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December 23, 2024

California Public Utilities Commission
Energy Division Tariff Unit
505 Van Ness Ave
Fourth Floor
San Francisco, CA 94102-3298

RuralREN North Advice Letter #003-E/003-G (RuralREN North ID U-1401-E)

Tier Designation

This Advice Letter has a Tier 3 designation pursuant to Decision (D.) 24-09-031, Ordering Paragraph (OP) 9.

Subject

RuralREN North Revised Business Plan

I. Purpose

The Northern California Rural Regional Energy Network (RuralREN North or RRENN) submits a revised Business Plan following Decision (D.) 24-09-031. This filing provides an update to RRENN's business and portfolio plans, program offerings, goals, budgets and forecasts for the period 2024 through 2027. This filing is submitted in compliance with D.24-09-031, Ordering Paragraph 9 to submit a Tier 3 advice letter by December 31, 2024.

II. Background

A. Regulatory Requirements

The Rural Regional Energy Network (RuralREN) was initially established by D.23-06-055 as an equity-focused REN to address the specific needs of rural communities, by offering energy efficiency programs in the North Coast, Central Coast, San Joaquin Valley, and Sierra regions of California. The RREN proposal was submitted by Redwood Coast Energy Authority (RCEA) on behalf of itself and several partners including County of San Luis Obispo (SLO), County of Ventura (Ventura), Association of Monterey Bay Area Governments (AMBAG), High Sierra Foundation (HSF), San Joaquin Valley Clean Energy Association (SJVCEO), and Sierra Business Council (SBC). RCEA was named the lead portfolio administrator by the Commission in D.23-06-055.

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On May 21, 2024, the Administrative Law Judge filed a Ruling Seeking Comment on Potential Path Forward for Rural Regional Energy Network that proposed dividing RuralREN into two separate entities, one serving the North Coast and Northern Sierra regions, and the other serving the Central Coast and Central Valley areas. This proposal was approved in Decision (D.)24-09-031, which ordered a modification to the Rural Regional Energy Network approved in D.23-06-055 to two RENs, the Northern California Rural Regional Energy Network and the Central California Rural Regional Energy Network (CCRREN).

The RuralREN North Partners include Lake Area Planning Council (Lake APC), Mendocino Council of Governments (MCOG), SBC, and RCEA as the lead administrator.

B. Filing Requirements

D.24-09-031 requires RuralREN North to provide the following:

- Tier 3 advice letter no later than December 31, 2024, reflecting the content of the decision and updating business and portfolio plans, program offerings, goals, and forecasts, for the period 2024 through 2027.
- Revised budget based on the updated funding amounts as listed in Table 4 of D.24-09-031.

III. Discussion

A. Portfolio Overview:

RuralREN North's portfolio of programs remains consistent with the original RuralREN Business Plan application. The portfolio includes strategies and programs within two of the three segments and focuses approximately 51% of its budget on the Equity segment because of the high percentage of hard-to-reach, underserved and disadvantaged customers in the region. Historically, the residential sector in rural hard-to-reach areas has been underserved by energy efficiency programs, therefore it represents RuralREN North's largest opportunity and portfolio focus.

RuralREN North's portfolio offers two Resource Acquisition programs serving the Commercial Small/Medium Business (SMB) and Residential sectors. They will primarily target hard-to-reach and underserved participants consistent with RuralREN North's equity objectives. Of the portfolio budget, two percent will fund the Codes and Standards segment. The objective for this funding is to increase the efficiency of buildings and equip code enforcement agencies in rural hard-to-reach areas to comply with energy codes. The original RuralREN Business Plan proposed offering many of these services using RuralREN staff and consultants, while the smaller Codes and Standards program proposed by RuralREN North intends to connect local agencies with existing trainings and resources as an initial step while evaluating their needs for further program development.

Portfolio information is largely consistent with the original RuralREN Business Plan application. One significant change is that for the two Resource Acquisition programs, the programs were

originally intended to launch using the Deemed Savings methodology and are now planning to launch using Normalized Metered Energy Consumption (NMEC) as their savings claims methodology where appropriate, per D.23-06-055. However, for the purpose of forecasting, savings forecasts were developed using the deemed measure savings forecasts.

Another change from the original Business Plan was a shift of Objective 3. The original RuralREN Business Plan had a much larger budget and emphasis on Workforce Education and Training (WE&T). The new portfolio still includes a WE&T program, however, for RuralREN North, the initial focus will be on upskilling the existing workforce and then will expand into building the workforce in later program years. This led to a change in Objective 3 from workforce development to providing capital to rural customers for energy efficiency and electrification projects through incentives and financing. In the RuralREN North territory, this has been identified as an important gap to fill. In the original Business Plan, the Resource Acquisition programs were only planned for implementation in the north part of the region and now will serve all regions in RuralREN North and include 47% of the budget.

Additionally, the portfolio budget has been updated in three key ways. First, the budget now includes a distinction for Portfolio Support, to align with CPUC direction. Second, because the original RuralREN Business Plan application did not include a complete Evaluation, Measurement and Verification (EM&V) budget, RuralREN North has included a budget for CPUC EM&V across all program years. Third, a budget has been included for integrated demand side management (IDSM) as described in D.23-06-055. RuralREN North will file an Advice Letter at a later date to describe IDSM activities.

Below is a summary of the RuralREN North programs. The Commercial Resource Acquisition and Residential Resource Acquisition programs have had changes to their savings claims methodologies since the original Business Plan application. The remaining programs are included for thoroughness as part of this portfolio summary but have not materially changed since the original RuralREN Business Plan application. The order of the programs aligns with the intended order of program implementation launch.

RREN01: Residential Equity Program

[No significant changes since Business Plan application]

RuralREN North's Residential Equity program connects rural residential communities to energy efficiency opportunities through targeted outreach, education, assessments, and technical assistance focusing on equity-targeted hard-to-reach and underserved rural customers who often face very high energy burdens. The program aids rural communities in better understanding the concepts of energy conservation, energy efficiency, electrification, and demand response. The program also connects customers to the opportunities for energy savings that might exist in their homes and guides customers to other RuralREN North programs as well as external programs and resources to support implementation of energy projects. The program will provide some small energy saving measures through direct installation during assessment and energy saving kits that can be handed out at outreach events or shipped directly to customers' homes.

RRN02: Residential Resource Acquisition Program

RuralREN North's Residential Resource Acquisition program is a comprehensive EE and

decarbonization program offering technical services, customer incentives, and direct installation of measures aimed at reducing energy usage, on-peak load and GHG emissions. The program will be offered in all RuralREN North's regions, which are mostly remote and sparsely populated areas. The program uses a whole-house approach to increase adoption of EE, demand response, and decarbonization measures, while providing added safety, resilience, and occupant comfort benefits. While not categorized as an Equity segment program, the program will prioritize services for underserved and geographically hard-to-reach rural customers who often face very high energy burdens. The program compliments RuralREN North's Residential Equity program by integrating its marketing, outreach, and education activities.

In the original RuralREN Business Plan application, the Commercial program planned to use Deemed Savings to claim energy savings. However, the program is now shifting to the NMEC savings methodology. RuralREN North intends to solicit for an NMEC consultant in early 2025. Savings forecasts were calculated using the Deemed Savings methodology.

RRN03: Commercial Resource Acquisition Program

RuralREN North's Commercial Resource Acquisition program is a comprehensive energy efficiency and decarbonization program offering technical services, incentives, and direct installation of select measures all aimed at reducing energy usage, on-peak load, and GHG emissions in rural micro, small, and medium-sized businesses. The program will be offered in all RuralREN North's regions, filling a gap in services to the most remote and sparsely populated areas and those most in need of a customized local delivery offering. The program uses a comprehensive approach to increase adoption of EE, demand response, and decarbonization measures, while providing operating cost savings and added non-energy benefits of safety, resilience, and occupant comfort for local businesses. While not categorized as an Equity segment program, a high proportion of the businesses served will be hard-to-reach and located in or near rural underserved communities.

In the original RuralREN Business Plan application, the Commercial program planned to use Deemed Savings to claim energy savings. However, the program is now shifting to the NMEC savings methodology. RuralREN North intends to solicit for an NMEC consultant in early 2025. Savings forecasts were calculated using the Deemed Savings methodology.

RRN04: Finance Equity Program

[No significant changes since Business Plan application]

As described in the new RuralREN North Business Plan, the cross-cutting RuralREN North Finance Program will equitably support the residential, SMB, and public sectors in the RuralREN North communities through low/no cost loans that will encourage and accelerate the implementation of energy efficiency projects. RuralREN North Financing Program loan products will address first-cost and access to capital barriers that exist in rural California and will span gaps in current investor-owned utility (IOU) and other statewide offerings. The RuralREN North Financing Program will offer bridge loans to complement and improve the effectiveness of IOU on-bill financing (OBF). Micro loans will fill a niche in the realm of currently available financing products for loans for EE upgrades below current minimum loan amounts, with easy qualifying and flexible repayment terms.

Detailed design and implementation of the program will be solicited in early 2025 for a third-party proficient in energy finance. The details of the program will be included in the Implementation Plan to be developed by the selected consultant and RuralREN North Partners.

RREN05: Public Equity Program

[No significant changes since Business Plan application]

The RuralREN North Public Equity Program is a public agency-focused program designed to help hard-to-reach and underserved public agencies in Lake and Mendocino counties access, understand, and participate in energy efficiency by providing local expertise and knowledge of public buildings and infrastructure. The program builds on existing relationships, data, and experience to bring savings and knowledge of energy use to public sector customers.

RREN06: Workforce, Education & Training Equity Program

The cross-cutting WE&T program accelerates training, including upskilling of existing workers and training for new workers. The program addresses skills training and supports building professionals, while coordinating with local community colleges and agencies for training support. The program intends to ensure that training is available within the RuralREN North communities where distance to training centers has been a barrier. In later program years, the program will also work with trainees entering the workforce and ensure that the rural communities have access to trained and skilled workers.

RRN07: Codes & Standards Market Support Program

As described in the new RuralREN North Business Plan, the RuralREN North Codes & Standards (C&S) program will provide rural building departments and building professionals with education and technical resources to increase comprehension and compliance in the California Building Energy Efficiency Code (Title 24) and escalate more rapid adoption of new standard technologies. The program is designed to connect rural building departments with current IOU and Statewide offerings and will serve geographically rural and hard-to-reach areas that have distinct characteristics and needs. The program's goal is to ensure offerings are available in rural areas that will help those regions reduce energy usage through improved building design and construction and greater code compliance and enforcement.

B. Summary of Forecasted Portfolio Impacts:

For RuralREN North's two Resource Acquisition programs, the programs were originally proposed to use just the Deemed Savings methodology but will instead use Deemed Savings for the initial program element launch and will later incorporate NMEC savings methodology into future program elements. Savings will continue to be forecasted using Deemed Savings methodology with first deemed and then calculated NMEC savings submitted in future claims. The Residential Equity program will also claim a small amount of energy savings through their direct installation program. Those measures have shifted from the Residential Resource Acquisition program into the Residential Equity program and will be forecasted and claimed using Deemed Savings methodology.

Due to the lack of the anticipated ramp up in 2024, the quantity of measures installed in 2025-27 were reduced resulting in a change in the total system benefit (TSB) and savings forecast from

the original RuralREN Business Plan filed in early 2022. Measure updates in 2024 and the updated Avoided Cost Calculator (ACC) also impacted the calculations using the Deemed Savings methodology. Although measure quantities were reduced, TSB and savings forecasts were generally increased from the original RuralREN Business Plan.

RuralREN's original Business Plan application did not include a budget for CPUC EM&V. The budgets included in the new RuralREN North Business Plan include both PA and CPUC EM&V.

D.21-05-031 directed PAs to distinguish between Program Implementation Costs and Portfolio Administration Costs. RuralREN North budgets have been adjusted to incorporate this new designation.

List of Attachments

Attached hereto are the following:

Attachment A/Exhibits 1-3: Revised Business Plan

Attachment B/Exhibit 4: Revised 2024-2031 Application Tables

Attachment C: TUAL Tables

Attachment D: CEDARS Confirmation Sheet

A. Protest

Anyone may protest this Advice Letter. The Protest must state the grounds upon which it is based. The Protest must be made in writing and received by the Commission within 20 days of the date this Advice Letter was filed with the Commission, or January 12, 2025. There is no restriction on who may file a protest. The address for mailing or delivering a protest to the Commission is:

California Public Utilities Commission
CPUC Energy Division
Attention: Tariff Unit
505 Van Ness Avenue
San Francisco, CA 94102

Copies of the protest should also be sent via e-mail to the attention of the Energy Division at EDTariffUnit@cpuc.ca.gov. It is also requested that a copy of the protest be sent by email to the addresses shown below on the same date it is mailed or delivered to the Commission.

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B. Effective Date

RuralREN North requests that this Tier 3 advice filing be approved by the Commission by January 22, 2025, which is 30 calendar days from the date of this filing.

C. Notice

In accordance with General Order 96-B, Section IV, a copy of this advice letter is being sent electronically to service lists for R.13-11-005 and A.22-02-005 and uploaded to the CPUC Energy Division Advice Letter database (cpucadviceletters.org). Address changes to the General Order 96-B service list should be directed to Patricia Terry at pterry@redwoodenergy.org or by calling 707-269-1700. For changes to all other service lists, please contact the Commission's Process Office at 415-703-2021 or by electronic mail at Process_Office@cpuc.ca.gov.

/s/ Patricia C. Terry

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For the Northern California Rural Regional Energy Network (RuralREN North)



ADVICE LETTER SUMMARY

ENERGY UTILITY



MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No.:

Utility type:

☐ ELC ☐ GAS ☐ WATER
☐ PLC ☐ HEAT

Contact Person:

Phone #:

E-mail:

E-mail Disposition Notice to:

EXPLANATION OF UTILITY TYPE

ELC = Electric GAS = Gas WATER = Water
PLC = Pipeline HEAT = Heat

(Date Submitted / Received Stamp by CPUC)

Advice Letter (AL) #:

Tier Designation:

Subject of AL:

Keywords (choose from CPUC listing):

AL Type: ☐ Monthly ☐ Quarterly ☐ Annual ☐ One-Time ☐ Other:

If AL submitted in compliance with a Commission order, indicate relevant Decision/Resolution #:

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL:

Summarize differences between the AL and the prior withdrawn or rejected AL:

Confidential treatment requested? ☐ Yes ☐ No

If yes, specification of confidential information:

Confidential information will be made available to appropriate parties who execute a nondisclosure agreement. Name and contact information to request nondisclosure agreement/ access to confidential information:

Resolution required? ☐ Yes ☐ No

Requested effective date:

No. of tariff sheets:

Estimated system annual revenue effect (%):

Estimated system average rate effect (%):

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected:

Service affected and changes proposed¹:

Pending advice letters that revise the same tariff sheets:

¹Discuss in AL if more space is needed.

Protests and correspondence regarding this AL are to be sent via email and are due no later than 20 days after the date of this submittal, unless otherwise authorized by the Commission, and shall be sent to:

California Public Utilities Commission
Energy Division Tariff Unit Email:
EDTariffUnit@cpuc.ca.gov

Contact Name:
Title:
Utility/Entity Name:

Telephone (xxx) xxx-xxxx:
Facsimile (xxx) xxx-xxxx:
Email:

Contact Name:
Title:
Utility/Entity Name:

Telephone (xxx) xxx-xxxx:
Facsimile (xxx) xxx-xxxx:
Email:

CPUC
Energy Division Tariff Unit
505 Van Ness Avenue
San Francisco, CA 94102

Attachment A

Northern California Rural Regional Energy Network

Updated Business Plan

Exhibit 1: Executive Summary

Exhibit 2: Strategic Business Plan

Exhibit 3: Portfolio Plan

Northern California Rural Regional Energy Network

ENERGY EFFICIENCY PORTFOLIO APPLICATION



December 2024

Governing Partners:



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Executive Summary

For Rural, by Rural, Equity-Focused

The Northern California Rural Regional Energy Network (RuralREN North) is a steward of the regions we serve, committed to helping our rural communities grow and thrive through the adoption of energy efficiency while promoting clean energy practices and technologies. Part of serving rural communities is understanding the unique perspectives as well as accepting views and opinions that often do not align with California's metropolitan areas. RuralREN North will help our rural communities support California's ambitious greenhouse gas (GHG) reduction policies while achieving the California Public Utilities Commission's (CPUC) energy efficiency savings goals, in terms that rural customers can accept, support, and in time, champion.

We are proud of RuralREN North's efforts to bring clean energy practices and programs to our regions of California: the North Coast and Sierra. We are committed to remaining zealous advocates for rural customers while tirelessly sharing our vision. We support the vision of a clean energy future. To achieve this, all Californians must be part of it.

Our portfolio approach builds upon our past energy efficiency program experiences to maximize opportunity, reduce unnecessary costs, and to lessen market confusion. We are poised to continue our focus on helping customers save energy using comprehensive energy efficiency tactics, increasing awareness of energy efficiency opportunities, and increasing local workforce capabilities and capacity—all largely in rural hard-to-reach and underserved communities. Rural California can support the vision for a clean energy California but will only succeed with the assistance of trusted partners.

The idea of the RuralREN North is a direct response to the unique issues and urgent needs of geographically hard-to-reach California energy customers.

Our focus and highest priority objective is to provide energy efficiency services to underserved and hard-to-reach rural ratepayers. Appropriately 51% of our total proposed budget is allocated to the Equity segment and all programs are targeted to equity customers. For the RuralREN North equity is more than a segment; it's imbued into our governance and decision making. As rural Californians, we experience firsthand that rural issues are equity issues.

Through a focused and strategic portfolio of program offerings across the Equity, Codes & Standards, and Resource Acquisition segments, RuralREN North will achieve:

Equity: Hard-to-reach, disinvested and underserved rural customers are provided an equitable level of services and support of CPUC energy programs and are empowered to act.

Reduced Consumption: Energy consumption, energy cost and GHG emissions are reduced across the region, contributing to California’s decarbonization and energy efficiency goals.

Increased adoption of energy projects: Through incentives, rebates, financing and a trained, local workforce to enable energy and cost savings, and GHG emissions reductions.

About RuralREN North

Figure 1: RuralREN North Regions (North Coast and Sierra)



RuralREN North was split off from the Rural Regional Energy Network (RuralREN) that was a new Regional Energy Network formed by members of the Rural Hard-to-Reach Working Group (RHTR). The RuralREN was approved in Decision D.23-06-055 in mid-2023. In September of 2024, the CPUC split the RuralREN into two new RENs, the Northern California Rural Regional Energy Network (RuralREN North) and the Central California Rural Regional Energy Network (CCRREN).

RuralREN North contains two distinct regions—The North Coast and the Sierra. The counties, population, and land area are shown in Figure 1 and in Table 1. The combined RuralREN North service territory population of 1.6 million people represents approximately 4% of California’s total population, but its land area of 29,421 square miles is approximately 18% of

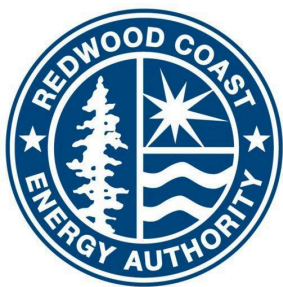
California’s total land area.

Table 1: RuralREN North: Regions, Partners, Counties, Square Miles, Population

Region	Partner Organization	Counties Served	Land Area, Sq. Miles	Population
North Coast	Redwood Coast Energy Authority (RCEA)	Humboldt	3,568	136,132
North Coast	Mendocino Council of Governments (MCOG)	Mendocino	3,507	91,145
North Coast	Lake Area Planning Council (Lake APC)	Lake	1,255	68,024
Sierra	Sierra Business Council (SBC)	Alpine, Amador, Butte, Calaveras, El Dorado, Lassen, Mariposa, Nevada, Placer, Plumas, Sierra, Sutter, Tuolumne, Yuba	21,014	1,309,382

Source: US Census Bureau

RuralRen North Partners



The **Redwood Coast Energy Authority (RCEA)** was founded in 2003 as a Joint Powers Agency whose members include the County of Humboldt, the Cities of Arcata, Blue Lake, Eureka, Ferndale, Fortuna, Rio Dell, Trinidad, and the Humboldt Bay Municipal Water District. RCEA's purpose is to develop and implement sustainable energy initiatives that reduce energy demand, increase energy efficiency, and advance the use of clean, efficient, and renewable resources available in the region. RCEA currently implements residential and non-residential resource acquisition programs as an elect Program Administer, non-resource programs for public agency, commercial, and residential hard-to-reach customers through its local government partnership with PG&E, as well as other self-funded efforts as a Community Choice Aggregator.



