

Docket No.: A.26-03-020 (consolidated in A.26-03-009, *et. al.*)

Exhibit No.s: 1-A, 2-A, 3-A

Date: September 30, 2026

Witnesses: Trevor Keith; Lynette O'Neil

CENTRAL CALIFORNIA RURAL REGIONAL ENERGY NETWORK

ENERGY EFFICIENCY

2028-2031 PORTFOLIO PLAN AND 2032-2035 BUSINESS PLAN

REVISED TESTIMONY EXHIBITS 1-A, 2-A, 3-A

CLEAN VERSION



Table of Contents

Exhibit 1: 2028-2031 Portfolio Plan and 2032-2035 Business Plan	1
About CCR REN	1
Chapter 1: Executive Summary	2
Chapter 2. Portfolio Summary	7
Service Territory and Service Territory-Related Factors	7
Regulatory Intent.....	31
Application Summary Tables of Expected Performance Metrics Covering the 4-year and 8-year Budget Request	33
Chapter 3: Portfolio Strategies	40
Portfolio Strategies for 4-year Plan and 8-year Plan	41
Advance Affordability and Mitigate Overall Rate Impacts (Consistent with Executive Order N-5-24)	41
Optimize TSB Achievement and Cost Effectiveness, as well as TSB Achieved Per Ratepayer Dollar Spent.....	42
Advance Building Decarbonization Activities in Your Energy Efficiency Portfolio....	44
Focus Electric Savings at Peak Times with High Avoided Cost and TSB	50
Use of Meter-Based Savings Measurement	51
Promote and Deploy Exempt Measures in the Equity Segment	53
Increase progress on CPUC’s ESJ Action Plan Goals	55
Strategy for IDSM Activities Within CCR REN’s Proposed Portfolio.....	57
Increase WE&T to Better Deliver Quality Energy Efficiency Installations.....	59
Joint Demographic Data Reporting Per D.23-06-055 (OP 23)	61
Overcome Sector and Segment-Specific Challenges.....	62
Promote Responsible Management and Disposal of Removed Refrigerants and Incorporate Low/Ultra Low GWP Refrigerants.....	64
Spur Innovation to Advance a Technology, Marketing Strategy, or Delivery Approach in a Manner Different from Previous Efforts.....	66
Incorporate Community-Based Program Design	69
Chapter 4: Forecast Methodology and Zero-Based Budgeting.....	71
Demonstration of the Reasonableness of the Request.....	71
Methodologies to Forecast and Allocate Resource Acquisition, Equity, Market Support, and Codes & Standards Program Budget and Benefits.....	79
Methodologies to Forecast and Allocate Program Budget and Benefits by Sector..	81

Methodologies and Calculations Used to Derive a Zero-Based Budget (D.21-05-031, COL 22, OP 8).....	83
Program Modifications from 2024-2027 Portfolio Cycle	85
Describe the significant program modifications (e.g., portfolio segmentation changes or significant budget shifts) from the 2024-2027 portfolio cycle.....	85
Closed Programs.....	89
New Programs/Program Placeholders.....	90
Chapter 5: Portfolio Management	93
Overview for 4-year plan and 8-year plan: Key metrics and outcomes.....	93
Alignment with 4- and 8-year goals.....	93
4- and 8-Year Portfolio Logic Model.....	95
CCR REN Unique Value Metrics	96
Strategies to Optimize the Portfolio and Manage Risk.....	99
TSB, Cost-Effectiveness and On-Target Procedures	99
Approach and Flexibility in Risk Management.....	102
Procurement Practices	105
Based on D.23-06-055, Propose a Process for Statewide Programs	107
Chapter 6: Segmentation and Sector Strategy	108
Portfolio Sector Strategy.....	108
Portfolio Segmentation Strategy.....	114
Resource Acquisition Strategy.....	115
Market Support.....	117
Equity.....	118
Codes & Standards.....	123
Chapter 7: Portfolio Coordination	125
Segment and Sector Specific Coordination	125
Coordination within the Same PA	125
Coordination with Other PAs	129
Coordination Participants.....	130
Coordination Structure and Frequency	131
Coordination Practices, Overlap Identification and Mitigation	132
Coordination with Market Transformation.....	136
Coordination with Energy Savings Assistance (ESA) Programs.....	136

Coordination with Other Demand Side Programs.....	137
Chapter 8: Stakeholder Engagement	141
Stakeholder Engagement Summary and Approach	141
How CCR REN Addressed Feedback	146
Chapter 9: Evaluation, Measurement & Verification.....	149
Summary of planned EM&V Studies and Activities for the 4-year plan and 8-year plan.....	149
PA/ED EM&V Allocations and Justification.....	152
Chapter 10: Cost & Cost Recovery (IOUs only)	153
Chapter 11: Recommendations for New or Modified Energy Efficiency Policy	154
1. Update the Energy Efficiency Policy Manual	154
2. Strengthen the TRC Test's Participant Benefits Estimation Methodology	155
3. Reinstate IOU Fiscal Oversight for CPUC-Directed EM&V Funds.....	158
4. Update Fuel-Switching Policy to Support Customer Choice and Affordability....	159
5. Revise the Current Hard-to-Reach Definition to Include Underserved Customers as a Part of the Geographic Criteria.....	160
6. Update the Underserved Definition to Include Permanent Medical Baseline Customers	161
7. Modernize Energy Efficiency Planning and Reporting to Improve Portfolio Administration and Oversight.....	161
8. Streamline Energy Efficiency Measure Packages Review	163
9. Reconcile Preponderance of Evidence (POE) and NTG Assumptions for Custom and Accelerated Replacement/Retirement (AR) Projects	164
10. Support PA Partnerships for Effective Program Expansion.....	165
Exhibit 2: Program Cards	1
Commercial Energy Improvement Program.....	1
Non-Residential SEM.....	7
Workforce Education and Training.....	14
Residential Equity	21
IDS.....	27
Finance Equity	34
Codes & Standards.....	40
Exhibit 3: CEDARS Filing Links and Receipts.....	1

2028 CEDARS Filing Link and Submission Receipt.....1

2029 CEDARS Filing Link and Submission Receipt.....3

2030 CEDARS Filing Link and Submission Receipt..... 5

2031 CEDARS Filing Link and Submission Receipt 7

List of Tables

Table 1. 4-year Portfolio Budget Forecast Summary (2028-2031)	33
Table 2. 4-year Portfolio Forecast Summary (2028-2031)	34
Table 3. 4-year Portfolio Budget Forecast Summary (2032-2035)	36
Table 4. 4-year and 8-year IOUs Total System Benefit Forecast (w/out C&S) vs. Goals	37
Table 5. 4-Year and 8-Year Codes & Standards Forecast vs. Goals (IOUs only)	38
Table 6. Portfolio Statewide and Third-Party Contribution Percentage Requirements (As Applicable)	39
Table 7. Closed Programs from the 2024-2027 Cycle	90
Table 8. New Programs in 2028-2031 4-Year Application Cycle	90
Table 9: CCR REN Unique Value Metrics Overview and Reporting Approaches	96
Table 10. Budget Distribution by Sector	113

List of Figures

Figure 02-01. CCR REN Service Territory	07
Figure 02-02. CCR REN Regions, Partners, Counties, Square Miles, and Population	10
Figure 02-03. Heating and Cooling Degree Days in CCR REN Climate Zones	12
Figure 02-04. CCR REN Wide Demographics	13
Figure 02-05. Central Coast Demographics	14
Figure 02-06. San Joaquin Valley Demographics	15
Figure 02-07. Eastern Sierra Demographics	16
Figure 02-08. Shared Territory with other PAs Serving CCR REN Customers	17
Figure 02-09. Utilities Serving CCR REN Customers	18
Figure 02-10. PG&E Electricity Use by Building Types	19
Figure 02-11. SCE Electricity Use by Building Types	19
Figure 02-12. PG&E Natural Gas Use by Building Types	20
Figure 02-13. SCG Natural Gas Use by Building Types	20
Figure 02-14. Electricity Energy Intensity Across Building Types	21
Figure 02-15. Natural Gas Energy Intensity Across Building Types	21
Figure 02-16. Annual Energy Cost and Energy Burden- Average	22
Figure 02-17. Electricity Cost Escalation Over Time	24
Figure 02-18. Percentage of Population in Poverty and 2024 Median Income	24
Figure 02-19. Unemployment Over Time	25
Figure 02-20. CCR REN's Disadvantaged Communities	26

Figure 02-21. CCR REN DAC, Hard-to-Reach, and Underserved Populations	27
Figure 03-01. CCR REN 2028-2035 Guiding Principles	40
Figure 03-02. Portfolio Strategies in Alignment with N-5-24	41
Figure 03-03. CCR REN 2028-2031 Portfolio	43
Figure 03-04. Building Decarb Strategies Included in the CCR REN Portfolio	45
Figure 03-05. Decarbonization Initiatives and Collaboration Opportunities	47
Figure 03-06. CCR REN Peak Load Reduction Opportunities	50
Figure 03-07. Strategy To Deliver Exempt Measures	53
Figure 03-08. CCR REN Strategies for Advancing ESJ Goals	55
Figure 03-09. CCR REN IDSM Activities and Strategies	58
Figure 03-10. WE&T Program Goals, Strategies, and Objectives	59
Figure 03-11. Overcoming Sector and Segment Specific Challenges and Applied Strategies	63
Figure 03-12. Key Community-Based Approach for Meaningful Involvement	69
Figure 04-01. IOU Hard-to-Reach and Non-Hard-to-Reach Expenditures by Sector - 2024	73
Figure 04-02. BP Metric 171, Average Percent of Hard-to-Reach	74
Figure 04-03. BP Metric 70, Average Percent of Hard-to-Reach Residential Participants	74
Figure 04-04. CCR REN 2024-2027 Budget Compared to Other RENs	75
Figure 04-05. CCR REN 2028-2031 Budget Compared to Other RENs	76
Figure 04-06. Poverty Rates and 2024-2027 Investments by REN	78
Figure 04-07. Poverty Rates and 2028-2031 Investments by REN	78

Figure 04-08. Budget Forecast Methodology Across Segments	79
Figure 04-09. Methodology to Forecast and Allocate Program Budget and Benefits by Sector	82
Figure 04-10. Methodology to Derive a Zero-Based Budget	83
Figure 04-11. 2024-2027 to 2028-2031 Budget Shifts by Segment	88
Figure 05-01. 2028-2031 Portfolio Goals and Business Plan Outcomes	93
Figure 05-02: CCR REN Portfolio Logic Model	95
Figure 05-03. CCR REN's Unique Role in California's Energy Efficiency Landscape	98
Figure 05-04. TSB and TRC Metric Tracking	101
Figure 05-05. CCR REN Corrective Action Plan Framework	103
Figure 06-01. 2028-2031 Percent Budget by Segment	114
Figure 06-02. Single-Family and Manufactured Home Participation Forecast	123
Figure 07-01. CCR REN Governance Structure	125
Figure 07-02. Program, Segment, Sector, Lead Organization, and Territory	126
Figure 07-03. Sector/Segment Coordination	127
Figure 07-04. Program Coordination	128
Figure 07-05. Shared Territory with other PAs Serving CCR REN Customers	130
Figure 07-06. Coordination Structure and Frequency	132
Figure 07-07. CCR REN Overlap Identification Process	133
Figure 07-08. CCR REN Identified Levers to Resolve or Prevent Overlap	135
Figure 07-09. CCR REN Demand-Side Program Integration	137
Figure 07-10. CCR REN Coordination with Building Decarbonization Programs	139

Figure 08-01. CCR REN Community Engagement	142
Figure 08-02. Community Engagement Summary	143
Figure 08-03. Illustrative Quotes from Community Engagement	146
Figure 08-04. Community Feedback and Portfolio Adjustments	147
Figure 09-01. Summary of CCR REN EM&V Study Types and Expected Cadence	150
Figure 09-02. CCR REN EM&V Budget	152

EXHIBIT 1: 2028-2031 PORTFOLIO PLAN AND 2032-2035 BUSINESS PLAN

About CCR REN

The Central California Rural Regional Energy Network (CCR REN) supports an equitable and affordable clean energy transition for underserved communities. By leveraging regional collaboration, trusted local relationships, and pragmatic responses to community needs, the CCR REN serves communities that have historically lacked access to energy-efficiency programs.

The CCR REN is administered by the County of San Luis Obispo on behalf of the partner organizations: the Association of Monterey Bay Area Governments (AMBAG), the San Joaquin Valley Clean Energy Organization and The High Sierra Energy Foundation (HSEF). The County of Ventura holds an advisory role. The CCR REN became a Portfolio Administrator in 2024, offering energy efficiency programs throughout the Central Coast, San Joaquin Valley, and Eastern Sierra regions.

Chapter 1: Executive Summary

In compliance with California Public Utilities Commission (CPUC or Commission) requirements,¹ the Central California Rural Regional Energy Network (CCR REN) submits this Energy Efficiency Business Plan Application requesting approval of an authorized budget cap of \$413,424,196 for its eight-year strategic Energy Efficiency Business Plan covering program years 2028-2035, and a four-year budget request of \$170,252,643 associated with its proposed energy efficiency portfolio plan for 2028-2031. Exhibit 1 discusses CCR REN's 2028-2031 Portfolio Plan and 2028-2035 Business Plan (Business Plan), including proposed budgets. Exhibit 2 provides CCR REN's Program Cards. Exhibit 3 includes the CEDARS Filing Receipts.

I. Intent

CCR REN's intent in filing the 2028-2035 Business Plan is to expand equitable access to, and delivery of, energy-efficiency programs that prioritize geographically hard-to-reach, Underserved, and Disadvantaged Communities in the Central Coast, San Joaquin Valley, and Eastern Sierra regions. CCR REN's Business Plan prioritizes affordability, reducing customer energy costs, building an in-community workforce, and addressing air quality issues through place-based program design that addresses the higher costs of serving these communities, referred to as the "Rural Cost Penalty."²

According to the Carnegie Endowment for International Peace, place-based program approaches "...design policies and projects that work in specific

¹ D.21-05-031, OP 5 EE Business Plan Application Template, dated September 29, 2025 Assigned Commissioner's Ruling, dated July 23, 2025

² "Ron Shani, Yaniv Reignewertz, Eran Vigoda-Gadot (2025), Far-from-sight and expensive: additional costs of public services in rural areas"
<https://www.tandfonline.com/doi/epdf/10.1080/03003930.2024.2369784?needAccess=true>

places in order to solve specific economic and energy challenges and provide tangible benefits to workers and communities.” Since launching programs in 2025, CCR REN has shown that a place-based, community-driven approach can deliver results and address the Rural Cost Penalty by meeting equity goals and achieving \$2.97m in Total System Benefit (TSB), surpassing our forecasted goal of \$2.41m. Highlights of our 2025 program year include:

- 2,013 homes received audits and entry-level energy efficiency measures,
- 82 job placements through WE&T and Commercial,
- A Resource Acquisition segment Total Resource Cost (TRC) ratio of 1.50.

The 2028-2035 Business Plan intends to build on CCR REN’s proven approach while scaling place-based designed programs to support an equitable and affordable clean energy transition for geographically hard-to-reach, Underserved, and Disadvantaged Communities.

II. Determining Intent

CCR REN’s intent was shaped by the experiences of the communities CCR REN partner organizations live in and serve. Existing program service rates, discussed in Chapter 4, community engagement, discussed in Chapter 8, and the lived professional experiences of each partner agency shaped the intent, structure, and priorities of the Business Plan. The 2028-2035 Business Plan responds to the need for scaled place-based programming that addresses the Rural Cost Penalty while prioritizing affordability, customer bill savings, economic opportunity, and air quality.

III. Community Engagement

For CCR REN, community engagement began long before planning for the 2028-2035 Business Plan Application. We understand the realities our geographically hard-to-reach, Underserved, and Disadvantaged Communities face. CCR REN understands these realities because partner organizations and

1 their team members represent, live, and work in the communities served. We
2 have seen first-hand the impacts of:

- 3 • Increasing energy costs,
- 4 • Extreme weather events,
- 5 • Depressed economic and educational opportunities, and
- 6 • Poor air quality.

7 CCR REN's lived experiences were reinforced through community
8 engagement with 264 unique participants across 30 stakeholder meetings, 4
9 listening sessions, 3 community workshops, 3 community surveys, and 1 focus
10 group. Across all three regions, community members expressed concern about:

- 11 • Rising utility bills,
- 12 • Opportunities for energy-related work locally, and
- 13 • Challenges in accessing and participating in energy-saving programs.

14 **IV. Impact**

15 CCR REN responded to lived experiences and community feedback by
16 updating the program portfolio to prioritize affordability, customer bill savings,
17 workforce development, and air quality. The 2028-2035 Business Plan positively
18 impacts geographically hard-to-reach, Underserved, and Disadvantaged
19 ratepayers and workers across non-residential and residential sectors. CCR REN's
20 2028-2031 portfolio is forecasted to:

- 21 • Deliver \$212m TSB and achieve a 4-year portfolio TRC ratio of 1.06,
- 22 • Generate \$20.808million in lifecycle customer bill savings,
- 23 • Achieve $\geq 75\%$ permanent job placement rates for WE&T participants,
- 24 • Reduce CO₂e by 715k Metric Tons, NO_x by 13.8k lbs. and PM₁₀ by 13.8 lbs.

25 **V. Access to Programs and Information**

CCR REN's proven place-based approach increases access to programs and information by delivering trusted in-community services. CCR REN's in-community approach builds trust by leveraging existing relationships, raises community awareness of key energy-efficiency issues by being present and approachable, and delivers energy and utility cost savings through installers who have a vested interest in the communities they live and work in. The Business Plan scales CCR REN's innovative solutions to solving the Rural Cost Penalty and is designed from the bottom up to equitably and affordably increase access to information and participation in energy efficiency programs.

For non-residential customers, CCR REN is focused on delivering programs that provide cost-effective resource acquisition, beneficial electrification, permanent load shifting, and bill savings. Increased access to programs and information will be supported by an in-community workforce trained through the WE&T program. This approach was proven in 2025 and will increase access to information and delivery of programs and will also build the workforce our region needs to reduce the Rural Cost Penalty, create climate-adaptive careers, and enable Central California to fully participate in and benefit from the clean energy transition.

For residential customers, CCR REN's community-driven approach will tailor program design to the needs of the communities being served. The program design will have a focus on increasing program participation among equity-targeted customers. This will be supported by a Codes & Standards program that seeks to expand access to information amongst building professionals, with a specific focus on refrigerant management practices.

CCR REN's Integrated Demand-Side Management (IDSM) and finance programs are designed to make it easier for customers to realize the full benefits of energy efficiency coupled with distributed energy resources. The IDSM and finance programs will provide a range of services to make information easier to

1 access, while providing technical assistance for project opportunities that
2 promote customer bill savings and mitigate upward rate pressures through
3 permanent peak load shifting and off-peak load growth.

4 **VI. Regulatory**

5 CCR REN's 2028-2035 Business Plan meets all CPUC requirements for the
6 application and satisfies all Regional Energy Network criteria established in
7 Decision 12-11-015 as revised in Decision 19-12-021, by delivering services that
8 utilities cannot or do not intend to provide, piloting new approaches, and serving
9 hard-to-reach customers, regardless of whether there is another utility or CCA
10 program that may overlap.³

11 CCR REN segmentation, metrics, and outcomes comply with D.23-06-055⁴
12 and Resolution E-5351, and further the CPUC's Environmental Social Justice
13 Action Plan Goals 1, 2, 5, and 7 as discussed in Chapter 3. CCR REN's Business Plan
14 aligns with Executive Order N-5-24 and the 2025 State Auditor's Report by
15 strengthening oversight, improving transparency, and delivering clear value for
16 ratepayers. The Business Plan supports key state policy goals by reducing energy
17 use, supporting beneficial electrification, improving air quality, and building an
18 in-community workforce capable of delivering clean-energy upgrades.

19 The CCR REN Business Plan is clear in its intent. Deliver a ***For Rural by Rural***,
20 place-based, cost-effective portfolio that supports a just and equitable energy
21 transition for geographically hard-to-reach, Underserved, and Disadvantaged
22 Communities in the Central Coast, San Joaquin Valley, and Eastern Sierra regions.

³ D. 19-12-021, OP 4

⁴ D.23-06-055

Chapter 2. Portfolio Summary

Service Territory and Service Territory-Related Factors

The Central California Rural Regional Energy Network (CCR REN) serves a combined territory that covers approximately 49,000 square miles, 31% of California's total land area, and covers a footprint slightly larger than the state of Pennsylvania. CCR REN serves 14 of California's 58 counties and is home to approximately 5.3 million Californians. The region's population density is sparse at 108 per square mile, compared with California's statewide density of 254 people per square mile.⁵ Figure 02-01 shows the service territory, which covers the Central Coast, San Joaquin Valley, and Eastern Sierra.

Figure 02-01. CCR REN Service Territory



⁵ <https://data.census.gov/>

Each CCR REN region has distinct social, political, economic, and geographic and climatic characteristics. To ensure every part of the territory is represented, and that unique, place-based⁶ approaches are advanced, four partner organizations collaborate as the CCR REN Leadership Team. Each partner organization operates and lives within a distinct CCR REN region. This model is critical as it ensures that local and regional voices directly shape program design and delivery across CCR REN's large and diverse service territory.

These organizations are:

Association of Monterey Bay Area Governments (AMBAG) was organized in 1968 for the purpose of regional collaboration and problem-solving. AMBAG, as it is often referred to, was formed as a Joint Powers Authority (JPA) governed by a 24-member Board of Directors comprised of elected officials from each City and County within the region. The AMBAG region includes Monterey, San Benito, and Santa Cruz counties. AMBAG serves both as the federally designated Metropolitan Planning Organization (MPO) for all three counties and the Council of Governments (COG) for Monterey and Santa Cruz Counties. AMBAG has 20 years of experience in energy efficiency program implementation, ranging from local government partnership implementation of grant funded and CCR REN programs. AMBAG is the Program Lead Organization for the CCR REN Commercial Energy Improvement Program and the IDSM program.

The County of San Luis Obispo is a general law form of government that provides more than 700 public services, including law enforcement, animal control, transportation planning, foster care, and local and regional energy programming. The County has previously implemented Local Government

⁶ Kate Gordon (2024), "About Local Solutions for the Clean Energy Transition. <https://carnegieendowment.org/research/2024/08/managing-the-energy-transition-a-place-based-approach>

1 Partnerships and Tri-County Regional Energy Network programs. The County is
2 currently the Internal Administrator for the CCR REN. In addition, the County is
3 the lead CCR REN agency for Non-Residential Strategic Energy Management
4 (SEM) and the Finance Equity programs.

5 The **High Sierra Energy Foundation** (HSEF), a registered 501(c)(3) non-
6 profit established in 2005, promotes energy efficiency and sustainability in the
7 rural Eastern Sierra communities of Inyo and Mono counties. HSEF implemented
8 a Local Government Partnership for over a decade and has provided outreach for
9 statewide programs such as *Flex Your Power* and *Energy Upgrade California*.
10 HSEF works with Southern California Edison and the Los Angeles Department of
11 Water and Power on community partnership initiatives, ensuring the
12 communities they serve are aware of and can benefit from the offerings available
13 to California ratepayers. The organization is a Regional Partner of SoCalREN and
14 supports Public agency, tribal, multifamily, and youth education programs, and
15 is the Program Lead Organization for CCR REN's Codes & Standards and
16 Residential Equity Program.

17 The **San Joaquin Valley Clean Energy Organization** (SJVCEO) was
18 founded in 2007 as a 501(c)(3) non-profit to work with cities and counties, as well
19 as public and private organizations, to demonstrate the benefits of energy
20 efficiency and renewable energy throughout the eight-county region of the San
21 Joaquin Valley. SJVCEO's work focuses on regional solutions for various issues,
22 including advancing the use of local renewables, energy efficiency, demand
23 reduction, climate action planning, and alternative transportation. SJVCEO
24 currently implements the Valley Innovative Energy Watch with Southern
25 California Gas Company and the Central California Energy Watch (CCEW) for
26 public agencies with PG&E. The organization serves as a Regional Partner
27 supporting the SoCalREN Public agency and multi-family programs and is the
28 Program Lead Organization for the CCR REN Workforce Education and Training
29 (WE&T) program.

Figure 02-02 below presents CCR REN regions, partners, counties, square miles, and population.

Figure 02-02. CCR REN Regions, Partners, Counties, Square Miles, and Population

CCR REN Region	Partner Organization	Counties Receiving Services	Land Area, sq. miles	Population
Central Coast	Association of Monterey Bay Area Governments	Monterey, San Benito, Santa Cruz	5,115	774,105
	County of San Luis Obispo	San Luis Obispo	3,300	156,255
San Joaquin Valley	San Joaquin Valley Clean Energy Organization	Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare	27,270	4,313,161
Eastern Sierra	High Sierra Energy Foundation	Inyo, Mono	13,2450	32,211

CCR REN's large and diverse territory presents both challenges and opportunities in implementing energy efficiency programs. Without thoughtful place-based program intervention, providing energy efficiency services to geographically hard-to-reach areas can cost more than serving metropolitan or suburban communities. This can be referred to as the Rural Cost Penalty. Travel time, labor, and outreach all increase in low-density rural communities, which increases the cost of service. Many rural and tribal communities also lack

dependable internet connectivity and face a “Digital Divide”,⁷ making participation and follow-through more challenging. The use of unregulated fuels (e.g., wood and propane) further limits measures that can be provided in areas like Mono and Inyo County and rural communities in other CCR REN geographies that lack access to utility-provided natural gas.⁸

CCR REN communities in the San Joaquin Valley have faced longstanding, severe air quality challenges, with unhealthy levels of ozone and fine particulate matter being the region’s central challenges.⁹ The region’s pollution burden is due to a mix of emission sources and conditions that favor the buildup of ozone and fine particulate matter. Indoor air quality improvements are especially important on days when outdoor air quality is poor. CCR REN sees an opportunity to implement programs and measures that can deliver measurable benefits to both indoor and outdoor air quality. For example, CCR REN may consider residential program designs that prioritize indoor air-quality measures such as induction stoves and building envelope measures.

CCR REN’s territory has been historically underserved, as detailed in Chapter 4, creating a clear opportunity to fill longstanding program gaps while prioritizing local and regional workforce development. Program Year 2025 results demonstrate that a place-based in-community¹⁰ delivery model, paired with

⁷ Joseph Hayes, Niu Gao, Darriya Starr, Amy Gong Liu, Vicki Hsieh, “Achieving Universal Broadband in California,” (2023) (<https://www.ppic.org/publication/achieving-universal-broadband-in-california>)

⁸ California Building Decarbonization Assessment (2021), California Energy Commission. <https://efiling.energy.ca.gov/GetDocument.aspx?tn=239311>

⁹ Air Quality in the Valley: Challenges and Progress (2022), San Joaquin Valley Air Pollution Control District. <https://ww2.valleyair.org/media/nw2d1c3g/05-chapter-2-aqinvalley-challenges-and-progress.pdf?utm>

¹⁰ CCR REN uses “In-Community” in reference to local and regional hiring and implementation.

workforce development and utility cost-savings measures, can deliver meaningful results across the portfolio while addressing the Rural Cost Penalty.

Climate Zones

CCR REN spans diverse geographic areas, from the Central Coast and the San Joaquin Valley to the high mountainous region in the Eastern Sierra. These areas have climates that include some of the state's most extreme temperature conditions, resulting in higher-than-average energy consumption and energy cost burden. These varied climate zones offer CCR REN the opportunity to design locally delivered energy-efficiency programs that address local needs, reduce customer bills, and improve resilience across coastal, valley, mountain, and arid communities.

Figure 02-03 presents the Climate Zones that CCR REN serves and the average heating and cooling degree days, which are used to understand each climate zone's demand for heating and cooling.

Figure 02-03. Heating and Cooling Degree Days in CCR REN Climate Zones

Climate Zone	CCR REN Region	Heating Degree Days	Cool Degree Days
3	Central Coast	3071	183
4	Central Coast	2548	666
5	Central Coast	2654	464
12	San Joaquin Valley	2621	1226
13	San Joaquin Valley	2443	1599
14	San Joaquín Valley, Eastern Sierra	2422	3056
16	Eastern Sierra	5057	596

1 CCR REN Demographics

Figure 02-04. CCR REN Wide Demographics

Central California Rural REN demographics	
DEMOGRAPHIC CATEGORY	REGION AVERAGE STATS
Land Mass (land area in square miles)	48,932
Population	5,275,732
Percentage population in Central California Rural REN Territory	13.34% of California Population
Median household income	\$81,895
Education Breakdowns	
HS grad or higher (percentage of persons age 25+, 2018-2022)	78.54%
Bachelor's degree or higher (percentage of persons age 25+, 2018-2022)	22.23%
Unemployment Rates (2022)	6.91%
Unemployment Rates (2024)	7.01%
Age Range	
Persons under 5	6.79%
Persons under 18	26.76%
Persons above 18	60.04%
Persons 65 or above	12.32%
Language other than English spoken	43.35%
Number of federal and state-recognized tribes	16
Square miles of federal and state-recognized tribal lands	146%
Percentage of veterans in population 18 and older	5.00%
Number of census tracts	979
Number of hard-to-reach census tracts	763
Number of DAC census tracts	389
Number of low-income census tracts	520
Percentage population living in a geographically hard-to-reach area	76.37%
Percentage population living in a SB 535 "Disadvantaged Community"	39.12%
Percentage population living in an AB 1550 "low-income community"	49.62%
Percentage of schools where 75% or more students are eligible to receive free and reduced priced meals	55.80%

1 Figure 02-05. Central Coast Demographics

 Central Coast demographics 	
DEMOGRAPHIC CATEGORY	REGION AVERAGE STATS
Land Mass (land area in square miles)	8,416.30
Population	930,360.00
Percentage population in Central California Rural REN Territory	17.63%
Median household income	\$96,829.75
Education Breakdowns	
HS grad or higher (percentage of persons age 25+, 2018-2022)	83.11%
Bachelor's degree or higher (percentage of persons age 25+, 2018-2022)	33.76%
Unemployment Rates (2022)	4.98%
Unemployment Rates (2024)	5.90%
Age Range	
Persons under 5	5.50%
Persons under 18	21.70%
Persons above 18	61.30%
Persons 65 or above	16.90%
Language other than English spoken	38%
Number of federal and state-recognized tribes	0
Square miles of federal and state-recognized tribal lands	0
Percentage of veterans in the population 18 and older	5.30%
Number of census tracts	209
Number of hard-to-reach census tracts	148
Number of DAC census tracts	4
Number of low-income census tracts	80
Percentage of population living in a geographically hard-to-reach area	69.70%
Percentage of population living in an SB 535 Disadvantaged Community	2.50%
Percentage of population living in an AB 1550 "low-income community"	41.30%
Percentage of schools where 75% or more students are eligible to receive free and reduced-priced meals	37.90%

1 **Figure 02-06. San Joaquin Valley Demographics**

 San Joaquin Valley demographics 	
DEMOGRAPHIC CATEGORY	REGION AVERAGE STATS
Land Mass (land area in square miles)	27,270.70
Population	4,313,161
Percentage population in Central California Rural REN Territory	81.75%
Median household income	\$74,979.88
Education Breakdowns	
HS graduate or higher (percentage of persons age 25+, 2018-2022)	77.25%
Bachelor's degree or higher (percentage of persons age 25+, 2018-2022)	19.17%
Unemployment Rates (2022)	6.54%
Unemployment Rates (2024)	8.28%
Age Range	
Persons under 5	7.10%
Persons under 18	28.00%
Persons above 18	59.70%
Persons 65 or above	12.20%
Language other than English spoken	45%
Number of federal and state-recognized tribes	7
Square miles of federal and state-recognized tribal lands	135
Percentage of veterans in the population 18 and older	4.90%
Number of census tracts	760
Number of hard-to-reach census tracts	606
Number of DAC census tracts	385
Number of low-income census tracts	434
Percentage of population living in a geographically hard-to-reach area	77.80%
Percentage of population living in an SB 535 Disadvantaged Community	48.40%
Percentage of population living in an AB 1550 "low-income community"	51.50%
Percentage of schools where 75% or more students are eligible to receive free and reduced-priced meals	60.80%

1 **Figure 02-07. Eastern Sierra Demographics**

 Eastern Sierra demographics 	
DEMOGRAPHIC CATEGORY	REGION AVERAGE STATS
Land Mass (land area in square miles)	13,245.90
Population	32,211.00
Percentage of population in CCR REN territory	0.61%
Median household income	\$79,692.50
Education Breakdowns	
HS graduate or higher (percentage of persons age 25+, 2018-2022)	90.64%
Bachelor's degree or higher (percentage of persons age 25+, 2018-2022)	30.08%
Unemployment Rates (2022)	3.97%
Unemployment Rates (2024)	4.20%
Age Range	
Persons under 5	4.50%
Persons under 18	19.80%
Persons above 18	59.70%
Persons 65 or above	20.50%
Language other than English spoken	19%
Number of federal and state-recognized tribes	9
Square miles of federal and state-recognized tribal lands	11
Percentage of veterans in the population 18 and older	7.00%
Number of census tracts	9
Number of hard-to-reach census tracts	9
Number of DAC census tracts	0
Number of low-income census tracts	6
Percentage population living in a geographically hard-to-reach area	100.00%
Percentage population living in an SB 535 Disadvantaged Community	0.00%
Percentage population living in an AB 1550 "low-income community"	75.40%
Percentage of schools where 75% or more students are eligible to receive free and reduced-priced meals	13.90%

Energy Characteristics of the CCR REN Region

Portfolio Administrators Servicing the Region

CCR REN's service area has multiple Portfolio Administrators (PAs) that are implementing energy efficiency programs. Coordination with other PAs and the processes to address overlap and duplication is discussed in Chapter 7. Figure 02-08 below presents the other PAs providing energy-efficiency programming within CCR REN's territory.

Figure 02-08. Shared Territory with other PAs Serving CCR REN Customers

CCR REN Region	Electricity Utilities	Natural Gas Utilities	REN/CCAs
Central Coast: Monterey, Santa Cruz, and San Benito	PG&E	PG&E	N/A
Central Coast: San Luis Obispo	PG&E	PG&E, SoCalGas	SoCalREN, 3CREN
San Joaquin Valley	PG&E, SCE	PG&E, SoCalGas	SoCalREN, PCE, Ava ¹¹
Eastern Sierra	SCE	N/A (Propane)	SoCalREN

Utilities

The CCR REN service territory is served primarily by Pacific Gas & Electric (PG&E), Southern California Edison (SCE), and Southern California Gas Company (SCG). Electricity in the CCR REN territory is provided by PG&E and SCE, as well as other Publicly Owned Utilities (POUs). Natural gas is primarily provided by PG&E and SoCalGas. Various companies provide unregulated propane to customers across all CCR REN regions.

¹¹ Ava and PCE serve a portion of the San Joaquin Valley.

Figure 02-09 shows the primary utilities serving the CCR REN regions.

Figure 02-09. Utilities Serving CCR REN Customers

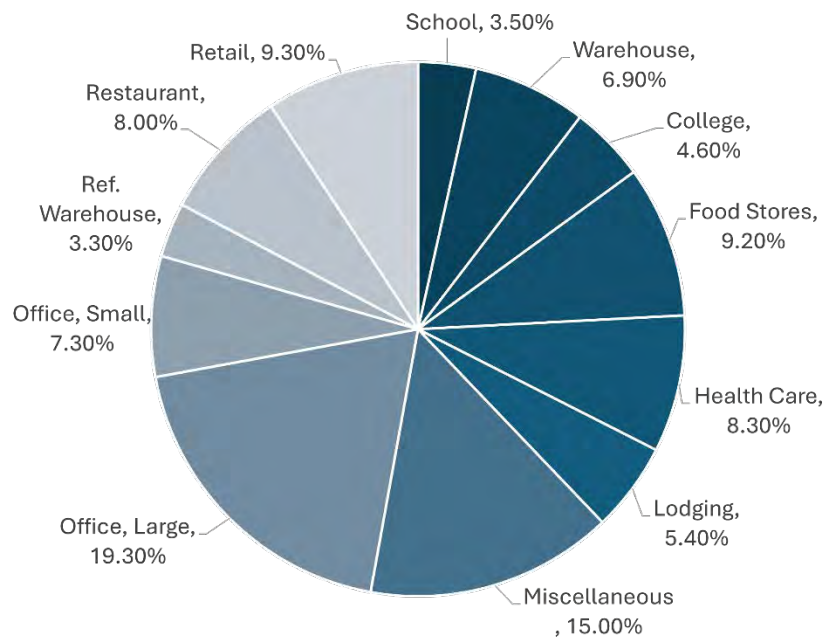
CCR REN Region	Electricity Providers	Natural Gas Providers
Central Coast	PG&E	PG&E, SoCalGas
San Joaquin Valley	PG&E, SCE, Lodi Electric Utility, Port of Stockton, Modesto Irrigation District, Turlock Irrigation District, Merced Irrigation District	PG&E, SoCal Gas, City of Coalinga
Eastern Sierra	SCE, Los Angeles Department of Water and Power (LADWP) and Liberty Utilities	No natural gas service

Annual Energy Cost and Energy Burden

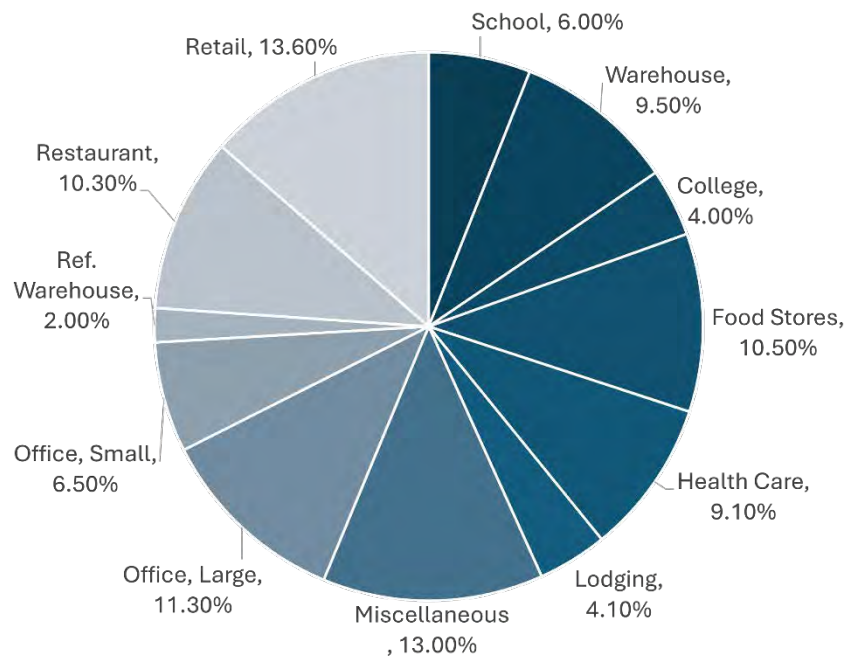
Commercial and residential energy costs, use intensity, and energy burden vary across building types and climate zones. To better understand energy consumption and its potential impact on place-based program design, CCR REN reviewed the California Energy Commission's 2022 Commercial End Use Survey (CEUS)¹² and residential energy burden rates. When paired with climate zone data on heating and cooling degree days in the CCR REN territory, this information provides context for portfolio and program design, resiliency, and service. Figures 02-10 through 02-13 present commercial energy use by IOU and building type and were adapted from the CEUS study results.

