09-060 at 3

[4] D.04-09-060 at 35

[5] D.07-10-032 at 5

[6] D.08-07-047 at 18-19

Goals for the 2018 - 2030 portfolio cycle will be applied on the following basis:

a. Energy savings goals are based on achieving 100 percent of incremental market potential identified in the most recent Potential Study for both gas and electric savings.[7]

b. Separate energy savings goals were adopted for IOU Codes and Standards (C&S) advocacy. The C&S advocacy category represents the estimated energy savings forecasted for the Title 20 and 24 updates and federal appliance standards that can be attributed to the IOUs'

C&S advocacy program (D.12-11-015, pp. 56-58).

c. Energy savings goals are set on a "net basis." (D.16-08-019, p. 19).

d. The CPUC intends to develop a better understanding of the sustained impact of the utility programs (including decay and market transformative effects) to encourage programs that will have lasting impacts and to hold IOUs accountable for long-term savings in future portfolios. (D.12-05-015 at 95.)

3. **Implementation of the California Long-Term Energy Efficiency Strategic Plan.** D.07-10-032 established a broader framework for statewide coordination on energy efficiency program design, in order to overcome market barriers to more widespread adoption of energy efficiency and to capture longer-term savings. The decision directed the IOUs to work with CPUC staff and market participants to prepare the California Long-Term Energy Efficiency Strategic Plan (Strategic Plan). Adopted in D.08-09-040, the Strategic Plan set forth a roadmap for energy efficiency in California through 2020 and beyond, by articulating a long-term vision and goals for each market sector and identifying specific near-term, mid-term and long-term strategies to achieve the goals. (The Strategic Plan can be viewed at http://www.cpuc.ca.gov/NR/rdonlyres/D4321448-208C-48F9-9F62-1BBB14A8D717/0/EEStrategicPlan.pdf).

[7] The Potential Study can be viewed at http://www.cpuc.ca.gov/PUC/energy/Energy+Efficiency/Energy+Efficiency+Goals+and+Potential+Studies.htm

D.08-09-040 and the subsequent October 30, 2008 Ruling in A.08-07-021 directed the IOUs to align their programs with Strategic Plan goals by clearly identifying utility actions for all Strategic Plan near-term strategies and action steps, where a utility role is important, and to provide programs that reflect the Strategic Plan short-term steps and milestones. (D.08-09-040, ordering paragraph 2.)

i. Among the market strategies identified as necessary to achieve market transformation, the Strategic Plan established three long-term goals for energy efficiency:

- All new residential construction in California will be zero net energy by 2020;
- All new commercial construction in California will be zero net energy by 2030; and
- The Heating, Ventilation, and Air Conditioning (HVAC) industry will be reshaped to ensure optimal equipment performance

ii. The Strategic Plan expanded the CPUC's objectives for the energy efficiency portfolios to also pursue market transformation, which was defined as "long-lasting sustainable changes in the structure or functioning of a market achieved by reducing barriers to the adoption of energy efficiency measures to the point where continuation of the same publicly-funded intervention is no longer appropriate in that specific market. Market transformation includes promoting one set of efficient technologies until they are adopted into codes and standards (or otherwise adopted by the market), while also moving forward to bring the next generation of even more efficient technologies to the market." (D.09-09-047 at 354.)

4. **Energy Efficiency Program Design.** D.15-10-028 established a "Rolling Portfolio" process for regularly reviewing and revising portfolios. Central to the rolling portfolio cycle framework is the rolling portfolio schedule. This schedule is described in Attachment 5 and 6

in D.15-10-028. [8] IOUs, CCAs, and RENS must use the same process for program design. For example, program related business plans must be submitted for CPUC review and approval and revised if prompted by certain triggers as described in D.15-10-028. p. 56-57. Existing plans (prior to the adoption of D.15-10-028) do not need a new application until they have one year of funding left for the corresponding program. The IOUs should implement statewide programs in order to achieve economies of scale and employ industry best practices.[9]

5. **Program Portfolio Development, Balance and Management.** The most appropriate program design and balance of program funding across market sectors (e.g., residential, industrial, commercial) should be based on maximizing cost-effective long-term savings. D.07-10-032 directed the IOUs to work with stakeholders, including the CPUC and the California Energy Commission (CEC) staff as well as market participants, to encourage the application of best practices, portfolio diversity and innovation. IOUs are expected to coordinate to develop and manage statewide programs, in order to avoid duplications of efforts and promote innovation and good program management. IOUs should also include a selection of non-resource programs such as statewide marketing and outreach programs, information and education programs, workforce education and training, emerging technologies programs and other activities in their proposed portfolios that support the CPUC's short-term and long-term energy savings goals. Non-resource programs also help in achieving Strategic Plan objectives. Lastly, the IOUs have been directed by the CPUC to utilize a percentage of their program funding for third party designed and implemented programs. D.18-01-004, modified by D.18-05-041 requires the IOUs to use at least 25 percent of their program funding for third parties by PY 2020, 4 percent by PY 2021, and 6 percent by 2023.

6. **Integrated Demand Side Management.** In order to achieve maximum savings while avoiding duplication of efforts, reducing transaction costs, and diminishing customer confusion, the IOUs are required to integrate customer demand side programs, such as energy efficiency, self-generation, advanced metering, and demand response in a coherent and efficient manner. Integrated demand side management (IDSM) is identified in the Strategic Plan as an overarching strategy to promote customer-side energy management and achievement of zero net energy goals.[10] In Ordering Paragraph (OP) 10 of D.18-05-041, the CPUC directed that a set amount of the IOUs' IDSM budget shall focus on the integration between energy efficiency and demand response. The CPUC also has related work on

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[8] 2013-14 Portfolio cycle program guidance provided in D.12-05-15 and D.12-11-015 for RENs, and D.14-01-033 for CCAs

[9] In D.07-10-032 at 31

[10] D.09-09-047, p. 214

Integrated Distributed Energy Resources (IDER) with more information available at https://www.cpuc.ca.gov/IDER.

7. **The Emerging Technologies Program (ETP).** ETP supports EE program uptake of cost-effective new and underutilized commercial technologies. In order to filter this uptake, ETP is primarily engaged in technology evaluation with a focus on achieved savings and cost-effectiveness via the ETP Technology Assessment subprogram. In this capacity, ETP both identifies suitable technologies for program inclusion and eliminates unsuitable technologies from consideration. Technologies with positive evaluation results are then recommended for inclusion into the portfolio and passed off to EE resource programs for workpaper development. To support the technology intake process, the ETP Technology Development Support subprogram works with technology development actors to support their engagement with ETP and IOU programs and gather information about current and upcoming technology innovations. ETP also holds annual or semi-annual ET Summits to encourage discussion and knowledge sharing. The Technology Introduction Support subprogram engages in work intended to smooth the transition of technologies into EE programs and subsequently into the market. D.18-05-041, Attachment A, requires the IOUs to initiate Technology-focused Pilots, which will be ETP's first efforts at accelerating high-priority technologies into the market by identifying technology-specific market barriers and initiating market barrier breakdown activities. Along with this expanded scope, ETP is expanding its role as a technology communications hub spanning from R&D to C&S in California with several tools, including the Technology Priority Maps and an updated dissemination website (https://www.etcc-ca.com/).

8. **Codes and Standards (C&S).** In order to ensure that energy efficiency programs support the adoption of higher efficiency standards rather than compete with them, the IOUs shall implement programs to advocate for the adoption of higher codes and standards. D.12-05-015 established separate goals for codes and standards and affirmed that 100 percent of verified net savings shall count toward meeting these goals. The baseline for gross savings should be the previous standard or the prevailing market practice. The purpose of Codes and Standards goals is to give the IOUs credit for their specific contributions to new energy savings via their Codes and Standards advocacy work, which should not include naturally occurring savings or the advocacy work of other entities.

9. **Marketing Outreach and Education (ME&O).** In the CPUC's Proceeding A.12-08-007 directs the IOUs to implement the statewide Marketing, Education, and Outreach program called "Energy Upgrade California", which encourages Californians to save energy, and informs them about time-of-use rates. For more information go to https://www.energyupgradeca.org/ .

10. **Competitive Bidding for Third Party (3P) Programs.** Competitive solicitations help to identify innovative approaches or technologies for meeting savings goals with improved performance that might not otherwise be identified during the program planning process, and can take advantage of the unique strengths that third parties bring to the table. The IOUs shall propose a portfolio of programs that reflects the continuation of successful IOU and non-IOU designed and implemented programs. As part of that process, the IOUs will solicit competitive bids from third parties for the purpose of soliciting innovative ideas and proposals for improved portfolio performance. Please see section IX for a more detailed description of the CPUC adopted rules associated with IOU third party solicitations.

11. **Local Government and Institutional Partnerships.** Local Government Partnerships (LGPs) are partnerships between an IOU and a Lead Local Partner (LLP), which could be a city, county or region for the purpose of engaging local governments to promote demand side management (DSM) activities. Specifically, LGPs are designed to generate energy and demand savings within their own facilities and in their communities through joint utility-local government program designs that incorporate utility offerings and local government leadership, take actions that support the California Energy Efficiency Strategic Plan, leverage their local government role/authority, and provide DSM outreach in the community. Pursuant to D.12-05-015, beginning in the 2013-2014 cycle, new candidate partners must also adhere to deep retrofit criteria, as defined in the IOUs' program implementation plans.

12. **Pilot Programs.** Pilot programs should be designed to create the measures and program delivery mechanisms of the future, enabling EE programs to achieve deeper savings and market transformation. The pilots should be limited in scope and duration so that results are available in a specified time frame and limited in budget so that unsuccessful programs have a minimal impact on the overall portfolio. All results of pilot programs must be shared widely with the other program implementers and with the stakeholders in the sector impacted by the pilot. There should be a specific plan and timeframe to move successful pilot programs into statewide use (if applicable), or other more significant program efforts.

    Each proposed pilot should contain the following elements[11]:

[11] D.09-09-047 at 48-49

i. A specific statement of the concern, gap, or problem that the pilot seeks to address and the likelihood that the issue can be addressed cost-effectively through utility programs;

ii. Whether and how the pilot will address a Strategic Plan goal or strategy and market transformation;

iii. Specific goals, objectives and end points for the project;

iv. New and innovative design, partnerships, concepts or measure mixes that have not yet been tested or employed;

v. A clear budget and timeframe to complete the project and obtain results within a portfolio cycle - pilot projects should not be continuations of programs from previous portfolios;

vi. Information on relevant baselines metrics or a plan to develop baseline information against which the project outcomes can be measured;

vii. Program performance metrics (see Section 4.6.3);

viii. Methodologies to test the cost-effectiveness of the project;

ix. A proposed EM&V plan; and

x. A concrete strategy to identify and disseminate best practices and lessons learned from the pilot to all California IOUs and to transfer those practices to resource programs, as well as a schedule and plan to expand the pilot to utility and hopefully statewide usage.

II. Funding Guidelines for IOUs

These guidelines provide the IOUs with ways to be compensated for their energy efficiency programs.

1. **Energy Efficiency Funds from Electric Procurement Rates and Gas Public Purpose Program (PPP) Surcharges.** Pursuant to § 381, 381.1, 399 and 890-900, gas PPP surcharge and/or electric procurement funds must be spent to deliver energy efficiency benefits to ratepayers in the IOU service territory from which the funds were collected. Gas PPP surcharge and/or electric procurement collections must fund energy efficiency programs that benefit gas and/or electric customers within an IOU's service territory, as adopted by the CPUC. However, nothing in these Rules is intended to prohibit or limit the ability of the CPUC to direct the IOUs to jointly fund selected measurement studies, statewide marketing and outreach programs,

or other EE programs and activities that reach across service territory boundaries that serve statewide energy efficiency efforts.

2. **Cost Caps and Targets.** All IOUs shall reflect all costs associated with the delivery of their energy efficiency programs in their submissions in the EE portfolio annual budget advice letters (ABAL) as stated in D.18-05-041 and shall note, where applicable, when the costs are recovered in other proceeding. Costs shall reflect the caps and targets defined in D.09-09-047 and clarified in D.12-11-015 (D.09-09-047, pg. 49). Administrative cost definitions are further delineated in Appendix C of this manual.

    i. **Administration** – Administrative costs for utility EE programs (excluding non-IOU third party and/or government partnership budgets) are limited to 10 percent of total EE budgets. These costs shall be inclusive of any energy efficiency-related costs authorized and collected in other proceedings. These costs should also reflect the fully-loaded personnel costs of delivering EE programs and shall also note where the costs have been or will be recovered elsewhere to avoid double counting of costs. Administrative costs shall be consistent across IOUs and can only be shifted into other cost categories subject to the fund shifting rules as described in D.15-10-028. The IOUs shall not reduce the non-utility portions of government partnership and third-party implementer administrative costs without following authorized fund shifting guidelines subject to the fund shifting guidelines in Appendix A. (D.09-09-047, pg.369.)

    ii. **Marketing, Education, & Outreach (ME&O)** – ME&O cost targets for energy efficiency are set at 6 percent of total adopted EE budgets, subject to the fund-shifting rules in Rule II.3 and Appendix A.

    iii. **Direct Implementation Non-Incentive (DINI) --** DINI costs are defined in Appendix C as resource program delivery support costs and shall have a target value set at 20 percent of the total adopted energy efficiency budgets.[12] The IOUs are required to minimize their non-incentive budgets as much as possible to achieve savings targets (D.12-

[12] This target was adopted for 2010-12 cycle in D.09-09-047 at 6, at 74, and OP 13c and re-iterated for the 2013-14 cycle. D.12-11-015 at 98 states "This provision of D.09-09-047 is still in effect and has not been superseded, though the target is also not met by the proposed portfolios. We find that such a target is still reasonable for 2013-2014."

11-015, pg. 101).

iv. **Local Government Partnerships and Third Party Programs** – The utilities will seek to limit administrative costs of third party and local government partnership direct costs to 10 percent, striving for an entire cost cap of 10 percent. This amount is separate from utility costs to administer these programs (D.09-09-047, pg. 63).

v. The utility PAs shall ensure that their EE portfolios contain third party designed and implemented programs funded as a percentage of each IOU's overall EE budget utilizing the following schedule and budget amount by the end of each given year: 25 percet by 2019, 40 percent by 2020, and 60 percent by 2022. These PAs shall file a Tier 2 advice letter for each third party contract, or a batch of third party contracts, that is valued at $5 million or more and/or with a term of longer than three years for Commission review (D.18-01-004, pg.61, and D.18-05-041).

3. **Fund Shifting Rules.** D.15-10-028 modifies prior fund-shifting rules established in D.12-11-015, the December 22, 2011 Assigned Commissioner's Ruling (ACR) in R.09-11-014, D.09-09-047, D.09-05- 037, D.07-10-032, D.06-12-013, and D.05-09-043 to apply to the current funding cycle. Each energy efficiency program administrator (PA) must file a Tier 2 advice letter highlighting the next calendar year's budget, all fund shifting activity, annual spending, and cost-effectiveness statements (D.15-10-028,p.123).

   In D.15-10-028, the CPUC also eliminated prior requirements that EE PAs must file advice letters to obtain authorization to shift funds among EE programs. However, if CPUC Staff or stakeholders identify fund-shifting activities that substantially depart from CPUC policy direction or, in the opinion of CPUC Staff or stakeholders, are not in the best interest of ratepayers and/or the efficiency portfolios, they may raise their concerns in a protest to the PA (D.15-10-028, pg.127).

4. **Funding Business Plans.** Each PA will file an initial business plan for new programs as an application to receive EE funding. Business plans will explain at a relatively high level how PAs will effectuate the strategic plan and correspond with their more detailed implementation plans. PAs will organize business plans into market sectors and subsectors as discussed below. After the initial filing, PAs *must* file revised business plans only when a "trigger" event happens; PAs *may* also file revised business plans whenever they choose to do so. Business plan filings will

generally be untethered to the calendar except that PAs will need to apply for an extension of funding – that is, a restarting of the ten-year clock -- no less than one year before funding is set to end. (D.15-10-028, pg. 123).

Business plans will be considered as part of a stakeholder process and shall contain the following:

a) Portfolio summary and description of applicable intervention strategies;

b) A chapter for each of six sectors (residential, commercial, industrial, agriculture, public, cross-cutting) providing;
    a. A description of each PA's overarching goals, strategies and approaches; near-, mid- and long-term strategic initiatives;
    b. Sector-specific intervention strategies;
    c. Descriptions of how each sector approach advances the goals, strategies and objectives of the strategic plan;
    d. Descriptions of which and how strategies are coordinated statewide and regionally among PAs and/or with other demand-side options;
    e. Descriptions of how cross-cutting "sectors" are addressed;
    f. Descriptions of leveraging of cross-cutting activities for success for particular customer groups;
    g. Descriptions of work to minimize redundancy;
    h. Descriptions of efforts voiding working at cross purposes with other PAs;
    i. A description of any pilots contemplated or underway for the sector.
    j. A chapter for each of six sectors (residential, commercial, industrial, agriculture, public, cross-cutting) providing a statement of evaluation.

Utility program administrators shall not opt out of funding statewide programs and must fund at levels consistent with their proportional share based on load, unless specifically approved by the CPUC for a deviation by means of a new business plan (D.18-05-041, pg.186). In a rolling portfolio, where budgets are annualized rather than in a multi-year (portfolio cycle) period, if the program calendar year ends before disposition of the advice letter with the budget for the next calendar year, the prior year's budget shall remain in place until disposition of the pending

advice letter. IOUs shall continue to recover costs, and make transfers to CCAs and RENs, based on the prior year's authorized budget (D.15-10-028, OP 5).

5. **Shared Funding and Funding for EM&V** - The utilities shall file a Tier 1 advice letter to propose a mechanism for shared funding of statewide programs detailing proportional amounts and discrepancies or issues (D.18-05-041, pg.187). Energy efficiency PAs shall fund the coordinating committee (as created via D.15-10-028, p. 70) budget pro-rata based on their share of the overall authorized annual energy efficiency spending, filed through a Tier 1 advice letter (D.15-10-028 pg.125-126). Evaluation budgets will remain at four percent of the total portfolio, with at least 60 – 72.5 percent reserved for CPUC staff evaluation efforts and from 27.5 and up to 40 percent for program administrators, to be further divided proportionally among utilities, community choice aggregators, and regional energy networks by appropriate utility service area, with the exact amounts to be finalized during the collaborative process between program administrators and CPUC staff. (D.16-08-019, pg. 3.)

6. **Treatment of Unspent Funds from Prior Portfolio Cycles.** At the beginning of each portfolio cycle, IOUs should apply prior cycle(s) unspent funds to the new portfolio, including any associated interest collected, to offset revenue requirements in the new portfolio cycle as approved by the CPUC through the IOUs' EE applications (D.12-11-015, pg. 93). Committed funds are defined as those associated with individual customer projects and/or are contained within contracts signed during a previous program cycle and associated with specific activities under the contract. Committed funds are not considered "unspent funds," and need not be spent during that particular program cycle so long as there is an expectation that the activities will be completed and that the committed funds are spent to complete the activities for which they were committed. Savings will be counted in the cycle in which the project is completed (D.12-11-015, pg. 92).

7. **Program Cancellation**. IOUs shall not eliminate any energy efficiency program or sub-program except through the energy efficiency portfolio application or an Advice Letter seeking such a change. (D.12-11-015)

III. Regional Energy Networks & Community Choice Aggregators

This section provides information on the option for local government entities to apply with the CPUC to directly administer and report of energy efficiency related programs. This section also

includes compliance requirements for Regional Energy Networks (RENs) and Community Choice Aggregators (CCAs) administering Energy Efficiency programs.

1. **Regional Energy Networks.** In D.12-11-015, the CPUC authorized the formation of RENs, to enable local government entities to plan and administer energy efficiency programs independent from the IOUs. RENs are distinguishable from other local government partnerships (LGPs) by the fact that they have applied to the CPUC to become a REN vs. LGPs that propose to and are selected by the IOUs. RENs are intended to be additional to and not in replacement of design or budget of LGPs contracting to IOUs. The RENs will have the independent ability, within the confines of CPUC approval, to manage, deliver, and oversee their own programs independently, without utility interference or direction as it relates to the design and delivery of their programs. Within California there are three RENs; 1) The Bay Area Regional Energy Network, 2) The Southern California Regional Energy Network, and 3) The Tri-County Energy Network. The IOUs will serve as fiscal managers responsible for all usual fiscal and management functions including fiscal oversight and monitoring, such as providing the day-to-day contract management functions and disbursement of ratepayer funds (D.12-11-015, pg. 10). The CPUC retains the authority to direct changes to the REN energy efficiency portfolio. The RENs and IOUs are required to submit Joint Cooperation Memorandum advice letters (D. 18-05-041, OPs 38-39). These memos ensure coordination between the Program Administrators with overlapping service territory. The memos identify program offerings that are distinct and similar. Where programs are similar, the RENs and the IOUs state their plan for seamless program offerings and to avoid customer confusion. Finally, D.16-08-019, page 11 reaffirmed the RENs as "pilots" and that they should be evaluated on an equal basis as the IOUs and that the RENs should continue to directly apply to the CPUC for funding.

   On December 5, 2019, the CPUC approved D.19-12-021 which adopted Frameworks for RENs and Market Transformation. The language in this decision authorizes the continued operation of the RENs and "invites new REN proposals as business plans to be filed with the Commission" so long as they meet specific criteria laid out in the proposed decision.[13] Reiterates that the RENs have no cost-effectiveness threshold given that they exist to fill gaps in California's energy efficiency portfolio of programs and serve hard-to-reach (HTR) customers. Allows some geographic overlap among more than one REN and other program

[13] The new criteria for RENs in D.19-12-021 include that they must represent more than local government entity (pg 22); coordinate with existing program administrators in their geographic area prior to filing a business plan (pg 22); vet their proposal with stakeholders through the California Energy Efficiency Coordinating Committee (CAEECC) (OP 2); explain their governance structure in the business plan filing (OP 2); A description of its new and unique value to contribute to California's energy, climate, and/or equity goals (OP 2); and a proposed set of metrics and savings targets (OP 2).

administrators, with appropriate coordination and requires that all PAs file JCMs to avoid duplication (D.19-12-021, pgs 25-26). Finally, the decision re-designates the RENs as program administrators instead of pilots, requires that the RENs business plans demonstrate a value add, in addition to filling gaps and serving HTR customers, and does not limit them to any specific sector or program area (D.19-12-021).

2. **Community Choice Aggregator (CCA).** Community Choice Aggregators (CCAs), are an alternative to the investor owned utility energy supply system in which local entities in California can aggregate the buying power of individual customers within a defined jurisdiction in order to secure alternative energy supply contracts. In 2010 the first CCA, Marin Clean Energy (MCE) launched. The passage of AB 117 (Midgen, 2002) which allowed formation of CCAs as an alternate load serving entity also created the option for CCAs to administer EE programs under Public Utility Code (PUC) § 381.1 by allowing a CCA to "apply to administer" ratepayer funded EE programs. This act was later modified by Senate Bill (SB) 790 (Stats. 2011, Ch.599, Leno) which allowed another route for CCA's to offer ratepayer funded EE programs through "electing to administer" and D.14-01-033 provided further clarity for CCAs choosing either approach. CCAs "applying to administer" EE programs must file an application with their Business Plan which must comply with the CPUC's prior decisions and resolutions per PUC § 381.1(a-d). Additionally, CCAs shall submit their plans factoring in cost effectiveness approved by their governing board, then the CPUC. CCAs "electing to administer" programs can only offer only EE services to their own customers pursuant to Section 381.1(e-f). A formula that sets the maximum funding the electing CCA can request (D.14-01-033, pg. 22). CCAs elect to administer through filing a proposed plan via a Tier 3 advice letter (D.14-01-033, pg. 54).

Compliance Requirements for Regional Energy Networks and Community Choice Aggregators:

3. **Business Plans.** CCAs were encouraged apply to be non-IOU program administrators of energy efficiency programs and local governments were allowed to submit regional pilots for the CPUC to review in D.12-05-015, COL 50 and the applications of BayREN, MCE and SoCalREN were later approved in D.12-11-015, OPs (8-11). RENs and MCE submitted their applications, which were proposed in Business Plans, to the CPUC in January of 2017. Each year, after approval of the overall business plans, MCE and RENs' annual budget advice letters are to be shared with stakeholders by leveraging the California Energy Efficiency Coordinating Council (CAEECC) prior to submission to CPUC, a process endorsed in D.15-10-028 (16-08-019, OP 1 and OP 2). All EE PAs, including the RENs and MCE are subject

to the triggers for refiling their business plans per OP 2 of D.15-10-028.[14] However, RENs are not required to meet a cost-effectiveness threshold and do not have assigned savings targets through the ED led Potential and Goals Study.[15] MCE is required to meet the same cost-effective threshold as the IOUs, but also do not have assigned savings targets through the ED led Potential and Goals Study).[16] To ensure that MCE and the RENs are more accountable to meeting a saving threshold, D.18-05-041 stated that RENs and MCE forecasted energy savings goals must meet or exceed the annual energy savings targets included in their business plan as a criteria for approval of their ABALs.[17] However, MCE and the RENs each submitted budget and savings true-up tables in their PY 2019 ABALs. These true-up tables reflected more accurate and updated planning assumptions and forecasts, for each program year through 2025, than their business plans. Thus, D.19-08-034 stated that for each year MCE and the RENs request energy efficiency funding authorization via an ABAL, they shall meet or exceed the annual savings forecasts presented in their true-up tables as submitted in their prior year's ABALs.[18]

4. **Implementation Oversight and Reporting Requirements**. The RENs and CCA's who implement EE programs are subject to the same periodic reporting requirements to the CPUC as the IOUs are required to submit. The IOUs will receive attribution toward their portfolio goals for REN and CCA energy savings (D.12-11-015, pg. 11). Additionally, RENs and CCAs will submit monthly narrative reports, which enable CPUC staff to track and perform approved EE activities. These reports are found on the CEDARs (https://cedars.sound-data.com/). The CCAs and RENs shall conduct financial and management audits of its energy efficiency programs and provide a copy of the audits to the CPUC (D.12-11-015, pg.10).

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[14] Each energy efficiency program administrator must file an application with a revised business plan when a "trigger" event happens. Triggers are:

1. A Program Administrator (PA) is unable to adjust its portfolio in response to goal, parameter, or other updates to:

    a. meet savings goals,

    b. stay within the budget parameters of the last-approved business plan, or

c. meet the Commission-established cost effectiveness (excluding Codes and Standards and spillover adjustments)

2. The Commission calls for a new application as a result of a decision in the policy track of the proceeding (or for any other reason);

[15] D.19-08-034, pg 28.

[16] Ibid

[17] D.18-05-041, pg. 134.

[18] D.19-08-034, pg 28.

5. **Threshold of Review.** D.19-12-021 revised the criteria that the CPUC will consider in approving new or renewed REN business plans. Specifically, the decision states new RENs must show also new or unique value to the CPUC's energy, climate, and/or equity goals. In addition, to qualify for consideration, a REN program activity must meet one or more of the following criteria to be considered for approval:

   - Activities that utilities or CCA program administrators cannot or do not intend to undertake.
   - Pilot activities where there is no current utility or CCA program offering, and where there is potential for scalability to a broader geographic reach, if successful.
   - Activities serving hard-to-reach markets, whether or not there is another utility or CCA program that may overlap (D.19-12-021, pg 32).

6. **Program Cost-Effectiveness Threshold**. D.14-01-033 required the CCA's portfolios to meet the same cost-effectiveness tests as IOUs, with an exception in the three years following their first application where a TRC of 1.0 is permitted (pg. 50). Regional Energy Networks are not required to hit a cost-effectiveness threshold, but D.16-08-019 did "encourage RENs to manage their programs with an eye toward long-term cost-effectiveness" (D.16-08-019, pg 12).

7. **CCA and REN Funding.** CCA's submitting applications to administer programs pursuant to Section 381.1 shall receive funding only for electricity savings programs (D.14-01-033, pg. 54). For the three RENs, Southern California Edison Company, Southern California Gas Company, and Pacific Gas and Electric Company remain the fiscal managers for their contracts without exercising control over program design or program changes (D. 14-10-046, pg.162). If funding year ends prior to CPUC disposition of program administrator budget via their annual budget advice letter, RENs and CCAs will continue to receive prior years funding (15-10-028, OP5, pg. 124).

8. **Evaluation, Measurement and Verification Requirements**. CPUC staff shall include CCA -administered programs under PUC § 381.1 (a)-(d) within the scope of its EM&V activities (D.12-11-015, pg. 51). REN evaluations, including impact and process evaluations should be managed by CPUC staff. CPUC Staff shall retain an accounting consultant using EM&V funds to cover the cost both to review prior cycle reporting and to develop a proposal to rationalize accounting practices for energy efficiency going forward (D. 14-10-046, pg.162). In OP 16 of D.16-08-019, CCAs and RENs funding for evaluation shall be set

on a proportional basis, based on total program budget, from among the up-to-40 percent allocation within the relevant utility service territory.

IV. Cost-Effectiveness

This section provides the rules and policies governing cost effectiveness analysis for the purposes of measuring the performance of program administrator programs and ensuring that public purpose funds are responsibly allocated. This section also provides details regarding program performance metrics as another metric to measure the performance of programs and portfolios.

1. **Standard Practice Manual (SPM).** The cost-effectiveness indicators referred to in these rules are described in the *California Standard Practices Manual: Economic Analysis of Demand-Side Management* (D.12-05-015, p. 28). Cost-effectiveness analyses must be performed in a manner consistent with the indicators and methodologies included in the SPM, with clarifications indicated in CPUC decisions relating to this subject.

2. **Total Resource Cost Test (TRC).** This CPUC relies on the Total Resource Cost Test (TRC) as the primary indicator of energy efficiency program cost effectiveness, consistent with our view that ratepayer-funded energy efficiency should focus on programs that serve as resource alternatives to supply-side options. The TRC measures net costs as a resource option based upon the total costs for the participants and the utility. The benefits are the net present value of avoided costs of the supply-side resources avoided or deferred. The TRC costs encompass the net present value of the net costs to participants for installed measures over the measure life plus all the costs incurred by the program administrator. The net benefits and net participant costs exclude the benefits derived from and costs paid by free-rider participants (D.07-09-043, p. 157). The net cost to participants is the actual costs minus any rebates[19] from the program administrator. The net present values are calculated using a discount rate that

[19] Per SPM and Decisions including D.08-01-006, rebate amounts used to reduce participant costs are defined to include only dollar benefits such as rebates or rate incentives (monthly bill credits) paid by the program administrator to a participating customer (ratepayer). These costs are included in the program administrator total cost so must not be counted twice. Rebates paid to free-rider participants are included as TRC costs in the program administrators cost.

reflects each utility's after-tax weighted average cost of capital (WACC), based on the most recent cost of capital decision.[20]

3. **Program Administrator Cost Test (PAC).** The Program Administrator Cost (PAC) test of cost-effectiveness should also be considered in evaluating program and portfolio cost-effectiveness. Under the PAC test the program benefits are the same as used in the TRC test. The costs include only the net present value of all costs incurred by the program administrator while excluding the costs incurred by the participating customers. As in the TRC test, the net present values for the PAC are calculated using a discount rate that reflects each PA's after-tax weighted cost of capital, based on the most recent cost of capital decision.

4. **Application of the TRC, RIM and PAC Tests.** Though TRC is the primary cost effectiveness test used by the CPUC, also considering the RIM and PAC test supplemental to the TRC appropriately acknowledges the dual-cost issue unique to energy efficiency investments (D.19-05-019, p. 24). Since it is expected that incentives offered for the installation of a measure will not exceed the incremental cost of the measure, activities that pass the TRC test normally will also pass the PAC test.[21] However, if deployment of the program requires rebates or financial incentives to participants that exceed the measure cost, then the program may pass the TRC test, but fail the PAC test. Incentives or rebates that exceed the TRC cost for a measure must be justified in workpaper submissions that are approved by CPUC Staff.[22] The RIM test provides information on the rate impacts. Therefore, all determinations based on the cost-effectiveness analyses of distributed energy resources should include a written description of the results of the TRC, PAC, and RIM (D.19-05-019, p. 25).

   D.18-05-041 modified the portfolio requirements to include a 1.25 ex-ante TRC by 2023, with an ex-ante TRC of 1.0 during the ramp years of 2020-2022 (p.72). The decision did not

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[20] D.12-05-015, p. 38 contains a table of the current IOU WACC values and OP 2 directs the use of the after-tax Weighted Average Cost of Capital as the discount rate. D.12-12-034 provides the latest review of utility cost of capital. Further historical data is provided at http://www.cpuc.ca.gov/General.aspx?id=12056.

[21] D.06-06-063, p. 72 recognizes only "limited instances for program design purposes where the cash rebate to the customer exceeds the measure installation cost"

[22] Originally defined in D.92-09-080, the dual test was last modified in D.05-04-051

modify that the evaluation of portfolios take into consideration passing both the TRC and PAC tests for each service territory and for the entire approved portfolio, including RENS (p.161). However, the TRC will not exceed the PAC unless incentives exceed incremental measure costs.[23]

5. **Overall Cost-Effectiveness of IOU, REN, and CCA Portfolios.** It is the responsibility of the CPUC to approve the total portfolio- which includes both utility and REN proposals- and ensure that it is cost-effective overall, because the IOUs are not in control of the REN proposals and therefore cannot make the cost-effectiveness tradeoffs within their portfolio. The CPUC therefore applies the dual test for overall portfolio cost effectiveness, taking into consideration passing both the TRC and PAC tests for each utility service territory portfolio without the RENS, as well as entire approved portfolio that includes the RENs (D.12-11-015, p. 18). The CPUC emphasized in D.18-05-041 that RENS ought to focus in filling gaps in IOU energy efficiency portfolios, piloting different approaches, and targeting hard-to-reach customers. Due to challenges associated with RENs diversifying portfolios, the CPUC did not adopt specific cost effectiveness requirements for RENs (p.95)

6. **Avoided Costs and Other Inputs**. TRC and PAC benefits should be computed using the avoided cost methods and input assumptions, including avoided greenhouse gas emissions related cost[24] that have been developed for the evaluation of energy efficiency programs in the Standard Practice Manual and in Proceeding R.14-10-003. As set forth in D.16-06-007, data for the avoided cost calculator shall be updated on an annual basis, and shall be conducted through the CPUC Resolution process (D.16-06-007, p. 6 and OP 2, p. 26).

7. **Cost Effectiveness Adjustments for Free-Ridership and Market Effects.** Net to Gross (NTG) ratios are used to estimate and describe the "free ridership" that may be occurring within energy efficiency programs, that is, the degree to may be occurring within energy efficiency programs, that is, the degree to which customers would have installed the program

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[23] D.06-06-063, p. 72 recognizes only "limited instances for program design purposes where the cash rebate to the customer exceeds the measure installation cost"

[24] D.17-08-022 adopted a series of values based upon the California Air Resources Board Cap-and-Trade Allowance Price Containment Reserve Price as an interim greenhouse gas adder value for use in the avoided cost calculator when analyzing the cost-effectiveness of distributed energy resources. Resolution E-4942 incorporates the update of these values set forth in D.18-02-018 for use in the IDER proceeding and any other proceedings that rely on assumptions about the avoided GHG costs of DERs for evaluating cost effectiveness.

measure or equipment even without the financial incentive (e.g., rebate) provided by the program. Cost-effectiveness of the portfolio shall be calculated as net of free riders, or on a "net savings basis" for the purpose of establishing budget levels that meets the legislative requirement in § 454.5.[25]

a. CPUC Staff has the responsibility to perform research on free ridership and market effects and to use the results of that research to develop updated NTG values for use in portfolio planning and utility reporting. This research often involves interviews with customers and others who participate in the utility programs. The IOUs are required to cooperate and facilitate this research. Utility customers are required cooperate with CPUC staff in this research as a condition of receipt of energy efficiency funds. The IOUs must respond to CPUC Staff's request for evaluation data in a timely manner to facilitate this research so as to improve the reliability of NTG results (D.12-05-015, p.51). Our adopted DEER is the repository of the NTG values to be used for planning and reporting. CPUC Staff shall strive to update DEER with uniform statewide NTG values that represent typical expected results (p. 54 and OP 6).

b. The "default" NTG values shall be used when there is a lack of research on the NTG value for the program or delivery mechanism. This may apply to new or existing measures (or if a proposed delivery mechanism has deviated substantially from past related program activities).[26] When new measures or programs are proposed, CPUC staff may utilize the results of previously completed research produced during similar program or measure piloting activity to set an appropriate NTG value (D.12-05-015, p. 339). Alternatively staff may determine that no piloting research is required and accept proposed use of default or other appropriate NTG values.

c. For measures added to the portfolio as a direct result of Emerging Technology Program activities (Emerging Technology measures) the IOUs may request in their non-DEER work paper submissions that a measure be assigned a NTG value at or above 0.85. CPUC Staff shall have the authority to accept or reject a utility Emerging Technology measure classification and

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[25] Definition and calculation of Net-to-Gross adjustments to TRC test were described in Attachment 9 of D.07-09-043.