Sierra Business Council (SBC) is a 501(c)(3) non-profit organization whose purpose is to pioneer and demonstrate innovative approaches and solutions to increase community vitality, economic prosperity, environmental quality, and social fairness in the Sierra Nevada. For over 17 years, SBC has served as an experienced energy program implementer and has been working with PG&E implementing the Sierra Nevada Energy Watch. SBC has also participated in CPUC proceedings bringing a rural equity point of view to the public process.



Lake Area Planning Council (Lake APC) is a California joint powers authority with member agencies consisting of the Cities of Lakeport and Clearlake and the County of Lake. Lake APC is the Regional Transportation Planning Agency created with authority to plan for and suggest solutions to common problems, assist in the preparation of proposals by utilizing planning talents and general plans of the various governmental agencies located within the County and of planning and technical experts in various other fields.



Mendocino Council of Governments (MCOG) is a California joint powers authority formed in 1972 with member agencies consisting of the Cities of Fort Bragg, Point Arena, Ukiah and Willits, and the County of Mendocino. Its purpose is to assist local governments in planning to address common needs, cooperating for mutual benefit, and coordinating for sound regional, community, and intercommunity development. MCOG is the Regional Transportation Planning Agency for the Mendocino County region.

The RuralREN North is particularly well-situated to deliver energy efficiency services to rural Californians. RENs offer an opportunity to regionalize and localize program design and associated service while maintaining the economy of scale necessary to maximize the cost-effective delivery of resources. Regional and local program designs that integrate various locational variables are critical to successful rural implementation. For example, customer locational values, beliefs, and norms must be incorporated into program design; otherwise, long-term social structural barriers to success will emerge—previous local government partnerships practices had filled this niche. As local programs are downsized by budget and scope, we see RuralREN North as a practical solution to continue and expand focused effort to bring equitable access and services by and for rural Californians.

RuralREN North’s Proposed Portfolio of Programs

The formation of RuralREN North is a direct response to underrepresented rural California energy customers' unique issues and urgent needs. RuralREN North will address the needs of rural California customers with a portfolio focused on Equity segment objectives across Public and Residential sectors and cross-cutting Workforce Education and Training, and Finance offerings. The portfolio also includes equity focused Resource Acquisition programs in the Residential and Small Commercial sectors that emphasize common energy efficiency measures along with strategic decarbonization measures. Also, the portfolio will have a limited, pilot scale, “hyper local” Codes and Standards program. Sector strategies will include a range of outreach, training, technical and financial assistance, all designed to help rural communities implement energy savings measures as well as build local economies and workforces. A thoughtfully planned, phased portfolio approach offers a mix of flexible programs customized to the needs of local communities that will evolve and expand over the four-year portfolio funding cycle and eight-year strategic business plan.

RuralREN North Governance Model

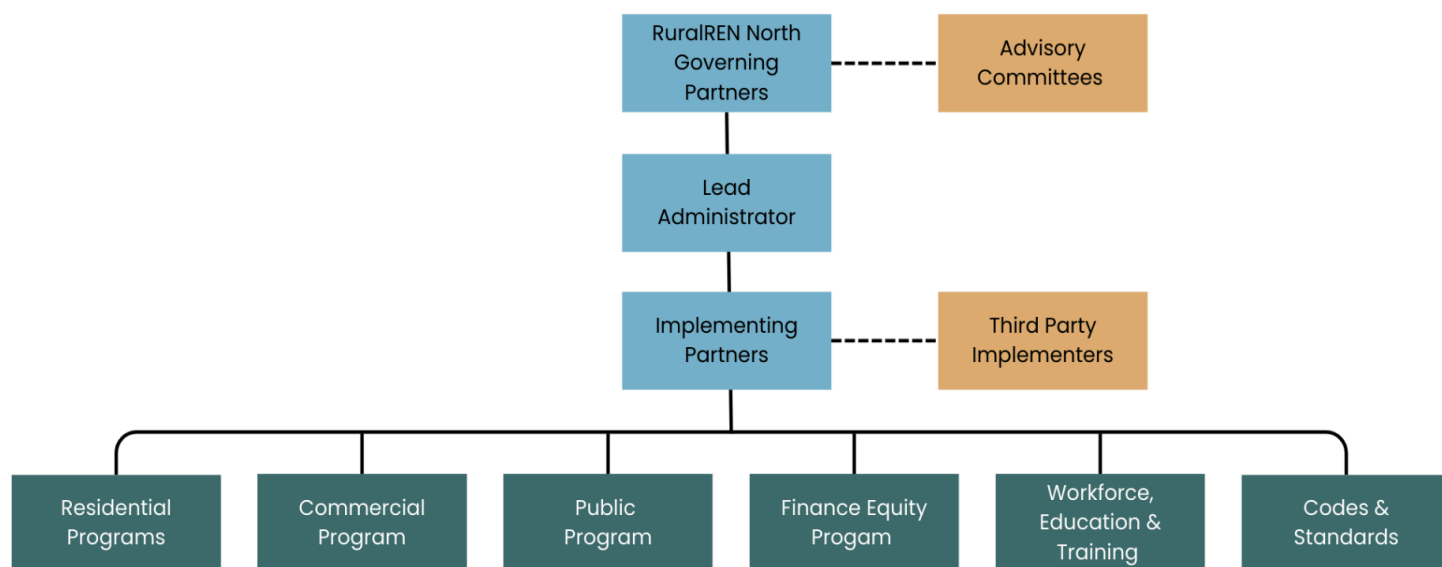
RuralREN North’s governance model provides strong, centralized fiscal control, management of performance and achievement of goals as well as compliance with regulatory and policy mandates.

The organization includes Implementing Agencies, Advisory Committees, Governing Partners, and a Lead Administrator operating under a decision-making framework that:

- Defines and assigns the multi-levels of governance: local leadership, centralized decision making
- Delineates scopes of authority with a single Lead Administrator
- Describes what and how decisions are made at each level of governance
- Establishes channels for effective and transparent communication
- Takes input and advice from multiple stakeholders
- Prioritizes local delivery

Figure 2, the governance model shows the function and relationships of the RuralREN North.

Figure 2: Governance Model



The **Lead Portfolio Administrator**, RCEA, acts as the Lead Agency and is responsible for: filing required regulatory submissions and reporting to the CPUC; representing RuralREN North in CPUC proceedings and on committees as necessary; managing portfolio-wide procurement and contracts; providing oversight of budgets; coordinating with PG&E on invoicing and regulatory requirements. The Administrator can delegate roles and responsibilities to members of the Leadership Team.

The **Governing Partners** are RuralREN North's Board of Directors and make portfolio-level strategy, operations, and policy decisions. The Leadership Team is composed of one representative from each RuralREN North Agency. Each representative holds one equal vote. To conduct Leadership Team business or hold a vote, a minimum of three (3) Leadership Team members (or alternates) must be present, and decisions will be made by consensus.

RuralREN North Advisory Committees. The Governing Partners may establish such advisory committees as deemed appropriate to assist the Governing Partners in its implementation of RuralREN North.

Implementing Agencies are responsible for engaging the counties they serve and designing and delivering programs that reflect the existing service gaps and needs expressed in those counties. They are responsible for helping to define program offerings; monitoring program performance, challenges, and barriers; augmenting, altering, and adapting programs to address problems, and supporting the roll-out of new programs.

Member Counties are RuralREN North's constituency and have a critical voice in the decision-making process, particularly in terms of articulating service gaps and defining the unique needs of customers in their counties.

Technical Advisory Committee(s) includes staff from Implementing Agencies that have expertise in program design, development, implementation, and management. This committee is responsible for helping to define program offerings; monitoring program performance, challenges, and barriers; augmenting, altering, and adapting programs to address problems, and supporting the roll-out of new programs.

Program Operations Teams include Implementing Agencies staff that have expertise in program design, development, implementation, and management, the sector and program technical and outreach leads, consultants/third parties, and managers who run sector programs.

Defining Rural Customers

The basis of rurality lies in the need to provide all Californians with equitable access to energy efficiency programs and services. There is some level of debate about the definition of rural, so for the purposes of the RuralREN North, we will rely on the CPUC's hard-to-reach definition where the CPUC has recognized that geographic location is a barrier to participating in energy efficiency programs for residential and small businesses.¹ RuralREN North logically extends this geographic barrier to include all customers in rural areas. The majority of the 17 counties represented by the RuralREN North met CPUC's definition of geographically hard-to-reach.²

¹ D. 18-05-041, FOF 14. The CPUC identifies geographic location as a barrier to participating in energy efficiency programs for residential and small businesses. The CPUC defines this barrier as: "Businesses or homes in areas other than the United States Office of Management and Budget Combined Statistical Areas of the San Francisco Bay Area, the Greater Los Angeles Area and the Greater Sacramento Area or the Office of Management and Budget metropolitan statistical areas of San Diego County. Businesses or homes in disadvantaged communities, as identified by CalEPA pursuant to Health and Safety Code Section 39711."

² Id., COL 27. "Programs targeted at hard-to-reach customers should prioritize the most underserved customers or customer segments, because they are likely the hardest to reach. There is considerable overlap in the policy objectives for disadvantaged communities and hard-to-reach customers. The definition of hard-to-reach should reflect this overlap by including disadvantaged communities, as identified by CalEPA, as an additional criterion for meeting the geographic component of the hard-to-reach definition."

California's rural communities also are home to large populations in other CPUC-defined equity categories, including hard-to-reach and underserved. Additionally, many rural customers are low-income qualified, or are just above that threshold.³ Thus, the RuralREN North will focus primarily on energy efficiency solutions that are consistent with the CPUC objectives for the newly formed Equity program segment.

Looking Ahead Through the Lens of Equity

Without a RuralREN North, California runs the risk of a wholesale loss of rural and geographically hard-to-reach service capacity built from previous program endeavors funded through the IOU's Local Government Partnerships, (LGPs), American Recovery and Reinvestment Act (ARRA), Proposition 39, and other state and local sources.

While IOUs make efforts to reach rural customers, continued pressure on them and third-parties to improve cost-effectiveness and reduce program delivery costs have led to increased emphasis on California metropolitan areas with abundant and scalable energy savings potential and less emphasis on more costly program delivery to rural markets. Additional cost-effectiveness pressures are expected to continue, which will result in lower levels of participation from rural communities

The time has come for a connected and collaborative rural movement. The RuralREN North will help deliver an equitable and clean energy future. When we impact people in their jobs, homes, communities, and their ability to access capital—we change lives. Together we build communities that contribute to regions and those regions all rise together.

³ California Environmental Protection Agency's Office of Environmental Health Hazard Assessment (OEHHA), California Communities Environmental Health Screening Tool: CalEnviroScreen 4.0, *Updated October 2021*

Exhibit One: Strategic Business Plan

Vision for EE in CA: 2024-2031

The RuralREN North approach—for rural, by rural, equity-focused—offers a complementary path to deliver innovative approaches for reducing energy use and expanding adoption of integrated demand resources across California’s vast rural community. According to the Berkeley Labor Center, rural counties in California constitute nearly a quarter of the state’s electric energy market. Rural California customers can be served best through a locally delivered RuralREN North.

While the RuralREN North’s portfolio will not be held to the same cost-effectiveness requirements as non-REN Portfolio Administrators (PAs),⁴ the RuralREN North is committed to developing programs that enhance services, realize bill and energy savings, and provide value to IOU ratepayers. The RuralREN North will leverage economies of scale and situational similarity to provide services that are additive, rather than duplicative or competitive, to existing IOU, CCA or REN energy efficiency programs.

Guiding Principles

These principles will guide the RuralREN North Business Plan in how to approach the needs and opportunities of rural California.

Equity – integrate equity, environmental and social justice principles into RuralREN North’s decision making and operations.

Community – incorporate local needs and wants to ensure solutions meet the needs of the rural communities we serve.

Collaboration – work closely with other rural agencies, PAs, and program implementers to improve rural customer program access and participation to avoid duplication and create synergies.

⁴ D.12-11-015, COL 14 “There should not be a minimum cost-effectiveness threshold for approval of REN or MEA proposals. However, the RENs and MEA should strive to deliver the most cost-effective programs possible. This does not result in the Commission holding RENs and MEA to a different standard than the utilities. Similar programs should be considered similarly, regardless of who is delivering the program.”

Table 2: Portfolio Outcomes

OUTCOME 1: Provide EE Services to Rural, HTR & Underserved Customers	OUTCOME 2: Reduce Energy Use & GHG Emissions, Maximize TSB	OUTCOME 3: Provide capital for energy projects
Hard-to-reach and underserved rural customers are provided an equitable level of services and support of CPUC energy programs and are empowered to take action to better manage their energy use and cost through increased awareness, a trained workforce, support resources, and access to financing to provide their homes and business.	Energy consumption, energy cost, and GHG emissions are reduced across the region, contributing to California's decarbonization and energy efficiency goals	Hard-to-reach and underserved rural communities have access to incentives and financing tailored to their needs to encourage adoption of energy efficiency and electrification projects.

Portfolio Outcomes

Consistent with the RuralREN North's Guiding Principles, our proposed portfolio will achieve the following outcomes.

Outcome 1: Hard-to-reach, disinvested, disadvantaged, and underserved rural customers are provided an equitable level of services and support of CPUC energy programs and are empowered to take action to better manage their energy use and cost through increased awareness, support resources, a trained workforce and access to financing to improve their homes and businesses.

The RuralREN North will support structural, procedural, distributional, and transgenerational equity for rural California through a multifaceted approach that:

- Places program delivery tasks in the hands of local providers and workers. Third-parties are not motivated to address the rural market due to a focus on program cost-effectiveness and cost-efficiency in program delivery. As energy efficiency (EE) increasingly becomes automated we lose local presence. IOUs are steadily reducing their employee footprints resulting in a loss of monetary and community presence.
- Relies on trained local workforce and short-term project financing to increase the number of energy efficiency projects in rural communities.
- Advances California energy policies through direct demonstration to elected officials that local economies directly benefit from an increase in local clean energy investments, careers, and customer bill savings.

- Produces trained, local workforce that provides energy services to rural communities to enable energy and cost savings, and GHG emissions reductions.

Outcome 2: Energy consumption, energy cost, and GHG emission are reduced across the region, contributing to California’s decarbonization and energy efficiency goals.

The RuralREN North’s proposed portfolio of programs will raise awareness of the benefits of energy efficiency and decarbonization. The programs will provide the necessary information, technical support, financial resources, and actionable recommendations for rural customers to implement energy efficient technologies and practices. When a customer decides to take action to implement energy efficiency measures, they will be guided to the RuralREN North’s resource acquisition programs, or to an IOU core or third-party resource acquisition programs, to ensure savings are captured and reported. This is consistent with our guiding principle of collaboration. The RuralREN North will continue to grow and maintain engagement with energy efficiency industry providers and PAs to ensure the most effective use of resources, avoid duplication, and streamline the customer experience. With its local presence and engagement with customers, the RuralREN North will make it easier for these other program providers to identify and complete energy efficiency projects quickly, making rural communities more attractive to serve.

As local needs, policies, or technologies evolve, the RuralREN North will design and test complementary program offerings, delivered by local workforces, to uniquely address objectives and barriers. As individual programs prove successful in reducing market barriers and achieving expected outputs and outcomes, the RuralREN North will look to offer programs in other rural regions. We expect such sharing of best practices to be adjusted according to the unique challenges and opportunities presented in specific rural areas.

Outcome 3: Hard-to-reach and underserved communities have access to incentives and financing tailored to their needs to encourage adoption of energy efficiency and electrification projects.

The RuralREN North will deliver local energy efficiency solutions with incentives and financing that can move the needle for rural customers with the highest energy burdens.

As stewards of the regions we serve, we remain committed to helping our communities grow and thrive through clean energy, while maintaining a rural character. Being able to adapt and respond to local needs is one of our greatest strengths. Part of serving rural spaces is understanding the unique perspectives and accepting their views and opinions that are often not in alignment with the rest of the state. It is our responsibility to help our communities meet California’s ambitious energy and climate policy goals, in terms they can accept, support, and in time, champion.

RuralREN North’s Implementing Agencies have a proven record of:

- Relationships with local governments and trusted, established community-based organizations

- Community involvement
- Involvement in shaping regulatory and state policies

RCEA and SBC also have:

- A history of delivering local EE programs
- Collaborative working relationships with IOUs, RENs, CCAs, and third-parties

Description of Service Territory

Figure 3: RuralREN North Service Territory



Geographic Factors

RuralREN North will serve a vast area of California as shown in Figure 3.

The region covers approximately 29,421 square miles – about 18% of the state's land area and includes 17 of California's 58 counties. The population of the region is 1.6 million, just 4% of the state's population. The population density of the region is relatively sparse, at 55 people per square mile, which is significantly lower than California's overall population density of 254 people per square mile. In comparison, Table 2 below presents land areas and populations served by other California Regional Energy Networks. Clearly, the large land area and diverse geography of the region alone make achieving energy efficiency objectives much more difficult than in metropolitan regions. RuralREN North will rely on its Implementing Agencies,

which have decades of experience in energy efficiency programs and deep-rooted relationships with their communities throughout the four regions. RuralREN North Implementing Agencies will be the primary contact for energy efficiency program providers to help them increase rural program participation while tailoring specific and complementary local program offerings of their own.

Table 3: California RENs Area and Population Served

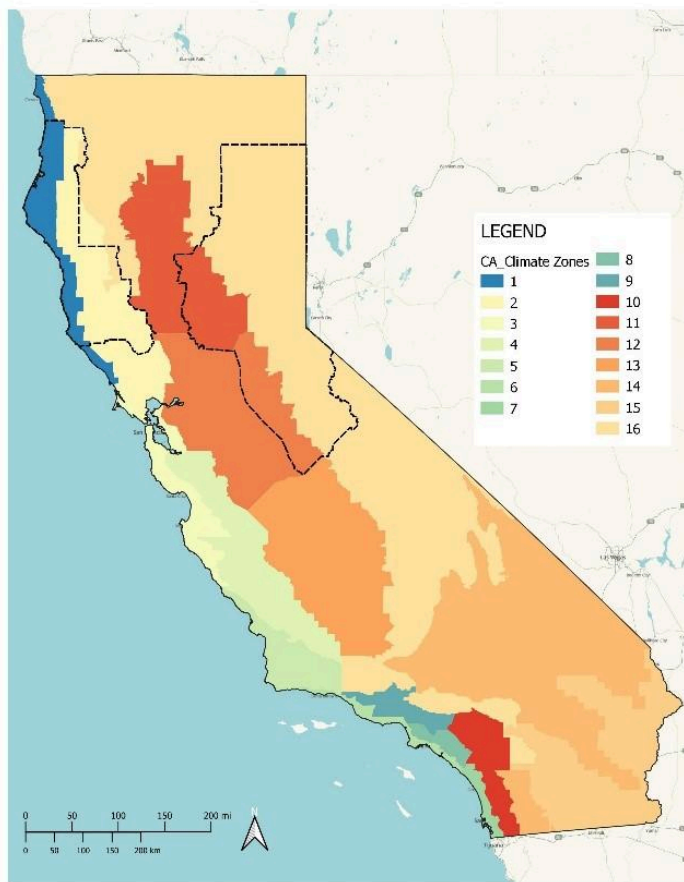
REN Name	Counties	Population	Area, Sq Miles	Population/Sq Mile
RuralREN North	17	1,604,683	29,344	55
CCR-REN	14	5,462,342	51,883	105
BayREN	9	7,685,888	6,910	1,112
I-REN	2	4,789,628	27,277	176
3C-REN	3	1,568,934	7,876	199
SoCalREN*	13	21,035,371	71,777	293
SDREN	1	3,289,701	4,210	781

**Overlaps with Counties in 3C-REN, I-REN, and RuralREN Central*

Data Source: US Census Bureau

Climate Zones

Figure 4: Climate Zones



The RuralREN North region is characterized by diverse geographic areas ranging from northern coastal to the high, semi-arid mountainous region in the eastern part of the state. These areas have climates that include some of the state's most extreme temperature conditions, causing higher than average energy consumption, and energy cost burden. Figure 4 shows the different climate zones across the region. Table 3 shows the average heating and cooling degree days for each climate zone, which are a proxy for heating and cooling energy consumption. The climates where RuralREN North customers live present an opportunity for energy savings and system benefits that RuralREN North will address with innovative, focused solutions. The colder climates of the North Coast and Sierra regions suggest good opportunities for weatherization and decarbonization measures, especially electric heating.