¹² "2022 California Commercial End-Use Survey (CEUS) Final Report" (2024). California Energy Commission. https://www.energy.ca.gov/sites/default/files/2024-02/2022%20CEUS%20Final%20Report_ada.pdf

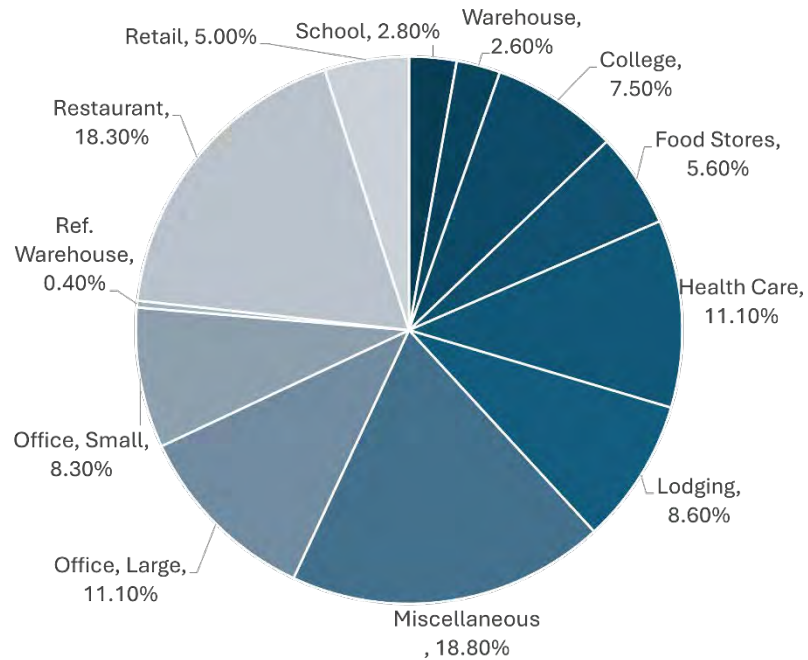
1 **Figure 02-10. PG&E Electricity Use by Building Types**



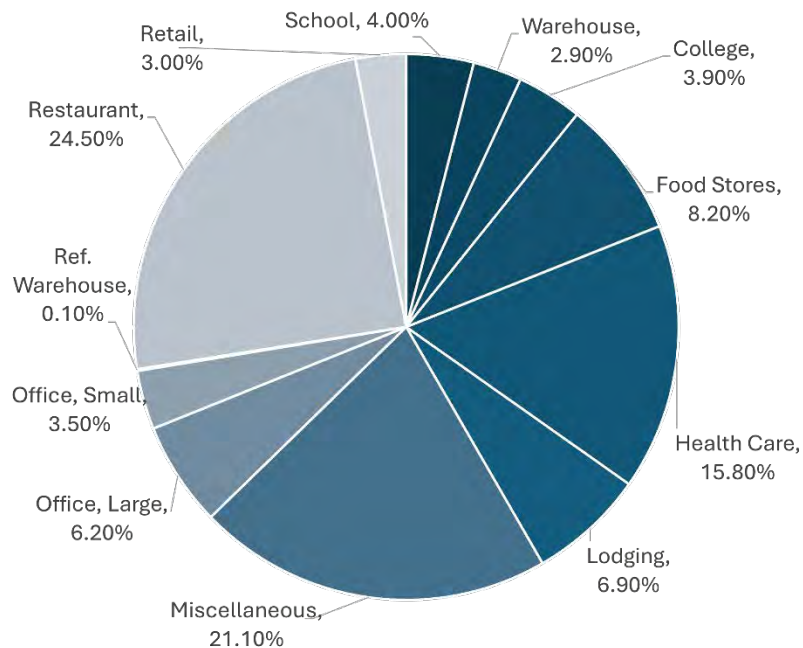
2 **Figure 02-11. SCE Electricity Use by Building Types**



1 **Figure 02-12. PG&E Natural Gas Use by Building Types**



2 **Figure 02-13. SCG Natural Gas Use by Building Types**



Energy Use Intensity (EUI) for Commercial buildings follows a similar trend to energy use. Figures 02-14 and 02-15 below present EUI across building types.

Figure 02-14. Electricity Energy Intensity Across Buildings

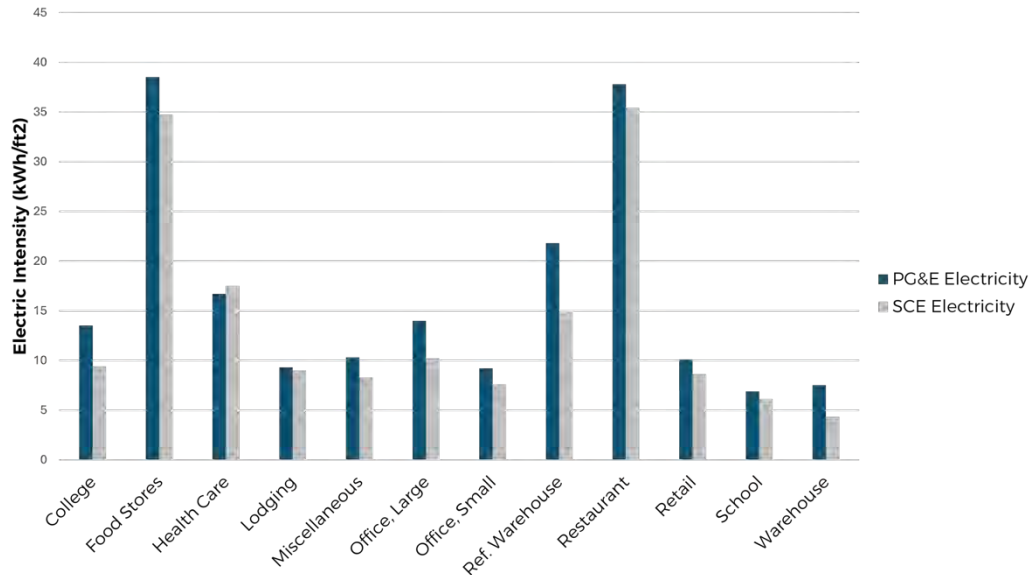
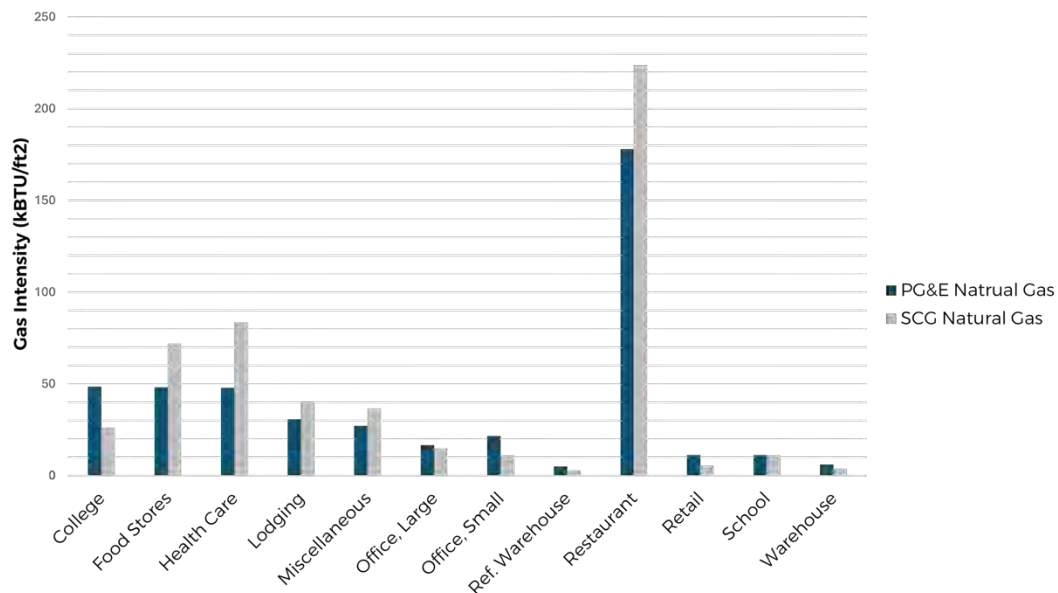


Figure 02-15. Natural Gas Energy Intensity Across Buildings



Understanding energy use and energy use intensity across commercial building types creates an opportunity to optimize program design based on where the most energy is used while increasing access to and delivery of equitable services.

Figure 02-16 presents average residential energy burdens and annual energy costs for California and the CCR REN territory.¹³ CCR REN households face an average energy burden approximately 42% higher than the statewide average and pay more than 10% more annually. Note that some CCR REN areas have significantly higher energy burdens. For example, Inyo County has a burden of 3.5%, Kern has a burden of 3.6%, and Tulare has a burden of 3.7%.

Figure 02-16. Annual Energy Cost and Energy Burden- Average

Region	Averaged Energy Burden	Averaged Annual Cost	Medium Household income
California	2.20%	\$2,388	\$100,149
CCR REN	3.13%	\$2,646	\$81,895

For many non-residential and residential customers, energy use and costs are not abstract statistics but port into daily economic pressures shaped by structural and socioeconomic conditions such as limited access to energy-saving programs, employment opportunities, higher concentrations of low- to moderate-income households, and a greater reliance on unregulated propane.¹⁴ Together, these factors compound the challenge of maintaining safe, affordable energy service and underscore the need for targeted, place-based energy efficiency interventions across both Residential and Non-Residential sectors.

¹³ A Deep Dive into Energy Affordability. California Energy Commission Preliminary Data. <https://www.energy.ca.gov/data-reports/data-exploration-tools/energy-equity-indicators-dashboard-collection/deep-dive-energy>.

¹⁴ https://dof.ca.gov/media/docs/forecasting/Demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2025/E-5-2025_Geo_InternetVersion.xlsx

¹⁵ [https://data.census.gov/table/ACSDP5Y2024.DP04?g=040XX00US06\\$05000000](https://data.census.gov/table/ACSDP5Y2024.DP04?g=040XX00US06$05000000), 2020-2024 ACS 5-year estimates

Socioeconomic Factors

CCR REN serves communities that are geographically hard-to-reach, underserved and disadvantaged while providing relevant place-based program interventions. CCR REN's territory faces higher poverty and unemployment rates than urban and suburban areas and continues to bear disproportionate economic impacts from increasing rates. Seasonal employment in tourism and agriculture further amplifies instability and limits access to well-paying, year-round jobs. These conditions are reflected in an elevated energy burden and intensified by recent spikes in the California Consumer Price Index—4.2% in 2021 and 7.3% in 2022, followed by increases of 3.9% and 3.1% in 2023 and 2024, respectively.¹⁶

The region's energy affordability challenges are evident in both utility arrearages and rate trends. Nearly one in five California households are currently behind on their energy bills, as documented in the Public Advocates Office's 2025 rates analysis.¹⁷ Utility cost escalation has further deepened customer energy affordability concerns. CCR REN communities face compounded pressures from statewide rate drivers, which include wildfire mitigation, customer solar subsidies, and utility transmission and distribution investments. These and other factors have contributed to significant increases in average rates over the past decade.¹⁸

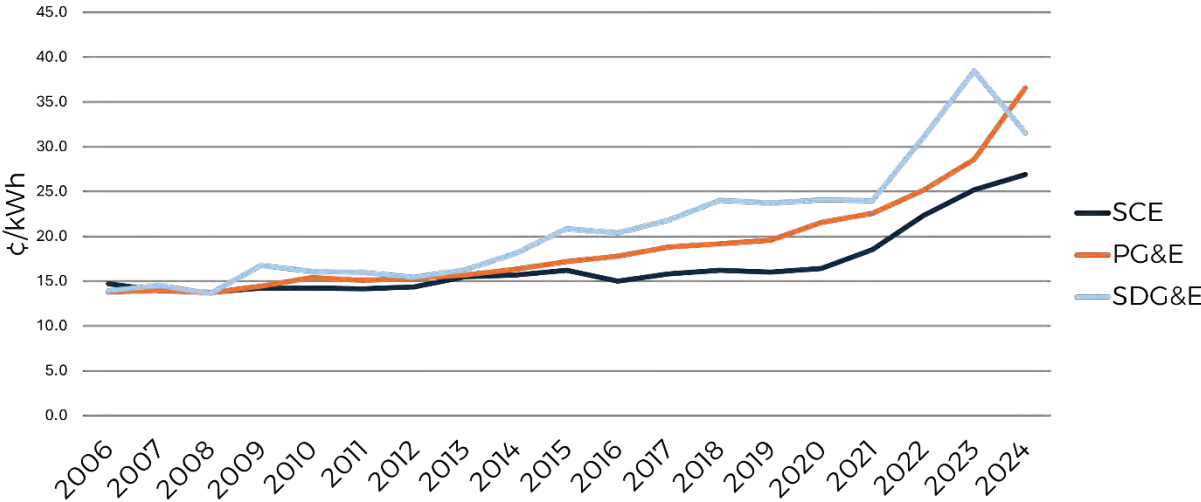
¹⁶<https://labormarketinfo.edd.ca.gov/cgi/databrowsing/localAreaProfileQSMOREResult.asp?viewAll=yes&viewAllUS=¤tPage=¤tPageUS=&sortUp=&sortDown=&criteria=consumer+price+index&categoryType=economicindicators&geogArea=0601000000×eries=consumer+price+indexTimeSeries&more=&menuChoice=localAreaPro&printerFriendly=&BackHistory=-1&goTOPPageText=&USgoTOPPage=>

¹⁷ Public Advocates Office Q1 2025 Rates Report, March 2025 utility compliance filings in the CPUC's disconnection proceeding (R.18-07-005)

¹⁸ Mohit Chhabra, (2025) "Powering Change - Understanding California's Electric Rate Challenge and Affordability Solutions." <https://www.nrdc.org/resources/powering-change-understanding-californias-electric-rate-challenges-and-affordability>

1 Figure 02-17 below presents Bundled System Average Rate costs per kWh across
2 electric providers.¹⁹

3 **Figure 02-17. Electricity Cost Escalation Over Time**



4 Affordability and energy burden are further reflected by income statistics:
5 16.3% of the CCR REN population falls below the poverty level, compared with
6 11.8% statewide.²⁰ Median household income in the CCR REN region is \$81,895,
7 which is approximately 18% lower than the California median of \$100,149. Figure
8 02-18 below presents poverty levels and median incomes across California and
9 the CCR REN territory.

Figure 02-18. Percentage of Population in Poverty and 2024 Median Income

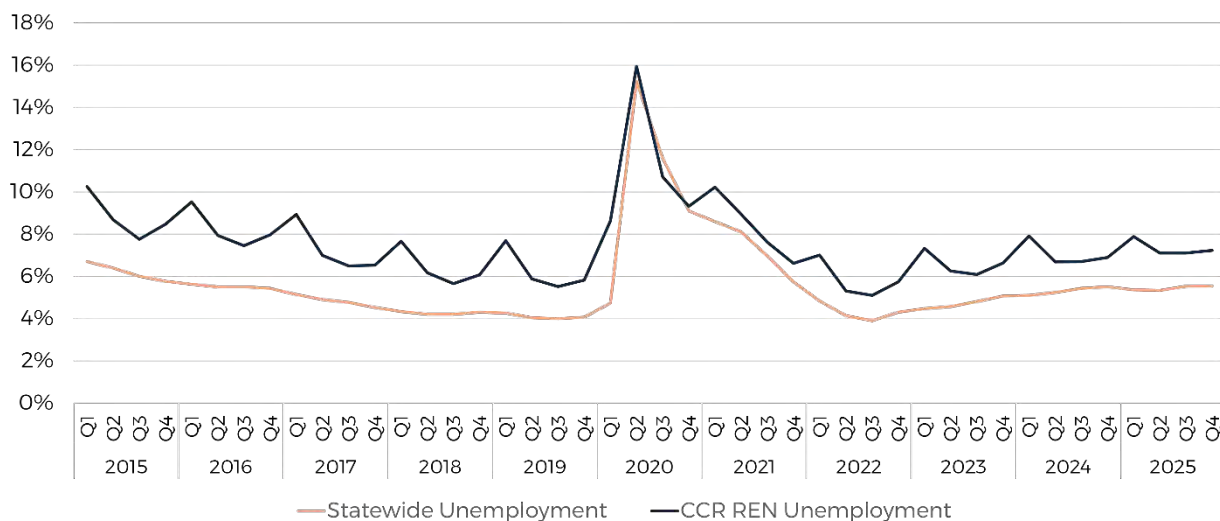
Region	Percent of Population in Poverty	2024 Medium Income
California	11.8%	\$ 100,149
CCR REN	16.3%	\$ 81,895

¹⁹<https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/electric-costs/historical-electric-cost-data/historelectricelectriccostdata--08-09-2024--v-02-21-2025-v3.xlsx>

²⁰ <https://data.census.gov/profile/California?g=040XX00US06#income-and-poverty>

Figure 02-19 presents California unemployment rates over the past 10 years and shows that CCR REN communities consistently experienced unemployment rates of 1.0% to 3.5% higher than the statewide average.²¹ Long-run labor market data further demonstrate that many counties within the CCR REN footprint experience persistently higher unemployment than the statewide average, driven by seasonal agriculture and tourism cycles and structural rural labor market constraints. County-level unemployment maps and annual averages from the California Employment Development Department (EDD) illustrate this variability across the San Joaquin Valley and surrounding rural counties.²² This volatility underscores the need for durable, locally rooted job creation tied to energy programs, both to stabilize household incomes and to expand the contractor base required to deliver energy efficiency services.

Figure 02-19. Unemployment Over Time



CCR REN will serve communities across all three CPUC Equity categories hard-to-reach, Underserved, and Disadvantaged Communities, which include

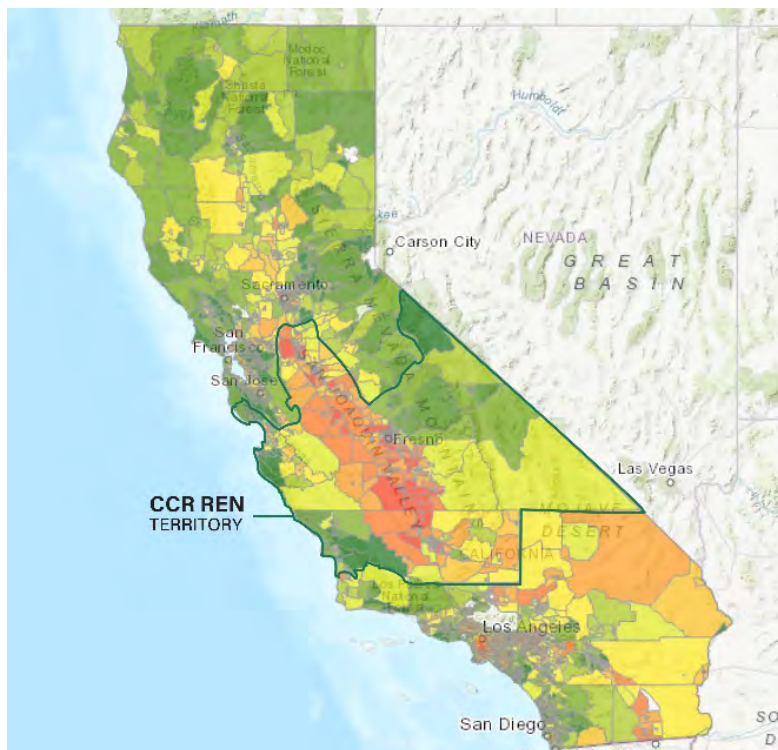
²¹ <https://www.bls.gov/lau/tables.htm#stateaa>

²² 2024 Annual Average Unemployment, California Employment Development Department. https://labormarketinfo.edd.ca.gov/file/Maps/County_UR2024_BM24.pdf https://labormarketinfo.edd.ca.gov/file/Maps/County_UR2024_BM24.pdf

both residential and non-residential customers. Non-Residential customers face many of the same economic pressures as households. CCR REN will further prioritize Environmental and Social Justice (ESJ) Communities as defined by the ESJ Action Plan,²³ reinforcing the need for locally targeted, Equity-focused place-based program delivery.

Figure 02-20 overlays CCR REN's territory on the CalEnviroScreen map, showing a significant concentration of Disadvantaged Communities in the San Joaquin Valley. CCR REN is committed to responding to this need through targeted outreach, tailored program design to local needs, and partnerships that reach both households and local businesses essential to regional economic resilience.

Figure 02-20. CCR REN DACs



²³ Environmental & Social Justice Action Plan Version 2.0, (2022). California Public Utilities Commission. <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/news-and-outreach/documents/news-office/key-issues/esj/esj-action-plan-v2jw.pdf>

For the Residential and Public sectors, an Underserved customer is a member of an Underserved community, as defined by Public Utility Code Section 1601(e). For the Commercial, Industrial, and Agricultural sectors, a customer must be a member of an Underserved community as defined by Public Utility Code Section 1601(e) and must also be an Underserved business group as defined by Government Code Section 12100.63(h)(2).²⁴

The hard-to-reach criteria were most recently defined in D.23-06-055.²⁵ In this decision, the CPUC added Disadvantaged Communities to the geographic criteria, clarified that public agencies located in qualifying geographic areas may be considered hard-to-reach, and established that federally-recognized Tribal Nations participating in a program are considered hard-to-reach.

Figure 02-21 provides estimates of the CCR REN population living in Underserved and Disadvantaged Communities. CCR REN's territory has approximately 13% of the state's population, and approximately 22% of the state's Disadvantaged Community population.

Figure 02-21. CCR REN DAC, Hard-to-Reach, and Underserved Populations

Region	Population	Counties	Population in Disadvantaged Communities	Population in Low-Income Census Tracts	Number of Geo. Hard-to-Reach Counties
California	39,538,223	58	9,656,617	18,467,316	31
CCR REN	5,275,732	14	2,111,252	2,677,858	9

²⁴ D.23-06-055, COL 31

²⁵ <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M512/K907/512907396.PDF>

Energy Careers and Workforce

Advancing clean energy careers in CCR REN territory faces a variety of social and economic barriers. Key social barriers include educational attainment, skill gaps and training needs, job displacement and unemployment fears, social implications of workforce transitions, and policy and regulatory hurdles.²⁶ Further social inequalities impact access by gender, race, and ethnicity. Women hold approximately 23% of energy efficiency roles, while contributing 48% of the total workforce, and black people hold 7% of all energy efficiency jobs, contributing 11% of the total workforce.²⁷

Analyses show a clear need for new workers across the energy trades, as well as among energy professionals such as project managers, engineers, and energy auditors. The California energy sector has added over 200,000 jobs since 2016 and has the most clean energy jobs in the United States, with over 552,300 individuals employed. Energy efficiency had a job growth rate of 3.3% in 2024. At the same time, 32% of the current energy workforce is over 50, indicating that as retirement accelerates, recruitment, training, and retention will become increasingly critical.^{28 29}

²⁶ Greg Guibert, Graham Hulse, Alison Turner, Jocelyn Lewandowski, Iain Hyde, (2024). "The Challenges and Opportunities to the Local Workforce Associated with Community Scale Energy Transitions." NERRC Economic Resilience Learning Collaborative, https://www.eda.gov/sites/default/files/2025-06/NERRC_Energy_Transitions_Research_Brief_Final.pdf

²⁷ "Who has Access to Good Clean-Energy Jobs?" (2024). Urban Institute <https://www.urban.org/projects/clean-energy-job-access-race-gender>

²⁸ Sarah Bohn, Daniel Payares-Montoya, Shannon McConville (2025). "California's Energy Workforce: Needs and Opportunities." Public Policy Institute of California. <https://www.ppic.org/publication/californias-energy-workforce-needs-and-opportunities/>

²⁹ U.S. Green Building Council California (2025). Clean Jobs California. https://e2.org/wp-content/uploads/2025/11/E2-FS-Clean-Jobs-CA-2025-25-10-E_04.pdf

CCR REN will deliver accelerated, place-based training that integrates technical skills, soft skills, certifications, on-the-ground training, and career support through resume building and interview practice sessions. Workforce offerings will provide upskilling for existing workers and rapid pathways for new workers. CCR REN's proposed workforce development and career-creation initiatives are designed to create paid positions, expand permanent local jobs, strengthen contractor networks, and broaden economic opportunities across the CCR REN territory. CCR REN will work with other Portfolio Administrators and program providers to address key barriers to entry that have created inequitable access to the economic benefits of jobs in energy efficiency. This work will focus on expanding capacity to drive demand in energy efficiency programs while reducing the Rural Cost Penalty.

Climate Change

The regions comprising the CCR REN territory are facing increasing threats from climate change and climate-related disasters. Climate change manifests in the territory through climate variability, which is resulting in more frequent wildfires³⁰, continued drought³¹, an increase in severe storms and precipitation

³⁰ California Department of Forestry and Fire Protection (CAL FIRE). "2021 Incident Archive." Cal Fire Department of Forestry and Fire Protection, State of California, 2022, <https://www.fire.ca.gov/incidents/2021>.

³¹ Pugh, Brad. "California | U.S. Drought Monitor." U.S. Drought Monitor, National Drought Mitigation Center, University of Nebraska-Lincoln, 2022, <https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?CA>.

1 events³², record heatwaves,³³ sea level rise³⁴, and reduced snowpack and water
2 resources.³⁵

3 According to FEMA, most counties in the CCR REN region have a relatively
4 low ability to prepare for anticipated natural hazards, adapt to changing
5 conditions, and withstand and recover rapidly from disruptions when compared
6 to the rest of the U.S.³⁶ Public health impacts from climate change range widely
7 and highlight inequities.

- 8 • Seven counties in CCR REN's San Joaquin Valley region received failing
9 grades on all three measures of air quality.
- 10 • According to a 2025 American Lung Association report, counties in the San
11 Joaquin Valley have some of the nation's highest asthma rate for children.³⁷
- 12 • Increased heat days impact human health and also increase the chances
13 of vector-borne disease.³⁸

³² Extreme Weather in California and Climate Change: Droughts and Flooding." Institute of the Environment and Sustainability at UCLA, The Regents of the University of California, 1 Apr. 2019, <https://www.ioes.ucla.edu/project/extreme-weather/>.

³³ "Climate in California: Temperatures in California Over Time." USAFacts.org, <https://usafacts.org/issues/climate/state/california#climate>.

³⁴ Anderson, Jeffrey K., "Sea-Level Rise in the Humboldt Bay Region - Update 2" (2018). Local Reports and Publications. 5. https://digitalcommons.humboldt.edu/hsuslri_local/5

³⁵ Berg, N., and A. Hall (2017), Anthropogenic warming impacts on California snowpack during drought, *Geophys. Res. Lett.*, 44, 2511-2518, doi:10.1002/2016GL072104

³⁶ "FEMA: National Risk Index." *FEMA's Natural Hazards Risk Assessment Program*, Department of Homeland Security. <https://hazards.fema.gov/nri/map#>.

³⁷ American Lung Association. (2016). State of the Air 2025. Chicago, IL. Retrieved from <https://www.lung.org/getmedia/5d8035e5-4e86-4205-b408-865550860783/State-of-the-Air-2025.pdf>

³⁸ "Impact of Climate on Workers." Centers for Disease Control and Prevention, The National Institute for Occupational Safety and Health (NIOSH), 6 Dec. 2016, <https://www.cdc.gov/niosh/topics/climate/how.html>.

- Food insecurity from the climate is exacerbated by impacts on food production.³⁹

Climate change impacts have, and will continue to, affect the regions in CCR REN's territory, stressing the importance of energy efficiency, awareness of low-GWP refrigerants, and clean, renewable energy as pathways to address climate change and to advance the state's decarbonization policies.

Regulatory Intent

CCR REN is filing this Business Plan with the CPUC pursuant to the Commission's established framework for Regional Energy Networks (RENs). RENs were first authorized as pilots in D.12-11-015⁴⁰. Further definition and alignment to the rolling portfolio occurred in D.15-10-028⁴¹, D.16-08-019⁴², and D.18-05-041⁴³. D.19-12-021⁴⁴ removed the "pilot" designation and recognized RENs as established Portfolio Administrators. This shift provided greater stability and reduced uncertainty about RENs' continued viability in the energy efficiency landscape.

D.19-12-021 reinforced that RENs are not subject to TRC requirements, as they are designed to fill gaps and serve hard-to-reach customers, but that they are required to forecast cost-effective outcomes. D.19-12-021 also required RENs

³⁹Brown, M.E., et al. 2015. *Climate Change, Global Food Security, and the U.S. Food System*. 146 pages.

http://www.usda.gov/oce/climate_change/FoodSecurity2015Assessment/FullAssessment.pdf

⁴⁰ <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M034/K299/34299795.PDF>

⁴¹ <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M155/K511/155511942.pdf>

⁴² <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M166/K232/166232537.PDF>

⁴³ <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M215/K706/215706139.PDF>

⁴⁴ <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M321/K507/321507615.PDF>

1 to demonstrate new or unique value to the Commission’s energy, climate, and/or
2 equity goals in addition to meeting at least one or more revised thresholds for
3 review, which are:⁴⁵

- 4 • Activities that utilities or CCA Portfolio Administrators cannot or do not
5 intend to undertake.
- 6 • Pilot activities where there is no current utility or CCA program offering, and
7 where there is potential for scalability to a broader geographic reach, if
8 successful.
- 9 • Activities serving hard-to-reach markets, whether or not there is another
10 utility or CCA program that may overlap.

11 D.24-09-031⁴⁶ approved CCR REN and authorized funding from 2024 to
12 2027. Funding was not authorized beyond 2027, and it was noted that allocations
13 among the three utilities that fund CCR REN should be reevaluated during
14 consideration of the 2026 portfolio applications. In addition, D.24-09-031
15 required that CCR REN file a Tier 3 advice letter detailing an updated Business
16 Plan and forecasts. CCR REN filed advice letter 1-E/1-G on 12/31/2024, which was
17 subsequently approved on August 28, 2025, and issued on September 5, 2025.⁴⁷

18 CCR REN’s 2028-2035 Business Plan aligns to previous CPUC guidance and
19 takes a forward-looking approach to portfolio design. CCR REN’s portfolio meets
20 the review thresholds established in D.12-11-015 and revised in D.19-12-021. CCR
21 REN will deliver programs that fill gaps and primarily serve hard-to-reach
22 customers in Underserved, Disadvantaged, and Tribal communities. CCR REN

⁴⁵ D.19-12-021, Pg 32

⁴⁶ <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M542/K040/542040687.PDF>

⁴⁷ <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M578/K922/578922783.PDF>

further the CPUC’s Environmental and Social Justice action plan by integrating equity throughout the portfolio, taking a place-based, in-community investment approach, promoting meaningful participation, and building high-road career paths. The 2028-2035 portfolio aligns with the CPUC’s energy and climate goals by delivering measurable energy and emissions savings through Strategic Energy Management and the installation of energy-saving technologies coupled with an IDSM approach.

Executive Order N-5-24 and the 2025 State Auditor’s report emphasized a need for strengthened oversight, improved transparency, and clearer value for ratepayers. CCR REN’s plan is designed to deliver TSB while increasing participation, reducing energy burden, and supporting long-term customer and ratepayer affordability across geographically hard-to-reach, Underserved, Disadvantaged, and Tribal communities.

Application Summary Tables of Expected Performance Metrics Covering the 4-year and 8-year Budget Request

The following tables present the CCR REN’s proposed 4-year and 8-year budget requests, including annual funding levels, forecasted cost-effectiveness, and expected performance outcomes. The tables below summarize the projected investments and associated metrics across both planning horizons.

Table 1. 4-year Portfolio Budget Forecast Summary (2028-2031)

	2028	2029	2030	2031	Total (4 years)
Total Budget	\$31,495,882	\$40,155,952	\$46,850,475	\$51,750,334	\$170,252,643
Resource Acquisition Segment Budget	\$18,977,715	\$23,308,287	\$28,579,103	\$33,105,194	\$103,970,299

Table 1. 4-year Portfolio Budget Forecast Summary (2028-2031)

	2028	2029	2030	2031	Total (4 years)
Market Support Segment Budget	\$5,650,713	\$6,421,903	\$6,382,192	\$6,434,438	\$24,889,246
Equity Segment Budget	\$4,299,247	\$7,380,067	\$8,507,590	\$8,562,105	\$28,749,009
Codes & Standards Budget	\$1,308,372	\$1,439,457	\$1,507,571	\$1,578,583	\$5,833,983
EM&V	\$1,259,835	\$1,606,238	\$1,874,019	\$2,070,014	\$6,810,106
ED Portfolio Oversight	\$-	\$-	\$-	\$-	\$-

Table 2. 4-year Portfolio Forecast Summary (2028-2031)

	2028	2029	2030	2031	Resource Acquisition Segment Only (Total 4-year)	Entire Portfolio (Total 4-year)
Total System Benefit (TSB)	31,776,404	45,767,519	60,746,144	73,769,503	198,944,315	212,059,570
Total Resource Cost (TRC) Ratio	0.91	1.00	1.09	1.17	1.36	1.06
Program Administrator Cost (PAC) Ratio	1.02	1.12	1.23	1.32	1.59	1.19

Table 2. 4-year Portfolio Forecast Summary (2028-2031)

	2028	2029	2030	2031	Resource Acquisition Segment Only (Total 4-year)	Entire Portfolio (Total 4-year)
Societal Cost Test (SCT) - Base	1.26	1.37	1.50	1.59	1.85	1.46
Societal Cost Test (SCT) - High	1.27	1.37	1.50	1.59	1.85	1.46
Ratepayer Impact Measure Test Ratio (RIM)	0.80	0.82	0.86	0.88	0.97	0.85
Lifecycle MWh	(49,511)	(62,573)	(80,644)	(91,769)	(304,341)	(284,498)
First Year MW	1.63	2.31	2.89	3.30	8.56	10.13
Lifecycle MM THERMS	19.41	25.97	32.83	37.79	112.78	116.00
Lifecycle Net Electric CO2 Metric Tons	16,424	21,886	27,153	34,367	96,911	99,830
Lifecycle Net Gas CO2 Metric Tons	103,074	137,889	174,303	200,640	598,852	615,907

Table 3. 4-year Portfolio Budget Forecast Summary (2032-2035)

	2032	2033	2034	2035	Total (4 years)
Total Budget	\$58,556,029	\$60,234,068	\$61,511,332	\$62,870,124	\$243,171,553
Resource Acquisition Segment Budget	\$35,170,869	\$35,236,374	\$35,571,096	\$36,682,331	\$142,660,670
Market Support Segment Budget	\$6,468,988	\$6,503,235	\$6,610,728	\$6,660,486	\$26,243,437
Equity Segment Budget	\$12,908,774	\$14,364,211	\$15,054,388	\$15,116,660	\$57,444,033
Codes & Standards Budget	\$1,665,157	\$1,720,885	\$1,814,667	\$1,895,842	\$7,096,551
EM&V	\$2,342,241	\$2,409,363	\$2,460,453	\$2,514,805	\$9,726,862
ED Portfolio Oversight	\$-	\$-	\$-	\$-	\$-

Table 4. 4-year and 8-year IOUs Total System Benefit Forecast (w/out C&S) vs. Goals

Year	Total System Benefit Forecast	Total System Benefit Goals	Percent of TSB Goal
2028	Not Applicable to CCR REN		
2029			
2030			
2031			
Total (4 years)			
2032			
2032			
2033			
2034			
2035			
Total (4 years)			
Cumulative (8 years)			

1 Table 5 and 6 below are not applicable to CCR REN.

Table 5. 4-Year and 8-Year Codes & Standards Forecast vs. Goals (IOUs only)

Year	Energy Savings (MWh, MW, MMtherms)	Goals (MWh, MW, MMtherms)	Percent of Goal
2028	Not Applicable to CCR REN		
2029			
2030			
2031			
Total (4 years)			
2032			
2033			
2034			
2035			
Total (4 years)			
Cumulative (8 years)			

Table 6. Portfolio Statewide and Third-Party Contribution Percentage Requirements (As Applicable)

Time Period	Budget Component	Qualifying Budget	Cumulative Total Budget w/o OBF Loan Pool and ED Portfolio Oversight	Contribution Percentage	Minimum Threshold
2028-2031 (4-years)	Statewide [1]	Not Applicable to CCR REN			20%
2028-2035 (8-years)	Statewide [1]				20%
2028-2035 (4-years)	Third-party [2]				60%
2028-2035 (8-years)	Third-party [2]				60%

Chapter 3: Portfolio Strategies

1 The CCR REN’s vision is to support a place-based, equitable clean energy
2 transition that expands access to and delivery of energy efficiency programs that
3 prioritize geographically hard-to-reach, Underserved, and Disadvantaged
4 Communities. By leveraging regional collaboration, trusted local relationships,
5 and promoting pragmatic responses to community needs, CCR REN will support
6 communities that have not historically participated in energy efficiency
7 programs. CCR REN’s portfolio strategies are driven by a central goal to increase
8 access to energy efficiency programs while aligning to four guiding principles.

Figure 03-01. CCR REN 2028-2035 Guiding Principles

Guiding Principle	Result
Affordability	CCR REN delivers measurable net positive benefits to California ratepayers.
Customer Bill Savings	Measurable customer energy bill savings are delivered to CCR REN participants.
Workforce	The local and regional workforce is trained to drive demand for CCR REN programs while building capacity and economic resilience.
Air Quality	Reduce Criteria Air Pollutants, ⁴⁸ refrigerants, ⁴⁹ and Climate Pollutants ⁵⁰ through energy efficiency and beneficial electrification.

⁴⁸ Criteria Air Pollutants refers to the six pollutants for which EPA has established National Ambient Air Quality Standards: ozone, particulate matter (PM_{2.5}/PM₁₀), carbon monoxide, nitrogen dioxide, sulfur dioxide, and lead.

⁴⁹ Refrigerants are regulated as high-global-warming-potential greenhouse gases and are treated as climate pollutants rather than criteria air pollutants

⁵⁰ Climate pollutants refer to greenhouse gases and short-lived climate forcers that contribute to atmospheric warming, including carbon dioxide (CO₂) and ozone (O₃).