[26] D.12-05-015 adopted DEER NTG table. D.15-10-028 adopted the DEER update process through the rolling portfolio cycle schedule which includes the update of default and prescribed NTG values.

to set any Emerging Technology measure NTG value at or above 0.85 as it deems appropriate (D.12-05-015, p. 62 and OP 14 and OP 15).

d. For all projects undertaken by schools, and for programs targeting specific transmission, distribution, or generation constrained areas (other than bottoming-cycle combined heat and power projects), for purposes of determining net savings, default ex ante lockdown rules apply, except that a Net-to-Gross ratio of .85 (before spillover effects) is "locked down" for all above code projects. Eligibility includes requirements that customer incentives shall be the higher of 75 percent of incremental measure cost, or what is available under prior policies (D.14-10-046, pp. 163-164).

e. For custom projects the adopted ex ante review process provides CPUC Staff with the ability to review and update ex ante values including NTG for those projects (OP 149). The IOUs are expected to respond to CPUC staff reviews by taking steps to improve NTG results. Utility programs should strive to push customers to augment projects to include action that would not occur without incentive support or redesign the incentive structure to encourage deeper and more comprehensive activities as well as aligning the incentive amounts to be commensurate with the level of savings that can be attributed to the program (p.61 and OP 12).

f. Market effects are defined as additional energy savings that occur as a result of the energy efficiency programs, but that are not included in the utility savings claims. The CPUC acknowledges that market effects occur. However, in D.12-11-015 the CPUC determined that there were not sufficiently current or technically rigorous market effects studies to base market effect estimates on, and instead determined to apply a portfolio-level "market effects adjustment" of 5 percent, ex-post, across all resource programs for the entire cost effectiveness calculation (D.12-11-015, p. 49). This 5% market effect adjustment shall be applied to increase TRC and PAC benefits as well as to increase TRC participant costs (excluding the deduction of program rebates or incentives paid to participants).

8. **Portfolio Filing of Prospective Cost Effectiveness**. A prospective showing of cost-effectiveness using for the TRC test (with consideration also given to PAC) for the entire portfolio of ratepayer-funded energy efficiency activities and programs (i.e., individual programs, plus all costs not assignable to individual programs, such as overhead, planning,

evaluation, measurement verification and administrator compensation and performance, if applicable) is a consideration when authorizing ratepayer funds.

This consideration applies to each of the following: (1) the service- territory wide program portfolios offered by each IOU and CCA Program Administrator, excluding: 1) RENs, 2) emerging technologies programs, and (3) On-Bill Financing loans (D.09-090-47, p.288). IOU program administrators must demonstrate that the first threshold requirement is met on a prospective basis in their program funding applications to the CPUC. IOUs must also demonstrate that the proposed level of electric and natural gas energy efficiency program activities are expected to meet or exceed the CPUC-adopted electric and natural gas savings goals, by service territory.[27]

a. The CPUC adopted several safeguards against certain risks that the annual portfolios would not achieve their forecasted TRC estimates. As the basis for determining cost-effectiveness of proposed program portfolios, IOU Program Administrators omit codes and standards (C&S) advocacy costs and benefits, and spillover effects. The CPUC also sets a higher prospective TRC threshold of 1.25 (D.12-05-015, p. 100 and D.18-05-041, pp. 54-55), to hedge against eventual reductions in savings as determined by evaluations.[28]

b. To support comparisons of all resources in the IOUs' procurement portfolio, the program administrators are required to also provide levelized unit cost estimates at the portfolio, end-use and measure level consistent with the methods described in the SPM. This information should be submitted with the program administrators' compliance filings.

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[27] Per D.04-09-060, p.2 savings from LIEE programs will also count towards these goals.

[28] D.18-05-041 established the ramp period, program years 2019-2022, in the context of third party solicitations, setting up the statewide administration framework, and affording the PAs an opportunity to improve portfolio cost-effectiveness. Forecasted TRC must meet or exceed 1.25 in the ABAL, except during program years 2019 – 2022, when the forecasted TRC must meet or exceed 1.0.

If a Program Administrator's prospective showing of cost effectiveness does not meet the threshold set-forth by the CPUC[29], the PA will need to file an application with a revised business plan for CPUC approval.[30]

9. **Common Sector-level Metrics.** Metrics should be designed to be valuable to implementers as well as other stakeholders to improve the chances of longevity of the metric and associated perspective of measuring it over time.[31] Program administrators shall set sector-level metrics in the business plans and will set more granular, program level metrics in implementation plans (D.15-10-028, p. 53)[32] In addition to sector-level metrics developed by program administrators, CPUC Staff has developed common sector-level metrics to be reported annually in the annual report by all program administrators to (1) consolidate metrics around common problems identified by most program administrators for each sector, (2) enable consistent tracking and progress assessment for the whole sector, (3) enable comparisons across and within sectors, and (4) enable tracking of high-level portfolio progress over a period of time.[33] Attachment A of D.18-05-041 provides a listing of the minimum set of common metrics to be reported. PA's can submit additional metric (fields) within the Annual Budget Advice Letters, and submit associated data in their annual report.

10. **Cost Sharing and Cost-Effectiveness Across Utility Service Territories.** Energy efficiency statewide program costs are shared between utilities on an upfront pre-set basis, then trued up based on customer participation (D.16-08-019, p.110) Though costs are shared upfront, program cost-effectiveness is still evaluated by utility area, considering just the program costs and benefits relevant to the customers in that area (D.16-08-019, p. 55). The budget for each statewide program in each utility territory shall be counted toward the cost-effectiveness of each utility's energy efficiency portfolio and each utility shall be given energy savings and Energy Savings Performance Incentive credit consistent with their customers' funding and program participation (D.16-08-019, p. 110, OP 7).

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[29] D.18-05-041 at pp. 133-134 further set annual budget advice letter approval criteria for IOU, CCA, and REN program administrators.

[30] D.15-10-028, OP 1 identifies the trigger events which require a program administrator to file a revised business plan. The development of business plan filings are described in D.16-08-019.

[31] D.18-05-041 dictates that a metric includes a baseline and a target or targets (short, medium, or long term). An indicator does not include baselines or targets.

[32] Guiding principles for business plan metrics are laid out in Table 2 of the May 10, 2017 Administrative Law Judge's Ruling Seeking Comment on Energy Efficiency Business Plan Metrics.

[33] Administrative Law Judge's Ruling Seeking Comment on Energy Efficiency Business Plan Metrics, May 10, 2017, p. 5-6 and D.18-05-041, pp. 22-23.

11. **Cost Effectiveness Requirements for Fuel Substitution Programs / Measures/ Projects.** Fuel substitution programs/projects may offer resource value and environmental benefits. Fuel-substitution programs should reduce the need for supply without degrading environmental quality. For purposes of applying these tests, fuel substitution proponents must compare the technologies offered by their program/measure/project with the baseline technology determined in the same manner as for other measures in the energy efficiency portfolio (namely, using code baseline, industry standards practice, or existing conditions depending on the circumstances of the measure installation). The burden of proof falls on the party sponsoring the analysis to show that the baseline comparison adheres to this requirement. D.19-08-009 (OP 1, p.57) updates the Fuel Substitution Test as follows. Retrofit measures in fuel-substitution programs/projects must pass the following Fuel Substitution Test:

    a. The program/measure/project must not increase source- British Thermal Unit (Btu) consumption when compared with the baseline comparison measure available utilizing the original fuel, as currently defined by the baseline policies in D.16-08-019 and Resolution E-4939, Attachment A.

    b. The program/measure/project must not adversely impact the environment compared to the baseline measure utilizing the original fuel. This means that the use or operation of the measure must not increase forecasted CO2 equivalent greenhouse gas (GHG) emissions.

    The Fuel Substitution test does not apply to new construction applications. Program Administrators proposing fuel substitution measures must provide all assumptions and calculations for CPUC review, and utilize the most recent versions of the Avoided Cost Calculator, Cost-Effectiveness tool, and other fuel substitution documents available at the time the measure is proposed.

    D.19-08-009 also directed CPUC staff to issue technical guidelines for fuel substitution measures, including, but not limited to, guidance on calculation of source energy savings and environment offsets for fuel substitution measures. Fuel Substitution Technical Guidance for Energy Efficiency is a 'living' document, whose first version was released on September 2019.

12. **Mid-Cycle Funding Augmentations.** Costs and energy savings from mid-budget cycle funding additions for programs other than Energy Savings Assistance Programs (ESAP) shall be counted when calculating portfolio cost-effectiveness and shall count towards the IOUs' energy efficiency goals for resource planning purposes.

13. **References.** See the following references below for further information on cost effectiveness.

    a. CPUC Cost Effectiveness page – http://www.cpuc.ca.gov/General.aspx?id=5267

    b. CPUC Standard Practice Manual – http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/Utilities_and_Industries/Energy_-_Electricity_and_Natural_Gas/CPUC_STANDARD_PRACTICE_MANUAL.pdf

    c. CPUC Online Tool - https://cedars.sound-data.com/

V. Implementation Oversight and Reporting Requirements

The CPUC requires program administrators to both report on annual program achievements as part of its regular reporting requirements and file budget requests for subsequent program year based on prior-years' performance.

1. **Reporting Requirements**. CPUC staff is directed to develop and update reporting requirements to ensure that the types of data and the format of the information presented in the IOUs', RENs' or CCAs' filings and reports are as consistent as possible. The IOUs, RENs and CCAs (except as modified for RENs and CCAs in Rule III.3) are required to follow the CPUC's Energy Efficiency Reporting Requirements Manual for the current program cycle. Please refer to the California Energy Data and Reporting System (CEDARS) at (http://www.eestats.cpuc.ca.gov) for the most current reporting templates and Energy Division guidelines. The following regularly occurring reports are required:

    a) Monthly Reports on expenditures and savings
    b) Quarterly Reports on budgets and expenditure caps
    c) Utility Tracking data to report program accomplishments, evaluation sampling and cost effectiveness calculations

d) Common Sector Metric Annual Reporting - per D.15-10-028, program administrators were relieved of reporting requirements laid out in Resolution E-4385. Program administrators will report on metrics approved in D.18-05-041 in their Annual Budget Advice Letter (ABAL) filings due September of each year and in the May 1 annual reports
e) Energy Efficiency Program Annual Reports[34]
f) Annual Budget Advice Letters[35]
g) Other reports as required by the CPUC.

2. **Business Plans and Annual Budget Advice Letters.** IOUs, RENs and CCAs are no longer required to submit Program Implementation Plans, as they were associated with previously three-year program cycle applications. As of January 1, 2017, IOU, REN and CCA program administrators are required to submit Business Plans, which provide a 10-year high-level description of a program administrator's respective portfolio in terms of sectors, budgets and strategies, as well as Annual Budget Advice Letters (ABALs), which are filed each year in September and present the program administrator's budget request for the subsequent program year.[36] The Business Plans do not have a formal template; program administrators work with CPUC staff to ensure relative similarity across the various program administrators filed plans.

Implementation Plans – As of January 1, 2019, IOU program administrator portfolios are transitioning to a larger role for third party administrators. By 2023, at least 60 percent of the IOUs' respective portfolios (by budget) must be bid out to third party implementers, who will be solely responsible for proposing, designing, implementing, and delivering programs for utility program administrators. Consequently, the next few years will see a mix of program-level implementation plans for existing programs that may continue as well as implementation plans for new programs designed as part of the third-party expansion. (The program implementation plan (PIP) addendum process required by D.04-12-048 is no longer in force.)

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[34] Pursuant to Attachment C of ALJ Ruling Adopting Annual Reporting Requirements for Energy Efficiency and Addressing Related Reporting Issues, dated August 8, 2007

[35] As required by D. 15-10-028.

[36] Initial Business Plans were filed January 17, 2017 and subsequently approved via Commission Decision 18-05-041 in June 2016. Program administrators may file a subsequent business plan of their own accord or in the instance that they fail to meet specific portfolio review criteria as laid out in D. 18-05-041, including a failure to: meet energy savings goals; be cost-effective; or maintain a budget under the authorized cap.

Implementation plans for *existing programs* that will be continued by the IOUs during the third-party process will be posted to the California Energy Data and Reporting System (CEDARS) on http://www.eestats.cpuc.ca.gov) after a brief public review opportunity via CAEECC.

Implementation plans for *new programs,* developed as part of the third-party process, will be reviewed subsequent to a contract signed between an IOU and a third-party implementer and within the sector-specific Peer Review Group for that contract.[37]

Implementation plan updates are likely to follow guidance provided in D.18-01-004, which recognizes that implementation plans will be initially posted at the conclusion of the third party solicitation process and requires IOU program administrators' implementation plans to be "developed and posted, consistent with the requirements of D.15-10-028, within 60 days after contract execution." As of January 2019, the timing and nature of updating implementation plans that flow from successful third-party solicitation(s) has yet to be determined. However, the IOU program administrators, CPUC staff, and stakeholders, as part of the third-party Procurement Review Group(s) overseeing solicitations, are developing process that will guide implementation updates.

If a REN or CCA desires to modify an existing implementation plan, it should notify the appropriate utility and CPUC staff, and document the changes on the EEStats website, utilizing the same process by which the IOUs make changes to their implementation plans.

3. **Counting of Savings.** The reporting of ex ante savings estimates in the compliance filings is subject to Rule VI on ex ante review. When estimating ex ante savings values for either portfolio planning or accomplishment reporting the IOUs, RENS and CCAs shall use values and methods from the most recent version of Database for Energy Efficient Resources (DEER) if the measure values are available. If DEER values and methods are not available, the IOUs, RENs and CCAs may propose new values for staff review and approval, subject to Rules VI 4-6. The protocols for developing ex post savings estimates are provided in the California Energy Efficiency Evaluation Protocols,[38] updated in D.09-05-037, and through DEER updates.

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[37] See "Energy Efficiency Programs Implementation Plan Template" at Implementation Plan Template on EEStats

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[38] April 16, 2006 ALJ Ruling in R.01-08-028

The definition of peak megawatt load reduction contained in the most recently adopted DEER shall be used to estimate and verify peak demand savings values. The DEER method utilizes an estimated average grid level impact for a measure between 2 p.m. and 5 p.m. during a "heat wave" defined by three consecutive weekdays for weather conditions that are expected to produce a regional grid peak event.[39] The new DEER peak timeframe of 4 p.m. to 9 p.m. will replace the existing hours on January 1, 2020 (Resolution E-4952).

VI. Ex ante Savings and Review

This section explains the annual timeline of the Rolling Portfolio process to determine ex ante values, and the role of CPUC staff, IOU's and stakeholders in arriving at those values.

1. **CPUC Oversight of Ex Ante Values.** The estimated energy savings values for energy efficiency measures used for planning and reporting accomplishments for energy efficiency programs, referred to as the ex ante values, are subject to the review and approval of CPUC staff. The ex ante review process must be managed by CPUC staff because it involves judgments that can influence both the development of performance targets and the measurement of program achievements (D.05-01-055, p.120). Due to the conflict-of-interest concerns the IOU Portfolio Managers would not be the appropriate entities to manage or directly contract for the ex ante review process (D.05-01-055, p.121).

2. **DEER and non-DEER measures and workpapers –** Non-DEER workpapers must use DEER assumptions, methods and data

   IOUs are instructed to use DEER values as starting points and/or apply the DEER methodologies for estimating the non-DEER parameter value for cases in which any of the specific parameters of an IOU installation differ from the assumptions that form the basis of a DEER measure. The utilities cannot replace DEER assumptions and values with their

[39] D.06-06-063 OP 1. The DEER version adopted in D.12-05-015 utilizes a 3-day "heat wave" that occurs on consecutive days in June through September such that the three consecutive days do not include weekends or holidays, and where the heat wave is ranked by giving equal weight to the peak temperature during the 72-hour period, the average temperature during the 72-hour period and the average temperature from noon – 6pm over the three days.

preferred values unless the CPUC Staff agrees with their proposal for such replacements (D.12-05-015, p.331). Non-DEER values may not be used without CPUC Staff approval.

DEER measures are located in the official Ex Ante database (EAdb). Non-DEER workpapers are typically new measures that have values from sources other than what is in the DEER ex ante database. These may use some values in the DEER ex ante database but the energy savings are determined externally and do not just adopt an energy savings value in DEER.

Workpapers must use DEER assumptions, methods, and data in the development of non-DEER values when available/appropriate and shall follow CPUC Staff direction relating to the appropriate application of DEER to non-DEER values. Any proposed workpaper measure definitions that are different from DEER definitions should be calculated using DEER reference impacts (Statewide Deemed Workpaper Rulebook v.2.0, p.18). DEER is updated on an annual basis. Workpapers must use the appropriate DEER version based on their program implementation year.

If DEER values and methods are not available, new values may be proposed for CPUC Staff review and approval. For non-DEER measures, DEER values should be used as the starting point. In cases where any of the installation parameters differ from the assumptions for the DEER measure, the Implementer should apply DEER methodologies for estimating the non-DEER parameter value. Non-DEER values may not be used without CPUC Staff approval. Direct replacement of DEER measures is not allowed in workpapers (Statewide Deemed Workpaper Rulebook). Workpapers can be found at www.deeresources.net.

3. **Freezing of Ex Ante Values.** The Rolling Portfolio schedule for review and approval of ex ante values was established in D-15-10-028 (see Appendix F here; Appendix 6 in the Decision). The Decision sets a "January 1 deadline for IOU's to update their workpapers to reflect changes in DEER values adopted by the CPUC earlier in September of the previous year. These set of workpapers are also referred to as *Phase 1 workpapers*. Workpapers for new measures, and workpapers that do more than just update values to conform with revised DEER values, can be submitted by IOU's at any time or on the first and third Monday, respectively (D.15-10-028, p.84) and are referred to as Phase 2 workpapers. Upon approval by CPUC staff, the ex ante values are frozen until the workpaper is superseded by a revised workpaper or if the measure expires by virtue of the guiding disposition . This freeze of *ex ante* energy savings values applies both to energy efficiency measures contained in the DEER and non-DEER measures covered by workpapers which are developed by IOUs and other program implementers. Unreviewed non-DEER workpapers are granted interim approval

(D.12-05-015, p.334). Interim approval indicates that all values and approaches have been approved until a formal review occurs. If a formal review of an interim approved work paper requires significant changes to be made, then those significant changes are applied prospectively from the time of the completed review and the new values are then frozen and entered into the non-DEER database. In the case of an error such as using the wrong parameter values, the changes will be made retroactively. All active workpapers are posted at the workpaper website (www.deeresources.net).

4. **Mid-year updates of Ex Ante Values.** Ex ante values should be adopted and held constant throughout the year. However, mid-year updates of ex ante values are warranted if newly adopted codes or standards take effect during the year. These changes are known at least one year ahead of their effective date. The IOUs shall make appropriate adjustments to their participation and incentive calculation rules as well as update their ex ante value calculations in response to codes and standards changes (D.12-05-015, p.324). IOUs, RENs and CCAs are expected to update non-DEER workpapers with the latest Codes and Standards updates. CPUC staff may perform mid-year review of any non-DEER workpapers with interim approval and require revisions to those workpapers. Mid-year workpaper review shall follow the Phase II review process outlined in the Rolling Portfolio schedule in D.15-10-028, Appendix 5; p.2).

5. **Ex-Ante Review of Non-DEER Measures.** For non-DEER measures, the IOUs are instructed to use DEER values as starting points and/or apply the DEER methodologies, where appropriate, for estimating the non-DEER parameter value for cases in which any of the specific parameters of an IOU installation differ from the assumptions that form the basis of a DEER measure. D.12-05-015 directed the IOUs to update their WPs with all applicable updated DEER values (D.12-05-015, p.290). The current process allows only Program Administrators (PAs) to submit workpapers for review, a Third Party must submit a workpaper through a PA. The PAs do not have the option to replace DEER assumptions and values with their preferred values unless the CPUC Staff agrees with their proposal for such replacements (D.12-05-015, p.326). Additionally, PAs must utilize the latest information available, including the CPUC's most recently available evaluation results, when updating or developing new workpapers (D.12-05-015, p.332). Current and past evaluation results are available at https://pda.energydataweb.com. All ex ante values are to be updated or developed in consideration of the latest information available, including Unit Energy Savings (UES), Effective Useful Life (EUL), Installation Rate (IR), NTG and Cost. CPUC staff reviews all utility proposed non-DEER assumptions and values. PAs work with CPUC Staff, following the workpaper and non-DEER workpaper submittal, review and approval process that was originally issued in the November 18, 2009 ruling and updated in D.10-12-054,

D.11-07-030, D.12-05-015, and D.15-10-028.[40] CPUC Staff's review of "interim approval" workpapers or new workpapers submitted mid-year adheres to the Phase 2 workpaper review process, including the dispute resolution process described in Appendix D.

6. **Installation Rate for DEER and non-DEER Measures.** All deemed measures have an installation rate, which is the ratio of the number of verified installations of that measure to the number of claimed installations rebated by the utility during a claim period (D.11-07-030, p.22). The installation rate is reported separately in claims and not included in the reported savings for the measure. For any measures not listed in the DEER database, the installation rate is be assumed to be 1.0. In their workpapers, PA's include the proposed installation rates for the measure covered by a workpaper. The Gross Savings and Installation Adjustment (GSIA) is a DEER adjustment factor that combines the Realization Rate and Installation Rate. It is dependent on both the measure technology and how the measure is delivered. The GSIA table can be accessed at www.deeresources.com. [41]

7. **Establishment of Baseline for use in Establishing TRC Savings and Costs. T**he approach to establish a baseline for ex ante gross savings values requires the review of the evidence related to one of the three baseline choices: (1) new equipment that is normal replacement, turnover or replacement due to normal retrofit and remodeling activities , and new construction (NC); or (2) the pre-existing equipment used in the program-induced accelerated replacement (AR) case. For new equipment choices that are selected under the NR and NC cases and are subject to existing regulations, codes or standards, the baseline equipment is determined by the regulation, code, or industry standard. The customer's reason for equipment replacement could alter the baseline choice, depending on whether compelling evidence demonstrates that the replacement was a program induced accelerated replacement (D.11-07-030, p. 40, Appendix I to Attachment B). Resolution E-4818 provides measure level baseline assignment and guidance to establish eligibility for an accelerated replacement baseline treatment.

   a. In the cases when there is no regulation, code, or standard that applies, which would normally set the baseline equipment requirements, the baseline must be established using

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[40] November 18, 2009 ALJ Ruling in A.08-07-021. D.09-09-047 OP 4 states that, "Review of completed IOU work papers regarding ex-ante savings estimates are subject to Commission Staff review and approval, as set forth in an ALJ Ruling of November 18, 2009 in Application 08-07-021, et al. Each IOU shall cooperate with Commission Staff to allow upfront consultation regarding such work papers.

[41] Log in to the READI portal accessed through www.deeresources.com. Then select either the official ex-ante database (EAdb) or the preliminary ex ante review database (PRdb). Then click on the tabs: Support Table, Cost Effectiveness and GSIA value.

a "standard practice" choice. For purposes of establishing a baseline for energy savings, we interpret the standard practice case as a choice that represents the typical equipment or commonly-used practice. Resolution E-4939 establishes the standard practice baseline definition and baseline selection process.

b. For the case of program-induced accelerated replacement, the remaining useful life (RUL) of the existing equipment is to be used as the starting assumption for the period of accelerated retirement. To establish the period of accelerated retirement, we recommend using one-third of the effective useful life in DEER as the remaining useful life until further study results are available to establish more accurate values (see Summary of effective useful life (EUL)-RUL Analysis for the April 2008 Update to DEER, p.2). CPUC staff has been given flexibility to utilize alternative remaining useful life values, based upon compelling project or technology specific evidence (D.12-05-015, p.348).

c. The measure or project cost utilized in an early-retirement case is the full cost incurred to install the new high-efficiency measure or project, reduced by the net present value of the full cost that would have been incurred to install the standard efficiency second baseline equipment at the end of the remaining- useful-life period. Thus, the early-retirement cost in the cost effectiveness calculation is higher than the incremental cost used in a normal-replacement case (previously referred to as replace-on-burnout), only by the time value of the dollar amount of the standard equipment full installed cost, using the adopted cost-effectiveness discount rate to calculate that time valuation.

d. A "dual baseline" must be utilized for program-induced accelerated replacement measures. The dual baseline reflects the difference between the savings that should be credited for the initial years of installation based upon the pre- existing or replaced equipment versus the savings credit in later years that should be based upon an eventual pre-existing equipment replacement assumed to occur if the measure had not been installed as part of the program. At the later date, when the pre-existing equipment would have been replaced due to normal turnover for reasons such as imminent failure or remodeling, an alternate equipment efficiency baseline should be utilized. This "dual baseline" requires two savings calculation periods:

- The remaining useful life (RUL) which DEER establishes as

  one-third of the expected useful life (EUL) for the equipment type (which may reflect the EUL of the new equipment rather than the replaced equipment). During the RUL period ("first baseline"), savings is calculated

using the full reduced energy use between the measure and the pre-existing condition. The measure cost for this period is the full cost of equipment, including installation, for the measure.

- The period between the RUL and EUL defines the second baseline calculation period. For this period, the savings are calculated based on the difference between the measure and code/regulations or industry standard practice baseline technologies. The measure cost for this period is the full cost of equipment, including installation, for the second baseline equipment measure. As discussed above, the TRC cost for an ER measure is calculated by subtracting this value discounted by the RUL number of years at the adopted discount rate from the measure cost utilized for the measure equipment in the initial baseline period.

8. **Custom Projects**. The adopted process for CPUC staff's review of custom projects is provided in Attachment B of D.11-07-030 (p.40). The Program Administrators (PA) shall follow the custom project ex ante value review process set forth in Attachment B (OP 7). Section 381.2 of the Public Utilities Code (Senate Bill 1131), effective July 1, 2019, requires the review of a proposed project to conclude within 30 business days of the CPUC receiving the complete project documentation for review. The "CPUC Staff Selection and Response Timing Protocol For Energy Efficiency Custom Projects Review" guidance document operationalizes the timing of communication on custom project document review and feedback between the PA and CPUC staff to meet this strict review timeline. This guidance document and other custom projects review guidance documents are available on the Energy Efficiency Custom Project Review Guidance Document webpage at:

https://www.cpuc.ca.gov/General.aspx?id=4133

The other guidance documents include:

- Energy Efficiency Savings Eligibility at Sites with non-IOU Supplied Energy Sources
- Statewide Custom Project Guidance Document, version 1.0
- Statewide Project Feasibility Study template, version 1.1
- Statewide Post Installation Report template, version 1.0
- Industry Standard Practice, version 2.0

- Project basis as Early Retirement (ER)/Replace-on-burnout (ROB)/Normal Replacement (NR)/New Construction (NC)/Add-on Retrofit (Ret) and remaining/Effective useful Life (RUL/EUL), and Preponderance of evidence

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9. **Heating, Ventilation, and Air Conditioning (HVAC) Interactive Effects.** Measures, such as lighting and refrigeration, have a secondary impact on heating and cooling loads and thus heating and cooling energy consumption. These "interactive effects" are appropriate for incorporation into DEER. [42] The gas and electric IOUs shall include those effects in non-DEER workpapers and custom measures and projects calculations. In its review of IOUs' workpapers and custom measures and projects, CPUC Staff shall ensure the IOUs include these effects when Staff deems that inclusion has a significant impact on the savings estimate.

10. **Persistence of Savings.** Until EM&V results inform better metrics, the IOUs may apply a conservative deemed assumption that 50 percent of savings persist following the expiration of a given measure's life (D.09-090-47, OP 49).

11. **Gross Realization Rate.** The gross realization rate (GRR) is a multiplier that addresses the likely reality that not all CPUC-approved projects undertaken by IOUs will come to fruition. Based on studies from past years' outcomes, a GRR value of 0.90 shall be applied as a conservative value to account for the difference between projected and actual energy savings for unreviewed custom projects (D.11-07-030 p. 38, OP 6).

12. **Statewide workpapers.** The CPUC in Decision D.12-05-015, p.54 states that "similar measures delivered by similar activities should have single statewide values unless recent evaluations show that a significant variation between utilities and that difference is supported by a historical trend of evaluation results".

[42] D.09-05-037, OP 3 denied the IOUs' proposal to eliminate HVAC interactive effects from DEER.

The Program Administrators (PAs) will begin submitting statewide consolidated workpapers for PY2020 in November 2018. The PAs have hired California Technical Forum (CalTF) to consolidate multiple WPs for the same measure to a single, statewide workpaper.[43]

Only one workpaper may be submitted for each set of programs/measures which are adopted by more than 1 program administrator; such workpapers have been termed "statewide workpapers" and program administrators have been directed to collaborate on such efforts.[44]

Prior to 2018, workpapers were submitted separately by PG&E, SoCalGas, SDG&E and SCE for the same or similar efficiency measures. The CPUC instructed the IOUs to submit one consolidated workpaper for each measure. The IOUs hired CalTF to consolidate their four individual workpapers. These consolidated workpapers have been submitted from the November 2018 through and through calendar year 2019. These workpapers will become effective on January 1, 2020.

VII. Evaluation, Measurement and Verification (EM&V)

The CPUC is responsible for evaluating energy efficiency programs and provides annual savings estimates to ensure that ratepayer dollars are spent cost-effectively and in accordance with the achievement of the state's energy efficiency goals.

1. **Purpose of EM&V.** The development of energy efficiency programs that deliver reliable energy savings for California's ratepayers depends on well-designed policies and methods of portfolio performance evaluation, measurement and verification (EM&V). Rigorous and strategically focused EM&V practices are required to gauge the performance of IOUs, RENs, CCAs, and Implementers, verify energy savings, improve the design and success of future energy efficiency programs and enhance the reliability of forecasted savings for resource planning purposes.

   In D.05-04-051 the CPUC ordered portfolio evaluation efforts to be structured such that they can:

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[43] Ex Ante 2018-2019 Workpaper Workplan, p. 2

[44] 2017 Workpaper Guidance Memo

1) inform the program selection process,

2) provide early feedback to program implementers,

3) produce impact evaluations at the end of the funding period, and

4) feed the planning process for future program cycles.

D.07-10-032 and D.10-04-029 further updated the EM&V process.

D.16-08-019 described how the evaluation budgets for EM&V may shift and updated the schedule requirements for EM&V studies.

2. **IOU and ED Collaboration on EM&V Plan.** Per D.09-09-047, D.10-04-029, and D.12-11-015, the IOUs and CPUC staff are expected to jointly prepare an EM&V Plan in order enhance timeliness, transparency and consistency across EM&V work products and to streamline EM&V processes. The IOUs and CPUC staff are expected to adhere to the plan. D.10-04-029 set out the roles and relationships among the CPUC staff, IOUs, and stakeholders regarding Evaluation, Measurement and Verification (EM&V) of energy efficiency programs for 2010 through 2012. In D.12-05-015, the CPUC indicated that guidelines for collaboration, cooperation, and dispute resolution adopted by D.10-04-029 will continue to apply to the 2013-2014 EM&V activities.

3. **Energy Division Role in EM&V Administration.** D.05-01-055 adopts an approach to EM&V administration whereby Energy Division has management and contracting responsibilities for all EM&V impact-related studies that will be used to:

    1. Measure and verify energy and peak load savings;
    2. Generate data for savings estimates, cost-effectiveness inputs, and the CPUC's adopted performance basis; and
    3. Evaluate whether portfolio goals are met.

Additionally, in D.10-04-029 the CPUC determined that the ED is permitted to manage evaluations that may be considered process or formative evaluations. ED may, on a case by case basis, use program implementers as a vehicle for collecting EM&V data when this would clearly be more efficient.

4. **IOU Role in EM&V Administration.** D.05-01-055 adopts an approach to EM&V administration whereby IOUs may directly contract for (and serve as technical lead in managing) early EM&V, process and program design evaluations as well as market assessment studies. Managing these studies assists IOUs in selecting and managing a portfolio of programs to meet the CPUC's objectives as well as provide them with access to information on a real-time basis to improve program delivery. While soliciting input from CPUC staff, the IOUs should also take the lead in allocating CPUC-authorized funding for this category of EM&V across individual studies, develop the scope of work for each study and prepare the RFPs when needed. In their program plan applications, the IOU should also describe each type of study (including general scope of work) that they plan to manage and/or directly contract for in this category. All interested parties should have an opportunity to consider whether any of those proposed studies would create a conflict of interest if the IOU or program implementers managed and directly contracted for them.

   The EM&V budget is set at four percent of the total portfolio budget per D.12-05-015 and is split between the program administrators and Energy Division, with the program administrators responsible for 27.5 percent and Energy Division responsible for 72.5 percent. While the IOUs and Energy Division are responsible for setting budgets for the evaluation work they respectively oversee, the IOUs administer the overall budget in that they are responsible for paying evaluation contractor invoices. The program administrators' portion of the budget may be increased to a maximum of 40 percent, however an increase above 27.5 percent is subject to discussions through the EM&V planning process, as outlined in D.16-08-019.

5. **ED Role in IOU EM&V Studies.** CPUC staff's role for approval and involvement in IOU EM&V projects shall be as set forth in Attachment 2 of D.10-04-029.

   a. An IOU shall seek approval from CPUC staff before initiating EM&V ex-ante studies, or EM&V process and formative evaluations. The EM&V ex ante studies referred to here are studies conducted by an IOU to develop energy savings estimates in specific cases where there is no existing ex-ante estimate or an existing estimate is out of date and needs testing, and for which CPUC staff is not already conducting or planning to conduct a project to develop estimates for the same measure (regardless of the funding dollars). The IOU management role for developing ex-ante savings estimates or EM&V process or formative evaluations shall be under the oversight of CPUC staff, who shall have the authority to deny approval of IOU proposed projects. This authority is limited to situations where there is a conflict of interest with a contractor the IOU wishes to hire, where there is duplication or significant overlap with studies

already planned or carried out by Energy Division, or where CPUC staff can specify why a study is unnecessary or inappropriate. Energy Division's approval process for IOU's ex-ante studies, or EM&V process or formative evaluations, is limited to no more than two weeks. Any CPUC staff denial of approval shall be in writing to the IOU requesting approval. If the proposed IOUs study is not approved within the two-week timeframe, then it will be approved by default.

b. If CPUC staff expects to take three months or more to complete an ex ante study, an IOU may request to develop the ex-ante study in order to ensure more timely information. The CPUC staff may approve, or reject the request by providing the IOU, within two weeks of the IOU's request, with a written statement indicating that such rejection is due to duplication of a study that will also be completed within 3 months, conflict of interest or other specific rationale.

c. CPUC staff may make case-by-case exceptions to the CPUC-adopted firewall policy regarding program implementers in order to collect data needed for EM&V.

6. **IOU Role in Energy Division managed EM&V Studies.** All EM&V related projects undertaken by the IOUs and Energy Division, regardless of funding source, shall adhere to the same policies and procedures adopted in D.10-04-029 as EM&V-funded projects, except that such EM&V policies and procedures do not apply to projects not previously considered to be in the EM&V category. The process for the IOUs involvement in ED's EM&V studies shall supersede the process adopted in D.05-01-055, and shall be as follows:

a. CPUC staff and the IOUs will convene publicly-noticed meetings among their staff, EM&V contractors, and stakeholders to share key results and EM&V findings that might lead to improvements in the portfolio and identify best practices and possible improvements to evaluation methods. Such meetings will take place sometime around the middle of the program cycle or at such time when significant results from various EM&V projects are available. If asked by parties or stakeholders, ED or IOUs, or both, should hold short informal meetings with groups or individual organizations, to discuss EM&V work progress and results.

b. CPUC staff and IOUs will convene ad hoc meetings (approximately quarterly) among CPUC staff, EM&V contractors, IOU EM&V staff and IOU program managers to discuss work progress and results. These meetings are to provide for timely feedback to program design and implementation. The IOUs can request meetings with ED to discuss work progress and results at any time.

c. When significant results are produced by the EM&V work, and a technical report is not immediately pending, the CPUC staff and/or the IOUs will provide informal written summaries of the results to the IOUs and other stakeholders. These written summaries will be posted on the same website used for posting EM&V work plans and comments.

7. **Dispute Resolutions.** A party may file a "Motion for Evaluation, Measurement and Verification Dispute Resolution" (EM&V Motion) with the assigned Administrative Law Judge for resolution of an EM&V matter. The EM&V Motion must include a statement from CPUC staff giving its side of the dispute and documentation of an attempt at informal dispute resolution. The Administrative Law Judge may issue a Ruling to resolve the dispute. The filing party or the CPUC staff may ask that the matter be resolved by the assigned CPUC or the full CPUC. In that case, the Administrative Law Judge (ALJ) will consult with the assigned Commissioner to determine the appropriate course of action. In this situation, the assigned Commissioner or ALJ may issue a Ruling to resolve the dispute. If the assigned Commissioner determines the matter should be brought before the full CPUC, the ALJ or assigned Commissioner shall issue a Proposed Decision and allow for comment under Rule 14 of the CPUC's Rules of Practice and Procedure. An EM&V motion filed pursuant to D.10-04-029 may be used for the following purposes only:

   - Dispute over selection of an EM&V contractor;
   - Disputes about project-specific final EM&V work plans;
   - Disputes over results of EM&V studies or reports (except for Energy Division Verification Reports, which are issued via draft resolutions per D.08-12-059);
   - Disputes regarding final EM&V technical reports; and
   - Disputes concerning public vetting of EM&V projects.

8. **Public Vetting Process.** ED shall determine which EM&V projects should be publicly vetted and shall follow the process laid out in the Energy Division Straw Proposal, pages 8-11, issued by Ruling in Proceeding A.08-07-021 on July 7, 2009. CPUC staff should coordinate with other pertinent state agencies wherever such coordination enhances the State's overall energy policy goals. ED should weigh the value of public input on EM&V studies versus the extra time such input would entail.

9. **EM&V in the Rolling Portfolio.** The adoption of the Rolling Portfolio in D.15-10-028 also laid out an updated approach to ED-led impact evaluation studies. While market and process evaluations are not tied to any evaluation schedule other than that in their respective

research plan(s), impact evaluations of uncertain measures are conducted within the Rolling Portfolio schedule on an annual basis. Each year features a list of "bus stops" that are deadlines for the critical steps in the portfolio update process. Bus stops set a "reliable, regular schedule for future updates, so that any new information that 'misses a bus' can get on board when the bus rolls around to the stop the following year." The annual evaluation "bus stop" schedule flows first from the annual EM&V plan update, which is expected to be completed at the end of each year and reflect studies planned for the following year. In addition to the timeline for impact evaluation studies, the bus stop process includes deadlines for IOU workpaper updates as well as ED-determined DEER updates. D.15-10-028 as well as the EM&V Plan (will be hyperlinked when updated) provide specific information on the bus stop schedule and ongoing evaluation planning.