Table 4: Heating and Cooling Degree Days in RuralREN North Climate Zones

Climate Zone	RRENN Territory	Characterization City	CDD	HDD
1	North Coast	Arcata	15	4,224
2	North Coast	Santa Rosa	369	3,052
11	Sierra	Red Bluff	1,937	2,573
12	Sierra	Sacramento	1,332	2,498
16	North Coast & Sierra	Blue Canyon	459	5,315

Demographics

Table 5: Demographics by Region and Subregion

Rural REN North		
Demographics Category	Region Stats	California Stats
Land Mass (land area in Square Miles)	29,344	155,859
Population		
Percentage of California population in RuralREN North territory	4%	
Population Number	1,604,683	39,356,104
Population Density (People per square mile)	54.7	252.5
Education Breakdowns		
HS Grad or Higher (Percentage of persons age 25+)	54%	55%
Bachelor's Degree or Higher (Percentage of persons age 25+)	32%	36%
Unemployment Rates	7%	6%
Age Range		
Persons under 5	5%	6%
Persons under 19	18%	19%
Persons above 19 and under 65	56%	60%
Persons 65 or above	21%	15%
Equity Breakdowns		
Number of Tribes	44	109
County contains lands belonging to a federally recognized California Indian tribe	65% or 11/17 Counties	
Percentage of Veterans	8%	5%
Included within definition of "low-income communities" defined by paragraph (2) of subdivision (d) of Section 39713 of Health & Safety Code	65% or 11/17 Counties	
Percent of students eligible to receive FRPM	50%	65%
Considered Geographically HTR by CPUC definition	76% or 13/17 Counties	

"Disadvantaged community" as defined by subdivision (g) of Section - whose median income is 80% of the state median income (\$75,235 is median income per census quick facts - 2015-2019), 80% is \$60,188		59% or 10/17 Counties	
Index of Relative Rurality is >0.50		65% or 11/17 Counties	
Poverty Rates ⁵	Near Poverty	25.7	
	Poverty	11.1	
	Deep Poverty	3.7	
Environmental Breakdowns			
Tier 2 or higher Fire District		94% or 16/17 Counties	90% or 52/58 Counties
Tier 3 (Highest) High Fire Threat District		82% or 14/17 Counties	64% or 37/58 Counties

North Coast

Demographics Category	Region Stats	California Stats
Land Mass (land area in Square Miles)	8,330	155,859
Population		
Percentage of California population in RuralIREN North territory	1%	
Population Number	295,301	39,356,104
Population Density (People per square mile)	35.5	252.5
Education Breakdowns		
HS Grad or Higher (Percentage of persons age 25+)	51%	55%
Bachelor's Degree or Higher (Percentage of persons age 25+)	26%	36%
Unemployment Rates	9%	6%
Age Range		
Persons under 5	5%	6%
Persons under 19	17%	19%

⁵ Poverty Rates by Region: ppic.org

Persons above 19 and under 65	56%	60%
Persons 65 or above	21%	15%
Equity Breakdowns		
Number of Tribes	22	109
County contains lands belonging to a federally recognized California Indian tribe	100%	
Percentage of Veterans	7%	5%
Included within definition of "low-income communities" defined by paragraph (2) of subdivision (d) of Section 39713 of Health & Safety Code	100%	
Percent of students eligible to receive FRPM	68%	65%
Considered Geographically HTR by CPUC definition	100%	
"Disadvantaged community" as defined by subdivision (g) of Section - whose median income is 80% of the state median income (\$75,235 is median income per census quick facts - 2015-2019), 80% is \$60,188	100%	
Index of Relative Rurality is >0.50 ⁶	100%	
Environmental Breakdowns		
Tier 2 or higher Fire District ⁷	100%	90% or 52/58 Counties
Tier 3 (Highest) High Fire Threat District	100%	64% or 37/58 Counties

Sierra Nevada

Demographics Category ⁸	Region Stats	California Stats
Land Mass (land area in Square Miles)	21,014	155,859
Population		
Percentage of California population in RuralREN North territory	3%	
Population Number	1,309,382	39,356,104

⁶ Index of Relative Rurality: Waldorf, B. (2006). A Continuous Multi-dimensional Measure of Rurality: Moving Beyond Threshold Measures. <https://ageconsearch.umn.edu/record/21383?v=pdf>

⁷ CPUC High Fire Districts Map <https://cpuc.maps.arcgis.com>

⁸ All demographics sources: CalEnviroScreen, Governor's Office of Emergency Services GIS Data

Population Density (People per square mile)	62.3	252.5
Education Breakdowns		
HS Grad or Higher (Percentage of persons age 25+)	55%	55%
Bachelor's Degree or Higher (Percentage of persons age 25+)	33%	36%
Unemployment Rates	6%	6%
Age Range		
Persons under 5	5%	6%
Persons under 19	18%	19%
Persons above 19 and under 65	56%	60%
Persons 65 or above	21%	15%
Equity Breakdowns		
Number of Tribes	22	109
County contains lands belonging to a federally recognized California Indian tribe	57% or 8/14 Counties	
Percentage of Veterans	8%	5%
Included within definition of "low-income communities" defined by paragraph (2) of subdivision (d) of Section 39713 of Health & Safety Code	62% or 8/14 Counties	
Percent of students eligible to receive FRPM	46%	65%
Considered Geographically HTR by CPUC definition ⁹	71% or 10/14 Counties	
"Disadvantaged community" as defined by subdivision (g) of Section - whose median income is 80% of the state median income (\$75,235 is median income per census quick facts - 2015-2019), 80% is \$60,188	50% or 7/14 Counties	
Index of Relative Rurality is >0.50	79% or 11/14 Counties	
Environmental Breakdowns		
Tier 2 or higher Fire District	95% or 13/14 Counties	90% or 52/58 Counties

⁹ CPUC HTR Definition from Decision D. 18-05-041

Tier 3 (Highest) High Fire Threat District

79% or
11/14 Counties

64% or
37/58 Counties

Energy Characteristics

Utilities serving RuralREN North

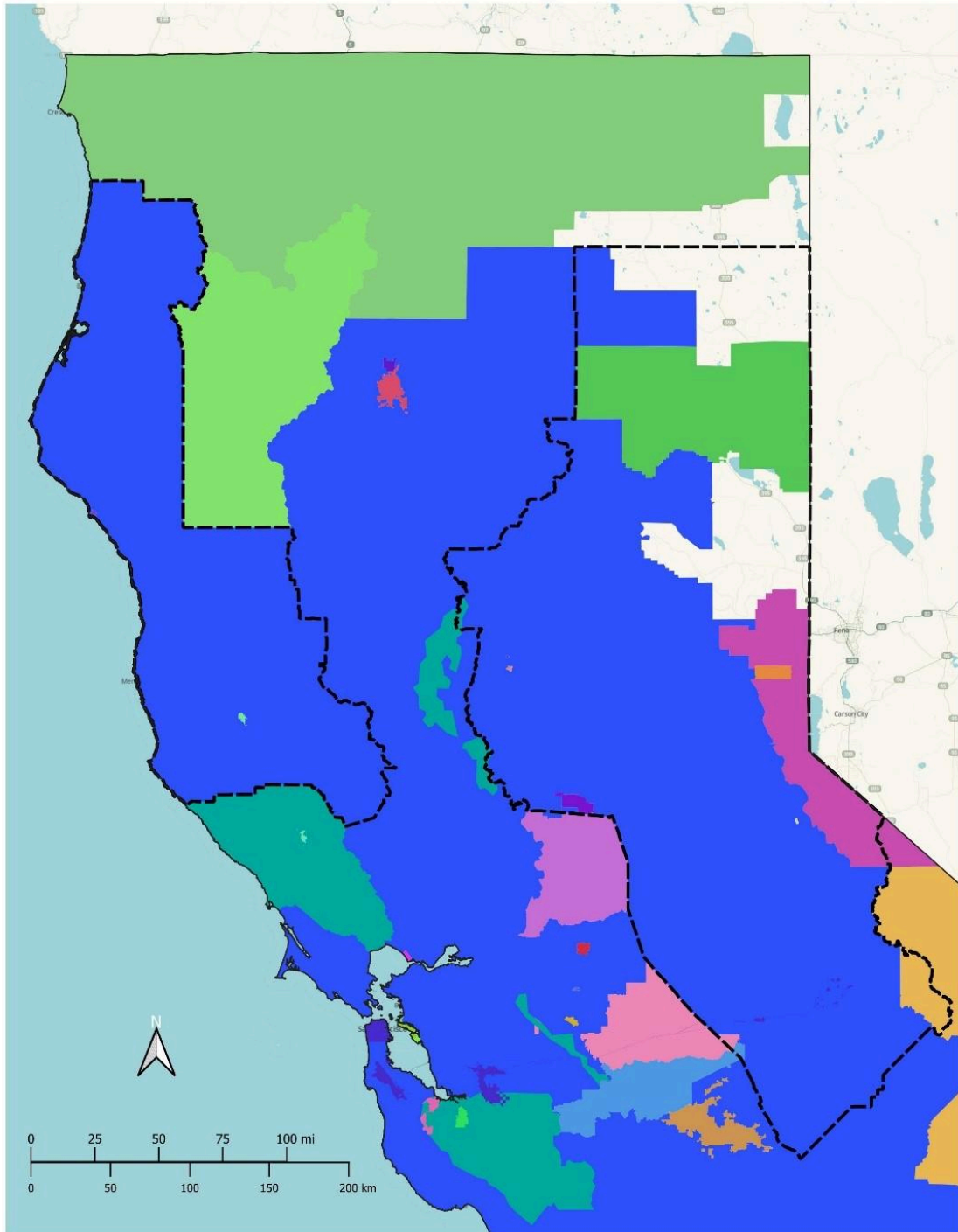
The RuralREN North service territory is served by Pacific Gas and Electric Company (PG&E). Electricity in the RuralREN North territory is provided by PG&E as well as other Publicly Owned Utilities (POUs). Natural gas is provided by PG&E, as well as pockets served by other providers and various companies provide unregulated propane to customers in all regions of RuralREN North. Table 4 shows utilities serving the RuralREN North regions, while Figure 7 shows the RuralREN North regions overlaid on a map of all utility service territories. Initially, only customers of PG&E will be eligible for participation in RuralREN North energy efficiency programs. RuralREN North will coordinate with utility providers in the region to explore possible collaboration with, and co-funding of programs to include non-IOU customers soon.

Table 6: Utilities Serving RuralREN North Customers

RuralREN Region	Electricity Providers	Natural Gas Providers	CCAs	RENs
North Coast	PG&E, City of Ukiah, Shelter Cove Resort Improvement District, Pacific Power	PG&E	RCEA, Sonoma Clean Power	None
Sierra	PG&E, SMUD, Roseville Electric, Lassen Municipal Utility District, Plumas-Sierra Rural Electric Cooperative, Surprise Valley Electrification Corp., Biggs Municipal Utilities, Gridley Electrical Utility, Truckee Donner Public Utilities District, Liberty Utilities, Kirkwood Meadows Public Utility District	PG&E, Southwest Gas, Tuscarora, City of Susanville	Pioneer Clean Energy	None

Figure 5: Electricity Providers

Colors in the map below represent the different utility districts within the region, with PG&E being the largest in blue.



Annual Energy Cost and Energy Burden

Annual energy cost and energy burden in the RuralREN North regions are higher than non-rural California.

Table 7: Annual Energy Cost and Energy Burden - Average

Region	Energy Burden	Annual Cost (All Energy)
North Coast	2.9%	\$2,647
Sierra	2.4%	\$2,823
RuralREN North	2.5%	\$2,790
Non-RuralREN North	1.7%	\$2,331
All California	1.7%	\$2,351

Source: US Census

According to the ACEEE, “rural households in every region of the United States have a higher median energy burden than the median in their region”.¹⁰ This is true in the RuralREN North service territory as well -- the average energy burden in the RuralREN North region is 47% higher than the rest of California. This could be attributed to generally larger household sizes, higher heating degree days, and a higher percentage of expensive heating fuel in the RuralREN North area. The RuralREN North region also has more single-family homes than non-rural parts of California and larger households (occupants per housing unit).

Table 8: Propane Use - Rural vs. Non-Rural Household

Region	Number of Households heated with Propane	% Households heated with Propane
North Coast	114,219	16%
Sierra	491,629	18%
RuralREN North	605,848	18%
Non-RuralREN North	12,611,738	3%
All California	13,217,586	3%

¹⁰ Drehtobl, A., L. Ross, and B. Stickles. July 2018. The High Cost of Energy in Rural America: Household Energy Burdens and Opportunities for Energy Efficiency. Washington, DC: American Council for an Energy-Efficient Economy

Table 9: Housing Types - RuralREN vs. California Average

Region	Single Detached	Single Attached	Two to Four Units	Five Plus Units	Mobile Homes
North Coast	70.7%	3.2%	6.6%	7.4%	11.7%
Sierra	76.1%	2.8%	5.3%	9.2%	6.3%
RuralREN North	75.1%	2.9%	5.5%	8.9%	7.3%
Non-RuralREN North	56.4%	7.5%	7.9%	24.8%	3.4%
All California	57.3%	7.2%	7.8%	23.9%	3.6%

RuralREN North Considerations

Hard-to-Reach, Disinvested, Disadvantaged, and/or Underserved

RuralREN North's customers are largely
hard-to-reach, disinvested, disadvantaged and/or
underserved.

Figure 6: Hard to Reach Populations within RuralREN North service territory

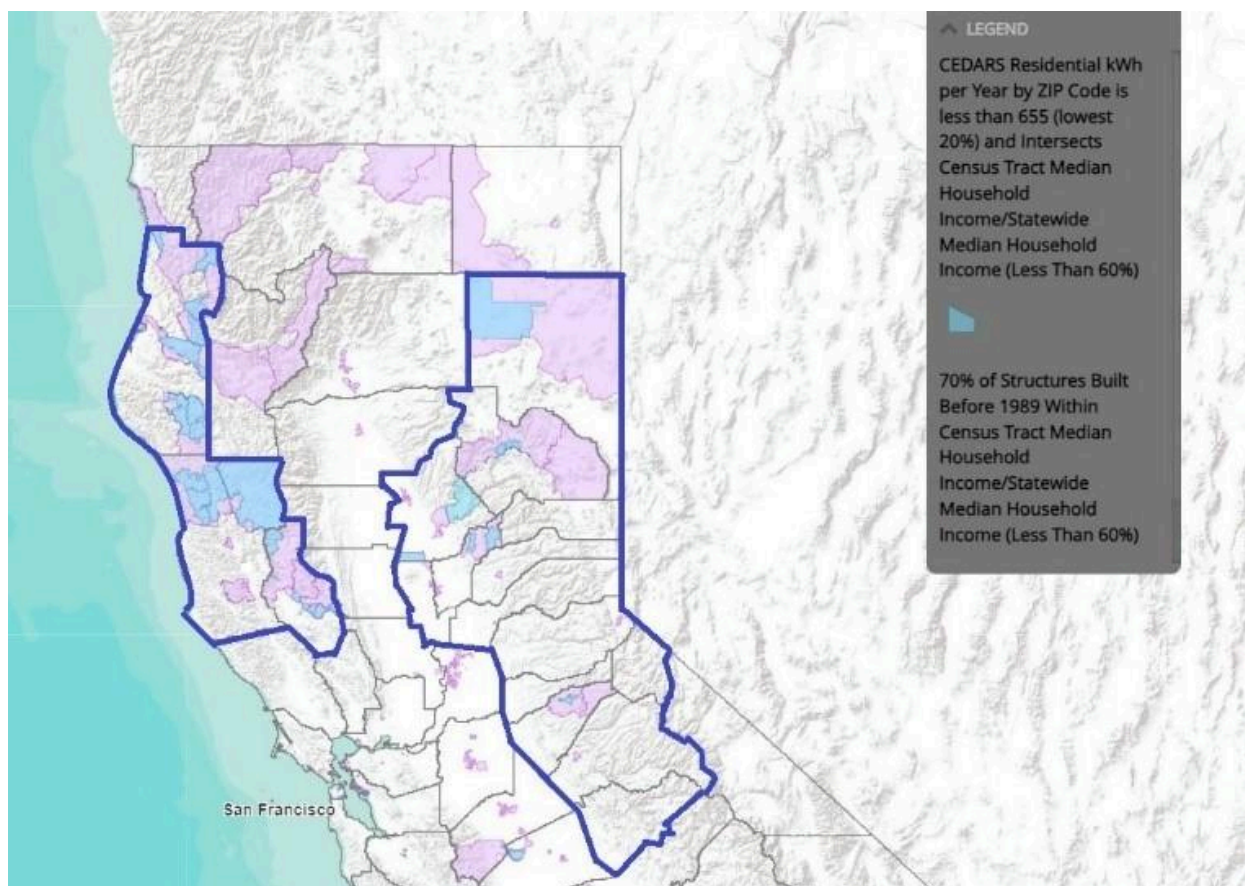
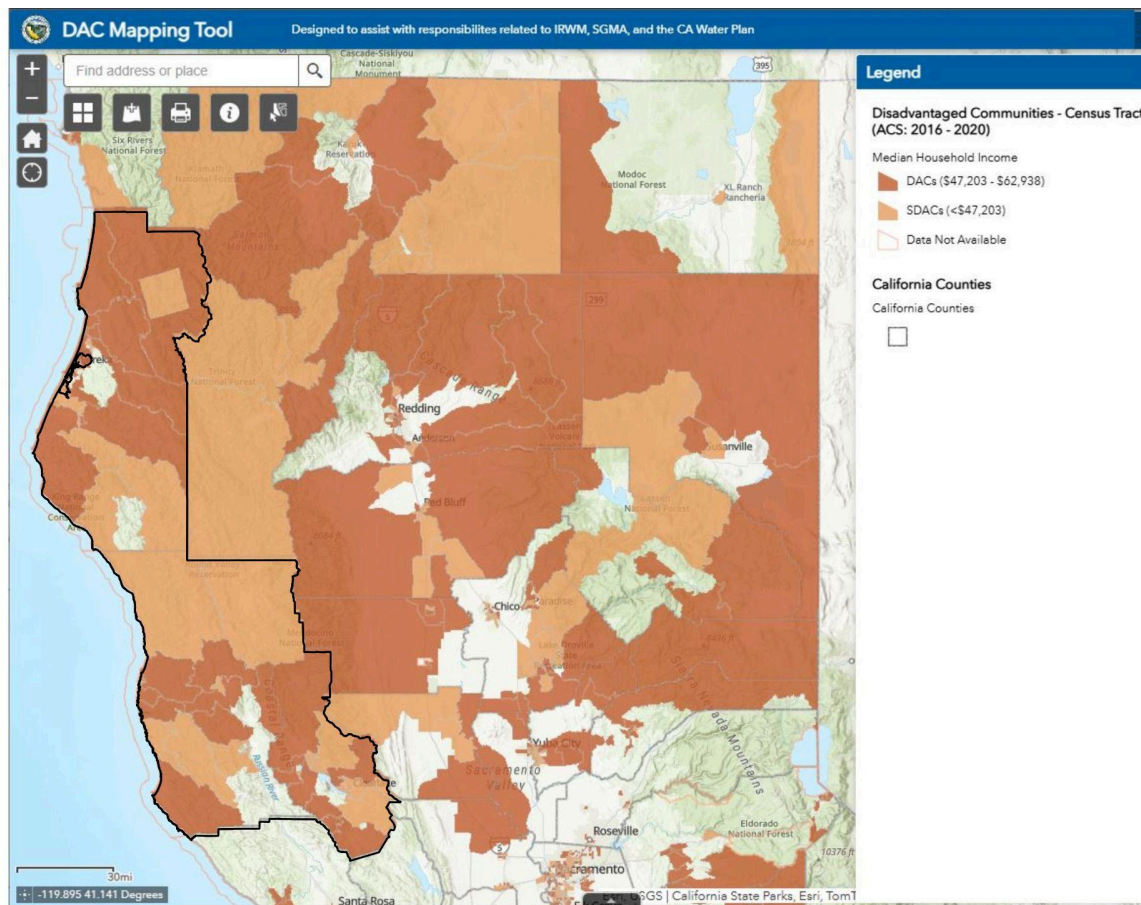