Portfolio Strategies for 4-year Plan and 8-year Plan

Advance Affordability and Mitigate Overall Rate Impacts (Consistent with Executive Order N-5-24)

Executive Order (EO) N-5-24 directs the state to keep electric service affordable, reliable, and safe during the transition to a clean grid.⁵¹ It requires California to meet its clean energy targets while limiting unnecessary increases in electric rates and not compromising activities that support improved health and safety, reliability, or the achievement of the State's 2045 clean electricity and economy-wide carbon neutrality goal. CCR REN's energy efficiency portfolio is designed to prioritize rate affordability and customer energy bill savings, advance Equity outcomes, and align with the State's 2045 goals. CCR REN's strategies will reduce customer bills while mitigating upward rate pressure. Figure 03-02 below presents CCR REN's portfolio strategies and approaches.

Figure 03-02. Portfolio Strategies in Alignment with N-5-24

Portfolio Strategy	Approach	Alignment
Dual Emphasis Portfolio Design	Prioritize Equity outcomes with Total System Benefit (TSB)	Mitigates rate impacts while prioritizing Equity and 2045 goals
Expand Resource Acquisition Programming	Balance Resource Acquisition costs to scale Equity and Market Support activities to align with N-5-24	Delivers customer cost savings while delivering positive net benefits to California Ratepayers
Beneficial Electrification	Prioritize electrification where off-peak load can be increased and where on-peak load can be mitigated	Increases the electricity rate base while mitigating increased demand during peak hours

⁵¹ <https://www.gov.ca.gov/wp-content/uploads/2024/10/energy-EO-10-30-24.pdf>

Figure 03-02. Portfolio Strategies in Alignment with N-5-24

Portfolio Strategy	Approach	Alignment
	through scheduled use and controls.	
Integrate Distributed Energy Resources with Energy Efficiency	Introduce technical and programmatic supports to permanently shift the peak load	Supports permanent load shift activities from peak to off-peak hours to mitigate increased rate pressure

Optimize TSB Achievement and Cost Effectiveness, as well as TSB Achieved Per Ratepayer Dollar Spent

In 2025, CCR REN delivered a cost-effective Commercial program, which is expected to have:⁵²

- A TRC ratio that exceeds 1.65
- Delivered over \$2.97m TSB
- A cost \$0.60/TSB

CCR REN's Commercial program achieved these noted outcomes while serving 100% Equity customers and integrating a workforce development component that prioritized in-community placements. CCR REN has demonstrated through the Commercial Energy Improvement Program that integrating Equity objectives with a goal of delivering cost-effective savings can produce measurable system benefits and meaningful Equity impacts.⁵³

⁵² CCR REN 2025 Q4 Claims -<https://cedars.cpuc.ca.gov/claims/confirmed-dashboard/CCR/>

⁵³ <https://cedars.cpuc.ca.gov/claims/confirmed-dashboard/CCR/>

CCR REN's 2028-2031 energy efficiency portfolio is anchored in Resource Acquisition programming integrated with key Market Support and Equity services. Chapter 7 presents how each segment, sector, and program interacts and coordinates to optimize in-community place-based approaches. Figure 03-03 below presents CCR REN's portfolio budgets, TSB forecasts, cost per TSB, and TRC ratio forecasts. Key CCR REN strategies developed to optimize TSB and TRC while advancing key Equity outcomes include:

- Aligning program services and energy efficiency measures with building types and climate zones that deliver strong performance.
- Offering energy efficiency measures and services through program designs that deliver cost-effective TSB while advancing Equity outcomes.
- Integrating Market Support workforce activities with Resource Acquisition activities to build demand for energy efficiency while maintaining a focus on Equity.
- Issuing competitive program provider solicitations that produce innovative program designs that follow the County of San Luis Obispo's procurement policies while aligning to CCR REN's portfolio goals.
- Launching a Non-Residential SEM offering in 2027 to begin building momentum prior to 2028.

Figure 03-03. CCR REN 2028-2031 Portfolio

Program Name	Budget	TSB	\$/TSB	TRC
Commercial Energy Improvement Program	\$50,540,244	\$117,294,757	\$0.43	1.51
Non-Residential SEM	\$41,866,424	\$81,649,558	\$0.51	1.31
Residential Equity Program	\$23,146,483	\$13,115,255	\$1.76	0.59

Figure 03-03. CCR REN 2028-2031 Portfolio

Program Name	Budget	TSB	\$/TSB	TRC
WE&T	\$15,212,573	\$-	\$-	-
IDSMD	\$6,854,233	\$-	\$-	-
Codes & Standards	\$5,174,062	\$-	\$-	-
Finance	\$2,424,151	\$-	\$-	-
EM&V	\$6,810,106	\$-	\$-	-
Portfolio Support	\$18,224,367	\$-	\$-	-
2028-2031 Totals	\$170,252,643	\$212,059,570	\$0.80	1.06

1 Advance Building Decarbonization Activities in Your Energy Efficiency
2 Portfolio

3 Each program is designed to advance building decarbonization by
4 reducing combustion-related emissions, supporting the transition away from
5 Climate Pollutant fuels (regulated and non-regulated) by promoting energy
6 efficiency measures that lower overall consumption. These activities also address
7 Criteria Air Pollutants and refrigerants, reinforcing CCR REN's commitment to
8 Equity outcomes and improving air quality.

9 Figure 03-04 outlines CCR REN's specific strategies and objectives for
10 advancing air-quality improvements across its portfolio.

Figure 03-04. Building Decarbonization Strategies in the CCR REN Portfolio

Program	Segment	Building Decarbonization Strategies
Resource Acquisition	Commercial Energy Improvement Program	• Direct installation of beneficial electrification and energy efficiency measures • Use of low-GWP refrigerants and proper refrigerant management practices • Education on CARB's ZEAS⁵⁴ efforts • Electrification readiness support
	Non-Residential SEM	• Train/educate and support building operators • Implement simple to complex electrification and energy efficiency measures • Use of low-GWP refrigerants and proper refrigerant management practices. • Education on CARB's ZEAS efforts • Electrification readiness support
Equity	Residential Equity Program ⁵⁵	• Direct installation of beneficial electrification and energy efficiency measures • Refrigerant recharge measures • Use of low-GWP refrigerants and proper refrigerant management practices • Education on CARB's ZEAS efforts

⁵⁴ CARB's Zero-Emission Appliance Standard is a forthcoming statewide requirement that will phase in zero-emission space and water heating standards once implementation begins.

⁵⁵ Final strategies and will be determined after the final program design is selected

Figure 03-04. Building Decarbonization Strategies in the CCR REN Portfolio

Program	Segment	Building Decarbonization Strategies
		Referral to the CEC Equitable Decarb Program as appropriate
	Finance Equity Program	• Technical and project management services to seek financing to capitalize energy efficiency and electrification projects
Market Support	WE&T	• Education on building decarbonization principles and strategies for Disadvantaged Workers • Workers are prepared for employment in energy efficiency programs • Workers drive customer demand in energy efficiency programs by providing in-community outreach
	IDSM	• Provides Distributed Energy Resource Assessments • Prioritizes battery and thermal storage combined with electrification to mitigate customer utility cost impacts • Evaluates, recommends, and provides implementation support for permanent peak load shifting
Codes & Standards	Codes & Standards	• Educates building officials and design & construction professionals about code compliance • Supports increasing awareness of upcoming standards, including promotion of proper refrigerant management practices

Figure 03-04. Building Decarbonization Strategies in the CCR REN Portfolio

Program	Segment	Building Decarbonization Strategies
		Increased compliance reduces emissions and results in better air quality

- 1 CCR REN will continue to evaluate, collaborate, and coordinate with other
2 decarbonization initiatives across California when appropriate. Examples are
3 provided in Figure 03-05 below.

Figure 03-05. Decarbonization Initiatives and Collaboration Opportunities

Decarbonization Initiative	Agency	Description	Opportunity for Collaboration
Refrigerant F-gas reclamation Support for Home HVAC (REFRESH) ⁵⁶	CARB	Supports safe recovery and reclamation of high-GWP refrigerants	- Increased awareness in Central California - Guide customers and contractors to participating reclaimers⁵⁷

⁵⁶ California Air Resources Board, *F-Gas Reduction Incentive Program (FRIP)*, Available at: <https://ww2.arb.ca.gov/our-work/programs/f-gas-reduction-incentive-program>

⁵⁷ Should no participating reclaimers be within a reasonable distance of key communities, CCR REN will seek collaborative solutions with appropriate stakeholders.

Figure 03-05. Decarbonization Initiatives and Collaboration Opportunities

Decarbonization Initiative	Agency	Description	Opportunity for Collaboration
SB 1221 ⁵⁸	CPUC	Allows utilities to avoid high-cost gas pipeline replacements and transition participating customers into cost-effective zero-emission alternatives	• Raise awareness in rural Central California • Identify and refer households/businesses interested in electrification upgrades
Equitable Building Decarb (EBD) Program ⁵⁹	CEC	Provides Residential electrification support for low and moderate-income households	• Identify potentially eligible households through outreach and direct install activities and refer those customers to the appropriate EBD pathway.

1 In addition to the previously discussed decarbonization strategies, CCR
2 REN recommends, in Chapter 11, that the Commission approve fuel switching
3 from non-regulated fuels, such as propane, to cleaner CPUC-regulated energy

⁵⁸ CPUC, *SB 1221 Implementation – Gas Distribution Maps and Pilot Neighborhood Decarbonization*, describing mapping requirements, zone designation, and program timelines

⁵⁹ California Energy Commission, *Equitable Building Decarbonization Program – Program Overview*, available at: <https://www.energy.ca.gov/programs-and-topics/programs/equitable-building-decarbonization-program>

sources. CARB's Propane Utilization in Buildings Across California report, prepared by TRC, found that:⁶⁰

- Ratepayers in the Central Coast, San Joaquin Valley, and Eastern Sierra regions often lack access to natural gas, especially in smaller and more rural areas.
- Adopting heat pumps and heat pump water heaters can reduce Non-Residential GHG emissions by more than 25%.
- Heat pumps can reduce Residential GHG emissions by more than 45%.
- Utility cost savings for Non-Residential businesses vary from \$1.39 per square foot to as high as \$12.15 per square foot.
- Utility cost savings for Residential varies from \$416 to \$584 per year.

Approving fuel switching will increase access to building decarbonization interventions that deliver customer cost savings and can further drive beneficial electrification⁶¹; grid utilization,⁶² and demand flexibility forward.⁶³

⁶⁰ "Propane Utilization in Buildings Across California" (2025). California Air Resources Board. <https://ww2.arb.ca.gov/sites/default/files/2026-01/Research%20Contract%2023STC009%20Final%20Report.pdf>

⁶¹ Beneficial Electrification: An Access Clean Energy Savings Program. Environmental and Energy Study Institute. <https://www.eesi.org/electrification/be?utm>

⁶² Distribution Grid Electrification Model 2025 Study and Report (2025). The Public Advocates Office. <https://www.publicadvocates.cpuc.ca.gov/-/media/cal-advocates-website/files/press-room/reports-and-analyses/251030-public-advocates-office-distribution-grid-electrification-model-2025.pdf>

⁶³ Beneficial Electrification and Grid Opportunities. Active Efficiency Collaborative. <https://activeefficiency.org/wp-content/uploads/2020/12/BeneficialElectrification-Report-vF120320.pdf>

Focus Electric Savings at Peak Times with High Avoided Cost and TSB

CCR REN's portfolio will deliver electric savings through program design that identifies building types that are occupied or in operation during peak periods. Appropriate energy saving measures will be tailored to their operational needs using place-based approaches. In addition, CCR REN's IDSM program will provide additional benefits by supporting increased adoption of technologies that can permanently shift load away from peak times.

Figure 03-06 presents illustrative energy-efficiency solutions that may be implemented to reduce peak demand. These illustrate a variety of actions that can be taken within programs to deliver savings during peak times.

Figure 03-06. CCR REN Peak Load Reduction Opportunities

Program	Opportunity
Non-Residential SEM	• Interior and exterior lighting retrofits • Retro-commissioning • Chiller retrofits and scheduling • HVAC motors, pumps, condensers, and compressors • Behavioral measures
IDSM	• Battery storage • Thermal Storage • Bidirectional charging • Scheduling
RES Equity Program ⁶⁴	• Appliance upgrades • Lighting measures • Domestic hot water

⁶⁴ Final opportunities will be defined after the final program design is selected.

Figure 03-06. CCR REN Peak Load Reduction Opportunities

Program	Opportunity
	• Smart thermostats

Use of Meter-Based Savings Measurement

The CPUC requires downstream Resource Acquisition programs for Commercial or Residential customers to use a meter-based savings method.⁶⁵ Approved methods include normalized metered energy consumption (NMEC), randomized control trials, SEM, or another CPUC-approved approach. A Portfolio Administrator may use a different method only if its Implementation Plan shows that meter-based methods are not feasible or cost-effective. CCR REN's Resource Acquisition programs are discussed below.

Non-Residential SEM Program

SEM has been shown to be an effective strategy for achieving cost-effective and reliable energy savings and TSB.⁶⁶ 2024 claims show that 11 of 14 active programs using SEM net to gross (NTG) IDs had a TRC ratio greater than 1.0.⁶⁷ CCR REN will apply this strategy for Non-Residential customers in geographically hard-to-reach, Underserved, Disadvantaged, and Tribal Communities in the Commercial, Public, Industrial, and Agricultural sectors.

CCR REN noticed the service list on February 20, 2026, indicating the intent to hold a webinar to present the details of a new SEM program proposed for

⁶⁵ D.23-06-055, OP 20.

⁶⁶ <https://pda.energydataweb.com/api/downloads/4238/Group%20A%2010-29-25%20Quarterly%20Update.pdf>

⁶⁷ <https://cedars.cpuc.ca.gov/reports/record-level/all/>

1 launch in 2027. The webinar will be held on March 17, 2026, and an advice letter
2 will be filed with the CPUC on or after April 6, 2026, seeking approval of the new
3 program. CCR REN will then issue a competitive solicitation for SEM
4 implementation services in accordance with the County of SLO's procurement
5 requirements. The selected implementer and CCR REN will confer with CPUC's
6 Energy Division staff to ensure the final program design aligns with current CPUC
7 SEM guidance.

8 CCR REN sees strong potential in this program design. 2024 SEM claims,
9 filtered by the SEM NTC ID, show that over 84% of all existing SEM program
10 expenditures were directed to the Industrial sector, 4.5% to Public, and 0.75% to
11 Commercial customers. CCR REN's SEM offer will prioritize increasing access to
12 SEM services where they have historically not been provided.

13 ***Commercial Energy Improvement Program (CEIP)***

14 CEIP provides direct installation services for commercial customers. For
15 these customers, individual site-level energy savings are typically too small to
16 support a 12-month metered savings period, as required for NMEC or other
17 meter-based methods. Population-based metered approaches have been
18 shown to be challenging to run cost-effectively from a TRC perspective.
19 Guidehouse found that in program year 2024, all population NMEC programs
20 had TRC ratios below 1.0.⁶⁸ CCR REN's 2025 delivery of the CEIP program with
21 deemed measures was proven to be cost-effective.⁶⁹ Accordingly, CEIP will
22 continue to rely primarily on deemed energy efficiency measures, which remain

⁶⁸ <https://pda.energydataweb.com/api/downloads/4238/Group%20A%2010-29-25%20Quarterly%20Update.pdf>

⁶⁹ <https://cedars.cpuc.ca.gov/claims/confirmed-dashboard/CCR/>

1 the most appropriate approach for this customer group, within CCR REN's
2 regions.

3 **Promote and Deploy Exempt Measures in the Equity Segment**

4 CCR REN will promote and deploy exempt measures in its Equity segment
5 program, which consists of the Residential Equity Program. The Residential
6 Equity Program will be designed to serve geographically hard-to-reach,
7 Underserved, and Disadvantaged Customers, as well as others who lack access to
8 energy programs. Services will be provided to residents of single-family,
9 multifamily, and manufactured homes. Services will be non-duplicative to
10 Energy Savings Assistance (ESA) program offerings.

11 CCR REN advances its strategy to promote and deploy exempt measures
12 in alignment with D.23-04-035, recognizing that the region's unique
13 characteristics make this work both necessary and impactful. Figure 03-07 below
14 presents CCR REN's illustrative strategy to deliver exempt measures within the
15 Residential Equity Program.

Figure 03-07. Strategy To Deliver Exempt Measures

Barriers	Strategy	Outcome
High First Cost	Provide no-cost direct install services	Equity measures are provided at no cost to the customer
Effective Place-Based Program Design	Seek new program design concepts from community stakeholders	The final program design is locationally appropriate across the CCR REN regions
Lack of Information and/or Awareness	Partner with in-community organizations	Communities receive information that is accurate and trusted

Equity-defined Residential customers in CCR REN's service area face a layered set of barriers that limit their ability to adopt energy efficiency and exempt energy efficiency measures such as insulation, air sealing, and other building-envelope improvements. High upfront costs and limited access to capital make even cost-effective upgrades out of reach for many households.⁷⁰ Split-incentive dynamics further suppress adoption. Property owners are reluctant to fund improvements that primarily benefit tenants, while tenants lack the authority to initiate upgrades.⁷¹

Manufactured homes offer affordable housing to many. However, those homes, especially those built before 1980, use more energy per square foot than single-family or multifamily structures, and are occupied disproportionately by lower-income residents who often experience high energy burdens.⁷² Informational gaps compound these economic and structural barriers, leaving many customers without clear, trusted guidance on energy-efficiency measures or their long-term value.⁷³

To address these needs, CCR REN will seek new program delivery models from program providers to develop offerings that promote exempt measures and advance broader Equity goals. Program providers will be expected to design strategies that lower first-cost barriers, improve customer understanding of

⁷⁰ Hannah Bastian, Charlotte Cohn, (2022). "Ready to Upgrade: Barriers and Strategies for Residential Electrification." American Council for an Energy-Efficiency Economy, <https://www.aceee.org/sites/default/files/pdfs/b2206.pdf>

⁷¹ Energy Efficiency: Challenges and Solutions (2023) <https://www.energycentral.com/energy-management/post/energy-efficiency-challenges-and-solutions-YmUmNX7p76pzUqE>

⁷² Public Input on Energy Conservation Standards for Manufactured Housing, (2025). Re: Docket No. EERE-2009-BT-BC-0021. https://www.lung.org/getmedia/b0fa879a-0035-4f9e-963a-f2da47e85633/DOE_Manufactured-Housing-Comment_FINAL.pdf

⁷³ <https://climate.sustainability-directory.com/question/what-are-the-main-barriers-to-energy-efficiency/>

long-term benefits, and simplify access to exempt-measure upgrades. CCR REN will reinforce these efforts through cost-efficient, community-rooted outreach in partnership with local governments, community-based organizations, and other trusted messengers.

Increase progress on CPUC’s ESJ Action Plan Goals

CCR REN’s portfolio is intentionally structured to advance the CPUC’s ESJ Action Plan, with a particular focus on Goals 1, 2, 5, and 7.⁷⁴ Figure 03-08 presents CCR REN’s strategies.

Figure 03-08. CCR REN Strategies for Advancing ESJ Goals

ESJ Goal	Goal Description	CCR REN Strategies
1	Consistently integrate Equity and access considerations throughout CPUC regulatory activities.	• Weave Equity considerations throughout planning and implementation • Prioritize community engagement and feedback • Facilitate transparent decision-making and consistent accountability to ESJ objectives
2	Increase investment in clean energy resources to benefit ESJ communities, especially to improve local air quality and public health.	• Expand access to clean energy measures • Scale energy efficiency programs • Deploy distributed energy resource services

⁷⁴ California Public Utilities Commission, Environmental and Social Justice (ESJ) Action Plan Version 2.0, (2022). <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/news-and-outreach/documents/news-office/key-issues/esj/esj-action-plan-v2jw.pdf>

Figure 03-08. CCR REN Strategies for Advancing ESJ Goals

ESJ Goal	Goal Description	CCR REN Strategies
5	Enhance outreach and public participation opportunities for ESJ communities to meaningfully participate in the CPUC's decision-making process and benefit from CPUC programs.	• Embed ESJ communities directly into decision-making • Empower in-community stakeholders to support place-based solutions • Develop equitable policies that expand access to energy efficiency
7	Promote high-road career paths and economic opportunities for residents of ESJ communities.	• Recruit and train local residents • Support certification pathways • Coordinate and partner with other portfolio administrators and program providers to create career pathways • Strengthen rural economies and expand practitioner capacity

1 D.21-05-031 recognized that traditional cost-effectiveness metrics, such as
2 the TRC test, are not appropriate evaluative tools for Equity or Market Support
3 programs.⁷⁵ The Decision acknowledges the need to reduce the tension between

⁷⁵ D. 21-05-031, Page 13. "Overall, we find it important to reduce the conflict between cost-effectiveness and other equally or more important policy objectives such as and support for the energy efficiency market. Furthermore, we acknowledge that while a TRC ratio appropriately compares the benefits and costs of a program targeted primarily at delivering grid benefits, it may not be the most appropriate tool for judging whether energy efficiency funding was prudently spent on programs which support equity or Market Support goals. The benefits delivered by these types of programs are not assessed using the CET or ACC, and therefore other methods are necessary."

1 cost-effectiveness requirements and other essential policy objectives, including
2 advancing ESJ goals.

3 Consistent with this guidance, CCR REN prioritizes community benefit,
4 equitable access, workforce development, and long-term capacity building while
5 also recognizing that increased rate pressures impact all customers. CCR REN is
6 committed to delivering a cost-effective portfolio while integrating Equity
7 outcomes and alignment with ESJ goals across all portfolio segments. This
8 balanced approach ensures prudent stewardship of ratepayer funds while
9 upholding the Commission's and CCR REN's Equity and affordability objectives.

10 **Strategy for IDSM Activities Within CCR REN's Proposed Portfolio**

11 CCR REN proposes an IDSM strategy that integrates community resiliency,
12 energy efficiency, electrification, and distributed energy resources (DER) into a
13 coordinated service tailored to customer needs. The IDSM program will, in part,
14 mitigate the potential for increased utility costs that can be associated with
15 electrification. IDSM is a critical part of CCR REN's beneficial electrification
16 strategy. The IDSM program is segmented as Market Support and is designed to
17 coordinate across Resource Acquisition offerings. Figure 03-09 below
18 summarizes CCR REN's forecasted IDSM activities and strategies. More
19 information can be found in Exhibit 2.

Figure 03-09. CCR REN IDSM Activities and Strategies^{76 77 78}

Activity	Strategy
Technologies	Prioritize battery and thermal storage, coupled with smart controls, to provide a permanent load-shifting solution. Integrate electrification measures to mitigate peak-load impacts.
Resiliency	Couple energy efficiency with distributed energy resource recommendations to reduce impacts associated with Public Safety Power Shutoffs and unplanned extreme weather events.
Distributed Energy Resource Assessments	Assessments will provide participants with an initial map of which projects to pursue and will be integrated into the existing services provided by CCR REN.
Provide Project Design Support	30% of design services will be provided to support project advancements while mitigating pre-installation costs.
Procurement and Construction Support	Provide procurement and construction support crafted to each customer's unique needs and policies.
Non-Energy Efficiency Funding	CCR REN will provide services to help participants identify and access funding beyond energy efficiency.
Workforce Integration	Collaborate with WE&T initiatives and provide participants with opportunities to learn about and drive community-level demand for integrated solutions.

⁷⁶Better Climate Challenge (2024). Maximizing the Benefits of Onsite Renewable Energy Generation Using Onsite Energy Storage.
<https://betterbuildingssolutioncenter.energy.gov/sites/default/files/attachments/IntegrationPrimer.pdf>

⁷⁷ Benefits of Energy Storage. American Clean Power.
<https://cleanpower.org/facts/clean-energy-storage/benefits-of-energy-storage/>

⁷⁸ U.S. Climate Resilience Toolkit. National Oceanic and Atmospheric Administration.
<http://toolkit.climate.gov/building-resilience-energy-sector>

Increase WE&T to Better Deliver Quality Energy Efficiency Installations

Workforce development is a core CCR REN portfolio principle. CCR REN's WE&T program will accelerate upskilling for existing workers, expand training opportunities for new workers, and create pathways to employment in geographically hard-to-reach, Underserved, Disadvantaged, and Tribal Communities where access to High Roads jobs may be limited. CCR REN's WE&T offerings will support place-based program delivery while addressing the Rural Cost Penalty.

Figure 03-10 below summarizes the goals, strategies, and objectives of CCR REN's WE&T program. Additional details are provided in Exhibit 2: Program Cards.

Figure 03-10. WE&T Program Goals, Strategies, and Objectives

Goal	Strategy	Objective
Workers are employed in the communities where energy efficiency programs are offered	• Perform in-community outreach to increase Program opportunity awareness • Place participants in positions directly supporting energy efficiency programs. • Paid on-the-job training • Job coaching • Resume and interview skills support	• CCR REN communities offer better career opportunities, higher employment rates, and lower energy burden • Build local and regional trust and awareness of CCR REN services • Increase demand in programs and energy efficiency services, and projects • Place participants in full-time, permanent positions within the energy efficiency and other related industries
Job and training opportunities	• Coordinate hiring and training with	• CCR REN member agencies work with trusted

Figure 03-10. WE&T Program Goals, Strategies, and Objectives

Goal	Strategy	Objective
are equitably distributed across the CCR REN service area	each CCR REN partner organization • Locally based train-the-trainer approach • Coordinate with Community College Districts, Offices of Education, County Workforce Departments, Trustees, and College Presidents	partners from the energy efficiency industry and community groups to adjust design and delivery • County Workforce Investment Boards, Economic Development Departments, Economic Opportunities Commissions, and local stakeholders support making program opportunities available to the communities being served
CCR REN and other PA Program Providers can draw from a trained in-community workforce	• Ad hoc and formal conversations and feedback from implementers and employers • Adaptive training to continuously conform to evolving compliance requirements • Coordinate with other PAs to employ local workers to assist in their program delivery	• Other PAs and program providers are aware of the in-community capacity • Other PAs and program providers offer feedback on required knowledge and training pertinent to their programs • Equip participants to enter the market and drive demand in programs, services, and energy-saving projects • Trainings allow for flexible design and delivery, meeting the growing need for shorter-time and just-in-time training

To address gaps in awareness of and access to clean energy jobs and related trades, the program will provide practical, accessible training pathways that more equitably distribute workforce benefits across CCR REN regions. While the program broadly targets Disadvantaged Workers, it also places particular emphasis on returning citizens, veterans, and Opportunity Youth⁷⁹, women, communities of color, and displaced Agricultural worker groups that face disproportionate barriers to the labor market.

Joint Demographic Data Reporting Per D.23-06-055 (OP 23)

CCR REN cautions that collecting demographic information outside of established EM&V processes may increase ratepayer costs and result in increasingly complex data collection and reporting processes that may not be required. CCR REN understands the Commission's objective and recommends that the CPUC first seek alternative solutions, such as analyzing existing participation data with census-tract-level demographic information.

If this approach or other alternatives do not meet the Commission's needs, CCR REN recommends a phased-in approach to demographic data collection and reporting that begins with the Residential sector. This data collection must be optional to reduce the potential for further marginalization of customer groups. CCR REN's proposed approach for Residential participants is as follows:

- **Segment:** Equity
- **Sector:** Residential
- **Requirement:** Demographic data collection should be optional and should not reduce access to programs or benefits

⁷⁹ Opportunity Youth refers to young people ages 16-24 who are neither in school nor employed.

- **Data Collected:** Age range, educational attainment, family size, marital status, employment status, primary language, ethnicity, gender identification, household income, and homeowner/renter status
- **Data Storage:** CEDARS
- **Reporting Mechanism:** Claims
- **Reporting Cadence:** Quarterly and annual

CCR REN also recommends additional coordination to determine the appropriate demographic information for Non-Residential participants. This coordination should define the distinguishing characteristics of each sector and assess the feasibility of collecting this information cost-efficiently. For near-term data needs, CCR REN recommends collecting applicable Non-Residential demographic information through EM&V and Impact studies.

Overcome Sector and Segment-Specific Challenges

Central to CCR REN's approach to overcoming sector and segment-specific challenges are in-community, place-based approaches. CCR REN will deploy a coordinated set of strategies to address key sectors and specific challenges that limit energy efficiency adoption.^{80 81 82} Challenges and CCR REN's corresponding -intervention strategies are summarized in Figure 03-11 below.

⁸⁰ <https://www.nrdc.org/bio/khalil-shahyd/rural-families-overburdened-higher-energy-costs#:~:text=Further%2C%20the%20lower%20density%20in,and%20less%20likely%20to%20happen.>

⁸¹ <https://ccst.us/reports/key-challenges-for-californias-energy-future/>

⁸² <https://building-performance.org/bpa-journal/understanding-the-gap-americas-community-based-disparities-in-energy-efficiency/>

Figure 03-11. Overcoming Sector and Segment Specific Challenges and Applied Strategies

Segment	Sector/ Program	Challenge	Intervention
Resource Acquisition	Commercial / CEIP	• Rural Cost Penalty • High first cost • Owner/tenant split incentive • Lack of awareness of energy efficiency	• Local delivery by local workers • No-cost direct install • In-community energy advisors
	Non-Residential / SEM	• Rural Cost Penalty • Lack of organizational structures • Lack of awareness	• Energy audits • Organizational change management • Incentives
Market Support	Cross-Cutting / WE&T	• Lack of in-community capacity • Lack of awareness and trust	• Provide local opportunities • Provide training and education • Collaborate with local agencies
Codes & Standards	Cross-Cutting / Codes & Standards	• Understanding of complex energy codes • Limited public agency resources	• Training of building officials and design, construction teams

Figure 03-11. Overcoming Sector and Segment Specific Challenges and Applied Strategies

Segment	Sector/ Program	Challenge	Intervention
			• Energy Coaches to support code enforcement staff
Equity	Cross-Cutting / Finance	• Rural Cost Penalty • High first cost • Loan complexity • Technical requirements	• Assist with loan applications • Provide project development services • Provide technical support
Equity	Residential / Residential Equity	• Rural Cost Penalty • High first cost • Locally available Program Providers	• Final intervention strategies will be determined through solicitations

Additional segment and sector-specific strategies are presented in Chapter 6, and in Exhibit 2, which describe how each program is structured to meet the needs of the communities and customer groups CCR REN serves.

Promote Responsible Management and Disposal of Removed Refrigerants and Incorporate Low/Ultra Low GWP Refrigerants

California's implementation of new refrigerant requirements relies upon the proper reclamation of high-GWP refrigerants, which, if mismanaged,

1 undermine the very environmental gains our energy efficiency programs seek to
2 achieve. CPUC studies reveal that refrigerant management and disposal
3 practices in the Residential HVAC industry are significantly out of compliance,
4 largely due to cost barriers.⁸³ Contractors themselves have indicated that
5 financial incentives would encourage proper reclamation, offsetting the costs
6 they currently bear. Within CCR REN's vast service area, spanning approximately
7 49,000 square miles, only one reclamation center⁸⁴ was found to exist, which can
8 be as far as nearly seven hours away from locations in the territory, underscoring
9 the urgency for intervention.

10 CCR REN proposes a comprehensive refrigerant management framework
11 that will:

- 12 • Require programs to promote proper refrigerant management practices
13 in full compliance with state and local regulations.
- 14 • Conduct random checks by program providers of participating contractors,
15 as applicable, to ensure compliance.
- 16 • Require program providers to coordinate with the regional reclamation
17 center and/or other reclamation pick-up services to establish convenient
18 recycling services for participating contractors.
- 19 • Engage the local recovery services to support energy efficiency programs,
20 strengthening both environmental outcomes and community economics.

⁸³ Group A. Forward-Looking Low-Global Warming Potential Refrigerant (2024).
California Public Utilities Commission Chapter 1.4.3.
https://www.calmac.org/publications/CPUC_Foward-Looking_Low-GWP_Refrigerant_Transition_Study.pdf

⁸⁴ EPA-Certified Refrigerant Reclaimers | US EPA – Arvin, CA located in Kern County.
<https://www.epa.gov/section608/epa-certified-refrigerant-reclaimers>

- Incorporate the scopes of work and contract terms with program providers to drive proper disposal practices.
- Promote the safe adoption of new, lower GWP refrigerants.
- Deliver training and awareness through local Codes & Standards compliance and WE&T efforts, including specialized instruction on managing newer, more flammable ultra-low GWP refrigerants.

By requiring the proper refrigerant management practices and workforce support in CCR REN's program design, we ensure that refrigerant management becomes a cornerstone of California's energy efficiency and decarbonization strategy. The result will be a cleaner environment, stronger compliance, and a practical pathway for contractors and communities to align with the state's climate goals.

Spur Innovation to Advance a Technology, Marketing Strategy, or Delivery Approach in a Manner Different from Previous Efforts

CCR REN's energy efficiency portfolio refinements incorporate innovation in delivery approaches, marketing strategy, and use of technology. As previously mentioned, CCR REN's portfolio prioritizes in-community, place-based solutions that take a dual design approach to increase Equity and Market Support outcomes while delivering TSB.

CCR REN's portfolio design is innovative for how segments are structured without compromising Equity, and for how programs are integrated. Chapter 7 presents coordination of programs in more depth. CCR REN's proposal is not simply a portfolio realignment; it is a statement that Equity and affordability must advance together. Three innovative program designs underscore CCR REN's innovative approach to integrating Equity and affordability. These are discussed below.

Non-Residential SEM

The Non-Residential SEM program is a deliberate commitment to innovate to deliver cost-effective savings while prioritizing compliance⁸⁵, access, and Equity. CCR REN's SEM will challenge program providers to create and refine CPUC-approved SEM program design elements to increase access through place-based solutions while delivering TSB cost-effectively.

Workforce

CCR REN's WE&T strategy underscores a core commitment: for rural by rural. Central California's energy-efficiency future must be delivered by the very communities it seeks to serve, leveraging trusted local-advisor relationships, increasing local capacity, supporting economic prosperity, and creating enduring pathways to clean-energy careers.

CCR REN's WE&T program establishes clear and accessible employment pathways for individuals—particularly Disadvantaged Workers⁸⁶—living in geographically hard-to-reach, Underserved, Disadvantaged, and Tribal Nation Communities. Participants will receive the education and hands-on training needed to bring energy-efficiency programs and services to their own communities. All participants will also receive support in securing full-time employment through resume development, interview preparation with industry hiring managers, and coordination with other PAs and Program Providers.

⁸⁵Strategic Energy Management (SEM). California Public Utilities Commission. <https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/demand-side-management/energy-efficiency/strategic-energy-management>

⁸⁶ D.18-10-008 states " Disadvantaged Worker" means a worker that meets at least one of the following criteria: lives in a household where total income is below 50 percent of Area Median Income; is a recipient of public assistance; lacks a high school diploma or GED;

1 This approach strengthens local economies, reduces program-delivery
2 costs, and the Rural Cost Penalty, by relying on trained local labor. CCR REN
3 equips workers with skills that lead to certifications and long-term careers in the
4 clean-energy workforce. CCR REN will:

- 5 • Recruit locally, train locally, and employ locally to create a transparent job
6 loop that drives economic growth.
- 7 • Establish direct training-to-employment pathways.
- 8 • Partner with other energy efficiency and DSM Portfolio Administrators and
9 their Program Providers to build labor pools that deliver programs more
10 cost-effectively and stabilize local economies.
- 11 • Create administrative internship opportunities that support portfolio
12 management and program administration.
- 13 • Partner with local workforce and economic-development agencies, high
14 schools, community colleges, and universities to expand job opportunities
15 and increase regional capacity.

16 CCR REN's WE&T program is more than a Market Support delivery
17 mechanism designed to increase demand for energy-saving projects and
18 technologies. It is a strategy to deliver meaningful change while increasing
19 community and economic resilience. It provides:

- 20 • Access to high-road jobs
- 21 • Economic resiliency
- 22 • A mechanism to build demand in programs while increasing trust in
23 services

24 ***IDSM***

25 CCR REN's IDSM program is not simply about energy efficiency or
26 distributed energy resources. By integrating energy efficiency, IDSM, and DERs

into a cohesive framework, CCR REN will provide California with a model that reduces costs, strengthens reliability, and advances decarbonization. It is a vision of behind-the-meter energy orchestration that is equitable and transferable.

The IDSM offerings include new program design elements that will promote resiliency and facilitate time-dependent energy use, thereby driving market demand for increased energy efficiency, beneficial electrification, and permanent load shifting. The IDSM program will:

- Integrate DER assessments with energy efficiency assessments
- Mitigate redundant infrastructure investments by customers
- Focus on permanently shifting the load from peak to off-peak time periods
- Increase deployment of battery and thermal storage solutions
- Provide workforce participants with an opportunity to apply system approaches to energy efficiency project development

Incorporate Community-Based Program Design

CCR REN's portfolio is designed to incorporate and leverage Community-Based Program Design while advancing key equity segment outcomes. Figure 03-12 presents the CCR REN's approach.

Figure 03-12. Key Community-Based Approach for Meaningful Involvement

Design Element	Activity
Community Led	CCR REN in-community agencies incorporate place-based needs and concerns, and those voices are made part of ongoing decision-making
Participatory Design	Solicitations for program providers prioritize participatory design elements that incorporate community needs and feedback

Figure 03-12. Key Community-Based Approach for Meaningful Involvement

Design Element	Activity
Belonging	Safe, inclusive, and welcoming environments that foster positive relationships and effective feedback loops that inform design adaptations are created
Program Design Adaptation	Program design elements adapt to evolving community feedback, needs, and local, cultural, and environmental contexts

- 1 As discussed in this chapter and throughout this application, CCR REN’s:
- 2 • Portfolio is designed to be place-based with a focus on in-community
- 3 delivery.
- 4 • Programs have been crafted to balance maximizing Equity and ESJ
- 5 outcomes.⁸⁷
- 6 • Portfolio delivers utility cost savings while reducing upward rate pressure.⁸⁸

⁸⁷ See Chapter 3, discussion on ESJ Action Plan goals.

⁸⁸ See Chapter 3, discussion on affordability and TSB optimization.

Chapter 4: Forecast Methodology and Zero-Based Budgeting

CCR REN's 2028-2035 energy efficiency budget request complies with the zero-based budgeting requirements established by the CPUC in D.21-05-031, which directs PAs to justify all proposed expenditures for each year of the portfolio after evaluating the needs and costs of every budget function.⁸⁹ The following will demonstrate the reasonableness of the request, forecast methodology, and our approach to zero-based budgeting.

Demonstration of the Reasonableness of the Request

The CCR REN Business Plan is designed to deliver Equity-based, cost-effective energy efficiency services while closing the observed service gap in hard-to-reach, Underserved, and Disadvantaged Communities. CCR REN programs and their associated budgets will:

- Increase 2028-2031 investments in Equity, relative to 2024-2027.
- Introduce Market Support services that include a new workforce program and IDSM.
- Reenvision a Residential program to be more comprehensive and impactful to customers who otherwise would not have access to services.
- Deliver an overall energy efficiency portfolio with a Total Resource Cost test ratio that exceeds 1.0.
- Increase program services for hard-to-reach-flagged customers across the CCR REN territory.