The EM&V funds for RENs and CCAs should be proportional to the program budgets implemented by those administrators. Additionally, EM&V budget allocation to program administrators may be increased to 40 percent on an approved and as-needed basis.

VIII. Shareholder Incentive Mechanism

This section outlines the Energy Savings and Performance Incentive (ESPI) Mechanism established in D.13-09-023, as modified through D.15-10-028 and D.16-08-019, to promote achievement of energy efficiency goals through programs. This new mechanism supersedes the Risk/Reward Incentive Mechanism (RRIM) originally adopted in D.07-09-043 and subsequently modified through a series of later decisions.

The ESPI Mechanism applies to EE program activities that began effective January 1, 2013, and will continue in effect for subsequent cycles until further notice or direction. Relevant supplemental documentation related to the ESPI include Resolutions E-3497, E-3510, E-4807, E-4897, and E-5007 which have approved IOU incentive awards for program years 2013, 2014, 2015, 2016, and 2017.

1. **Incentive Mechanism Criteria**. The ESPI mechanism complements, integrates with, and promotes EE programs and policy goals as adopted in D.12-11-015 (in Proceeding A.12-07-001 et al). The following criteria inform the design of the incentive mechanism. The incentives offered must:

- **Be effective** in spurring the utilities to a commitment to capture all cost-effective energy savings as the first priority in the loading order by fostering innovation in approaches to capture energy savings.
- **Value longer-lasting and deeper savings**. The mechanism should value efforts that achieve deeper, more comprehensive, and longer-lasting savings. The mechanism should maximize GHG reductions and encourage both market transformation and resource acquisition programs.
- **Rely on accurate, transparent, and timely** EM&V to ensure clear, fair, and timely implementation.
- **Prudently use customer funds to** ensure that customers are better off when utilities invest in efficiency instead of supply-side alternatives (D.13-09-023, p. 19).

2. **Energy Savings and Performance Incentive (ESPI) Categories.** The ESPI mechanism shall incorporate opportunities for performance incentives in the following categories:

   a. Energy Efficiency Resource Savings:

   An incentive is offered to encourage energy efficiency resource savings, paid as a combination of ex ante "locked down" and ex post verified units of savings results, according to the level of uncertainty of the measures for which savings are being claimed. The methodology for measuring resource savings is modified from previous cycles to focus on net lifecycle savings. Incentives for EE resource savings are capped at 9 percent of resource program budgets, minus funding dedicated to administrative activities, codes and standards programs, ME&O, On Bill Financing, EM&V, and CCA/RENs.

   The energy savings performance award is split between ex-ante (i.e., estimated savings pre-implementation) and ex-post (i.e., evaluated savings post implementation) savings values. IOUs may file for incentive payments for ex-ante savings in the year following the program year (PY+1) and for ex-post savings two years following the program year (PY+2). Ex-post savings values will apply to custom measures and deemed measures on the ESPI Uncertain Measure List for the corresponding year. Ex-ante values will apply to deemed measures not on the ESPI uncertain measure list for the corresponding year (Resolution E-4897, p. 5).

   b. Ex-Ante Review Process Performance:

   For performance in implementing the lock down of ex ante parameters, a performance award shall be paid based on the scoring of performance metrics in accordance with the protocol set forth in Section 7 of D.16-08-019.

The ex-ante review performance award is the product of the final IOU score and the earnings cap for the component. Each IOU's score is based on an evaluation of their respective ex-ante review activities in accordance with the metrics below (further detailed in Section 7 of D.16-08-019:

Metric Category	Adopted Weighting
1. Timing and Timeliness of Submittals	10%
2. Content, Completeness, and Quality of Submittals	30%
3. Proactive Initiative of Collaboration	10%
4. Program Administrator's Due Diligence and Quality Assurance/Quality Control Effectiveness	25%
5. Program Administrator's Responsiveness to Needs for Process and Program Improvements	25%

The award is capped at 3 percent of approved resource program expenditures. Administrative costs, On-Bill Financing Loan Pool budget, and IOU Direct Implementation Non-incentive (DINI) expenditures incurred beyond 20 percent of resource program expenditures are subtracted from the authorized resource program expenditures before calculating the 3 percent award. In case the IOU expenditures exceed the authorized budget for resource programs, the approved annual budget for the resource program category is used for calculating the caps. In that case, administrative costs, On-Bill Financing Loan Pool budget, and IOU Direct Implementation Non-incentive (DINI) expenditures incurred beyond 20 percent of resource program expenditures are subtracted out from the approved program budget.

c. Codes and Standards (C&S) Program Management Fees:

An incentive for savings from building C&S advocacy is paid as a management fee equal to 12 percent of approved C&S program expenditures, not to exceed authorized expenditures, and excluding administrative costs.

d. Non-Resource Program Management Fees:

For performance in implementing non-resource programs (which support savings based programs but in which there are no direct savings), a management fee shall be paid equal to 3 percent of non-resource program expenditures, not to exceed authorized

expenditures for these programs exclusive of administrative costs (D.13-09-023, pp. 19-20)

Incentive caps are specific to each component. If a utility does not earn up to the cap of one component, those incentives are not available to be earned under a different incentive component (D.13-09-023, p. 95, OP 3).

3. **Scaling Incentive Earnings Potential for Resource Savings.** It is the intent of the mechanism to award incentive based on net savings goals, adjusted for the effects of "free riders" and "spillover"(D.13-09-023, p. 36). For purposes of designing incentive performance metrics, incentive earnings potential are scaled in relation to the appropriate level of resource savings goals (D.13-09-023, p. 33-34). Savings incentive earnings accrue as a function of: (a) a pre-determined level of earnings potential, and (b) designated efficiency savings goals (D.13-09-023, p. 32).

The following formula derives net lifecycle goals (in units of energy savings) (D.13-09-023, p. 37):

Annualized Goals *	Target Effective Useful Life *	Target Net-to-Gross % =	Lifecycle
(in kWh, MW, MMth)	(in years)	(in %)	Net Target Goal

Earnings rate coefficients shall be calculated as the amount that correlates incentive earnings potential for resource savings with a cap of 9 percent of the approved resource program budget for each savings type, excluding funding for administrative activities, Evaluation, Measurement and Verification, codes and standards programs, On Bill Financing Loan program budgets, Marketing Education and Outreach program budget, and the Regional Energy Network/Community Choice Aggregation programs not administered by the utilities (D.13-09-023, p. 97, OP 13). The coefficient (i.e., earnings per unit of resource savings) that correlates incentive earnings with EE Net lifecycle goals is calculated based on the following formula (D.13-09-023, p. 33):

(Total incentive earnings potential) / (Net Lifecycle units of resource savings)

= Incentive Earnings Per Unit of Savings

Target EUL values of 12 years for electric measures and 15 years for gas measures, and a target NTG of 0.8 for both electric and gas measures shall be utilized in calculating lifecycle goals to emphasize the importance of challenging the IOUs to stretch their capabilities to reach higher standards of performance over time (D.13-09-023, p 37).

4. **Ex Ante Review Performance Scoring.** Energy Savings Performance Incentive scores for deemed and custom activities shall be weighted for the utility program administrators based on the proportion of deemed savings and custom measures in each utility's portfolio. The annual scores for deemed and custom activities be weighted by the fraction of portfolio annual net lifetime savings kWh and therm claims, as reported in the utility annual advice letter filed in September of each year. Combined electric and gas utilities would additionally weight their electric and gas net lifetime claims by the total incentives paid for gas versus electricity.[45]

5. **Uncertain Measures.** For custom projects and for specific "deemed" measures with ex ante parameters that are identified as highly uncertain, CPUC Staff shall require ex post evaluations as the basis for calculating savings incentive payments. The savings award for the remaining "deemed" measures will be calculated based on the locked down ex ante parameter values, and only the claimed measure count will be subject to ex post adjustment for these measures (D.13-09-023, p. 50).

   By October 31 of each year prior to the program year, CPUC Staff will identify deemed measures, in the DEER or in an IOU-submitted non-DEER workpaper, for which one or more savings parameters are sufficiently uncertain that the savings claim should be subject to ex post verification in order to be included in the incentive payment. For ESPI purposes, "sufficiently uncertain" measures are defined as those measures for which the CPUC believes the net lifetime savings of the current DEER or non-DEER savings estimate may be as much as 50 percent or more under- or over-estimated (D.13-09-023, p. 51). The resulting list is called the 'Uncertain Measure list.'

[45] D.16-08-019, p, 113, OP 19. Adopts the weighting methodology provided in the June 8, 2016 Administrative Law Judge's ruling seeking comment on Evaluation, Measurement, & Verification and Energy Savings Performance Incentive issues, p. 12.

6. **Calculating Resource Savings Incentive Awards.** Efficiency Savings and Performance Incentive awards for resource savings shall be derived as the sum of the following components that increase as a linear function up to the earnings target for each respective savings type (D.13-09-023, p. 96, OP 9):

--For savings of electric consumption:

(Units of kWh Savings) * (Earnings Rate Coefficient)

--For reduction of peak electric demand

(Units of mega-watt (MW) Reductions) * (Earnings Rate Coefficient)

--For savings of natural gas consumption:

(Units of MMTherm Savings) * (Earnings Rate Coefficient)

7. **Verification of Expenditure and Claims Data.** In order to verify Codes and Standards and non-resource program expenditures for the purposes of awarding these management fees, CPUC Staff will rely upon public versions of the CPUC's Utility Audit, Finance and Compliance Branch reports. Upon completion, the CPUC's Utility, Audit, Finance and Compliance Branch shall serve on the service list in this proceeding (or its successor) a notice of availability of the public copy of its audit report detailing its review of annual expenditures for the Energy Efficiency programmatic activity of the respective program year(s) (D.13-09-023, p. 98, OP 17).

   To avoid data discrepancy across various submissions, the IOUs must use their final official program year tracking data as the basis for all their submissions that include data associated with that specific program year. IOUs may not make any changes to the data after the final submission, save for the following provision: if an IOU discovers any errors in the data after the final tracking data is submitted, then the IOU must update its tracking data in CEDARS and notify the Energy Efficiency Branch Program Manager; the Utility Audit, Finance and Compliance Branch Program Manager; and all parties to the active energy efficiency proceeding (i.e., Proceeding R.13-11-005 or its successor) of any such changes (D.18-05-041, pp. 131-132).

8. **Resource Savings Claim and Expenditure Eligibility.** IOUs should only include savings for measures installed (the year the measure has been physically installed and became

operational to deliver savings) in the same year they are claiming incentives for.[46] IOUs should indicate the measure installation date in their data submissions.

9. **Approval of Incentive Claims.** In accordance with the schedule set forth in Attachment 6 of D.15-10-028, an annual Tier 3 advice letter shall be filed for approval of incentive claims in accordance with the schedule adopted in this decision. The first annual advice letter will occur beginning in 2014, and continuing annually thereafter, to claim recovery of Efficiency Savings and Performance Incentive (ESPI) incentive elements in the following sequence (D.13-09-023, pp. 95-96, OP 4):

   Claims for ESPI awards covering the first program year (PY) of each cycle shall be made during the first following year (PY +1) for the following ESPI elements:

   - Non-Resource program management fee
   - Codes and Standards program management fee
   - Ex ante performance award
   - Preliminary ex ante locked down deemed measure savings award

   Claims covering the first program year of each cycle shall be made in the second following year (PY +2) for the following ESPI elements:

   - Custom projects
   - Ex post verified deemed measure savings
   - True up of preliminary ex ante lockdown award based on verified counts.

10. **Dispute Resolution of Ex Post Evaluations.** If necessary to resolve disputes over ex post results, and only after other more informal efforts at resolution have been exhausted, parties may invoke the dispute resolution process established in D.10-04-029, in accordance with the process set forth in Attachment 4 of D.13-09-023.[47]

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[46] The annual installation date based claims requirement was introduced in D.04-09-060 (at 33 and Findings of Facts 14) , clarified and reiterated in D.05-04-051 (at 55, Findings of Fact 36-42, Conclusion of Law 3, Ordering Paragraph 17), D.05-09-043 (at 84) and again in Resolution G-3510 (at 13), Resolution E-4807 (OP.10), and Resolution E-4897 (at 15-16) .

[47] D.13-09-023, p. 96, OP 9.

11. **References.** See the following attachments and references below for further information on the ESPI process.

    a. http://www.deeresources.com/index.php/espi

    b. http://www.cpuc.ca.gov/General.aspx?id=4137

IX. Third Party Solicitation Process

Senate Bill (SB) 350 increased reliance on pay-for performance strategies and meter based energy savings evaluation for energy efficiency programs in California. These requirements increase the reliance on third party energy efficiency program and delivery which are inherently performance based. This legislation resulted in the following:

- The CPUC adopted D.16-08-019 setting a minimum target of 60 percent of the utility's total budgeted portfolio, including administrative costs and EM&V, (up from the previously target of 20 percent) to be third-party designed and delivered by the end of 2022 via a stepped approach (see below). The rationale for this requirement reflects the CPUC's view that the utility role should focus more on the design and management of the energy efficiency portfolio overall, and less on individual program design and implementation.

  D.16-08-019 emphasized that third party design and implementation should become the default for much of the portfolio, unless the utilities can justify why use of utility personnel should continue. This same decision defined third-party as a program primarily designed and presented to the utility by a third party, in addition to delivered under contract to a utility (p. 69 – 70). Specifically the Decision stated; "A program must be proposed, designed, implemented, and delivered by non-utility personnel under contract to a utility program administrator." This direction requires clear solicitation protocols amid a likely increase in third-party IOU program administration contracts. Solicitation efforts aim to reach the 60 percent third-party target, using the new third-party definition adopted in D.16-08-019. via a phased approach (D.18-05-041) of minimum percentages of 25 percent by December 19, 2019; 40 percent by December, 31, 2020; and 60 percent by December, 31, 2022.

- In January of 2018 the CPUC adopted D.18-01-004. This decision addresses the required process for third party solicitations in the context of pre-existing rolling portfolio structure for energy efficiency programs overseen by the investor-owned utility (IOU) program administrators (PAs); The CPUC adopted D.15-10-028 in October of 2015, which established a "Rolling Portfolio" process for regularly reviewing and revising energy efficiency program administrators' portfolios.

1. **Two-Stage Solicitation Process:** A two-stage process should be used unless there is a specific -schedule related- reason that a shortcut must be used where the first stage is a short request for abstract and the second stage is a full request for proposals. The first stage is the Request for Abstract (RFA) Stage. In this stage, third-party implementers would provide a short abstract summarizing their proposed program, approach, qualifications and experience, and indicative pricing. If there was a robust response, the IOUs would then issue a request for proposal (RFP) soliciting detailed offers from qualified bidder respondents. RFP responses would then be evaluated with qualitative and quantitative criteria and would also utilize inperson- interviews. The most competitive participants would then be notified that they are short-listed and would proceed to the contract negotiation phase. D.18-01-004, p. 7

2. **Scoring Solicitations:** Once participant submit their abstracts in the RFA phase described above, "[t]he IOUs would then select potentially qualified respondents following scoring and evaluation of the abstracts including the viability and usefulness of the programs proposed in the RFAs." The RFA shortlist results are not required to be shared among PAs. Doing so may not only be impractical, but also may violate expectations of confidentiality on the part of bidders and it is not clear what benefits would override those considerations. Each PA is ultimately responsible for its own solicitation process, while as much informal communication and coordination among the PAs as possible is encouraged (D.18-01-004, p. 48). A separate scoring process will be developed and implemented in the Request for Proposal (RFP) phase of the solicitation process.

   D.18-01-004 also established a stakeholder advisory groups known as a "Procurement Review Group" (PRG) comprised of Energy Division staff and eligible non-market participants to consult with the IOUs in the design of the RFP and the evaluation of bids on a quarterly basis (see Section X.2. below for more information on the PRG).

3. **Solicitation Schedule:** Implementation plans for third party programs will necessarily be developed and posted after solicitations have concluded. However, the timely and up--to-date- posting of those implementation plans as soon as practical, but no later than 60 days

after contract execution, is still required. For programs that will be bid out in later rounds of the solicitation schedule, posting of implementation plans is still required after the CPUC's decision on the business plans, to reflect programs available to customers in the interim before additional third-party solicitations are scheduled to take place.

4. **Energy Division Review of Solicitations:** Any contract that has a value of $5 million or greater and/or a term of more than three years, must be submitted to the CPUC for approval via a Tier 2 advice letter. Contracts may be submitted in batches, at the discretion of the contracting utility. CPUC staff should ensure the contracts filed by advice letter comply with the utility's approved business plan, all CPUC decisions and direction, are not the result of a biased solicitation process, and do not thwart the intentions of successful program design, delivery, and realized savings, for some or all sectors and subsectors of customers. CPUC staff always can review any contract informally at any time, including those that do not meet the dollar or length thresholds identified above for required submittal by advice letter.

   In addition to the advice letter process described above for contracts valued at $5 million or greater and/or a term of more than 3-years, CPUC staff will also serve on the PRG utilized for general solicitation review…"Each utility will have at least one PRG, and at its discretion, may utilize more than one PRG, if the IOU prefers to tailor the PRGs for specific market segments or other purposes. The PRGs shall consist of non-financially interested- parties, representing diverse stakeholder interests, as well as CPUC staff, including ORA." D.18-01-004, p. 35

5. **Independent Evaluator's (IEs) Role in Solicitation Process:** In D.18-01-004, p. 2, 9, 33, and 36-38 the CPUC requires the IOUs to utilize Independent Evaluators to support the solicitation process. More specifically, the Decision directs the IEs utilized by the utilities for these energy efficiency third party solicitations to be hired specifically for this purpose and to possess energy efficiency expertise. The role of the IEs is designed to lend arms length- expertise evaluating the fairness of the conduct and results of the solicitation process by the IOUs. In addition, IOUs should consult with Energy Division staff during the selection process and the Energy Division director should have final approval over the pool of IEs selected by each utility.

   "…The IEs monitor the entire solicitation process and provide a written report at the end that is delivered formally to the CPUC as part of the contract evaluation and approval process." Because not all third party contracts will be submitted for formal approval by the CPUC, a formal IE report will accompany only those contracts required to be submitted via a

Tier 2 advice letter (i.e., those contracts valued at $5 million or more and/or with terms of longer than three years), (D.18-01-004, p. 37).

The IEs provide recommendations on all solicitations which shall be submitted to the members of the PRGs. The IEs should also monitor the entire process from RFA design to contract execution for all solicitations and contracts, not only those required to be submitted to the CPUC for approval. For the entire solicitation process the IE will serve as a consultant to the PRGs by participating in PRG meetings and shall also provide assessments of the overall third party solicitation process and progress on at least a semi-annual basis to the CPUC via reports filed in the relevant energy efficiency rulemaking. The CPUC may, as this process progresses, see a need for a stronger IE function. The CPUC therefore reserves the right, at any point in the future, to hire an IE or multiple IEs itself, as part of our evaluation and oversight functions. (D.18-01-004, p. 38)

6. **Workforce Standards**: The workforce standards are applied to non-residential HVAC and lighting projects for both existing utility programs and 3P solicitation starting July 1, 2019. These are intended as a starting point for potentially more far-reaching requirements in the future. Incentivized projects of $3,000 for HVAC and $2,000 for lighting will have specific criteria requirements of installation technicians[48]. (D.18-10-008, pg. 76-77)

With respect to third party contracts for the workforce, the utilities will propose a set of requirements for the contract among the modifiable terms with specific recommendations for each market or sector to identify the applicable workforce installer standards that would reduce the risk of lost energy savings from poor installation of energy efficiency measures including any specific skills certification requirements and/or broader occupational training and experience requirements (such as journeymen and apprenticeship requirements). D.18-01-004, p. 40 - 41, in OP 9, all EE program administrators shall define "disadvantaged worker," for purposes of their

[48] Requirements of installation technician doing work onsite. For Lighting: California Advanced Lighting Controls Training Program (CALCTP) certification. For HVAC: Completed or enrolled in a California or federal accredited HVAC apprenticeship; Completed at least five years of work experience at the journey level as defined by the California Department of Industrial Relations and passed a practical and written HVAC system installation competency test and received credentialed training specific to the installation of the technology being installed; or Has a C-20 HVAC contractor license from the California State Contractor's Licensing Board.

EE portfolios and tracking metrics or indicators associated with them, as an individual that meets certain criteria[49] (D.18-10-008, pg. 79).

X. Advisory Groups

The CPUC's approach to policy making and practicing administrative law relies on a combination of formal and informal public input that support the development of a record in an administrative proceeding.

For energy efficiency proceedings, the CPUCs continues to promote informal advisory group opportunities for obtaining stakeholder input:

1. **California Energy Efficiency (EE) Coordinating Committee (CAEECC):** In D.15-10-026, (p. 71 - 72) the CPUC established a statewide coordinating committee. Per this decision, "There is no need for Program Administrator (PA)-specific Program Advisory Groups (PAGs), as the PAs all deal with a similar set of issues. The focus now can be on how the PAs incorporate the ideas and concepts developed by the coordinating committee into their specific portfolios.

   A single coordinating committee should facilitate greater statewide coordination and harmonization of statewide programs across PAs. As we said in D.05-01-055, "we expect the PAs to ensure that statewide residential and nonresidential program offerings take advantage of best practices and avoid customer confusion by being as uniform and consistent as possible…Subcommittees should be along sector lines, not separated by PA.

   a. Scope of Work for CAEECC:
      i. Provide input into development of business plans prior to and throughout the drafting process (see notes below re scope of input and timing);
      ii. Provide input into development of implementation plans, again, prior to and throughout the drafting process;

[49] Disadvantaged Workforce Criteria: Total household income is below 50 percent of AMI; is a recipient of public assistance; lacks a high school diploma or GED; has history of incarceration of more than one year; is a custodial single parent; is chronically unemployed; was in the foster care system; has limited English proficiency; or lives in a high unemployment ZIP code that is in the top 25 percent of only the unemployment indicator of the CalEnviroScreen Tool.

iii. Provide input into development of annual budget advice letters, again, prior to and throughout the drafting process; and,

iv. Provide input into development and revision of metrics for inclusion in business plans and implementation plans as part of i and ii.

v. Provide a clearinghouse for discussion of the scope and schedule of other stakeholder processes.

In this same decision, the CPUC acknowledged, "the Coordinating Committee will obviate the need for some current stakeholder processes. From a practical perspective, some current processes will have to give way, as stakeholders and CPUC Staff have time for only so many processes…(We) repeat here the admonition we gave in D.05-01-055: we provide general guidance and expectations for the [stakeholder] group structure, but purposefully do not specify every implementation detail."

D.18-05-041 directed the PA's Annual Budget Advice Letter (ABAL) proposals be shared with CAEECC. Additionally, this same decision stipulated, "…the program administrators shall host a forum for stakeholder input on implementation plan development for new programs either through the California Energy Efficiency Coordinating Committee or another workshop hosted by the program administrators following the issuance of this decision."

D.18-10-008 which established EE related workforce requirements and third-party contract terms and conditions also directed the CAEECC to convene a stakeholder process, no later than July 1, 2020, to consider further application of workforce standards beyond those adopted in this decision including any additional lighting controls certification. This will allow time for consideration of experience with the standards required herein.

For more detailed information about the CAEECC including role of the PAs vs. the Coordinating Committee, Energy Division Staff participation on the Committee, sub-committee guidance, and meeting schedule / agenda development, etc. please see: D.15-10-028. For more information about the CAEECC's roll in reviewing PA Rolling Portfolio submissions please see: D.18-05-041

2. **Procurement Review Group (PRG):** In D.02-08-071, p. 24, the CPUC established stakeholder advisory groups known as "Procurement Review Groups (PRGs) comprised of eligible non-market participants to consult with the IOUs in the design of the RFP and the evaluation of bids on a quarterly basis; "In order to ensure that interim procurement contracts entered into by the utilities are subject to sufficient and expedited review and pre-approval, we will require each utility

to establish a PUC-authorized "Procurement Review Group" whose members, subject to an appropriate non-disclosure agreement, would have the right to consult with and review the details of, and assess proposed contracts and provide written comments to the IOUs before they submit contract(s) to the CPUC."

Over the years the usefulness and purpose of these stakeholder groups became questionable given the changing regulatory landscape and competition for stakeholder engagement resulted in limited stakeholders for these purposes. In D.18-01-004, Section 3.4 the concept of the PRG was resurrected again, "We agree there is value in continuing the PRGs, which have existed in some form for some time. The PRGs are a useful vehicle for following the solicitation processes and providing feedback to the PAs. Continuing the PRGs balances the goals of oversight and transparency, as well as timely feedback, with the desire to have an expeditious solicitation process."

Each utility has at least one PRG, and at its discretion, may utilize more than one PRG if the IOU prefers to tailor the PRGs for specific market segments or other purposes. The PRGs shall consist of non--financially interested- parties, representing diverse stakeholder interests, as well as CPUC staff, including ORA. In terms of the PRG's ultimate responsibilities, we expect the PRGs to be involved at all levels in the solicitation process, including:

- Draft RFA review
- Review of RFA bids and shortlist
- Draft RFP review
- Review of RFP bid selection criteria
- RFP shortlist and selected contractor review
- Review IE evaluations of all solicitations.

D.18-05-041 requires PAs to "…consult the new energy efficiency PRG and present its proposal to meet the Annual Budget Advice Letter (ABAL) review criteria in future program. For more information about PRGs including direction related to PRG composition, meeting, the PRG Handbook and meeting minutes please see:

https://www.caeecc.org/third-party-solicitation-process

XI. Affiliate and Disclosure Rules

1. **Transactions with IOU Affiliates.** To avoid anti-competitive behavior and cross- subsidies between IOUs and their affiliates, all transactions between the IOU administrator and any implementer that is an affiliate of PG&E, SCE, SDG&E or SoCalGas are banned (D.05-01-055).

2. **Treatment of Energy Efficiency Service Providers.** The IOUs, RENs and CCAs will not provide preferential treatment to any provider of an energy efficiency service that uses energy efficiency program funds.

3. **Conflict of Interest.** Bidders for EM&V contracts, including program design evaluation and market assessment studies, shall provide full disclosure of any potential conflicts of interest, including all current non-energy efficiency related contracts with IOUs, RENs, CCAs and program implementers. Each utility should have at least one PRG, with members who are not financially interested in solicitation results and represent diverse stakeholder interests, to provide feedback during the third party solicitation process. The PRGs should be involved at all stages of the solicitation process participants should be eligible for intervenor compensation (D.18-01-004, pg. 57).

XII. Process and Procedural Issues

1. **Energy Efficiency Policy Manual Disclaimer**. This Policy Manual is a summary of CPUC rules for energy efficiency. It does not supersede any CPUC Decision. IOUs, RENs and CCAs are required to meet the orders of previous CPUC decisions regardless of whether or not they are included in this policy manual. If there is any conflict between this Policy Manual and a CPUC decision, the CPUC's decision controls.

2. **Modifications to Policy Manual and Related Rules.** Energy Division will update this manual as needed based on significant changes related to Energy Efficiency policy. Due to the unknown frequency of policy changes, and potential lag time in updating this manual, interested parties are encouraged to use other sources to receive the most up to date information keeping in mind that some references to older decisions in this manual may have been superseded by more recent CPUC guidance. It is the responsibility of the reader to ensure the most recent policies, pertinent to their policy related questions, are referred to.

3. **Complaints and Dispute Resolution.** Any program proposal for energy efficiency funding must describe a dispute resolution process to be used in dealing with complaints from end-use gas or electric consumers participating or attempting to participate in the program. In programs where the IOUs, RENs, and CCAs hold contracts with third parties, those contracts will also be required to include dispute resolution provisions.

APPENDIX A: ADOPTED FUND SHIFTING RULES

As modified by D.12-11-015, 12/22/2011 ACR (R.09-11-014), D.09-09-047, D.09-05-037,D.07-10-032, D.06-12-013, andD.05-09-043

Fund Shifting Category	Shifts Among Budget Categories, Within Program	Shifts Among Programs, Within Category	Shifts Among Categories
Statewide Program (except ET, ME&O, and C&S)	No formal Commission review/approval required	No formal Commission review/approval required	Advice letter required for shifts >15% between statewide program categories in either direction (based on each category funding level) per annum. See rules below for shifting away from ET, ME&O, and C&S.
Third Party Programs (competitively bid) (See Notes Below)	No formal Commission review/approval required	No formal Commission review/approval required	Advice Letter required for shifts >15% between statewide and Third Party (competitively bid) program categories in either direction (based on total category funding level) per annum. Advice Letter is required if allocation to competitively bid programs falls below 20% of total portfolio funding.
Local Government and Institutional Partnerships (See Notes Below)	No formal Commission review/approval required	No formal Commission review/approval required	Advice Letter required for shifts >15% between statewide and Local Government and Institutional Partnership program categories in either direction (based on category funding level) per annum.

Notes

a) Any fund shifting will be shown on the quarterly fund shifting report which will be provided to the Energy Division beginning 7/1/13 (and every 90 days thereafter).

b) No program or sub-program shall be eliminated except through the Advice Letter process.

c) For adding new programs, except those chosen during a competitive process, an Advice Letter must be filed.

d) "Third Party Programs" include any third-party programs that are competitively bid and count towards the percentage competitive bidding requirement. In aggregate, these programs constitute a twelfth category (in addition to the 11 statewide program categories), subject to the 15 percent fund-shifting rule requiring an Advice Letter if the amount transferred from this category is greater than 15 percent in either direction. Fund-shifting of any amount within this twelfth program category is allowed without an Advice Letter.

e) "Local Government and Institutional Partnerships." In aggregate, these programs constitute a thirteenth category (in addition to the 11statewide program categories, and third-party programs), subject to the 15 percent fund-shifting rule requiring an Advice Letter if the amount transferred from this category is greater than 15 percent in either direction. Fund-shifting of any amount within this thirteenth program category is allowed without an Advice Letter.

f) "Other Programs" include local programs and any other programs not capture in the aforementioned categories. In aggregate, these programs constitute a fourteenth category (in addition to the 11statewide program categories, third-party programs, and local government and institutional partnerships), subject to the 15 percent fund- shifting rule requiring an Advice Letter if the amount transferred from this category is greater than 15 percent in either direction. Fund-shifting of any amount within this fourteenth program category is allowed without an Advice Letter.

g) The 15 percent fund-shifting rule, requiring an Advice Letter if the amount transferred from this category is greater than 15 percent in either direction, is applied to the category funding level in the authorized budget adopted in the compliance filing pursuant to the most recent authorizing decision (or the decision itself, if there is no compliance filing).

h) Utility program administrator may carryover/carryback funding during the current program cycle without triggering a review/approval process.

i) Changes to incentive levels or modifications to program design (such as changes to customer eligibility requirements) will not trigger Energy Division or formal CPUC review. Program administrators will notify the CPUC of all incentive level changes that take place through the Program Implementation Plan Addendum process.

j) Advice letters are subject to General Order (GO) 96B.

k) Marketing Education & Outreach and EM&V programs are subject to overall caps adopted in D.09-09-047 OP 13. Program administrators may request fund shifting augmentations if they wish to increase budget caps. In addition, the fund shifting changes adopted in D.09-09-047 are not intended to change Rule II.2 of the Energy Efficiency Policy Manual V.5 as applied to EM&V and ME&O spending below the adopted caps, nor to change the fund shifting rules for C&S or Emerging Technologies programs.

APPENDIX B: GLOSSARY

COMMON ENERGY EFFICIENCY TERMS AND DEFINITIONS

Adopted Program Budget

The program budget as it is adopted by the CPUC. Inclusive of costs (+/-) recovered from other sources.

Advanced Technologies

Measures or processes which exceed the efficiency or thermodynamic performance of standard energy using equipment or processes.

Affiliate

Any person, corporation, utility, partnership, or other entity 5 percent or more of whose outstanding securities are owned, controlled, or held with power to vote, directly or indirectly either by an administrator or any of its subsidiaries, or by that administrator's controlling corporation and/or any of its subsidiaries as well as any company in which the administrator, its controlling corporation, or any of the administrator's affiliates exert substantial control over the operation of the company and/or indirectly have substantial financial interests in the company exercised through means other than ownership. For purposes of these Rules, "substantial control" includes, but is not limited to, the possession, directly and indirectly and whether acting alone or in conjunction with others, of the authority to direct or cause the direction of the management of policies of a company. A direct or indirect voting interest of five percent (5 percent) or more by the administrator, its subsidiaries, or its affiliates in an entity's company creates a presumption of control.

Avoided Costs

Avoided costs refers to the incremental costs avoided by the investor-owned utility when it purchases power from qualifying facilities, implements demand-side management, such as energy efficiency or demand-response programs, or other wise defers or avoids generation from existing/new utility supply-side investments or energy purchases in the market. Avoided costs also encompass the deferral or avoidance of transmission and distribution-related costs. (D.08-01-006, Footnote 2)

Baseline Data

The state of performance and/or equipment that what would have happened in the absence of the program induced energy efficiency.

California Energy Efficiency (EE) Coordinating Committee (CAEECC)

In D.15-10-026, (p. 71 - 72) the CPUC established a statewide coordinating committee whose role is to facilitate greater statewide coordination and harmonization of statewide EE programs across program administrators (PAs).

Coincident Peak Demand

The metered or estimated demand of a device, circuit, or building that occurs at exactly the same time as the system peak for a given year and weather condition.

Community Choice Aggregators

Organizations created by local governments pursuant to Assembly Bill 117 for the purpose of procuring power and administering energy efficiency programs on behalf of local citizens.

Competitive Solicitation

The process whereby parties are requested to submit bids offering innovative approaches to energy savings or improved program performance.

Conservation

Reduction of a customer's energy use achieved by relying on changes to the customer's behavior which may result in a lower level of end use service.

Conservation Measures

Activities and/or behaviors aimed at reducing energy consumption.

Conservation Programs

Programs which are intended to influence customer behavior as a means to reduce energy use.

Cost Effectiveness

An indicator of the relative performance or economic attractiveness of any energy efficiency investment or practice when compared to the costs of energy produced and delivered in the absence of such an investment.

Cost-Effectiveness Tool

Avoided Cost Calculator Tool

Cream Skimming

Cream skimming results in the pursuit of a limited set of the most cost-effective measures, leaving behind other cost-effective opportunities. Cream skimming becomes a problem when lost opportunities are created in the process.

Cross Subsidization

Benefits enjoyed by one group, such as a customer class, which are funded by another group.

Custom Measures/projects

Energy efficiency efforts where the customer financial incentive and the ex ante energy savings are determined using a site-specific analysis of the customer's facility (D.11-07- 030 page 31).

Customer

Any person or entity that pays an electric and/or gas bill to an IOU or CCA and that is the ultimate consumer of goods and services including energy efficiency products, services, or practices.

Cumulative Savings

As clarified in D.07-10-032, cumulative savings represent the savings in that year from all previous measure installations (and reflecting any persistence decay that has occurred since the measures were installed) plus the first-year savings of the measures installed in that program year.

Deemed Measure

A prescriptive energy efficiency measure.

Delayed Installation

Products which are claimed as installed in a specific quarter but are likely to be installed at a later date (D.11-07-030, page 21).

Dual Test

The requirement that an energy efficiency activity pass both the TRC and the PAC cost-effectiveness test.

Effective Useful Life (EUL)

An estimate of the median number of years that the measures installed under the program are still in place and operable.

Electricity Savings

Reduced electricity use (or savings) produced by either energy efficiency investments which maintain the same level of end use service or conservation actions which usually reduce energy use by reducing the quantity or quality of the baseline energy services demanded.

Emerging Technologies

New energy efficiency technologies, systems, or practices that have significant energy savings potential but have not yet achieved sufficient market share (for a variety of reasons) to be considered self sustaining or commercially viable. Emerging technologies include late stage prototypes or under-utilized but commercially available hardware, software, design tools or energy services that if implemented appropriately should result in energy savings.

Emissions Reductions

The CPUC requires annual reporting of reduced emissions of carbon dioxide (CO2), sulfur oxides (SOx), nitrous oxides (NOx), and particulate matter (PM10) as a result of energy efficiency savings. The IOUs use the E3 calculator to compute the annual electric and natural gas emissions reductions, which are the units implemented in the year times the annual emission reduction for a

particular measure. The E3 calculator calculates values of CO2 in tons per kWh or therms; NOx and PM10 are in pounds per kWh or therms.

The following equations are from the "E3 Calculator Tech Memo" found at the following web link:

https://www.ethree.com/wp-content/uploads/2017/02/E3_Calculator_TechMemo_6d.docx

Electric Reductions: CO2 tons per year *(Emission[E][CO2])*

$$Emission[E][CO2]_y = \sum_{Q=1+(y-1)*4}^{y*4} \left(IN_{M,Q} * kWh_wtd_A_M * NTG_M * ER[CO2]_M \right) * IR_M * GRR_M$$

Where

y	=	year of consideration. First year of program cycle = 1.
Q	=	Quarter of the year.
INM,Q	=	# of incremental of measures implemented in quarter Q.
NTGM	=	Net–to-Gross ratio for energy for measure M, adjusted for market effects.
ER[CO2]M	=	Emission rate of CO2 in tons per kWh of measure M.

NOX and PM-10 equations are the same. Just replace [CO2] with the appropriate indicator. Note that CO2 emission rate is in tons per kWh. NOX and PM-10 are in pounds per kWh.