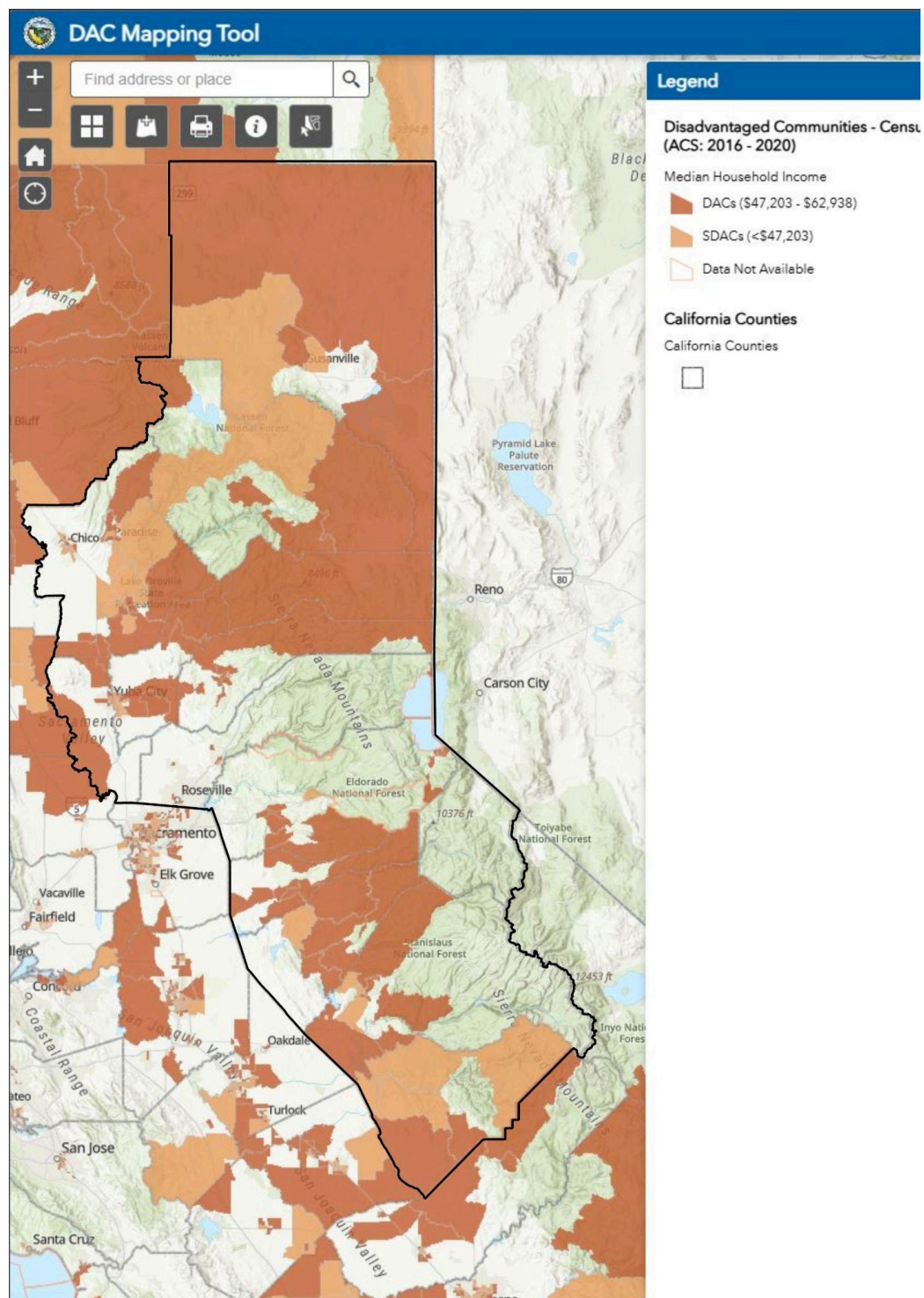
Figure 7: Disadvantaged Communities in the North Coast



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¹¹ In this instance, Disadvantaged Community (DAC) is defined in Water Code 79505.5 as a community with an annual median household income that is less than 80% of the Statewide annual median household income, or \$56,982. A Severely Disadvantaged Community is defined by MHI below 60% of the statewide average, or \$43,737. A Small Disadvantaged Community refers to a Disadvantaged Community that has a yearlong population of no more than 10,000 persons, <https://gis.water.ca.gov/app/dacs/>

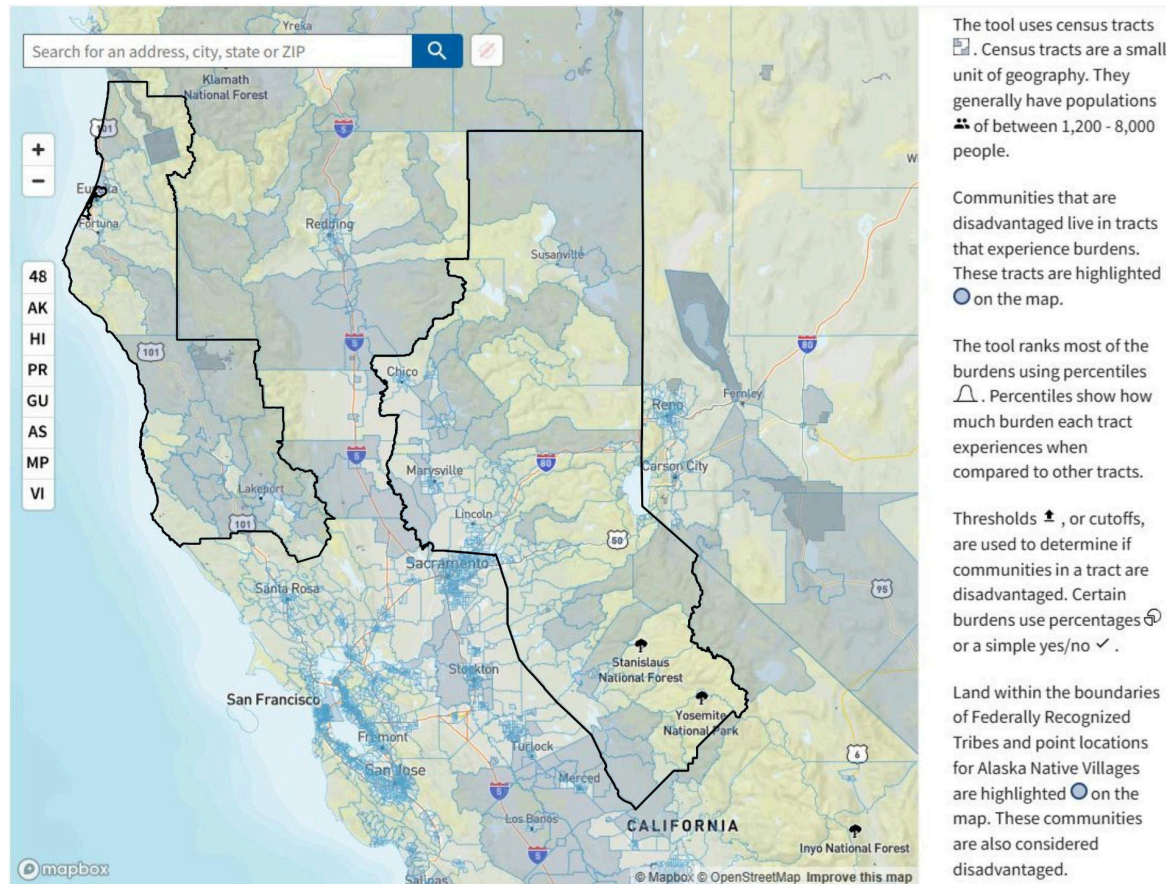
Figure 8: Disadvantaged Communities in the Sierra



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¹² In this instance, Disadvantaged Community (DAC) is defined in Water Code 79505.5 as a community with an annual median household income that is less than 80% of the Statewide annual median household income, or \$56,982. A Severely Disadvantaged Community is defined by MHI below 60% of the statewide average, or \$43,737. A Small Disadvantaged Community refers to a Disadvantaged Community that has a yearlong population of no more than 10,000 persons, <https://gis.water.ca.gov/app/dacs/>

Figure 9: Climate and Economic Screening Tool (Justice40) Map



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California's rural regions face higher poverty and unemployment rates than their urban and suburban counterparts, and struggle with a lack of well-paying jobs.¹⁴ Rural California continues to suffer disproportionately from the ongoing recession.¹⁵ This is compounded by a recent and dramatic increase in inflation, 7% in 2021, which is the highest jump in 40 years.¹⁶ Rural regions consistently suffer from higher unemployment rates than urban cores, and this is compounded by the number of seasonal jobs in rural areas. RuralREN North's proposed workforce development and career creation efforts help address and bridge this urban/rural divide.

¹³ Climate and Economic Justice Screening Tool, <https://screeningtool.geoplatform.gov/en/#6.61/39.483/-121.626>

¹⁴ Ono, How to Spur Prosperity in Overlooked Rural California and Benefit the Entire State, California Forward, October 1, 2018

¹⁵ Koppam, Raksha. "Gaps in U.S. Rural and Urban Economic Growth Widened in the Post-Great Recession Economy, with Implications amid the Coronavirus Recession." Equitable Growth, 6 Aug. 2020, <https://equitablegrowth.org/gaps-in-u-s-rural-and-urban-economic-growth-widened-in-the-post-great-recession-economy-with-implications-amid-the-coronavirus-recession/>.

¹⁶ U.S. Bureau of Labor Statistics, 2022, Economic News Release: Consumer Price Index Summary, <https://www.bls.gov/news.release/cpi.nr0.htm>.

The RuralREN North's region historically receives fewer economic benefits from CPUC energy efficiency programs. Many regions within the RuralREN North area have among the lowest participation rates in California, receiving less than \$5,000 per 1,000 people, the lowest 20% in the state.

The RuralREN North will focus much of its attention on equity-targeted communities and customers in two of three CPUC-defined equity categories: hard-to-reach and underserved. Rural regions do not include many of CalEnviroSceen's Disadvantaged communities as defined by pollution, however, the RuralREN North region does include many tribal communities that are identified as hard-to-reach and underserved. Table 12 shows estimated RuralREN North populations that are hard-to-reach and/or low income.

Table 10: Hard-to-Reach and Low-Income Populations in RuralREN North territory

Region	Number of Counties	Low Income Counties	% Low Income Counties	Number of HTR Counties	% Low HTR Counties
North Coast	3	3	100%	3	100%
Sierra	14	8	57%	10	71%
RuralREN North	17	11	65%	13	76%
Non-RuralREN North	41	16	39%	18	44%
All California	58	27	47%	21	36%

Source: Census

CA EDD Metropolitan Area Counties

Underserved “ESJ communities are commonly identified as those where residents are: predominantly communities of color or low-income; underrepresented in the policy setting or decision-making process; subject to a disproportionate impact from one or more environmental hazards; and likely to experience disparate implementation of environmental regulations and socio-economic investments in their communities.”¹⁷

Hard-to-Reach – “Those customers who do not have easy access to program information or generally do not participate in energy efficiency programs due to a combination of language, business size, geographic, and lease (split incentive) barriers.”¹⁸

¹⁷ Environmental and Social Justice Action Plan (V. 1). (2019, February). California Public Utilities Commission. <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/news-and-outreach/documents/news-office/key-issues/esj/environmental-and-social-justice.pdf>

¹⁸ Id, FOF14

Economic Impacts of Recession, Inflation, and On-going Pandemic

Rural economies were the hardest hit by the 2008 recession and the slowest to recover.¹⁹ By 2017, average rural [employment was still two percent lower](#) than in 2007. Businesses were hit especially hard—in the first four years of the recovery, [counties under 100,000 lost 17,500 businesses, while economies in counties over 1 million people added 99,000](#) businesses.²⁰ COVID-19 only [exacerbates these pressures](#): The shutdown of commerce has already put small businesses, a key driver of rural economies, into an economic vise grip, and almost twice as many [rural areas rely primarily on the recreation industry](#) as urban areas.²¹

After the global pandemic, business and residential customers have altered the ways they use energy.²² In the energy efficiency industry, programs have responded with modifications to how programs are delivered to customers. RuralREN North will collaborate with program providers to adjust program delivery to the new normal through locally sourced labor. RuralREN North will also work with customers on identifying new barriers and opportunities to energy efficiency caused by the pandemic.

Career Disconnect

Climate Adaptive Careers aren't part of the rural experience because they're not accessible.

When considering workforce development, environmental justice, clean energy curriculum in schools, and community engagement, these topics amalgamate under the “climate adaptive career.” Rapid changes happening within regulation, policy, industry and in our communities make clear that the scope is beyond just energy efficiency. Climate Adaptive Careers are reactive to climate change and displacement due to climate related events.

A new approach is needed to ensure Climate Adaptive Careers are accessible to rural workers, but also deliver skills sets missing from traditional offerings. Existing programs with career technical training emphasis lack “soft skills” needed for business development and industry understanding. A turn-key training with soft skills, career support, certification and wraparound services built in is needed. Largely, there is a lack of awareness of the California energy efficiency market design, how programs are delivered, and which career opportunities exist. Finally, there is a growing need for career building and upskilling of existing workers in decarbonization.

Due to the lack of opportunities to train in-person in rural areas, trainees miss out on fundamental hands-on experience, creating education gaps and setting them at a disadvantage. While the IOUs have a history of providing quality education through Energy Education Centers in-person and online

¹⁹ Koppam, Raksha. “Gaps in U.S. Rural and Urban Economic Growth Widened in the Post-Great Recession Economy, with Implications amid the Coronavirus Recession.” Equitable Growth, 6 Aug. 2020, <https://equitablegrowth.org/gaps-in-u-s-rural-and-urban-economic-growth-widened-in-the-post-great-recession-economy-with-implications-amid-the-coronavirus-recession/>.

²⁰ Ferguson, Pipa, Geismar, Redesign required: Principles for reimagining federal rural policy in the COVID-19 era, April 14, 2020

²¹ IBID

²² Motya, Marlene, et al. “Energy Management: Paused by Pandemic, but Poised to Prevail.” Deloitte Insights, Deloitte, 8 July 2020, <https://www2.deloitte.com/us/en/insights/industry/power-and-utilities/energy-study-of-businesses-and-residential-consumers.html>.

WE&T programs, neither are necessarily a right fit for hyper-rural communities. The RuralREN North WE&T program should collaborate with IOU partners to utilize existing resources and expand the content reach into our communities.

Climate Change Impacts

The regions comprising the RuralREN North territory are facing increasing threats from climate change and climate-related disasters.

Climate change manifests in the territory through climate variability which is expanding wildfire seasons and more frequent catastrophic wildfires,²³ continued drought,²⁴ an increase in severe storms and precipitation events,²⁵ record heat waves,²⁶ sea level rise,²⁷ and reduced snowpack and water resources.²⁸

²³ 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>.

²⁴ 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>.

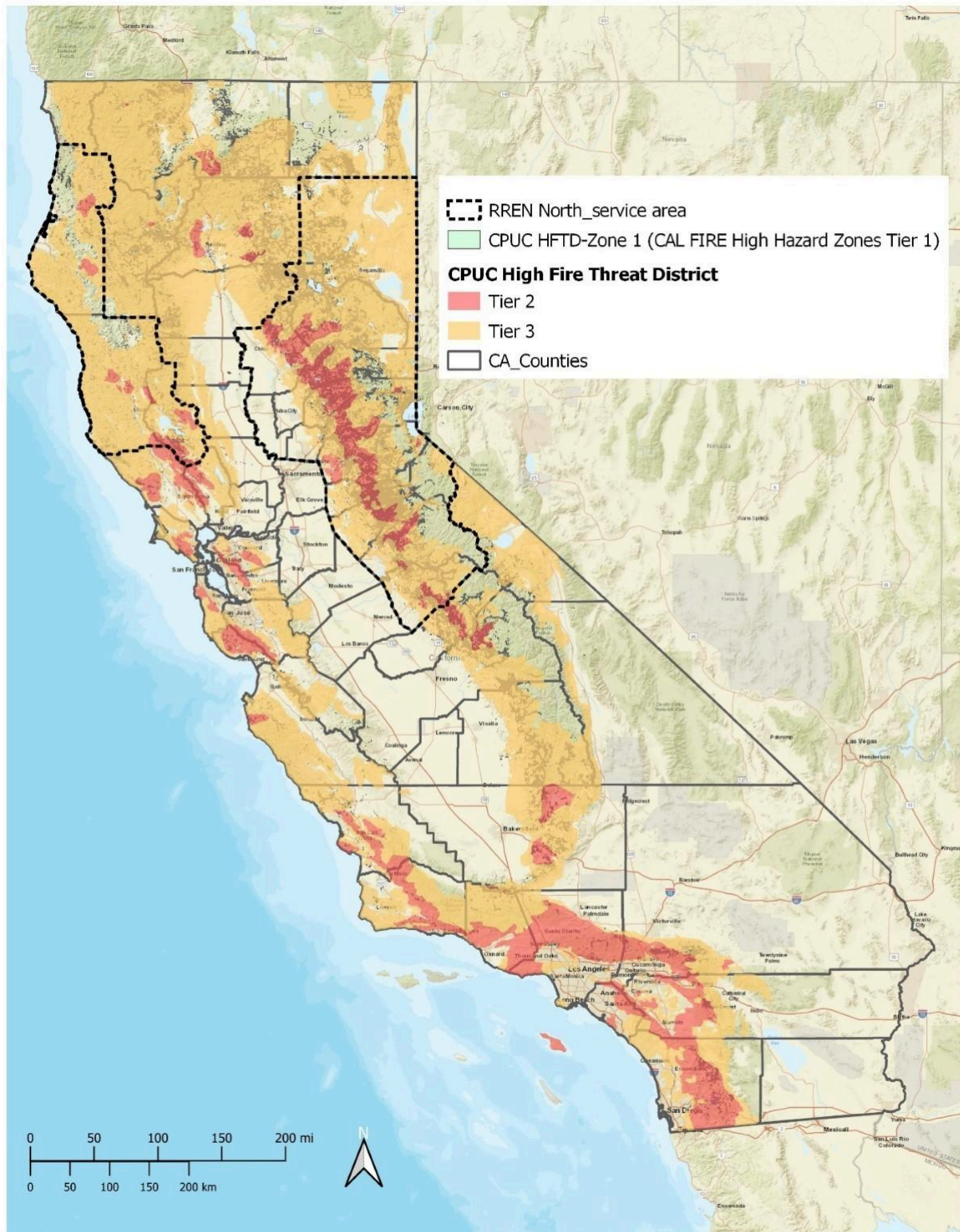
²⁵ "Extreme Weather in California and Climate Change: Droughts and Flooding." Institute of the Environment and Sustainability at UCLA, The Regents of the University of California, 1 Apr. 2019, <https://www.ioes.ucla.edu/project/extreme-weather/>.