⁸⁹ OP 8, "When all program administrators file their combined business plan and four-year portfolio applications, the funding proposals shall be zero-based, justifying all expenses for each year of the four-year period, after analyzing each function within the budget for its needs and costs."

1 To better understand the landscape of resource energy efficiency
2 programs, and the level of service provided to hard-to-reach customers in Central
3 California, CCR REN conducted an analysis of hard-to-reach and non-hard-to-
4 reach 2024 expenditures by resource programs delivered by IOUs in the CCR REN
5 service area. The analysis was limited to PG&E, SCE, and SCG 2024 CEDARS claims
6 and took the following steps:

- 7 • Used the hard-to-reach flag to categorize expenditures by hard-to-reach or
8 non-hard-to-reach.
- 9 • Limited analysis to specific CCR REN climate zones.⁹⁰
- 10 • Limited results to only those expenditures associated with a resource flag.
- 11 • Found Agriculture hard-to-reach expenditures were limited to SCG in
12 climate zone 5.⁹¹

13 The claims data reported by IOU PAs in CEDARS indicates that in 2024, IOU
14 hard-to-reach participants in CCR REN's climate zones received \$7.13 for every
15 \$100 spent on resource programming.⁹² Figure 04-01 below summarizes the
16 combined IOU hard-to-reach investments in CCR REN's climate zones based on
17 2024 CEDARS claims data.⁹³

⁹⁰ CCR REN climate zones for the purpose of this analysis is defined as climate zones 3a, 3b, 4, 5, 12, 13, 16, and system. Systems 3A, 4, 13, and 16 include claims that are outside of CCR REN territory, but were included as more granular census tracks, or zip-code level participation was not available for review.

⁹¹ CEDARS claims data shows no agricultural hard-to-reach expenditures were identified in PG&E or SCE territory. 80% of SCG agricultural expenditures were identified as hard-to-reach in Climate Zone 5 only.

⁹² Data may not include services where there was no benefit for flagging a claim as hard-to-reach or using the hard-to-reach NTC ID. However, this data is the best information currently available.

⁹³ <https://cedars.cpuc.ca.gov/reports/record-level/all/>

Figure 04-01. IOU Hard-to-Reach and Non-Hard-to-Reach Expenditures by Sector - 2024

Sector	Total Expenditure	Hard-to-Reach	Non-Hard-to-Reach	Hard-to-Reach Percent Expenditure
Commercial	\$32,313,240	\$420,737	\$31,892,503	1.30%
Public	\$13,684,803	\$2,164,634	\$11,520,169	15.82%
Agriculture	\$15,257,568	\$3,525,290	\$11,732,278	23.11%
Industrial	\$37,802,002	\$0	\$37,802,002	0.00%
Cross-Cutting	\$21,664,859	\$163,516	\$21,501,343	0.75%
Residential	\$56,960,201	\$6,400,858	\$50,559,343	11.24%
Totals	\$177,682,673	\$12,675,035	\$165,007,638	7.13%

To further our analysis, CCR REN also reviewed annual energy efficiency reports⁹⁴ to better understand reported hard-to-reach service levels by the IOUs across the Commercial and Residential sectors from 2016 to 2024. Figures 04-02 and 04-02 present the percentage of commercial participants reported as hard-to-reach under BP metric 171, averaged across PG&E, SCE, and SCG.

⁹⁴ <https://cedars.cpuc.ca.gov/documents/standalone/list/>

Figure 04-02. BP Metric 171, Average Percent of Hard-to-Reach Commercial Participants

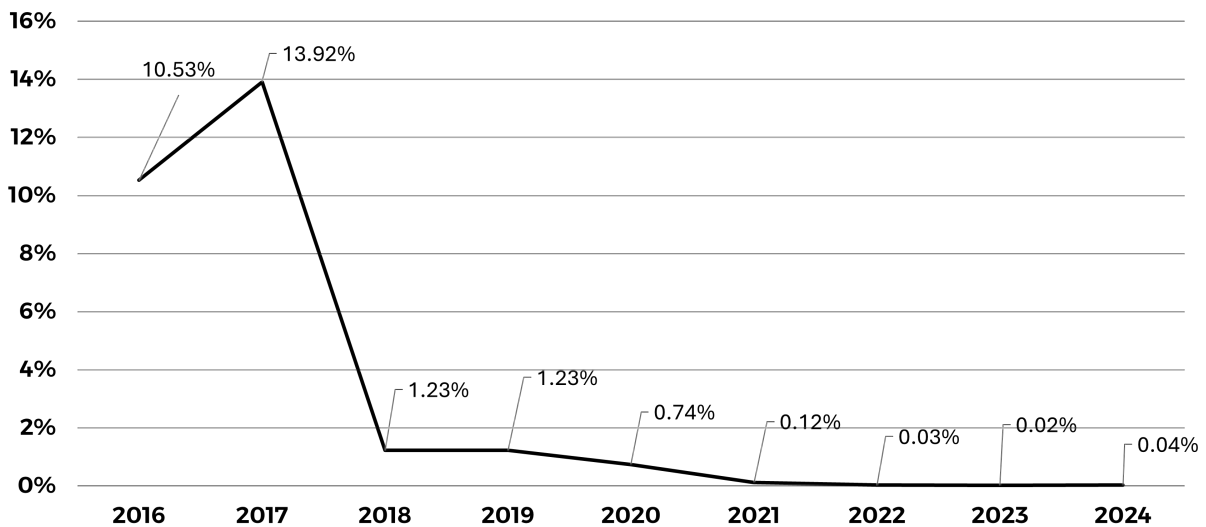
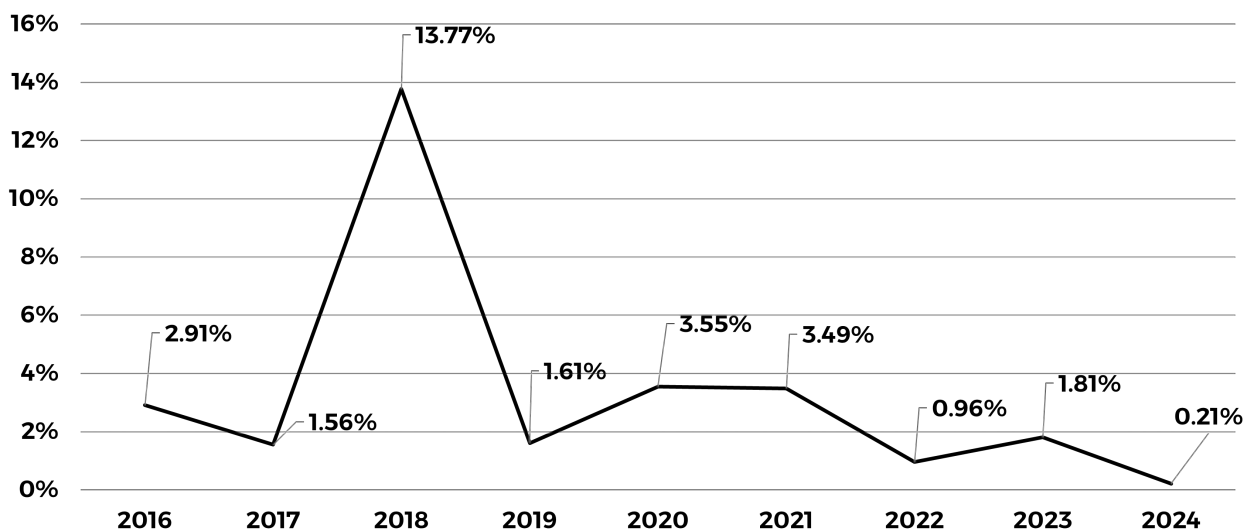


Figure 04-03 below presents the percentage of residential participants who were reported as hard-to-reach under BP metric 70, averaged across PG&E, SCE, and SCG.

Figure 04-03. BP Metric 70, Average Percent of Hard-to-Reach Residential Participants



The review of 2024 CEDARS claims data and IOU annual reports show that hard-to-reach ratepayers have been historically underserved. CCR REN's Business

Plan and associated budget will deliver a meaningful difference in access to and delivery of services to geographically hard-to-reach, Underserved, and Disadvantaged customers in CCR REN’s Central Coast, San Joaquin Valley, and Eastern Sierra regions.

Energy Division staff requested that CCR REN review and compare our budget with those of other RENs.⁹⁵ To assess the reasonableness of the CCR REN request relative to other applicants, we compared key demographic variables across all currently authorized RENs.⁹⁶ Note that CCR REN:

- Serves approximately 49,000 square miles—an area comparable to the size of the states of Mississippi or Pennsylvania, and larger than Ohio or Virginia.⁹⁷
- Has the lowest REN investment per square mile in 2024–2027.
- Has the lowest REN budget per person in 2024–2027.

Figure 04-04 below presents CCR REN’s 2024-2027 findings compared with those of other applicants.

Figure 04-04. CCR REN 2024-2027 Budget Compared to Other RENs

RENs	~Square Miles Served	Population Served	2024-2027 Budget	Budget Per Square Mile	Budget Per Person
CCR REN	48,934	5,275,732	\$36,339,000	\$742.63	\$6.89
NREN	29,344	1,602,708	\$33,139,078	\$1,129.33	\$20.68
IREN	27,277	4,599,839	\$65,577,932	\$2,404.12	\$14.26

⁹⁵ ED meeting with CCR REN, dated November 25, 2025

⁹⁶ <https://data.census.gov/>

⁹⁷ <https://www.census.gov/geographies/reference-files/2010/geo/state-area.html>

Figure 04-04. CCR REN 2024-2027 Budget Compared to Other RENs

RENs	~Square Miles Served	Population Served	2024-2027 Budget	Budget Per Square Mile	Budget Per Person
SoCalREN ⁹⁸	71,776	20,995,915	\$227,597,351	\$3,170.93	\$10.84
3CREN	10,532	2,300,726	\$71,367,489	\$6,776.32	\$31.02
BayREN	6,910	7,765,640	\$171,676,636	\$24,845.02	\$22.11
SDREN	4,210	3,298,634	\$124,274,206	\$29,515.31	\$37.67

1 In addition, CCR REN's proposed energy efficiency 2028-2031 budget was
2 compared following the same approach with the preliminary budgets presented
3 during the December 9, 2025, CAEECC PA Formal Consultation.⁹⁹ Figure 04-05
4 below presents the findings.

Figure 04-05. CCR REN 2028-2031 Budget Compared to Other RENs

RENs	~Square Miles Served	Population Served	2028-2031 Proposed Budget	Budget Per Square Mile	Budget Per Person
CCR REN	48,933	5,275,732	\$170,252,643	\$3,479.31	\$32.27
NREN ¹⁰⁰	29,344	1,602,708	\$65,300,000	\$2,225.32	\$40.74
IREN	27,277	4,599,839	\$58,700,000	\$2,151.97	\$12.76

⁹⁸ Approximate values due to territory being aligned with SCE/SCG opposed to county boundaries.

⁹⁹ Full CAEECC Quarterly Meeting #48. December 9, 2025.
https://www.caeec.org/_files/ugd/849f65_7f074e9d68da4b029292c4a1299e1efc.pdf

¹⁰⁰ This analysis does not include potential geographic expansion in 2028.

Figure 04-05. CCR REN 2028-2031 Budget Compared to Other RENs

RENs	~Square Miles Served	Population Served	2028-2031 Proposed Budget	Budget Per Square Mile	Budget Per Person
SoCalREN	71,776	20,995,915	\$356,187,290	\$4,962.47	\$16.96
3CREN	10,532	2,300,726	\$97,900,000	\$9,295.57	\$42.55
BayREN	6,910	7,765,640	\$208,155,462	\$30,124.24	\$26.80
SDREN	4,210	3,298,634	\$175,038,485	\$41,571.90	\$53.06

Figure 04-06 below presents poverty rates that were identified for each REN using the 2024 American Community Survey (ACS) 1-year estimates.¹⁰¹ The estimated population in poverty and the energy efficiency investments per person in poverty were calculated by CCR REN using existing data. The analysis relied on CPUC-authorized PA 2024-2027 energy efficiency budgets. Our analysis found that CCR REN:

- Has the highest calculated territory-wide poverty rate,
- Energy efficiency investments per person in poverty were the lowest of all similar applicants, and
- Can deliver meaningful change through workforce investments, educational opportunities, and increased access that reflects historic social structural barriers tied to family, racism, and gender discrimination.

¹⁰¹ <https://data.census.gov>

Figure 04-06. Poverty Rates and 2024–2027 Investments by REN

RENs	Square Miles Served	Population Served	Population Density (per Sq Mile)	Estimated Population in Poverty	Averaged Poverty Rate	EE Investment per Person in Poverty
CCR REN	48,933	5,275,732	108	858,949	16%	\$42.31
SDREN	4,211	3,298,634	783	329,863	10%	\$100.46
SoCalREN	71,776	20,995,915	293	2,650,832	13%	\$24.74
BayREN	6,910	7,765,640	1,124	657,444	8%	\$346.19
3CREN	10,532	2,300,726	218	336,122	15%	\$203.83
IREN	27,277	4,599,839	169	504,853	11%	\$340.05
NREN	29,344	1,602,708	55	188,869	12%	\$657.99

1 Figure 04-07 below shows the impact of CCR REN's proposed 2028-2031
2 energy efficiency budget on overall energy efficiency investments on a per-
3 person-in-poverty basis. PA comparisons reflect the budgets presented during
4 the CAEECC formal consultation held on December 9, 2025.

Figure 04-07. Poverty Rates and 2028–2031 Investments by REN

RENs	Square Miles Served	Population Served	Population Density (per Sq Mile)	Estimated Population in Poverty	Averaged Poverty Rate	EE Investment per Person in Poverty
CCR REN	48,933	5,275,732	108	858,949	16%	\$198.21
SDREN	4,211	3,298,634	783	329,863	10%	\$530.64
SoCalREN	71,776	20,995,915	293	2,650,832	13%	\$134.37
BayREN	6,910	7,765,640	1,124	657,444	8%	\$316.61
3CREN	10,532	2,300,726	218	336,122	15%	\$291.26

Figure 04-07. Poverty Rates and 2028-2031 Investments by REN

RENs	Square Miles Served	Population Served	Population Density (per Sq Mile)	Estimated Population in Poverty	Averaged Poverty Rate	EE Investment per Person in Poverty
IREN	27,277	4,599,839	169	504,853	11%	\$116.27
NREN	29,344	1,602,708	55	188,869	12%	\$345.74

1 **Methodologies to Forecast and Allocate Resource Acquisition, Equity,**
2 **Market Support, and Codes & Standards Program Budget and Benefits**

3 Figure 04-08 below outlines the methodology used to forecast and
4 allocate budgets and benefits across Resource Acquisition, Equity, Market
5 Support, and Codes & Standards segments of CCR REN's proposed energy
6 efficiency portfolio.

Figure 04-08. Budget Forecast Methodology Across Segments

Step	Action
1	Identified key CCR REN guiding principles to be used in portfolio development. These include: • Ratepayer Affordability • Customer Energy Bill Savings • Workforce • Air Quality
2	Documented key portfolio outcomes: • CCR REN's 4-year energy efficiency portfolio will be cost-effective. • Real customer energy bill savings are delivered through energy efficiency upgrades.

Figure 04-08. Budget Forecast Methodology Across Segments

Step	Action
	• A local workforce, serving rural and hard-to-reach customers, is further developed and employed. • Quantifiable indoor and outdoor air quality benefits are achieved through reduced fuel use. • Equity and Market Support investments are increased to more effectively serve the entire CCR REN territory.
3	Reviewed 2024–2027 budgets and assessed the investment levels required from 2028–2035 to support portfolio outcomes across segments.
4	Affirmed the expectation that Resource Acquisition programs can serve Equity populations cost-effectively through scale, targeted selection of services, and competitive procurement of program providers.
5	Reviewed Resource Acquisition services and identified the proportionate level of activity required to support Equity, Market Support, and Codes & Standards offerings while achieving a cost-effective portfolio.
6	Conducted exploratory CET runs in the CEDARS platform to confirm alignment with CCR REN portfolio objectives

The segment forecast methodology described above, together with the zero-based budgeting approach outlined below, results in the following outcomes:

- Increased Equity investments provide customer energy bill savings across the CCR REN territory.
- A shift in Workforce, Education, and Training activities from the Equity segment (in 2024–2027) to Market Support, strengthening the local and regional workforce needed to implement CCR REN programs over time.

- Maintained investment in Codes & Standards with cost escalation over time to account for inflation.
- Expanded Resource Acquisition programming targeted toward Equity populations, helping to close the service gap between hard-to-reach and non-hard-to-reach customers within CCR REN's territory while addressing ratepayer affordability concerns.

The proposed budget requests for the 2028-2031 program cycle are presented in Chapter 2 of this Business Plan. The budget shifts across portfolio segments reflect CCR REN's methodology for updating program-level budgets, which results in increases and decreases at the individual program level and corresponding adjustments across segments. Overall, the updated budgets reflect increased investment across all portfolio segments, consistent with CCR REN's objectives. The proposed segment budgets position the portfolio to generate significantly higher TSB, eventually achieve cost-effectiveness across the entire energy efficiency portfolio, increase program participation, and create strong job opportunities for Disadvantaged Workers in our rural communities.

Methodologies to Forecast and Allocate Program Budget and Benefits by Sector

Figure 04-09 presents the methodology used to forecast and allocate program budget and benefits by sector.

Figure 04-09. Methodology to Forecast and Allocate Program Budget and Benefits by Sector

Step	Action
1	Conducted community stakeholder engagement to develop a clearer understanding of community needs.
2	Reviewed other PA programs' penetration rates and identified gaps in services to hard-to-reach customers in CCR REN's territory.

Figure 04-09. Methodology to Forecast and Allocate Program Budget and Benefits by Sector

Step	Action
3	Identified CCR REN's key outcomes, including providing equitable services to hard-to-reach customers across customer sectors, forecasting a cost-effective energy efficiency portfolio, and increasing investments in Equity and Market Support activities.
4	Forecasted the program provider services and incentive budgets required for each program to achieve the intended outcomes. CCR REN will competitively procure these program services following authorization of this Application.
5	Assessed CEDARS 2024 and 2025 claims data for service rates throughout CCR REN territory.
6	Compared the market potential to the available and cost-effective measures listed in the current eTRM database.
7	Forecasted services across CCR REN regions and mapped expected benefits by climate zone and by the building types anticipated to participate in the CCR REN proposed programs.
8	Conducted a preliminary Cost Effectiveness Test (CET) analysis excluding CCR REN program staff and portfolio-support cost centers to validate the optimization of total system benefits, cost-effectiveness, and segment-level investment allocations.
9	Adjusted budgets by sector to optimize Equity and Market Support investments, while achieving a cost-effective portfolio.
10	Developed a CCR REN staff labor and material forecasting tool that enables participating agencies to systematically itemize and document the labor and non-labor resources required to manage and administer the programs proposed in this application.
11	Conducted a second-round CET analysis excluding CCR REN program staff and portfolio-support cost centers to validate the optimization of total system benefits, cost-effectiveness, and segment-level investment allocations.

Figure 04-09. Methodology to Forecast and Allocate Program Budget and Benefits by Sector

Step	Action
12	Adjusted sector-level budgets and associated measures to incorporate CCR REN's zero-based budgeting approach, thereby optimizing Equity and market-support investments.
13	Presented the final sector- and segment-level budget to the CCR REN Leadership Team for review and feedback.
14	Refined final sector-level budgets and associated benefits in response to feedback from the CCR REN Leadership Team.

1 Methodologies and Calculations Used to Derive a Zero-Based Budget (D.21-05-031, COL 22, OP 8)

Figure 04-10 below outlines the methodology used to develop a zero-based budget for CCR REN's application, consistent with the requirements set forth in D.21-05-031.¹⁰²

Figure 04-10. Methodology to Derive a Zero-Based Budget

Step	Action
1	Conducted community engagement to develop a clearer understanding of community needs.
2	Reviewed other PA programs' reported penetration rates and identified gaps in services to hard-to-reach customers in CCR REN's territory.
3	Identified CCR REN's key outcomes, including providing equitable services to hard-to-reach customers across customer sectors, forecasting a cost-effective energy efficiency portfolio, and increasing investments in Equity and Market Support activities.

¹⁰² COL 22, OP 8

Figure 04-10. Methodology to Derive a Zero-Based Budget

Step	Action
4	Forecasted the program provider services and incentive budgets required for each program to achieve the intended outcomes. CCR REN will competitively procure these program services following authorization of this Application.
5	Conducted a preliminary CET analysis excluding CCR REN program staff and portfolio-support cost centers to assess the optimization of total system benefits, cost-effectiveness, and segment-level investment allocations.
6	Developed a CCR REN staff labor and material forecasting tool that enables participating agencies to systematically itemize and document the labor and material resources required to manage and administer the programs proposed in this application.
7	Verified that the tool calculated annualized role-based costs by applying hours worked to annual billable rates, inclusive of rate escalation over time.
8	Directed each CCR REN member agency to populate labor and material forecasts for program years 2028 through 2035, reflecting the resources required to implement CCR REN programs and associated administrative functions effectively. Additional guidance was provided to: 1. Distinguish between programs that the CCR REN member agency will directly manage and those that will operate within the agency's territory but fall under the management of another agency. 2. Itemize anticipated agency roles and titles, along with 2028 billable rates and projected salary escalation trajectories for program years 2028-2035. 3. Document key assumptions underlying labor and material cost buildups associated with each program and activity area.
9	Developed a CCR REN 2028-2035 zero-based budgeting workbook that integrated four primary cost centers: CCR REN member labor and material forecasts, CCR REN non-labor program cost projections, and REN-wide non-labor administrative support cost forecasts.

Figure 04-10. Methodology to Derive a Zero-Based Budget

Step	Action
10	All CCR REN labor and material costs were consolidated and incorporated into the cost forecasts developed in Step 4.
11	Portfolio-support labor and non-labor costs were assessed and developed to reflect updated program requirements, anticipated administrative needs, and REN-wide marketing expectations, following the guidance provided on the PCG Basecamp website.
12	Portfolio support cost expectations for consultant-supported activities were solicited from vendors and calibrated to reflect the increased scale of CCR REN operations. Representative areas include CRM administration, regulatory support, and operational and regulatory reporting.
13	Evaluation, Measurement, and Verification costs were incorporated as a fixed percentage of the total portfolio budget.
14	The CCR REN Leadership Team reviewed the budget for reasonableness.
15	The County of San Luis Obispo's fiscal staff reviewed the budget for reasonableness.
16	The budget was reviewed by the CCR REN Leadership Team and executive leadership from each organization.

1 Program Modifications from 2024-2027 Portfolio Cycle

2 Describe the significant program modifications (e.g., portfolio segmentation
3 changes or significant budget shifts) from the 2024-2027 portfolio cycle.

4 The CCR REN energy efficiency portfolio for 2028-2031 reflects several
5 substantive modifications from the 2024-2027 cycle, including segmentation
6 and budget. These modifications are informed by updated organizational
7 priorities, such as utility cost savings, affordability, cost-effectiveness, and
8 expanding access to energy efficiency services for communities. The

segmentation modifications will be discussed first, followed by an overview of budget shifts across segments.

Resource Acquisition Segment

Resource Acquisition investments are increasing in 2028-2031 compared to the 2024-2027 cycle and are focused on Non-Residential ratepayers. CCR REN's Resource Acquisition programming is designed to support the 2028-2031 energy efficiency portfolio by:

- Closing service gaps that exist with current IOU programs
- Expanding access to Non-Residential customers in hard-to-reach, Underserved, Disadvantaged, and Tribal Communities
- Delivering meaningful utility cost savings
- Addressing ratepayer affordability by supporting the delivery of a cost-effective portfolio

Market Support Segment

The Market Support segment is being introduced into CCR REN's portfolio for the first time in the 2028-2031 energy efficiency application. The Market Support segment will include a new workforce program design and an IDSM program as a Cross-Cutting offering.

- ***The Workforce Program*** will transition from the Equity segment (2024-2027) to the Market Support segment. This change reflects CCR REN's efforts to enhance in-community capacity to drive demand in energy-saving projects while leveraging Disadvantaged Workers to support

1 program delivery. This reclassification from Equity to Market Support aligns
2 with CPUC Market Support objectives.¹⁰³

- 3 • ***The IDSM Program*** will be added to the Market Support segment portfolio.
4 This addition responds to the growing need to integrate energy efficiency
5 with behind-the-meter distributed energy resources and other DSM
6 offerings.

7 ***Equity Segment***

8 The Equity segment will undergo several modifications in 2028-2031
9 relative to the 2024-2027 cycle.

- 10 • The ***Residential Equity Program*** will be relaunched but continuing within
11 the Equity segment. The 2028-2031 Residential program will take a
12 community-designed approach. This change reflects the need to redesign
13 the offer to provide place-based approaches that deliver deeper energy-
14 saving opportunities for geographically hard-to-reach, Underserved, and
15 Disadvantaged households throughout CCR REN's territory.
- 16 • ***The Finance Equity Program*** will continue and remain classified as
17 Equity. This reflects the program's perceived value in expanding access to
18 financing tools for Non-Residential customers and in supporting
19 equitable participation in energy efficiency upgrades.
- 20 • ***The 2024-2027 Workforce Equity Program***, as previously noted, will be
21 closed and relaunched in the Market Support segment activity, building
22 and expanding on the successes of the Commercial Energy Improvement
23 Program's workforce component.

¹⁰³ Programs with a primary objective of supporting the long-term success of the energy efficiency market by educating customers, training contractors, building partnerships, or moving beneficial technologies towards greater cost-effectiveness.

- ***The Public Equity Program*** will be closed, with its activities incorporated into the Non-Residential SEM and IDSM offering. This integration reduces administrative duplication, aligns public sector services with SEM’s proven delivery model, and integrates with the IDSM offerings to support more comprehensive offerings for public agencies, prioritizing improvements that enhance the resiliency of facilities that serve communities day-to-day, during disasters, and during disaster recovery. See Chapter 6 for more information.

The increase in the Equity segment budget between 2024-2027 and 2028-2031 reflects CCR REN’s focus on delivering more robust energy efficiency opportunities for Residential Equity customers.

Codes & Standards Segment

The Codes & Standards segment budget increases in 2028-2031. The increase supports a full implementation cycle with a mature offering. It also strengthens local code compliance activities, particularly in refrigerant management and recovery. The budget increase expands program reach across the CCR REN territory. It also accounts for normal market-driven increases in implementation costs over time.

2024-2027 to 2028-2031 Budget Shifts

Figure 04-11 presents the 2028-2031 budget as compared to the 2024-2027 revised Mid-Cycle Advice Letter budget filing.

Figure 04-11. 2024-2027 to 2028-2031 Budget Shifts by Segment

Segment	2024-2027 Budget	2028-2031 Budget
Resource Acquisition	\$7,674,584	\$103,970,299
Market Support	\$0	\$24,889,246

Figure 04-11. 2024-2027 to 2028-2031 Budget Shifts by Segment

Segment	2024-2027 Budget	2028-2031 Budget
Equity	\$23,841,750	\$28,749,009
Codes & Standards	\$3,369,107	\$5,833,983
EM&V	\$1,453,560	\$6,810,106
Total	\$36,339,000	\$170,252,643

The 2028-2031 CCR REN portfolio budget:

- Invests in Resource Acquisition to increase access and delivery of energy efficiency services to geographically hard-to-reach, Underserved, and Disadvantaged Communities.
- Increases Equity investments by \$4.9 million in 2028-2031 relative to 2024-2027.
- Introduces Market Support into the portfolio and increases WE&T investments by \$7.974 million in 2028-2031 relative to 2024-2027.
- Increases Codes & Standards investments by \$2.464 million to address local compliance with refrigerant management and improve overall compliance with Codes & Standards.

Closed Programs

Table 7 presents the programs that will be closed effective January 1, 2028.¹⁰⁴

¹⁰⁴ Not required where a program is closed due to a program ending according to its original contract term length or upon completion of commitments.

Table 7. Closed Programs from the 2024-2027 Cycle

Name of Closed Program	Segment	Sector	Unspent Budget of Closed Program	Total EE budget from 2024-2027 cycle	Rationale for Program Closure	Underperformance and Remediation *
Not required for CCR REN as all closing programs are closing according to original contract term lengths and upon completion of program commitments.						

1 New Programs/Program Placeholders

2 CCR REN’s proposed programs listed in Table 8 will be new offerings for
3 the 2028-2031 cycle. These program concepts are presented as placeholders for
4 planning purposes. CCR REN will competitively solicit program providers to
5 deliver innovative program designs and ensure that each offering advances the
6 portfolio’s stated goals around affordability, decarbonization, reliability, and
7 equitable access. This approach promotes innovation and ensures that final
8 program designs are responsive to regional needs and aligned with CPUC policy
9 direction.

Table 8. New Programs in 2028-2031 4-Year Application Cycle

Name of New Program / Placeholder Program	Segment	Sector	High-Level Program Description/Purpose
Non-Residential SEM	Resource Acquisition	Commercial, Industrial, Agricultural, Public	CCR REN’s SEM offering is designed to fill gaps in energy-savings services for businesses and organizations operating in geographically hard-to-reach, Underserved, and Disadvantaged Communities. The SEM program meets these businesses where

Table 8. New Programs in 2028-2031 4-Year Application Cycle

Name of New Program / Placeholder Program	Segment	Sector	High-Level Program Description/Purpose
			they are with tailored coaching, individualized energy-saving strategies, and a focus on long-term utility cost savings.
Residential Equity	Equity	Residential	The CCR REN Residential Equity Program will serve residents living in multi-family, single-family, and manufactured homes who are geographically hard-to-reach, Disadvantaged, and/or Underserved, and are ineligible for ESA services. The final program design and strategies employed will be solicited from the program provider community. The program seeks to be informed by the communities being served.
Workforce	Market Support	Cross-Cutting	CCR REN's Workforce program provides paid asynchronous and synchronous energy-focused training for existing workers and new workers. Program participants will be integrated into CCR REN's portfolio to deliver Cross-Cutting benefits while learning on the job. The offering provides a pathway to make energy-efficiency careers more equitably accessible to those living in geographically hard-to-reach, Underserved, and Disadvantaged Communities,

Table 8. New Programs in 2028-2031 4-Year Application Cycle

Name of New Program / Placeholder Program	Segment	Sector	High-Level Program Description/Purpose
			and prioritizes returning citizens, Opportunity Youth, women of color, and displaced Agricultural workers.
IDSM	Market Support	Cross-Cutting	CCR REN's IDSM program is designed to address affordability and utility cost savings by focusing on providing services that prioritize resilience, permanent load shifting, and increasing awareness of distributed energy resources. CCR REN's IDSM program will focus on customers in geographically hard-to-reach, Underserved, and/or Disadvantaged Communities.

1 Chapter 5: Portfolio Management

2 Overview for 4-year plan and 8-year plan: Key metrics and outcomes

3 Alignment with 4- and 8-year goals

4 CCR REN's proposed Energy Efficiency Business Plan has outcomes that
5 directly align with and support our 4- and 8-year goals. Figure 05-01 summarizes
6 CCR REN's portfolio goals and the forecasted measurable outcomes associated
7 with this plan, with the information available today.

Figure 05-01. 2028-2031 Portfolio Goals and Business Plan Outcomes¹⁰⁵

Goals	Business Plan Outcomes
Increase Access to Energy Efficiency Programs	• Investments flagged as hard-to-reach activities in CCR REN Climate Zones increase • Deliver more than 1,600 completed Commercial and Non-Residential energy saving projects • Deliver more than 3,750 Residential engagements
Deliver Customer Bill Savings	• \$21.580 million delivered in customer bill savings through energy-saving projects¹⁰⁶
Train a local and regional workforce	• Train 3 or more Cohorts per year • Place more than 75% of CEA participants in permanent clean Energy jobs

¹⁰⁵ The values in Figure 05-01 are forecasts based on currently available information and expectations. Forecasts are expected to be updated after program providers are selected and implementation plans are updated.

¹⁰⁶ CPUC Workbook Final, Tab 1. Participant Bill Impacts

Figure 05-01. 2028-2031 Portfolio Goals and Business Plan Outcomes¹⁰⁵

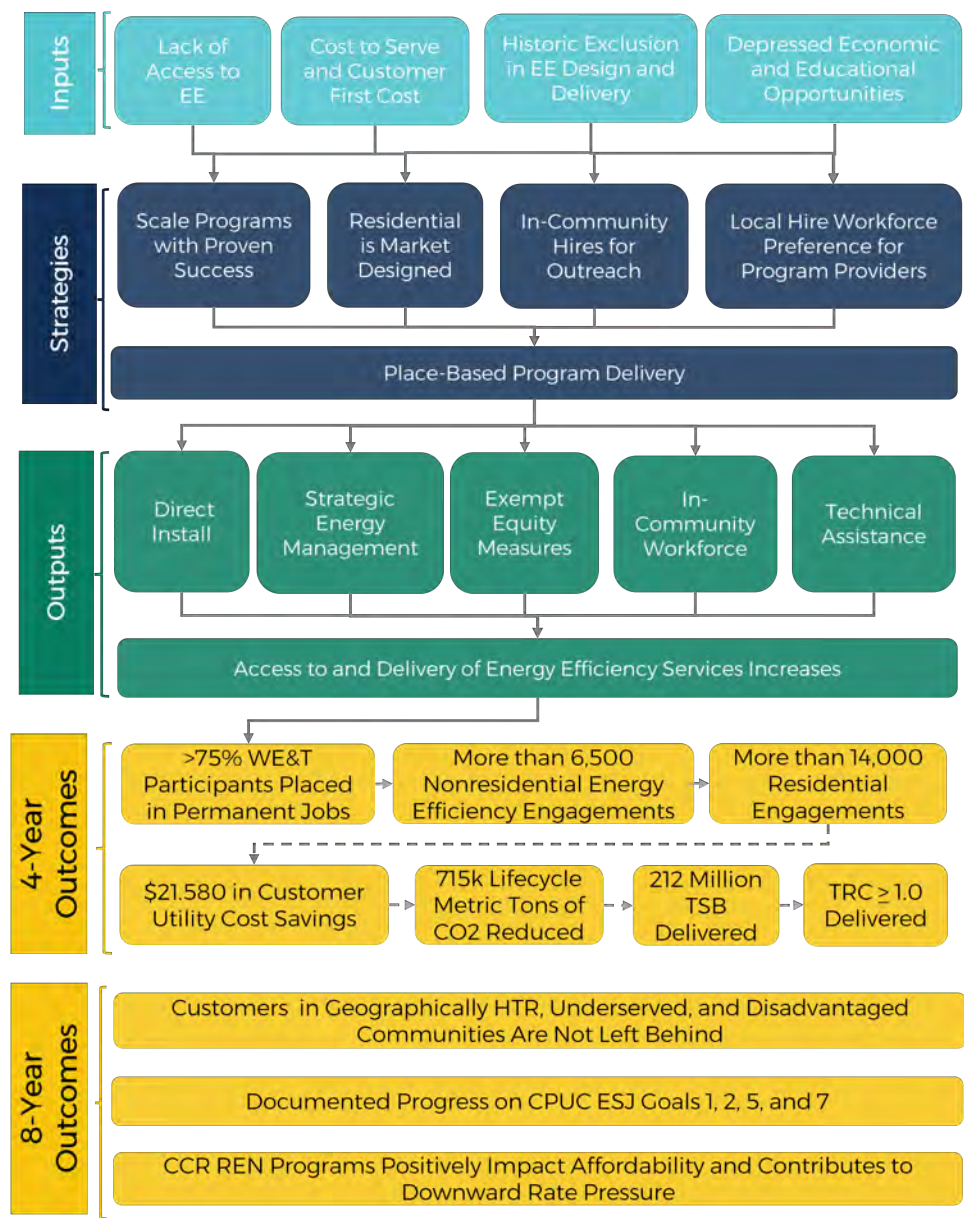
Goals	Business Plan Outcomes
	CEA participants and placements deliver more than 65% of leads to the CEIP program.
Increase air quality through the reduction of combustion fuels, GHGs, and Criteria pollutants	13,838 lbs. Lifecycle Net PM10 13839 lbs. of Net Lifecycle NOx reduced 715,737 Metric Tons Net Lifecycle CO2e reduced
Increase Community Resilience through IDSM	> 500 customers engaged > 250 participants 35+ projects completed or in progress \$1,500,000 or more in non-energy efficiency funding
Support Grid-Level Affordability	- Deliver a 2028-2031 Portfolio with a TRC ratio > 1.0 - Meet or exceed forecasted TSB - Fuel substitution measures increase off-peak energy use and do not increase peak use - Battery and/or thermal storage are used to permanently reduce peak demand

CCR REN's strategies, discussed in Chapter 3, align with achieving the goals and outcomes listed above. Additionally, CCR REN's Unique Value Metrics (UVMs) directly complement and measure progress towards those goals. Each UVM is intentionally aligned with a core element of the logic model, ensuring that CCR REN's activities, outputs, and outcomes translate into measurable value for customers and the state. As shown in Figure 05-02 below, the portfolio logic model provides a clear, structured depiction of the inputs, strategies, outputs,

1 and expected outcomes that collectively define CCR REN's portfolio strategy. It is
2 designed to show how CCR REN's programs translate resources into measurable
3 results and how those results advance the Commission's policy objectives.

4 **4- and 8-Year Portfolio Logic Model**

Figure 05-02: CCR REN Portfolio Logic Model



CCR REN Unique Value Metrics

CCR REN's proposed Unique Value Metrics demonstrate its distinct and necessary role within Central California's energy efficiency landscape. Collectively, the UVMs provide the Commission with a transparent and credible framework for oversight and accountability. This framework demonstrates CCR REN's unique, community-focused value and aligns with the principles in CCR REN's Energy Efficiency Business Plan.

Table 9 presents the Unique Value Metrics that CCR REN will use in the 2028–2031 portfolio cycle. Detailed parameters and quantitative targets for each metric are provided in tab 10 of the associated CPUC provided Business Plan Excel workbook.