Gas Reductions: CO2 tons per year *(Emission[G][CO2])*

$$Emission[G][CO2]_y = \sum_{Q=1+(y-1)*4}^{y*4} \left(IN_{M,Q} * Th_wtd_A_M * NTG_M * ER[CO2]_{GCT} \right) * IR_M * GRR_M$$

Where

y	=	year of consideration.
Q	=	Quarter of the year.
INM,Q	=	# of incremental of measures implemented in quarter Q.
NTGM	=	Net–to-Gross ratio for energy for measure M, adjusted for market effects.
ER[CO2]GCT	=	Emission rate of CO2 in tons per therm, based on the gas combustion type (GCT) specified on the input sheet for the measure.

NOX and PM-10 equations are the same. Just replace [CO2] with the appropriate indicator. Note that CO2 emission rate is in tons per Therm. NOX and PM-10 are in pounds per Therm.

Energy Efficiency Groupware Application (EEGA)

The IOUs post reports to the EEGA webpage, which is accessible to the public: http://eega.cpuc.ca.gov.

End Use

1) The purpose for which energy is used (e.g. heating, cooling, lighting).

2) A class of energy use that an energy efficiency program is concentrating efforts upon. Typically categorized by equipment purpose, equipment energy use intensity, and/or building type.

Energy Efficiency

Activities or programs that stimulate customers to reduce customer energy use by making investments in more efficient equipment or controls that reduce energy use while maintaining a comparable level of service as perceived by the customer.

Energy Efficiency Measure

An energy using appliance, equipment, control system, or practice whose installation or implementation results in reduced energy use (purchased from the distribution utility) while maintaining a comparable or higher level of energy service as perceived by the customer. In all cases energy efficiency measures decrease the amount of energy used to provide a specific service or to accomplish a specific amount of work (e.g., kWh per cubic foot of a refrigerator held at a specific temperature, therms per gallon of hot water at a specific temperature, etc). For the purpose of these Rules, solar-powered, non- generating technologies are eligible energy efficiency measures (D.09-12-022, OP 1).

Energy Efficiency Programs

Programs that reduce customer energy use by promoting energy efficiency investments or the adoption of conservation practices or changes in operation which maintain or increase the level of energy services provided to the customer.

Energy Efficiency Savings

The level of reduced energy use (or savings) resulting from the installation of an energy efficiency measure or the adoption of an energy efficiency practice, subject to the condition that the level of service after the investment is made is comparable to the baseline level of service. The level of service may be expressed in such ways as the volume of a refrigerator, temperature levels, production output of a manufacturing facility, or lighting level per square foot.

Evaluation, Measurement and Verification (EM&V)

Activities that evaluate, monitor, measure and verify performance or other aspects of energy efficiency programs or their market environment.

Evaluation Project Budget

The project level evaluation budget as it is defined by the program administrators or Energy Division for internal program budgeting and management purposes. Inclusive of direct and allocated overhead and costs (+/-) recovered from other sources.

Ex Ante (Forecast) Values

Estimated savings values calculated based on assumptions prior to the evaluation of the portfolio cycle. These savings reflect the IOU reported savings, which are trued up with final evaluation.

Ex Ante (Forecast) Review

The review process that occurs before savings for a measure or project savings claim is "frozen" to verify that the ex ante values used to calculate the reported savings are reasonable and based on best available information.

Financial Incentive

Financial support (e.g., rebates, low interest loans, free technical advice) provided to customers as an attempt to motivate the customers to install energy efficient measures or undertake energy efficiency projects. (See Rebate)

Free Drivers

A free driver is a non-participant who adopted a particular efficiency measure or practice as a result of a utility program. (From April 2006 EM&V Protocols)

Free riders (Free Ridership)

Program participants who would have installed the program measure or equipment in the absence of the program.

Fuel Substitution

Programs which are intended to substitute energy using equipment of one energy source with a competing energy source (e.g. switch from gas furnaces to electric resistance heating).

Funding Cycle

Period of time for which funding of energy efficiency programs have been approved by the CPUC.

Gas Savings

Reduced natural gas usage (or savings) produced by either energy efficiency investments which maintain the same level of end use service or conservation actions which can reduce energy use by reducing the quantity or quality of the baseline services provided.

Gross Savings

Gross savings count the energy savings from installed energy efficiency measures

Irrespective of whether or not those savings are from free riders, i.e., those customers who would have installed the measure(s) even without the financial incentives offered under the program. Gross savings are adjusted by a net-to-gross ratio to produce net savings, that is, to remove the savings associated with free riders.

Gross Realization Rate

Gross Realization Rate (GRR) is the ratio of achieved energy savings to predicted energy savings; as a multiplier on Unit Energy Savings, the GRR takes into account the likelihood that not all CPUC-approved projects undertaken by IOUs will come to fruition.

Hard to Reach, Residential

Those customers who do not have easy access to program information or generally do not participate in energy efficiency programs due to a language, income, housing type, geographic, or home ownership (split incentives) barrier. These barriers are definedas:

Language – Primary language spoken is other than English, and/or

Income – Those customers who fall into the moderate income level (income levels less than 400 percent of the federal poverty guidelines and/or

Housing Type – Multi-family and Mobile Home Tenants, and/or Geographic – Businesses in areas other than the San Francisco Bay Area, San

Diego area, Greater Los Angeles Area (Los Angeles, Orange, San Bernardino, Riverside and Ventura counties)or Sacramento, and/or

Home Ownership – Renters

Incremental Measure Cost

The additional cost of installing a more efficient measure calculated from the price differential between energy-efficient equipment and services and standard or baseline state. These costs include any direct or indirect incremental cost that is attributable to the energy efficiency activity. This may include design assistance, surveys, materials and labor, commissioning costs, etc.

Independent Evaluator (IE)

A consultant selected by the IOUs to serve as an independent advisor to the IOUs and the PRG members involved in overseeing the third-party solicitation process as described in D.18-01-004, p. 2, 9, 33, and 36-38.

Information & Education

Information and education programs can provide a wide range of activities designed to inform or educate a customer or customer group. Generally these range from in-depth, one-on-one, on-site or centrally located classroom style instruction in topics related to energy efficiency, to programs that target information to specific types of customers, to general information provided to a wide range of customers, to short inexpensive public service announcements on FCC approved communication frequencies. Programs intended to provide customers with information regarding generic (not customer- specific) conservation and energy efficiency opportunities. For these programs, the information may be unsolicited by the customer.

Innovation Incubator

A low-cost, stand-alone program designed to grow innovative energy saving programs and processes for the larger portfolio over the long term. The incubator funds new program ideas that meet reasonable scientific scrutiny for potentially cost-effective energy savings and peak reduction.

Installation Rate

Installation Rate is the ratio of the number of verified installations of a measure divided by the number of claimed installations rebated by the utility during a claim period. Typically Installation Rates used on an ex ante basis will be based upon previous ex post evaluations.

Institutional Barriers

A type of market barrier: In this case, the internal organizational hurdles that inhibit the evaluation and or choice to take energy efficiency actions.

Least Cost/Best Fit

The procurement of cost-effective supply and demand-side resources that, regardless of ownership, meet capacity and energy deliverability requirements. Energy efficiency resources are constructed from the bottoms up approach that aggregates the demand and energy savings from various energy-saving measures and activities into applicable end-use categories such as space cooling, space heating, lighting, and refrigeration, in order to provide near- and long-term peaking, intermediate, and baseload requirements.

Levelized Cost

An estimate of the annualized cost of installing an energy efficiency measures divided by the annual energy savings. Typically calculated by multiplying the incremental cost of the measure by capital recovery factor (function of discount rate and expected useful life of the measure) and then dividing by annual energy savings.

Load Management

Programs which reduce or shift electric peak demand away from periods of high cost electricity to non-peak or lower cost time periods, with a neutral effect on or negligible increase in electric use.

Lost Opportunities

Energy efficiency measures that offer long-lived, cost-effective savings that are fleeting in nature. A lost opportunity occurs when a customer does not install an energy efficiency measure that is cost-effective at the time, but whose installation is unlikely to be cost-effective if the customer attempts to install the same measure later.

Market Effect

A market effect is a change in the structure or functioning of a market or the behavior of participants in a market that result from one or more program efforts. Typically these efforts are designed to increase in the adoption of energy-efficient products, services or practices and are causally related to market interventions. Market effects include reductions in energy consumption and/or demand in a utility's service area caused by the presence of the DSM program, beyond program related gross or net savings of participants. These effects could result from: (a) additional energy efficiency actions that program participants take outside the program as a result of having participated;

(b) changes in the array of energy-using equipment that manufacturers, dealers and contractors offer all customers as a result of program availability; and (c) changes in the energy use of non-participants

as a result of utility programs, whether direct (e.g., utility program advertising) or indirect (e.g., stocking practices such as (b) above or changes in consumer buying habits)." Participant spillover is described by (a), and non- participant spillover, by (b) and (c). Some parties refer to non-participant spillover as "free-drivers." (From EM&V Protocols, April 2006)

Market Transformation

Decision (D.)09-09-047, defines market transformation as "long-lasting, sustainable changes in the structure or functioning of a market achieved by reducing barriers to the adoption of energy efficiency measures to the point where continuation of the same publicly-funded intervention is no longer appropriate in that specific market. Market transformation includes promoting one set of efficient technologies until they are adopted into codes and standards (or otherwise adopted by the market), while also moving forward to bring the next generation of even more efficient technologies to the market.[50]"

Marketing, Education and Outreach (ME&O)

Communications activities designed to identify, reach and motivate potential customers to take actions to either learn more about or invest in energy efficiency opportunities.

Measures

1) Specific customer actions which reduce or otherwise modify energy end use patterns.

2) A product whose installation and operation at a customer's premises results in a reduction in the customer's on-site energy use, compared to what would have happened otherwise.

Net savings

The savings realized when free ridership is accounted for. The savings is calculated by multiplying the gross savings by the net to gross ratio.

Net to Gross Ratio

[50] D.09-09-047 at p.354, OP 10

A ratio or percentage of net program savings divided by gross or total impacts. Net to gross ratios are used to estimate and describe the free-ridership that may be occurring within energy efficiency programs.

Non-price Factors

Those factors included in cost effectiveness tests, other than commodity prices and transportation and distribution costs, e.g., environmental factors.

Non-Resource Program

Energy efficiency programs that do not directly procure energy resources that can be counted, such as marketing, outreach and education, workforce education and training, and emerging technologies.

Participant Test

The Participant Test is the measure of the quantifiable benefits and costs to the customer due to participation in a program. Since many customers do not base their decision to participate in a program entirely on quantifiable variables, this test cannot be a complete measure of the benefits and costs of a program to a customer. (See SPM link under Attachment A.)

Partnership

Coordinated efforts of a utility and a local government or other entity to use the strengths of both parties to achieve energy savings goals.

Peak Demand, Reported (per OP 1 of D.06-06-063 as modified by D.12-05-015)

The peak megawatt load reduction contained in the most recently adopted DEER used to estimate and verify peak demand savings values. The DEER method utilizes an estimated average grid level impact for a measure between 2 PM and 5 PM during a "heat wave" defined by a three consecutive weekdays for weather conditions that are expected to produce a regional grid peak event. DEER utilizes a 3-day "heat wave" that occurs on consecutive days in June through September such that the three consecutive days do not include weekends or holidays, and where the heat wave is ranked by giving equal weight to the peak temperature during the 72-hour period, the average temperature during the 72-hour period and the average temperature from noon – 6 PM over the three days.

Peak Demand-General (kW)

1) The maximum level of metered demand during a specified period, such as a billing month, or during a specified peak demand period.

2) Extremely high energy use, usually with reference to a particular time period.

Peak Savings- Coincident (kW)

The estimated peak (e.g. highest) demand savings (MW or kW) from a program for a specific time, date, and location coincident with the forecasted system peak for a given area and a given set of weather conditions. This estimate must also include consideration of the likelihood that the equipment is actually on at the time of coincident peak. Usage of this definition: Resource planning- for making adjustments to forecasts of peak usage for understanding reserve margins and reliability purposes.

Peak Savings- Daily Average (kW)

The average peak demand savings (kWh impacts/ # of hours in the peak rate period) for a given utility during their peak season. Example for SCE-Peak period is for summer weekdays from 12-6 PM. So - daily average savings would be the number of kWh saved/ # of kWhs saved for all weekday peak periods (= kWh/5 days/week * 12 weeks/ summer* 6 hours/day = kW average. Usage: Cost effectiveness analysis, primarily for valuing energy savings that occur during the peak period using "peak" average avoided costs.

Peak Savings –Non coincident (kW)

Estimated highest level of peak savings (kW or MW) for a given program during the peak time period for a given utility on the hottest day of a "normal" weather year. Thus if a group of measures saved 1MW at 2PM, 1.7 MW at 3PM, 1.6 MW at 4PM, 1.0 MW at 5 PM and 1.2 MW at 6 PM, the peak non coincident savings would be 1.7 MW. This savings estimate does not take into account how many of the affected devices or equipment will be operating during the peak time period. Usage: Cost effectiveness analysis and procurement.

Peer Review Group (PRG)

A subset of the Program Advisory Group consisting of non-financially interested members who will review utility submittals to the CPUC, assess overall portfolio plans, plans for bidding out pieces of the portfolio, and the bid evaluation criteria for selecting third-party programs.

Performance Uncertainties

A market barrier: refers to new technologies or systems whose efficiency or system performance levels are uncertain due to lack of experience.

Portfolio

All IOU and non-IOU energy efficiency programs funded by ratepayers that are implemented during a program year or cycle. May also refer to a group of programs sponsored, managed, and contracted for by a particular IOU.

Portfolio Reporting

Regularly scheduled reporting by the portfolio administrators directly to the CPUC. Metrics reported are: portfolio budgets and expenditures, measures installed, services rendered, and other program activity deemed relevant to Energy Division's responsibility to support the CPUC's responsibilities of quality assurance, policy oversight, and EM&V.

Pre-commercialization

A phase in the life of a product before it is readily available on the market.

Program

A collection of defined activities and measures that

- are carried out by the administrator and/or their subcontractors and implementers,
- target a specific market segment, customer class, a defined end use, or a defined set of market actors (e.g. designers, architects, homeowners),
- are designed to achieve specific efficiency related changes in behavior, investment practices or maintenance practice in the energy market,
- and are guided by a specific budget and implementation plan.

Program Activities

Any action taken by the program administrator or program implementer in the course of implementing the program.

Program Administrator

An entity tasked with the functions of portfolio management of energy efficiency programs and program choice.

Program Administrator Cost (PAC) Test

Under portfolio evaluation of cost effectiveness, the PAC test contains the program benefits of the TRC test, but costs are defined differently to include the costs incurred by the program administrator but not the costs incurred by the participating customer. (See the SPM link under Attachment A.)

Program Advisory Group (PAG)

Advisory groups for each utility service area composed of energy efficiency experts representing customer groups, academic organizations, environmental organizations, agency staff and trade allies in the energy market.

Program Cycle

The period of time over which a program is funded and implemented.

Program Implementation Plan

A detailed description of a program that includes program theory, planned program processes, expected program activities, program budget, projected energy savings and demand reduction and other program plan details as required by the CPUC, assigned ALJ, or Energy Division.

Program Implementers

An entity or person that puts a program or part of a program into practice based on contacts or agreements with the portfolio manager.

Program Strategy

The set of activities deployed by the program in order to achieve the program's objectives.

Program Year(s)

The calendar year(s) during which the program operates.

Ratepayer

Those customers who pay for gas or electric service under regulated rates and conditions of service.

Rebate

A financial incentive paid to the customer in order to obtain a specific act, typically the installation of energy efficiency equipment.

Remaining Useful Life (RUL)

An estimate of the median number of years that an measure being replaced under the program would remain in place and operable had the program intervention not caused the replacement.

Report Month

The month for which a particular monthly report is providing data and information. For example, the report month for a report covering the month of July 2006, but prepared and delivered later than July 2006, would be July 2006.

Resource Programs

Energy Efficiency programs that generate energy savings that are quantified and tracked by program administrators.

Resource Value

An estimate of the net value of reliable energy (e.g., kWh, therms) and capacity (e.g., kW, Mcfd) reductions resulting from an energy efficiency program. This includes the net present value of all of the costs associated with a program and all of the estimated benefits (both energy and capacity). The calculation of resource value and associated benefits should be consistent with the avoided costs adopted in the most recent CPUC proceeding or otherwise provided for by the CPUC.

Ratepayer Impact Measure (RIM) Test

The Ratepayer Impact Measure (RIM) test measures what happens to customer bills or rates due to changes in utility revenues and operating costs caused by the program. Rates will go down if the change in revenues from the program is greater than the change in utility costs. Conversely, rates or bills will go up if revenues collected after program implementation are less than the total costs

incurred by the utility in implementing the program. This test indicates the direction and magnitude of the expected change in customer bills or rate levels.

Savings Decay

The reduction of cumulative savings due to previous measure installations passing their Remaining Useful Life or Effective Useful Life. Per D.09-09-047 and until EM&V results inform better metrics, IOUs may apply a conservative deemed assumption that 50 percent of savings persist following the expiration of a given measure's life.[51]

Service Area

The geographical area served by a utility.

Short Term/Long Term

Planning terms referring to the timing or expected timing of program activities, program impacts, or program funding. Short term indicates program activities, program impacts, or program funding that occurs during the current program cycle. Long term indicates program activities, program impacts, or program funding that occurs beyond the current program cycle.

Source-BTU Consumption

Conversion of retail energy forms (kWh, therms) into the BTU required to generate and deliver the energy to the site. This conversion is used to compare the relative impacts of switching between fuel sources at the source or BTU level for the fuel substitution test required for fuel-substitution programs.

Standard Practice Manual (SPM)

The California Standard Practice Manual: Economic Analysis of Demand-side Programs and Projects is jointly issued by the California Public Utilities Commission and the California Energy Commission. The SPM provides the definitions for the standard cost effectiveness tests and their components used for energy efficiency programs. SPM tests are further clarified in CPUC Decisions as cited in the Cost-Effectiveness Rules in this Policy Manual.

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[51] D.09-09-047 at p.334

Statewide

Energy efficiency programs or activities that are essentially similar in design and available in all CPUC regulated utility service areas in California.

Third Party/Non-IOU

Non-regulated implementers of ratepayer funded energy efficiency activities.

Total Resource Cost Test (TRC)

The TRC test measures the net resource benefits from the perspective of all ratepayers by combining the net benefits of the program to participants and non-participants. The benefits are the avoided costs of the supply-side resources avoided or deferred. The TRC costs encompass the cost of the measures/equipment installed and the costs incurred by the program administrator. (See SPM link under Attachment A.)

Two-Stage Solicitation Process

A solicitation process that includes two stages; an initial Request for Abstract and a follow-up Request for Proposal phase as described in D.18-01-004, p. 7

Unit Energy Consumption

Unit Energy Consumption (UEC) is the expected annual energy consumption of a technology, group of technologies, or process.

Unit Energy Savings

Unit Energy Savings (UES) is the estimated difference in annual energy consumption between a measure, group of technologies or processes and baseline, expressed as kWh for electric technologies and therms for gas technologies

Upstream Incentives

Incentives provided to manufacturers or retailers of high efficiency products in order to encourage their production and sales, in contrast to the more common downstream incentives, which are provided directly to customers as rebates.

Workpapers

Documentation prepared by the program administrators or program implementers that documents the data, methodologies, and rationale used to develop ex-ante estimates that are not in already fully contained in the Database for Energy Efficiency Resources (DEER) (D.10-04-029, footnote page 20).

Zero Net Energy

Zero Net Energy is defined as the implementation of a combination of building energy efficiency design features and on-site clean distributed generation such that the amount of energy provided by on-site renewable energy sources is equal to the energy consumed by the building annually, at the level of a single "project" seeking development entitlements and building code permits. Definition of zero net energy at this scale enables a wider range of technologies to be considered and deployed, including district heating and cooling systems and/or small-scale renewable energy projects that serve more than one home or business. (D.07-10-032, Footnote 42.)

(END OF APPENDIX B)

APPENDIX C: Cost Categories and Related Cap and Targets

IOU shall reflect all costs associated with the delivery of their energy-efficiency programs in their filings in the energy-efficiency portfolio applications and shall note, where applicable, when the costs are recovered in other proceedings.

The CPUC has established various (hard) caps and (soft) targets as summarized in the table below:

Budget Categories	**Cap**	**Target**
Utility program administrative costs[52]	10 %	
Third-party / Gov't partnership administrative costs[53]		10 %
Marketing & outreach costs[54]		6%
Direct implementation non-incentive (DINI) costs[55]		20 %
Evaluation, measurement & verification (EM&V) costs[56]	4 %	

The IOUs will forecast and report total Administrative, Marketing, Direct Implementation costs by program and subprogram in the cost categories and sub-categories. A detailed characterization of the specific types of costs that are allocated to each of these categories is provided below.

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[52] D.09-09-047, OP 13a and p. 62

[53] D.09-09-047 at p. 63

[54] D.09-09-047, OP 13b and at p. 73

[55] D.09-09-047 OP 13c and at p. 74; D.12-11-015 at p. 101

[56] D.12-11-015 at p. 59; D.09-09-047, COL 6

Utility Administrative Costs

Administrative costs for utility energy efficiency programs (excluding third party and/or local government partnership budgets) are limited to 10 percent of total energy efficiency budgets.

Administrative costs shall not be shifted into any other costs category.

Administrative costs are necessary to support energy efficiency programs but costs must be reasonable and limited to overhead, labor and other costs discusses below needed to implement quality programs with ratepayer funds.

All IOUs shall reflect all labor-related costs associated with the delivery of energy-efficiency programs, as defined at page 49 of D.09-09-047, in their energy-efficiency portfolio filings, and shall clearly delineate where any expenses or costs have been or will be recovered in proceedings other than energy efficiency applications.[57] Administrative costs include the following:[58] [59]

Overhead (G&A Labor/Materials): administrative labor, accounting support, IT services and support, reporting databases, data request responses, CPUC financial audits, regulatory filings support and other ad-hoc support required across all programs.

Labor (Managerial & Clerical): This category includes utility labor costs related to either management or clerical positions directly related to program administration. SDG&E and SoCalGas also add payroll taxes.

Human Resource Support and Development: This includes payroll taxes, payroll support, as well as pensions. [60]

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[57] D.12-11-015 OP 39

[58] D.09-09-047, OP 13a and at p. 50; with additional detail from Attachment A to PG&E AL. 3065-G/3562-E

[59] D.09-09-047 at 50 states that these Administrative Cost categories do not include EM&V or Marketing Outreach

[60] D.09-09-047 at p. 56 says "Attachment 5-A of the December 2008 ruling [the Allowable Costs Attachment] lists payroll tax and pensions as included in the Human resources Support Category."

Travel and Conference fees: This includes labor, travel and fees for conferences.[61] This category includes utility sponsorships for energy efficiency program-specific events or activities such as including membership-based, issue-specific trade organizations that include as a component of membership benefits entry into conferences. However, utility sponsorship fees for major national energy efficiency conferences that provide company recognition or status are prohibited as energy efficiency allowable costs. Such costs shall not be funded with energy efficiency program funding.[62]

CPUC Division of Water and Audits allows travel costs, such as meeting with customers, can to be charged to the applicable program area (i.e., to DINI or to Marketing and Outreach).

Travel costs by IOU staff should be limited, but this will be achieved via the cost targets for marketing. Travel costs to EE conferences and other activities shall be charged to administrative costs with the following exceptions:

Travel costs for DINI activities and marketing can be charged to those respective cost categories

IOU sponsorships of EE conferences (i.e. "platinum" "gold" level donations) be explicitly prohibited from inclusion in energy efficient budgets as administrative costs. IOUs may join membership-benefit issue specific (i.e. HVAC) trade organizations that include as a component of membership benefits entry into conferences. Other staff travel costs to participate in energy efficiency conferences are also allowable administrative costs.

Additional activities charged to the utility administrative cost category include:[63]

Membership dues (i.e., trade organizations)

Reporting database (e.g., CRM,Track It Fast, Program Builder, SMART, etc.)

Facility-related costs

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[61] D.09-09-047 at 50

[62]D.11-04-005 at 20, OP 2

[63]Unless otherwise noted, these details were provided in Attachment A to PG&E AL 3065- G/3562-E (2010-12 EE portfolio compliance filing).

- Supply management function activities to ensure oversight of contractors
- Administering contractor payments for services which are non-incentive related
- Utility administrative cost associated with Local Government Partnerships & Third Party Programs
- Administrative and logistical costs related to workshops on Strategic Planning issues[64]
- Utility administrative costs do not include the following:[65]
- Direct implementation (incentive costs and DINI)
- Marketing and outreach
- Evaluation, measurement and verification
- Administrative costs for third party programs / government partnerships[66]
- Program-specific IT costs charged to the DINI and M&O cost categories (e.g., on-line audit tools).[67]

Direct Implementation Non-Incentive (DINI) Costs

Direct implementation non-incentive (DINI) costs (excluding non-resource and other exempt programs and subprograms) are targeted at 20 percent of the total adopted energy efficiency budgets.[68]

As depicted in the figure below, direct implementation non-incentive (DINI) costs are a subset of direct implementation costs. Direct implementation costs are defined as "costs associated with activities that are a direct interface with the customer or program participant or recipient (e.g., contractor receiving training)."[69] Direct implementation includes two subcategories: (a) rebate and incentive costs and (b) DINI.[70]

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[64] D.09-09-047, OP 14

[65] D.09-09-047 at 50, unless otherwise noted

[66] D.09-09-047 at 63

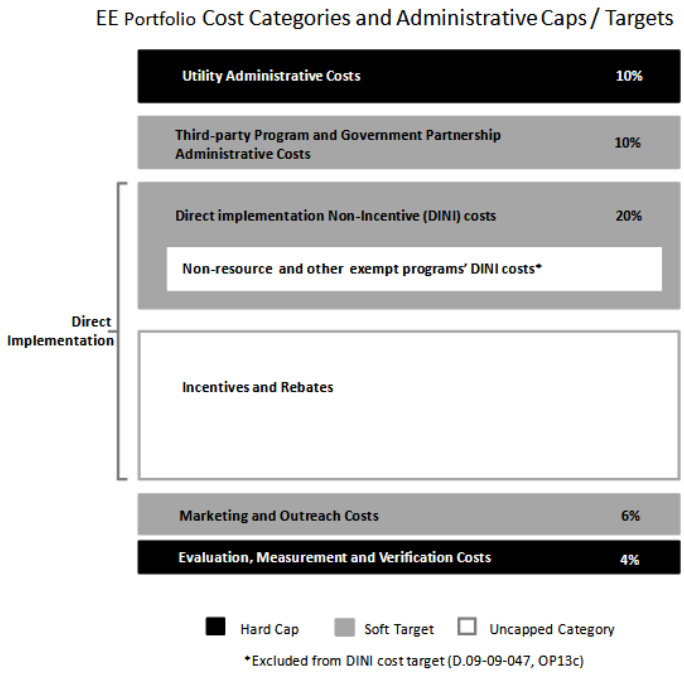
[67] Attachment A to PG&E AL 3065-G/3562-E

[68] D.09-09-047 OP 13c and at p. 74; D.12-11-015 at p. 101

[69] D.09-09-047 at p. 50

[70] D.09-09-047, Table 3, at p. 54, see notes regarding lines C1 and C2

Note: DINI costs have been referred to by the IOUs and the CPUC with various terms such as "non-resource costs,"[71] "direct implementation (non-incentives and rebates),"[72] "program delivery (non-rebates and incentives),"[73]and "implementation – customer services costs."[74]



Activities charged to cost category subject to the DINI target include:[75]

- Employees who have a direct interface with the customer (i.e. Account Executives, Auditors, Engineers, Processors, Inspectors, call center representatives)
- Processing rebate applications
- Inspecting rebated/incentive measures
- Engineering related activities
- Measurement development
- Education and training of contractors/partners/customers

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[71] D.09-09-047 OP13

[72] D.09-09-047, Table 3 at p. 54

[73] D.09-09-047 Tables 5, 6 and 7 at pages 75, 77, 80, respectively

[74] D.12-11-015 at p. 101

[75] Unless otherwise noted these details were provided in Attachment A to PG&E AL 3065- G/3562-E

- Project management activities (i.e. Planning Scope of Work, working with contractors and customers, setting goals, reviewing goals, reacting to market conditions, and responding to customer inquiries (i.e. calls, emails, letters).
- Program planning, development and design
- Customer support
- Energy audits and Continuous Energy Improvement
- Market transformation and long-term strategic plan support
- Compiling and maintaining information (i.e, data, customer records) for projects
- Licensing fees or IT development cost for program specific applications for implementation (e.g., benchmarking tool or project management tool);
- Vacation and sick leave-related to direct implementation labor
- Direct-implementation specific IT costs (e.g., licensing fees or IT development cost for program-specific applications)
- Staff travel to undertake direct implementation-specific work activities (excluding conference participation)
- Program planning/design/project management and information gathering costs related to specific Strategic Plan related non-resource and resource programs[76]
- Programs or subprograms that are exempt from the DINI target include:[77]
- Non-resource programs or subprograms (e.g., Emerging Technologies, Workforce Education and Training, Lighting Market Transformation, Zero Net Energy pilots,

- Integrated Demand Side Management). [78]
- Codes and Standards Program[79]
- Financing programs, including On-Bill Financing Program[80] (excluding revolving loan amounts)

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[76] D.09-09-047, OP 14

[77] See exclusion of these costs in D.09-09-47 OP 13c

[78] D.09-09-047 at p. 50

[79] D.09-09-047 Table 3, at p. 54, see notes regarding C2

[80] Ibid.

- The formula for calculating the DINI cost percentage subject to the target is as follows:

  [Total DINI cost, excluding REN and CCA programs] – [Exempt DINI program costs]
  [Total IOU budget, excluding REN and CCA programs]

Notes:

- REN and CCA programs are excluded because the IOUs do not manage and/or administer them.
- For exempt programs and subprograms, see examples above.
- Government partnership and third-party programs budgets are included in both the numerator and denominator.
- Statewide ME&O (a non-resource DINI target exempt program) budgets are included in the denominator, whether approved by separate application or not.

Marketing and Outreach Costs

Marketing and outreach costs are targeted at 6 percent of total adopted energy efficiency budgets, subject to the fund-shifting rules specified in this manual.[81] This is not a hard cap, as with administrative costs, but a budget target.[82] Activities charged to this category include:[83]

- Preparing collateral
- Distributing collateral
- Support related to outreach events
- Participating in outreach events
- Advertising, media, newspaper, website, and magazine related marketing activities
- Local government partnership marketing and outreach related to long-term Strategic planning support
- Vacation and sick leave related to marketing labor

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[81] D.09-09-047, OP 13c

[82] D.09-09-047 at p. 73

[83] Attachment A to PG&E AL 3065-G/3562-E

- Marketing-specific IT costs
- Staff travel to undertake marketing-specific work activities (excluding conference participation.)

Third Party Program and Government Partnership Administrative Costs:[84]

The IOUs shall seek to achieve a 10 percent administrative cost target for third party and local government partnership direct costs (i.e., separate from utility costs to administer these programs).[85] The cost target is 10 percent of third party and government partnership budget, rather than 10 percent of the total energy efficiency portfolio (as with the utility administrative cost cap). The IOUs should not be permitted to unduly shift administrative cost cuts onto local government partnerships and third party implementers. Local government partnership and third party program M&O and DINI costs are subject to the 6 percent and 20 percent portfolio cost targets.[86]

Evaluation Measurement and Verification

The adopted EM&V budget is 4 percent of the total portfolio budget, consistent with budgets from prior portfolios.[87] Activities charged to the EM&V budget category include:

- Staff travel to participate in Strategic Plan workshops[88]
- Market, cost assessment and other studies as called for or suggested by the Strategic Plan[89]
- Benefits, payroll tax, and pensions for EM&V labor.[90]

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[84] Attachment A to PG&E AL 3065-G/3562-E

[85] D.09-09-047 at p. 63.

[86] Attachment A to PG&E AL 3065-G/3562-E

[87] D.12-11-015 at p. 59; D.09-09-047, COL 6

[88] Attachment A to PG&E AL 3065-G/3562-E

[89] D.09-09-047, OP 14

[90] Allowable Costs Attachment, Attachment 5-A to December 2008 ACR in A.08-07-021 et al.. Also referenced in Attachment A to PG&E AL 3065-G/3562

APPENDIX D: Phase 2 Workpaper Review

Development, review and approval of Non-DEER workpapers has evolved through several decisions:

1. D.09-09-047 gave Energy Division authority to review and approve Non-DEER workpapers and required ED to develop a process for submittal, review and freezing of non-DEER measures.
2. A.08-07-021 provided a standardized review and approval process for Phase 2 Non-DEER workpapers including
    a. Requirements for utilizing DEER values and methods in the development of Non-DEER measures
    b. A timeline for detailed review that required CPUC staff to perform a preliminary review for additional information within 15 days and the final review within 25 days of receiving the additional review.
    c. A requirement for consideration of the latest evaluation, measurement and verification published studies in the development of ex ante values including energy impacts, cost data, EUL/RUL and NTGR.

The following paragraphs, covering Phase 2 workpaper review are from D.12-05-015[91]:

a. *If Commission Staff agrees with the parameters included in a non-DEER workpaper for a new measure provided by an IOU, Commission Staff will communicate this to the IOU via email and upload it to the Workpaper Project Area on the http://www.deeresources.info website, and the workpaper will become effective on that date.*
b. *If Commission Staff disagrees with or needs more information regarding parameters included in a non-DEER workpaper, Commission Staff will recommend revised parameter values (or request additional information) within 15 days of receipt of a work paper with all necessary information provided by the utility.*

On-line Submission: Workpapers shall be submitted to http://www.deeresources.info at in the Workpaper Project Archive under the Current Workpaper Project Archive project tree. A single file shall be submitted for each workpaper submission. If the workpaper includes additional supporting files, all files shall be archived into a single .zip or

.7z file so that they can be submitted as a single file. The file name shall include the entity's unique ID and title of the workpaper.

If staff does not take any action on a submitted workpaper, it achieves interim approval after 25 days. Staff has 15 days to do a preliminary review of a submitted workpaper and if they require additional information or clarification, they can stop the clock until the information is provided. The clock is then reset, and the staff has 25 days to issue a disposition before a workpaper achieves interim approval.

Posting of Approved Workpapers: Workpapers are posted by the program administrators to the Workpaper Project Archive (WPA). After they are approved, they are posted to www.deeresources.net. Disputes over Staff Recommendations: Submitting entities may not agree with the final staff requirement for workpaper revisions. D.12-05-015 includes a dispute resolution process to address cases where a submitting entity finds staff requirement unacceptable. If the utility finds the revised parameter values unacceptable (and/or any subsequent information exchange does not resolve the disagreements in parameter values), CPUC Staff and the IOU will hold one or more meetings to come to an agreement. If agreement on workpaper parameters is reached through this process, CPUC Staff will upload the workpaper to the Workpaper Project Area on the http://www.deeresources.info website and the workpaper will become effective on that date.

APPENDIX F: Rolling Portfolio Timeline

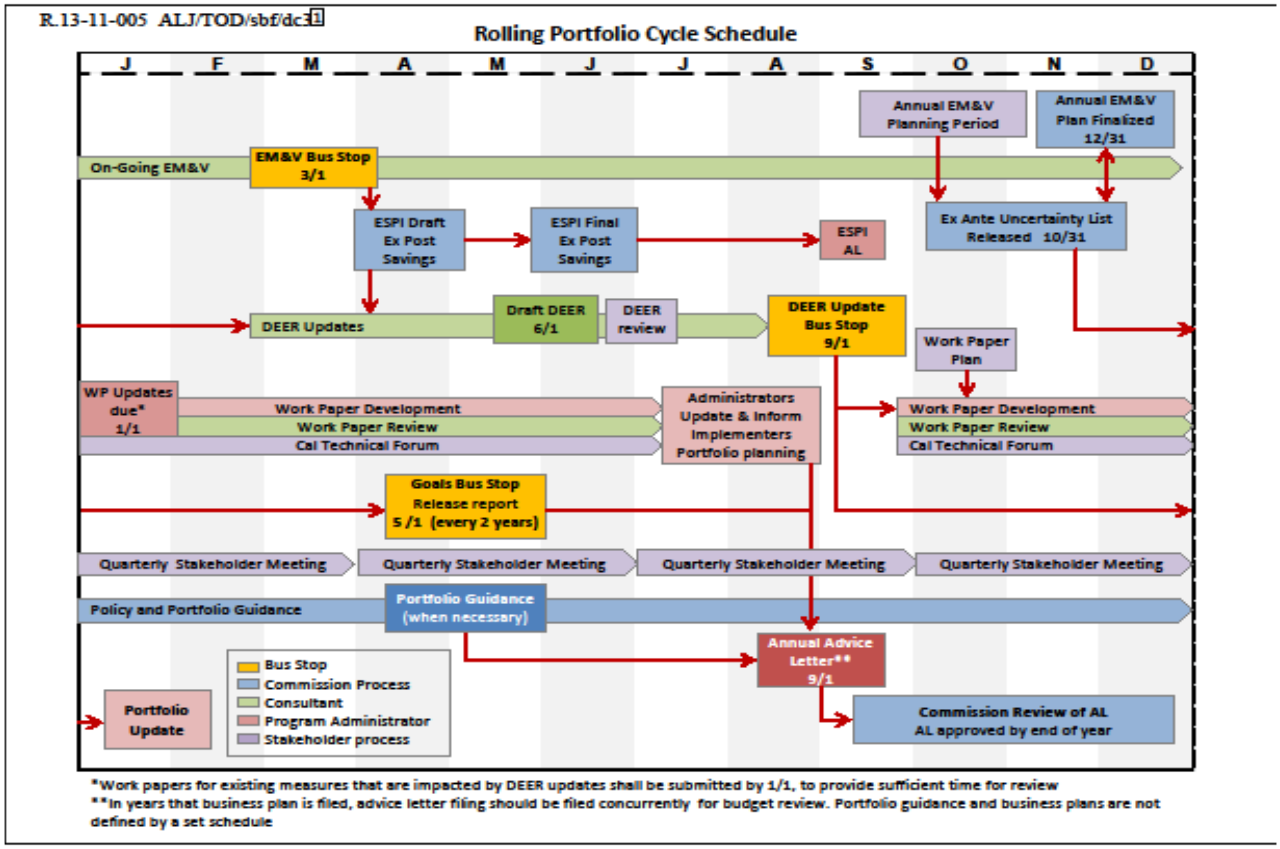


EXHIBIT G

Time & Materials Hourly Rate Schedule

Western Riverside Council of Governments (WRCOG)

	LOW*	HIGH**
Executive Director	$ 250.00	$ 425.00
Environmental Director	$ 200.00	$ 350.00
Finance Director	$ 200.00	$ 350.00
Senior Program Manager	$ 150.00	$ 200.00
Program Manager	$ 125.00	$ 150.00
Senior Analyst	$ 110.00	$ 120.00
Management Analyst	$ 100.00	$ 115.00
Program Assistant	$ 85.00	$ 100.00
REN-Tern	$ 55.00	$ 85.00
Legal Counsel - Best Best & Krieger		
Partner		$ 338.00
Associate		$ 338.00

Coachella Valley Association of Governments (CVAG)

	LOW*	HIGH**
Executive Director	$ 250.00	$ 425.00
Environmental Director	$ 200.00	$ 350.00
Senior Program Manager	$ 150.00	$ 200.00
Program Manager	$ 125.00	$ 150.00
Management Analyst	$ 100.00	$ 125.00
Program Assistant	$ 85.00	$ 100.00
REN-Tern	$ 55.00	$ 85.00
Legal Counsel - Best Best & Krieger		
Partner		
Associate		

San Bernardino Association of Governments (SANBAG)

Low rate is hourly budgeted rate and high rate include fringe and indirect costs.