²⁶ "Climate in California: Temperatures in California Over Time." USAFacts.org, <https://usafacts.org/issues/climate/state/california#climate>.

²⁷ 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

²⁸ Berg, N., and A. Hall (2017), Anthropogenic warming impacts on California snowpack during drought, *Geophys. Res. Lett.*, 44, 2511–2518, doi:10.1002/2016GL072104

Figure 10: CAL FIRE Hazard Zones



Wildfires have increased substantially in rural regions. The RuralREN North counties are highly represented in CPUC High Fire Threat Districts, including 82% in Tier 3 and over 94% in Tier 2. Combined, the total number of climate related events, including wildfires, drought, flooding, and temperature variances, from 1999 through 2021 has increased by over 13,000%. All 17 counties show regions of severe drought and several are suffering from extreme drought conditions.²⁹ According to FEMA, most counties in the RuralREN North region have a relatively low ability to prepare for anticipated natural hazards, adapt to changing conditions, and withstand and recover rapidly from disruptions when compared to the rest of the U.S.³⁰

Climate change impacts have, and will continue to, affect the regions in the RuralREN North territory, stressing the importance of energy efficiency, awareness of low GWP (Global Warming Potential) refrigerant, and clean, renewable energy as pathways to address climate change and to advance the state's decarbonization policies.

Energy Efficiency Strategy

RuralREN North's proposed strategy for energy efficiency in rural communities starts with a core portfolio of programs aimed at addressing barriers that the RuralREN North customers face in implementing energy efficiency, including

- increasing awareness of the benefits of energy efficiency and providing energy information and tools that will help spur on customer implementation of EE behaviors and measures
- supporting the initial capital outlay required to adopt new energy efficiency technologies and equipment
- training and resources for public agencies to ensure compliance with energy codes and make progress on achieving carbon reduction goals
- ensuring availability of skilled tradesmen and contractors needed to implement energy efficiency upgrades

RuralREN North's energy efficiency strategy incorporates near- and long-term planning and goals. Near-term covers the first three years of implementation in this program cycle (2025 – 2027), while longer-term addresses the period 2028 to 2031. Described in this section are strategies that will be implemented during the first three years, along with the general anticipated evolution of the portfolio for the second four-year cycle and beyond. As our rural communities become more aware of basic energy efficiency principles and technologies, the RuralREN North programs will incorporate more advanced energy management concepts and technologies, including demand response, load management, normalized metered energy consumption and others.

²⁹ "Current U.S. Drought Monitor Conditions for California." Drought.gov, National Drought Mitigation Center, National Oceanic and Atmospheric Administration, and USDA, 2022, <https://www.drought.gov/states/california>.

³⁰ "FEMA: National Risk Index." FEMA's Natural Hazards Risk Assessment Program, Department of Homeland Security. <https://hazards.fema.gov/nri/map#>.

Strategy for application/use of various and new methods for savings forecasting and quantification methods (e.g. normalized metered energy consumption including requirements in Public utilities Code section 25310 © (5))

In its initial portfolio, the RuralREN North will use a combination of deemed and Normalized Metered Energy Consumption (NMEC) methodology for savings forecasting and quantification. This is appropriate given the equity-focused residential and small business incentive strategy of its Resource Acquisition programs, and the limited past participation in energy efficiency programs in general within this customer sector in rural regions.

Strategies for market intervention and energy efficiency adoption: e.g. targeted points of intervention; delivery channels/platforms/methods

The RuralREN North will deploy multiple strategies for market intervention and energy efficiency adoption. Strategies have been selected to address common barriers to energy efficiency adoption and tailored to the rural markets to be served within each sector. Strategies incorporate equity principles and needs throughout the portfolio. In future years, portfolio strategies will increasingly emphasize equity, resilience, grid management and GHG reduction. Specific market intervention strategies are summarized in Table 10 below and discussed more in Exhibit Two: Portfolio Plan.

Table 11: Strategies for Market Intervention

Sector/ Program	Common Barrier Addressed	Intervention	Delivery Channels	Platforms/ Methods	Future Enhancements
Commercial (SMB)	Lack of information; First cost	Rebates; Energy audits; Incentives; Financing (from other programs)	Direct to customers; Trade Allies; Community support	Deemed savings; NMEC	Grid/TOU management
Cross Cutting - Codes & Standards	Understanding of codes; Public agency resources stretched too thin	Training of building officials and design, construction teams; Energy coaches to support code enforcement staff	Direct to public, staff, design and construction teams	Education & Training Energy coaches	Electrification technologies; Renewable integration; Grid/Load management
Cross Cutting - Finance	First cost	OBf Bridge Loans; Microloans; Electrification	Direct to customers; Trade allies; Energy Advisors	Revolving Loan fund; No/low interest; Flexible terms	On bill repayment

Cross Cutting - WE&T	Availability of skilled trades	Training for contractors, tribal communities, and those entering the workforce and upskilling for trade workers	Community-based organizations; Third party training organizations	Proven training methods and curriculum; Equity targeted candidates	Resilience training
Public	Resources/ Staffing	Benchmarking; Audits; Project implementation support (EE, DR, EV charging); Funding support	Energy advisors	Deemed, custom; Shared database	NMEC, Resilience support
Residential	First cost; hassle factor; information	Remote phone-based and in-person audits (EE, DR, EV charging); Energy advisor support; Rebates; Financing	Downstream; Trade Allies; Community Based Organizations	Deemed savings; NMEC	TOU rate management; Grid/Load Management; Resilience measures

New strategies for spurring innovation:

The RuralREN North approach—for rural, by rural, equity-focused—encourages rural communities to enter the energy efficiency arena. Through our guiding principles of equity, community, and collaboration we prioritize working closely with other rural agencies, elected and community leaders, community benefit organizations and the broader community to pull back the curtain on the industry and engage in accelerating the adoption of more climate supportive policies.

The RuralREN North Advisory Committees are an opportunity for community leader level exposure to the design and implementation process. Through a collaborative structure the RuralREN North benefits from our Equity and ESJ colleagues' experiences and input while the RuralREN North can provide an understanding of energy efficiency design and implementation. Similarly, the group can cross-share to build policy ideas that can address expanding adoption of GHG reducing technologies by their constituencies. The Advisory Committees will provide an opportunity for RuralREN North to work with community leaders to make energy efficiency more accessible to our communities.

Table 12: Strategies for Spurring Innovation

Innovation Channel/Opportunity	RuralREN North Supporting Strategy
New, Diverse Business Entrants to EE Market	<ul style="list-style-type: none"> Contracting opportunities with RuralREN North emphasize diversity and a green economy
Traditional Actors (Businesses) Moving Into EE Market	<ul style="list-style-type: none"> WET upskilling Build awareness of EE business model in other markets Contracting opportunities for EE program implementation scope
Increase Adoption of New/Evolving GHG Reducing Technology	<ul style="list-style-type: none"> Res and Small Business Sector Electrification Audit recommendations, incentives and financing Collaborate with Statewide Emerging Technologies Pilot Program to deploy new GHG technologies at rural customer sites. Leverage non-EE funding for Electrification and GHG RDD to test or deploy new GHG technologies at rural customer sites

Throughout all levels of interaction, RuralREN North will seek to increase access points for the rural customer, as well as take in feedback on how to better penetrate the communities that can grow the industry forward more equitably.

Strategy for incorporating low global warming potential (low-GWP) refrigerants in the portfolio

According to California Air Resource Board (CARB), the most common refrigerant today, R-22, has a 100-year (GWP) of 1,810, almost 2,000 times the potency of carbon dioxide, so just one pound of R-22 is nearly as potent as a ton of carbon dioxide.³¹ RuralREN North will act as a trusted advisor to rural customers to advance the State's GWP refrigerant mitigation policies. As part of RuralREN North's energy efficiency offerings, RuralREN North will train the local workforces in our rural regions to increase awareness of alternate refrigerant solutions to enable rural customers to adopt lower and zero-GWP refrigerant applications for all applicable technologies (e.g., electric heat pump water heaters, HVAC systems, refrigeration systems).

³¹ High-GWP Refrigerants. (2022). California Air Resources Board <https://ww2.arb.ca.gov/resources/documents/high-gwp-refrigerants>

Table 13: Strategy for incorporating low global warming potential (low-GWP) refrigerants in the portfolio

Portfolio Sector/Program	RuralREN North Supporting Strategy
Codes & Standards	Provide information to building code officials, contractors, and designers about low GWP refrigerant benefits and code requirements.
Workforce Education & Training	Provide information to WET participants about CFC phase-out and low GWP refrigerant benefits and code requirements.
Residential & Commercial	Incorporate LGWP specs for rebated equipment (such as HVAC heat pumps, HPWHs); Low GWP Refrigerant information incorporated in audit reports.
Public	Low GWP Refrigerant information incorporated in audit reports.
Finance	Minimum technical requirements for financed equipment (such as HVAC heat pumps, HPWHs); Low GWP Refrigerant information incorporated in audit reports.

Portfolio Management Strategies

Segmentation Strategy Summary

The RuralREN North portfolio will focus on addressing the challenges of rural customers through complementary offerings in each of the three segments described below, with an emphasis on the Equity segments.³² The following presents an overview of RuralREN North’s overarching objectives to guide each portfolio segment to support and advance the CPUC policy objectives.

Equity – RuralREN North’s focus, and highest priority objective is to provide energy efficiency services to underserved and hard-to-reach rural customers. Appropriately 51% of our total proposed budget is allocated to the Equity segment to fund outreach and education, financing, and workforce education and training to rural hard-to-reach communities. Historically, the residential sector in rural hard-to-reach areas has been underserved by energy efficiency programs, therefore it represents RuralREN North’s largest opportunity and portfolio focus.

Resource Acquisition – RuralREN North is proposing two Resource Acquisition programs serving the Commercial (SMB) and Residential sectors. While we’ve classified these programs as primarily Resource Acquisition strategies, they will substantially target hard-to-reach, disinvested, disadvantaged communities and underserved participants consistent with RuralREN North’s equity objectives. These programs will have a goal of at least 70% participation by equity-targeted customers. The proposed budget allocation for the Resource Acquisition segment is 47%.

³² D. 21-05-031, pp. 14-15. “... the Commission’s Environmental and Social Justice (ESJ) Action Plan; 3 Improving access to energy efficiency for ESJ communities, as defined in the ESJ Action Plan, may provide corollary benefits such as increased comfort and safety, improved indoor air quality, and more affordable utility bills, consistent with Goals 1, 2, and 5 in the ESJ Action Plan.”

Codes and Standards – Of the RuralREN North’s portfolio budget, Two percent is allocated to the Codes & Standards segment. RuralREN North’s program intends to increase the efficiency of buildings and equip code enforcement agencies in rural hard-to-reach areas to comply with energy codes through our proposed Codes and Standards program.

Sector Strategy

Commercial

RuralREN North’s Commercial Sector program will focus on filling the unmet needs from other utility and statewide programs. It will deliver direct-to-customer rebates for energy efficiency and decarbonization upgrades and direct install options.

Also included are Energy Advisor services and financial incentives to small and medium-sized businesses. Region-specific outreach and energy audits will provide specific, actionable recommendations for improving the place of business to reduce energy consumption and guide the customer toward available incentives and financing options offered by RuralREN North or PG&E and third-party program implementers. RuralREN North will offer incentives for energy efficiency upgrades and GHG-reducing technologies such as heat pumps. Energy efficiency measures will include a variety of items such as controls, HVAC, and plug loads/appliances. The market focus is on small and micro-businesses to address the tenant landlord split incentive barrier that is faced by so many small businesses.

Cross Cutting

Codes & Standards

RuralREN North’s Codes and Standards program supports code enforcement agencies and better equips the building design and construction community to implement California’s ambitious Building Energy Efficiency Standards (Title 24), helping make buildings more efficient, paving the way for zero net energy building stock, and reducing energy use and greenhouse gas emissions in rural California’s most environmentally challenged regions.

Finance

Barriers of first cost and access to capital remain perhaps the biggest impediments to higher adoption rates of energy efficiency, especially in low- and moderate-income areas. RuralREN North’s Finance program will address two areas of need.

The Bridge Loan program will supplement the IOUs’ On-Bill Financing (OBF) loans with short-term loans to cover energy efficiency project costs during construction to “bridge” the time gap between application and funding of the OBF loan. This type of product covers energy efficiency project costs during construction to “bridge” the time gap between the time of application for IOU On-Bill Financing and funding of the OBF loan after construction completion. This gap can be many months, and in some cases a year or more. This type of funding lets non-residential customers implement energy

efficiency projects quicker and eliminates the added cost of contractor or bank financing during construction.

RuralREN North also will develop a microloan product that fills gaps in existing financing products such as GoGreen and PACE. The target customer groups would be residential and small to medium-sized businesses in the commercial, industrial, public, and agricultural sectors. The loan amounts are expected to be below currently available financing products (\$5,000) and would carry low or zero interest and fees.

Both loan programs will be fully developed through a competitive solicitation for design with the goal of creating products that meet needs of customers and complement existing offerings and avoiding conflict with the outcomes of the CPUC's ongoing Order Instituting Rulemaking to Investigate and Design Clean Energy Financing Options for Electricity and Natural Gas Customer R.20-08-022.

By removing first cost barriers, RuralREN North anticipates its finance strategy will 1) increase Resource Acquisition program participation; 2) increase IOU On-Bill Finance participation; 3) reduce turn over from project ideation to completion; and 4) drive more comprehensive energy projects.

Workforce, Education & Training

RuralREN North's WE&T program accelerates training (upskilling of existing workers and training for new workers) and increases new opportunities for employment in geographically hard-to-reach places to meet immediate needs. Seeking to address equity issues in access to and awareness of energy related careers, the RuralREN North WE&T offering presents pathways to diffuse program benefits more equitably for rural Californians. The program pathways are targeted broadly for disadvantaged workers. The program addresses skills training, trades advancement, pre-apprenticeship placement and supports building professionals, while coordinating with third-party program implementers and local employers to increase opportunities. It will support training and employ Energy Advisors to deliver parts of the RuralREN North Residential program, as well as upskill trades in the regions. The RuralREN North can promote specific courses and hold seats for those in the trade ally network, allowing local contractors the ability to upskill through specific certifications and training. The benefit being received by the contractor, the program will offer customized versions of in-person and virtual training curriculum to best serve the populations in each specific region. Individuals are enrolled into the program pathway that is best suited for them, and training is delivered directly and/or in coordination with the RuralREN North's community partners. The result ensures the development of a well-trained and knowledgeable workforce that reflects the communities they live in.

Public

RuralREN North's Public Sector program will offer a suite of expert services to rural public agencies. Services will identify, develop, track, and implement energy savings opportunities in their buildings and facilities on the path to meeting mandates for GHG reduction and Zero Net Energy. Energy efficiency projects developed using RuralREN North's support services will be tracked in a pipeline queue and handed off to applicable IOU or other PA incentive programs and/or financing programs,

including RuralREN North's Bridge Loan Program. In addition to providing much-needed project services, the program will increase awareness and expertise of public agencies, improve information sharing among them and demonstrate leadership in energy efficiency within their local communities. The Public Sector program will focus on public agencies that are not part of an LGP.

The Public sector program will only be implemented in Lake and Mendocino Counties, as Humboldt County and the counties served by SBC are already served by a PG&E Local Government Partnership program.

Residential

RuralREN North is proposing two programs in the Residential Sector – an Equity Segment element offering Energy Advisor audits and do-it-yourself energy efficiency kits, and a Resource Acquisition element offering incentives for whole-house energy efficiency and electrification measures.

The Residential Equity Segment Program will provide outreach and energy awareness information. It involves a community-based approach to raise the “energy literacy” of rural residential customers, including general awareness campaigns, simple energy efficiency do-it-yourself kits, and in-home energy audit services provided by the RuralREN North Energy Advisors, as a pathway to adoption of more comprehensive and advanced energy upgrades. The RuralREN North programs will guide customers toward available incentives and financing options offered by RuralREN North or PG&E and third-party program implementers

The Residential Resource Acquisition Segment Program will focus on filling the unmet needs from other utility and statewide programs. It will deliver direct-to-customer rebates for energy efficient and decarbonization upgrades as well as some direct-install options.

The program will offer incentives for common home energy upgrades and decarbonization measures including HVAC and water heating heat pumps, and electric cooktops. Energy efficiency measures will include a variety of “whole home” items like weatherization, HVAC, and plug loads/appliances. The market focus is single-family homeowners and renters, consistent with the prevalence of single-family homes in rural areas.

Very high-level discussion of strategies driving distribution of budget among sectors and segments

Strategies driving distribution of the budget and alignment with broader portfolio objectives are described below.

Equity – A large portion of RuralREN North's customer base falls into one or more of the CPUC's three Equity-Targeted categories of hard-to-reach, underserved or disadvantaged. RuralREN North's Vision and goals focus on bringing energy efficiency programs and services to this rural customer base. Appropriately 51% of our total proposed budget is allocated to the Equity segment to fund outreach and education, incentives, financing, and workforce education and training to rural customers.

Resource Acquisition – RuralREN North is proposing two Resource Acquisition programs serving the Commercial (SMB) and Residential sectors. While these programs are primarily classified as Resource Acquisition strategies, they will substantially target hard-to-reach, and underserved participants consistent with RuralREN North’s equity objectives.

The Resource Acquisition segment budget is 47% of the total RuralREN North proposed five-year budget. This budget is further divided among the Residential and Commercial Sectors.

Codes and Standards – RuralREN North’s main objective of the Codes and Standards segment is to increase the efficiency of buildings and equip code enforcement agencies in rural, hard-to-reach areas to comply with energy codes through our Codes and Standards program. The budget reflects the market size for the service over the five-year cycle.

The Codes and Standards segment budget is 2% of the total RuralREN North proposed budget. The Codes and Standards program will provide support to the local rural building officials as well as the building design and construction industry to aid understanding of and compliance with energy codes.

Sector budgets are established to achieve overall portfolio goals, which are in turn based on the needs of our rural customer base. Past program participation, equity factors, and current and planned IOU and other PA-proposed program offerings in the region helped determine sector focus and level of effort needed. For example, RuralREN North is not proposing to target the Agriculture Sector because PG&E currently has Resource Acquisition programs that will target the Ag Sector in regions served by RuralREN North.

Reduce Energy Burden: We help reduce energy burden by helping customers identify and implement ways to reduce energy consumption, which then creates a more robust pipeline of projects for RuralREN North, PG&E or third-party resource programs.

Increase Employment: We create opportunities for Climate Adaptive Careers, and we train and place for those careers. We can improve career prospects by offering Climate Adaptive career training; career opportunities can be increased by driving more project opportunities and sending a pipeline to PG&E, third-party, and RuralREN North Resource Acquisition programs.

Bring Capital for EE Investments: We bring needed capital to our rural communities in the form of rebates and incentives and bridge financing and potentially micro-lending for customers to adopt more comprehensive, costly energy efficiency and decarbonization measures.

The Codes and Standards sector is important because rural counties are notorious for lagging in code compliance, and as more and more customers migrate from urban and suburban areas to rural areas new construction and home renovations will increase. The result will increase the demand for knowledgeable code enforcement officials and designers and builders. It is a challenge to achieve Title 24 compliance—the achievement of decarbonization and EE goals can be sped up by taking local action to ensure rural communities are not unprepared or left behind when pursuing these goals.

The Public program, offered in Lake, and Mendocino counties, fills a gap in service of PG&E's Local Government Partnership (LGP) programs working in the regions. The RuralREN North organizations are implementers of the LGP programs and can ensure consistency.

The Commercial and Residential Resource Acquisition programs fill gaps by serving the most remote areas of rural California, continuing and building upon Resource Acquisition programs that have been implemented by RCEA and SBC through LGPs.

Budgets were determined through a zero-based budgeting approach and achieved by a combination of factors including the needs and market opportunities within regions and the gaps in services of other PAs being filled as described in the previous sections.