Table 9: CCR REN Unique Value Metrics Overview and Reporting Approaches

Unique Value Metric (UVM)	Description (of what it measures)	Tracking & Reporting Approach	Targets	Strategic Importance to REN Portfolio
Increase Access to, and Delivery of, Energy Efficiency Services	Effectiveness in increasing awareness and participation in energy efficiency programs	Equity defined customer participation rates Annual Report	Increased investments in hard-to-reach and resource program-flagged CEDARS claims in CCR REN climate zones using a 2024 baseline	Increasing access and delivery of services to hard-to-reach, Underserved and Disadvantaged customers is a foundational objective of CCR REN
Energy Affordability	Contribution to systemwide benefits to	CEDARS Claims	TRC ratio is $\geq$ to 1.0	Addresses long-term rate pressure while

Table 9: CCR REN Unique Value Metrics Overview and Reporting Approaches

Unique Value Metric (UVM)	Description (of what it measures)	Tracking & Reporting Approach	Targets	Strategic Importance to REN Portfolio
	ratepayers and economic impact	Avoided/shifted ¹⁰⁷ Peak Demand delivered through permanent load shift. Quarterly and Annual Reports	\$/TSB < 1.0 Total kW avoided / shifted from peak hours	increasing local economic resilience
Customer Bill Savings in Resource Acquisition Programs	Customer energy bill cost reduction	CEDARs / Internal CRM Annual Reports	Estimated First Year Customer Utility Bill Savings	Addresses short-term energy burden and energy intensity rates for CCR REN customers
Workforce Development	Development of a local energy efficiency workforce	Number of local workers trained and placed in energy efficiency jobs Annual Report	Number of Cohorts Trained Percentage of Workers placed in permanent jobs Percent of leads generated for RA programs	Having a trained, local workforce addresses a key barrier to energy efficiency while driving demand in services in CCR REN's territory

¹⁰⁷ Shifted peak demand is considered to be permanent and associated with battery or thermal energy storage

Table 9: CCR REN Unique Value Metrics Overview and Reporting Approaches

Unique Value Metric (UVM)	Description (of what it measures)	Tracking & Reporting Approach	Targets	Strategic Importance to REN Portfolio
Air Quality	Reduction of Criteria Pollutants and CO2e	CEDARS / Internal Calculations based on energy savings Quarterly and Annual Reports	PM10 Reductions	Many rural areas suffer from poor air quality and high rates of asthma, especially in California's San Joaquin Valley

- 1 The UVMs highlight metrics that define CCR REN's unique contribution.
- 2 Figure 05-03 presents overarching themes not captured in the metrics noted
- 3 above.

Figure 05-03. CCR REN's Unique Role in California's Energy Efficiency Landscape

Place-Based Approach	CCR REN partner organizations inform program designs that work in specific places to solve local challenges while benefiting workers and communities. This Increases access to, and delivery of, energy efficiency services in geographically hard-to-reach, Underserved, and Disadvantaged Communities.
In-Community Implementation	CCR REN builds local workforce capacity by hiring, training, and placing in-community workers into the clean energy industry. This drives demand in programs while addressing the Rural Cost Penalty.
Community Trusted Advisor	CCR REN's partner organizations are regarded within their communities as trusted energy advisors.
Community Presence	CCR REN's partner organizations are connected to community groups throughout the region, creating unique,

	locally grounded channels for outreach, program recruitment, and effective program delivery
Connected to Local Governments	CCR REN's partners have close working relationships with local government representatives in their region, which serves as another channel for program awareness and outreach
Cost-Effectiveness	CCR REN is seeking a cost-effective portfolio while simultaneously increasing Equity and Market Support investments

1 Strategies to Optimize the Portfolio and Manage Risk

2 TSB, Cost-Effectiveness and On-Target Procedures

3 CCR REN is using cost-effectiveness thresholds and TSB goals as core tools
4 to equitably support geographically hard-to-reach, Underserved, and
5 Disadvantaged Communities in their clean energy transition. Delivering a cost-
6 effective energy efficiency portfolio is not at odds with serving Equity customers.
7 Rather, cost-effectiveness and TSB metrics provide the foundation for
8 maximizing Equity outcomes. By grounding program design in these metrics,
9 CCR REN can expand access to programs, increase energy and cost savings,
10 reduce emissions and Criteria Pollutants, and build demand for energy efficiency
11 solutions through WE&T initiatives.

12 CCR REN has established attainable cost-effectiveness and TSB targets for
13 the Resource Acquisition Programs and the Residential Equity Program. These
14 targets have been made available through the associated filings posted to
15 CEDARS.¹⁰⁸ CCR REN set the TSB and TRC goals through a structured process
16 that included:

¹⁰⁸ <https://cedars.cpuc.ca.gov/filings/list/>

- 1 • Identifying energy efficiency measures and services with demonstrated
2 cost-effectiveness,
- 3 • Identifying historic energy efficiency service gaps in CCR REN service area,
- 4 • Evaluating customer demand and opportunity across customer segments,
- 5 • Reviewing technology adoption rates and expected positioning along the
6 adoption S-Curve,
- 7 • Forecasting potential regulatory requirements and policy changes,
- 8 • Aligning forecasted energy efficiency measures and services with these
9 observations, and
- 10 • Modeling installation expectations across factors such as measure
11 permutations, climate zones, application types, quantities, and costs.

12 CCR REN sets the TSB goals across a 4-year implementation cycle and
13 manages goal tracking at the program year level. Monthly and quarterly targets
14 are established to track progress, and goals are developed collaboratively with
15 Partner Organizations to reflect realistic expectations and existing project
16 pipelines. Progress toward these goals will be monitored through a performance
17 and metrics reporting system designed to provide near real-time visibility into
18 portfolio performance. CCR REN anticipates that this reporting database will be
19 completed and operational in 2026.

20 To stay “on target,” CCR REN pairs its metric monitoring with collaborative
21 action, contractual performance requirements, and change-management
22 practices. Figure 05-04 summarizes the key metrics tracked at the program level
23 to ensure timely visibility into program health, performance, and emerging risks.

Figure 05-04. TSB and TRC Metric Tracking

Monitoring Metric	Update Cadence	Use
Annual, Monthly and Quarterly TSB Forecast	Monthly	Presents the program's current expectations of program delivery over time and gives rolling baselines to evaluate on-target delivery
Monthly Claimable TSB	Monthly	Shows actual delivery monthly and is used to evaluate the variance from the forecast to the actuals
Monthly TSB	Bi-Weekly	Presents the expected TSB that will be delivered in the near term
Committed TSB	Bi-Weekly	Represents high probability TSB that will be delivered
Prospected TSB ¹⁰⁹	Bi-Weekly	Provides program potential after applying probability weights to account for those who decide not to participate
Conversion Rate	Bi-Weekly	% of TSB prospected to committed may indicate sales health and capacity to influence project advancement
Full Pipeline \$/TSB	Bi-Weekly	Indicates whether the program is on budget to meet TSB goal (this metric can also be used to forecast potential cost-effectiveness)
Quarterly Claimable TSB	Quarterly	Submitted TSB performance to the CEDARS website
Quarterly TRC	Quarterly	Submitted TRC performance to the CEDARS website

¹⁰⁹ TSB potential that has been identified but has not been made part of the portfolio commitments.

CCR REN's monitoring and communication procedures are designed to identify challenges early and support timely, innovative design solutions. Program leads hold monthly coordination meetings with the operations team to review performance metrics, assess pipeline health, evaluate customer-acquisition needs, and discuss existing or emerging market barriers. Program leads also meet Monthly with the internal administrator and consultants to further assess program performance and ensure alignment across delivery partners. These meetings are alternating and result in bi-weekly program check-ins. Ad hoc Stop-Start-Continue-Change conversations¹¹⁰ are used to evaluate activities, refine approaches, and explore potential solutions.

CCR REN's program providers are selected through competitive procurement processes, resulting in contracts with clear scopes of work and key performance metrics that reflect a shared commitment to delivering defined outcomes. While early identification of challenges and effective change-management practices are prioritized, contractual provisions remain available to reinforce on-target delivery when necessary.

Approach and Flexibility in Risk Management

CCR REN maintains portfolio oversight that identifies underperformance and overperformance early. This allows CCR REN to take timely corrective actions or make needed adjustments. Operational reporting gives clear visibility into key performance indicators, including TSB, TRC test, and Equity and Market Support metrics. The process fosters a collaborative environment with open, honest communication about program performance. Program Managers have clear indicators of underperformance and a defined escalation path to CCR REN

¹¹⁰ SSC conversations are brief, structured check-ins used to identify what activities should stop, start, continue, or be modified to support continuous improvement. <https://www.colorado.edu/researchinnovation/start-stop-continue>

leadership. This structure supports consistent oversight, timely course correction, and clear escalation steps. The activities below describe how CCR REN detects performance issues and applies corrective actions at the portfolio level.

Corrective Action Plan

CCR REN will implement timely corrective action plans for underperforming programs, sectors, or segments. Each plan will reflect the type and cause of the underperformance, as well as whether it occurs at the segment, sector, or program level. In all cases, the goal of a corrective action plan is to support performance improvement, not to impose punitive measures. Figure 05-05 presents CCR REN's Corrective Action Plan Framework.

Figure 05-05. CCR REN Corrective Action Plan Framework

Step	Action	Outcome
Identify the Challenge	Document the metrics or indicators that show the program is underperforming and has reached the point where a corrective action plan is required	- Underperforming segments, sectors, or program areas are identified - A corrective action plan is triggered
Investigate the Cause	Conduct a collaborative root-cause analysis to understand why the underperformance is occurring	- The factors behind underperformance are identified. - Parties agree on identified factors.
Develop the Plan	Collaboratively explore realistic and timely solutions to the underlying performance issue	- A shared vision of course correcting is agreed upon by the parties - Program closure can be used as an off-ramp at this

Figure 05-05. CCR REN Corrective Action Plan Framework

Step	Action	Outcome
		stage if no effective path forward is identified
State Corrective Actions and Measurable Outcomes	Specific, measurable, attainable, realistic, and time-bound goals are set	- Parties agree to specific actions tied to specific timelines - Measurable outcomes are defined
Execute	Begin implementing the actionable steps previously agreed upon	The Corrective Action Plan is initiated
Monitor and Iterate	Continuously track progress. Revisit the plan development phase if needed	- Metrics provide visibility into whether the plan shows signs of success or not - Iterating the plan supports real-time adaptation to implementation environments - Off-ramps to contractual action or program closure are maintained

1 *Retained Flexibility for 2028-3031*

2 CCR REN prefers to retain the flexibility provided by the CPUC in the 2024–
3 2027 energy efficiency portfolio cycle. This flexibility allows CCR REN to adjust
4 program scope, budgets, and schedules as conditions change and as new
5 performance data becomes available. CCR REN also seeks additional flexibility
6 that is currently available to IOU PAs. CCR REN would like the ability to test new
7 program designs and tactics without having to file an advice letter for approval.

CCR REN proposes the same thresholds applied to IOU PAs. Eligible pilots would not exceed \$5 million or a three-year term. Pilots would be funded from monies shifted from existing authorized funds within the approved energy efficiency portfolio.

CCR REN would continue to meet all CPUC requirements, including holding a public workshop and posting an Implementation Plan to CEDARS. The ability to test program concepts quickly is expected to improve portfolio performance over time.

Program Closures

CCR REN is closing three programs: the 2024–2027 Public Equity, Residential Equity, and Workforce Equity programs. These programs are currently functioning as intended, and no remediation has been required. The rationale for closing each program is provided in Table 7 in Chapter 4.

Procurement Practices

As a steward of ratepayer funds, transparency and strong fiscal control is critical. In furtherance thereof, Central California Rural REN has adopted the following procurement policy: All procurements, regardless of the issuing partner organization, shall follow the Internal Administrator’s agency procurement guidelines and thresholds, unless a partner has more restrictive policies than that of the administrator’s agency, in which case it is assumed that the internal administrator’s threshold/requirements are met and exceeded. All solicitations shall be reviewed and evaluated by a selection committee composed of at least three different Central California Rural REN leadership team organizations, including one from the internal administrator.

CCR REN’s procurement practices are designed to limit risk and maintain transparency and accountability. All solicitations comply with or will exceed the

1 County of San Luis Obispo’s public-agency procurement policies, which establish
2 consistent standards for competition, documentation, and fiscal controls.¹¹¹ This
3 approach reduces forecasting and expenditure risk by ensuring contracts are
4 awarded using clear, objective criteria and that budgets and scopes align with
5 program goals.

6 CCR REN’s phased procurement schedule begins competitive solicitations
7 for 2028 and beyond and will begin as soon as the application is approved or a
8 determination is made. This timing reduces first-year forecasting and
9 implementation risk because selected consultants will have contracts with
10 conditional notice to proceed upon approval of this application. This approach
11 avoids the ramp-up delays that occur when solicitations and program delivery
12 begin in the same year.

13 Procurement can introduce risk when regulatory changes,
14 measure-package updates, or new metric expectations arise after contracts are
15 executed. These changes can create new cost pressures that bidders did not
16 anticipate, prompting partners to request additional funding or contract
17 adjustments. CCR REN plans to manage this risk through clear contract language
18 and appropriate provisions.

19 Overall, CCR REN’s procurement approach provides a consistent,
20 transparent, and compliant framework that manages risk across forecasting,
21 expenditures, program delivery, and regulatory obligations while supporting
22 open and fair competition.

¹¹¹Procurement Ethics and Standards of Conduct. County of San Luis Obispo Central Services Department. <https://www.slocounty.ca.gov/departments/central-services/forms-documents/purchasing-services/procurement-ethical-standards>

Based on D.23-06-055, Propose a Process for Statewide Programs

CCR REN supports the joint PA report titled “Statewide Energy Efficiency Program Assessment Criteria,” finalized on February 12, 2026. The report outlines a process for identifying, evaluating, and deciding on statewide energy efficiency programs and identifies key issues needing further development or clarification. CCR REN appreciates the collaborative effort to date and looks forward to continued work with the PAs and Energy Division staff to resolve the remaining issues.

Chapter 6: Segmentation and Sector Strategy

Portfolio Sector Strategy

CCR REN's sector strategy and budgets are grounded in a place-based, in-community approach that increases access to, and delivery of, services while prioritizing affordability, customer bill savings, workforce development, and air quality. These priorities guided the CCR REN sector program design and resource allocation. They also shape each sector's strategies and ensure that program activities advance the Commission's goals for energy efficiency, affordability, decarbonization, and reliability. A brief narrative on each sector is below.

Non-Residential

Commercial Energy Improvement Program (CEIP). CCR REN is scaling the Commercial Energy Improvement Program to increase completed projects from an expected 125-150 in 2025-2027 to more than 1,600 in 2028-2031. As shown in Chapter 4, this investment will expand access for hard-to-reach customers in a meaningful way. The program will continue the strategies established in Program Year 2025, including in-community outreach that is integrated with Workforce activities. This approach supports project delivery, builds local capacity, and strengthens regional economic resilience. The program will offer direct install services, in-community outreach, and coordinate with the cross-cutting Workforce, Education, and Training program.

- **Key Populations:** Commercial customers operating in geographically hard-to-reach, Underserved, Disadvantaged and Tribal Communities.
- **Key End-Uses:** Water heating, controls, lighting, refrigeration, plug load/appliances, HVAC.

Non-Residential SEM. CCR REN intends to file an advice letter on or after April 6, 2026, requesting Commission approval to launch this effort within the

2024–2027 cycle. The Non-Residential SEM program is expected to continue the activities launched in program year 2027. The program will use a metered delivery approach and will apply deemed and calculated incentives when they appear in a participant’s Opportunity Register¹¹² and when the use of those measures is determined to be in the customers’ and the program’s best interest. Non-Residential SEM will coordinate with the WE&T, IDSM, and Finance programs.

- **Key Populations:** Commercial, Public, Industrial, and Agricultural customers in hard-to-reach, Underserved, Disadvantaged, and Tribal Communities who do not have access or resources to participate in existing SEM offerings
- **Key End-Uses:** Water heating, controls, lighting, refrigeration, plug load/appliances, HVAC, process equipment, building envelope

Residential

CCR REN’s Residential sector strategy is grounded in place-based community-driven solutions that increase participation among households that are not qualified for the IOUs’ low-income Energy Savings Assistance program and where service gaps remain. The sector will include the Residential Equity Program. This program is classified as Equity, and it is expected to contribute to CCR REN’s TSB achievements.

- **Key populations:** Residents in geographically hard-to-reach, Underserved, and Disadvantaged Communities

¹¹² An Opportunity Register is a living log of all identified behavioral, operational, and capital energy-saving opportunities within a customer’s Non-Residential SEM engagement, including estimated savings, status, and next steps.

- **Key End-Uses:** HVAC, water heating, lighting, appliances, building envelope, behavioral education

Codes & Standards

CCR REN's Codes & Standards program is a code-compliance offering for building departments and building professionals in geographically hard-to-reach, Underserved, and Disadvantaged Communities. The program will provide education and resources that strengthen participants' understanding and application of the California energy code, increase awareness of proper refrigerant management practices, and support greater energy savings, long-term utility cost reductions, and reductions in Criteria Pollutants.

- **Key Populations:** Local government code compliance staff and building professionals
- **Key End-Uses:** HVAC, water heating, lighting, refrigeration, process equipment

Cross-Cutting

Workforce Education & Training. CCR REN's WE&T program is a core element of the overall portfolio design. The sector and program structure will support the delivery of CCR REN offerings by integrating paid placements to support in-community engagement, outreach, and initial audits, when appropriate. The program will provide upskilling and rapid-entry training to expand local and regional capacity to implement energy-saving projects and assist with portfolio administration through internships.

- **Key Populations:** Individuals living in the CCR REN territory who are interested in a clean energy career, with preference placed on individuals who meet the CPUC definition of “Disadvantaged Worker”¹¹³

- **Key End-Uses:** N/A

Integrated Demand-Side Management. CCR REN’s IDSM program will support affordability and cost savings by helping customers shift load away from peak hours and strengthen resiliency. The program will provide cross-cutting services, including DER assessments that identify opportunities for load shifting and improved resilience to extreme weather. Participants who choose to advance a project will receive design support to reduce technical costs and clarify their next steps.

- **Key Populations:** Non-Residential SEM and Commercial Energy Improvement Program participants; service may be provided to participants in geographically hard-to-reach, Underserved, Disadvantaged, and Tribal Communities where gaps in support services exist

- **Key End-Uses:** Battery and Thermal Storage, Vehicle to Building Electric Vehicle Infrastructure, Beneficial Building Electrification

Finance Equity Program. CCR REN has identified first-cost barriers as a major obstacle to completing energy-saving projects. The Finance program will expand access to existing financing products by providing technical and administrative support, including participants in Non-Residential programs and customers seeking IOU On-Bill Financing. Assistance will be aligned with the requirements of each financing product. The Finance program is designed to reduce first-cost barriers and support projects that deliver energy and utility bill savings while reducing emissions of Criteria Pollutants.

¹¹³ <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M310/K261/310261656.PDF>

- **Key Populations:** rural and Equity-defined Non-Residential customer groups

- **Key End-Uses:** HVAC, water heating, lighting, refrigeration, process

Table 10 on the following page presents the distribution of the budget by sector.

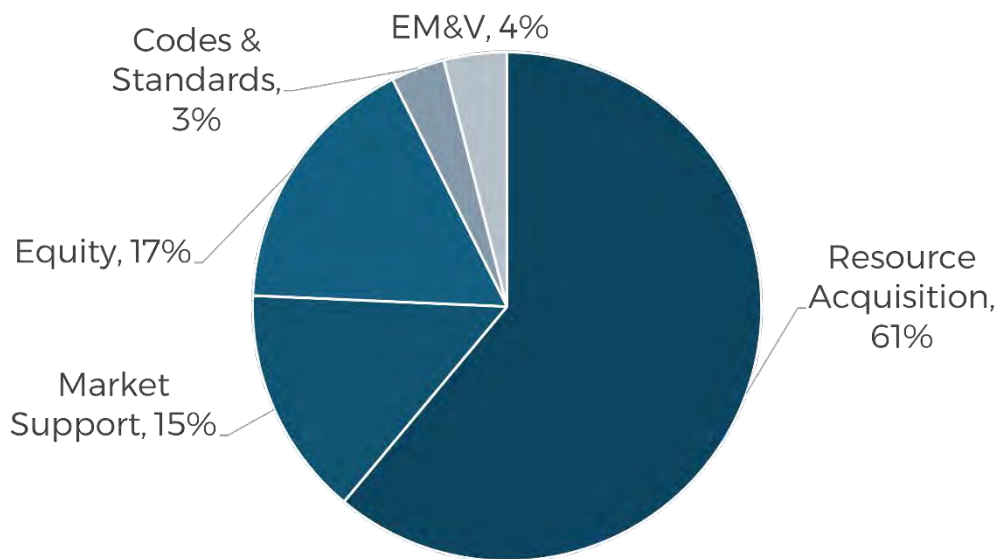
1 Table 10. Budget Distribution by Sector

Budget	Residential	Commercial	Industrial	Agricultural	Public	Cross-Cutting	EM&V	Portfolio Support	Total Budget
2028	\$3,144,153	\$16,365,908	\$-	\$-	\$-	\$6,564,752	\$1,259,835	\$4,161,233	\$31,495,882
2029	\$5,917,541	\$20,593,326	\$-	\$-	\$-	\$7,548,556	\$1,606,238	\$4,490,291	\$40,155,952
2030	\$7,018,665	\$25,660,041	\$-	\$-	\$-	\$7,703,867	\$1,874,019	\$4,593,884	\$46,850,475
2031	\$7,066,126	\$29,787,393	\$-	\$-	\$-	\$7,847,843	\$2,070,013	\$4,978,959	\$51,750,334
Total (4-Year)	\$23,146,485	\$92,406,668	\$-	\$-	\$-	\$29,665,018	\$6,810,106	\$18,224,367	\$170,252,643
2032	\$10,062,476	\$31,967,580	\$-	\$-	\$-	\$9,063,898	\$2,342,241	\$5,119,833	\$58,556,029
2033	\$11,393,689	\$32,061,969	\$-	\$-	\$-	\$9,159,686	\$2,409,363	\$5,209,361	\$60,234,068
2034	\$11,934,434	\$32,209,396	\$-	\$-	\$-	\$9,326,356	\$2,460,453	\$5,580,692	\$61,511,332
2035	\$12,030,265	\$33,364,195	\$-	\$-	\$-	\$9,501,360	\$2,514,805	\$5,459,500	\$62,870,124
Total (4-Year)	\$45,420,864	\$129,603,140	\$-	\$-	\$-	\$37,051,299	\$9,726,862	\$21,369,386	\$243,171,553
Cumulative Total (8-Year)	\$68,567,349	\$222,009,808	\$-	\$-	\$-	\$66,716,318	\$16,536,968	\$39,593,753	\$413,424,194

Portfolio Segmentation Strategy

The budget distribution across segments for 2028–2031 advances the four CCR REN portfolio principles while ensuring equitable allocation of resources across activities. To close service gaps, as discussed in Chapter 4, and to responsibly expand Market Support, Equity, and Codes & Standards activities, CCR REN directed significant investment toward achieving cost-effective TSB through its Resource Acquisition segment. This allocation approach is consistent with Commission priorities, including advancing Equity, supporting ESJ objectives, and ensuring ratepayer value. Figure 06-01 presents the budget distribution.

Figure 06-01. 2028-2031 Percent Budget by Segment



CCR REN used clear criteria to guide its budget decisions. In addition to prioritizing place-based solutions and an in-community approach, the following criteria were used.

- Expanded Access
- Customer Cost Savings
- Criteria Pollutant Reductions
- Scalability
- Total Resource Cost
- Innovation
- Affordability
- Workforce Development
- Feasibility
- Total System Benefit
- Regulatory and Legislative Context
- Equity Considerations

The criteria noted above guided budget decisions by addressing operational feasibility, community need, innovation, and the broader regulatory and legislative context of this application. CCR REN's budget strategy responds to current regulatory guidance and anticipates future Commission direction, positioning the portfolio for long-term success and alignment with energy efficiency policy objectives.

High-Level Discussion of 8-year Segmentation Plan Strategies.

CCR REN's eight-year segmentation strategy prioritizes expanded access for geographically hard-to-reach, Underserved, and Disadvantaged Non-Residential and Residential customers. The strategy delivers customer bill savings and reduces Criteria Pollutants while prioritizing local capacity through workforce development. CCR REN balanced investments in Resource Acquisition, Equity, Market Support, and Codes & Standards to reach the scale needed to make a meaningful impact across its territory.

Resource Acquisition Strategy

CCR REN will expand its cost-effective offerings in the Resource Acquisition segment of the portfolio in response to increased investments in

1 Market Support and Equity. Chapter 3 details portfolio strategies; Chapter 4
2 provides additional detail on the reasonableness of the budget request; and
3 Chapter 5 provides details on goals and outcomes.

4 The Resource Acquisition segment will serve all Non-Residential sectors
5 and will offer practical pathways to reduce energy use, lower energy bills, and
6 participate in California’s clean-energy transition. The segment will include two
7 programs: The Commercial Energy Improvement Program and the Non-
8 Residential SEM program. The segment will prioritize Equity outcomes tied to
9 access, customer bill savings, and air quality while remaining cost-effective.

10 The CEIP program provides deemed direct install services for select
11 measures to Commercial entities in geographically hard-to-reach, Underserved,
12 and Disadvantaged Communities. CCR REN is offering a deemed direct install
13 program design because the size, composition, and location of expected
14 participants make meter-based approaches cost-prohibitive. Meter-based
15 approaches would also reduce cost-effectiveness and could create negative
16 program experiences that undermine long-term engagement and trust. CCR
17 REN provides deemed direct install services to increase access while prioritizing
18 affordability, utility cost savings, workforce development, and air quality
19 improvements.

20 CCR REN plans on launching the Non-Residential SEM program in 2027. A
21 webinar will be held on March 17, 2026, and CCR REN intends to submit an advice
22 letter on or after April 6, 2026. The Non-Residential SEM Program will serve
23 customers across commercial, public, industrial, and agricultural settings.

24 ***Normalized Metered Energy Consumption (NMEC)***

25 As explained previously, CCR REN does not expect to implement the NMEC
26 energy savings methodology in any Resource Acquisition program. If a program

1 adopts an NMEC approach in the future, CCR REN will update the
2 Implementation Plans accordingly.

3 **Market Support**

4 The Market Support segment was first defined in D.21-05-031¹¹⁴ as
5 “Programs with a primary objective of supporting the long-term success of the
6 energy efficiency market by educating customers, training contractors, building
7 partnerships, or moving beneficial technologies towards greater cost-
8 effectiveness.” In D.23-06-055,¹¹⁵ the CPUC further defined Market Support sub-
9 objectives as activities that focus on long-term market success through the
10 building, enabling, and maintenance of:

- 11 • Market demand,
- 12 • Supply chains,
- 13 • Partnerships,
- 14 • Innovation and accessibility, and
- 15 • Access to capital.

16 CCR REN’s Market Support strategy focuses on supporting the long-term
17 success of the energy efficiency market in geographically hard-to-reach,
18 Underserved, and Disadvantaged Communities. The strategy also builds demand
19 for energy efficiency projects and services through workforce development and
20 the IDSM offering. CCR REN will promote technologies that support the adoption
21 of energy-efficient solutions and beneficial electrification.

¹¹⁴ p. 14

¹¹⁵ p. 58

1 The workforce program will train participants and provide paid
2 placements across the portfolio. These placements will allow participants to
3 engage directly with potential customers. The program will provide the training
4 and information needed for placements to communicate the benefits of energy
5 efficiency and to help them access services that support the adoption of energy
6 efficiency measures. The program will build demand for CCR REN's Resource
7 Acquisition programs while developing in-community workforce capacity.

8 The IDSM Market Support program will integrate energy efficiency with
9 other demand-side management strategies. The program will provide DER
10 assessments in coordination with energy efficiency programs. See the IDSM
11 Program Card in Exhibit 2 for more information. Integrating energy efficiency
12 with DERs will reduce the need for iterative infrastructure investments. It will also
13 reduce utility cost impacts associated with fuel substitution and increase CCR
14 REN's ability to expand access to, and delivery of, place-based energy-saving
15 program designs that mitigate upward rate pressure.

16 CCR REN's Market Support offerings are categorized as cross-cutting. No
17 sectors are being withdrawn from the segment.

18 **Equity**

19 CCR REN's Equity Segment and Portfolio Strategy, including Resource
20 Acquisition, aligns with the objectives set in D.23-06-055.¹¹⁶ CCR REN's Equity
21 segment includes the Residential Equity Program and the Finance Equity
22 Program. Both programs are designed to increase access to and delivery of
23 energy services, energy and utility cost savings, and reduce Criteria Pollutant
24 emissions.

¹¹⁶ p. 57

1 The Residential Equity Program will serve single-family, multifamily, and
2 manufactured homes. The program will increase access to services for customers
3 not eligible for ESA programming. It will provide exempt energy efficiency
4 measures and those that provide claimable TSB. Energy efficiency measures will
5 reduce participants' energy bills and improve air quality by reducing Criteria
6 Pollutants.

7 The final program design will be determined through competitive
8 solicitations in accordance with the County of San Luis Obispo's procurement
9 standards. It is expected to include components of the following services:

- Technical Assistance
- Incentives/Rebates
- Outreach
- Energy Audits
- Direct Install
- Education

10 The Finance Equity Program is designed to increase access to energy
11 improvement loans by providing no-cost technical and administrative services to
12 CCR REN customers in geographically hard-to-reach, Underserved, or
13 Disadvantaged Communities. The Finance Equity Program will support CCR
14 REN's Non-Residential program participants in accessing capital (e.g., IOU On-Bill
15 Financing) for projects with upfront costs. The Finance program will increase
16 access to support services, lead to measurable energy savings, and reduce Criteria
17 Pollutants by increasing the installation of energy-efficient equipment.

18 ***Equity Subcategories Refinement***

19 ***Hard-to-Reach***

20 Unlike the Disadvantaged Community or Underserved Equity
21 classifications, the hard-to-reach designation carries specific policy interventions
22 for Resource Acquisition services that support alignment with defined Equity
23 outcomes. Continued refinement of the hard-to-reach definition is therefore

critical to ensuring alignment with both the Resource Acquisition and Equity segment goals.

CCR REN has observed potential service gaps for customers who are classified as Underserved but are ineligible for the hard-to-reach designation or the policy interventions associated with that classification. CCR REN does not have the data necessary to quantify the scale of this challenge due to the confidential nature of the customer data.

For fair and consistent treatment across Equity groups, the Underserved customer designation should be added to the hard-to-reach geographic criteria, as is the case with DAC customers. This would create a third path for receiving hard-to-reach geographic criteria treatment.

If concerns exist regarding this recommendation, CCR REN recommends commissioning a study to assess the impact of excluding underserved Equity customers from the hard-to-reach geographic criteria.

Disadvantaged Communities

The Disadvantaged Communities definition is straightforward, relying on census tracts to identify eligible geographic areas. Implementation has been efficient, reducing administrative burden, avoiding market confusion, and lowering costs, aided by the availability of ZIP-code data in IOU billing systems.

However, in practice, implementers currently rely on mapping-based tools to identify Disadvantaged Census Tracts, which can lead to confusion. Most stakeholders rely on CalEnviroScreen 4.0, which is being phased out in favor of CalEnviroScreen 5.0. This creates a potential for confusion, which is further compounded by the fact that CalEPA also designates official SB 535

Disadvantaged Communities, which are slightly more inclusive than communities identified by the latest version of the CalEnviroScreen tool.¹¹⁷

CCR REN recommends that the CPUC align its DAC eligibility methodology with SB 535 and the Disadvantaged Communities designated by CalEPA. The latest CalEPA designation was issued in 2022, and includes 4 categories of census tracts:

- Top 25 of overall score in CalEnviroScreen 4.0 (1,984 census tracts)
- Census tracts lacking overall CalEnviroScreen scores due to data gaps but that are in the highest 5% of CalEnviroScreen 4.0 population burden (19 census tracts)
- Census tracts that were considered Disadvantaged in 2017, regardless of their CalEnviroScreen 4.0 score (307 Census Tracts)
- Lands under the control of federally recognized tribes

The office of Environmental Health Hazard Assessment, which is part of the CalEPA, maintains the official SB 535 map that indicates which census tracts qualify as Disadvantaged Communities, as officially designated by CalEPA.¹¹⁸ Using the official map of SB 535 Disadvantaged Communities, as issued by Cal EPA staff, will ensure full alignment between tracking of CPUC funding going to DACs and the tracking that all other State agencies perform for cap-and-trade investment programming.

This approach would also create a clear decision point for transitioning from the CalEnviroScreen 4.0 tool to the 5.0 tool and allow implementers to serve the

¹¹⁷ https://calepa.ca.gov/wp-content/uploads/2022/05/Updated-Disadvantaged-Communities-Designation-DAC-May-2022-Eng.a.hp_-1.pdf

¹¹⁸ <https://experience.arcgis.com/experience/1c21c53da8de48f1b946f3402fbae55c/page/SB-535-Disadvantaged-Communities/>

communities designated under CalEnviroScreen 5.0 as soon as CalEPA issues its official determination of SB 535 Disadvantaged Communities.

Underserved

In D.23-06-055, the Commission formally adopted a definition of “Underserved” that extends across multiple customer classes, including Residential, Commercial, Industrial, and Agricultural sectors. In alignment with the Commission’s ESJ Policy,¹¹⁹ CCR REN proposes explicitly including permanent medical baseline customers. This recommendation is expanded on in Chapter 11.

Describe the Sector(s) the PA Proposes to Serve within the Equity Segment (noting PA expansion into new sectors or withdrawal from sector). Include Forecasts of Single-Family and Manufactured Home Customers Served.

CCR REN Equity segment programs will serve the Residential and Cross-Cutting sectors through the Residential Equity and Finance Equity programs.

Preliminary participation forecasts for single-family and manufactured homes over the four-year implementation period are shown in Figure 06-02. CCR REN anticipates refining these forecasts once the final program design is complete, program providers are selected, and the split between residential, multifamily, and manufactured homes is finalized.

¹¹⁹ CPUC ESJ Action Plan 2.0 at pp. 21-22. <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/news-and-outreach/documents/news-office/key-issues/esj/esj-action-plan-v2jw.pdf>

Figure 06-02. Single-Family and Manufactured Home Participation Forecast

	2028	2029	2030	2031	Total
Single-Family	380	715	848	854	2,798
Manufactured Homes	163	307	364	366	1,199

Codes & Standards

CCR REN will deliver coordinated Codes & Standards training across its service area. The training will use virtual platforms and regional partnerships to increase accessibility for the communities served. When preferred by local jurisdictions, CCR REN will also provide in-person training to support hands-on learning and tailored assistance. These efforts are integrated with CCR REN's WE&T initiatives. They are designed to increase access to the benefits of code compliance and align with the Equity Segment's goals of reducing energy and utility costs while mitigating Criteria Pollutant emissions.

Describe the PA's Strategy for the Codes & Standards Segment, Consistent with the Commission's objectives.

In D.23-06-055, the Commission states the primary purposes of the Codes & Standards segment.¹²⁰ These are:

- Influences standards and code-setting bodies,
- Improves compliance with existing Codes & Standards,
- Assists local governments to develop ordinances that exceed statewide minimum requirements, and

¹²⁰ pp. 14-15

- Coordinates with the other programs and entities to support the state's policy goals.

CCR REN's Codes & Standards segment prioritizes improving local compliance with existing Codes & Standards. The segment consists of one program. The program will increase energy-code awareness and compliance by providing training and support to building officials, building staff, building operators, and contractors. CCR REN will deliver coordinated, accessible, and regionally relevant code-compliance training across its service area and will inform stakeholders on how to engage in code updates.

CCR REN will complement IOU efforts by offering workforce and stakeholder education that equips market actors with the knowledge needed for proper installation and maintenance of code-compliant systems, including proper refrigerant management practices. In partnership with the California Energy Commission and local agencies, CCR REN will raise awareness of the benefits of compliance, particularly in communities where in-person training is difficult or costly.

Describe the Sector(s) that the PA Proposes to Serve within the Codes & Standards Segment

CCR REN's Codes & Standards program will provide training and increase awareness of the energy code across all sectors.

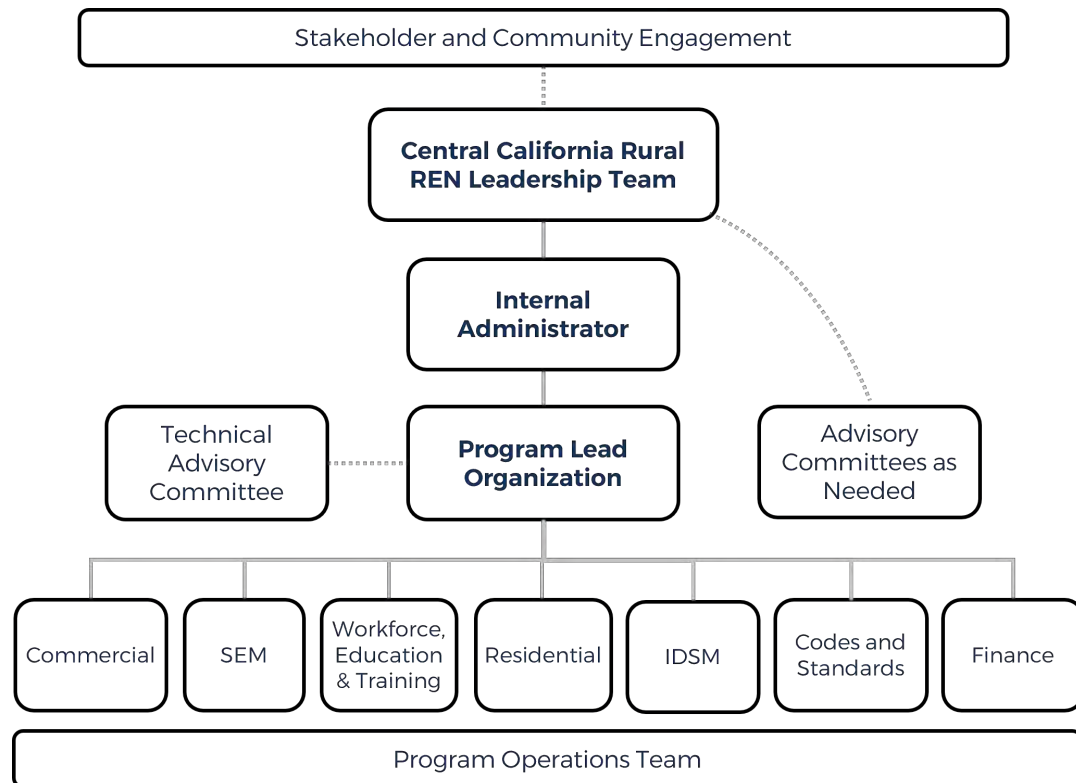
Chapter 7: Portfolio Coordination

Segment and Sector Specific Coordination

Coordination within the Same PA

CCR REN serves the Central Coast, San Joaquin Valley, and Eastern Sierra regions. Each region is represented by a partner organization, as presented in Chapter 2 of this testimony. Figure 07-01 presents the CCR REN governance structure.