	LOW*	HIGH**
Executive Director	$ 157.45	$ 475.50
Director of Planning	$ 99.26	$ 299.77
Deputy Director of Planning	$ 66.25	$ 200.08
Chief of AQMP	$ 80.00	$ 241.60
COG & Equity Programs Mgr.	$ 57.28	$ 172.99
AQMP Management Analyst	$ 38.89	$ 117.45
GIS Analyst	$ 33.70	$ 101.77
I-REN Program Manager	$ 48.96	$ 147.86
I-REN Management Analyst	$ 40.28	$ 121.65
Chief Finance Officer	$ 97.57	$ 294.66
Chief of Fiscal Resources	$ 70.43	$ 212.70
Accounting Supervisor	$ 44.59	$ 134.66
Intern	$ 16.00	$ 48.32
In-house Legal Counsel	$ 104.70	$ 316.19

Frontier Energy

Director	$ 240.00
Program Manager (Lead)	$ 148.00
Program Manager	$ 128.00
Program Consultant	$ 128.00
Program Assistant	$ 128.00

BluePoint Planning

Director	$ 175.00
Program Manager	$ 120.00

*LOW - Estimated actual hourly rate

**HIGH - Estimated fully-burdened rate

I-REN Organization

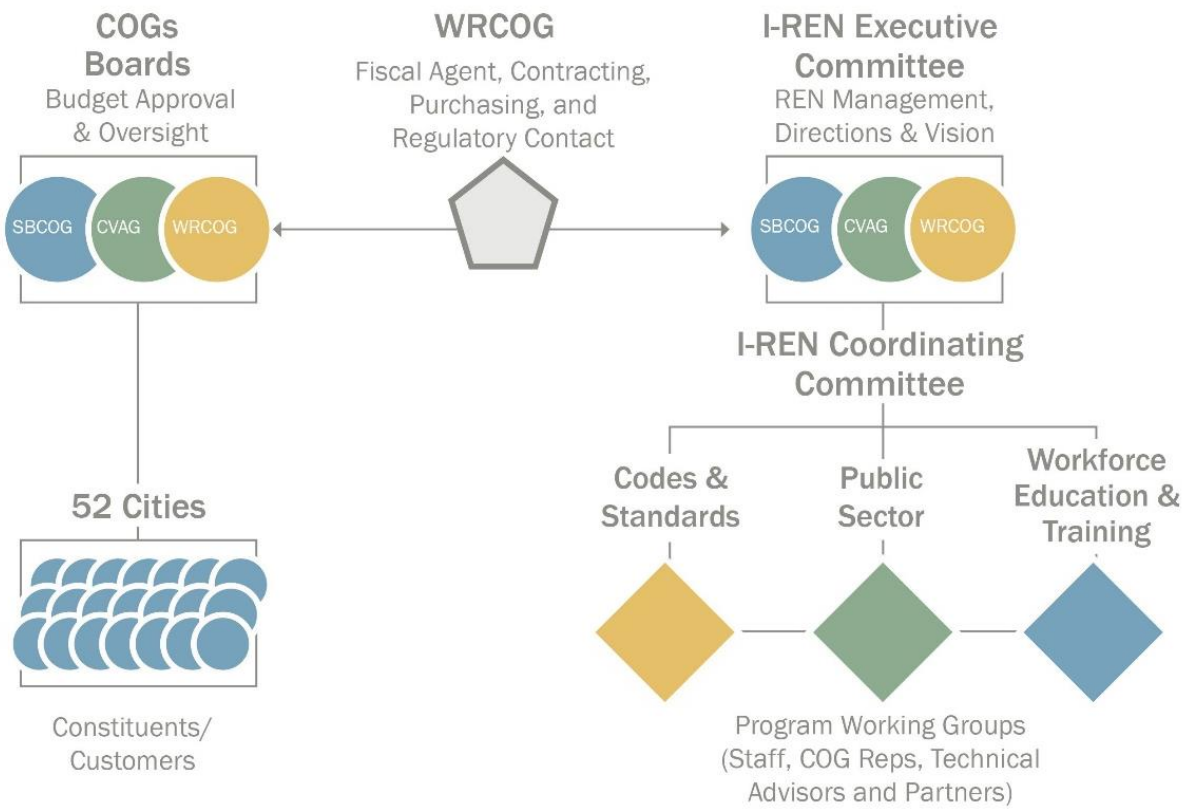


Figure 1-1. I-REN Governance

The I-REN organization builds on the robust and active Committee structure currently used for the three COGs (also referred to herein as the **I-REN governing agencies**). The graphic in Figure 1-1 illustrates the organization and the roles.

The COGs each have an Executive Committee which sets policy and oversees the budgets for the COGs. For I-REN, they will provide an oversight role to ensure accountability and service to the member cities. Representatives from the cities, the County Board of Supervisors, the Municipal Water Districts, and the Tribes collectively have seats on the Executive Committees for WRCOG, CVAG and SBCOG. By working together through the committee structure and utilizing resources, the COGs are cost-effective by reducing duplication of effort and sharing information, enabling strong advocacy and strengthening the Region's standing.

WRCOG will serve as the fiscal agent, purchasing and contracting entity, and primary regulatory contact manager for I-REN. They will not have more decision-making power than the other COGs but will work through the committee structure to ensure equal engagement for the entire region.

Representatives from each COG will in turn be represented on the I-REN Committee and have equal power in I-REN decision making and management. The I-REN Committee will set all strategic direction,

vision, and specific policies related to the operation and management of REN activities, and will jointly consider regulatory issues.

The I-REN Committee will be advised by three programmatic working groups composed of I-REN staff, COG representatives, technical advisors, and partners. The Program Working Groups will focus on program design, implementation, marketing and outreach, and other day-to-day implementation activities. They will provide information, program proposals, and program tracking and monitoring reports to the I-REN Committee on a regular basis to ensure smooth operations and to address any issues or concerns that may arise.

I-REN Vision & Goals

The I-REN governing agencies have collectively developed a vision and three guiding goals to help shape its Business Plan, its future, and anticipated activities:

VISION

I-REN's vision is to connect residents, businesses, and local government to a wide range of energy efficiency resources to increase energy savings and equitable access throughout San Bernardino and Riverside counties.

GOAL 1.

Build capacity and knowledge to enable local governments to effectively leverage energy efficiency services and to demonstrate best practices. (Public Sector Chapter)

GOAL 2.

Ensure there is a trained workforce to support and realize energy efficiency savings goals across sectors. (WE&T Chapter)

GOAL 3.

Work closely with local building departments and the building industry to support, train, and enable long-term streamlining of energy code compliance. (Codes and Standards Chapter)

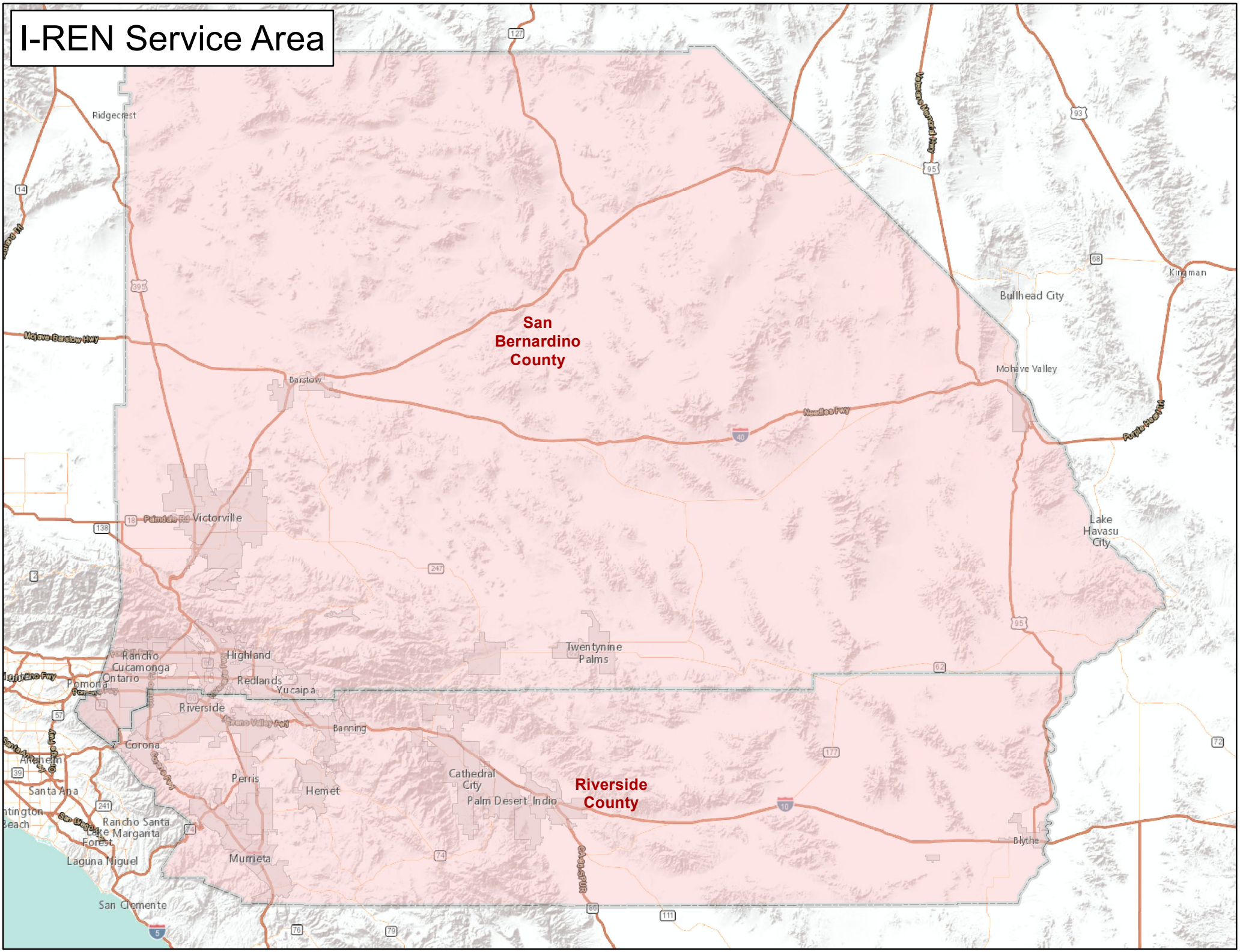
Placeholder: Public Sector Working Group

Placeholder: Workforce Education and Training Working Group

Placeholder: Codes and Standards Working Group

Placeholder: Tribal Working Group

I-REN Service Area



I-REN Service Territory

The Coachella Valley Association of Governments, San Bernardino Council of Governments, and the Western Riverside Council of Governments, collectively make up the Inland Regional Energy Network, who have been working together since 2019. The I-REN service territory covers over 27,000 square miles – an area nearly the size of the state of South Carolina – with a range of communities, populations, and needs. Vast areas of the region are historically underserved by traditional IOU and other PA programs as they are far away from major cities, have a lack of an available workforce, and socio-economic barriers make them less attractive to travel to provide services. I-REN, as a local government coalition, has a mission to equitably serve these outlying communities which are already part of the I-REN governing agencies' organizational structures.

The Riverside-San Bernardino-Ontario Metropolitan Statistical Area (MSA)[1], which includes the counties of Riverside and San Bernardino, makes up approximately 11% of California's total population, but their square mileage comprises approximately 17% of California's land area. While the Los Angeles and San Francisco MSAs are the largest in the state by population, the Riverside-San Bernardino-Ontario MSA is a very close third – yet it has had historically low participation in energy efficiency programs and has been historically underserved by utility energy efficiency programs. This may be due in part to its distance of two- to three-hours to the Los Angeles MSA – many utility-run programs are administered from within the Los Angeles MSA, and naturally the program implementers focus their resources locally. I-REN is excited for the opportunity to administer regionally appropriate resources locally within the third-largest MSA in the state.

- Riverside County: Population 2,189,641 (2010 Census), covering 7,208 square miles; population density of 304 people/square mile
- San Bernardino County: Population 2,035,210, covering 20,105 square miles (largest county in the United States by area); population density of 101 people/square mile

Figure 1-1. I-REN Service Territory Map[2]

[1] "Metropolitan Statistical Area (MSA) is a geographical area with a population of 50,000 or more, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties." Definition Provided by the California Employment Development Department.

[2] Source: https://censusreporter.org/profiles/31000US40140-riverside-san-bernardino-ontario-ca-metro-area/

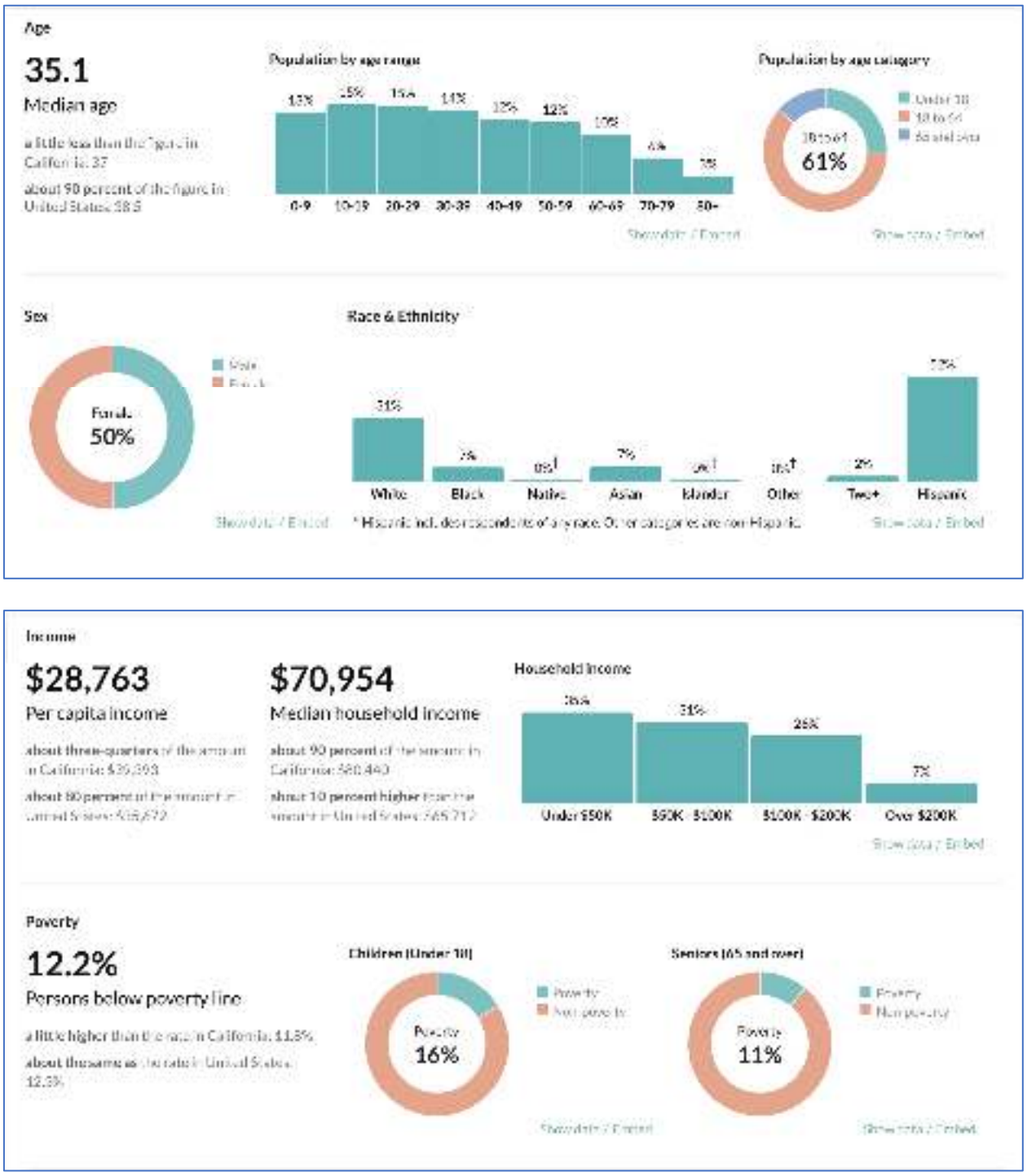


Figure 1-2. Riverside-San Bernardino-Ontario MSA Demographic & Income Data[3]

[3] Source: https://censusreporter.org/profiles/31000US40140-riverside-san-bernardino-ontario-ca-metro-area/

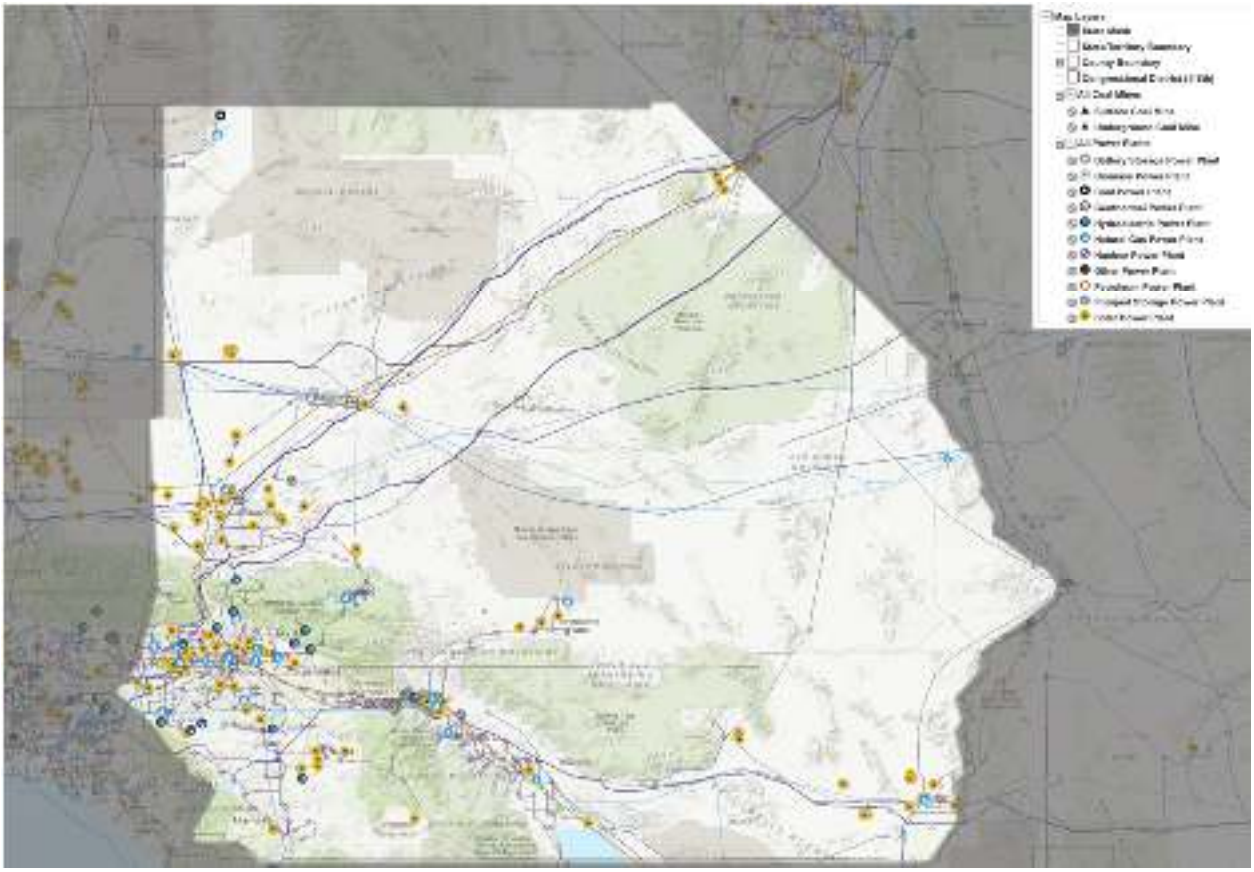


Figure 1-3. I-REN Territory Energy Infrastructure[4]

The I-REN region is a diverse geography with mountains, deserts, distinct urban areas, tribal areas, and vibrant communities and towns. The region is served by SCE and SoCalGas and is included in the SoCalREN territory. While there are multiple Program Administrators (PAs) in the region, the actual services to local communities are limited and do not meet the needs of this growing area. The reduction of Local Government Partnerships (LGPs) in particular is impacting the ability of the local jurisdictions to aggressively reduce energy use in local government buildings and build the capacity to tackle the State's greenhouse gas (GHG) reduction goals.

The illustration in Figure 1-4 from Energy Information Administration (EIA) is a good demonstration of how the Inland Empire is used as a bridge for services to the large Los Angeles MSA, with pipelines, powerlines, etc. crisscrossing the territory. State goals included in SB 350, AB/SB32, and others all point to the need to increase the services and opportunities for energy savings in the inland areas of California. In the Summer of 2020, the California Independent System Operator (CAISO) and SCE issued multiple heat wave warnings and flex alerts, asking all energy consumers to reduce usage during stressful times on the electricity grid. Coupled with massive fire events across the state, it is even more important for I-REN to implement and assist its communities, and thus, the State.

[4] Source: Energy Information Administration (EIA) https://www.eia.gov/state/?sid=CA

I-REN's service territory also includes several relatively new cities incorporated in recent years. The region's continued growth and increasingly hot and dry weather will likely result in an overall increase in energy consumption in the coming years. In addition, the I-REN territory has large sections of the region that are characterized as disadvantaged communities (DACs) as defined by SB 535, tribal lands, or with a population with a median income 60% below the statewide median, as seen in the maps and data in the I-REN Business Plan[5]. These factors contribute to a substantial need for focused, consistent, local engagement to serve these communities and to help reduce energy consumption over time.

The Inland Empire has economic strengths with a growing economy pre-COVID, but also has many socioeconomic vulnerabilities. The I-REN territory has approximately 16% living in poverty (compared to 14.7% living in poverty in California), with 38% of those being Hispanic and 34% white.[6] With I-REN's service territory being among the hottest and driest regions of California and harsh climate conditions in summer months, vulnerable populations such as children, the elderly, and low-to-moderate income families benefit from public gathering spaces that offer protection from extreme heat. Further, these conditions require air conditioning in most buildings resulting in high utility bills and energy use.

I-REN's public sector jurisdictions include two counties, 52 cities, 115 special districts, unincorporated communities, and 15 tribal areas, ranging in size from less than a dozen tribal members in the Augustine Band of Cahuilla Indians to more than 300,000 residents in the City of Riverside.[7] For additional information and analysis on I-REN's public sector jurisdictions, please see Appendix B: Public Sector Market Analysis[8].

When single family residential new construction slowed elsewhere in California after the 2008 housing crisis, the Inland Empire continued to see new single family housing starts due to the greater availability and lower cost of developable land.[9] Data from the 2018 US Census indicates that the I-REN territory represents 13% of California's total new residential permits, despite having 11.6% of the population. In 2018, more than 78% of new permits in the Riverside-San Bernardino-Ontario, CA MSA were for single family homes. Data from the 2018 US Census indicates that the I-REN territory represents 13% of California's total new residential permits, despite having 11.6% of the population.[10] In 2018, more than 78% of new permits in the Riverside-San Bernardino-Ontario, CA MSA were for single family homes.

The California Finance Department reported that between 2010 and 2019, the Inland Empire added 407,476 people to reach a population of 4,632,327.[11] The region has seen steady growth over the last decade following the Great Recession, as people moved away from coastal areas with a higher cost of living.

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[5] I-REN Business Plan, 1.11-1.13.
[6] https://datausa.io/profile/geo/riverside-san-bernardino-ontario-ca#economy
[7] U.S. Census Bureau, 2010.
[8] I-REN Business Plan, B.1.
[9] Building the Future: Construction in Southern California. LAEDC Institute for Applied Economics. September 2016. Available online. Accessed October 2020. https://laedc.org/wp-content/uploads/2016/12/Construction_FINAL_20161110.pdf
[10] 2018 Annual Permits Data for New Houses. https://www.census.gov/construction/bps/msaannual.html
[11] Inland Empire Quarterly Economic Report. Economics & Politics, Inc. October 2019. Available Online. Accessed October 2020. http://www.johnhusing.com/QER%20Reports/QER%20October%202019.pdf

CVAG's member agencies include City of Blythe, City of Cathedral City, City of Coachella, City of Desert Hot Springs, City of Indian Wells, City of Indio, City of La Quinta, City of Palm Desert, City of Palm Springs, City of Rancho Mirage, Agua Caliente Band of Cahuilla Indians, Cabazon Band of Mission Indians, and Torrez Martinez Tribe.

SANBAG/SBCOG's member agencies include the Town of Apple Valley, City of Adelanto, City of Barstow, City of Big Bear Lake, City of Chino, City of Chino Hills, City of Colton, City of Fontana, City of Grand Terrace, City of Hesperia, City of Highland, City of Loma Linda, City of Montclair, City of Needles, City of Ontario, City of Rancho Cucamonga, City of Redlands, City of Rialto, City of San Bernardino, City of Twentynine Palms, City of Upland, City of Victorville, City of Yucaipa, the Town of Yucca Valley.

WRCOG's member agencies include The County of Riverside , the City of Banning, the City of Beaumont, the City of Calimesa, the City of Canyon Lake, the City of Corona, the City of Eastvale, City of Hemet, the City of Jurupa Valley, the City of Lake Elsinore, the City of Menifee, the City of Moreno Valley, the City of Murrieta, the City of Norco, City of Perris, the City of Riverside, the City of San Jacinto, the City of Temecula, the City of Wildomar, the Eastern Municipal Water District, the Western Municipal Water District, and the Riverside County Superintendent of Schools.

I-REN Strategic Planning: Detailed Timeline

Task	Dec '22	Jan '23	Feb	Mar	Apr	May	Jun	Jul	Aug
Project Team Meetings	#1	#2	#3		#4	#5	#6		
Executive Committee Meetings		Kickoff		#1	#2			#3	
Background Materials Review (BPP)									
Survey Review + Finalizing (I-REN)									
Survey Outreach + Data Collection									
Stakeholder Interviews									
Existing Conditions Presentation (BPP)									
Draft Equity and Climate Criteria / Guardrails (BPP)									
Equity and Climate Criteria / Guardrails Review (I-REN)									
Strategic Plan Framework Development (BPP)									
Strategic Plan Framework Review (I-REN)									
Draft Strategic Plan + Implementation Plan (BPP)									
Draft Strategic Plan Review (I-REN)									
Final Strategic Plan									

Proposed Project Team Meeting Dates:

Meeting #1: December 5, 2022 (done)
Meeting #2: January 4, 2023 (done)
Meeting #3: February 13, 2022, 1-2:30pm
Meeting #4: April 3, 2023, 1-3pm
Meeting #5: May 15, 2023, 1-2:30pm
Meeting #6: June 12, 2023, 1-3pm

Proposed Executive Commitee Meeting Dates:

Kickoff Meeting: January 17 (done)
Meeting #1: March 21 ***BPP in-person**
Meeting #2: April 18 - BPP virtual
Meeting #3: July 18 - BPP virtual

All dates above align with regularly scheduled Executive Committee meetings.

INLAND REGIONAL ENERGY NETWORK

Placeholder: Anticipated Program Elements

Placeholder: Program Manuals

Placeholder:
CPUC Reporting

Placeholder:
Annual Reports
from other RENs

BayREN
3C REN
SoCal REN

PUBLIC UTILITIES COMMISSION
505 Van Ness Avenue
San Francisco CA 94102-3298

Western Riverside Council Of Governments
ELC (Corp ID 246)
Status of Advice Letter 1E/1G
As of March 1, 2022

Subject: Inland Regional Energy Network, Southern California Edison, SoCalGas, and Southern California Regional Energy Network 2022 Joint Cooperation Memo

Division Assigned: Energy

Date Filed: 01-21-2022

Date to Calendar: 01-26-2022

Authorizing Documents: D1805041

Authorizing Documents: D2111013

Disposition:	**Accepted**
Effective Date:	**02-28-2022**

Resolution Required: No

Resolution Number: None

Commission Meeting Date: None

CPUC Contact Information:

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STATE OF CALIFORNIA **GAVIN NEWSOM,** *Governor*

PUBLIC UTILITIES COMMISSION
505 Van Ness Avenue
San Francisco CA 94102-3298

To: Energy Company Filing Advice Letter

From: Energy Division PAL Coordinator

Subject: Your Advice Letter Filing

The Energy Division of the California Public Utilities Commission has processed your recent Advice Letter (AL) filing and is returning an AL status certificate for your records.

The AL status certificate indicates:

Advice Letter Number
Name of Filer
CPUC Corporate ID number of Filer
Subject of Filing
Date Filed
Disposition of Filing (Accepted, Rejected, Withdrawn, etc.)
Effective Date of Filing
Other Miscellaneous Information (e.g., Resolution, if applicable, etc.)

The Energy Division has made no changes to your copy of the Advice Letter Filing; please review your Advice Letter Filing with the information contained in the AL status certificate, and update your Advice Letter and tariff records accordingly.

All inquiries to the California Public Utilities Commission on the status of your Advice Letter Filing will be answered by Energy Division staff based on the information contained in the Energy Division's PAL database from which the AL status certificate is generated. If you have any questions on this matter please contact the:

Energy Division's Tariff Unit by e-mail to
edtariffunit@cpuc.ca.gov

Attachment A

Inland Regional Energy Network, Southern California Edison, SoCalGas®, and Southern California Regional Energy Network

2022 Joint Cooperation Memo

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I. SUMMARY OF I-REN, SOCALREN, SCE, AND SOCALGAS PORTFOLIO COORDINATION

D.18-05-041 and D.21-11-013 require Program Administrators (PAs) to submit a joint cooperation memorandum (JCM) between Energy Efficiency (EE) PAs with overlapping service areas. Specifically, the directive states: "We will require the PAs (RENs, IOUs, and CCAs) to develop a joint cooperation memo to demonstrate how they will avoid or minimize duplication for programs that address a common sector (e.g., residential or commercial) but pursue different activities, pilots that are intended to test new or different delivery models for scalability, and/or programs that otherwise exhibit a high likelihood of overlap or duplication and are not targeted at hard-to-reach customers. For such programs, each PA must explicitly identify and discuss how its activities are complementary and not duplicative of other PAs' planned activities."[1]

The I-REN, SoCalREN, SCE, and SoCalGas' (hereinafter referred to as the "Joint PAs") 2022 portfolio will focus on collaboration with respect to the Joint PAs' overlapping territories, as I-REN begins to contract implementers and launch its first ratepayer-funded energy efficiency programs as a new PA. As part of the Joint PAs' focused transition to performance-based and comparatively cost-effective and cost-efficient 2022 portfolios, the Joint PAs will be deepening collaboration to ensure that their respective overlapping regional programs do not result in unnecessary duplication or cause customer confusion. PAs can derive additional value by providing information and referrals to programs across all program implementers, including those outside each other's implementation focus.

[1] See D.18-05-041, p. 97

In addition, the Joint PAs will use 2022 to continue to conduct ongoing performance assessments, introduce program administrative and implementation adjustments to reduce costs and increase energy savings, and optimize performance of all their portfolios.

Details on how each of the Joint PAs' overlapping sector programs will collaborate between each PA, as necessary to comply with the Commission's directives, are provided below in the following section.

II. SUMMARY OF I-REN BUSINESS PLAN SECTORS

A. PUBLIC SECTOR

I-REN's public sector offerings will serve the members of the three Councils of Government (COGs) represented in I-REN, including the Coachella Valley Association of Governments (CVAG), San Bernardino Associated Governments (SANBAG), Western Riverside Council of Governments (WRCOG), and the cities, school districts, water districts, special districts, and tribal communities they represent. These regional programs will target, but not be limited to, upgrades to existing public buildings and facilities with high energy use and older equipment. While the offerings will consider all public building types, there will be a focus on community-serving buildings such as community centers, libraries, senior centers, schools, and fire and police buildings. Through energy efficiency projects in these facilities, I-REN can provide benefits that will flow to disadvantaged, low income, and other vulnerable communities. The I-REN programs will be multi-beneficial in nature, layering energy efficiency strategies with greenhouse gas reductions, community resilience and climate adaptation measures.

I-REN's local governments have limited capacity to complete energy upgrades and are challenged to maintain and upgrade these facilities due to lack of funding for capital

improvements, a lack of awareness related to energy efficiency and other energy efficiency program opportunities, limited time and staff resources, along with conflicting priorities. Further, State mandates such as building energy benchmarking (AB 802) requirements, energy code compliance, and climate adaptation planning are additional unfunded regulations and requirements on local governments and are difficult to meet given competing priorities. These challenges are exacerbated now due to the COVID-19 pandemic, the associated economic downturn and increased pressure on local government agencies to respond to a variety of issues.

To address these challenges, I-REN will leverage its existing public sector partnerships and networks across the region to offer technical assistance, implement resource program options, and improve access to financing. Implementing these initiatives will further I-REN's goals of encouraging resilience and continuous capacity building for local governments, thereby strengthening their ability to serve their community through energy efficiency projects in their own facilities, while also saving on building operations costs and contributing to local and statewide goals for energy savings, climate resilience, and greenhouse gas emissions reduction.

1. Summary of I-REN's Public Sector Program Objectives

a. Local governments have support and resources to develop and implement their strategic energy plans and energy efficiency projects.

b. Help local governments afford and finance a range of energy efficiency upgrades through innovative financing options.

B. CODES AND STANDARDS SECTOR

I-REN is proposing a dynamic and targeted set of offerings for the Codes and Standards (C&S) Sector to assist its local government agencies in better understanding and enforcing

energy building codes. The I-REN's Codes and Standards program (IREN-CS-001) will consist of two components: training and education, and technical support. In addition, I-REN will support the region's building industry to better conform to and implement these codes. This could include but is not limited to identifying gaps in training and education and code compliance, supporting enforcement, and working with the Statewide IOU C&S Compliance Improvement Team to ensure that statewide, CEC-vetted, consistent support is provided to their constituents. I-REN may also offer outreach for compliance support to non-electric IOU areas served by SoCalGas that include the City of Riverside and the Imperial Irrigation District (IID) service area. Should I-REN serve areas that are served by a single IOU, I-REN will coordinate with SoCalGas as the fiscal and contracting agent. Compliance with California Energy Code (Title 24, Part 6) and California Green Building Standards Code (Title 24, Part 11) is required for new construction of, and additions and alterations to, residential and nonresidential buildings.

The authorities having jurisdiction or "AHJs" that provide permits for these projects and enforce codes and standards are found at the city and county level and are expected to enforce the California Energy Code without additional state budget resources. Increased contractor compliance with the Energy Code, particularly related to residential HVAC, is identified as an important strategy to increase energy efficiency and home safety. The CEC has established a goal to increase compliance by 80% by 2021.[2]

Energy code enforcement has historically been difficult for local jurisdictions, particularly smaller communities with fewer resources. Conflicting priorities and a focus on life

[2] California Energy Commission, "2019 California Energy Efficiency Action Plan," December 2019, page 40.

and safety codes relegates energy code to a secondary (or tertiary) position. I-REN's service territory includes many AHJs that face significant challenges in enforcing energy codes and standards with their current resources and capacity. These jurisdictions are small in population size, geographically dispersed, challenged by extreme climate conditions, and disadvantaged by pollution and other factors. I-REN has significant opportunity to support compliance and enforcement, to ensure building department knowledge, awareness, and realization of energy-savings measures.