Portfolio Coordination

Other PAs

RuralREN North understands the critical importance of coordinating its portfolio and program operations with other PAs operating in the same areas to achieve goals, avoid duplication, and provide customers with consistent communications to avoid confusion. Coordination processes and interfaces will be memorialized in Joint Cooperation Memos between the RuralREN North and PG&E, the only other PA currently in the RuralREN North's service territory. Another effective venue for coordination with other PAs will be in regulatory proceedings and policy forums. The RuralREN North's implementing agencies have been, and will continue to be, active participants in CPUC proceedings and CAEECC and its working groups as a way of coordinating with other PAs and stakeholders.

Statewide Programs

RuralREN North will actively coordinate with all applicable statewide programs, including New Construction, Codes and Standards, Workforce Education and Training and Market Transformation. The result will complement their offerings and accelerate RuralREN North's tailored solutions for rural hard-to-reach customers.

Other Demand Side Management (DSM) programs

RuralREN North will help advance rural customer adoption of other DSM programs, including Demand Response (DR), Technology and Equipment for Clean Heating (TECH) and Building Initiative for Low Emission Development (BUILD), Self-Generation Incentive Program (SGIP), Electric Vehicle Charging and other DSM and Distributed Energy Resources (DER) offerings.

The RuralREN North recognizes and respects the role and importance of the Energy Savings Assistance (ESA) programs, and the value offered within our communities. Our offerings should enhance and expand, but never duplicate ESA programs. The intention is to augment gaps, and ensure customers are holistically served. The RuralREN North Residential programs will coordinate outreach and implementation with the ESA Programs.

Other REN and CCA Programs

There are currently no other RENs in the RuralREN North region. The region does have three existing CCAs, including RCEA. RuralREN North intends to coordinate and collaborate with Pioneer Community Energy and Sonoma Clean Power to avoid customer confusion and ensure programs complement and do not conflict with one another.

Evaluation, measurement and verification (EM&V)

RuralREN North will collaborate with the CPUC and stakeholders to ensure that data collection activities are embedded across the RuralREN North program portfolio to capture the information necessary to meet evaluation requirements and help expand the understanding of energy efficiency potential and best practices in this relatively new sector. RuralREN North's EM&V considerations for its program portfolio include data collection to inform CPUC evaluation activities and support internal program performance tracking and continuous improvement.

Alignment with Legislative and CPUC Requirements and Relevant Action Plans

RuralREN North's Business Plan strategies and outcomes align with CPUC regulatory requirements, applicable legislation, and the various action plans that guide implementation of California's energy policies, as summarized in the following paragraphs.

CPUC Requirements*

*Note: RuralREN submitted its original Business Plan on March 4, 2022, and was approved as a REN portfolio administrator in D.23-06-055. That decision was then modified in D.24-09-031 to create the two separate RENs. The below content in this section was submitted in the original Business Plan and remains applicable to RuralREN North.

RuralREN's Business Plan is offered as a formal proposal to form a REN. CPUC policies allow RENs the flexibility to adapt innovative program design and deliver to serve identified gaps in IOU program portfolios that provide significant value to the ratepayer, albeit not one that is not solely captured within the resource acquisition program segment. RENs provide an appropriate and viable vehicle to serve those who would not be served otherwise due to cost-effectiveness requirements, while filling programmatic gaps and acting as incubators for new, innovative, and effective program design that can be scaled and replicated throughout the state.

The RuralREN proposal to form a REN is consistent with the CPUC requirements associated with forming a new REN. The CPUC, in D.19-12-021, reconfirmed, with adjustments, the three criteria by which a new REN would be considered:

- Activities that utility or community choice aggregator (CCA) program administrators cannot or do not intend to undertake.

- Pilot activities where there is no current utility or CCA program offering, and where there is potential for scalability to a broader geographic reach, if successful.
- Activities serving hard-to-reach markets, regardless of whether there is another utility or CCA program that may overlap.³³

RENs are uniquely situated to advance regionalized innovative program designs that create an economy of scale. RuralREN will be an important energy efficiency delivery vehicle for years to come. The main objectives, strategies, and outcomes of the RuralREN align well with important legislative and CPUC requirements including the RuralREN's focus to:

- Reduce energy use and GHG emissions in rural California
- Increase rural hard-to-reach access to energy efficiency programs and policies
- Promote innovative programs that respond to the needs of the rural customer
- Cultivate locally trained workforces that meet the needs of the rural, hard-to-reach, underserved, and disadvantaged communities
- Build long-term career opportunities in the energy efficiency and clean energy sector for rural Californians.

The Business Plan identifies existing gaps and minimal services currently offered in these rural communities. RuralREN will complement existing offerings by directly connecting programs with rural customers for a broader geographic reach and focusing on serving hard-to-reach markets throughout the RuralREN regions.

RuralREN is borne from the local communities it will serve. These communities are represented by the long-standing Rural HTR Working Group that has advocated, in CPUC energy efficiency proceedings, for equal access to energy-efficiency program services across California's rural spaces. As preferred by the CPUC, RuralREN will collaborate and coordinate with Portfolio Administrators and program implementers to serve the best interests of customers.³⁴ RuralREN will help PAs and implementers more effectively serve geographically hard-to-reach rural customers while providing locally delivered programs tailored to better serve the needs of hard-to-reach customers. Such programs include training and providing jobs for local workers to support RuralREN program delivery.

To gain feedback from PAs in overlapping service territories and other stakeholders, in the original filing for approval of the Rural Regional Energy Network, RuralREN had conducted the following:

³³ D. 19-12-021, OP 4. "To be approved by the Commission, a regional energy network business plan must propose activities that meet at least one of the following criteria: (a) Activities that utility or community choice aggregator (CCA) program administrators cannot or do not intend to undertake. (b) Pilot activities where there is no current utility or CCA program offering, and where there is potential for scalability to a broader geographic reach, if successful. (c) Activities serving hard-to-reach markets, whether or not there is another utility or CCA program that may overlap."

³⁴ Id, p. 26. "Coordination and cooperation is in the interest of all program administrators and/or implementers, as well as the Commission and the customers being served."

- Met with PG&E to discuss the proposed RuralREN North and ways to ensure coordination in shared regions.
- Received an individual “letter of commitment” from PG&E which has overlapping operations in the same geographic area as the RuralREN North as presented in this Business Plan.
- Received “letters of support” from various local governments and community organizations for the creation of the new RuralREN North.
- Regularly participated in CAEECC and its various Working Group meetings (RCEA holds a CAEECC member seat)
- Presented initial plan for the RuralREN North and the Draft Business Plan to the Full California Energy Efficiency Coordinating Committee (CAEECC) on February 16, 2022.
- Responded to feedback from CAEECC stakeholders which is reflected in the Business Plan.
- Coordinated with CPUC Energy Division Staff to present the initial proposed RuralREN North and discuss the Business Plan submittal.

A summary of RuralREN’s compliance with the CPUC’s REN requirements is shown in Table 13.

Table 14: RuralREN Compliance with CPUC’s REN requirements

No.	Compliance Directive	Business Plan Section/Compliance Documentation
1	A proposal for a new regional energy network (REN) may be brought to the Commission at any time via a motion in the open energy efficiency rulemaking. A proposed REN is required to represent more than one local government entity and must present its business plan proposal to at least one meeting of the California Energy Efficiency Coordinating Committee (CAEECC) prior to filing it with the Commission. The REN motion to the Commission must also contain:	Executive Summary CAEECC presentation included in Appendix
2	(a) A description of its new and unique value to contribute to California’s energy, climate, and/or equity goals.	Executive Summary
3	(b) A description of its proposed governance structure.	Executive Summary
4	(c) A “letter of commitment to cooperate” from each existing Portfolio Administrator with whom the new REN’s proposed activities will overlap.	Appendix
5	(d) A written summary of feedback received from the CAEECC meeting and any other stakeholder input, along with the response or changes that were made as a result of the input.	Exhibit 02, Section v.6
6	(e) A proposed set of energy savings targets.	Exhibit 02, Section a.iii

7	(f) A proposed set of goals and metrics.	Exhibit 02, Section c.
8	(g) An estimate of benefits and costs according to the Total Resource Cost and Portfolio Administrator Cost tests.	Exhibit 01, Section b.
9	All regional energy networks, once approved by the Commission, shall negotiate and file bilateral Joint Cooperation Memorandums, as defined in Decision 18-05-041, Ordering Paragraph 38, annually, for any activities that overlap with the activities of utility Portfolio Administrators, community choice aggregators, and other regional energy networks.	Joint Cooperation Memorandums with PG&E will be developed and filed after CPUC approval of RuralREN
10	To be approved by the Commission, a regional energy network business plan must propose activities that meet at least one of the following criteria:	RuralREN North's Business Plan proposes activities that meet each of the required criteria
11	(a) Activities that utility or community choice aggregator (CCA) Portfolio Administrators cannot or do not intend to undertake.	Residential sector strategy includes direct, in-person outreach to residential customers and energy advisor service-see Program Card
12	(b) Pilot activities where there is no current utility or CCA program offering, and where there is potential for scalability to a broader geographic reach, if successful.	Residential strategy includes pilot-scale deployment of whole house assessments incorporating safety and comfort
13	(c) Activities serving hard-to-reach markets, whether or not there is another utility or CCA program that may overlap.	All of RuralREN North's activities serve hard-to-reach markets, and underserved rural customers. See Business Plan Exhibit 1 and Exhibit 2, and Program Cards

RuralREN North will comply with all applicable Commission policies and directives. Recent CPUC decisions have reset prior CPUC policies, which directly reshape how Portfolio Administrators will design and deliver their energy efficiency portfolios. Recognizing CPUC's other energy efficiency policies objectives, the Commission "reduce[d] the conflict between cost-effectiveness and other equally or more important policy objectives such as equity and support for the energy efficiency market." The CPUC's new approach allows the RuralREN North the opportunity to focus efforts on addressing inequities in the program availability facing California's rural customers.

Legislation

SB 100: Calls for utilities to procure 60 percent renewable energy by 2030 and 100 percent carbon-free energy by 2045, and to double the energy efficiency of existing buildings. The goal to double energy efficiency for existing buildings will be a substantial lift and require coordination and collaboration across the RuralREN North implementing agencies and PAs in California's rural communities. RuralREN North's programs will increase adoption of energy efficiency in rural communities and reduce carbon emissions through energy savings and implementation of decarbonization measures such as electric heat pumps and cooking appliances.

Assembly Bill (AB) 1482; SB 246; SB 379; AB 2800: Call for preparation of state climate adaptation strategy, establishing the Governor's Office of Planning and Research (OPR) Integrated Climate Adaptation and Resiliency Program, requiring local governments to include adaptation and resilience strategies in general plans, and requiring state agencies to account for climate change when planning new infrastructure, respectively. The RuralREN North will help rural customers facing immediate impacts due to climate change adopt higher levels of energy efficiency and emission reduction through various energy efficiency solutions.

AB 32/SB 32: California Global Warming Solutions Act of 2006: AB 32/SB 32: seek substantial reductions in carbon emissions. The latest extension of SB 32 mandates the reduction of GHG gas emissions to 40 percent below the 1990 levels by 2030. RuralREN North's programs provide GHG awareness and mitigation strategies as part of its energy efficiency message, and promote decarbonization measures such as electric heat pumps, water heating and appliances.

SB 350: Clean Energy and Pollution Reduction Act of 2015: Increase energy efficiency by 50 percent in existing buildings by 2030 and focus on addressing the needs of disadvantaged communities more effectively in accessing energy efficiency and solar resources and workforce development. All RuralREN North's programs contribute to increased adoption of energy efficiency and explicitly targets the 398 census tract level disadvantaged communities within its service territory to provide access to, and assistance with, implementation of energy efficiency and solar resources. Also provided is workforce development training that will increase energy-related skills of the local workforce and create new clean energy careers in disadvantaged communities.

SB 1414: Requires increased code compliance and requirement for confirmation of appropriate permits for installation of new HVAC and heat pumps systems. The RuralREN North incorporates these requirements into its Workforce Education & Training and Codes and Standards programs and works with local public sector customers (building departments) to establish successful approaches to implement this across the regions.

AB 3264: Requires reporting of public interest impacts and other metrics of demand-side management programs. As a REN, RuralREN North's programs are designed to deliver equity outcomes and benefits to the communities we serve. RuralREN North will track public interest impacts of its programs per CPUC guidance to support compliance with this new legislation.

Action Plans

Environmental and Social Justice Action (ESJ) Plan: The CPUC's puts forth its vision to advance equity in its programs and policies for ESJ communities. The CPUC defines environmental and social justice as follows:³⁵

Environmental and social justice seeks to come to terms with, and remedy, a history of unfair treatment of communities, predominantly communities of people of color and/ or low-income residents. These communities have been subjected to disproportionate impacts from one or more environmental hazards, socio-economic burdens, or both. Residents have been excluded in policy setting or decision-making processes and have lacked protections and benefits afforded to other communities by the implementation of environmental and other regulations, such as those enacted to control polluting activities .

RuralREN North's focus and highest priority objective is to provide energy efficiency services to underserved and hard-to-reach rural communities. Appropriately, 51% of our total proposed budget is allocated to the Equity segment.

For the RuralREN North Equity is more than a segment; it is imbued into our governance and decision making. The RuralREN North's Advisory Committees will provide input and recommendations regarding opportunities to incorporate and enhance equity and diversity of the organization and its programs. This advisory group may be formed during the startup phase of the RuralREN North in 2025 and will be comprised of champions of diversity, equity and inclusion from local governments, community-based organizations, schools/colleges, and other organizations within our communities.

Senate Bill (SB) 350 Supporting Plans: The RuralREN North has considered the many plans that have been developed to better understand how to achieve the bold goals set forth in SB350. The RuralREN North is particularly attuned to those plans that address barriers that impact low-income communities, including the California Energy Commission "SB 350 Low-Income Barriers Study Recommendations." The RuralREN North has considered these plans in the development of this plan and will continue to look for ways to integrate recommendations into program delivery.

³⁵ California codified Environmental Justice in GOV § 65040.12: "...the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies."

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

California Energy Efficiency Strategic Plan (CEESP) and the Big Bold Goals: The CPUC's 2011 CEESP set forth a framework to make energy efficiency a way of life in California by refocusing ratepayer-funded energy efficiency programs on achieving long-term savings through structural changes in the way Californians use energy. Two of the RuralREN North Implementing Agencies received CEESP funding through their former LGPs and were able to support the needs of their local governments through the creation of benchmarking policies, Energy Action Plans, Climate Action Plans and other CEESP initiatives. The RuralREN North relies on the CEESP to guide its vision and goals across its portfolio to support the achievement of the Plan's long-term goals.

Annual Portfolio Budgets

Table 15: RuralREN Proposed Annual Budgets, Savings, Cost Effectiveness, and TSB for 2024-2027

		Budget	TSB	TRC	PAC	kWh	KW	Therms
2024	Resource Acquisition	\$548,006	0	0	0	0	0	0
	Market Support	\$0	0	0	0	0	0	0
	Equity	\$993,865	0	0	0	0	0	0
	Codes & Standards	\$23,684	0	0	0	0	0	0
	EM&V	\$137,290	\$0	0	0	0	0	0
	Portfolio	\$1,702,846	\$0	0	0	0	0	0
2025	Resource Acquisition	\$4,324,254	\$698,968	0.26	0.30	-364,600	42	73,488
	Market Support	\$0	\$0	0	0	0	0	0
	Equity	\$4,972,902	\$64,550	0.03	0.03	1,792	0	10,598
	Codes & Standards	\$206,044	\$0	0	0	0	0	0
	EM&V	\$379,701	\$0	0	0	0	0	0
	Portfolio	\$9,882,900	\$763,518	0.14	0.14	-362,808	42	84,086
2026	Resource Acquisition	\$4,781,541	\$1,040,845	0.33	0.38	-540,898	55	101,996
	Market Support	\$0	\$0	0	0	0	0	0
	Equity	\$5,027,647	\$104,482	0.05	0.05	2,986	0	15,761

	Codes & Standards	\$239,535	\$0	0	0	0	0	0
	EM&V	\$403,615	\$0	0	0	0	0	0
	IDSM	\$5,000	\$0	0	0	0	0	0
	Portfolio	\$10,457,338	\$1,142,327	0.18	0.2	-537,912	55	117,757
2027	Resource Acquisition	\$5,242,140	\$1,148,609	0.33	0.37	-540,898	55	101,996
	Market Support	\$0	\$0	0	0	0	0	0
	Equity	\$5,214,926	\$107,157	0.05	0.05	2,986	0	15,761
	Codes & Standards	\$228,970	\$0	0	0	0	0	0
	EM&V	\$404,956	\$0	0	0	0	0	0
	IDSM	\$5,000	\$0	0	0	0	0	0
	Portfolio	\$11,095,993	\$1,255,766	0.18	0.19	-537,912	55	117,757
	Total Portfolio	\$33,139,078	\$3,161,611			-2,877,264	304	-2,876,960

Exhibit Two: 2024-2027 Portfolio Plan

Portfolio Summary

The Northern California Rural Regional Energy Network (RuralREN North) has created a portfolio of programs to achieve our main goals, outcomes and vision statement, as summarized below, and described in our Exhibit One: Strategic Business Plan document. The portfolio addresses the fact that geographically remote rural energy users are not as well served by energy efficiency programs as those in closer proximity to metropolitan centers, but also specifically focuses on furthering the CPUC's Environmental and Social Justice Action Plan³⁶ policies and associated gaps in service for this largely underserved, hard-to-reach, and disadvantaged customer base.

RuralREN North Vision Statement

The RuralREN North will act as a catalyst to accelerate the implementation of the state's energy efficiency and climate goals in geographically hard-to-reach California. By leveraging rural regional collaboration, our trusted local relationships, and promoting pragmatic responses to community needs, the RuralREN North will help deliver a just and clean energy future.

RuralREN North Proposed Outcomes

Outcome 1: Hard-to-reach, low income, tribal, and underserved rural customers are provided equitable levels of services and support of CPUC energy programs and are empowered to take action to better manage their energy use and cost through increased awareness, technical support resources, and access to a trained, local workforce to improve their homes and businesses.

Outcome 2: Energy consumption, energy cost and GHG emissions are reduced across the region, contributing to California's decarbonization and energy efficiency goals.

Outcome 3: Increased access to rebates, incentives, and financing to provide the capital needed in rural communities to enable investments in energy and demand reduction projects with persistent energy savings, GHG emissions reductions, and benefits to the grid.

Key Metrics and Outcomes

³⁶ *Environmental and Social Justice Action Plan* (V. 1). (2019, February). California Public Utilities Commission. <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/news-and-outreach/documents/news-office/key-issues/esj/environmental-and-social-justice.pdf>

Table 16: Portfolio Alignment with Outcomes

Segment - Sector	Outcome 1: Provide EE services to Rural, HTR, Low Income, and Underserved Customers	Outcome 2: Reduce energy use and GHG emissions, maximize TSB	Outcome 3: Provide capital for energy projects thorough incentives and financing
Resource Acquisition - Commercial	EE services and incentives are delivered to HTR rural and equity-targeted SMBs from within their communities. Growth of energy related projects create new job opportunities in rural regions	Rural SMBs implement a mix of energy efficiency and GHG-reducing electrification measures using technical support and incentives.	Rebates and incentives increase adoption of energy efficiency and GHG reducing electrification measures
Equity - Finance	RuralREN North's finance programs are designed with equity as a primary objective including micro-loans, low or no cost, easy qualifying/eligibility	RuralREN North's low cost and easy to access loan program will increase EE projects and services leading to reduced energy usage and GHG reductions.	Access to capital through financing increases adoption of energy efficiency projects and GHG reducing electrification measures
Equity - WE&T	WE&T programs prioritize the underserved, HTR and Low Incomes communities and individuals, developing a local skilled workforce	Availability of skilled workers helps increase implementation of energy efficiency measures	Workers trained by the WE&T program will be knowledgeable about available incentives and financing and how to access them.
Codes and Standards	Code education and enforcement provided to rural HTR building officials, with a focus on serving rural, underserved, HTR and low-income communities	More buildings will comply with energy codes, and as a result will use less energy and emit less GHG pollutants	Community-based organizations; Third party training organizations

Equity - Public	Project development support is provided to local government and agencies serving rural, HTR, DAC and underserved communities	Local government and public agencies implement energy savings and upgrades using RREN-N provided technical support	Local governments and public agencies are provided support with applying for grants, and accessing incentives, and financing
Equity & Resource Acquisition - Residential	Program focuses outreach and program participation to equity-targeted customers, increased demand for energy technologies and services supports the local trades	Outreach, education, technical support and incentives drive implementation of energy savings upgrades	Rebates and incentives and access to financing increase adoption of energy efficiency and GHG reducing electrification measures

Narrative on portfolio goals and portfolio performance metrics to be achieved in this program cycle:

Portfolio performance metrics and goals have been selected to ensure performance to goals, both near- and long-term, and to provide the highest degree of accountability to the CPUC and all California ratepayers. The RuralREN North's proposed set of metrics ensure performance and accountability at the program, sector, segment, and portfolio level, as summarized in the Table 16 below. Portfolio performance metrics are aligned with RuralREN North's overarching goals of equity, energy savings, and access to funding. Key metrics at the sector and segment level roll up to the portfolio level for reporting, but close management at the program/sector level ensures portfolio goals are achieved. Portfolio metrics for Resource Acquisition segment programs have targets listed for the program cycle. Portfolio metrics for Equity and Market Support segment programs indicate a target where one has been established or indicate that baselines and targets will be established once detailed program designs are complete. This is also consistent with non-consensus recommendation Option 2 of the CAEECC Market Support and Equity Working Group Final Reports.