Figure 07-01. CCR REN Governance Structure



Each CCR REN partner organization appoints a primary and alternate representative to the Leadership Team. The Leadership Team oversees portfolio performance, strategy, and policy decisions. The County of San Luis Obispo functions as the Internal Administrator. The interactions between the County of

San Luis Obispo and the Leadership Team are defined by an agreed-upon Memorandum of Understanding that sets roles and responsibilities and frames coordination. The Leadership Team meets bi-weekly virtually and in-person once a quarter.

Each CCR REN Program Lead Organization manages one or more energy efficiency programs, even when those programs span multiple regions. Coordination across sectors, segments, and CCR REN territory occurs through operations meetings scheduled at least once a month and through ad hoc communications. This coordinated structure supports consistent program delivery across the service area.

Figure 07-02 presents each program, the agency responsible for leading it, and the locations where it will be implemented.

Figure 07-02. Program, Segment, Sector, Lead Organization, and Territory

Program	Program Lead Organization	COSLO	AMBAG	SJVCEO	HSEF
Commercial Energy Improvement Program	AMBAG	Yes	Yes	Yes	Yes
Non-Residential SEM	County of San Luis Obispo	Yes	Yes	Yes	Yes
Workforce, Education and Training	SJVCEO	Yes	Yes	Yes	Yes
Residential Equity Program	HSEF	Yes	Yes	Yes	Yes
IDSM	AMBAG	Yes	Yes	Yes	Yes

Figure 07-02. Program, Segment, Sector, Lead Organization, and Territory

Program	Program Lead Organization	COSLO	AMBAG	SJVCEO	HSEF
Finance Equity Program	County of San Luis Obispo	Yes	Yes	Yes	Yes
Codes & Standards Equity Program	HSEF	No	Yes	Yes	Yes

1 ***Sector/Segment Specific Coordination***

2 Figure 07-03 presents customer-sector and portfolio-segment
3 coordination. For all sectors and segments, CCR REN will facilitate coordination
4 through scheduled leadership and operational meetings, ad hoc meetings,
5 written communications, and direct consultant coordination.

Figure 07-03. Sector/Segment Coordination

Segment	Sector	Coordination
Resource Acquisition	All Non-Residential	These programs will coordinate with CCR REN's Market Support and Equity segments.
Market Support, Codes & Standards, and Equity	Cross-Cutting	Workforce, IDSME, and Finance will coordinate with all Non-Residential sectors. Codes & Standards will coordinate with all sectors in the portfolio.
	Residential	The local Codes & Standards program will coordinate with residential installers to increase awareness to, and compliance with, code.

Program-Specific Coordination.

CCR REN delivers a coordinated set of energy efficiency programs across its territory. Each program supports a shared strategy to reduce customers' energy bills, address ratepayer affordability, invest in the local workforce, and reduce Criteria Pollutants that negatively impact air quality. The programs will use the same set of tools discussed for segment- and sector-level coordination. Figure 07-04 presents program-specific coordination supported by the Cross-Cutting programs. Exhibit 2 Program Cards provides more information on the program's interactions with others.

Figure 07-04. Program Coordination

Cross-Cutting Program	Programs
Workforce, Education, and Training	Commercial Energy Improvement Program
	Non-Residential SEM
	IDSM
	Codes & Standards
IDSM	Commercial Energy Improvement Program
	Non-Residential SEM
Finance	Commercial Energy Improvement Program
	Non-Residential SEM
Codes & Standards	Commercial Energy Improvement Program
	Non-Residential SEM
	Workforce, Education and Training
	IDSM
	Residential Equity Program

1 **Coordination with Other PAs**

2 Effective programs in shared territories rely on active coordination among
3 PAs. To achieve this coordination, CCR REN actively collaborates with other PAs
4 serving overlapping regions. This coordination improves customer experiences
5 across all areas and is especially important for CCR REN participants in
6 geographically hard-to-reach, Underserved, and Disadvantaged Communities.

7 In addition to coordinating among all PAs, the joint REN PAs collaborate to
8 ensure local governments have a voice within the California energy efficiency
9 portfolio. Two crucial venues for REN PA coordination and stakeholder
10 engagement are the California Climate and Energy Collaborative¹²¹ and the
11 California Regional Energy Networks collaborative.¹²²

12 CCEC, through CivicWell, convenes the Annual California Climate & Energy
13 Forum, bringing together local governments, state agencies, community
14 organizations, utility and CCA PAs, and other key stakeholders to coordinate,
15 share best practices, and support local leadership in climate action. CCEC also
16 provides local governments and other stakeholders with access to resource
17 libraries, technical assistance, and other services.

18 CalREN provides a venue for REN PAs to share information, build on
19 collective successes, and work together to coordinate and streamline activities to
20 increase their impact. To further streamline efficiencies, in 2025, RENs added
21 their CalREN services to the CivicWell contract to enhance coordination and
22 create additional cost savings.

23 Starting in 2027 and for the Business Plan period, the CivicWell contract
24 covering both CalREN and CCEC activities will be budgeted consistently by all

¹²¹ <https://eecoordinator.info/>

¹²² <https://californiaregionalenergynetworks.org/>

1 REN PAs, with costs divided between the Administration (85-100%) and
 2 Marketing (0-15%) categories, as applicable.

3 **Coordination Participants**

4 CCR REN coordinates with Pacific Gas and Electric Company (PG&E),
 5 Southern California Edison (SCE), Southern California Gas Company (SoCalGas),
 6 and all California RENs through the CalREN Collaborative. Figure 07-05 shows
 7 shared geographic territories and potential areas of overlap between CCR REN,
 8 utilities, and other PA programs. Additional discussion on avoiding duplication
 9 appears later in this chapter.

Figure 07.05 Shared Territory with other PAs Serving CCR REN Customers

Portfolio Administrator	Shared Geographic Territory	Potential Customer Overlap
PG&E	• Central Coast • San Joaquin Valley • Eastern Sierra	• Commercial • Public • Industrial • Agricultural • Residential
SCE	• San Joaquin Valley • Eastern Sierra	• Commercial • Public • Industrial • Agricultural • Residential
SCG	• Central Coast • San Joaquin Valley	• Commercial • Public • Industrial

Figure 07.05 Shared Territory with other PAs Serving CCR REN Customers

Portfolio Administrator	Shared Geographic Territory	Potential Customer Overlap
		• Agricultural • Residential
SoCalREN	• Central Coast • San Joaquin Valley • Eastern Sierra	• Commercial • Public • Industrial • Agricultural • Residential
3CREN	• Central Coast	• Commercial • Residential • Agricultural

Coordination Structure and Frequency

CCR REN holds regular coordination meetings with other PAs. These meetings strengthen program alignment and improve service delivery. They reduce customer confusion, prevent duplication, improve cost efficiency, and support higher participation in energy efficiency programs. This approach further supports the exchange of best practices and lessons learned and informs program design and delivery for the geographically hard-to-reach, Underserved, and Disadvantaged Communities CCR REN serves.

CCR REN also proposes to work with other PAs on the development and delivery of effective statewide programs to enable customer participation in CCR REN's service area, as further detailed in Chapter 5.

This work will occur on a regular cadence throughout the program cycle. Figure 07-06 lists CCR REN's coordination structure, meeting frequency, and the staff roles involved.

Figure 07-06. Coordination Structure and Frequency

Venue	Cadence	Staff
California Energy Efficiency Coordinating Committee	Quarterly	- Portfolio Managers - Coordination Members
Joint Coordination Memos	Per CPUC ED Direction	- Portfolio Managers - Sector leads - Program Providers 3rd Parties
Portfolio Administrator Coordination Meetings	Quarterly	- Sector Leads - Program Providers 3rd Parties
CalREN	Monthly	Portfolio Managers
Ad Hoc	As needed	- Portfolio Managers - Sector Leads - Program Providers and Consultants

Coordination Practices, Overlap Identification and Mitigation

CCR REN's approach is rooted in mutual respect, open dialogue, and a shared commitment to delivering place-based, cost-effective, participant-centered energy efficiency solutions. CCR REN believes that thoughtful coordination not only prevents duplication but also enhances the collective

1 impact of California’s energy efficiency portfolio. CCR REN remains committed to
2 the prudent use of ratepayer funds and continued collaboration with the CPUC
3 and fellow PAs.

4 CCR REN recognizes that the terms “substantially similar” and
5 “duplicative”¹²³ refer to programs that, while not identical, may share core
6 characteristics in purpose, design, delivery mechanisms, and target populations.
7 CCR REN also understands that such an overlap, if unaddressed, may lead to
8 customer confusion, inefficient use of ratepayer funds, and diminished portfolio
9 effectiveness.

10 CCR REN uses a structured and collaborative process to identify potential
11 overlap among PA program offerings. Figure 07-07 presents CCR REN’s review
12 process for identifying overlap and potential for substantially similar or
13 duplicative programs.

Figure 07-07. CCR REN Overlap Identification Process

Step	Criteria	Process
1	Target Population and Geography	CCR REN assesses whether a proposed program would target the same customer groups within overlapping service territories. CCR REN also reviews how effective existing PA programs have been recruiting customers in the CCR REN region.
2	Program Intent and Objectives	CCR REN reviews whether a proposed program shares the same primary goals, such as electrification, Equity, or workforce development, as those offered by other PAs.
3	Measures and Delivery	CCR REN considers whether a proposed program with similar intent shares delivery approaches and energy saving measures.

¹²³ Advice Letter 20-E/20-G, pp 19-21

Figure 07-07. CCR REN Overlap Identification Process

Step	Criteria	Process
4	Timing and Outreach Channels	CCR REN evaluates whether the program operates concurrently with similar efforts and uses comparable outreach or enrollment strategies.
5	Funding Source and Incentive Structure	CCR REN examines whether programs offer similar incentives for the same outcome.
6	Stakeholder Coordination	CCR REN participates in regular coordination meetings with other PAs to share potential program concepts, flag potential overlap, and refine scopes collaboratively.
7	Documentation and Resolution Pathway	When potential overlap is identified, CCR REN documents the findings and initiates direct dialogue with the relevant PA(s) to explore options to avoid potential overlap, including program differentiation, geographic targeting, or joint implementation.

1 ***Explain How Overlap Findings are Brought to the Coordination Venue and the***
2 ***Timeline for Reaching a Resolution***

3 CCR REN uses its governance and operational structure to identify
4 instances where programs target the same customer groups in the same
5 segment with similar services. CCR REN logs each instance of potential overlap.
6 CCR REN also engages the affected parties through established coordination
7 venues and pursues timely and collaborative resolutions. This process ensures
8 that customers receive services while the affected PAs work toward a mutually
9 agreeable resolution.

1 ***List Options / Specific Levers to Resolve or Prevent Overlap***

2 CCR REN acknowledges the potential for overlapping program offerings
3 among PAs in shared territories with shared goals. CCR REN asserts that
4 preventing direct overlap requires deliberate and collaborative programming
5 and portfolio design. Figure 07-08 presents the levers CCR REN uses to resolve
6 substantively similar and/or duplicative program activities.

Figure 07-08. CCR REN Identified Levers to Resolve or Prevent Overlap

Lever	Description
Joint Planning and Scoping	Early engagement with other PAs during planning cycles to align program objectives and delivery channels.
Competitive Solicitations	Coordinate with IOUs and other PAs prior to and during solicitation to mitigate after-the-fact duplication.
Joint Coordination Memos	Coordinate, document, and outline processes, actions, and expectations between PAs designed to mitigate duplication.
Geographic and Demographic Targeting	Refine eligibility and outreach to focus on geographically hard-to-reach, Underserved, and Disadvantaged Communities.
Program Differentiation	Design offerings that fill gaps in the statewide program portfolio, such as workforce development tailored to rural labor markets.
Transparent Communication	Maintain continuous lines of communication with other PAs and stakeholders to flag potential overlap and co-develop solutions.

Coordination with Market Transformation

CCR REN intends to engage with CalMTA¹²⁴ and recognizes that effective coordination is essential for meaningful progress in energy efficiency. While CCR REN remains open to the evolving landscape, our approach is to align our portfolio with statewide market transformation activities where there are practical intersections. Support for CalMTA's initiatives will be considered where feasible and impactful. CCR REN will also continue to examine how market transformation initiatives can be incorporated into local codes, standards, and workforce development while bringing awareness of new technological solutions to the installer community.

Coordination with Energy Savings Assistance (ESA) Programs

CCR REN acknowledges the ESA Program's role in serving low-income households and is committed to enhancing, not duplicating, its impact. CCR REN's Residential Equity Program will be designed with a place-based approach and will fill service gaps to extend equitable access to and delivery of energy efficiency services, targeting economically vulnerable customers in alignment with CPUC-defined Equity principles.

CCR REN has developed an ESA referral process and will continue to use and refine that process. CCR REN will use clear referral processes and ongoing information exchange to support smooth handoffs between programs. CCR REN's intent is to reinforce ESA offerings while expanding access to services for

¹²⁴ CalMTA is California's market transformation administrator creating a portfolio of market-level initiatives for the State which work to deliver cost-effective energy efficiency and reduce greenhouse gas emissions. CalMTA efforts are also aligned with other State goals on equity and workforce development.

1 residents living in geographically hard-to-reach, Underserved, and
2 Disadvantaged Communities that lack access to existing services.

3 **Coordination with Other Demand Side Programs**

4 CCR REN recognizes that effective IDSM, including behind-the-meter DER
5 delivery, requires not only innovative program design, but also strategic
6 coordination across the broader PA landscape. CCR REN will actively collaborate
7 with other PAs to ensure that integrated solutions are delivered consistently,
8 efficiently, and equitably.

9 Figure 07-09 below presents the key elements of CCR REN's integration
10 strategy.

Figure 07-09. CCR REN Demand-Side Program Integration

Integration Element	Description
Innovation and Collaboration	CCR REN will engage the Program Provider community to bring forward creative and scalable strategies that integrate energy efficiency with DER and DSM offerings.
Cross-PA Coordination for Program Alignment	CCR REN will coordinate with other PAs to align program messaging, eligibility criteria, incentive structures, and customer engagement strategies. This coordination will reduce duplication, improve customer experience, and support consistent delivery of IDSM solutions statewide.
Flexible Program Design for Multi-DER Projects	CCR REN will seek energy efficiency programs from the program provider community that are designed to accommodate layered interventions, such as combining energy efficiency retrofits with automated controls, to deliver measurable system benefits. Program designs will support permanent load shifting (PLS) and avoid reliance on event-based demand response, consistent with CPUC directives.

Figure 07-09. CCR REN Demand-Side Program Integration

Integration Element	Description
Data-Driven Planning and Evaluation	CCR REN will incorporate DER-specific forecasting and evaluation methodologies into its implementation plans. This includes engineering estimates or metered load shapes to support disaggregating impacts across energy-efficiency and non-energy-efficiency measures. CCR REN will follow CPUC-approved protocols for cost-effectiveness testing and reporting, and coordinate with the Energy Efficiency Reporting Project Coordination Group (PCG) to ensure accurate data capture in CEDARS.
Interagency and Local Collaboration	CCR REN will engage with CEC, local governments, water agencies, and municipal utilities to identify joint implementation opportunities, particularly where water-energy nexus measures or electrification upgrades can be bundled with energy efficiency interventions.
Conflict Resolution and Portfolio Compliance	CCR REN will establish internal protocols to resolve any conflicts between energy efficiency program requirements and DER program rules, ensuring that integrated projects remain compliant and customer-friendly, technically sound, financially beneficial, and aligned with our communities' priorities.

Coordination Plans with Building Decarbonization Programs.

CCR REN will coordinate its energy efficiency portfolio with statewide and regional decarbonization initiatives, including programs such as those administered by the California Energy Commission (CEC), California Air Resources Board (CARB), regional Air Quality Districts, CPUC-funded electrification efforts, electric transportation initiatives, and relevant decarbonization proceedings, to ensure CCR REN communities are equipped to participate in and benefit from California's clean energy transition.

CCR REN's coordination strategy is designed to support the equitable deployment of decarbonization solutions across Central California, with a focus

on aligning energy efficiency investments with electrification readiness, grid-supportive technologies, and long-term carbon-neutral goals.

By coordinating its energy efficiency portfolio with California’s building decarbonization and electrification efforts, CCR REN will ensure that rural communities are not only included in the state’s climate strategy but also positioned to lead in its implementation. This integrated approach supports CPUC goals for affordability, reliability, and Equity, and reinforces CCR REN’s role as a trusted regional partner in California’s clean energy future.

Figure 07-10 presents key coordination activities with building decarbonization programs.

Figure 07-10. CCR REN Coordination with Building Decarbonization Programs

Integration Element	Description
Alignment with CEC Building Decarbonization Programs	CCR REN will engage with CEC-administered programs such as the Building Initiative for Low-Emissions Development (BUILD), Equitable Building Decarbonization, and EPIC-funded pilots to identify opportunities for joint implementation, data sharing, and outreach, where feasible. CCR REN will confirm that its energy efficiency interventions complement CEC-funded electrification and retrofit efforts, particularly in geographically hard-to-reach, Underserved, and Disadvantaged Communities.
Integration with CPUC Electrification and Transportation Initiatives	CCR REN will coordinate with CPUC-funded programs that support building electrification, electric vehicle infrastructure, and transportation electrification, where feasible. This includes identifying synergies between energy-efficiency upgrades (e.g., panel readiness, envelope improvements) and electrification measures (e.g., heat pump installations, EV charger enablement).
Participation in Decarbonization	CCR REN will actively monitor relevant CPUC proceedings and technical forums focused on

Figure 07-10. CCR REN Coordination with Building Decarbonization Programs

Integration Element	Description
Proceedings and Working Groups	decarbonization, including R.19-01-011 (Building Decarbonization), R.22-11-013 (DER Cost-Effectiveness), and future proceedings addressing electrification and load flexibility.
Cross-Program Coordination with Other Portfolio Administrators	CCR REN will collaborate with IOUs, RENs, and CCAs to align decarbonization messaging, customer engagement strategies, and program eligibility criteria.
Support for Electrification Readiness and Grid Integration	CCR REN will prioritize energy efficiency programs that prepare buildings for electrification, including panel upgrades, envelope improvements, and/or load management technologies. These measures will be designed to complement DER and DSM offerings and will be evaluated using CPUC-approved cost-effectiveness methodologies and load shape protocols.
Local Government and Agency Collaboration	CCR REN will work with local governments, air quality management districts, and water agencies to support regional decarbonization goals, including the implementation of climate action plans and the adoption of electrification ordinances.

Chapter 8: Stakeholder Engagement

Stakeholder Engagement Summary and Approach

CCR REN engaged communities and stakeholders across the Central Coast, San Joaquin, and Eastern Sierra to support portfolio design. Beyond this effort, CCR REN routinely engages its communities through conversations with elected officials and community members. Stakeholders across regions described similar challenges, including high energy bills, limited local capacity, limited access, confusing program rules, and solutions that don't fit their realities. Many people want to act but don't know where to start or don't see programs designed for their circumstances. Feedback was solicited from community members, energy efficiency industry stakeholders, and locally elected and appointed officials.

Community Engagement

Community engagement is foundational to CCR REN's place-based approach and is reinforced through each partner organization's lived experiences operating and serving their communities. For the 2028-2035 Business Plan, CCR REN collaboratively designed outreach activities, including listening sessions, focus groups, community workshops, surveys, and one-on-one stakeholder meetings. These efforts sought feedback and information from residents, businesses, contractors, and community-based organizations to inform portfolio and program strategies that reflect local priorities and lived experiences.

CCR REN facilitated Community Engagement activities in Q3 and Q4 of 2025. Figure 08-01 below summarizes CCR REN's stakeholder community engagement efforts.

Figure 08-01. CCR REN Community Engagement

Activity	Number of Activities	Number of Participants
Community Workshops / Events	3	120
Community Survey	3	59
Listening Sessions	4	43
1:1 Stakeholder Meetings	30	30
Focus Group	1	12
Totals	42	264

Coordination with Statewide and Peer Entities

CCR REN participated in a series of coordination and feedback sessions with statewide and peer entities to align its portfolio with the broader California energy efficiency implementation environment. These efforts included coordination with IOUs focused on portfolio alignment, data coordination, and shared customer referral protocols. RENs also exchanged lessons learned on program delivery and implementation, and CAEECC members and policy stakeholders provided input on program framing and regulatory alignment. 10 separate scheduled meetings were held.

Separately, CCR REN met with the Natural Resources Defense Council to better understand their perspective and considerations from a statewide policy perspective.

CCR REN Organizational Structure and Community Engagement

Each of the four Partner Organizations, AMBAG, the County of San Luis Obispo, SJVCEO, and HSEF, is governed by boards comprised of city council

members, county supervisors, other elected leaders, and community members.¹²⁵ This structure enables CCR REN operations to be in ongoing alignment with local priorities and to be publicly accountable. Through routine board meetings, Leadership Team coordination, and ongoing updates to varying board members, CCR REN maintains an ongoing dialogue with policymakers, staff, and involved community members.

Summary of Key Themes and Areas of Support

CCR REN’s 2025 engagement process included more than 250 participants and generated consistent, regionally grounded input. Across communities, stakeholders provided consistent feedback that informed multiple elements of CCR REN’s 2028–2035 portfolio. Figure 08-02 below summarizes feedback from CCR REN’s engagement activities.

Figure 08-02. Community Engagement Summary

Theme	Subthemes	Source of Stakeholder Input	Description
Customer Affordability & High Energy Bills	- High utility bills & energy burden - Affordability and safety concerns - Propane - Upfront costs & financing gaps	- Community listening sessions - Survey - Board meetings - Ongoing community engagement	Participants face high energy bills and up-front project costs, often without financing options that feel accessible.

¹²⁵ CCR REN’s organizational structure, including local government and community-based organization leadership, Partner Organization roles, and oversight responsibilities, is described in Exhibit 1, Chapter 2 (About CCR REN).

Figure 08-02. Community Engagement Summary

Theme	Subthemes	Source of Stakeholder Input	Description
	• Middle-income cost burden		
Program Access and Participation Barriers	• Lack of awareness • Duplication of efforts & process confusion • Language and inclusion • Tenant/landlord divide • Aging infrastructure & limited capacity	• Community listening sessions • Survey • Stakeholder meetings • Ongoing community engagement	• Program access is hindered by language barriers, awareness gaps, eligibility confusion, and social/family limitations • Community members often don't know where to start or whether they qualify. Tenants often lack the authority needed to participate
Workforce Access and Development	• Labor shortage & access to training • Low awareness of clean energy careers • Travel and family constraints • Gender and social barriers	• Community listening sessions • Survey • Stakeholder meetings • Ongoing community engagement	• Communities lack local training pipelines, face labor shortages, and need more visible, structured career paths into clean energy, especially for young and Underserved workers

Figure 08-02. Community Engagement Summary

Theme	Subthemes	Source of Stakeholder Input	Description
Economic & Operational Resilience	• Economic feasibility of retrofits • Integrating commercial needs • Bandwidth & complexity	• Community listening sessions • Board meetings • Focus groups • Stakeholder meetings • Ongoing community engagement	• Small to medium-sized businesses and public agencies face challenges balancing energy upgrades with day-to-day operations. Many lack the staffing capacity, technical expertise, financing or time to manage complex projects.
Community-Driven Outreach & Local Trust	• Trust and local presence • Outreach expansion • Civic leadership and multi-stakeholder alignment • Community demonstrations	• Community listening sessions • Board meetings • Focus groups • Stakeholder meetings • Ongoing community engagement	• Many residents distrust third-party implementers and utilities and are more likely to engage when programs are delivered or endorsed by trusted local organizations.
Inter-PA and Policy Coordination	• Duplication avoidance • Data sharing • Peer collaboration	• IOU coordination meetings • CCA coordination meetings	• Feedback from utilities, RENs, and CAEECC members highlighted the need for early portfolio coordination before JCMs are drafted, to

Figure 08-02. Community Engagement Summary

Theme	Subthemes	Source of Stakeholder Input	Description
		- REN coordination meetings - CAEECC	minimize overlap and duplication while increasing access and value for ratepayers.

1 Figure 08-03 below presents direct quotes from the engagement that
2 capture the essence of what CCR REN heard.

Figure 08-03. Illustrative Quotes from Community Engagement

<i>“People need to see someone local, someone accountable who’s still around next year.”</i>
<i>“People have high bills and then face high up-front costs to improve efficiency.”</i>
<i>“We need something local, our folks can’t just stop working and go to Fresno or Bakersfield for a two-week course.”</i>
<i>“My margins are razor thin, if I’m going to upgrade anything, it better save me money this month, not five years from now.”</i>
<i>“Every program has different rules, we don’t have time to figure out who does what.”</i>
<i>“I don’t know which programs apply to me. There’s too many and they all seem confusing.”</i>

3 **How CCR REN Addressed Feedback**

4 CCR REN reviewed the qualitative and quantitative data collected and
5 adjusted the portfolio application where feasible and appropriate. Figure 08-04
6 summarizes the key themes above and the adjustments made.

Figure 08-04. Community Feedback and Portfolio Adjustments

Theme	Portfolio Adjustments
Customer Affordability & High Energy Bills	• Prioritize utility cost savings and customer choice in regulated end-use devices. • Rebalance the 2028-2035 portfolio to prioritize Resource Acquisition while serving Equity customers. • Introduce a community-driven Residential Equity Program that prioritizes increasing access to energy-saving services. • Adjust IDSM to focus on integrating with Resource Acquisition programming to be able to prioritize viable electric alternatives while permanently load shifting. • Incorporate policy change recommendations to allow fuel switching to address propane use.
Program Access and Participation Barriers	• Increase focus on delivering services through the local and regional workforce. • Embed multilingual outreach. • Align program documentation with regional participation criteria. • Increase portfolio scale to afford equitable access while mitigating service waitlists.
Workforce Access and Development	• Support asynchronous and synchronous, and flexible learning environments. • Provide flexible and paid employment and internship positions. • Take a train-the-trainer approach to facilitate local and regional access to education.

Figure 08-04. Community Feedback and Portfolio Adjustments

Theme	Portfolio Adjustments
	• Engage with local and regional stakeholders to build awareness of clean energy career opportunities. • Integrate workforce opportunities throughout CCR REN's portfolio.
Economic & Operational Resilience	• Incorporate operational resilience to PSPS and extreme weather events through the IDSM Cross-Cutting program. • Expand direct install offerings to Commercial customers. • Introduce a community-designed Residential program to provide no-cost energy-saving upgrades to those who do not have access to other services. • Prioritize economic resilience through in-community hiring.
Community-Driven Outreach & Local Trust	• Increase capacity within CCR REN agencies to increase local and regional trust in programs. • Increase investments in in-community program representatives to build trust and demand in energy-saving upgrades.

Chapter 9: Evaluation, Measurement & Verification

Summary of planned EM&V Studies and Activities for the 4-year plan and 8-year plan.

For the 4- and 8-year plans, CCR REN will work closely with CPUC staff and other Portfolio Administrators to support the development of the CPUC's EM&V Roadmaps and to actively participate in statewide EM&V studies and working groups. We will build data collection into each program to meet CPUC evaluation needs, submit coordinated EM&V plans through the PCG, and contribute to REN-related studies.

CCR REN will use EM&V as a practical management tool to assess and continuously improve the performance of its energy-efficiency portfolio. CCR REN's EM&V program will focus on three core activities: managing projects to produce defensible ex-ante impact estimates, conducting process and formative research to improve program design and the participant experience, and performing market assessments to identify gaps and baselines for new offerings.⁶⁶ These efforts will ensure CCR REN's programs are evidence-based, responsive to Commission priorities, and continuously improved.

Planned EM&V Studies and Activities

CCR REN's planned EM&V studies and activities will be crafted around four key areas as listed below.

- ***Portfolio Performance Studies*** – Designed to assess whether the portfolio and associated programs are sufficiently meeting 4-year and 8-year outcomes.
- ***Process Evaluation Studies*** – Designed to identify opportunities to improve program design and customer experience.

- ***Evaluability Assessments*** – Confirming programs are collecting the data needed to support future impact studies and metrics.
- ***Market Analysis*** – Designed to assess market opportunities, gaps and generate recommendations on how to better serve portfolio segments and sectors.
- ***Ad Hoc Research*** – CCR REN expects that questions will arise in which quick response studies and research will be needed.

CCR REN expects needs to vary. However, in general, we expect that process and evaluability assessments will be most beneficial early in the 4-year cycle, with Market Analysis and Ad Hoc research being less critical in the near term. CCR REN will be most interested in evaluating how Cross-Cutting programs are integrating with Resource Acquisition programming and whether the market impacts forecasted are being realized.

Figure 09-01 summarizes the expected types of studies across programs across time. A full timeline and study plan will be finalized after the approval of CCR REN’s Business Plan.

Figure 09-01. Summary of CCR REN EM&V Study Types and Expected Cadence

Study Type / Name	Description	Expected Cadence
Portfolio Performance Studies	Appropriately scoped studies will independently evaluate CCR REN performance to 4-year and 8-year outcomes.	Annual
Process Evaluation Studies	Each program will be evaluated biennially to identify opportunities to improve design and customer experience. Studies will align with and support the mid-cycle advice letters, updates, and changes to portfolio design for future applications.	Biennially

Figure 09-01. Summary of CCR REN EM&V Study Types and Expected Cadence

Study Type / Name	Description	Expected Cadence
Evaluability Assessments	Programs will be randomly selected and evaluated to assess whether the data being collected is sufficient for compliance and future impact studies, and metric reporting.	Annual
Market Analysis	Non-Residential Market assessment to identify gaps and needs across CCR REN's Territory. This will be used to adjust programs in the MCAL and for future applications.	Once per 4-year cycle
Market Analysis	Residential Market assessment to identify gaps and needs across CCR REN's Territory. This will be used to adjust programs in the MCAL and to inform future Portfolio Design.	Once per 4-year cycle
Market Analysis	Workforce needs assessment to identify emerging trends and capacity limitations across CCR REN's Territory.	Once per 4-year cycle
Ad Hoc Studies	Ad hoc studies will be initiated when study questions are identified and when no known data or research is available to address the question.	As needed

1 ***Coordination with PCG EMV***

2 CCR REN will coordinate its EM&V planning with the CPUC Energy Division
3 through the EM&V Project Coordination Group (PCG). We will develop an annual
4 EM&V plan consistent with the statewide process, submit proposed studies for
5 PCG review, incorporate PCG guidance, and ensure that only Energy
6 Division-approved activities are included in the statewide EM&V Plan prior to
7 implementation.

CCR REN will prioritize policy-relevant study questions, adhere to PCG-endorsed methodological standards, and avoid duplication with other portfolio administrators. We will provide timely documentation and data to support independent verification, participate in PCG meetings, and engage in working groups as needed.

PA/ED EM&V Allocations and Justification

CCR REN proposes an EM&V budget for the 4- and 8-year portfolio, presented as Figure 09-02 below. The allocations of the CCR REN and CPUC EM&V budgets are based on the CPUC direction set forth in D.16-08-019.⁶⁷

Figure 09.02. CCR REN EM&V Budget

Year	Total EM&V Budget (4% of Portfolio Budget)	PA EM&V Budget (27.5%)	CPUC EM&V Budget (72.5%)
2028	\$1,259,835	\$346,455	\$913,381
2029	\$1,606,238	\$441,715	\$1,164,523
2030	\$1,874,019	\$515,355	\$1,358,664
2031	\$2,070,013	\$569,254	\$1,500,760
Subtotal	\$6,810,106	\$1,872,779	\$4,937,327
2032	\$2,342,241	\$644,116	\$1,698,125
2033	\$2,409,363	\$662,575	\$1,746,788
2034	\$2,460,453	\$676,625	\$1,783,829
2035	\$2,514,805	\$691,571	\$1,823,234
Subtotal	\$9,726,862	\$2,674,887	\$7,051,975
Total	\$16,536,968	\$4,547,666	\$11,989,302

1 **Chapter 10: Cost & Cost Recovery (IOUs only)**

2 Not applicable to CCR REN.

Chapter 11: Recommendations for New or Modified Energy Efficiency Policy

CCR REN proposes the following policy refinements to advance and strengthen California's energy efficiency portfolios. To support clarity and alignment with the Commission's priorities, CCR REN has organized these recommended policy changes by the CPUC's core goals of affordability, decarbonization, reliability, and improved Commission oversight. This structure reflects CCR REN's intent to help the energy efficiency portfolio deliver more effective, equitable, and customer-focused outcomes while reinforcing the Commission's broader policy direction. CCR REN offers these proposals in a collaborative spirit and in alignment with the Assigned Commissioner's Scoping Memo and Ruling issued on July 23, 2025.

1. Update the Energy Efficiency Policy Manual

Proposal: Update the Energy Efficiency Policy Manual to address policy changes since its adoption. Update to explicitly address differences between utility and CCAs, and RENs.

Rationale: The 2020 Energy Efficiency Policy Manual does not currently reflect all requirements, differences in applications across PA types, or changes to expectations. A consolidated policy manual that provides direction to all PAs will reduce the potential for compliance errors and increase the cost-effectiveness of administering programs by reducing time investments associated with compliance checks.

Outcome: An updated Energy Efficiency Policy Manual is issued that incorporates changes made since the last draft was adopted and clarifies expectations across PAs and policy areas.

2. Strengthen the TRC Test's Participant Benefits Estimation Methodology

Proposal: CCR REN proposes the inclusion of participant non-energy benefits (NEBs)¹²⁶ in the estimate of the overall net benefits associated with energy-saving projects. CCR REN recommends that the CPUC's response to the State Auditor's Recommendation 11 is to adopt an initial estimation of NEBs for inclusion in the portfolio, consistent with the Auditor's recommendation.¹²⁷

Rationale: Revising the approach to calculating current estimated net benefits by including an estimated NEB is essential to effective energy-efficiency portfolio design. The continued exclusion of participant NEBs from the energy efficiency TRC test reduces measured energy efficiency benefits and distorts perceptions of program performance. The exclusion of NEBs, therefore, creates a structural policy barrier to cost-effective energy efficiency. CCR REN agrees with the State Auditor report that the CPUC should consider the specific treatment of participant NEBs in determining whether to fund energy efficiency programs and measures.

The Commission, in D.21-05-031, directed that the IOUs present a cost-effective Resource Acquisition segment of their energy efficiency portfolio using the TRC test.¹²⁸ The TRC test is defined in the Standard Practice Manual (Manual)¹²⁹ and remains the Commission's key metric for assessing the value of

¹²⁶ NEBs can fall into three distinct categories: Participant NEBs, Societal NEBs, and Utility/Ratepayer NEBs. See, Schweitzer, Martin and Tonn, Bruce. 2002. Non-energy Benefits from the Weatherization Assistance program: A Summary of Findings from the Recent Literature. Oak Ridge National Laboratory. Prepared for the Department of Energy.

¹²⁷ <https://www.auditor.ca.gov/reports/responses-2023-127-all/>

¹²⁸ OP 3

¹²⁹ California Standard Practice Manual: Economic Analysis Of Demand-Side Programs And Projects, October 2001

1 energy efficiency. Per the Manual, the test includes all ratepayer benefits and
2 costs, except customer rebates, and all participant costs.¹³⁰ The Manual
3 recognizes that the inclusion of the participant costs is a major weakness in the
4 TRC test.¹³¹ Given that participant costs are included in the TRC test, it is
5 reasonable to include Participant NEBs. These NEBs are well recognized and
6 material. They can include lower bills, improved comfort, and other benefits
7 participants experience directly.¹³²

8 In D.23-06-055, the Commission determined that consideration of non-
9 energy benefits in cost-effectiveness evaluations is more appropriately addressed
10 in the Distributed Energy Resources Data and Cost-Effectiveness rulemaking,
11 R.22-11-013.¹³³ The Assigned Commissioner's Scoping Memo further clarified that
12 the energy efficiency proceeding would address cost-effectiveness issues specific
13 to energy-efficiency programs, while broader cost-effectiveness test design and
14 inputs remain within the scope of the DER rulemaking.¹³⁴

15 However, R.22-11-013 has addressed only a limited subset of societal non-
16 energy benefits in Track 1 and has not considered Participant NEBs,¹³⁵ nor has it

¹³⁰ Id, p.18

¹³¹ The Manual states that a weakness of the TRC test is, "...the costs of the DSM 'resource' in the TRC test are based on the total costs of the program, including costs incurred by the participant. Supply-side resource options are typically based only on the costs incurred by the power suppliers."

¹³² Market Rate Equity Segment Non-Energy Benefits Research Plan, July 1, 2025, Table 5, All Priority NEBs

¹³³ D.23-06-055, p. 36.

¹³⁴ p. 5

¹³⁵ D.24-07-015, OP 1

1 identified any future track or process to do so.¹³⁶ At the same time, the DER
2 proceeding explicitly states that it does not restrict any resource-specific
3 proceeding from determining the policies or procedures necessary to meet its
4 own objectives.¹³⁷

5 Given this, it is reasonable for energy efficiency proceedings to determine
6 how participant NEBs should be estimated within the TRC framework.

7 Vermont adopted a 15 percent NEB adder in 2012 after finding that NEBs
8 are inherent byproducts of energy efficiency and that their exclusion results in an
9 incomplete and inaccurate assessment of program value.¹³⁸ British Columbia and
10 New Hampshire adopted similar adders.^{139,140}

11 An adder is the better approach because it does not require precise
12 quantification, and the cost of selecting a reasonable value from existing research
13 is much lower than conducting new surveys or calculations for each individual
14 non-energy benefit.¹⁴¹ These actions demonstrate that a 15% proxy is not

¹³⁶ Order Instituting Rulemaking To Consider Distributed Energy Resource Program Cost-Effectiveness Issues, Data Use And Access, And Equipment Performance Standards, Section 4, Preliminary Schedule dated November 17, 2022

¹³⁷ Id, p. 1

¹³⁸ ***Incorporating Non-Energy Benefits into Cost-Effectiveness Screening: The Vermont Story***, IEPEC (2012). Summarizes the Vermont Public Service Board's 2012 order adopting a 15% NEB adder and the empirical basis for the decision. Available at: <https://www.iepec.org/wp-content/uploads/2018/02/027-1.pdf>.

¹³⁹ Guide to the Demand-Side Measures, Revised JULY 2014 available at: Issues Paper: Greenhouse Gas Reduction Measures Regulation under the Clean Energy Act

¹⁴⁰ New Hampshire Public Utilities Commission, ***EM&V Working Group – Cost-Effectiveness Screening Materials***, NH PUC (2017). Documents the use of a 15% non-energy benefits adder under the state's Energy Efficiency Resource Standard. Available at: [13-nh-cost-effectiveness-review.pdf](#)

¹⁴¹ ***Incorporating Non-Energy Benefits into Cost-Effectiveness Screening: The Vermont Story***, IEPEC (2012), p. 3

speculative; it is a standard, evidence-based adjustment that corrects a known weakness in the application of the TRC test.