As an organization led by and dedicated to serving local governments, I-REN can provide flexible and adaptable solutions to help bridge the gap and assist local jurisdictions, including but not limited to jurisdictions outside of IOU service areas . I-REN's C&S initiatives will offer locally focused training, education, and tools to support codes and standards implementation, gap filling, code enforcement, and compliance activities. Locally-focused training and educational resources will be informed by and targeted specifically to address the needs of jurisdictions in the region, which will be identified during activities related to Tactic 3.3.1: Identify and address the areas of greatest need for improved code compliance, in collaboration with local governments and the building industry, as described in I-REN's Business Plan[3] approved in D.21-11-013. To ensure statewide consistency in compliance improvement support I-REN will coordinate and collaborate with the IOU C&S team.

[3] Motion of the Western Riverside Council of Governments on Behalf of the Inland Regional Energy Network (I-REN), for Approval of its Energy Efficiency Rolling Portfolio Business Plan and Budget, p. 3.20.

1. **Summary of I-REN's Codes and Standards Program Objectives**

    a) Improve the understanding of energy efficiency and fuel substitution codes and standards among local building departments and the building industry to increase implementation and compliance.

    b) Make code compliance a valuable element of the region's energy efficiency and decarbonization goal attainment with engagement regionwide.

    c) Deliver locally informed resources and tools that streamline code compliance and enforcement and increase permit closeout.

C. WORKFORCE EDUCATION AND TRAINING SECTOR

The I-REN's Workforce Education and Training program (IREN-WET-001) will consist of two components: training and education, and workforce development. Workforce Education and Training (WE&T) initiatives may now be more important than ever due to the COVID-19 pandemic the U.S. faced for the majority of 2020 and continued to face throughout 2021. As a locally-focused and locally-led advocate for economic development in the Inland Empire, I-REN is distinct in its ability to respond to this crisis and help support the region's recovery. The COGs that make up I-REN's governing agencies have direct connections to local governments and community stakeholders to make this effort as effective as possible.

Agility and collaboration will be required to mount a response to the economic devastation caused by the pandemic. I-REN, as a consortium of San Bernardino and Riverside government representatives, can effectively link to local needs, workforce providers, and employers to create a more robust environment for job creation and skills development. Employment and training are issues that have specific opportunities and challenges that need to

be addressed by those who are in the area and connected directly to the range of potential actors. This is also a long-term need that will require relationship building and trust building with underserved communities, and the existing providers.

I-REN will serve as a vital link between workforce skills and training providers such as community colleges and employers to build a more robust market and increase the number of skilled EE contractors in the Inland Empire. These activities will promote job market recovery and progress toward statewide goals regarding energy efficiency, air quality, and support for hard-to-reach (HTR), underserved, rural, tribal, and disadvantaged communities (DACs). Both Senate Bill (SB) 350 and SB 535 prioritize these communities for initiatives to improve air quality, increase energy efficiency, and address economic conditions. SB 350 emphasizes workforce development and increased project penetration in underserved communities.[4] I-REN has an opportunity to support these goals through its WE&T initiatives.

1. **Summary of I-REN's Workforce and Education Sector Program Objectives**
    a. Create a robust local network of training programs that increase capacity, knowledge, and awareness of energy efficiency as a valuable component of the building industry.

    b. Increase the number of skilled energy efficiency workers in the region.

[4] California Senate Bill 350, Sec. 8.25943.a.1;.c.7-8.

III. SUMMARY OF I-REN PORTFOLIO OF PROGRAMS OFFERED FOR 2022 AND COMPARABLE PARTNER PROGRAM ADMINISTRATORS 2022 PROGRAMS

A. PUBLIC SECTOR—TECHNICAL ASSISTANCE AND STRATEGIC ENERGY PLANNING – IREN-PUBL-001

I-REN's Public Sector Technical Assistance and Strategic Energy Planning Program will provide short-term and mid-term technical support for local governments, special districts, school districts, and tribes to increase energy efficiency in publicly-owned facilities. The program will provide additional support and technical services to design high performing, energy efficient buildings.

The program will implement a strategy of developing a regional Building Upgrade Concierge (BUC) for local governments, special districts, and tribal communities with technical guidance and tools to inform and enable priority energy improvements. I-REN will provide person-to-person support for local governments to get higher levels of assistance and support for their energy efficiency projects, through concierge-style support to help fill gaps in staff capacity and resources at these local government jurisdictions.

I-REN's technical assistance support will build local government's capacity to tackle complex projects, from helping with benchmarking to navigating options and approaches for maximizing their investments and energy savings. I-REN will offer person-to-person support to help these local governments in making efficient equipment purchases and to implement energy efficiency projects. Resulting energy bill savings will benefit local governments and contribute to both local and statewide goals for energy efficiency and greenhouse gas reduction.

I-REN will also develop or enhance strategic energy plans to connect local government goals related to climate, resilience, and economic development to energy efficiency programs and adoption. Through this tactic I-REN will assess the current state of strategic energy planning and provide technical assistance to begin the process or help move the process forward, working in collaboration with jurisdiction stakeholders.

In addition, I-REN will create resources for the public sector to tap into EE and distributed energy resources programs offered by other providers and IOUs, acting as a clearinghouse for information about energy efficiency programs available in the region for the public sector, and will create and promote tools and resources to increase energy efficiency program participation among their constituents.

1. **Summary of I-REN's Technical Assistance and Strategic Energy Planning Program Objectives**
    - **a)** Local governments have support and resources to develop and implement their strategic energy plans and energy efficiency projects.

2. **Summary of Program Differentiation**

The following table provides a summary of the PAs' respective Technical Assistance and Strategic Energy Planning programs.

Table 1: I-REN, SoCalREN, SCE, and SoCalGas Technical Assistance and Strategic Energy Planning Program Summary

Program Parameters	I-REN	SoCalREN	SCE Local Public Third-Party Program	SoCalGas
Target Audience(s)	• Counties of Riverside and San Bernardino • Cities, school districts, water districts, special districts, tribal communities • Disadvantaged, low income, other vulnerable communities • Community centers, libraries, senior centers, schools, fire and police buildings • Educational institutions	All eligible Public Agencies served by SCE and/or SCG including: Cities, counties, tribes, K–12 schools, local governments, hospitals and hospital districts, water districts, wastewater districts, sanitation districts, ports, airports, and other special districts.	The program design for SCE's Local Public Sector Third-Party Program is not yet available. The Advice Letter (AL) for SCE's Local Public Sector Third-Party Program is being submitted in Q1 2022, and is pending review and approval from the CPUC. Program design will be available upon approval of the AL.	Eligible Public Sector customers which include cities, counties, public agencies, special districts (public water districts, health districts, waste treatment/water districts, etc.), K-12 school districts, High Education (UC/CSU, Community Colleges) and federal entities (federal agencies, US military facilities and Indian tribes) DAC/HTR Communities, Low income communities
Resource or Non-Resource	Non-resource	Non-resource	Resource	Resource and non-resource
Eligible Measures	n/a	n/a	TBD	Deemed and custom measures
2022 Budget	$3,102,902	$12,240,078*	$5,181,133*	$8,278,856 *

* SoCalREN, SCE and SoCalGas 2022 budgets provided herein are estimates merely for reference only. The final budgets are subject to Commission approval of 2022-23 BBAL Advice Letter.

I-REN will offer person-to-person concierge technical support services to serve the needs of public sector customers in its territory, including but not limited to strategic energy planning

and procurement and project management assistance. I-REN will focus on underserved local governments including tribal communities with targeted non-resource efforts to drive participation to IOU programs and use information technology to help improve public sector customers' and local governments' access to energy efficiency opportunities. While the program will be open to all public building types, there will be a focus on community-serving buildings such as community centers, libraries, senior centers, schools, and fire and police buildings. I-REN will leverage its existing public sector partnerships and networks across the region to deliver personalized services through this program. Location of services in Riverside and San Bernardino counties, especially in underserved jurisdictions, and a more localized focus will differentiate I-REN's program from other comparable offerings.

The following table compares the key program parameters of PAs' public sector technical assistance and strategic energy planning programs.

Table 2: Technical Assistance and Strategic Energy Planning Program Comparison

Program Parameters	I-REN	SoCalREN	SCE	SoCalGas
Types of Public Agencies Served	• Members of the I-REN COGs, counties, cities, school districts, water districts, special districts, and tribal communities • Hard-to-reach, disadvantaged, low income, and other vulnerable communities • Public sector facilities, community centers, libraries,	All eligible Public Agencies including but not limited to: • Cities • Counties • Water/ wastewater Districts • K–12 schools • Special Districts • Tribes	• Local Governments • Federal Government • Special Districts • Tribal Governments (non-residential only) • Public and Private Education limited to: • K-12 schools, both public and private	• All eligible Public Agencies that include cities, counties, various public agencies, special districts, K-12 schools, CA State agencies and high-ed institutions (by SW Programs); federal agencies and Indian tribes • DAC/HTR Communities, Low-income customers/communities (by SoCalGas' Low Income Programs)

Program Parameters	I-REN	SoCalREN	SCE	SoCalGas
	senior centers, schools, and fire and police buildings • Educational institutions		universities, colleges, and trade schools	
Resource/ Non-resource	Non-resource	Non-resource	Resource	Resource and non-Resource
Procurement Assistance	Support public agency staff in navigating procurement and approval process	Procurement and project delivery option analysis; Access and extensive support to both customized and turnkey procurement approaches for energy projects; Proposal and bid analysis; Development of contractor scope of work with performance specifications; Contractor cost estimate review.	TBD	
Technical Assistance	Strategic energy planning; benchmarking; technical support to assess project options;	Customized technical engineering support from project identification to completion, including investment grade audits to identify all energy saving opportunities, technical performance specifications and	TBD	Technical assistance for EE opportunities and EE project scoping and development; Benchmarking support; Engineering support

Program Parameters	I-REN	SoCalREN	SCE	SoCalGas
		provide construction management support.		
Financial Support	Provide information on I-REN financing options and other PA offerings	Financial Analysis for projects to compare different financing options; Support with financing and incentive applications and process; Assistance with non-ratepayer funded financing; Access to financial advisory services.	On-Bill Financing	Support for financing and incentive application through account representatives or 3P Implementers; OBF zero-interest financing; SW Financing offerings
Access to Energy Data	Benchmarking and energy modeling support	Access to on-demand energy data and customized reports to communicate data; Benchmarking support including AB 802 compliance; Detailed facility TOU load profiles and insights.	Energy Data Request Program (EDRP); Green Button Connect My Data; CEC Building Benchmarking (Energy Star Portfolio Manager) support; Energy Atlas/CATALENA	Agency usage-level data on request; Aggregated community data on request (EDRP); Energy Star PM support; Energy Atlas/CATALENA (under development); Automated electronic bill data delivery via secure file transfer protocol
Energy Project Expertise to Implement Projects	Support public agency decisionmakers and staff with concierge-style project management support	Provides support at each stage to each participating agency through an assigned Project Manager along with access to engineering and construction support.	TBD	Technical support for EE projects; 3P Resource Program delivery; 3P Direct Install; Program management support to coordinate technical assistance, leverage available 3P program resources and

Program Parameters	I-REN	SoCalREN	SCE	SoCalGas
				engineering services
Community Marketing/Outreach	• Outreach to local jurisdictions and agencies to educate them about the program offerings • Create regionally-focused resources on public sector opportunities • Collaborate with local governments, tribes, and special districts to design and deliver messaging to the community to promote local leadership in energy efficiency	Development and sharing of tools and resources to promote regional and local energy action. Customized support to engage community stakeholders and inspire regional and local energy action; Leverages Regional Partner channels to deliver customized marketing materials adapted to unique community needs.	TBD	Regional Energy Pathways to provide focused outreach and support for all Public Agencies Customized marketing support to engage communities and educate on other EE offerings that includes leveraging Core Program and 3P Program resources 3P programs tailored to Public Sector Funneling SoCalGas Core and 3P program offerings to Public Agencies and the communities served under the jurisdiction
Sharing of Best Practices for Sustainability Efforts	• Convene stakeholders for strategic energy planning • Create local case studies to showcase achievements in the region • Create, distribute and promote regionally-focused tools and resources through e-communicators, social media,	Sub-regional peer-to-peer workshops, Energy Manager Working Groups, and trainings on relevant topics; Access to shared online resources and learning communities; Regular communication and coordination among Regional Partners and Advisory Committee	TBD	Regular communication with customers and engagement in regional events, support and coordinate with 3P programs

Program Parameters	I-REN	SoCalREN	SCE	SoCalGas
	web, and at in-person events.	members to share activities and best practices.		

3. Comparable SoCalREN Program – Public Agency Energy Efficiency Project Delivery Program (EE PDP)

The SoCalREN Public Agency Energy Efficiency Project Delivery Program (EE PDP) is a program that offers services to identify and complete public sector projects that are customized to meet the unique needs of each agency. The Program provides objective, third-party expertise from project start-to-finish to help agencies implement the best measures to maximize energy cost savings. The SoCalREN Public Agency EE PDP is a market support program that channels projects through utility core and third-party programs as well as SoCalREN resource programs (Metered Savings Program and Streamlined Savings Pathway). In addition, SoCalREN's EE PDP assists in the development and sharing of tools and resources through a peer-to-peer network to inspire local energy action.

Services include:

- Energy portfolio analyses and benchmarking support that help identify potential opportunities
- Start-to-finish project management support
- Facility and equipment energy audits

- Exterior lighting, interior lighting, mechanical, and envelope retrofit technical expertise
- Water and wastewater pumping and process optimization retrofits and other measures
- Retro-commissioning support
- Project financing analysis
- Development of contractor scope of work elements with EE performance specifications
- Access to competitively bid specialty contractors
- Construction management support
- Project close-out support and training
- Access to EE tools, resources & peer-to-peer learning opportunities
- Customized support to celebrate project success
- Support in access to financing, including EE financing and grant application services
- Assistance with utility incentive and rebate processing
- Application support for various grant and financing programs including but not limited to: CEC Energy Conservation Assistance Act Loan, SoCalREN's Revolving Savings Fund, CEC CalSHAPE program etc.

4. **Comparable SCE Program – Local Public Sector 3P Solicitation – SCE-13-TP-029**

The program design for SCE's Local Public Sector Third-Party Program currently under solicitation and is not yet available. However, SCE will be submitting an Advice Letter with program details in Q1 2022. This new third-party program will replace SCE's legacy local public sector programs.

5. **Comparable SoCalGas Program – Regional Energy Pathways – SCG3912**

Regional Energy Pathways is a transition from the previous Local Government Partnership (LGP) model. The Regional Energy Pathways builds on the experience and successes of LGP to further the progress in Public Sector and expand a greater reach to all Public Sector customers. The Regional Pathways will deploy more flexible and efficient approaches to engage with all public sector customers in providing valuable programs and services to all public sector customers. Regional Pathways will have assigned Program Manager for each region to maintain and expand valuable relationships with public agencies. This program is committed to providing ongoing outreach and collaboration with public sector customers as trusted resources and reliable partner. Public Sector customers will continue to be served through various Third-Party Programs as well as SoCalGas' Core Programs.

SCG3846 PUB – Small/Medium Public Sector 3P Program

SoCalGas Small/Medium Public Sector 3P Program is a Third-Party program. The 3P program provides a turnkey end-to-end solution for SoCalGas to serve small and medium Public Sector customers. The program provides direct install measures to small and medium Public Sector customers.

SCG3899 PUB – Large Public Sector 3P Program

SoCalGas Large Public Sector 3P Program is a Third Party program currently under solicitation process.

6. Coordination Protocol Between Programs

As a new PA, I-REN has not yet contracted with implementers. Within 60 days of implementer(s) being contracted for the relevant programs, the Joint PAs will reconvene to plan coordination activities. The Joint PAs will coordinate as new and launching programs are contracted and designed in order to minimize duplication of efforts. Technical assistance will be a key area of focus for coordination among the Joint PAs. Additionally, new market support and equity programs might also provide similar services, which must also be closely coordinated.

To address marketing confusion among implementers (both IOU and third-party) the Joint PAs will establish a protocol for program coordination to occur at the COG level. I-REN will invite implementers of Joint PA programs to present to COG audiences to inform and build awareness among members of EE programs. Historically, COGs have served as conveners to IOU programs. I-REN will seek opportunities to leverage existing implementer relationships and be a convener of services for COG members. Not only would this develop potential leads, but it would also bring the best solutions to the customer.

7. Coordination Between Statewide Program(s)

As a new PA, I-REN has not yet contracted with implementers. Within 60 days of implementer(s) being contracted for the relevant programs, the Joint PAs will reconvene to plan coordination activities. The Joint PAs will continue to participate in Energy Division-led Peer Coordination Groups (PCGs). The statewide PCGs enable collaborative statewide discussions regarding all programs across all PAs throughout the state, not just those in Southern California.

Coordination with statewide programs could include but not necessarily be limited to the following:

SCE_SW_IP_Colleges – SW Higher Education Program (UC, CSU. CCC)

The Statewide Higher Education Program, also known as the UC/CSU/CCC Program, is a resource program that will serve the statewide Public Higher Education Institutions such as University of California, California State University, and California Community Colleges energy efficiency needs. The three customer segments being served will be the University of California , California State Universities and California Community Colleges. The objective for this program is to have the third party offer innovative and cost-effective EE opportunities to the three customer segments listed above. This program is scheduled to launch Q3 2022.

SCE_SW_UL – Statewide Lighting Energy Efficiency Program

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

SCE_SW_WP – Statewide Water/Wastewater Pumping Energy Efficiency Program

SCE, on behalf of itself, PG&E, SDG&E, and SCG, as the statewide lead will administer the Statewide Water/Wastewater Pumping Efficiency program through a third-party designed and delivered program. The program targets water extraction, distribution and treatment, waste

water treatment and oil and gas clear water pumping throughout each of the IOU's service territories and comply with the CPUC-established energy efficiency policies within this Solicitation's requirements, as listed in Article 3 of these Solicitation Instructions.

SCG_SW_IP_Colleges PUB-SW-Institutional Partnership: UC/CSU/CCC

The SW Institutional Partnership for UC/CSU/CCC is a SW Third Party program currently under solicitation process. The existing SW UC/CSU/CCC Partnership will continue until the SW Third Party Program launches in later part of 2022.

The University of California/ California State University/ Investor Owned Utility (UC/CSU/IOU) Energy Efficiency Partnership is a statewide program which includes California's four IOU's, PG&E, SCE, Southern California Gas Company (SCG), and SDG&E, as well as the continuation of LA Department of Water and Power (LADWP), in partnership with the UC and CSU. The program generates energy savings through the identification and implementation of energy efficiency projects and through training and education to support those projects. The Partnership consists of three main project types: retrofit, commissioning and new construction.

The California Community Colleges/Investor Owned Utility (CCC/IOU) Energy Efficiency Partnership is a unique, statewide program to achieve immediate and long-term energy savings and peak demand reduction within California's higher education system. The statewide incentive funding for the 2019 program year was utilized to maintain the Partnership program processes and framework established in previous program cycles for sustainable, comprehensive energy management at campuses served by California's four Investor Owned Utilities.

SCG_SW_IP_Gov PUB-SW-Institutional Partnership: DGS & DOC

The SW Institutional Partnership for DGS & DOC is a SW Third Party Program that targets CA State agencies. This new SW Third Party program is administered by PG&E, and is designed and implemented by AESC with support from partners serves state-owned buildings in PG&E, SCE, SoCalGas, and SDG&E service areas which include I-REN service area. The program runs through October 2026. The goal of the program is to help California State Agencies (excluding higher education) reach their Greenhouse Gas (GHG) emission reductions goals while driving towards Zero Net Energy through EE and IDSM project planning, technical support, and financial assistance.

SCG_SW_MCWH SW Midstream Water Heating

SoCalGas SW Midstream Water Heating Program is a SW Third Party program that helps business owners and building managers purchase high-efficiency commercial water heating products at reduced prices and contractors build lower-cost equipment into their bids. Distributors can receive incentives and program support for offering instant point-of-sale rebates to eligible commercial customers of SoCalGas®, Pacific Gas and Electric Company (PG&E®), Southern California Edison (SCE®) or San Diego Gas & Electric (SDG&E®). This program also serves public sector customers for the eligible water heating products.

SCG_SW_FS SW Point-of-Sale Food Service

SoCalGas SW Food Service Program is a SW Third Party program that provides instant rebates for qualifying energy efficient food service equipment through participating dealers. This program also serves public sector customers.

8. Compliance

The following table describes in further detail how I-REN's Public Sector Technical Assistance and Strategic Energy Planning Program satisfies the REN criteria in D.12-11-0115.

Table 3: I-REN's 2022 Public Sector Technical Assistance and Strategic Energy Planning Program Compliance with D.12-11-015

REN Criteria	I-REN Public Sector Technical Assistance and Strategic Energy Planning Program – IREN-PUBL-001
1. Activities IOU cannot or does not intend to undertake	• Building Upgrade Concierge with personalized end-to-end technical assistance, procurement and project management support, capacity-building, and ongoing commissioning support to ensure efficient operations and maintenance. • I-REN has strong existing relationships with, communication channels to, and support from local jurisdictions as an organization made up of local government agencies.
2. Pilot activities where there is no IOU program offering and where there is potential for scalability	n/a
3. Activities in hard-to-reach markets, whether or not there is an IOU program that may overlap	• The program is open to all public sector customers but will target underinvested jurisdictions serving hard-to-reach, DAC, underserved, and ESJ communities where I-REN can help address equity issues such as the unequal access to energy efficiency dollars, the need for additional support and commitment for small and underserved communities, ineffective programs for tribal communities, as well as overall lack of diversity. Many of these communities have been historically underinvested in and have greater needs for facility improvements, particularly community serving facilities such as libraries, community centers and the like. • By supporting energy efficiency projects in these types of facilities, I-REN can provide equitable and locally administered assistance to public sector agencies where benefits will flow directly to disadvantaged and vulnerable communities.

B. PUBLIC SECTOR—PUBLIC BUILDINGS NORMALIZED METERED ENERGY CONSUMPTION (NMEC) PROGRAM – IREN-PUBL-002

I-REN's Public Sector—Public Buildings Normalized Metered Energy Consumption (NMEC) Program is a resource program (in year two of I-REN program administration) to provide incentives and financing for savings based on NMEC achieved over three to five years, with a special focus on HVAC improvements to community-serving buildings.

1. Summary of I-REN's Public Buildings NMEC Program Objectives

a) Allow local governments to leverage an innovative approach that goes beyond code to achieve deep energy savings.

b) Help local governments afford and finance a range of energy efficiency upgrades.

2. Summary of Program Differentiation

The following table provides a summary of the PAs' respective Public Buildings NMEC programs.

Table 4: I-REN, SoCalREN, SCE, and SoCalGas Public Buildings NMEC Programs Summary

Program Parameters	I-REN	SoCalREN	SCE Public Sector Performance-Based Retrofit High Opportunity Program [SCE-13-L0031]	SoCalGas High Opportunity Projects – Metered and Performance Based Retrofits
Target Audience(s)	• Members of the I-REN COGs, counties, cities, school districts, water districts, special districts, and tribal communities	Public Agencies served by SCE and/or SoCalGas: Cities, counties, tribes, local government hospitals and hospital districts,	Public Sector	All eligible Public Sector customers

Program Parameters	I-REN	SoCalREN	SCE Public Sector Performance-Based Retrofit High Opportunity Program [SCE-13-L0031]	SoCalGas High Opportunity Projects – Metered and Performance Based Retrofits
	• Hard-to-reach, disadvantaged, low income, and other vulnerable communities • Community centers, libraries, senior centers, schools, and fire and police buildings • Educational institutions	water districts, K-12 schools, wastewater districts, sanitation districts, ports, airports, and other special districts.		
Resource or Non-Resource	Resource	Resource	Resource	Resource
Eligible Measures	Any measure that reduces energy usage including but not limited to HVAC, controls, foodservice, appliances, water heating, lighting	CMPA Methodology – includes whole building retrofits and behavioral and operational savings.	CMPA Methodology – includes whole building retrofits and behavioral and operational savings	CMPA Methodology – includes whole building retrofit and behavioral and operational savings; NMEC protocol
Budget	$3,185,292	$XXX,XXX*	$562,423*	TBD*

*SoCalREN, SCE and SoCalGas 2022 budgets provided herein are estimates merely for reference only. The final budgets are subject to Commission approval of 2022-23 BBAL Advice Letter.

The following table compares the key program parameters of PAs' public sector NMEC programs.

Table 5: I-REN, SoCalREN, SCE, and SoCalGas Public Buildings NMEC Program Comparison

Program Parameters	I-REN	SoCalREN	SCE Public Sector HOPPs Program	SoCalGas
Eligible Facilities	• Buildings and non-facilities (e.g., exterior lighting) • Special focus on community centers, libraries, senior centers, schools, and fire and police buildings	Eligible facility types per the most recent version of the CPUC NMEC Guidelines	Buildings	Public Sector buildings and non-building facilities or systems
Eligible Agencies	Counties, cities, school districts, water districts, special districts, and tribal communities	• Public Agencies served by SCE and/or SoCalGas: Cities, counties, tribes, local government hospitals and hospital districts, water districts, K-12 schools, wastewater districts, sanitation districts, ports, airports, and other special districts. • Focus on DAC, rural, and low-income communities.	All Public Sector	All Public Sector customers
Eligible Measures	Any measure that reduces energy usage including but not limited to HVAC, controls, foodservice, appliances, water heating, lighting	Any measure that reduces energy usage	Any measure that reduces energy usage, must include at least one retrofit	Any measure that reduces energy usage to achieve 20% savings and a minimum of 7,000 Therms and suitable for NMEC feasibility
Technical Assistance	Project scope development, procurement assistance, project	Modeling and M&V Plan, post implementation training, performance	Modeling, M&V Plan, Project Management, Financial Analysis &	M&V Plan, facility audit, EE education related to retrofits, performance tracking

Program Parameters	I-REN	SoCalREN	SCE Public Sector HOPPs Program	SoCalGas
	management, operations and commissioning	tracking and savings persistence	Services	and savings persistence
Measurement	TBD	CMPA (IPMVP Option C)	CMPA (IPMVP Option C)	CMPA (IPMVP Option C) or other applicable options
Baseline	Existing conditions	Existing conditions.	Existing condition	Existing conditions
Performance Payment	Incentive payment based on energy savings achieved over 3-5 years	Incentives provided post-implementation measurement and verification of savings on scheduled intervals	Monetary Incentives provided on post-implementation measurement of energy savings based on meter data	Incentive provided on a post-implementation measurement of energy savings based on meter data
Resource or Non-Resource	Resource	Resource	Resource	Resource
Approval Process	TBD	Streamlined Process within CPUC NMEC Guidelines that will go through the CMPA	CPUC HOPPS Guidelines	CPUC HOPPs Guidelines
2022 Status	New/launching	In the market as of April 2019; incentives offered upon approval of the 2022 BBAL	Not accepting new projects	TBD

3. Comparable SoCalREN Program – Public Agency NMEC Program – SCR-PUBL-B3

Under the Public Agency NMEC Projects Program, SoCalREN employs a NMEC framework and targets projects that are identified by the SoCalREN EE PDP or SoCalREN DER DAC program are limited by support and incentives through existing EE resource programs. This Program provides an alternative to the existing utility and third-party programs, while pursuing

stranded potential in public agency facilities and buildings. This Program is a resource program, so EE savings from these projects contribute to SoCalREN program goals and cost-effectiveness calculations. The program targets DAC, rural, and low-income communities by offering increased incentives for these equity communities.

SoCalREN targets agencies who are enrolled in the EE PDP and DER DAC EE PDP and have facilities that have not recently participated in utility programs. Participating agencies also benefit from the SoCalREN Program's project management expertise and technical services. Similar to the partner IOU NMEC programs, engineers with experience in ASHRAE energy savings calculation standards and International Performance Measurement and Verification Protocols (IPMVP) will be prioritized in executing NMEC projects. The SoCalREN Public Agency NMEC Program provides technical assistance, application technical review, staff training, and facility savings reports to ensure persistence of savings while adhering to CPUC NMEC Guidelines that go through the CMPA process. The SoCalREN Public Agency NMEC Program differs from the IOUs NMEC programs by providing staff training, regular savings reports post installation, and a focus on equity through the provision of enhanced incentives for equity communities.

4. Comparable SCE Program – Public Sector Performance-Based Retrofit High Opportunity Program – SCE-13-L-003I

SCE's Public Sector Performance-Based Retrofit High Opportunity Program, an NMEC program, is ending this year However, there will be a pipeline of projects in development and/or implementation throughout 2022.

5. Comparable SoCalGas Program – HOPPs Program – SCG3710

The program design for the new/launching SoCalGas HOPPs Program under SCG3710 Calculated Incentives is not yet available.

6. Coordination Protocol Between Programs

The Joint PAs will coordinate as new and launching programs are contracted and designed in order to operationalize coordination, with an understanding that new market support and equity programs might also provide similar services. As a new PA, I-REN has not yet contracted with implementers. Within 60 days of implementer(s) being contracted for the relevant programs, the Joint PAs will reconvene to plan coordination activities.

7. Coordination Between Statewide Program(s)

As a new PA, I-REN has not yet contracted with implementers. Within 60 days of implementer(s) being contracted for the relevant programs, the Joint PAs will reconvene to plan coordination activities. The Joint PAs will continue to participate in Energy Division-led Peer Coordination Groups (PCGs). The statewide PCGs enable collaborative statewide discussions regarding all programs across all PAs throughout the state, not just those in Southern California.

8. Compliance

The following table describes in further detail how I-REN's Public Sector NMEC Program satisfies the REN criteria in D.12-11-0115.

Table 6: I-REN's 2022 Public Sector NMEC Program Compliance with D.12-11-015

REN Criteria	I-REN Public Buildings NMEC Program – IREN-PUBL-002
1. Activities IOU cannot or does not intend to undertake	n/a

REN Criteria	I-REN Public Buildings NMEC Program – IREN-PUBL-002
2. Pilot activities where there is no IOU program offering and where there is potential for scalability	n/a
3. Activities in hard-to-reach markets, whether or not there is an IOU program that may overlap	• The program is open to all public sector customers but will target underinvested jurisdictions serving hard-to-reach, DAC, underserved, and ESJ communities where I-REN can help drive equity outcomes. • Program outreach will focus initially on public gathering spaces and community-serving facilities such as community and neighborhood centers, health and recreation centers, senior centers, teen centers, and libraries. • Upgrades and retrofits to HVAC and lighting equipment both interior and exterior will improve comfort and safety at facilities that benefit vulnerable populations such as children, elders, and low income, disadvantaged, and underserved communities.

C. WORKFORCE EDUCATION AND TRAINING – TRAINING AND EDUCATION PROGRAM – IREN-WET-001

For its Cross-cutting Sector Workforce Education & Training (WE&T) Training and Education Program, I-REN will assess the current training marketplace in the Inland Empire and work with local providers, including higher education providers, high schools, adult schools, and professional training companies to tailor content to be relevant to the region's needs and ensure that disadvantaged communities are a focus. I-REN will collaborate with training providers to improve access to a broad spectrum of training opportunities in person, online, and in the field.

1. Summary of I-REN's Training and Education Program Objectives

a) Create a robust local network of training programs that increase capacity and knowledge related to energy efficiency in the building industry.

2. Summary of Program Differentiation

The following table provides a summary of the PAs' respective workforce education & training programs.

Table 7: I-REN, SoCalREN, SCE, and SoCalGas WE&T Training and Education Program Summary

Program Parameters	I-REN	SoCalREN	SCE	SoCalGas
Target Audience(s)	• Local providers, including higher education providers, high schools, adult schools, and professional training companies • Disadvantaged communities (DACs)	• Architects, designers, engineers, contractors, building operators, technicians, craft/tradesmen, customers, youth, classified disadvantaged workers, and building owners • SWMDVBE that can potentially support IOU resource program sectors and local public agencies sustainability projects. • Homeless (i.e., at-risk transition youth) • In-school youth, youth classified disadvantaged workers, and homeless (i.e., at-risk transition youth). • Targets Disadvantaged communities	Workers who are in or are pursuing occupations in the energy efficiency and other related professional fields that provide the technical capabilities that are needed to support the attainment of CAs and IOU Energy Saving and sustainability targets	Workers in, or pursuing careers and occupations in energy efficiency, gaining and providing professional and technical capabilities, specifically useful for achieving CA-IOU energy savings targets.

Program Parameters	I-REN	SoCalREN	SCE	SoCalGas
		(DACs) and Hard to Reach.		
Resource or Non-Resource	Non-resource	Non-resource	Non-resource	Non-resource
Eligible Measures	n/a	n/a	n/a	n/a
Budget	$1,012,949	$375,000*	$8,696,114*	$4,250,000*

* SoCalREN, SCE and SoCalGas 2022 budgets provided herein are estimates merely for reference only. The final budgets are subject to Commission approval of 2022-23 BBAL Advice Letter.

With location and a more localized focus being the main differentiator across PAs, I-REN will focus largely on entry-level offerings in San Bernardino and Riverside counties. I-REN will help to raise the value of energy efficiency training and career paths within high schools, community colleges, and universities. These focus areas differentiate I-REN from other PAs' WE&T Training and Education offerings. SoCalREN's WE&T Program offerings now emphasize a robust regional workforce education and training approach that supports underserved Disadvantaged Workers (DAW) -including at risk youth, Hard to Reach (HTR) and small, women, minority, and disabled veteran owned business enterprises (SWMDVBE). SoCalGas supports entry-level job seekers and workers but is moving to more career paths. SCE's focus is geared towards incumbent skill building.

The following table compares the key program parameters of PAs' WE&T training and education programs.

Table 8: WE&T Training and Education Program Comparison

Program Parameters	I-REN	SoCalREN	SCE	SoCalGas
Target Audience	• Local providers, including higher education providers,	• Targets the most underserved and disadvantaged	Workers who are in or are pursuing occupations in the	Workers in, or pursuing careers and occupations in

Program Parameters	I-REN	SoCalREN	SCE	SoCalGas
	high schools, adult schools, and professional training companies • Disadvantaged communities (DACs)	workers (DAW) and Hard to Reach (HTR) Architects, designers, engineers, contractors, building operators, technicians, craft/tradesmen, customers, youth, classified disadvantaged workers, and building owners • SWMDVBE that can potentially support IOU resource program sectors and local public agencies sustainability projects. • Homeless (i.e., at-risk transition youth) In-school youth, youth classified disadvantaged workers, and homeless (i.e., at-risk transition youth). • Targets Disadvantaged communities (DACs) and Hard to Reach.	energy efficiency and other related professional fields that provide the technical capabilities that are needed to support the attainment of CAs and IOU Energy Saving and sustainability targets.	energy efficiency, gaining and providing professional and technical capabilities, specifically useful for achieving CA-IOU energy savings targets.
Location of Training	• In field/on-the-job • Online	In field, on-job and online.	• Energy Education Centers (Irwindale/Tulare) • Alternative training sites (On	In-person (Energy Resource Center, vendor sites) and Online

Program Parameters	I-REN	SoCalREN	SCE	SoCalGas
			Location) • Virtual (Live Instructor Led) • On-Demand	
Training Types	• In-person • Online	• In-person • Online	• In-person • Online	In-person (Energy Resource Center, vendor sites) and Online
Statewide/Local	Local	• Local • Regional	Local	Local
Partner Organizations	• Educational institutions • Trade associations • Industry and non-profit organizations • Certification organizations • Government agencies	• Public Agencies • Nonprofit organizations • High schools • Community Colleges • 3rd party implementers • Workforce centers	• Other IOUs • Industry associations • Post- secondary education • Business networks • Regional workforce services • Non-profit Organizations	• Educational institutions • Trade associations • Industry and non-profit organizations • Certification organizations • Government agencies

3. Comparable SoCalREN Program – Workforce Education & Training Program – SCR-WET-D1

SoCalREN has historically utilized policies and instruments for local hiring and workforce partnerships while developing infrastructure for small and minority contractors to access clean energy investments. SoCalREN's WE&T Program offerings emphasizes a robust regional workforce education and training approach that supports underserved Disadvantaged Workers (DAW), Hard to Reach (HTR)and small, women, minority, and disabled veteran owned business enterprises (SWMDVBE). The primary goal of this Program is to provide the ability to build capacity within the EE industry with a local regional approach. Similar to its other non-resource programs, the SoCalREN WE&T Program leverages public agencies to reach and

engage communities while simultaneously building its underserved workforce, thus providing long term workforce supply in the EE industry. The SoCalREN WE&T Program provides: 1) comprehensive regional workforce education, training, and resources for DAW/HTRs and SWMDVBE contractors of all skill levels; 2) entry-level workforce skills training for in-school youths 3) SWMDVBE contractors' local government public agency training and capacity building in regard to sustainability projects and RFPs; and 4; and 2) a green career pathway for classified at-risk and or homeless individuals, such as transition age at-risk foster youth.

4. Comparable SCE Program – Integrated Energy Education & Training Program – SCE-13-SW-010A

The SCE WE&T Integrated Energy Education & Training Program (IEET) offers resources and training programs that are aimed at shaping the current and future energy workforce through a series of occupational, employer, and technology-focused workshops and seminars, combined with workplace-based and hands-on technical training. This program aims to provide technical upskill and pathways certifications and credentials in energy efficiency-related industries that also support California's clean energy objectives.

In addition to the training courses offered, SCE maintains a Foodservice Technology Center where they conduct training, standards-based equipment testing, and evaluations that further enhance the commercialization of emerging energy efficient technologies and programs. These services are delivered with technical integrity and scientific rigor to ensure our partners stay competitive and maintain cost effectiveness.

The Energy Centers provide a host of other value-added customer programs and services such as the Tool Lending Library and conduct technical tours and consultations, all of which are available at no-cost to the customer.