The RuralREN North's proposed portfolio includes strategies and programs within two segments, but appropriately focuses on the Equity segment because of the high percentage of hard-to-reach, underserved and low-income customers in the region. Our selection of metrics reflects this mix of programs using existing metrics, CAEECC Equity and Market Support Working Group recommended metrics, and custom metrics tailored to the specific strategies and tactics within programs.

Resource Acquisition Metrics – In addition to the standard energy savings metrics used in the past, Total System Benefits is now the primary metric for our Resource Acquisition portfolio at the segment, sector, and program level. Since all the RuralREN North's programs target hard-to-reach, underserved

and low-income customers, equity metrics are also included in the Resource Acquisition segment programs.

Equity Metrics – The RuralREN North will use CPUC metrics for its Equity segment programs. The RuralREN North programs in the Resource Acquisition and Market Support segment also have Equity metrics, again because of the large population of hard-to-reach, underserved and/or disadvantaged customers and communities. Equity segment programs make up 51% of RuralREN North’s total portfolio budget so it will be important to ensure that our metrics and Equity-targeted customer definitions align with CAEECC/CPUC definitions that are expected to be refined in this program cycle.

Market Support Metrics – The RuralREN North proposes using a tailored subset of the CAEECC Market Support Metrics Working Group recommended metrics for the C&S and WE&T program. Many of the RuralREN North Codes and Standards segment strategies include portfolio level Equity metrics as well.

REN Unique Value Metrics – In D.19-12-021 CPUC directed new RENs to demonstrate the unique value their portfolios will provide. The idea of the RuralREN North is a direct response to the unique issues and urgent needs of geographically hard-to-reach California energy customers. As RuralREN North launches its programs it will develop a set of REN unique value metrics to measure the unique value its portfolio will provide to rural customers.

Table 17: Portfolio Metrics

Portfolio Metric	G1: Provide EE Services to Rural HTR, Underserved & DAC Customers	G2: Reduce energy use & GHG emissions, maximize TSB	G3: Provide capital for energy projects through incentives & financing
Number of Customers Receiving RRENN Services	✓		
Number and Percentage of Equity-Targeted Customers Receiving Services	✓		
Total System Benefits (TSB), \$		✓	
Energy Savings, ex ante, net		✓	
GHG Reductions, ex ante, net		✓	

Estimated Energy savings and GHG reductions supported by Non-Resource Programs	✓	
Workers Trained in WE&T Programs	✓	
Construction-related jobs created through EE program expenditures		✓
Total EE Expenditures in the local regions		✓
Estimated Value of EE Projects		✓
Total EE funding brought into the local region		✓
Total EE financing accessed		✓

Portfolio Performance Metrics

CPUC Decision D.23-06-055 adopted a list of Equity and Market Support Indicators, listed in the tables below. Ordering Paragraph 11 (OP11) of the Decision required the portfolio administrators to file a Tier 2 Advice Letter clarifying the indicators and including any modifications from metrics and indicators adopted in D. 18-05-041. RuralREN North intends to comply with the metrics and indicators approved by the CPUC as a result of OP11.

Table 18: Equity Segment Indicators

Equity Segment Indicators		Quarterly/ Annually	Segment/ Portfolio
1	Count of equity target participants in equity segment, by sector	Q	S
2	Sum of equity target participants expected first-year bill savings in equity segment, by sector	Q	S
3	Count of equity target participants in market support segment, by sector	Q	S
4	Count of equity target participants in resource acquisition segment, by sector	Q	S
6	Sum of all equity segment participants' kilowatt hour (kWh) savings in equity segment	Q	S
7	Sum of all equity segment participants' kW savings in equity segment	Q	S

8	Sum of all equity segment participants' therm savings in equity segment	Q	S
9	Sum of all equity segment participants' TSB in equity segment	Q	S
10	Median of equity target participants' expected first-year bill savings in equity segment, by sector	Q	S
11	Percent of hard-to-reach customer participants in portfolio, by residential single family / multi-family and commercial sector	A	P
12	Percent of disadvantaged community customer participants in portfolio, by residential single-family / multifamily and commercial sector	A	P
13	Percent of equity target participants in equity segment, by sector	Q	S

Table 19: Market Support Segment Indicators

Market Support Segment Indicators		Quarterly/ Annually	Segment/ Portfolio
1	Number of partners by type and purposes	Q	P
2	Dollar value of non-ratepayer in-kind funds/contributions utilized via partnerships	A	P
3	Percent of participation relative to eligible target population for curriculum	Q	S
4	Percent of total WE&T program participants that meet the definition of disadvantaged worker	Q	S
5	Number of career and workforce readiness participants who have been employed for 12 months after receiving the training	A	S
6	Prior year percentage of new measures added to the portfolio that were previously emerging technology program (ETP) technologies	A	P
7	Prior year number of new measures added to the portfolio that were previously ETP technologies	A	P
8	Prior year percentage of new codes or standards that were previously ETP technologies	A	P

9	Prior year number of new codes and standards that were previously ETP technologies	A	P
10	Savings (lifecycle net kWh, kWh, and therms) of measures currently in the portfolio that were supported by ETP, added since 2009. Ex ante with gross and net for all measures, with ex post where available	A	P
11	Number of new, validated technologies recommended to the California Technical Forum	A	P
12	Cost-effectiveness of a technology prior to market support program relative to cost-effectiveness of a technology after intervention by the market support programs (percentage change in cost-effectiveness)	A	S
13	Number of collaborations, with a contextual description, by business plan sector to jointly develop or share training materials or resources	A	P
14	Number of unique participants by sector that complete training	Q	S
15	Number of projects (outside of ETP) that validate the technical performance, market and market barrier knowledge, and/or effective program interventions of an emerging/under-utilized or existing energy efficient technology	A	P
16	Total projects completed/measures installed and dollar value of consolidated programs by sector	Q	P
17	Ratio of ratepayer funds expended to private capital leveraged by sector	Q	P
18	Percentage of partners that have taken action supporting energy efficiency by type	Q	P
19	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	Q	S
20	Assessed value of the partnership by partners	A	P
21	Percent of market penetration of emerging/under-utilized or existing energy efficiency products or services	A	P

22	Percent of market participant awareness of emerging/under-utilized or existing energy efficiency products or services	A	P
23	Aggregated confidence level in performance verification by production, project, and service (for relevant programs)	A	P
24	Differential of cost defrayed from customers (e.g., difference between comparable market rate products and program products)	A	P
25	Comparisons between market-rate capital vs capital accessed via energy efficiency programs (e.g., interest rate, monthly payment)	A	P

Table 20: Additional Market Support Segment Indicators (AKAB)

Additional market support segment indicators structured around annual surveys focused on awareness, knowledge, attitude, and behavior (AKAB), to track after the survey process is further developed		AKA
1	Percent of customer sample aware of energy efficiency product/service	awareness
2	Percent of customer sample that is knowledgeable of energy efficiency product/service benefits	knowledge
3	Percent of customer sample that is interested in obtaining an energy efficiency product/service	attitude
4	Percent of customer sample that has taken action towards obtaining energy efficiency product/service	behavior A
5	Percent of customer sample that has obtained energy efficiency products/services	behavior B
6	Percent of market actors aware of energy efficiency products and/or services that can be supplied to customers	awareness
7	Percent of market actors knowledgeable of energy efficient products and/or services that can be supplied to customers	knowledge
8	Percent of market actors that are interested in supplying energy efficient products and/or services to customers	attitude
9	Percent of market actors that have supplied energy efficiency products and/or services to customers	behavior

10	Percent of market actors aware of what is required to perform/ensure quality installation of energy efficient products and/or services that optimizes energy efficiency savings	awareness
11	Percent of market actors knowledgeable of how to perform/ensure quality installation of energy efficiency products and/or services that optimize energy efficiency savings	knowledge
12	Percent of market actors that are interested in performing/ensuring quality installation of energy efficiency products and/or services that optimize energy efficiency savings	attitude
13	Percent of market actors that have performed/ensured quality installation of energy efficiency products and/or services that optimize energy efficiency savings	behavior
14	Percent of market participants aware of capital access opportunities for investments in energy efficient projects, products, and/or services	awareness
15	Percent of market participants knowledgeable about capital access opportunities for investments in energy efficient projects, products, and/or services	knowledge
16	Percent of market participants interested in leveraging capital access opportunities for investments in energy efficient projects, products, and/or services	attitude
17	Percent of market participants that were unable to take action due to access to capital or affordability of energy efficient projects, products, or services	behavior

Portfolio Strategies

Strategy for application/use of various and normalized metered energy consumption including requirements IN D.23-06-055

In its initial three-year portfolio, the RuralREN North will use a combination of deemed and custom-litee methodology for savings forecasting and will use NMEC methodology for energy savings quantification where possible. D.23-06-055 required the use of NMEC methodology for any new Resource Acquisition programs. The RuralREN North intends to solicit technical support to develop the calculation methodology and M&V protocols at the beginning of the program launch.

Strategy for incorporating low global warming potential (low-GWP) refrigerants in the portfolio

Low GWP refrigerants will be incorporated in the portfolio as described below in Table 21.

Table 21: Low GWP Refrigerant Strategy

Portfolio Sector/Program	Low GWP Refrigerant Strategy
Codes & Standards	Provide information to building code officials, contractors, and designers about CFC phase-out and low GWP refrigerant benefits code requirements
Workforce Education & Training	Provide information to WET participants about CFC phase-out and low GWP refrigerant benefits and code requirements
Residential and Commercial	Incorporate low GWP spec for rebated equipment (such as HVAC heat pumps, HPWHs) & low GWP refrigerant information in audit reports
Public	Low GWP Refrigerant information incorporated in audit reports
Finance	Minimum technical requirements for financed equipment (such as HVAC heat pumps, HPWHs)

RuralREN North will incorporate strategies to spur innovation throughout its portfolio, consistent with our key business principles related to equity, customer focus, and collaboration, as well as our primary goals. Table 21 below describes these strategies.

Table 22: Strategies for Spurring Innovation

Innovation Channel/Opportunity	RuralREN North Supporting Strategy
New, Diverse Business Entrants to EE Market	- Contracting opportunities with RuralREN North emphasize diversity, green economy
Traditional Actors (Businesses) Moving into EE Market	- WET upskilling - Build awareness of EE business model in other markets - Contracting opportunities for EE program implementation scope
Increase Adoption of New/Evolving GHG Reducing Technology	- Res and SMB Sector Electrification Audit recommendations, incentives and financing - Collaborate with Statewide Emerging Technologies Program to deploy new GHG technologies at rural customer sites - Leverage non-EE funding for Electrification and GHG RDD to test or deploy new GHG technologies at rural customer sites

Strategies for market intervention and energy efficiency adoption

Table 23: Strategies for Market intervention and EE adoption

Sector/Program	Common Barrier Addressed	Intervention	Delivery Channels	Platforms & Methods	Future Enhancements
Commercial (SMB)	Lack of information; First cost split incentive	Rebates; Energy audits; Incentives; Financing	Direct to customers; Trade Allies; Community support	Deemed savings; NMEC	Grid/TOU management, IDSM, Resilience
Cross Cutting - Codes & Standards	Understanding of codes; Public agency resources stretched too thin	Training of building officials and design, construction teams; Energy coaches to support code enforcement staff	Direct to public, staff, design and construction teams	Education & Training Energy coaches	Electrification technologies; Renewable integration; Grid/Load management
Cross Cutting - Finance	First cost	OBFI Bridge Loans; Microloans; Electrification	Direct to customers; Trade allies; Energy Advisors	Revolving Loan fund; No/low interest; Flexible terms	On bill repayment
Cross Cutting - WE&T	Availability of skilled trades	Training for rural and tribal communities and upskilling for trade workers	Community-based organizations; Third party training organizations	Proven training methods and curriculum; Equity targeted candidates	Partnering with Community Colleges to build capacity Resilience training

Public	Resources/ Staffing	Benchmarking; Energy Audits; Project implementation support; Funding support	Energy advisors	<i>Deemed, custom; Shared database</i>	NMEC, Resilience support
Residential	First cost; hassle factor; information	Audits; Energy advisor support; Rebates; Financing	Downstream; Trade Allies; Community Based Organizations	Deemed savings; NMEC	TOU rate management; Grid/Load Management; Resilience measures

The RuralREN North will deploy multiple strategies for market intervention and energy efficiency adoption. Strategies have been selected to address common barriers to energy efficiency adoption and tailored to the rural markets to be served within each sector. Strategies incorporate equity principles and needs throughout the portfolio. In future years, portfolio strategies will increasingly emphasize equity, resilience, grid management and GHG reduction.

Application Summary Tables Covering the Budget Request

The RuralREN North's annual budget for the period 2024-2027 is shown in Table 23 below. As a new REN, the RuralREN North will have a three-year implementation budget starting in 2025 with a startup period covering Q4 of 2024.

Table 24: Budget Request

Budget Category	2024	2025	2026	2027	Total
Administration	\$380,138	\$1,088,604	\$962,423	\$906,003	\$3,337,169
Marketing and Outreach	\$105,344	\$504,887	\$513,651	\$473,857	\$1,597,740
Direct Implementation - Non-Incentive	\$1,080,073	\$7,031,297	\$7,314,161	\$7,904,683	\$23,330,214
Direct Implementation - Incentive	\$0	\$878,412	\$1,263,487	\$1,406,494	\$3,548,392
Evaluation, Measurement & Verification	\$137,290	\$379,701	\$403,615	\$404,956	\$1,325,563
Total	\$1,702,846	\$9,882,900	\$10,457,338	\$11,095,993	\$33,139,078

Table 25: Budget by Segment and Sector

Portfolio Segment	Resource Acquisition	Codes & Standards	Equity	Total
Commercial	\$5,799,869	\$0	\$0	\$5,799,870
CC - Finance	\$0	\$0	\$6,580,192	\$6,580,192
CC - WE&T	\$0	\$0	\$1,964,597	\$1,964,597
CC – C&S	\$0	\$678,383	\$0	\$678,384
Public	\$0	\$0	\$1,181,206	\$1,181,206
Residential	\$8,682,609	\$0	\$6,022,548	\$14,705,158
Total	\$14,482,480	\$678,383	\$15,748,543	\$30,909,407

Figure 11: Portfolio by Sector

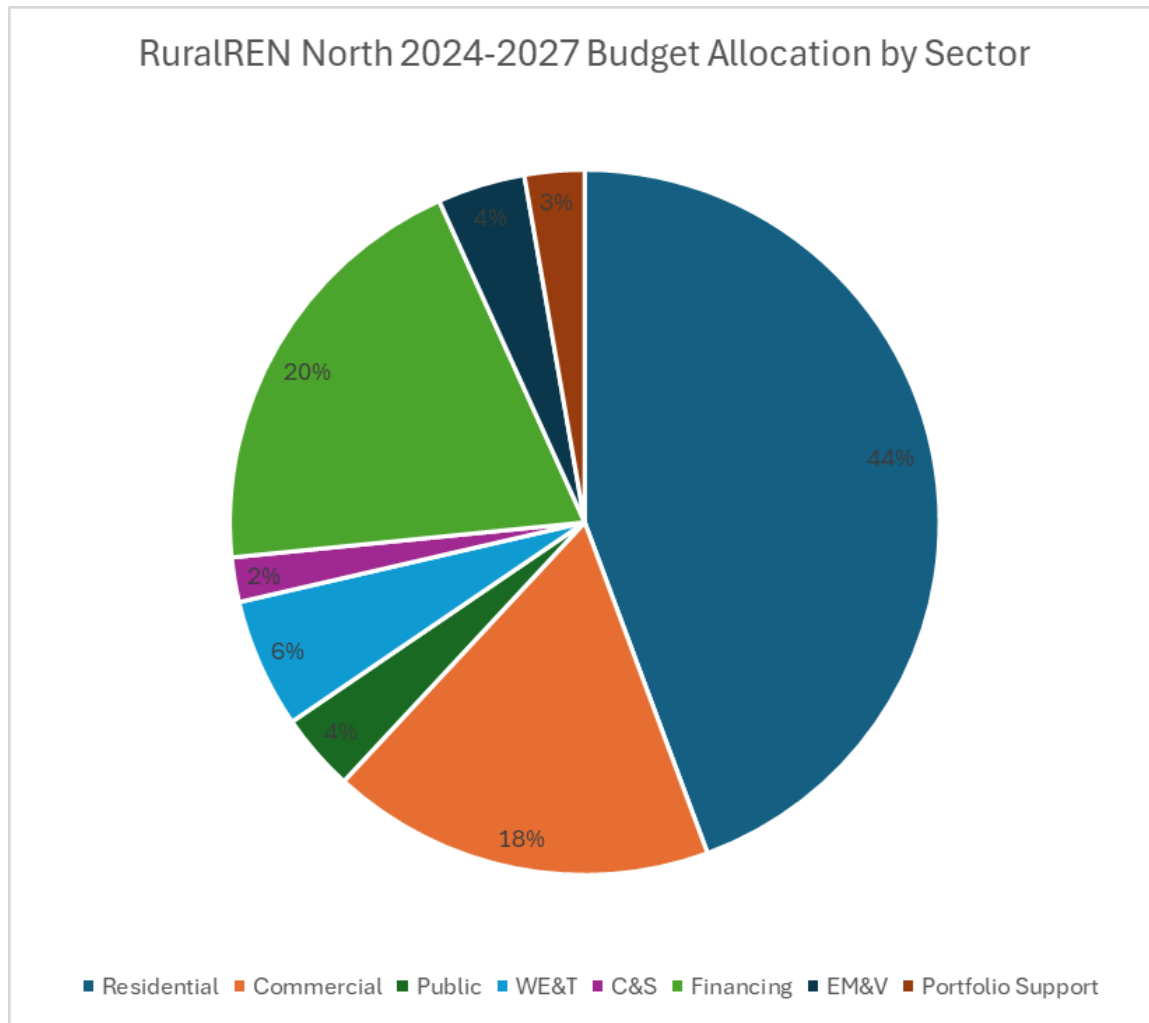
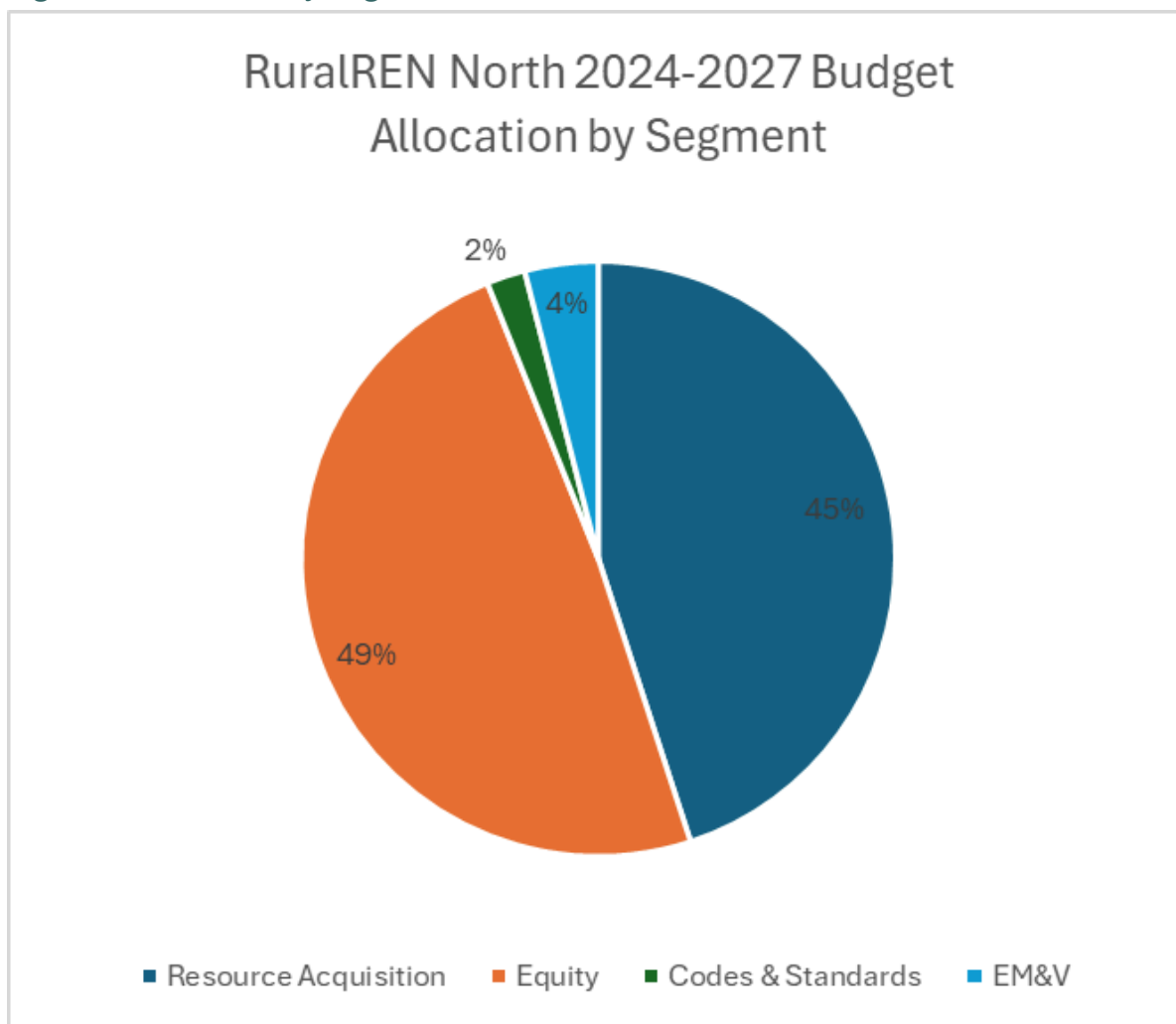