These findings provide a strong basis for Commission action. Within the scope of this energy efficiency proceeding, the CPUC should adopt a Participant NEB adder for all TRC calculations that include participant NEBs. If the Commission seeks additional confirmation, it may draw on the results of the ongoing NEB study to refine any future participant-benefit adder.¹⁴²

The change aligns with energy efficiency policy, as it doesn't propose changing the current TRC test but only how benefits are estimated. Most importantly, the change also supports the Commission's stated goals of advancing all cost-effective energy efficiency while addressing key Equity outcomes such as health and safety.

Expected Outcome: The inclusion of NEBs within the TRC Test better aligns benefits-to-cost analysis and provides the Commission with clearer portfolio cost-effectiveness visibility, furthers Equity, and addresses Recommendation 11 of the State Auditor Report.

3. Reinstate IOU Fiscal Oversight for CPUC-Directed EM&V Funds

Proposal: The Commission previously assigned the IOUs to serve as fiscal agents for the EM&V budget but later shifted fiscal responsibility to non-IOU Portfolio Administrators. This proposal recommends restoring IOU fiscal oversight for Commission-directed EM&V activities, while preserving each PA's responsibility for managing the EM&V funds tied to their own portfolio.

The current structure is unnecessarily burdensome: IOUs must collect ratepayer funds, execute transfer agreements with every REN and CCA in their

¹⁴² D.23-06-055, OP 19.

1 service territories, and regularly transfer funds to them, after which the RENs and
2 CCAs must return the Commission’s portion of the EM&V budget to the IOU. CCR
3 REN’s proposal would eliminate this entire cycle of repeated transfers to fund the
4 CPUC-directed EM&V activities.

5 **Rationale:** This proposal streamlines EM&V fiscal management by
6 eliminating unnecessary fund transfers, which reduces administrative costs.

7 **Expected Outcome:** Eliminating the fund retransfers among PAs for the
8 CPUC EM&V budget will directly reduce ratepayer costs.

9 **4. Update Fuel-Switching Policy to Support Customer Choice and** 10 **Affordability**

11 **Proposal:** Update CPUC energy efficiency fuel-switching exclusions¹⁴³ to
12 allow customers to shift from unregulated to regulated energy sources when
13 preferred. This, combined with an IDSM strategy, will increase grid flexibility,
14 support customer choice, and deliver bill savings. CCR REN recommends
15 approving fuel switching and (1) approving the use of a new construction
16 measure application type for immediate use while (2) tasking staff with drafting
17 a proposal on the appropriate mechanisms to capture TSB for future measure
18 package updates.

19 **Rationale:** Updating CPUC fuel-switching rules to allow customers to shift
20 from unregulated to regulated energy sources supports affordability, consumer
21 choice, and California’s decarbonization objectives by increasing the electric rate
22 base while eliminating gas-burning equipment from the use-stream. Regulated
23 energy generally provides more stable pricing and stronger oversight, helping

¹⁴³ D.19-08-009

households manage rising costs while aligning customer decisions with the state's clean energy transition.

D.19-08-009 notes that ratepayers of the new fuel shall be those who fund the activity.¹⁴⁴ CCR REN notes that a ratepayer who benefits from switching non-regulated gas equipment to electric equipment will effectively contribute to the Public Purpose Program surcharge based on increased attributable use over time. Furthermore, targeted fuel switching can increase the grid utilization rates while providing an additional tool to increase load during off-peak hours, thereby further reducing utility cost pressures.

Expected Outcome: Fuel switching can help customers reduce their energy burden, increase participation in energy efficiency programs, and lower emissions associated with non-regulated fuel use. Updating the policy will enable CCR REN to expand participation in its energy efficiency program among those who rely on unregulated energy sources for heating and cooking.

5. Revise the Current Hard-to-Reach Definition to Include Underserved Customers as a Part of the Geographic Criteria

Proposal: Update the geographic criteria of hard-to-reach to include all Underserved populations.

Rationale: The Commission most recently revised the hard-to-reach definition in D.23-06-055. D.18-05-041 established that concrete data and analysis must support any further modifications to the hard-to-reach definition. Unlike DAC or Underserved Equity classifications, the hard-to-reach designation

¹⁴⁴ D.19-08-009 COL21; Fuel Substitution measures should be funded by the ratepayers of the new fuel, not the original fuel being substituted.

has historically carried meaningful policy implications for Resource Acquisition programs.

To promote consistency in how Equity groups are treated across Commission frameworks, CCR REN recommends adding the Underserved customer designation to the hard-to-reach geographic criteria—mirroring the Commission’s prior decision to include Disadvantaged Communities as a qualifying pathway. This would establish a third route for customers to receive credit for the geographic hard-to-reach criteria.

6. Update the Underserved Definition to Include Permanent Medical Baseline Customers

In D.23-06-055, the Commission formally adopted a definition of “Underserved” that extends across multiple customer classes, including Residential, Commercial, Industrial, and Agricultural sectors.

CCR REN proposes including permanent medical baseline customers within the Underserved definition. This addition aligns with the Commission’s Equity objectives and ensures that customers with the greatest needs are not left at the margins of program design.

Expected Outcome: Portfolio Administrators will prioritize identifying and enrolling permanent medical baseline and Underserved customers into energy efficiency programs, ensuring these Equity-defined groups receive targeted access to efficiency solutions.

7. Modernize Energy Efficiency Planning and Reporting to Improve Portfolio Administration and Oversight

Proposal: Modernize energy efficiency reporting by fully integrating and automating existing data systems (CEDARs, Public Document Area (PDA), CalTF,

etc.) to reduce administrative burden, enable real-time performance tracking, improve transparency, increase ease of use, and strengthen oversight.

Rationale: Current reporting and research processes are highly manual and time-consuming, which limits the Commission’s visibility into real-time program and portfolio performance. A modernized approach that integrates the full lifecycle of energy-efficiency measures and projects—from development and planning through implementation, monitoring, reporting, and evaluation—would create a continuous, end-to-end data flow. This integration would reduce administrative burden, improve data accuracy, and enable the Commission to make timelier, evidence-based decisions about program performance and portfolio outcomes.

The current data systems are inefficient and limit PAs ability to focus on program planning, implementation, innovation, and performance. Streamlining data collection and enabling real-time performance tracking would give the Commission more accurate, timely insight into program performance while reducing administrative burden.

Recent advances—particularly in automated data processing, workflow orchestration, and multi-step “agentic”¹⁴⁵ systems—create a practical opportunity to modernize the CEDARS platform. Authoritative analyses from the National Institute of Standards and Technology (NIST) describe how new learning systems can reliably automate data validation, detect anomalies, and manage complex information flows across large datasets.¹⁴⁶ Similarly, the U.S. Department of

¹⁴⁵ Agentic refers to an AI system’s capacity to autonomously initiate actions, make context-dependent decisions, and pursue defined objectives without requiring step-by-step human instruction, while remaining bounded by human-established constraints and oversight.

¹⁴⁶ NIST. Artificial Intelligence Risk Management Framework (*AI RMF 1.0*). National Institute of Standards and Technology, U.S. Department of Commerce, January 2023. Available at: <https://nvlpubs.nist.gov/nistpubs/ai/NIST.AI.100-1.pdf>

1 Energy has documented how machine learning tools can streamline
2 energy-sector data management and improve the speed and accuracy of
3 program evaluation.¹⁴⁷

4 If applied to CEDARS, these capabilities would allow the Commission to
5 integrate the full lifecycle of energy efficiency data—from measure package
6 creation to real-time reporting to faster, more actionable program and load-
7 impact evaluations. For example, machine-learning-enabled automation could
8 replace many of today’s manual uploads, cross-checks, and reconciliation steps
9 with a single, continuous workflow. It could also improve a program’s ability to
10 target, recruit, and serve customers more effectively and at lower cost.

11 **Expected Outcome:** Significantly improved CPUC, PA, and public visibility
12 into energy efficiency portfolio performance while reducing administrative costs.

13 **8. Streamline Energy Efficiency Measure Packages Review**

14 **Proposal:** Streamline the review process for energy efficiency measure
15 packages and allow non-IOU Portfolio Administrators to sponsor them. This
16 adjustment will cut unnecessary delays in measure package approval, accelerate
17 the deployment of locally relevant measures, and ensure they are delivered with
18 the same technical rigor and cost-effectiveness expected across the energy
19 efficiency portfolio.

20 **Rationale:** A more agile review framework unlocks faster innovation,
21 reduces bottlenecks, and broadens access to community-specific energy
22 efficiency solutions. Empowering non-IOU Portfolio Administrators to sponsor

¹⁴⁷ U.S. Department of Energy, AI for Energy Systems. U.S. Department of Energy, 2023.
Available at: <https://www.energy.gov/ai/ai-energy-systems>

1 measure packages strengthens Equity and responsiveness while preserving the
2 Commission's standards for technical quality and accountability.

3 **Expected Outcome:** A higher volume of timely, locally tailored measure
4 packages, resulting in increased claimable TSB, lower administrative costs, and a
5 quicker path for emerging energy efficiency technologies to reach customers.
6 This approach positions the portfolio to keep pace with California's evolving
7 decarbonization and affordability needs.

8 **9. Reconcile Preponderance of Evidence (POE) and NTG Assumptions for** 9 **Custom and Accelerated Replacement/Retirement (AR) Projects**

10 **Proposal:** Reconcile the conceptual break between requiring
11 preponderance of evidence documentation that shows that a program or PA
12 influenced an action that would not have otherwise occurred without program
13 intervention, and the ex-ante application of a net-to-gross ratio that pre-
14 establishes free-ridership rates.

15 CCR REN has identified two different approaches to resolving this observation.

- 16 • Establish a net-to-gross ratio of one for all custom and Accelerated
17 Retirement (AR) projects and continue to require a preponderance of
18 evidence to be gathered by programs.
- 19 • Eliminate the requirement to collect a preponderance of evidence and
20 continue to apply the accepted ex-ante net-to-gross ratios for the energy
21 saving measures being deployed.

22 **Rationale:** A preponderance of the evidence is an evidentiary standard
23 used to meet a burden of proof that there is a greater than 50% chance that the
24 claim is true.¹⁴⁸ Requiring a program to meet this evidentiary standard while

¹⁴⁸ https://www.law.cornell.edu/wex/preponderance_of_the_evidence

1 applying ex-ante NTG rates creates a conceptual break in logic. Applying an ex-
2 ante NTG rate across projects and measures establishes an expectation that the
3 preponderance of evidence collected does not meet the evidentiary standard set.

4 **Expected Outcome:** Assumptions of free-ridership and the need to set
5 POE are reconciled. Customers have greater access to custom and AR offerings.
6 Services and projects more effectively align with Commission Equity and
7 Resource Acquisition outcomes.

8 **10. Support PA Partnerships for Effective Program Expansion**

9 **Proposal:** CCR REN recommends that the Commission direct PAs to draft
10 a report on creating a new framework for PAs to be authorized to partner with
11 one another to rapidly deploy successful programs in areas outside of their
12 territory upon a request from another PA.

13 **Rationale:** There is no known mechanism for quickly adopting and
14 deploying successful programs implemented in one territory to another. CCR
15 REN sees operational efficiency and increased ratepayer benefits in coordinating
16 and collaborating with other PAs to extend existing programs into their territories
17 or adopt their program design and implementing capacity. Due to the
18 complexity of procurement, contracting, and savings attribution, a consensus
19 approach should be sought.

20 **Outcome:** PAs are directed to draft a recommendation outlining the
21 acceptable mechanics and policy adjustments needed to accommodate the
22 adoption of successful programs from one PA to another.

1 EXHIBIT 2: PROGRAM CARDS

2 Commercial Energy Improvement Program

Program Name: Commercial Energy Improvement Program (CEIP)		
Program ID: CCR-COM-001 New / Existing: Existing Expected Program Duration: 2024 – 2035		
Portfolio Segment: (Resource Acquisition, Market Support, Equity, Codes & Standards) <i>Resource Acquisition</i>	Program Implementer Type: (IOU Core, Third-Party Solicited, REN, CCA) REN	Third-Party Program Implementer (applicable to IOUs only): N/A
Applicable Sector: (e.g., Residential, Commercial, Industrial, Agricultural, Public, or Cross-Cutting, etc.) If multi-sector, provide a list of each sector covered. <i>Commercial</i>	Customer Group(s): Commercial customers in geographically hard-to-reach, Underserved, and/or Disadvantaged Communities.	
Sector Challenges: Energy efficiency programs serving Commercial customers in geographically hard-to-reach, Underserved, and/or Disadvantaged businesses in communities face the following challenges: • Delivering cost-effectiveness and Total System Benefit. • Customers often lack access and exposure to existing Commercial offerings. • Limited participant capacity to evaluate or implement energy-	Sector Opportunities (Expected Outcome(s)): Commercial customers participating in the CCR REN CEIP program will: • Receive turn-key direct installation services. • Interact with in-community team members. • Save energy and reduce utility costs through energy efficiency. • Have access to direct install services where they would otherwise not. The CEIP program will:	

Program Name: Commercial Energy Improvement Program (CEIP)	
saving solutions, even when programs are no-cost. Dispersed locations and reduced business density in rural areas reduce access to services	- Fill gaps created through other direct install Commercial offerings. - Take individualized regional approaches that support trust building and increase awareness and participation rates. - Provide a local and regional approach that effectively serves dispersed businesses - Deliver direct install services that address key end uses while delivering cost-effective TSB.
Brief Program Description: (Including customer target, program strategies employed, expected program outcome): The CEIP program offers technical services, incentives, and direct installations of select measures to Commercial businesses operating in the Central Coast, San Joaquin Valley, or Eastern Sierra. The program is turn-key and is designed to make upgrading targeted end-use devices simple for participating customers. Customer target: The CCR REN CEIP program will continue to serve Commercial customers across geographically hard-to-reach, Underserved, and Disadvantaged Communities throughout the CCR REN territory. Program strategies: CEIP will build on its successes in previous program years and continue to fill service gaps within the CCR REN territory. CEIP uses a Downstream Direct Install approach, bridged to in-community delivery to build trust and awareness. In-community delivery will be done through an integrated approach with the WE&T program. We have found that the link between Direct Install and a strong in-community presence increases adoption of energy efficiency measures while providing utility cost savings and increased local and regional economic resilience. Expected program outcome:	

Program Name: Commercial Energy Improvement Program (CEIP)	
Customers participating in the CEIP program will reduce energy use and costs through turnkey retrofits of existing equipment. Commercial customers' access to energy efficiency services will increase through CEIP's gap-filling approach, and investments in geographically hard-to-reach, Underserved, and Disadvantaged Communities are equitable. Local and regional awareness of energy programs will increase, and the capacity to implement programs will be established through the integration of CCR REN's WE&T program.	
Known Equity Concerns in the Selected Markets (if applicable): • More than 89% of businesses in CCR REN's territory have 20 or fewer employees.¹⁴⁹ • More than 80% of businesses in CCR REN's territory are geographically hard-to-reach. • Energy burdens are, on average, much higher than the state average and those of their counterparts in urban/suburban areas. • Targeted participants do not have dedicated facility staff tasked with managing energy-using equipment.	Proposed Solutions to Equity Concerns (if applicable): CEIP services will address Equity concerns by: • Setting a target of 75% or more of services directed to customers in Underserved and Disadvantaged Communities. • Setting a target of 50% or more of services directed to customers in Disadvantaged Communities. • Measures delivered will be cost-effective while also delivering utility cost savings. • Outreach and messaging strategies will drive Equity customers to implement energy efficiency upgrades to their businesses using incentives and direct install services.
Intervention Strategy: (e.g., SEM, MAP, Direct Install, Incentive/rebate, Finance, Audit, Technical Assistance, Advocacy, Training, Marketing and Outreach/Information)	Delivery Type: (e.g., Manufactured Upstream, Midstream-Distributor, Midstream-Retail, Downstream, Downstream-Direct Install, Codes & Standards, etc.)

¹⁴⁹ https://labormarketinfo.edd.ca.gov/lmid/size_of_business_data.html

Program Name: Commercial Energy Improvement Program (CEIP)	
<i>Marketing & Outreach, Audit, and Direct Install</i>	<i>Downstream, Downstream – Direct Install</i>
Measurement and Verification Methods: (e.g., Deemed, Custom, NMEC – Population, NMEC – Site, SEM M&V, Randomized Controlled Trial (RCT), Other) <i>Deemed</i>	Program Total System Benefit (TSB) for 2028-2031: \$117,294,757
Annual Budgets for 2028-2031: 2028: \$9,090,921 2029: \$11,132,427 2030: \$14,130,702 2031: \$16,186,194	Cost Effectiveness (TRC and PAC Test Ratios) for 2028-2031: TRC:1.51 PAC: 1.60
Anticipated directional and scale changes in the budget for years 2032-2035: CEIP budget will remain stable through 2032-2035	Market Actors necessary for success: • Participants • Local and Regional contractors • Distributors • In-Community energy advisors
High-level description of the delivery workforce, including the necessary scale and its risks: The CCR REN CEIP program will be delivered in coordination with selected Program Providers, the CCR REN team, and community partners. Consultant(s) will be selected through competitive solicitation and will be tasked with implementing the offering across CCR REN’s three territories. • The budget for consultant time should allow for approximately 16-19 FTE per Program Year. • Actual FTE will be determined based on the selected consultant’s average hourly billing rates.	

Program Name: Commercial Energy Improvement Program (CEIP)

CCR REN's Program Lead Organization will provide day-to-day program management support. CCR REN partner agencies will contribute to ongoing operations, informing implementation in their territory.

- ~1.5 averaged FTE for Program Management support per year over the 4-year period
- ~0.6 – 0.75 averaged FTE for outreach and other program support activities per year over the 4-year period.

Community-based organizations will be engaged to increase local and regional awareness of the offerings.

Workforce risks include the selected consultant not assigning sufficient staff to the program or being unable to provide the necessary contractors to complete projects. The competitive solicitation and subsequent contracting will mitigate this risk.

Near-term Program Output(s) (1-4 years):

- TSB will be delivered to the CCR REN portfolio -PY2028 \$17,867,975 , PY2029 \$24,661,370, PY2030 \$33,634,026 , PY 2031 \$ 41,131,387
- The TRC Ratio will be: PY2028 1.39, PY2029 1.47, PY2030 1.54, PY 2031 1.59
- Percent service rates to Commercial hard-to-reach-flagged customers in CCR REN territory increase compared to the 2024 baseline.
- More than 1,600 projects will be completed from 2028 to 2031.

Long Term Outcome (5-10 years):

- Persistent, measurable, cost-effective energy savings are delivered.
- Persistent, measure improvements to air quality are delivered.
- Long-term utility cost savings are realized.
- Long-term capacity to implement will be built.

Does this program interact with other programs in this PA portfolio? If so, describe:

Yes, CCR REN's CEIP program will interact with the following CCR REN programs:

Program Name: Commercial Energy Improvement Program (CEIP)	
Non-Residential SEM: the program may refer customers who are better fit for SEM to the CCR REN SEM program; the CCR REN SEM program may refer customers who are better fit for direct install to CEIP. WE&T program: the WE&T program will be used to facilitate local and regional implementation and will include training to build and then deploy in-community Energy Advisors to increase the demand for program services. Integrated Demand Side Management (IDSM): IDSM will provide additional support for permanent load shifting.	
Program Metrics and Indicators (KPIs): - Count of Equity target participants in the Resource Acquisition segment, by sector (E-5351 – EQ4) - Commercial First year net kW, kWh, and therms savings (E-5351 – 140, 142, 144) - First year annual net kW, kWh, and therms savings in Hard-to-Reach Markets (E-5351 – 26, 28, 30) - First year annual net kW, kWh, and therms savings in Disadvantaged Communities (E-5351 – 14, 15, 18)	
Does this program utilize Integrated Demand Side Management (IDSM)? Yes	Link to Existing Implementation Plan, if existing: https://cedars.cpuc.ca.gov/documents/download/3411/mainchange_summary%7Cmain%7Credline/

1 Non-Residential SEM

Program Name: Non-Residential SEM		
Program ID: <i>CCR-COM-002</i> New / Existing: <i>Existing</i> Expected Program Duration: <i>2027-2035</i>		
Portfolio Segment: (Resource Acquisition, Market Support, Equity, Codes & Standards) <i>Resource Acquisition</i>	Program Implementer Type: (IOU Core, Third-Party Solicited, REN, CCA) <i>REN</i>	Third-Party Program Implementer (applicable to IOUs only): <i>Not applicable</i>
Applicable Sector: Non-Residential • Commercial • Public • Industrial • Agricultural		Customer Group(s): Non-Residential customers operating in geographically hard-to-reach, Underserved, and/or Disadvantaged Communities.
Sector Challenges: Energy efficiency programs serving Non-Residential customers face the following challenges: • Non-Residential customers in CCR REN's territory are not served through existing PA SEM programs. • Current programs target the largest customers, excluding customers who could benefit from the SEM approach. • Non-Residential customers, geographically hard-to-reach, Underserved, and Disadvantaged		Sector Opportunities (Expected Outcome(s)): Non-Residential customers participating in the CCR REN SEM program will: • Reduce energy use and costs over time. • Relate to peers through cohorts, resulting in peer-to-peer learning and sharing best practices to improve systems and operations. • Establish a process to acquire buy-in for getting energy

Program Name: Non-Residential SEM

Communities lack access and exposure to existing SEM programs.

efficiency projects funded and facilitated.

The CCR REN SEM program will:

- Fill gaps created through other PA SEM programs.
- Support capacity building for building operators, facility managers, plant managers, etc. by increasing skills and awareness through hands-on, interactive training.
- Encourage behavior changes that become part of the customer culture
- Increase access to SEM programs to a different type of customer than those targeted by other PA SEM programs.

Brief Program Description: (Including customer target, program strategies employed, expected program outcome):

CCR REN intends to launch Non-Residential SEM in 2027. Service lists R.25-04-010 and A.22-02-005 were noticed on February 20, 2026, for this intent. A public workshop will be held on March 17, 2026, and an advice letter may be filed on or after April 6, 2026.

CCR REN will issue a solicitation in accordance with the County of San Luis Obispo's procurement guidelines and thresholds for SEM services from a consultant. CCR REN will require the selected consultant to align the program design with the SEM design guide and M&V guide and fully describe how the design has been modified to align with allowable expansions. CCR REN will coordinate closely with Energy Division staff and the selected consultant to ensure program design aligns with the CPUC's authorization to expand SEM, supported by the SEM Expansion Study completed per D.23-02-002.

Program Name: Non-Residential SEM

Customer target:

The CCR REN SEM program will serve Non-Residential customers across geographically hard-to-reach, Underserved, and Disadvantaged Communities within the CCR REN territory – customers who are typically not the focus of existing PA SEM offerings, which tend to concentrate on the largest energy users. By not filtering for customer size, the program fills a critical gap in reaching other facilities that stand to benefit from the SEM framework.

Program strategies deployed:

SEM estimates energy savings at the facility level using regression models and existing condition baselines that capture the full range of program activities. These activities include capital projects, behavioral, retro-commissioning, and operational (BRO) measures, as well as customer education on integrating demand side management (IDSM) strategies.

Expected program outcome:

Non-Residential customers participating in the CCR REN SEM program will reduce energy use and costs over time through sustained engagement and facility-level planning. Participants will connect with peers through cohorts, creating opportunities for peer-to-peer learning and the sharing of best practices that improve systems and operations across facilities. Through this process, customers will also establish a pathway to secure organizational buy-in for funding and installing energy efficiency projects – a barrier that often stalls progress for smaller operators without dedicated energy staff.

At the program level, the CCR REN SEM program will fill gaps created by other PA SEM programs by taking a place-based approach to increasing access to SEM for a different type of customer than those targeted by existing offerings. The program will build capacity for building operators, facility managers, plant managers, and similar roles by increasing skills and awareness through hands-on, interactive training. Over time, the program will encourage behavior changes that become embedded in customer culture – shifting energy management from a one-time effort to an ongoing operational priority.

Known Equity Concerns in the Selected Markets (if applicable):

Proposed Solutions to Equity Concerns (if applicable):

- Program will target non-Residential customers in geographically hard-to-reach,

Program Name: Non-Residential SEM	
• More than an estimated 80%¹⁵⁰ of CCR REN Non-Residential customers are in geographically hard-to-reach, Underserved, or Disadvantaged Communities. • Target customers don't have dedicated staff focused on energy efficiency improvements or energy savings. • Target customers are outside the interest and targets of other PA SEM programs and therefore do not benefit equitably from SEM opportunities.	Underserved, or Disadvantaged Communities. • Program will justify the cost of staff time through demonstrated energy savings. • Coordinate with other PA SEM programs to avoid customer targeting duplication. To further support Equity through the program delivery, the CCR REN SEM program will: • Prioritize in-community hires • Outreach materials will be culturally appropriate and in-language where appropriate
Intervention Strategy: (e.g., SEM, MAP, Direct Install, Incentive/rebate, Finance, Audit, Technical Assistance, Advocacy, Training, Marketing, and Outreach/Information) SEM, Direct Install, Incentive/Rebate, Technical Assistance, Training	Delivery Type: (e.g., Manufactured Upstream, Midstream-Distributor, Midstream-Retail, Downstream, Downstream-Direct Install, Codes & Standards, etc.) Downstream, Downstream - Direct Install
Measurement and Verification Methods: (e.g., Deemed, Custom, NMEC – Population, NMEC – Site, SEM M&V, Randomized Controlled Trial (RCT), Other) SEM, Deemed, Custom, Site NMEC	Program Total System Benefit (TSB) for 2028-2031: \$81,649,557

¹⁵⁰ https://labormarketinfo.edd.ca.gov/lmid/size_of_business_data.html

Program Name: Non-Residential SEM**Annual Budgets for 2028-2031:**

2028: \$7,274,988
2029: \$9,460,899
2030: \$11,529,338
2031: \$13,601,199

Cost Effectiveness (TRC and PAC Test Ratios) for 2028-2031:

TRC: 1.31
PAC: 2.00

Anticipated directional and scale changes in budget for years 2032-2035:

We expect budgets to remain stable at 2028-2031 levels through 2032-2035.

Market Actors necessary for success:

- Participants
- Trades (local and regional)
- Distributors
- Other PAs

High-level description of delivery workforce including necessary scale and its risks:

The CCR REN Non-Residential SEM program will be delivered in coordination with selected Program Providers, the CCR REN team, contractors and community partners.

Consultant(s) will be selected through competitive solicitation and will be tasked with implementing the offering across CCR REN's three territories.

- The budget for consultant time should allow for approximately 12-15 FTE per Program Year.
- Actual FTE will be determined based on the selected consultant's average hourly billing rates.

CCR REN's Program Lead Organization will provide day-to-day program management support. CCR REN partner agencies will contribute to ongoing operations and inform implementation in their territories.

- ~2.25 averaged FTE for Program Management support per year over the 4-year period
- ~1 averaged FTE for outreach and other program support activities per year over the 4-year period

Local and regional contractors will be engaged to support the delivery of energy-saving projects.

Program Name: Non-Residential SEM

Community-based organizations will be engaged to increase local and regional awareness of the offerings.

Workforce risks include the selected consultant failing to assign sufficient staff to the program. The competitive solicitation and subsequent contracting will mitigate this risk.

Near-term Program Output(s) (1-4 years):

- TSB will be delivered to the CCR REN portfolio -PY2028 \$12,710,929, PY2029 \$17,805,200, PY2030 \$22,863,400, PY 2031 \$28,270,028
- TRC will be: PY2028, 1.17, PY2029 1.27, PY2030 1.34, PY 2031 1.40
- 4-6 cohorts of 10-20 participating facilities, representing geographically hard-to-reach, Underserved, and Disadvantaged Communities

Long Term Outcome (5-10 years)

- Persistent, measurable, cost-effective energy savings
- Persistent, measurable improvements to air quality
- Customers develop a systematic approach to managing energy that exceeds the program life-cycle
- Customers transition understanding to IDSM opportunity identification and implementation
- Business practices are updated to focus on energy and utility cost savings

Does this program interact with other programs in this PA portfolio? If so, describe:

Yes, CCR REN's Non-Residential SEM program will interact closely with the following CCR REN programs:

Commercial Energy Improvement Program (CEIP): the program may refer customers who are a better fit for SEM to the CCR REN Non-Residential SEM program; the CCR REN Non-Residential SEM program may refer customers who are a better fit for direct install to CEIP.

Integrated Demand Side Management (IDSM): IDSM will provide additional support for permanent load shifting.

Program Name: Non-Residential SEM

WE&T program: the WE&T program will be used to facilitate local implementation and will include training to build and then deploy in-community SEM Energy Coaches.

Finance Equity Program: The Finance program will support capitalizing projects with upfront costs that present a barrier to implementation.

Program Metrics and Indicators (KPIs):

- Count of Equity target participants in Resource Acquisition segment, by sector (E-5351 – EQ4)
- Commercial First year net kW, kWh, and therms savings (E-5351 – 140, 142, 144)
- Public First year net kW, kWh, and therms savings (E-5351 – 189, 191, 193)
- Industrial First year net kW, kWh, and therms savings (E-5351 – 224, 226, 228)
- Agriculture First year net kW, kWh, and therms savings (E-5351 – 261, 263, 265)
- First year annual net kW, kWh, and therms savings in hard-to-reach Markets (E-5351 – 26, 28, 30)
- First year annual net kW, kWh, and therms savings in Disadvantaged Communities (E-5351 – 14, 15, 18)

Does this program utilize Integrated Demand Side Management (IDSM)?

Yes

Link to Existing Implementation Plan, if existing:

The Program Implementation plan will be posted to CEDARS in 2027.

1 Workforce Education and Training

Program Name: WE&T Program		
Program ID: CCR -WE&T-002 New / Existing: New Expected Program Duration: 2028 - 2035		
Portfolio Segment: (Resource Acquisition, Market Support, Equity, Codes & Standards) Market Support	Program Implementer Type: (IOU Core, Third-Party Solicited, REN, CCA) REN	Third-Party Program Implementer (applicable to IOUs only): N/A
Applicable Sector: Cross Cutting		Customer Group(s): New and existing workers interested in clean energy efficiency careers
Sector Challenge: Community members in geographically hard-to-reach, Disadvantaged, and Underserved Communities face challenges in accessing training and paid opportunities. These include: • Access: Travel requirements and costs to access training reduce opportunities for individuals in geographically hard-to-reach, Underserved, and Disadvantaged Communities. • Awareness: California energy efficiency program career opportunities are not well-known. • Undersupply of trained workers: A lack of trained workers leaves gaps in the local workforce. • Alternative Career Pathways: Younger generations are opting		Sector Opportunities (Expected Outcome(s)): Workers participating in the WE&T will: • Receive the virtual, hands-on, and certification necessary to provide in-community outreach. • Be paid to address access to training inequalities. • Connected with CCR REN consultants and other implementers and PAs to facilitate finding full-time permanent positions. • Increase local and regional capacity to implement energy programs and provide energy-saving services.

Program Name: WE&T Program

out of traditional education pathways.

- Change: Rapidly evolving industry, regulatory, and policy impacts require just-in-time training and faster training to stay current.

The WE&T program will:

- Increase demand in energy efficiency programs and energy saving projects.
- Provide local opportunities for energy jobs without relocating, keeping talent and economic benefits in rural areas while strengthening local economies.
- Prioritize serving returning citizens, veterans, women, and Opportunity Youth.
- Be designed to be adaptive to effectively meet the needs of energy job markets.
- Support the growing need for career building and upskilling of existing workers in support of beneficial electrification.

Brief Program Description: (Including customer target, program strategies employed, expected program outcome):

CCR REN's WE&T program provides paid asynchronous and synchronous energy-focused training for existing workers and new workers. The program addresses skills training, trades, and the identification and development of a new generation of energy efficiency professionals. The program will coordinate with energy efficiency implementers and local employers to increase career opportunities for participants. A customized in-person and virtual training curriculum will be designed to meet the specific needs of each CCR REN region.

Customer target:

CCR REN's WE&T program will seek participants who are Disadvantaged Workers, returning citizens, Opportunity Youth, women, people of color, displaced Agricultural workers, and Tribal Nation members. Workers seeking reskilling will also be considered. All participants will go through a selection process that aligns with standard state hiring standards and law. CCR REN's

Program Name: WE&T Program

WE&T program will align with CPUC's ESJ goal 7 and will promote high-road career paths and opportunities.

Programming strategies deployed:

Program participants will be integrated into CCR REN's portfolio to deliver Cross-Cutting benefits while learning on the job. This will be accomplished through in-person, virtual, and in-field training with subject matter experts. Training will cover key building systems, including lighting, water heating, HVAC, and the building envelope. Additional training will be provided on battery and energy storage, as well as on controls that facilitate permanent load shifting. Participants will receive additional support with resume generation, practice interviews, and direct assistance in finding full-time, permanent positions.

Expected program outcomes:

Demand for services increases as offerings across various programs are made available to the communities they serve. In-community capacity to implement energy-efficiency programs and energy-saving projects increases. The clean energy workforce is being increased in CCR REN in geographically hard-to-reach, Underserved, and Disadvantaged Communities. Participants receive paid training that equips them with the skills, knowledge, and abilities necessary to obtain an entry-level job in the clean energy sector, supporting energy efficiency and distributed energy resource programs, projects, and services. Participants are placed in permanent, full-time positions.

Known Equity Concerns in the Selected Markets (if applicable):

- CCR REN communities have some of the highest poverty rates in the state, with one County exceeding 20% and an estimated average across the territory of 16%.
- The energy field is predominantly comprised of men.
- Emerging energy occupations require higher levels of educational attainment at the entry level.

Proposed Solutions to Equity Concerns (if applicable):

CCR REN's WE&T program is designed to:

- Make paid training opportunities available to Disadvantaged Workers, returning citizens, Opportunity Youth, women, people of color, displaced Agricultural workers, and members of Tribal Nations.
- Provide the skills and knowledge necessary to

Program Name: WE&T Program	
Fossil fuel energy jobs are shrinking, and existing energy workers will need access to reskilling opportunities.	compete for entry-level positions in the clean-energy industry. - Collaborate with local agencies to effectively educate and inform community members on the availability and benefits of energy careers. - Enhance local economies by providing remote opportunities to those in geographically hard-to-reach, Underserved, and Disadvantaged Communities.
Intervention Strategy: (e.g., SEM, MAP, Direct Install, Incentive/rebate, Finance, Audit, Technical Assistance, Advocacy, Training, Marketing and Outreach/Information) Training	Delivery Type: Downstream / Workforce Education & Training
Measurement and Verification Methods: N/A	Program Total System Benefit (TSB) for 2028-2031: N/A
Annual Budgets for 2028-2031: 2028: \$3,767,559 2029: \$3,776,097 2030: \$3,814,366 2031: \$3,854,550	Cost Effectiveness (TRC and PAC Test Ratios) for 2028-2031: N/A

Program Name: WE&T Program**Anticipated directional and scale changes in budget for years 2032-2035:**

CCR REN anticipates a budget increase to account for the ongoing cost escalation associated with doing business.

Market Actors necessary for success:

- Participants
- Community development organizations
- TK-12 and Community Colleges
- Energy efficiency implementers
- Portfolio Administrators

High-level description of delivery workforce including necessary scale and its risks:

The CCR REN WE&T program will be delivered in coordination with selected Program Providers, the CCR REN team, and community partners.

Consultant(s) will be selected through competitive solicitation and will be tasked with implementing the offering across CCR REN's three territories.

- The budget for consultant hours should allow for approximately 8-10 FTE per Program Year.
- Actual FTE will be determined based on the selected consultant's average hourly billing rates.

CCR REN's Program Lead Organization will provide day-to-day program management support. CCR REN partner agencies will contribute to ongoing operations and inform implementation in their territories.

- ~1.25 average FTE for Program Management support per year over the 4-year period
- ~1/2 an average FTE for outreach and other program support activities per year over the 4-year period

Community-based organizations will be engaged to increase local and regional awareness of the offerings.

Workforce risks include the selected consultant failing to assign sufficient staff to the program. The competitive solicitation and subsequent contracting will mitigate this risk.

Program Name: WE&T Program

Near-term Program Output(s) (1-4 years):

- Manage and train more than 12 CEA Cohorts.
- Place more than 75% of all participants in full-time permanent positions.
- Deliver more than 65% of leads to the CEIP programs.
- Generate demand in Non-Residential SEM cohort participation.
- Generate demand in IDSM services.

Long Term Outcome (5-10 years):

- Served communities have increased capacity to implement energy efficiency programs and energy-saving projects.
- Persistent demand in energy programs and services is maintained.
- Awareness to clean energy career paths increases in CCR REN communities.
- WE&T participants are employed in well-paying jobs and positively impact local economic conditions through supporting energy efficiency and distributed energy program services and projects.

Does this program interact with other programs in this PA portfolio? If so, describe:

Yes, CCR REN's WE&T program will interact closely with the following CCR REN programs:

Commercial Energy Improvement Program (CEIP): the WE&T program will be primarily responsible for generating demand for CEIP program offerings.

Non-Residential SEM: the WE&T program will be primarily responsible for generating demand in participating in SEM cohorts.

Integrated Demand Side Management (IDSM): WE&T participants will receive in-field experience with mechanical, electrical, and plumbing subject-matter experts.

Program Name: WE&T Program**Program Metrics and Indicators (KPIs):**

- Count of Equity target participants in the Market Support segment, by sector, # of individuals receiving training (E-5351 – EQ3).
- Percent of total WE&T program participants that meet the definition of Disadvantaged Worker (E-5351 – MS4).
- Number of career and workforce readiness participants who have been employed for 12 months after receiving the training (E-5351 – MS5).
- Number of unique participants by sector that complete training (E-5351 – MS14).
- 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 (E-5351-292).

Does this program utilize Integrated Demand Side Management (IDSM)?

No

Link to Existing Implementation Plan, if existing:

N/A. The implementation plan will be drafted after the selection of a Program Provider.

1 Residential Equity

Program Name: Residential Equity Program		
Program ID: <i>CCR-RES-002</i> New / Existing: New Expected Program Duration: <i>2028 - 2035</i>		
Portfolio Segment: (Resource Acquisition, Market Support, Equity, Codes & Standards) Equity	Program Implementer Type: (IOU Core, Third-Party Solicited, REN, CCA) REN	Third-Party Program Implementer (applicable to IOUs only): N/A
Applicable Sector: (e.g., Residential, Commercial, Industrial, Agricultural, Public, or Cross-Cutting, etc.) If multi-sector, provide a list of each sector covered. Residential		Customer Group(s): Geographically hard-to-reach, Disadvantaged, and Underserved customers in multi-family, single-family, and mobile homes.
Sector Challenges: Geographically hard-to-reach, Disadvantaged, and Underserved Communities face the following challenges for energy efficiency: • Geography limits access to contractors, suppliers, and program services in rural communities. • Low awareness of energy efficiency opportunities reduces customer engagement and trust. • High first cost of upgrades creates barriers, especially for service workers, retirees, and households with fixed incomes.		Sector Opportunities (Expected Outcome(s)): Residential Equity Program customers will: • Reduce energy use and costs over time through energy efficiency installations and education on low and no-cost energy conservation measures. • Reduce pollutants that contribute to unhealthy indoor air quality. • Receive exempt natural gas measures such as pipe

Program Name: Residential Equity Program

- Houses with high vulnerability to high energy burdens limit the ability to invest in efficiency.

insulation, aeration devices, and others.