5. Comparable SoCalGas Program – WE&T Integrated Energy Education Training (IEET) – SCG3729

The SoCalGas WE&T Integrated Energy Education Training (IEET) subprogram will offer both technical and foodservice workforce education, training and outreach events that can leverage I-REN local contacts to inform and equip workforce talent with skills to assist in meeting the State's energy and climate goals.

The WE&T Program contributes to the investor-owned utilities' (IOUs') energy efficiency goals by empowering customers and market actors with the knowledge to make energy reduction decisions. WE&T's primary target audience includes market actors who design, build, maintain, and operate buildings and building systems—engineers, technicians, building operators, designers, contractors, etc. Because these market actors have the potential to shape a building's energy use, WE&T teaches them how to recognize energy savings and balanced energy solutions to address GHG-reduction, and then provides them skills, tools, and resources to act upon those opportunities. Additionally, WE&T supports Post-secondary institutions that are training future generations of the energy workforce by providing them energy efficiency, sustainability, and green career awareness classes, internships, materials and resources

6. Coordination Protocol Between Programs

I-REN is in communication with other PAs operating in the region to identify areas of potential coordination for WE&T activities. As a new PA, I-REN has not yet contracted with implementers. Within 60 days of implementer(s) being contracted for the relevant programs, the Joint PAs will reconvene to plan coordination activities.

I-REN will ensure its activities are differentiated and avoid duplication of effort, while maintaining cooperation with other PAs to improve access to relevant training opportunities

across the I-REN counties. An opportunity that I-REN will explore is to support the critical connection to workforce entry for entry-level youth, which may include outreach to employers and work to get them involved. There is opportunity to create pathways to move from high school to non-college routes. They will work collaboratively to feed those entry-level specialists who are prepared for a higher training level into IOU programs.

Time is a critical issue in the education and training of the EE workforce. More than ever, it is vital for employees within the EE industry to stay up to date with emerging technologies and trends. The Joint PAs will work together to establish relevant training curriculum, especially for community colleges.

7. Coordination Between Statewide Program(s)

As a new PA, I-REN has not yet contracted with implementers. Within 60 days of implementer(s) being contracted for the relevant programs, the Joint PAs will reconvene to plan coordination activities. With PG&E as the statewide administrator for the Career and Workforce Readiness (CWR) and Career Connections WE&T subprograms, the Joint PAs will collaborate to leverage those statewide programs. I-REN will stay abreast of developments pertaining to these statewide programs and coordinate with PG&E to the extent possible to engage with the implementation vendor to discuss a coordination strategy. The Joint PAs will take advantage of opportunities for greater coordination and communication with other PAs as needed with regard to statewide programs.

8. Compliance

The following table describes in further detail how I-REN's WE&T Training and Education Program satisfies the REN criteria in D.12-11-0115.

Table 9: I-REN's 2022 WE&T Training & Education Program Compliance with D.12-11-015

REN Criteria	I-REN WE&T Program – IREN-WET-001
1. Activities IOU cannot or does not intend to undertake	• I-REN's WE&T program activities will center on supporting and leveraging local resources who are ideally positioned to deliver locally-focused, relevant, accessible training opportunities. • Offering training at familiar, nearby locations makes it easier for job seekers and workers to attend. I-REN can use its connections and experience to help ensure training opportunities are accessible throughout the region. • The I-REN governing agencies have existing partnerships with local colleges and community colleges, successfully providing instructional energy efficiency classes and events at local campuses where they have typically achieved high participation rates.
2. Pilot activities where there is no IOU program offering and where there is potential for scalability	n/a
3. Activities in hard-to-reach markets, whether or not there is an IOU program that may overlap	I-REN's WE&T program activities will drive market support and equity outcomes for HTR, underserved, DAC, and ESJ communities by partnering with and building capacity among local community-focused training providers to improve quality of and access to relevant training opportunities.

D. WORKFORCE EDUCATION AND TRAINING – WORKFORCE DEVELOPMENT PROGRAM – IREN-WET-001

I-REN will convene and collaborate with state, regional, and local stakeholders, including workforce investment boards (WIBs) and economic development departments to develop a unified mission around the region's energy efficiency workforce, highlighting pathways for job seekers to enter the green jobs market and to increase access for disadvantaged communities. I-REN will facilitate identifying opportunities for employers and local workforce partners to network and connect.

With its governing agencies' existing networks of contractors and training providers, I-REN is well positioned to help bridge the gap between the energy industry and the workforce. I-REN is building partnerships with local community colleges, local universities and local WIBs to establish a comprehensive network of WE&T offerings.

I-REN also brings close connections with local government planning and building departments across the region. I-REN's proposed WE&T initiatives offer important opportunities for collaboration across other sectors through its work in the Public Sector and Codes & Standards (C&S) --both of which are important drivers of energy efficiency and advanced energy activity and employment in the region.

1. Summary of I-REN's Workforce Development Program Objectives

a) Increase the number of skilled energy efficiency workers in the region.

2. Summary of Program Differentiation

The following table provides a summary of the PAs' respective workforce development programs.

Table 10: I-REN, SoCalREN, SCE, and SoCalGas WE&T Workforce Development Program Summary

Program Parameters	I-REN	SoCalREN	SCE	SoCalGas
Target Audience(s)	• State, regional, and local stakeholders, including workforce investment boards (WIBs) and economic development departments • Job seekers,	• Targets the most underserved and disadvantaged workers (DAW) and Hard to Reach (HTR) Architects, designers, engineers, contractors, building	Those workers who are in or pursuing occupations in the energy efficiency and other related fields that provide professional and technical capabilities needed to support the	Workers in, or pursuing careers and occupations in energy efficiency, gaining and providing professional and technical capabilities, specifically useful

Program Parameters	I-REN	SoCalREN	SCE	SoCalGas
	including students; individuals who are unemployed, or underemployed; job seekers looking to enter the energy efficiency and advanced energy industry; and job seekers currently working in the industry who seek to make lateral career moves or advance in their fields.	operators, technicians, craft/tradesmen, customers, youth, classified disadvantaged workers, and building owners • SWMDVBE that can potentially support IOU resource program sectors and local public agencies sustainability projects. • Homeless (i.e., at-risk transition youth) In-school youth, youth classified disadvantaged workers, and homeless (i.e., at-risk transition youth). • Targets Disadvantaged communities (DACs) and Hard to Reach.	attainment of CAs and IOU Energy Savings and sustainability targets.	for achieving CA-IOU energy savings targets. Training will be conducted at Energy Center, alternative site locations and distribution channels in collaboration as appropriate, with non-IOU sources, feasible for reaching target audiences.
Resource or Non-Resource	Non-resource	Non-resource	Non-resource	Non-resource
Eligible Measures	n/a	n/a	n/a	n/a
Budget	$1,240,346	$375,000*	$8,696,114 * [5]	$X,XXX,XXX*

*SoCalREN, SCE and SoCalGas 2022 budgets provided herein are estimates merely for reference only. The final budgets are subject to Commission approval of 2022-23 BBAL Advice Letter.

[5] Note that the $8,696,114 budget reflects the same budget for SCE's WE&T - Integrated Energy Education & Training Program budget shown on Table 7in Section C subsection 2 above. The two budgets are the same and should not be counted as separate.

One differentiating factor for I-REN's program is that it will target job seekers, students, and workers and partner organizations, such as state, regional, and local stakeholders, including workforce investment boards (WIBs) and economic development departments in order to build partnerships. This partnership focus aligns well with RENs' historical role as convenor of stakeholders and partners due to their close ties with their local and regional communities. Location is another differentiator.

I-REN will prioritize HTR, disadvantaged, underserved, and ESJ communities, and the organizations within those communities that support workforce development. I-REN will help to raise the value of energy efficiency career paths within high schools, community colleges, and universities. These focus areas differentiate I-REN from other PAs' WE&T Workforce Development offerings. SoCalGas supports entry-level job seekers and workers but is moving to more career paths. SCE's focus is geared towards incumbent skill building.

The following table compares the key program parameters of PAs' WE&T workforce development programs.

Table 11: WE&T Workforce Development Program Comparison

Program Parameters	I-REN	SoCalREN	SCE	SoCalGas
Target Audience	Job seekers, including students; individuals who are unemployed, or underemployed; job seekers looking to enter the energy efficiency and advanced energy industry; and job seekers currently working in the industry who seek to make lateral career moves or advance in their fields.	Targets the most underserved and disadvantaged workers (DAW) and Hard to Reach (HTR) - SWMDVBE that can potentially support IOU resource program sectors and local public agencies	Job seekers, including K-12 students; individuals who are unemployed, or underemployed; those interested in entering the energy efficiency and/or advanced energy industry; and those currently working	K-12 Job seekers, including students; individuals who are unemployed, or underemployed; job seekers looking to enter the energy efficiency and advanced energy industry; and job seekers currently

Program Parameters	I-REN	SoCalREN	SCE	SoCalGas
		sustainability projects.	in the industry who are interested in making career changes or further advancing in their fields.	working in the industry who seek to make lateral career moves or advance in their fields.
Location of Training	n/a	• Through local public agency training channels. • In field and online.	n/a	n/a
Training Types	n/a	In-Person/online	n/a	n/a
Statewide/Local	Local	Local	Statewide	Statewide
Partner Organization	State, regional, and local stakeholders, including workforce investment boards (WIBs) and economic development departments	• Public Agencies • Nonprofit organizations • Unions • 3rd party implementers • Workforce centers	SCE will coordinate with PG&E and the vendor to the extent possible to engage the REN supporting program coordination	SoCalGas will coordinate with PG&E to the extent possible to engage the I-REN with the implementation vendor to discuss a coordination strategy

3. Comparable SoCalREN Program – Workforce Education & Training Program – SCR-WET-D1

SoCalREN has historically utilized policies and instruments for local hiring and workforce partnerships while developing infrastructure for small and minority contractors to access clean energy investments. SoCalREN's WE&T Program offerings emphasize a robust regional workforce education and training approach that supports underserved Disadvantaged Workers (DAW), Hard to Reach (HTR) and small, women, minority, and disabled veteran owned business enterprises (SWMDVBE). The primary goal of this Program is to provide the ability to build capacity within the EE industry with a local regional approach. Similar to its

other non-resource programs, the SoCalREN WE&T Program leverages public agencies to reach and engage communities while simultaneously building its underserved workforce, thus providing long term workforce supply in the EE industry.

The SoCalREN WE&T Program provides: 1) comprehensive regional workforce education, training, and resources for DAW/HTRs and SWMDVBE contractors of all skill levels; 2) entry-level workforce skills training for in-school youths 3) SWMDVBE contractors' local government public agency training and capacity building in regard to sustainability projects and RFPs; and 4) a green career pathway for classified at-risk and or homeless individuals, such as transition age at-risk foster youth.

4. Comparable SCE Program – N/A

SCE does not have a specific Workforce Development Program. Instead, SCE participates in the Statewide Career Workforce Readiness (CWR) Program, known as Energize Careers, which is administered by PG&E. Energize Careers aims to create a diverse and representational energy workforce through the economic empowerment of people who experience systemic barriers to employment by helping them to access living wage energy career opportunities. The Energize Careers Program provides holistic services to support disadvantaged workers1 through technical training, job placement, and wrap-around service support. Energize Careers collaborates with pre-apprenticeship programs, apprenticeship programs, community-based training organizations, and community colleges to provide technical energy job training to underserved individuals. Energize Careers also collaborates with wrap-around service providers and industry partners to provide people with services and support to access career pathways into living wage energy efficiency jobs.

5. **Comparable SoCalGas Program**

N/A

6. **Coordination Protocol Between Programs**

I-REN is in communication with other PAs operating in the region to identify areas of potential coordination for WE&T activities. I-REN will ensure its activities are differentiated and avoid duplication of effort, while maintaining cooperation with other PAs to improve access to relevant training opportunities across the I-REN counties. As a new PA, I-REN has not yet contracted with implementers. Within 60 days of implementer(s) being contracted for the relevant programs, the Joint PAs will reconvene to plan coordination activities which could include but would not necessarily be limited to meetings and shared class lists.

There is a critical opportunity for Joint PAs to connect entry-level youth to good jobs in the EE field. The Joint PAs will collaborate to define employers and work to get them involved. There is opportunity for all PAs to create pathways to move from high school to non-college routes. They will work collaboratively to feed those entry-level specialists who are prepared for a higher training level into IOU programs.

Time is a critical issue in the education and training of the EE workforce. More than ever, it is vital for employees within the EE industry to stay up to date with emerging technologies and trends. The Joint PAs will work together to establish relevant training curriculum, especially for community colleges.

7. **Coordination Between Statewide Program(s)**

As a new PA, I-REN has not yet contracted with implementers. Within 60 days of implementer(s) being contracted for the relevant programs, the Joint PAs will reconvene to plan

coordination activities. With PG&E as the statewide administrator for the Career and Workforce Readiness (CWR) and Career Connections WE&T subprograms, the Joint PAs will collaborate to leverage those statewide programs. I-REN will stay abreast of developments pertaining to these statewide programs and coordinate with PG&E to the extent possible to engage the I-REN with the implementation vendor to discuss a coordination strategy. The Joint PAs will take advantage of opportunities for greater coordination and communication with other PAs as needed with regard to statewide programs.

8. Compliance

The following table describes in further detail how I-REN's WE&T Workforce Development Program satisfies the REN criteria in D.12-11-0115.

Table 12: I-REN's 2022 WE&T Workforce Development Program Compliance with D.12-11-015

REN Criteria	I-REN WE&T Program – IREN-WET-001
1. Activities IOU cannot or does not intend to undertake	• I-REN's WE&T program activities will center on convening, engaging, and building capacity with regional workforce development partners in order to define and establish a green workforce. • This program relies on collaboration with established community partner organizations and employers, many of whom have existing connections and trusted relationships with the I-REN member agencies.
2. Pilot activities where there is no IOU program offering and where there is potential for scalability	n/a
3. Activities in hard-to-reach markets, whether or not there is an IOU program that may overlap	I-REN's WE&T program activities will drive market support and equity outcomes for HTR, underserved, DAC, and ESJ communities by partnering with and building capacity among local community-focused workforce development partners.

E. CODES AND STANDARDS TRAINING & EDUCATION PROGRAM – IREN-CS-001

I-REN's Codes and Standards (C&S) Training and Education Program is a non-resource program to establish and implement training and education for building department staff and the building industry to support, understand, and effectively implement energy efficiency codes and standards including where gaps exist in the Statewide IOU Compliance Improvement program and enforcement activities. The program will also include outreach to engage, educate and involve regional construction firms and building departments, and support compliance and enforcement within regional EE programs and customers.

1. Summary of I-REN's C&S Training and Education Program Objectives

a) Improve the understanding of energy efficiency codes and standards among local building departments and the building industry to increase implementation and compliance and enforcement.

b) Make code compliance and enforcement a valuable element of the region's energy efficiency goal attainment with engagement regionwide.

2. Summary of Program Differentiation

The following table provides a summary of the PAs' respective C&S Training & Education programs.

Table 13: I-REN, SoCalREN, SCE, and SoCalGas C&S Training & Education Programs Summary

Program Parameters	I-REN	SoCalREN	SCE	SoCalGas
Target Audience(s)	• Local jurisdictions' building department staff	n/a	All stakeholders impacted by the energy code	n/a

Program Parameters	I-REN	SoCalREN	SCE	SoCalGas
	• Permit applicants • Contractors and building professionals • Areas not served by the IOUs (City of Riverside, Imperial Irrigation District service area, etc.)			
Resource or Non-Resource	Non-resource	n/a	Non-resource	n/a
Eligible Measures	n/a	n/a	n/a	n/a
Budget	$860,334	n/a	$3,077,099*	n/a

*SCE 2022 budgets provided herein are estimates merely for reference only. The final budgets are subject to Commission approval of 2022-23 BBAL Advice Letter.

I-REN's C&S Training & Education Program will be differentiated from comparable programs by the more localized geographic area in which trainings will be focused, in Riverside and San Bernardino counties, enabling contractors to more easily attend trainings. I-REN brings existing relationships with important training partners in the region, such as colleges, NGOs, CBOs, trade organizations, and regional entities. Another differentiating factor will be I-REN's focus on serving HTR, DAC, underserved, tribal, and ESJ communities.

I-REN trainings will also be differentiated by topic, with trainings tailored to the region's climate zones and the needs of the region's local jurisdictions, building department staff, and building professionals. I-REN has an understanding of local councils, cities, and communities and their priorities and the ability to navigate the local political climate, which is important for supporting local government jurisdictions. I-REN's familiarity with its communities will be important to inform and deliver regionally relevant training offerings that may not otherwise be

available. I-REN will also coordinate its C&S activities with its WE&T offerings to integrate code compliance and enforcement into technical trainings.

3. **Comparable SoCalREN Program**

   N/A

4. **Comparable SCE Program – Compliance Improvement Subprogram – SCE-13-SW-008C**

The IOU Compliance Improvement subprogram[6] (of which Energy Code Ace is a key component) targets actors within the building and appliance energy code supply chains to maintain comprehensive statewide compliance with energy codes and appliance standards, such as: manufacturers, distributors, retailers, architects, energy consultants, contractors, plans examiners, building inspectors, etc. Whereas the California Energy Commission is responsible for implementing state policy by establishing new Codes and Standards, others (architects, energy consultants, mechanical engineers, IOUs, builders, contractors, etc.) are responsible for interpreting the code and completing compliance forms while jurisdictions' building departments are responsible for enforcing the code. Building codes and appliance standards can be difficult to understand and time consuming to implement, therefore some industry actors fail to comply with regulatory requirements fully.

Compliance improvement program needs are determined through a performance-based solution approach to identify training, tools, resources and outreach necessary to narrow the gap between actual and desired performance, and principals of adult learning theory are employed to improve knowledge swings during training and increase long-term retention. Multiple training

[6] The Compliance Improvement subprogram is a statewide program offered by all IOUs

modalities are used to maximize student participation. With a few exceptions, a consistent curriculum, featured on EnergyCodeAce.com, is developed by the compliance improvement program and delivered statewide by a team of subject matter experts.

5. **Comparable SoCalGas Program**

   N/A

6. **Coordination Protocol Between Programs**

I-REN is in communication with other PAs operating in the region to identify areas of potential coordination for C&S activities. The I-REN governing agencies also bring experience coordinating with other PAs through their LGP work. I-REN will ensure its activities are differentiated and avoid duplication of effort, while maintaining cooperation with other PAs.

As a new PA, I-REN has not yet contracted with implementers. Within 60 days of implementer(s) being contracted for the relevant programs, the Joint PAs will reconvene to plan coordination activities. Through the JCM process I-REN and other PAs have already identified potential opportunities to collaborate on the delivery of workshops and trainings where appropriate to provide greater accessibility and regionally relevant training content to local jurisdictions and building professionals.

7. **Coordination Between Statewide Program(s)**

As a new PA, I-REN has not yet contracted with implementers. Within 60 days of implementer(s) being contracted for the relevant programs, the Joint PAs will reconvene to plan coordination activities. The Joint PAs will coordinate to ensure that ratepayer funds deliver resources efficiently and effectively across the shared territories, including coordination with PG&E as administrator of the statewide Codes & Standards program. With that in mind, the Joint

PAs will approach coordination with the goal of offering transparency through regular communication, efficiency through a collaborative approach to any shared resources, and support for the success of programs across the service area. The Joint PAs will meet regularly to coordinate on the WE&T and C&S programs.

The Joint PAs will share their respective lists of available C&S trainings including those in development stages. Whenever feasible, PAs will leverage existing curriculum and training by communicating training needs via email or in regular coordination meetings. A clear chain of communication and identified contacts will be exchanged for each program and/or sub-program.

IOUs' Compliance Improvement team representative will provide a list of trainings to I-REN on a quarterly basis and will include the following information:

- Class name(s)
- Description(s)
- Instructor name(s)
- Course length time
- Mode of access and location (ex: in-person, training center/city, online)
- Class schedule (if one exists)
- Course agenda

Additionally, a standing agenda item at the quarterly meeting will be to discuss the topics of trainings in development, even if only at a high level. This will reduce the potential for duplication of efforts.

The Joint PAs will determine which existing offerings can be leveraged and coordinate to deliver these resources. I-REN will develop a calendar with potential dates, of when these offerings can be delivered to various audiences in the tri-county region. This calendar will be shared with the Joint PAs and scheduled based on the availability and resource requirements.

The Joint PAs will make each other aware of resources available as courses are scheduled for delivery and new job aides (Energy Code Ace "resources" or "tools") are developed. A portion of the Statewide C&S Team's training schedule is set at the beginning of the year while the rest remains flexible since most courses are offered upon request as a result of the team's outreach efforts. All offerings are posted on the Energy Code Ace website training page as courses are scheduled.

8. Compliance

The following table describes in further detail how I-REN's C&S Training and Education Program satisfies the REN criteria in D.12-11-0115.

Table 14: I-REN's 2022 C&S Training and Education Program Compliance with D.12-11-015

REN Criteria	I-REN C&S Training and Education Program – IREN-CS-001
1. Activities IOU cannot or does not intend to undertake	• As an organization led by and dedicated to serving local governments, I-REN can provide flexible and adaptable solutions to support local jurisdictions. • I-REN brings an understanding of local councils, cities, and communities and their priorities and the ability to navigate the local political climate which is important for delivering support to local government jurisdictions. • I-REN's C&S initiatives will offer locally focused training, education, and tools to support codes and standards implementation, enforcement, and compliance activities.
2. Pilot activities where there is no IOU program offering and where there is potential for scalability	n/a

REN Criteria	I-REN C&S Training and Education Program – IREN-CS-001
3. Activities in hard-to-reach markets, whether or not there is an IOU program that may overlap	The program is open to all local jurisdictions but will provide targeted outreach to underinvested jurisdictions serving hard-to-reach, DAC, underserved, tribal, and ESJ communities where I-REN can help drive market support and equity outcomes and cross-cutting workforce-related objectives.

F. CODES AND STANDARDS TECHNICAL SUPPORT PROGRAM – IREN-CS-001

I-REN's Codes and Standards (C&S) Technical Support Program is a non-resource program to develop technical assistance tools and resources to assist building departments and the building industry with understanding, evaluating, and permitting the energy codes to support improved enforcement and compliance. I-REN will develop regionally appropriate model ordinances, vet and refine them with participating local governments, provide ongoing technical assistance for implementation, and deliver updates to reflect the triennial code cycle.

1. Summary of I-REN's C&S Technical Support Program Objectives

a) Deliver locally informed resources and tools that streamline code compliance and enforcement and increase permit closeout.

2. Summary of Program Differentiation

The following table provides a summary of the PAs' respective C&S Technical Support program.

Table 15: I-REN, SoCalREN, SCE, and SoCalGas C&S Technical Support Program Summary

Program Parameters	I-REN	SoCalREN	SCE	SoCalGas
Target Audience(s)	• Local jurisdictions'	n/a	All stakeholders impacted by the	n/a

Program Parameters	I-REN	SoCalREN	SCE	SoCalGas
	building department staff • Permit applicants • Contractors and building professionals • Areas not served by the IOUs (City of Riverside, Imperial Irrigation District service area, etc.)		energy code	
Resource or Non-Resource	Non-resource	n/a	Non-resource	n/a
Eligible Measures	n/a	n/a	n/a	n/a
Budget	$585,773	n/a	$3,077,099* [7]	n/a

*SCE 2022 budgets provided herein are estimates merely for reference only. The final budgets are subject to Commission approval of 2022-23 BBAL Advice Letter.

I-REN's C&S Technical Support Program will be differentiated from similar programs offered by other PAs by the geographic area in which technical support will be offered, to jurisdictions in the counties of Riverside and San Bernardino. Another differentiating factor will be I-REN's focus on serving HTR, DAC, underserved, tribal, and ESJ communities. I-REN brings existing relationships with the cities in its territory from its work in local government as a convenor and facilitator for issues affecting local jurisdictions. I-REN's existing network of relationships and understanding of local councils, cities, and communities and their priorities and

[7] Note that the $3,077,099 budget reflects the same budget for SCE's Codes & Standards Compliance Improvement subprogram budget shown on **Error! Reference source not found.** in Section E subsection 2 above. The two budgets are the same and should not be counted as separate.

the ability to navigate the local political climate will be important for the on-the-ground support needed to reach building department staff.

I-REN's C&S Technical Support Program will provide one-stop-shop access for its local jurisdictions and building department staff without competing against or duplicating statewide or other regional resources. I-REN's familiarity with its communities will be important to inform and deliver regionally-relevant technical support, such as development and implementation of reach codes and model ordinances.

3. **Comparable SoCalREN Program**

   N/A

4. **Comparable SCE Program – Compliance Improvement Subprogram – SCE-13-SW-008C**

In addition to the training activities enumerated in the previous section, the Compliance Improvement (CI) Subprogram also provides a comprehensive suite of online and interactive tools and resources to support market actors in streamlining their code compliance workflow.

The tools offered on the Energy Code Ace website are comprised of a suite of interactive applications to help users understand compliance processes, installation techniques, which forms are required, and energy efficiency regulations applicable to building projects and appliances in California.

Resources include an array of downloadable materials providing practical and concise guidance on how and when to comply with California's building and appliance energy efficiency standards. The resources that the (CI) subprogram has developed address the lack of time and

resources for industry professionals by providing web-based job aids that are downloadable for quick reference. Some of the key available tools and resources include:

- "Submit a Question" – Online portal providing market actors the opportunity to submit their compliance questions for subject matter expert review and response
- Q&Ace – Searchable database of FAQ's, including common questions fielded by subject matter experts through the "Submit a Question" portal
- Checklists – Step-by-step guidance for plan checks and field inspections to help ensure compliance with the Energy Code
- Forms Ace – Helps market actors determine which forms are applicable to their project scope prior to submittal, to focus their efforts and avoid filling out unnecessary paperwork
- Virtual Compliance Assistant – "TurboTax" style interface that generates compliance forms for project teams by guiding them through a series of direct questions about their projects
- Reference Ace – An online hyperlinked version of the energy code which is easier to navigate than a PDF or hard copy code book
- Image Ace – Provides helpful diagrams and images to better illustrate efficiency concepts and code requirements
- Timeline Ace – Graphically shows when specific Energy Code requirements are going into effect

5. **Comparable SoCalGas Program**

N/A

6. **Coordination Protocol Between Programs**

I-REN is in communication with other PAs operating in the region to identify areas of potential coordination for C&S activities, and the I-REN governing agencies bring experience coordinating with other PAs through their LGP work. Coordination activities could include but would not be limited to calling on existing IOU resources for training as needed. I-REN will ensure its activities are differentiated and avoid duplication of effort, while maintaining cooperation with other PAs. As a new PA, I-REN has not yet contracted with implementers. Within 60 days of implementer(s) being contracted for the relevant programs, the Joint PAs will reconvene to plan coordination activities.

7. **Coordination Between Statewide Program(s)**

As a new PA, I-REN has not yet contracted with implementers. Within 60 days of implementer(s) being contracted for the relevant programs, the Joint PAs will reconvene to plan coordination activities. The Joint PAs will coordinate to ensure that ratepayer funds deliver resources efficiently and effectively across the shared territories, including coordination with PG&E as administrator of the statewide Codes & Standards program. With that in mind, the Joint PAs will approach coordination with the goal of offering transparency through regular communication, efficiency through a collaborative approach to any shared resources, and support for the success of programs across the service area. The Joint PAs will meet regularly to coordinate on the WE&T and C&S programs.

8. Compliance

The following table describes in further detail how I-REN's C&S Technical Support Program satisfies the REN criteria in D.12-11-0115.

Table 16: I-REN's 2022 C&S Technical Support Program Compliance with D.12-11-015

REN Criteria	I-REN C&S Technical Support Program – IREN-CS-001
1. Activities IOU cannot or does not intend to undertake	• As an organization led by and dedicated to serving local governments, I-REN can deliver locally informed resources and tools that streamline code compliance and enforcement and increase permit closeout, in coordination with other PAs to leverage existing resources and avoid duplication. • I-REN's C&S interventions rely on relationships and communication. I-REN is uniquely positioned to serve the C&S sector because the I-REN governing agencies already have extensive connections throughout the region with local building and planning departments, including code officials and permitting staff at all levels, and many of the private construction and architectural firms who frequently apply for permits.
2. Pilot activities where there is no IOU program offering and where there is potential for scalability	n/a
3. Activities in hard-to-reach markets, whether or not there is an IOU program that may overlap	The program is open to all local jurisdictions but will provide targeted outreach to underinvested jurisdictions serving hard-to-reach, DAC, underserved, and ESJ communities where I-REN can help drive market support and equity outcomes and cross-cutting workforce-related objectives.

IV. I-REN PROGRAM COMPLIANCE

A. I-REN PROGRAM COMPLIANCE WITH D.12-11-015 AND D.19-12-021

The majority of the activities outlined in I-REN's Business Plan are non-resource programs, designed to support and enhance the activities of other PAs, with a targeted local government resource program not currently provided to its member audiences.

The CPUC in Decision 12-11-015, Decision 16-08-019, Decision 18-05-041, and refined in decision 19-12-021, directed the REN's activities to three areas:[8][9][10][11]

- Activities that utilities or CCA program administrators cannot or do not intend to undertake.
- Pilot activities where there is no current utility or CCA program offering, and where there is potential for scalability to a broader geographic reach, if successful.
- Activities serving hard-to-reach markets, whether or not there is another utility or CCA program that may overlap.

I-REN has focused on these three criteria areas and the need to provide value for ratepayers in the development of its program portfolio. The I-REN governing agencies worked for nearly 18 months coordinating, developing, and refining the presented sectors to ensure they do not overlap and instead fill clear gaps, address hard-to-reach communities, and assess opportunities to pilot new ideas that could be scaled beyond the I-REN region. I-REN has

[8] D.12-11-015, p. 17.
[9] D.16-08-019, pp. 11-12.
[10] D.18-05-041, p. 95.
[11] D.19-12-021, p. 32.

reviewed the CPUC guidance and pertinent decisions and is confident that it is well suited and needed to ensure equitable and effective energy efficiency services and resources to the region.

B. I-REN UNDERTAKING ACTIVITIES THAT UTILITIES CANNOT OR DO NOT INTEND TO UNDERTAKE.

A critical differentiation between I-REN and the other PAs' programs is the relationships I-REN has with its constituents, partners, and local governments, which is enhanced by their proximity and historic record of service for those entities. I-REN's ability to tailor and serve San Bernardino County and Riverside County entities will only grow as their programs are implemented. Recognizing these relationships will be important in the coming year as the Joint PAs navigate and avoid any duplication of services and avoid customer confusion.

These relationships are especially important in serving the public sector. Local government agencies and districts that make up the I-REN public sector are challenged in trying to improve the energy efficiency of their equipment and facilities, given various barriers including but not limited to insufficient funding for capital improvements, a lack of awareness around energy efficiency and IOU programs, complicated and long cycles times for approval processes for budgets and spending, and limited time and staff resources.

I-REN has strong existing relationships with, communication channels to, and support from local jurisdictions as an organization made up of local government agencies. I-REN will build on its existing connections in the public sector to help these local government agencies and districts improve their facilities' energy performance, to contribute to energy conservation and greenhouse gas reduction goals and position local government agencies as energy efficiency leaders in their communities. Some of the greatest challenges to participation in the public sector in the I-REN service area may also be indicators of unrealized energy savings potential. I-REN

has designed its Public Sector strategies and tactics to help local government agencies, tribal leadership, and staff at school districts and special districts overcome these participation barriers to improve their facilities' energy performance and harvest "stranded" energy savings.

Insufficient staff time and resources is one of the major barriers to implementing energy efficiency retrofits in public sector buildings. This has been exacerbated over the past two years due to the COVID-19 pandemic, with local governments on the front lines addressing the public health crisis and enduring the associated economic downturn. Local jurisdictions have had to implement mandatory closures of facilities, as well as intensive planning and logistical efforts to prepare for safely reopening facilities to the public. I-REN's Building Upgrade Concierge will provide personalized end-to-end technical assistance, procurement and project management support, capacity-building, and ongoing commissioning support to ensure efficient operations and maintenance.

I-REN's WE&T program activities will center on supporting and leveraging local resources who are ideally positioned to deliver locally-focused, relevant, accessible training opportunities. Offering training at familiar, nearby locations makes it easier for job seekers and workers to attend. I-REN can use its connections and experience to help ensure training opportunities are accessible throughout the region. The I-REN governing agencies have existing partnerships with local colleges and community colleges, successfully providing instructional energy efficiency classes and events at local campuses where they have typically achieved high participation rates.

I-REN's WE&T Workforce Development program activities will center on convening, engaging, and building capacity with regional workforce development partners in order to define

and establish a green workforce. This program relies on collaboration with established community partner organizations and employers, many of whom have existing connections and trusted relationships with the I-REN member agencies.

As an organization led by and dedicated to serving local governments, I-REN can provide flexible and adaptable solutions to support local jurisdictions. I-REN brings an understanding of local councils, cities, and communities and their priorities and the ability to navigate the local political climate which is important for delivering support to local government jurisdictions. I-REN's C&S initiatives will offer locally focused training, education, and tools to support codes and standards implementation, enforcement, and compliance activities.

Additionally, I-REN can deliver locally informed resources and tools that streamline code compliance and enforcement and increase permit closeout. I-REN's C&S interventions rely on relationships and communication. I-REN is uniquely positioned to serve the C&S sector because the I-REN governing agencies already have extensive connections throughout the region with local building and planning departments, including code officials and permitting staff at all levels, and many of the private construction and architectural firms who frequently apply for permits.

C. I-REN UNDERTAKING PILOT ACTIVITIES WHERE THERE IS NO CURRENT UTILITY UNDERTAKING, AND WHERE THERE IS A POTENTIAL FOR SCALABILITY TO A BROADER GEOGRAPHIC REACH, IF SUCCESSFUL.

At this time, I-REN is not proposing a program using this threshold criteria for compliance with D.12-11-015. I-REN is instead proposing program that both fill in gaps to IOU services and that target HTR markets.

D. I-REN UNDERTAKING PILOT ACTIVITIES IN HARD-TO REACH MARKETS, WHETHER OR NOT THERE IS A CURRENT UTILITY PROGRAM THAT MAY OVERLAP.

I-REN's Public Sector Technical Assistance and Strategic Energy Planning Program will be open to all public sector customers but will target underinvested jurisdictions serving hard-to-reach, DAC, underserved, and ESJ communities where I-REN can help address equity issues such as the unequal access to energy efficiency dollars, the need for additional support and commitment for small and underserved communities, ineffective programs for tribal communities, as well as overall lack of diversity. Many of these communities have been historically underinvested in and have greater needs for facility improvements, particularly community serving facilities such as libraries, community centers and the like. By supporting energy efficiency projects in these types of facilities, I-REN can provide equitable and locally administered assistance to public sector agencies where benefits will flow directly to disadvantaged and vulnerable communities.

Program outreach will focus initially on public gathering spaces and community-serving facilities such as community and neighborhood centers, health and recreation centers, senior centers, teen centers, and libraries.

I-REN's Public Sector NMEC Program will provide energy upgrades and retrofits to improve comfort and safety at facilities that benefit HTR customers and vulnerable populations such as children, elders, and low income, disadvantaged, and underserved communities. Higher efficiency equipment, appliances, and controls such as cooling-dominated HVAC loads as well as improvements to operations and maintenance will lower energy bills for local governments, reducing overhead and freeing up funds for other projects. Completion of projects at these high-

visibility locations will support achieving local and statewide energy efficiency and greenhouse gas reduction goals while also positioning local governments as energy efficiency leaders within their communities.

I-REN's WE&T program activities will drive market support and equity outcomes for HTR, underserved, DAC, and ESJ communities by partnering with and building capacity among local community-focused workforce development partners and training providers to improve quality of and access to relevant training opportunities. There is a gap between the demand and supply of existing trades people to provide energy efficiency services in the I-REN service territory. For contractors looking to expand their skills, career advancement and access to high-road jobs, the pathways for obtaining additional certifications can be complicated, costly, and limited by timing or distance.

In a service territory as expansive as the Inland Empire, expanding the number of training sites and promoting multiple delivery mechanisms are crucial for improving access to workforce education. I-REN can help providers identify underserved areas with a significant population that could benefit from training, and I-REN will also coordinate with other PAs and stakeholders to co-sponsor events and collaborate to bring training opportunities to the region. Through co-sponsorship and I-REN's extensive network of connections with local governments, I-REN will help promote training events with marketing and outreach to increase awareness and encourage participation.

I-REN will also provide outreach to employers to support decision-making around onsite training in the workplace or hands-on field training for employees, and will coordinate with other

PAs and key collaborators in the region to leverage existing training opportunities where appropriate.

For areas of the region where in-person training is challenging for cost reasons or limited participation numbers, I-REN will work with local stakeholders and employers to assess the applicability of online training options for supplementing local training. I-REN can recommend regionally appropriate training to pursue and assist with messaging and outreach to guide participants to training opportunities, including trainings offered by other PAs and statewide programs.

I-REN's C&S Training and Education program is open to all local jurisdictions but will provide targeted outreach to underinvested jurisdictions serving hard-to-reach, DAC, underserved, tribal, and ESJ communities where I-REN can help drive market support and equity outcomes and cross-cutting workforce-related objectives. To avoid duplication of effort, I-REN is communicating and exchanging ideas with other PAs operating in the region. Though other programs and initiatives have targeted the C&S sector, many local building departments (and the building industry in general) in the I-REN region have been underserved and will benefit greatly from locally focused training opportunities. I-REN will differentiate its C&S training offerings and coordinate with other training providers where necessary to make the best use of its constituents' ratepayer dollars. Additionally, training in C&S is an important area for crossover activities related to economic development and Workforce Education & Training (WE&T).

The C&S sector faces unique barriers to increased energy efficiency. This is especially true in the I-REN service territory, given its size and distance from the Los Angeles MSA. I-REN's C&S program activities will be tailored to the specific needs of this region, especially

HTR communities, even though the sector has been targeted by other non-local programs. This approach is consistent with CPUC's policy in D.12.11-2015 that Regional Energy Networks (RENs) should implement energy efficiency initiatives in hard-to-reach markets "whether or not there is a current utility program that may overlap."[12] In designing their approach to the C&S sector, I-REN has selected strategies and tactics based on insights from the I-REN governing agencies, with consideration also given to previous attempts by other PAs to address the C&S sector in this hard-to-reach region. Those lessons learned informed I-REN's planning process, as well as best practices from successful C&S programs elsewhere in the state. In this way, I-REN will offer locally-focused services that layer onto and complement existing C&S activities in the region in order to meet the unique needs of its jurisdictions and market actors.

[12] California Public Utilities Commission, Decision 12-11-015, Decision Approving 2013-2014 Energy Efficiency Programs and Budgets, November 8, 2012, Page 17

V. APPENDIX A: SUMMARY OF I-REN PROGRAM COMPLIANCE WITH D.12-11-015

Table 17: I-REN D. 12-11-015 Compliance, by Program

D.12-11-015 Threshold Criteria that apply for each program	Comparable IOU Program, if applicable	1. Activities that utilities cannot or do not intend to undertake.	2. Pilot activities where there is no current offering, and where there is potential for scalability to a broader geographic reach, if successful.	3. Pilot activities in hard to reach markets, whether or not there is a current utility program that may overlap.
Technical Assistance and Strategic Energy Planning Program	• SoCalREN Public Agency Energy Efficiency Project Delivery Program (EE PDP) • SCG Regional Energy Pathways • SCG3846 PUB-Small/Medium Public Sector 3P Program • SCG3899 PUB- Large Public Sector 3P Program • SCG_SW_IP_Colleges PUB-SW-Institutional Partnership: UC/CSU/CCC • SCG_SW_IP_Gov PUB-SW-Institutional Partnership: DGS & DOC • SCG_SW_MCWH SW Midstream Water Heating • SCG_SW_FS SW Point-of-Sale Food Service	• Building Upgrade Concierge with personalized end-to-end technical assistance, procurement and project management support, capacity-building, and ongoing commissioning support to ensure efficient operations and maintenance. • I-REN has strong existing relationships with, communication channels to, and support from local jurisdictions as an organization made up of local government agencies.	n/a	• The program is open to all public sector customers but will target underinvested jurisdictions serving hard-to-reach, DAC, underserved, and ESJ communities where I-REN can help address equity issues such as the unequal access to energy efficiency dollars, the need for additional support and commitment for small and underserved communities,

D.12-11-015 Threshold Criteria that apply for each program	Comparable IOU Program, if applicable	1. Activities that utilities cannot or do not intend to undertake.	2. Pilot activities where there is no current offering, and where there is potential for scalability to a broader geographic reach, if successful.	3. Pilot activities in hard to reach markets, whether or not there is a current utility program that may overlap.
				ineffective programs for tribal communities, as well as overall lack of diversity. Many of these communities have been historically underinvested in and have greater needs for facility improvements, particularly community serving facilities such as libraries, community centers and the like. By supporting energy efficiency projects in these types of facilities, I-REN can provide equitable and locally administered assistance to

D.12-11-015 Threshold Criteria that apply for each program	Comparable IOU Program, if applicable	1. Activities that utilities cannot or do not intend to undertake.	2. Pilot activities where there is no current offering, and where there is potential for scalability to a broader geographic reach, if successful.	3. Pilot activities in hard to reach markets, whether or not there is a current utility program that may overlap.
				public sector agencies where benefits will flow directly to disadvantaged and vulnerable communities.
Public Buildings NMEC Program	SoCalREN – Public Agency NMEC Program [SCR-PUBL-B3]	n/a	n/a	• The program is open to all public sector customers but will target underinvested jurisdictions serving hard-to-reach, DAC, underserved, and ESJ communities where I-REN can help drive equity outcomes. • Program outreach will focus initially on public gathering spaces and community-serving facilities such as community and

D.12-11-015 Threshold Criteria that apply for each program	Comparable IOU Program, if applicable	1. Activities that utilities cannot or do not intend to undertake.	2. Pilot activities where there is no current offering, and where there is potential for scalability to a broader geographic reach, if successful.	3. Pilot activities in hard to reach markets, whether or not there is a current utility program that may overlap.
				neighborhood centers, health and recreation centers, senior centers, teen centers, and libraries. • Upgrades and retrofits to HVAC and lighting equipment both interior and exterior will improve comfort and safety at facilities that benefit vulnerable populations such as children, elders, and low income, disadvantaged, and underserved communities. • Higher efficiency equipment, appliances and controls such as cooling-dominated

D.12-11-015 Threshold Criteria that apply for each program	Comparable IOU Program, if applicable	1. Activities that utilities cannot or do not intend to undertake.	2. Pilot activities where there is no current offering, and where there is potential for scalability to a broader geographic reach, if successful.	3. Pilot activities in hard to reach markets, whether or not there is a current utility program that may overlap.
				HVAC loads as well as improvements to operations and maintenance will lower energy bills for local governments, reducing overhead and freeing up funds for other projects. • Completion of projects at these high-visibility locations will support achieving local and statewide energy efficiency and greenhouse gas reduction goals while also positioning local governments as energy efficiency leaders within

D.12-11-015 Threshold Criteria that apply for each program	Comparable IOU Program, if applicable	1. Activities that utilities cannot or do not intend to undertake.	2. Pilot activities where there is no current offering, and where there is potential for scalability to a broader geographic reach, if successful.	3. Pilot activities in hard to reach markets, whether or not there is a current utility program that may overlap.
				their communities.
WE&T Training and Education Program	• SoCalREN – Workforce Education & Training Program [SCR-WET-D1] • SCE – Integrated Energy Education & Training Program [SCE-13-SW-010A] • SoCalGas – WE&T Integrated Energy Education Training (IEET) [SCG3729]	• I-REN's WE&T program activities will center on supporting and leveraging local resources who are ideally positioned to deliver locally-focused, relevant, accessible training opportunities. • Offering training at familiar, nearby locations makes it easier for job seekers and workers to attend. I-REN can use its connections and experience to help ensure training opportunities are accessible throughout the region. • The I-REN governing agencies have existing partnerships with local colleges and community colleges, successfully providing	n/a	I-REN's WE&T program activities will drive market support and equity outcomes for HTR, underserved, DAC, and ESJ communities by partnering with and building capacity among local community-focused training providers to improve quality of and access to relevant training opportunities.

D.12-11-015 Threshold Criteria that apply for each program	Comparable IOU Program, if applicable	1. Activities that utilities cannot or do not intend to undertake.	2. Pilot activities where there is no current offering, and where there is potential for scalability to a broader geographic reach, if successful.	3. Pilot activities in hard to reach markets, whether or not there is a current utility program that may overlap.
		instructional energy efficiency classes and events at local campuses where they have typically achieved high participation rates.		
WE&T Workforce Development Program	• SoCalREN – Workforce Education & Training Program [SCR-WET-D1] • SCE – Integrated Energy Education & Training Program [SCE-13-SW-010A]	• I-REN's WE&T program activities will center on convening, engaging, and building capacity with regional workforce development partners in order to define and establish a green workforce. • This program relies on collaboration with established community partner organizations and employers, many of whom have existing connections and trusted relationships with the I-REN member agencies.	n/a	I-REN's WE&T program activities will drive market support and equity outcomes for HTR, underserved, DAC, and ESJ communities by partnering with and building capacity among local community-focused workforce development partners.

D.12-11-015 Threshold Criteria that apply for each program	Comparable IOU Program, if applicable	1. Activities that utilities cannot or do not intend to undertake.	2. Pilot activities where there is no current offering, and where there is potential for scalability to a broader geographic reach, if successful.	3. Pilot activities in hard to reach markets, whether or not there is a current utility program that may overlap.
C&S Training and Education Program	SCE – Compliance Improvement Subprogram [SCE-13-SW-008C]	• As an organization led by and dedicated to serving local governments, I-REN can provide flexible and adaptable solutions to support local jurisdictions. • I-REN brings an understanding of local councils, cities, and communities and their priorities and the ability to navigate the local political climate which is important for delivering support to local government jurisdictions. • I-REN's C&S initiatives will offer locally focused training, education, and tools to support codes and standards implementation, enforcement, and compliance activities.	n/a	The program is open to all local jurisdictions but will provide targeted outreach to underinvested jurisdictions serving hard-to-reach, DAC, underserved, tribal, and ESJ communities where I-REN can help drive market support and equity outcomes and cross-cutting workforce-related objectives.

D.12-11-015 Threshold Criteria that apply for each program	Comparable IOU Program, if applicable	1. Activities that utilities cannot or do not intend to undertake.	2. Pilot activities where there is no current offering, and where there is potential for scalability to a broader geographic reach, if successful.	3. Pilot activities in hard to reach markets, whether or not there is a current utility program that may overlap.
C&S Technical Support Program	SCE – Compliance Improvement Subprogram [SCE-13-SW-008C]	• As an organization led by and dedicated to serving local governments, I-REN can deliver locally informed resources and tools that streamline code compliance and enforcement and increase permit closeout. • I-REN's C&S interventions rely on relationships and communication. I-REN is uniquely positioned to serve the C&S sector because the I-REN governing agencies already have extensive connections throughout the region with local building and planning departments, including code officials and permitting staff at all levels, and many of the	n/a	The program is open to all local jurisdictions but will provide targeted outreach to underinvested jurisdictions serving hard-to-reach, DAC, underserved, and ESJ communities where I-REN can help drive market support and equity outcomes and cross-cutting workforce-related objectives.

D.12-11-015 Threshold Criteria that apply for each program	Comparable IOU Program, if applicable	1. Activities that utilities cannot or do not intend to undertake.	2. Pilot activities where there is no current offering, and where there is potential for scalability to a broader geographic reach, if successful.	3. Pilot activities in hard to reach markets, whether or not there is a current utility program that may overlap.
		private construction and architectural firms who frequently apply for permits.		

VI. APPENDIX B: I-REN SUMMARY OF PROGRAMS OFFERED FOR 2022

Table 18: I-REN Summary of Programs, 2022

Unique ID	Program Name	Sector	Annual Budget	Eligible Measures
IREN-PUBL-001	**Technical Assistance and Strategic Energy Planning Program**	Public	$ 3,102,902	Not applicable; non-resource program
IREN-PUBL-002	**Public Buildings NMEC Program**	Public	$ 3,185,292	Any energy saving measure
IREN-WET-001	**WE&T Training and Education Program**	Cross-cutting: Workforce Education & Training	$ 1,012,949	Not applicable; non-resource program
IREN-WET-001	**WE&T Workforce Development Program**	Cross-cutting: Workforce Education & Training	$ 1,240,346	Not applicable; non-resource program
IREN-CS-001	**C&S Training and Education Program**	Cross-cutting: Codes & Standards	$ 860,334	Not applicable; non-resource program
IREN-CS-001	**C&S Technical Support Program**	Cross-cutting: Codes & Standards	$ 585,773	Not applicable; non-resource program

VII. APPENDIX C: SOCALREN, SCE AND SOCALGAS SUMMARY OF COMPARABLE PROGRAMS

Table 19: SoCalREN Summary of Comparable 2022 Programs

Unique ID	Program Name	Sector	Annual Budget	Eligible Measures
SCR-PUBL-A1	**Public Agency Energy Efficiency Project Delivery Program**	Public	$7,069,078	n/a
SCR-PUBL-B3	**Public Agency NMEC Program**	Public	$1,100,000	Any measure that reduces energy usage
SCR-WET-D1	**Workforce Education & Training Program**	Workforce Education & Training	$750,000	n/a

Table 20: SCE Summary of Comparable 2022 Programs

Unique ID	Program Name	Sector	Annual Budget	Eligible Measures
SCE-13-SW-010A	**Integrated Energy Education & Training**	Cross-Cutting	$8,696,114	n/a
SCE-13-SW-008C	**Compliance Improvement Subprogram**	Cross-cutting	$2,600,000	n/a
SCE-13-L-003I	**Public Sector Performance-Based Retrofit High Opportunity Program**	Public	$526,423	Whole Building
SCE-13-TP-029	**Local Public Sector 3P Solicitation**	Public	$5,181,133	n/a

Table 21: SoCalGas Summary of Comparable 2022 Programs

Unique ID	Program Name	Sector	Annual Budget	Eligible Measures
SCG3912	**Regional Energy Pathways**	Public	$1,932,904	n/a
SCG3729	**WE&T Integrated Energy Education Training (IEET)**	Workforce Education & Training	$4,250,000	n/a
SCG3886	**PUB - Small & Medium Public Sector**	Public Sector	$2,101,168	Direct Install measures
SCG3899	**PUB- Large Public Sector**	Public Sector	$1,750,000	TBD
SCG3739	**PUB – Community Colleges Partnership**	Public Sector	$104,440	n/a
SCG3740	**PUB – UC/CSU Partnership**	Public Sector	$137,088	n/a
SCG_SW_MCWH	**SW Midstream Commercial Water Heating**	Non-RES, Public Sector	$3,684,335	All water heating measures
SCG_SW_FS	**SW Food Service POS**	Non-RES, Public Sector	$3,845,582	Food Service Equipment

Placeholder: Annual Budget Advice Letters (ABALs)

California Climate & Energy Collaborative

Mission

Supporting California local governments to save energy, reduce greenhouse gas emissions, and accelerate climate action by building knowledge and networks amongst local government practitioners.

What we do

We are a hub for energy efficiency and sustainability news, information, best practices, and resources relevant to California's local governments.

CCEC offers the same services provided by Civicwell (formerly the Local Government Commission) and the Best Practices Coordinator as part of the Statewide Energy Efficiency Collaborative (SEEC), which sunsetted at the end of 2020 after 11 successful years.

Our Services

CCEC Forum

California Climate & Energy Forum brings together several hundred local government staff, elected officials, and community organizations, so they can collaborate and learn from each other in their efforts to advance fair and equitable climate change and energy practices.

Best Practices Coordinator

The Best Practices Coordinator is tasked with developing local government energy efficiency best practices case studies, sharing resources to promote best practice adoption across California's local governments.

Resource Library

This library is intended as a source to find all the resources compiled by CCEC throughout the years including best practices, technical assistance directory, technical assistance responses, webinar recordings and materials, funding resources, and a variety of other resources developed or compiled by CCEC.

wEEkly update

The wEEkly update is a weekly newsletter, where events, funding opportunities, peer-to-peer requests, job postings, and other items of interest to local governments are shared. Subscribe to join the 2000+ professionals receiving the wEEkly every Monday morning!

CURRENTS Quarterly

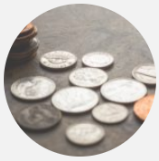
CURRENTS is CivicWell's free quarterly newsletter providing local elected officials and staff with current information on energy issues affecting California local governments.

Local Energy Resources Network (LERN)

Monthly Local Energy Resources Network (LERN) meetings are held every second Tuesday from 11am – 12pm to exchange knowledge, resources, input, and opportunities to help California local governments pursue their energy and climate goals.

Free Technical Assistance

The Statewide Best Practices Coordinator helps support local governments that need information to help them make progress on their local energy initiatives through free technical assistance.



Funding Resources Webpage

Webpage detailing featured active funding opportunities, a guide to internal and external funding best practices, pre-funding opportunities and a funding and assistance database.

CCEC Partners

CIVICWELL

3C-REN

BAYREN

I·REN
INLAND REGIONAL ENERGY NETWORK

Southern California
REGIONAL ENERGY NETWORK

Statewide CalREN Coordination Strategy

Last Updated: October 2022

Background

Regional Energy Networks (REN's) are now an integral component of the California energy efficiency landscape and officially are no longer pilots. RENs have a unique opportunity to capitalize on the REN promise and establish their essential role in the transformation to a clean energy future.

The purpose of this document is to enable RENs to build on their collective successes, determine how they can collectively and seamlessly work together to achieve greater impacts, support creation of future RENs, and lay the groundwork for a statewide REN organization.

Figure 1. California's Regional Networks and the geographic area covered

To ensure continuing coordination and effective collaboration, the RENs propose to create a ***CalREN Coordination Group*** to discuss high-level issues important to RENs and determine overarching coordination/collaboration strategies. The goal is to establish regular communication and coordination among all RENs to elevate their influence and harness their collective voice as key administrators of energy programs.

REN Planning Group

To initiate development of this REN coordination framework, a *REN Planning Group* meeting was held in San Diego on Friday, July 13, 2022. The meeting was facilitated by The Energy Coalition and included participants from the four authorized RENs and the newly proposed RuralREN. Meeting participants included:

- BayREN: Jenny Berg
- SoCalREN: Lujuana Medina
- 3CREN: Alejandra Tellez
- I-REN: Casey Dailey
- RuralREN: Courtney Kalashian

The meeting participants discussed topics important for effective coordination and developed the following Coordination Strategy. This document will continue to be updated as agreed upon by the CalREN Coordination Group.

What is the REN Promise?

In California, RENs are recognized for their unique ability to:

- *Understand Regional Needs and Fill Gaps*
    - IOU Administered Programs do not adequately serve all communities and their energy efficiency needs.
    - RENs are evolving and adapting to fill/address the gaps in IOU programs.
- *Serve "under resourced" communities*
    - RENs serve ratepayers that are underserved by other PAs and their program implementers.
- *Provide a Holistic Solution for Customers*
    - RENs build on other PA programs to augment and supplement, not duplicate, services.
    - As a trusted local resource, RENs deliver EE products and outcomes to meet their community energy needs.
    - RENs have established long-standing relationships with their member jurisdictions, making them better equipped to identify and deliver EE programs effectively to their under resourced and far reaching communities.

Why should the RENs collaborate?

Cost-effective use of ratepayer funds
As administrators of EE ratepayer funds, RENs are obligated to ensure they are managing costs, while maximizing value delivered to their communities. By pooling resources and best practices, and through effective collaboration, RENs save ratepayer money while increasing program resources to communities.

Avoid customer confusion and duplication
All RENs overlap with other EE Program Administrators and have established Joint Cooperation Memos (JCMs) and strategies to mitigate duplication of services and avoid customer confusion. Through established regular collaboration and coordination, RENs can work together to identify where best to serve customers and fill gaps.

As program portfolios grow, RENs will require greater access to customer data allowing them to effectively target customers and avoid duplication.

Stakeholder outreach & support
Collective strategies and coordinated outreach to stakeholders can positively influence opinions and perceptions about RENs. Like IOUs, RENs are autonomous PAs with both unique and common attributes. When working together on shared interests, RENs can coordinate with stakeholders (such as the IOUs) more consistently and efficiently. A unified REN voice can better demonstrate the value RENs add collectively.

Universal interests
The RENs have a universal interest in seeing all REN Business Plans approved, as proposed. The CPUC looks at each application individually but will evaluate RENs based on similar criteria. The joint RENs combined geographic and population footprint is larger than any other party, and through collaboration, they will be more influential in the stakeholder process. By working together through the Business Plan review, the CPUC will see the collective and synergistic positive impact of RENs.

How will the RENs coordinate and collaborate?

CalREN Coordination Group
The CalREN Coordination Group will be responsible for guiding CalREN activities and adhering to the Statewide REN Coordination Strategy. Any changes to the CalREN Coordination Group will be vetted with the group before confirmed. Members are:

- SoCalREN: Lujuana Medina
- BayREN: Jenny Berg
- 3CREN: Alejandra Tellez
- I-REN: Casey Dailey and Benjamin Druyon
- RuralREN: Courtney Kalashian

The Energy Coalition (Laurel Rothschild, Craig Perkins) volunteered to facilitate the meetings until a permanent facilitator is selected by the group. A change in facilitator can be made by the group at any time. The facilitator(s) will be responsible for coordination related to regular meetings, taking meeting notes, distributing agendas, and reinforcing the coordination strategy among the members.

Ongoing & regular meetings
The CalREN Coordination Group will meet remotely on the designated day and time every month and will meet in person at least once per year.

Attendance for the regularly scheduled meetings will be limited to the CalREN Coordination Group. If a member cannot attend a regularly scheduled meeting, he or she can request a pre-designated proxy to attend in their place. If two or more members are unavailable, the meeting will be rescheduled unless the group requests to keep the meeting. A meeting summary with action items will be distributed following each meeting by the facilitators.

Ad hoc meetings
In addition to regular meetings, CalREN may decide to meet as needed on regulatory comments and/or actions. Additional REN representatives (REN staff and/or REN consultants) may be invited to these discussions as appropriate so that they may act as "working sessions" and to share insights to REN leads.

A regularly scheduled meeting can be repurposed into an ad hoc meeting on a specific topic if needed, and proposed by the group.

Electronic communications
Coordination outside meetings can occur via email with the established CalREN Coordination Group. Including the CalREN facilitators in these emails is optional. Electronic communications, including meeting minutes, can be shared with other team members within a REN as appropriate. Any sharing of materials with representatives outside of a REN should be vetted with the CalREN coordination Group prior to sharing with non-REN representatives.

Regulatory filings
It is inevitable that regulatory issues will arise on which RENs may disagree. Given that **it is in the interest of RENs to have a united front on regulatory filings**, the RENs agree to the following:

- For any regulatory filings that could impact other RENs, the RENs will commit to sharing draft comments at least one day, but ideally three days before filing. If any REN has concerns or specific feedback about draft comments, they should contact ASAP the REN submitting comments to discuss.
- If a REN believes another REN's comments could negatively impact their position, the RENs agree to reach out proactively to discuss ahead of filing comments. The goal is to

reach agreement on the appropriate wording of a position before it is filed or to take a "no comment" approach in the filing. The RENs agree to discuss the issues beforehand and reach an agreement, whenever feasible.

- When all interests align, the RENs should consider filing collective joint comments. Costs for developing comments can be shared among RENs whenever possible.
    - In the immediate term, the RENs will coordinate on the following scoping memo topics:
        - metrics
        - settlements/briefs
        - value of RENs
            - equity and performance
            - terms that may have different definitions across RENs

Public Forums

Positive messaging and perception about effective REN coordination is essential to the collective success of RENs. As such, RENs agree to follow a primary "rule of engagement" to not talk about other RENs in a negative light when speaking with external stakeholders.

In addition, the RENs agree to the following key messages when speaking about RENs publicly:

- RENs complement other offerings
- Overlapping territories are not a concern but an opportunity for greater support to communities
- There is significant REN coordination work occurring "behind the scenes"

When possible, RENs should consider inviting ED staff where REN coordination is being highlighted.

Decision Making

When making decisions among the CalREN members, the Group agrees to the following guidance related to development of REN messaging:

- CalREN messaging:
    - All CalREN Coordination group members agree to reach consensus.
    - Non-consensus messaging will need to be adjusted before release.
    - Timelines for feedback should be proposed when circulating for feedback/approval.
- General REN messaging:
    - RENs agree to provide an opportunity for feedback from all CalREN Coordination Group members before publishing.
    - Suggested edits and changes should be considered but consensus is not required.
    - If a REN feels that any language or material could negatively impact their REN, then the impacted REN agrees to work with the REN that is proposing the messaging to adjust the content.

CalREN campaign
Once the CalREN message is developed, the RENs will lead a CalREN campaign effort with key stakeholders to build support and a stronger understanding for the RENs.

In the near term, this would include at a minimum:

- Schedule meeting with the head of CalAdvocates, Matt Baker
- Ex parte with commissioners
- Schedule meeting with new CPUC Energy Division Deputy Executive Director, Leuwam Tesfai

CalREN Association
To build a long-term sustainable model for coordination, the RENs propose to create CalREN as a trade association, building on lessons learned from organizations such as CalCCA. CalREN could be led by a single REN with admin funding collected from all participating RENs. Any joint coordination efforts, where the RENs see value in sharing resources can be funneled through CalREN.

What are the benefits of the CalREN Association?

Promoting the Value of RENs
RENs have a clear opportunity to promote their value and success as a group. RENs currently fund the annual CCEC Forum and can better coordinate with Civic Well to shape the programing and focus on RENs as a local government administrator of community programs.

Several key stakeholders do not clearly understand RENs or see their value. For example, CalAdvocates views RENs as not “cost effective” and that the overlap of regions leads to a waste of money. RENs are well positioned to change perceptions such as these through coordinated, clear, consistent, and repeated messaging.

Communications as RENs
Joint communication as a group will help promote the larger REN brand and value proposition. This can eventually be done through CalREN, as CalCCA has done for CCAs. Some ideas for joint REN communications include:

- Future REN Newsletter (CalREN newsletter).
- Collective statements that can be used by all RENs in communications. These could be on topics such as resiliency that can be promoted as a REN value.
- An annual or regular impact report that demonstrates the success of all RENs.
- CalREN website where relevant information can be posted and best practices can be shared.

RENs can also collectively approach key stakeholder groups to build coalitions of support for RENs. This should include meeting with the new Executive Director of CEDMC for EE industry support and representatives from Environmental Justice Groups and Small Business organizations.

Regulatory activities
RENs have many shared interests and should collaborate whenever possible on regulatory activities.

General REN support
All RENs can learn from each other, share ideas, and offer general support to overcome challenges. The RENs are encouraged to raise issues experienced by an individual REN for feedback from other RENs. Individual RENs can offer support in removing obstacles and share their own experiences in similar situations. All RENs can benefit in sharing on best practices and successes related to managing IOU relations. RENs can also promote program successes and ideas for potential scalability.

Leverage outside funding
RENs can coordinate on emerging funding opportunities to share ideas and potential partner when applying for funding. Strategies around developing shovel ready projects that support resiliency will be well suited for future funding. Emerging funding opportunities include:

- Ongoing funding announcements from CEC
- Strategic Growth Council grants such as Transformative Climate Communities
- DOE funding opportunities announced from IRA funding

SoCalREN applied for a large federal workforce grant. If awarded, SoCalREN would look to other RENs to support implementation.

Territory overlap strategy
All RENs overlap with at least two additional Program Administrators. Four of the five RENs currently overlap with another REN. Any messaging around geographic overlap should go back to the promise that RENs complement and supplement. RENs can continue to emphasize the role of JCMs and ongoing coordination where there are overlapping PAs.

REN Expansion
All RENs see value in the opportunity to access funding and work across proceedings and beyond EE. For RENs to have authority to access funding under different proceedings, they may need to file a motion under each individual proceeding. This could be done as a coordinated effort among all RENs.

Only IOUs currently have authority to lead statewide programs. A REN could propose to be a statewide lead for a statewide program/offering with other RENs as local administrator/partner.

CALIFORNIA ENERGY ALLIANCE

STRATEGIC PLAN 2022-2027

MISSION

CEA's Mission is to bring beneficial, equitable change to energy standards, policies and programs by developing consensus among diverse and engaged stakeholders.

VISION

CEA's Vision is a healthy and equitable built environment that is powered by carbon-free, reliable energy sources.

OUR PILLARS

These Pillars reflect the areas where the Alliance can have the most impact on improving the built environment while engaging the most diverse stakeholders. They are interrelated and rely on a fact-based, collective voice to guide the organization's research and advocacy activities.

BUILDING ENERGY & ENVIRONMENTAL POLICY

CODES & STANDARDS IMPROVEMENT & EVOLUTION

GOVERNMENT & INDUSTRY ENGAGEMENT

EDUCATION, TRAINING & OUTREACH

TAKE YOUR SEAT AT THE TABLE

caenergyalliance.org

California Energy Alliance

SIX-YEAR STRATEGY

"Be the conduit between the market and policy & code makers."

CEA helps its Members to build lasting connections with energy stakeholders, government officials, policy influencers, and industry professionals.

Over the next six years, CEA will develop pathways to increase engagement in the codes & standards making process and focus research efforts on larger policy-related issues.

This strategic vision is based on code development cycles and is meant to be implemented in a cyclical manner (every 3 years).

IMAGINE

Identifying opportunities for growth and expanding stakeholder participation in codes, standards & policy development.

>>> Developing 2x the codes & standards proposals, identifying new partnerships, increase funding streams for capacity building

ACTIVATE

Engaging new & existing stakeholders to participate in research and development through working groups, mentorship, and advocacy.

>>> Submitting codes & standards proposals, 10% membership growth, develop & support new legislation to advance CEA initiatives

EQUITABLE CHANGE

Enacting change which promotes a healthy & equitable built environment.

>>> Adoption of new codes & standards, provide workforce development, increased revenue growth, advocacy work in Western states

CURRENT INITIATIVES

- Codes & Standards Evolution
- Code Compliance Improvement
- Cost-Effectiveness Metrics
- Outcome-Based Approach
- Healthy Existing Buildings
- Education & Outreach

LGSEC 2022-2023 Policy Platform

LOCAL GOVERNMENT SUSTAINABLE ENERGY COALITION

Vision/Preamble

The climate catastrophe is exacerbating existing challenges and creating new demands on communities and local governments across California. The Local Government Sustainable Energy Coalition (LGSEC) envisions local governments as a leading and innovative force in achieving energy and climate goals to create resilient and environmentally responsible communities. In order to achieve statewide decarbonization, enhance climate resilience, and achieve energy equity, radical transformation is needed.

This transformation must shift the State's current electrical grid - centralized, carbon-intensive, and vulnerable to increased extreme weather events - to one that meets the needs and challenges of our times - decentralized, renewable, customer-focused, and resilient. As primary parties responsible for ensuring safety and resilience for their constituents, local governments can and must play a critical role in ensuring this transformation is done equitably and affordably for all.

Local governments are as diverse as our State's constituents and vary widely in structure and governance. Local governments include cities and counties, but should also include schools, special districts, councils of governments, and Tribal governments. Local governments are behind some of the State's energy innovations, like Community Choice Energy programs and Regional Energy Networks (RENs).

Local governments have authority over development, land use, permitting, infrastructure and local codes and programs, municipal programs and facilities. Local governments are the first line of defense and the providers of last resort when it comes to disaster preparedness and emergency response. However, not all communities are equipped with the capacity and resources to effectively consider potential climate impacts.

State policies and programs need to recognize the inextricable role local governments play in ushering the clean energy transition and should prioritize local governments' capacity needs and involvement by funding local government action.

LGSEC has outlined the top priorities and positions for the coming year as identified by our members. We will work with State regulatory agencies to implement these actions in order to realize a decentralized, decarbonized, reliable and affordable energy system.

To promote opportunities for local governments and ensure an equitable[1] transition, LGSEC will focus its 2022-2023 policy work in the following areas:

- Building and Transportation Decarbonization
- Decentralized and Resilient Energy Systems
- Funding, Financing and Affordability

[1] As part of LGSEC's 2021-2023 Strategic Plan, Equity is defined as " intentionally and proactively supporting policy and local governments who are underserved and underrepresented, based on access and availability to energy information and resources, and regulatory engagement."

Building and Transportation Decarbonization

Decarbonizing our buildings and vehicles while enhancing local energy resilience requires place-based strategies, which depend on local governments' intimate knowledge of their communities, and their capacity to manage and advance changes through design of sustainability programs, land use regulation, and provision of services.

The neighborhood-scale must be considered to build community resiliency and ensure equity rather than a piecemeal, top-down approach to centralized generation and transmission & distribution (T&D) infrastructure. This begins with local governments having access to energy consumption data that is granular, complete, and actionable.

Priority Actions

- Advocate for all-electric design and construction as the Statewide baseline code for all cost-effective building types, no later than the 2025 Energy Code.
- Advocate to the California Energy Commission (CEC) to enable local governments to obtain energy use and other data from utilities and state agencies that they need to effectively develop and administer climate and clean energy programs.
- Advocate to the California Air Resources Board (CARB) to prepare accurate, actionable, useful, and regular State greenhouse gas inventories and forecasts which are made accessible to local governments and incorporate alignment between state and local inventory data.
- Advocate for pilots, programs and/or funding mechanisms to support electrification, particularly in historically disinvested communities, with inclusive high road union jobs and workforce development in partnership with organized labor and local governments.
- Work with Investor-Owned Utilities (IOUs) to facilitate collaborative planning tools that can allow jurisdiction staff to view details about infrastructure and electrification opportunities.
- Develop a comprehensive funding/financing plan to direct electrification investments in marginalized communities.

Decentralized and Resilient Energy Systems

State energy and climate agencies urgently need to embrace decentralized energy. A holistic re-thinking of the transmission and distribution (T&D) infrastructure is needed with the guiding principle of decentralized energy. As a means to reduce the need for expensive T&D infrastructure and bolster local control, locating clean energy generation as close to energy demand should be paramount.

In line with a 2045 decarbonization goal established in 2018 by SB 100, a concrete plan is needed to decommission fossil fuel generation for retail sales, wholesale exports, and as backup engines and determine concrete and actionable pathways to decentralize and decarbonize energy infrastructure.

Every customer, especially those that are low-income, disadvantaged, and vulnerable, should be afforded the opportunity to realize energy self-sufficiency, and the grid should accommodate that opportunity in a customer-centric paradigm.

Unfortunately, utility infrastructure investment and deferral decisions are made without local government consultation or consideration that have resulted in significant impacts, missed opportunities, and escalation of costs. Local governments can lead by identifying fossil fuel generation in their jurisdiction, advocate for a just transition of those assets and support communities in accessing clean, local, and affordable energy systems.

Priority Actions

- Support legislation (such as SB 852) which would create opportunities for local governments to form climate resilience districts to fund projects and programs as well as receive/match state, federal, and private funding.
- Advocate for public agency-owned facilities to be exempt from solar and storage sizing limits and from the definition of an electrical corporation if seeking to form a multi-facility microgrid.
- Advocate for revisions to the California Public Utilities Commission (CPUC) interconnection rules to allow stationary battery storage and microgrids to export to the grid at any time, not limited to just emergency conditions. Furthermore, allow any excess power to be exported to physically adjacent sites in emergency conditions.
- Engage in the High Distributed Energy Resources (DER) proceeding to advocate for a 'tabula rasa' or 'blank slate' study of how a 21st century grid would be built in California. Advocate for the State to study reliability/resiliency and cybersecurity benefits of a decentralized system.
- Advocate for an examination of the net import and net export capacity in the energy imbalance market to determine how much additional rate impacts net exports have on customers that accrue to independent power producers versus ratepayer benefits for receiving out of state imports.
- Advocate against any unnecessary fossil fuel infrastructure, especially where decentralized, renewable energy alternatives have not been analyzed or considered.
- Advocate for the creation of a distribution service operation (DSO) to avoid centralized asset investment and direct DSOs to only rate base when needed to decentralized asset strategies.
- Advocate for transactive energy and prosumer networks, which reward customers to adopt energy and carbon-efficient technologies and behaviors that contribute to grid resilience.
- Advocate for State funding to support the formation of Resilience Offices or hire Resilience Officers to integrate sustainability and emergency operations.

Funding, Financing and Affordability

California's customer electricity rates - already the highest in the nation - are increasing at a worrying pace and threaten governments' ability to achieve an equitable energy transition. Heating and cooling bills are typically higher in less energy efficient homes occupied by low-income residents. Low-income, affordable housing must be prioritized when it comes to energy efficiency and electrification upgrades.

The CPUC and program administrators should maximize efforts to ensure disadvantaged and vulnerable populations have low- to no-cost and/or bill-neutral electrification and decarbonization interventions.

The State budget should provide increased funding for affordable housing and funding for energy and resource efficiency measures directed to assist property owners and tenants in acquiring and installing energy and resource efficiency measures in homes.

Rather than profit-driven IOUs, State legislation and the CPUC should enable a framework to re-evaluate the appropriate institutions and organizations that can more equitably and affordably achieve the State's climate and energy goals.

Priority Actions

- Advocate for clear support for low- to medium-income customers to decarbonize when otherwise installing fossil gas is cost prohibitive. Support integrated financing with zero - or even negative - interest and gap funding so out of pocket is not needed.
- Advocate for access to low cost capital or direct subsidy to accelerate the multifamily affordable housing sector decarbonization.
- Advocate for flexible accounting to utilities and non-IOU Program Administrators to demonstrate potential solutions to current regulatory financial barriers (such as gas vs. electrical assets, capital vs. expense accounting) and to support whole building retrofits, including energy efficiency, renewable energy, energy storage, and transportation and building decarbonization.
- Advocate for program funding focused on Greenhouse Gas (GHG) reductions and customer benefits rather than IOU costs and revenue requirements.
- Advocate for localized financing solutions that can be offered through Regional Energy Networks, Community Choice Energy programs and other prospective program administrators to increase access, flexibility and stacking for multi-benefit projects.
- Advocate that non-IOU parties, such as Community Choice Aggregators (CCAs) and RENs, are enabled to the greatest extent possible to meet their communities' needs .
- Advocate against rate basing behind-the-meter assets; enabling technologies and programs should be program-based.
- Advocate for ratepayer and state funds to contribute to tenant energy reliability through in-dwelling energy storage and solar/generation in common space or property boundary.
- Advocate for an unbiased study that examines customer-centric costs and benefits of a distribution grid that satisfies all local energy demand needs, with locally-sited DERs. The CPUC should take a blank slate approach to system planning whereby all generation is located in-state and on-site energy is maximized and connected and supplied through the distribution network.
- Advocate for a study that examines the ratepayer costs and benefits of sustaining or expanding transmission infrastructure that solely benefits independent power producers, and provides little to no direct benefits to California ratepayers.
- Advocate for an unbiased study of natural gas infrastructure investments and early measures that could be used to reduce future natural gas bill increases for those who are the last to transition to electricity.
- Advocate for transparency in IOU procurement contracts.

Thanks to all of the LGSEC board members and working groups members who collaborated to create this Policy Platform!