The Residential Equity Program will:

- Be designed with a place-based approach to deliver customer bill savings through energy efficiency.
- Provide information on no and low-cost conservation activities.
- Increase access to program services to eligible participants and fill service gaps.
- Will not duplicate ESA offerings.
- Increase awareness to existing energy efficiency electric rates and peak-period pricing.
- Support household and individual resiliency to PSPS and extreme weather events.

Brief Program Description: (Including customer target, program strategies employed, expected program outcome):

The CCR REN Residential Equity Program will serve residents living in multi-family, single-family, and mobile home units who are geographically hard-to-reach, Disadvantaged, and Underserved, and who are not eligible for ESA services. The final program design and strategies employed will be solicited through an approach that prioritizes place-based solutions. The program seeks to be informed by the communities it serves to deliver energy and cost-saving solutions, supported by outreach, education, and technical support.

Customer target:

The CCR REN Residential program will target Residential customers across geographically hard-to-reach, Underserved, and Disadvantaged Communities within the CCR REN territory who are not eligible for the ESA program or who do not have access to existing programming.

Program Name: Residential Equity Program

Program strategies deployed:

CCR REN will be seeking innovative ideas through a solicitation process modeled after the IDEEA 365 approach. The selected design(s) will be documented and posted in the associated Implementation Plan after procurement is complete.

Expected program outcome:

A community-designed approach is being adopted to identify new or emerging delivery strategies that reduce service gaps for moderate-income households in the CCR REN territory. Participants' energy burden is reduced through utility cost savings. Indoor air quality increases through reduced use of combustion fuels and exempt measures are offered to all participants.

Known Equity Concerns in the Selected Markets (if applicable)

- 11.24% of all Residential 2024 CEDARS data in CCR REN's territory was flagged as hard-to-reach.
- Household energy burden is 42% higher than compared to state levels.
- Indoor and outdoor air quality contribute to high rates of asthma and hospitalization in the CCR REN territory.
- Access to services is limited due to geographically hard-to-reach locations.

Proposed Solutions to Equity Concerns (if applicable):

- Conduct a community-designed solicitation to generate new and emerging ideas that are appropriate when considering CCR REN's large territory and diversity across regions.
- Increase investments in hard-to-reach-flagged projects.
- Reduce household energy burden by delivering utility cost savings through reduced energy use.
- Increase indoor air quality by implementing exempt measures and measures that reduce or eliminate the use of combustion fuels.

Intervention Strategy: (e.g., SEM, MAP, Direct Install, Incentive/rebate, Finance, Audit, Technical Assistance, Advocacy,

Delivery Type: (e.g., Manufactured Upstream, Midstream-Distributor, Midstream-Retail, Downstream,

Program Name: Residential Equity Program	
Training, Marketing, and Outreach/Information) Expected strategies include: Direct Install, Incentives/Rebates, Audits, Technical Assistance, and Outreach and Information. Final intervention strategies based on the final design approach.	Downstream-Direct Install, Codes & Standards, etc.) Downstream, Downstream – Direct Install, Audits
Measurement and Verification Methods: (e.g., Deemed, Custom, NMEC – Population, NMEC – Site, SEM M&V, Randomized Controlled Trial (RCT), Other) Final M&V TBD based on the community Driven approach.	Program Total System Benefit (TSB) for 2028-2031: \$13,115,255
Annual Budgets for 2028-2031: 2028: \$3,144,153 2029: \$5,917,541 2030: \$7,018,665 2031: \$7,066,125	Cost Effectiveness (TRC and PAC Test Ratios) for 2028-2031: TRC: 0.59 PAC: 0.59
Anticipated directional and scale changes in the budget for years 2032-2035: Assuming CPUC budget approval, the program budget is expected to increase slightly to serve the targeted Residential populations.	Market Actors necessary for success: • Participants • Community organizations • Local and regional contractors, • Distributors • Retailers • Other PAs

Program Name: Residential Equity Program

High-level description of the delivery workforce, including the necessary scale and its risks:

The CCR REN Residential Equity Program will be delivered in coordination with selected Program Providers, the CCR REN team, and contractors. Program Provider(s) will be selected through a solicitation and will be tasked with implementing the offering across CCR REN's Central Coast, San Joaquin Valley, and Eastern Sierra regions.

- The implementation budget for Community-based implementers should allow for approximately 7-10 FTE per Program Year.
- Actual FTE will be determined based on the proposals received and the average hourly billing rates.

CCR REN's Program Lead Organization will provide day-to-day program management support. CCR REN partner agencies will contribute to ongoing operations and inform implementation in their territories.

- ~1 averaged FTE for Program Management support per year over the 4-year period
- ~1 averaged FTE for outreach and other program support activities per year over the 4-year period.

Other community organizations will be engaged to increase local and regional awareness of the offerings.

Workforce risks include the selected Program Providers assigning insufficient staff to the program or being unable to provide the necessary contractors to complete projects. The solicitation and subsequent contracting will control this risk.

Near-term Program Output(s) (1-4 years):

- New and emerging program strategies are identified through a community-designed approach.
- Customers will realize 1st year utility cost savings.
- TSB will be delivered to the CCR REN portfolio -PY2028 \$1,197,501, PY2029 \$3,300,948, PY2030 \$4,248,718, PY 2031 \$4,368,087
- More than 500 projects will be completed from 2028-2031

Long Term Outcome (5-10 years):

Program Name: Residential Equity Program	
• Customer access to Residential offerings will increase. • Equity-defined households across geographically hard-to-reach, Underserved, and Disadvantaged regions are consistently prioritized. • Technology adoption will deepen, with electrification and fuel-switching (if allowable) becoming normalized. • Customer trust and participation in programs grow.	
Does this program interact with other programs in this PA portfolio? If so, describe: <i>No.</i>	
Program Metrics and Indicators (KPIs): Final metrics and indicators will be captured in the published Implementation plan after the community-sourced solicitation and program design are finalized. Metrics and indicators focus on delivery and impacts and may include: • Count of Equity target participants in Equity targeted segment, by sector (E-5351 – EQ1) • Sum of Equity target participants expected first-year bill savings in Equity segment, by sector (E-5351 – EQ2) • Sum of all Equity segment participants' kilowatt hour (kWh) savings in Equity segment - first year net (E-5351 – EQ6) • Sum of all Equity segment participants' kW savings in Equity segment - first year net (E-5351 – EQ7) • Sum of all Equity segment participants' therm savings in Equity segment - first year net (E-5351 – EQ8) • Sum of all Equity segment participants' TSB in Equity segment (E-5351 – EQ9)	
Does this program utilize Integrated Demand Side Management (IDSMD)? <i>No.</i>	Link to Existing Implementation Plan, if existing: The Implementation Plan will be developed after CPUC approval and after final program strategies are identified through a community-based approach.

1 IDSM

Program Name: IDSM		
Program ID: <i>CCR-IDSM-001</i> New / Existing: <i>New</i> Expected Program Duration: <i>2028 - 2035</i>		
Portfolio Segment: (Resource Acquisition, Market Support, Equity, Codes & Standards) Market Support	Program Implementer Type: (IOU Core, Third-Party Solicited, REN, CCA) REN	Third-Party Program Implementer (applicable to IOUs only): N/A
Applicable Sector: (e.g., Residential, Commercial, Industrial, Agricultural, Public, or Cross-Cutting, etc.) If multi-sector, provide a list of each sector covered. Cross Cutting		Customer Group(s): Customers who are geographically hard-to-reach and/or living in Underserved and Disadvantaged Communities.
Sector Challenges: Customers in geographically hard-to-reach, Underserved, and/or Disadvantaged Communities face the following challenges when integrating demand-side management and DER. • Broadband access, including limited high-speed broadband impacts communication and access to IDSM solutions • Aging infrastructure: Structures are often decades old with outdated panels, insulation, and wiring • Language barriers and experience with programs can lead to		Sector Opportunities (Expected Outcome(s)): Customers participating in the IDS program will: • Receive technical, administrative, procurement, and construction support services • Engaged with program information in appropriate languages • Be connected with installers who have the expertise to implement IDSM projects • Be connected with other customers who have implemented IDSM projects

Program Name: IDSM	
skepticism or disinterest in program offerings • Workforce: Local HVAC and electrical contractors, as well as maintenance staff, are often not trained on advanced, integrated systems or time-of-use programming	The IDSM program will: • Reduce customer confusion by providing a single point of contact and the resources needed to navigate a variety of programs that offer funding for non-energy efficiency projects • Reduce infrastructure investments through an integrated project approach • Interface with the WE&T program • Focus on resiliency to support community responses to Public Safety Power Shutoffs and events such as extreme heat/cold events
Brief Program Description: (Including customer target, program strategies employed, expected program outcome): CCR REN's IDSM program is designed to address affordability and utility cost savings by providing technical support to implement projects that shift load away from peak hours while prioritizing resiliency. Customer target: The CCR REN IDSM program will serve Non-Residential customers across geographically hard-to-reach, Underserved, and Disadvantaged Communities, including Tribal Nations, within the CCR REN territory. Priority will be given to those already participating in the Non-Residential SEM or CEIP programs. However, participation in other CCR REN programs will not preclude access to this service. Program strategies deployed: • Distributed energy resource assessments will provide participants with an initial map of what projects they should pursue and will include permanent load shifting through energy storage (battery and thermal), electric vehicle infrastructure, and behavioral modifications. • 30% of project design support participants who have committed to moving an integrated project forward and will be tailored to each project.	

Program Name: IDSM	
• Procurement support for participants who decide to move an IDSM project forward. • Construction support will be provided similar to an owner’s rep service, to ensure potential problems are identified early. • Support seeking non-energy efficiency funding will identify and access dollars outside of energy efficiency and will follow all requirements of the funding being accessed. Expected program outcome: IDSM customers are made aware of the benefits of implementing integrated projects that combine energy efficiency with distributed energy resources. Non-energy-efficiency funding is combined with energy-efficiency funding and financing, where applicable, to address ongoing first-cost barriers. Projects are implemented that combine energy-saving equipment with battery and thermal storage, vehicle-to-building electric vehicle infrastructure, photovoltaics, and controls. Electrification measures are used to unlock thermal storage potential, mitigate peak load impacts, and, where applicable, permanently shift load while not increasing customer utility costs. IDSM approaches are standard and integrated into CCR REN Non-Residential services.	
Known Equity Concerns in the Selected Markets (if applicable): • More than 89% of businesses in CCR REN’s territory have 20 or fewer employees¹⁵¹ and do not have the capacity to pursue IDSM-type projects. • Over 80% of CCR REN Non-Residential customers are in geographically hard-to-reach communities and lack access to resources that non-geographically hard-to-reach communities have. • Face high energy burdens and extreme weather events that have	Proposed Solutions to Equity Concerns (if applicable): IDSM services will address Equity concerns by: • Providing technical and professional services at no cost to participants. • Setting a target of 75% or more of services directed to customers in Underserved and Disadvantaged Communities. • Setting a target of 50% or more of services directed to customers in Disadvantaged Communities.

¹⁵¹ <https://labormarketinfo.edd.ca.gov/file/indsize/2024sfcoemp.xlsx>

Program Name: IDSM	
economic impacts on CCR REN communities.	- Drafting locational and culturally appropriate program collateral. - Supporting projects that deliver utility cost savings while increasing local and regional resilience
Intervention Strategy: (e.g., SEM, MAP, Direct Install, Incentive/rebate, Finance, Audit, Technical Assistance, Advocacy, Training, Marketing, and Outreach/Information) Technical Assistance, Training, Outreach, and Education	Delivery Type: (e.g., Manufactured Upstream, Midstream-Distributor, Midstream-Retail, Downstream, Downstream-Direct Install, Codes & Standards, etc.) Downstream
Measurement and Verification Methods: (e.g., Deemed, Custom, NMEC – Population, NMEC – Site, SEM M&V, Randomized Controlled Trial (RCT), Other) N/A	Program Total System Benefit (TSB) for 2028-2031: N/A
Annual Budgets for 2028-2031: <i>2028: \$1,105,475</i> <i>2029: \$1,897,779</i> <i>2030: \$1,915,950</i> <i>2031: \$1,935,029</i>	Cost Effectiveness (TRC and PAC Test Ratios) for 2028-2031: N/A
Anticipated directional and scale changes in the budget for years 2032-2035: Anticipate an increase in budget for this program for the 2032-2035 period, depending on program performance.	Market Actors necessary for success: - Participants - Mechanical, Electrical, and Plumbing Consultants - Local and regional contractors - Distributors

Program Name: IDSM

High-level description of the delivery workforce, including the necessary scale and its risks:

The CCR REN CEIP program will be delivered in coordination with selected Program Providers, the CCR REN team, and community partners.

Consultant(s) will be selected through competitive solicitation and will be tasked with implementing the offering across CCR REN's three territories.

- The budget for consultant time should allow for approximately 3-4 FTE per Program Year.
- Actual FTE will be determined based on the selected consultant's average hourly billing rates.

CCR REN's Program Lead Organization will provide day-to-day program management support. CCR REN partner agencies will contribute to ongoing operations and inform implementation in their territories. CCR REN expects approximately 1.25 FTE per year over the 4-year program.

Community-based organizations will be engaged to increase local and regional awareness of the offerings.

Workforce risks include the selected consultant failing to assign sufficient staff or an inability to provide the appropriate subject matter experts. The competitive solicitation and subsequent contracting will mitigate this risk.

Near-term Program Output(s) (1-4 years):

By 2031:

- More than 500 customers will have been engaged.
- More than 250 participants will participate.
- 35+ projects will have been completed or will be in progress.
- \$1,500,000 or more in non-energy efficiency funding is accessed.

Long Term Outcome (5-10 years):

- Persistent demand for energy efficiency and distributed energy resources is created.
- Demand for services leads to an adequate local and regional supply of key technologies and materials.

Program Name: IDSM
- Partnerships with community organizations support increased community awareness of the benefits of combining energy efficiency with distributed energy resources. - The complexity associated with accessing multiple funding sources for a single project is reduced.
Does this program interact with other programs in this PA portfolio? If so, describe: Yes, CCR REN's IDSM program will interact closely with the following CCR REN programs: Non-Residential SEM: The SEM program will refer customers to and incorporate the support of the IDSM program. Commercial Energy Improvement Program (CEIP): the program may refer customers who express interest in, and are a good fit for, the IDSM program offering. IDSM will be incorporated when building electrification measures are being installed in CEIP. This will be done to mitigate increased peak load and explore additional storage solutions. WE&T program: the WE&T program will be used to facilitate local implementation. WE&T Participants will receive in-the-field training with IDSM mechanical, electrical, and plumbing subject matter experts. Finance Equity Program: The Finance program will support capitalizing projects with upfront costs that present a barrier to implementation. The Finance program will engage if non-energy-efficiency and energy-efficiency funds are insufficient to address first-cost barriers.
Program Metrics and Indicators (KPIs): - Sum of Equity target participants expected first-year bill savings, by sector (E-5351 – EQ2, modified for use in this program) - Count of Equity target participants in Market Support segment, by sector (E-5351 – EQ3)

Program Name: IDSM	
• Number of Projects Initiated (E-5351 - 309) • Number of contractors (that serve in the portfolio administrator service areas) with knowledge and trained by relevant Market Support programs to provide quality installations that optimize energy efficiency (E-5351 – MS19) • Dollar value of non-ratepayer in-kind funds/contributions utilized via partnerships (E-5351 – MS2) • kW permanently shifted from peak hours to off-peak hours (recommended).	
Does this program utilize Integrated Demand Side Management (IDSM)? <i>Yes.</i>	Link to Existing Implementation Plan, if existing: N/A. An Implementation Plan will be developed and loaded to CEDARS after the application is approved and after a Program Provider is selected.

1 Finance Equity

Program Name: Finance Equity Program		
Program ID: CCR-FIN-001 New / Existing: Existing Expected Program Duration: 2026 - 2035		
Portfolio Segment: (Resource Acquisition, Market Support, Equity, Codes & Standards) Equity	Program Implementer Type: (IOU Core, Third-Party Solicited, REN, CCA) REN	Third-Party Program Implementer (applicable to IOUs only): N/A
Applicable Sector: (e.g., Residential, Commercial, Industrial, Agricultural, Public, or Cross-Cutting, etc.) If multi-sector, provide a list of each sector covered Cross-Cutting		Customer Group(s): Geographically hard-to-reach, Underserved, and/or Disadvantaged participants
Sector Challenges: - Upfront costs remain a major barrier to making energy upgrades with simple paybacks that are shorter than the effective useful life of the product. - Financing products has improved, but they're still leaving participants behind due to the complexity of application processes and the perceived/real risk of implementing a project within - On-Bill Financing (OBF) works well—but it's not for everyone or for every end-use device type.		Sector Opportunities (Expected Outcome(s)): Participants in the Finance Equity Program will: - Have access to the technical and administrative support needed to access existing financing products. - Reduce energy use and associated energy costs. - Have increased awareness of and comfort with financing upgrades. The Finance Equity Program will:

Program Name: Finance Equity Program

- Provide technical and administrative support to reduce the costs and risk associated with accessing available loan products.
- Provide direct support in accessing 0% on-bill financing for eligible projects.
- Increase access to and adoption of existing financing products.
- Increase awareness of available capital and the economic benefits of using financing instead of using other funding, such as cash reserves.

Brief Program Description: (Including customer target, program strategies employed, expected program outcome):

CCR REN's Cross-Cutting Finance program will support participants in geographically hard-to-reach, Underserved, and Disadvantaged Communities in accessing existing financing products through providing technical and administrative support services.

Customer Target:

Non-Residential Equity customers operating in geographically hard-to-reach, Underserved, or Disadvantaged Communities. CCR REN forecasts that participants in the Non-Residential SEM program will be the primary customer target. Equity customers or contractors serving them who are not participating in a CCR REN program will also be key targets.

Program strategies:

The Finance Equity Program will use a combination of technical support and administrative support to increase access to existing loan products. Technical support will focus on energy-saving calculations and appropriate scoping documentation to substantiate the project to the applicable funders. Administrative support will focus on assisting participants by navigating the

Program Name: Finance Equity Program

various forms and processes for different loan products. Additional strategies may be identified through the planned competitive solicitation for this service.

Expected program outcome:

Equity customers participating in CCR REN's Non-Residential SEM program have the additional support necessary to access various loan products. Non-Residential Equity customers throughout CCR REN's territory have access to these supports regardless of whether they're participating in a CCR REN Resource Acquisition program. Participants successfully secure financing and complete energy- and utility-cost-saving projects. Projects that prioritize permanent load shifting through battery and thermal energy storage receive the funding necessary to advance.

Known Equity Concerns in the Selected Markets (if applicable):

- Non-Residential customers operating in geographically hard-to-reach, Underserved, and/or Disadvantaged Communities face structural barriers, including limited credit history or inconsistent revenue.
- Application processes (for lending and energy efficiency programs) can be burdensome for Equity-targeted customers, especially for those without dedicated administrative or financial staff.
- Installers who are not familiar with or are uncomfortable with available financing products may not make them available to their customers.

Proposed Solutions to Equity Concerns (if applicable):

- CCR REN's Finance Program will be designed to increase local and regional access to capital through supporting both installers and participants.
- Marketing and outreach will prioritize Equity customers, using community-based strategies and trusted messengers.
- Equity participation targets will be built into the program design, ensuring that Equity participants aren't just included—they're prioritized.
- Assistance will be provided specifically to Equity participants in OBF to help them with the program application process.

Program Name: Finance Equity Program	
Intervention Strategy: (e.g., SEM, MAP, Direct Install, Incentive/rebate, Finance, Audit, Technical Assistance, Advocacy, Training, Marketing, and Outreach/Information) Finance, Marketing, and Outreach/Information	Delivery Type: (e.g., Manufactured Upstream, Midstream-Distributor, Midstream-Retail, Downstream, Downstream-Direct Install, Codes & Standards, etc.) Downstream
Measurement and Verification Methods: (e.g., Deemed, Custom, NMEC – Population, NMEC – Site, SEM M&V, Randomized Controlled Trial (RCT), Other) EM&V of Market Support Metrics	Program Total System Benefit (TSB) for 2028-2031: N/A
Annual Budgets for 2028-2031: 2028: \$563,411 2029: \$602,892 2030: \$619,963 2031: \$637,886	Cost Effectiveness (TRC and PAC Test Ratios) for 2028-2031: TRC: N/A PAC: N/A
Anticipated directional and scale changes in the budget for years 2032-2035: CCR REN's program budget is expected to increase to address the ongoing cost escalation associated with implementation.	Market Actors necessary for success: • Participants • Implementers • Trades • Distributors • IOUs • CAEAFTA
High-level description of the delivery workforce, including the necessary scale and its risks:	

Program Name: Finance Equity Program

The CCR REN Finance Equity Program will be delivered in coordination with selected Program Providers, the CCR REN team, and contractors.

Consultant(s) will be selected through competitive solicitation and will be tasked with implementing the offering across CCR REN's three territories.

- The budget for consultant time should allow for approximately a 3/4 FTE per Program Year.
- Actual FTE will be determined based on the selected consultant's average hourly billing rates.

CCR REN's Program Lead Organization will provide day-to-day program management support. CCR REN partner agencies will contribute to ongoing operations, informing implementation in their territory.

- 1 averaged FTE for Program Management and implementation per year over the 4-year period

Local and regional contractors will be engaged to increase awareness and support demand in the offerings.

Workforce risks include the selected consultant failing to assign sufficient staff to the program. The competitive solicitation and subsequent contracting will mitigate this risk.

Near-term Program Output(s) (1-4 years):

- Engage with no less than 10 tradespeople and 5 local or regional distributors
- Support 15-20 projects /year
- Utility cost savings are realized for participants in geographically hard-to-reach, Underserved, and Disadvantaged Communities

Long Term Outcome (5-10 years):

- CCR REN communities regularly use financing to implement energy efficiency projects
- Local and regional tradespeople and distributors routinely use alternative financing for qualified energy-saving projects
- CCR REN financing closes service gaps, delivering significant utility cost savings to CCR REN communities

Program Name: Finance Equity Program**Does this program interact with other programs in this PA portfolio? If so, describe:**

Yes, CCR REN's financing program will interact with other programs in the CCR REN portfolio:

Non-Residential SEM: the Finance Equity Program will provide additional support to Equity customers to increase the likelihood that they will receive the capital needed to invest in energy and cost-saving projects while permanently shifting peak load.

Commercial Energy Improvement Program (CEIP): the CEIP program will refer to projects to the Financing Equity Program that cannot be implemented through that offering.

WE&T: WE&T program participants will be trained on available financing products and will help build demand for those offerings.

Program Metrics and Indicators (KPIs):

- Count of Equity target participants in Equity targeted segment, by sector (E-5351 – EQ1)
- Sum of Equity target participants expected first-year bill savings in Equity segment, by sector (E-5351 – EQ2)
- Sum of all Equity segment participants' kilowatt hour (kWh) savings in Equity segment - first year net (E-5351 – EQ6)
- Sum of all Equity segment participants' kW savings in Equity segment - first year net (E-5351 – EQ7)
- Sum of all Equity segment participants' therm savings in Equity segment - first year net (E-5351 – EQ8)

Does this program utilize Integrated Demand Side Management (IDSM)?
No.

Link to Existing Implementation Plan, if existing:

The implementation plan will be posted after the program consultant is hired through a competitive solicitation.

1 Codes & Standards

Program Name: Codes & Standards		
Program ID: CCR-CS-01 New / Existing: Existing Expected Program Duration: 2024 – 2035		
Portfolio Segment: (Resource Acquisition, Market Support, Equity, Codes & Standards) Codes & Standards	Program Implementer Type: (IOU Core, Third-Party Solicited, REN, CCA) REN	Third-Party Program Implementer (applicable to IOUs only): N/A
Applicable Sector: (e.g., Residential, Commercial, Industrial, Agricultural, Public, or Cross-Cutting, etc.) If multi-sector, provide a list of each sector covered) Cross Cutting		Customer Group(s): Local Government Building Officials, Building Design, Construction Professionals, Residents, and Building Owners/Operators
Sector Challenges: - Newly adopted codes, as part of the regular Code Adoption cycle require information, education, and enforcement. - Building professionals lack access to training and professional development to keep up with changing building energy codes. - Energy code compliance is inconsistent at the local level. - Lack of local/regional capacity impacts enforcement and compliance.		Sector Opportunities (Expected Outcome(s)): - Regional information and education will result in consistent enforcement and compliance of energy codes. - Regional and climate-zone specific training will inform and engage building professionals. - Improved realization of energy savings from codes through consistent local enforcement. - Geographically hard-to-reach, Underserved, and Disadvantaged voices and recommendations are captured and included in the

Program Name: Codes & Standards	
	adoption and update process code.
Brief Program Description: (Including customer target, program strategies employed, expected program outcome): The Codes & Standards (C&S) program serves 97 AHJs and CCR REN communities with education and technical resources to increase comprehension of and compliance with the California Building Energy Efficiency Code (Title 24) and supports more rapid adoption of new standard technologies. Customer target: • Building departments • Contractors • Building professionals (including architects, engineers, examiners, etc.) • Owner-Builders Program strategies: • Fill the gaps in current Utility and Statewide offerings through local engagements • Leverage resources from other C&S compliance activities • Offers targeted training to reduce energy use through improved building design and construction, and greater code compliance and enforcement. • Offers professional continuing education courses • Resources such as best practice guides, checklists, aggregated resources from other programs, and policy support • Offers hands-on training to contractors on required code and emerging technologies CCR REN will evaluate adding training to the program on proper refrigerant management and reclamation to its Codes & Standards curriculum as the market transitions to low-GHG variants. This training will support safe handling, regulatory compliance, and environmental protection. Expected program outcome: The program will increase access and participation among local governments and local building professionals.	

Program Name: Codes & Standards	
Known Equity Concerns in the Selected Markets (if applicable): Building departments and professionals in geographically hard-to-reach, Underserved, and Disadvantaged areas often lack the staff capacity or awareness of training opportunities because they are not the target of statewide and IOU C&S programs.	Proposed Solutions to Equity Concerns (if applicable): Provide local outreach and in-person training in CCR REN communities. Provide training and project code review support online to eliminate travel and save time.
Intervention Strategy: (e.g., SEM, MAP, Direct Install, Incentive/rebate, Finance, Audit, Technical Assistance, Advocacy, Training, Marketing and Outreach/Information) • Training – in-person and virtual • Technical Assistance – in-person and virtual • Outreach & Information	Delivery Type: (e.g., Manufactured Upstream, Midstream-Distributor, Midstream-Retail, Downstream, Downstream - Direct Install, Codes & Standards, etc.) Downstream, Codes & Standards
Measurement and Verification Methods: (e.g., Deemed, Custom, NMEC – Population, NMEC – Site, SEM M&V, Randomized Controlled Trial (RCT), Other) N/A	Program Total System Benefit (TSB) for 2028-2031: N/A
Annual Budgets for 2028-2031: 2028: \$1,128,307 2029: \$1,271,788 2030: \$1,353,588 2031: \$1,420,378	Cost Effectiveness (TRC and PAC Test Ratios) for 2028-2031: N/A

Program Name: Codes & Standards

Anticipated directional and scale changes in budget for years 2032-2035:

CCR REN anticipates an increase in budget for the 2032-2035 period to account for ongoing implementation cost escalations.

Market Actors necessary for success:

- Local government building code officials
- Building designers, specifiers, and construction professionals
- Equipment suppliers
- IOU and statewide programs

High-level description of the delivery workforce, including the necessary scale and its risks:

The CCR REN Codes & Standards program will be delivered by CCR REN staff and supplemented by consultants.

CCR REN's Program Lead Organization will provide day-to-day program management and implementation support. CCR REN partner agencies will contribute to ongoing operations, informing implementation in their territory.

- ~1 averaged FTE for Program Management support per year over the 4-year period
- ~1 averaged FTE for customer outreach and engagement per year over the 4-year period
- ~1/3 FTE for other program support activities per year over the 4-year period

Consultant(s) will be tasked with providing supportive services across CCR REN's three territories.

- The budget for consultant time is expected to support approximately 1-2 FTE.
- Actual FTE will be determined based on the selected consultant's average hourly billing rates.

Any risks will be associated with CCR REN staffing, staff turn-over, and consultants not assigning sufficient staff to the program.

Program Name: Codes & Standards

Near-term Program Output(s) (1-4 years):

- 40 or more training sessions.
- 600 or more participants completing training activities.
- 400 or more jurisdictions receiving information about the program.
- 75% of participants note an increase in their awareness/knowledge after trainings or forums.
- 120 or more projects receiving enhanced code compliance support.

Long Term Outcome (5-10 years):

- CCR REN building stock's comfort and energy efficiency is increased
- Energy use is reduced through improved building designs and construction
- Codes are consistently applied throughout the region
- Code compliance is increased

Does this program interact with other programs in this PA portfolio? If so, describe:

No.

Program Metrics and Indicators (KPIs):

- Number of training activities (classes, webinars) held, number of participants by segment (e.g., building officials, builders, architects, etc.), and the total size (number of the target audience) by sector (E-5351 – 292).
- Number and percent of jurisdictions with staff participating in an Energy Policy Forum (E-5351 – 296)
- Number of unique participants by sector that complete training (E-5351 – MS14)
- Increase in code compliance knowledge pre/post training (E-5351 - 294)
- Percentage of partners that have taken action supporting energy efficiency by type (E-5351- MS18)

Program Name: Codes & Standards**Does this program utilize Integrated Demand Side Management (IDSM)?**

No

Link to Existing Implementation Plan, if existing:https://cedars.cpuc.ca.gov/documents/download/3728/mainchange_summary%7Cmain%7Credline/

EXHIBIT 3: CEDARS FILING LINKS AND RECEIPTS

2028 CEDARS Filing Link and Submission Receipt

https://cedars.cpuc.ca.gov/filings/dashboard/CCR/2028/?include_c_n_s=true

CEDARS FILING SUBMISSION RECEIPT

The CCR portfolio budget filing has been submitted and is now under review. A summary of the budget filing is provided below.

PA: Central California Rural REN (CCR)

Budget Filing Year: 2028

Submitted: 14:56 on 21 Sep 2026

By: Felix Monterroso

Application Number: 26-03-020

Application URL:

Advice Letter:

Advice Letter URL:

* Portfolio Budget Filing Summary *

- TRC: 0.91
- PAC: 1.02
- TRC (no admin): 1.88
- PAC (no admin): 2.41
- RIM: 0.8
- SCB: 1.26
- SCH: 1.27
- Budget: \$31,495,881.93
- TotalSystemBenefit: \$ 31,776,403.93- ElecBen: \$6,452,313.91
- GasBen: \$34,793,209.63
- WaterEnergyBen: \$53,441.59
- OtherBen: \$511,611.36
- TRCCost: \$46,021,976.07

- PACCost: \$41,100,837.96
- RIMCost: \$86,692,021.20
- SCBCost: \$48,023,335.97
- SCHCost: \$48,023,335.97
- ElecSupplyCost: \$9,720,252.59
- GasSupplyCost: \$0.00
- WaterEnergyCost: \$0.00
- OtherCost: \$313,919.98

* Programs Included in the Budget Filing *

- CCR-COM-001: Commercial Energy Improvement Program
- CCR-COM-002: Non-Residential SEM
- CCR-CS-001: Codes and Standards
- CCR-EMV-ED: EMV-ED
- CCR-EMV-PA: EMV-PA
- CCR-FIN-001: CCR REN Finance Program
- CCR-IDSM-001: IDSM
- CCR-PS-CS: Portfolio Support - Codes and Standards
- CCR-PS-Equity: Portfolio Support - Equity
- CCR-PS-MS: Portfolio Support - Market Support
- CCR-PS-RA: Portfolio Support - Resource Acquisition
- CCR-RES-002: Residential Equity Program
- CCR-WET-002: Workforce Education and Training

2029 CEDARS Filing Link and Submission Receipt

https://cedars.cpuc.ca.gov/filings/dashboard/CCR/2029/?include_c_n_s=true

CEDARS FILING SUBMISSION RECEIPT

The CCR portfolio budget filing has been submitted and is now under review. A summary of the budget filing is provided below.

PA: Central California Rural REN (CCR)

Budget Filing Year: 2029

Submitted: 14:56 on 21 Sep 2026

By: Felix Monterroso

Application Number: 26-03-020

Application URL:

Advice Letter:

Advice Letter URL:

* Portfolio Budget Filing Summary *

- TRC: 1.0
- PAC: 1.12
- TRC (no admin): 1.94
- PAC (no admin): 2.45
- RIM: 0.82
- SCB: 1.37
- SCH: 1.37
- Budget: \$40,155,952.00
- TotalSystemBenefit: \$45,767,518.76
- ElecBen: \$9,412,761.50
- GasBen: \$48,960,390.58
- WaterEnergyBen: \$75,829.18
- OtherBen: \$1,321,661.58
- TRCCost: \$59,914,714.85
- PACCost: \$53,550,002.62

- RIMCost: \$116,353,841.69
- SCBCost: \$62,664,092.68- SCHCost: \$62,664,092.68
- ElecSupplyCost: \$13,565,041.96
- GasSupplyCost: \$0.00
- WaterEnergyCost: \$0.00
- OtherCost: \$438,082.11

* Programs Included in the Budget Filing *

- CCR-COM-001: Commercial Energy Improvement Program
- CCR-COM-002: Non-Residential SEM
- CCR-CS-001: Codes and Standards
- CCR-EMV-ED: EMV-ED
- CCR-EMV-PA: EMV-PA
- CCR-FIN-001: CCR REN Finance Program
- CCR-IDSM-001: IDSM
- CCR-PS-CS: Portfolio Support - Codes and Standards
- CCR-PS-Equity: Portfolio Support - Equity
- CCR-PS-MS: Portfolio Support - Market Support
- CCR-PS-RA: Portfolio Support - Resource Acquisition
- CCR-RES-002: Residential Equity Program
- CCR-WET-002: Workforce Education and Training

2030 CEDARS Filing Link and Submission Receipt

https://cedars.cpuc.ca.gov/filings/dashboard/CCR/2030/?include_c_n_s=true

CEDARS FILING SUBMISSION RECEIPT

The CCR portfolio budget filing has been submitted and is now under review. A summary of the budget filing is provided below.

PA: Central California Rural REN (CCR)

Budget Filing Year: 2030

Submitted: 14:56 on 21 Sep 2026

By: Felix Monterroso

Application Number: 26-03-020

Application URL:

Advice Letter:

Advice Letter URL:

* Portfolio Budget Filing Summary *

- TRC: 1.09
- PAC: 1.23
- TRC (no admin): 2.01
- PAC (no admin): 2.51
- RIM: 0.86
- SCB: 1.5
- SCH: 1.5
- Budget: \$46,850,475.05
- TotalSystemBenefit: \$60,746,144.48
- ElecBen: \$12,283,289.46

- GasBen: \$65,136,737.17
- WaterEnergyBen: \$103,940.31- OtherBen: \$1,654,721.46
- TRCCost: \$72,316,605.17
- PACCost: \$64,512,251.06
- RIMCost: \$145,054,908.22
- SCBCost: \$75,885,796.29
- SCHCost: \$75,885,796.29
- ElecSupplyCost: \$17,877,419.37
- GasSupplyCost: \$0.00
- WaterEnergyCost: \$0.00
- OtherCost: \$555,124.54

* Programs Included in the Budget Filing *

- CCR-COM-001: Commercial Energy Improvement Program
- CCR-COM-002: Non-Residential SEM
- CCR-CS-001: Codes and Standards
- CCR-EMV-ED: EMV-ED
- CCR-EMV-PA: EMV-PA
- CCR-FIN-001: CCR REN Finance Program
- CCR-IDSM-001: IDSM
- CCR-PS-CS: Portfolio Support - Codes and Standards
- CCR-PS-Equity: Portfolio Support – Equity
- CCR-PS-MS: Portfolio Support - Market Support
- CCR-PS-RA: Portfolio Support - Resource Acquisition
- CCR-RES-002: Residential Equity Program
- CCR-WET-002: Workforce Education and Training

2031 CEDARS Filing Link and Submission Receipt

https://cedars.cpuc.ca.gov/filings/dashboard/CCR/2031/?include_c_n_s=true

CEDARS FILING SUBMISSION RECEIPT

The CCR portfolio budget filing has been submitted and is now under review. A summary of the budget filing is provided below.

PA: Central California Rural REN (CCR)

Budget Filing Year: 2031

Submitted: 14:56 on 21 Sep 2026 By: Felix Monterroso

Application Number: 26-03-020

Application URL:

Advice Letter:

Advice Letter URL:

* Portfolio Budget Filing Summary *

- TRC: 1.17
- PAC: 1.32
- TRC (no admin): 2.08
- PAC (no admin): 2.6
- RIM: 0.88
- SCB: 1.59
- SCH: 1.59
- Budget: \$51,750,334.00
- TotalSystemBenefit: \$73,769,502.70
- ElecBen: \$14,631,216.11
- GasBen: \$79,055,724.73

- WaterEnergyBen: \$120,905.94
- OtherBen: \$1,660,787.98
- TRCCost: \$81,693,740.93
- PACCost: \$72,572,320.78
- RIMCost: \$167,422,757.07
- SCBCost: \$85,867,490.10
- SCHCost: \$85,867,490.10
- ElecSupplyCost: \$21,069,092.56
- GasSupplyCost: \$0.00
- WaterEnergyCost: \$0.00
- OtherCost: \$630,039.50

* Programs Included in the Budget Filing *

- CCR-COM-001: Commercial Energy Improvement Program
- CCR-COM-002: Non-Residential SEM
- CCR-CS-001: Codes and Standards
- CCR-EMV-ED: EMV-ED
- CCR-EMV-PA: EMV-PA
- CCR-FIN-001: CCR REN Finance Program
- CCR-IDSM-001: IDSM
- CCR-PS-CS: Portfolio Support - Codes and Standards
- CCR-PS-Equity: Portfolio Support – Equity
- CCR-PS-MS: Portfolio Support - Market Support
- CCR-PS-RA: Portfolio Support - Resource Acquisition
- CCR-RES-002: Residential Equity Program
- CCR-WET-002: Workforce Education and Training