Figure 12: Portfolio by Segment



For all segments: forecasted annual program-, sector-, and portfolio-level Total System Benefit (TSB), kilowatt-hours, kilowatts, therms, and CO₂e.

Table 26: TSB and Energy Savings by Segment

Segment	TSB, \$	KWh, net	KW, net	Therms, net	CO ₂ e, tons
Total Portfolio	\$2,815,543	-1,438,632	153	319,599	1,210
Resource Acquisition Segment	\$2,564,857	-1,446,395	152	277,480	984
Equity Segment	\$250,685	7,763	1	42,120	226

Comparison of projected TSB to adopted TSB goals

The total projected TSB of the RuralREN North's (2024-2027) portfolio is \$2,815,543.20. In comparison to the adopted TSB goal for all of California, which is almost two billion dollars,³⁷ RuralREN North's contribution is small, due to its relatively small fraction of the total California energy efficiency budget, and because its portfolio appropriately focuses on providing much-needed non-resource equity services to rural hard-to-reach customers. While our resource acquisition segment programs fill a gap in regions not well served by other resource acquisition programs, our equity programs support other programs in achieving TSB benefits. Our Finance program will help customers move forward with projects that reduce GHG emissions and energy use.

Forecast Methodology

See attached files "Exhibit Four: EE Application Tables."

Portfolio Administration vs Program Implementation Costs

The RuralREN North's proposed budget conforms to the CPUC-mandated 10% limit on Portfolio Administration costs. See attached files "Exhibit Four: EE Application Tables" for a detailed showing and justification for each year of the RuralREN North's proposed five-year portfolio budget.

Segmentation Strategy

Strategies driving distribution of budget among segments and alignment with broader portfolio objectives

Table 27 and Figure 12 show the distribution of the 2023 – 2027 budget by segment. Strategies driving distribution of the budget and alignment with broader portfolio objectives are described below.

Equity – A large portion of the RuralREN North's customer base falls into one or more of the CPUC's three Equity-Targeted categories of hard-to-reach, underserved, or disadvantaged. The RuralREN North's vision and goals focus on bringing energy efficiency programs and services to this rural customer base. Appropriately 51% of our total proposed budget is allocated to the Equity segment to fund outreach and education, technical assistance, financing and workforce education and training to rural communities.

Resource Acquisition – The RuralREN North is proposing two Resource Acquisition programs serving the Commercial (SMB) and Residential sectors. While we've classified these programs as primarily Resource Acquisition strategies, they will substantially target hard-to-reach and underserved participants consistent with the RuralREN North's equity objectives. Our proposed budget allocation for the Resource Acquisition segment is 47%.

³⁷ D.21-09-037, p.19-21

Codes and Standards – The RuralREN North is allocating 2% of its portfolio budget to the Codes and Standards segment. The RuralREN North Codes and Standards program aims to increase the efficiency of buildings and to equip code enforcement agencies in rural hard-to-reach areas to comply with energy codes through our Codes and Standards program.

Table 27: Allocation of Budget by Segment (5 Year Budget)

Program Segment	Budget	Percent
Resource Acquisition	\$14,906,096	47%
Codes & Standards	\$698,227	2%
Equity	\$16,209,192	51%
Total w/o EM&V	\$31,813,515	
EM&V	\$1,325,563	
Total w/ EM&V	\$33,139,078	

Resource Acquisition

Preliminary Resource Acquisition budget for 2025-2027, and rationale for the distribution

Table 28: 2025-2027 Resource Acquisition Budget

Sector	2024	2025	2026	2027	Total
Residential	\$293,093	\$2,531,238	\$2,748,436	\$3,109,842	\$8,682,610
Commercial	\$224,351	\$1,661,258	\$1,898,283	\$2,015,978	\$5,799,870
Portfolio Support	\$30,573	\$131,806	\$139,873	\$121,364	\$423,616
Total	\$548,018	\$4,324,302	\$4,786,592	\$5,247,184	\$14,906,096

The Resource Acquisition segment budget is \$14,906,095.97, which is 47% of the total RuralREN North proposed budget. This budget is further divided among the Residential and Commercial Sectors. Residential and SMB sectors in the RuralREN North region continue to need access to incentive programs for comprehensive retrofits because these are the most remote regions in California and thus are “end of the line” for other programs, third-party implementers, and trade allies.

Table 29: Resource Acquisition Segment Strategies, Goals, Outcomes

Strategy	Goals	Outcomes
Incentives for Residential EE and electrification measures	Residential customers implement energy efficiency and electrification measures in their homes.	Residential customers save energy and reduce GHG emissions, and reduce their energy bills
Incentives for SMB EE and electrification measures	Customers upgrade their homes and businesses	Small and medium business owners save energy and reduce GHG emissions, reduce their O&M costs and improve their bottom line

Table 30: Resource Acquisition Segment Metrics – Residential Sector

Metric or Indicator	Description	2025	2026	2027
M	Total System Benefit (TSB), \$	\$129,682	\$201,603	\$250,468
M	GHG Reduction, ex ante, net	71	91	101
M	kWh Savings, ex ante, net	-245,969	-383,506	-383,506
M	KW Savings, ex ante, net	12	18	18
M	Therm Savings, ex ante, net	29,741	42,929	42,929

Table 31: Resource Acquisition Segment Metrics - Commercial Sector

Metric or Indicator	Description	2025	2026	2027
M	Total System Benefit (TSB), \$	\$569,285	\$839,242	\$898,141
M	GHG Reduction, ex ante, net	194	262	265
M	kWh Savings, ex ante, net	-118,631	-157,392	-157,392
M	KW Savings, ex ante, net	30	37	37
M	Therm Savings, ex ante, net	43,746	59,067	59,067

Table 32: Resource Acquisition Segment Metrics – Portfolio Level

Metric or Indicator	Description	2025	2026	2027
M	Total System Benefit (TSB), \$	\$698,968	\$1,040,845	\$1,148,609
M	GHG Reduction, ex ante, net	265	354	365
M	kWh Savings, ex ante, net	-364,600	-540,898	-540,898
M	KW Savings, ex ante, net	42	55	55
M	Therm Savings, ex ante, net	73,488	101,996	101,996

Resource Acquisition Segment Coordination

RuralREN North will coordinate its Resource Acquisition segment strategies as necessary with PG&E third-party programs and CCAs to avoid potential duplication/competition among programs, and wherever possible, will collaborate to increase customer participation in all programs in the region, to streamline delivery and enhance the customer experience. As a member of the CAEECC Coordinating Committee and CAEECC Working Groups on Underserved, Composition, Diversity, Equity, and Inclusion, Market Support Metrics, Equity Metrics, and the EE Filing Process, the RuralREN North representatives will continue to work collaboratively with all Portfolio Administrators and stakeholders to improve coordination and effectiveness of California’s energy efficiency policies and programs. Sector level (and program level) coordination needs are discussed in the Sector Strategy section of this document.

Codes and Standards

Preliminary Codes and Standards Budget for 2023-2027, and rationale for the distribution:

Table 33: Codes and Standards Budget

Sector	2024	2025	2026	2027	Total
Codes and Standards	\$22,252	\$199,868	\$232,981	\$223,284	\$678,384
C&S Portfolio Support	\$1,432	\$6,174	\$6,552	\$5,685	\$19,843
Total	\$23,684	\$206,042	\$239,533	\$228,969	\$698,227

Table 32 shows RuralREN North’s proposed Codes and Standards segment budget for 2024 – 2027. The proposed budget is \$698,226.74 which is 2% of the total RuralREN North proposed budget. The Codes

and Standards program will provide support to the local rural building officials and building design and construction industry to aid in understanding and compliance with energy codes.

Codes & Standards strategies, goals, and outcomes

Table 34: Codes & Standards Segment Strategies, Goals, and Outcomes

Strategy	Goals	Outcomes
Education, outreach, and training for code enforcement officials	Increase code compliance	The majority of permits issued comply with energy codes
Education, outreach, and training for building design and construction professionals	Increase understanding and support compliance of design and construction of projects	Increased energy code compliance of design and construction first time through, without rework
Technical support for code enforcement officials	Provide resources to support local code authorities review and approval of building design and construction	Increased accuracy and reduced turnaround time of energy code compliance checks

Codes & Standards Segment Coordination

The RuralREN North will coordinate its Codes and Standards segment strategies as necessary with PG&E, third-party programs or CCAs to avoid potential duplication/competition among programs, and wherever possible, will collaborate to increase participation in all programs in the region to streamline delivery and enhance the customer experience. As a member of the CAEECC Coordinating Committee and CAEECC Working Groups on Underserved, Composition, Diversity, Equity, and Inclusion, Market Support Metrics, Equity Metrics, Market Transformation, and the EE Filing Process, the RuralREN North representatives will continue to work collaboratively with all Portfolio Administrators and stakeholders to improve coordination and effectiveness of California's energy efficiency policies and programs. Sector level (and program level) coordination needs are discussed in the Sector Strategy section of this document.

Equity

Preliminary Equity Segment budget for 2023-2027, and rationale for the distribution

The proposed Equity segment budget is shown in Table 34. Consistent with the RuralREN North's vision and primary goals, providing EE services to Equity-Targeted customers and communities is our highest priority and thus, budget focus. A large portion of the RuralREN North's customer base falls into one or more of the CPUC's three Equity-Targeted categories of hard-to-reach, underserved or disadvantaged. Appropriately, 51% of our total proposed budget is allocated to the Equity segment to

fund outreach and education, incentives, financing and workforce education and training to rural communities.

Table 35: Equity Segment Budgets

Sector	2024	2025	2026	2027	Total
Finance	\$593,86	\$2,027,595	\$1,957,912	\$2,000,824	\$6,580,192
Portfolio Support	\$33,246	\$143,328	\$152,101	\$131,974	\$460,649
Public	\$25,377	\$344,867	\$413,074	\$397,889	\$1,181,206
Residential	\$271,973	\$1,887,333	\$1,875,113	\$1,988,130	\$6,022,548
WE&T	\$69,398	\$569,733	\$629,399	\$696,067	\$1,964,597
Total	\$993,855	\$4,972,86	\$5,027,598	\$5,214,884	\$16,209,192

Equity Segment strategies, goals, and outcomes

Table 36: Equity Strategies, Goals, Outcomes

Strategy	Goals	Outcomes
P1: Residential Outreach and Education	Rural HTR and equity-targeted customers understand energy usage information and act on energy saving recommendations	Residents and businesses implement energy savings upgrades in RuralREN North and IOU Resource Acquisition programs
P2: Financing for energy upgrades	Rural HTR and equity-targeted customers use financing to pay for energy upgrades in their homes and businesses	Energy and GHG emissions are reduced Rural communities become more resilient
P3: Workforce Training	Equity-targeted rural youth and disadvantaged workers learn clean energy job skills	Capacity for energy improvements is increased in the region
P4: Public Agency EE Support	Rural public agencies have the technical information and support to undertake energy efficiency projects, including support for financing and incentives needed to do EE projects	Public agencies in rural areas implement EE projects, save energy and reduce GHG emissions, reduce O&M costs, and provide showcase opportunities for the local community

Segment-Specific Coordination

The RuralREN North will coordinate its Equity segment strategies as necessary with PG&E, third-party programs or CCAs to avoid potential duplication/competition among programs, and wherever possible, will collaborate to increase equity-targeted customer participation in all programs in the region to streamline delivery and enhance the customer experience. As a member of the CAEECC Coordinating Committee and CAEECC Working Groups on Underserved, Composition, Diversity, Equity, and Inclusion, Market Support Metrics, Equity Metrics, and the EE Filing Process, the RuralREN North representatives will continue to work collaboratively with all Portfolio Administrators and stakeholders to improve coordination and effectiveness of California's energy efficiency policies and programs. Sector level (and program level) coordination needs are discussed in the Sector Strategy section of this document.

Sector Strategy

Strategies driving distribution of budget among sectors, and alignment with broader portfolio objectives

Sector budgets are established to achieve overall portfolio goals, which are in turn based on the needs of our rural customer base. Past program participation, equity factors, and current and planned program offerings in the region helped determine sector focus and level of effort needed. For example, the RuralREN North is not proposing to target the Agriculture Sector because PG&E has large Resource Acquisition programs that will target the Ag Sector in regions served by RuralREN North.

Description of sectors Portfolio Administrator proposes to serve

Table 36 shows the sectors the RuralREN North proposes to serve, and the regions where the sector programs will be offered. As shown in the table, all sectors/programs will be offered in the RuralREN North regions except for Public Equity. Our flagship programs are Residential-Equity, Residential and Commercial Resource Acquisition, and Finance because we believe we can have the biggest impact on individual customers and rural communities by providing support in the areas of energy burden, education, and financial resources.

Reduce Energy Burden: We help reduce energy burden by helping customers identify and implement ways to reduce energy consumption, which then creates a more robust pipeline of projects for Resource Programs.

Bring Capital for Energy Efficiency Investments: We bring needed capital to our rural communities in the form of bridge financing and micro-lending for customers to adopt more comprehensive, costly energy efficiency and decarbonization measures.

The Codes and Standards sector is important because rural counties are notorious for lagging in code compliance, and as more customers migrate from urban and suburban areas to rural areas, new

construction and home renovations will increase, placing additional burden on the demand for knowledgeable code enforcement officials and designers and builders. It is a challenge to achieve Title 24 compliance—we can speed up achievement of decarbonization and energy efficiency goals by taking local action to ensure rural communities aren’t unprepared or left behind as they pursue these goals.

The Public program, offered in Lake and Mendocino counties, fills a gap in service of PG&E’s Local Government Partnership programs working in the regions. RuralREN North’s partners, RCEA and SBC, are implementers of LGP programs and will ensure consistency.

The Commercial and Residential Resource Acquisition programs fill gaps by serving the most remote areas of rural California, continuing and building upon Resource Acquisition programs that have been implemented by RCEA and SBC through their LGPs in past program cycles.

Preliminary distribution of budget among sectors for 2023-2027, and rationale for the distribution

Table 37: Budget by Segment

Sectors	Segments				Total
	Codes & Standards	EM&V	Equity	Resource Acquisition	
C&S	\$678,384				\$678,384
Commercial				\$5,799,870	\$5,799,870
Finance			\$6,580,192		\$6,580,192
Public			\$1,181,206		\$1,181,206
Residential			\$6,022,548	\$8,682,610	\$14,705,158
WE&T			\$1,964,597		\$1,964,597
EM&V		\$1,325,563			\$1,325,563
Portfolio Support	\$19,843		\$460,649	\$423,616	\$904,108
Grand Total	\$698,227	\$1,325,563	\$16,209,192	\$14,906,096	\$33,139,078

Agricultural Sector

The RuralREN North’s portfolio does not include specific Agricultural Sector programs; however, the Commercial Resource Acquisition and Finance cross-cutting program will be available for Agricultural businesses.

Commercial Sector

The RuralREN North's Commercial Sector program will offer Energy Advisor services and financial incentives to small- and medium- businesses in RuralREN North's service area. Regionally tailored outreach and energy audits will provide specific, actionable recommendations for making energy related improvements to reduce energy consumption and will guide the customer toward available incentives and financing options offered by RuralREN North, PG&E, and third-party program implementers. Incentives will be offered for common energy efficiency measures and GHG reducing technologies such as heat pumps. EE measures will include a variety of items like lighting, HVAC, and appliances. Financing will be made available to enable customers to implement energy projects with no capital outlay. Finance offerings are described in the cross-cutting Finance Sector section of this business plan.

Commercial Sector Goals, Objectives, and Strategies

Table 38: Commercial Sector Goals, Objectives, and Strategies

Goal	Strategy	Objective
G1- Increase customer awareness and knowledge of energy efficiency benefits, including GHG reduction strategies	Provide basic energy efficiency information to raise awareness. Energy Coaches conduct surveys to identify actionable recommendations.	Achieve program metric targets related to outreach and recommendations.
G2- Increase customer implementation of energy efficiency measures	Address first cost barrier by providing incentives and easy financing. Energy Coaches provide support during implementation to reduce hassle factor.	Achieve kWh, kW, and Therm energy savings goals.
G3- Increase depth of energy efficiency retrofits in small and medium businesses	Leverage incentives from other sources, and encourage financing to pay for GHG reducing capital equipment such as HVAC and water heating heat pumps.	Achieve electrification equipment sales metrics.
G4- Increase participation of equity-targeted small and medium businesses	Focus outreach to hard-to-reach, DAC and underserved SMBs, provide increased incentive levels.	Achieve equity-targeted customer participation metrics.

Commercial Sector Coordination

The RuralREN North's Commercial Sector program will coordinate with PG&E, CEC, CCA, CPUC Energy Efficiency, Demand Response, Electrification and Market Transformation programs targeting small- and medium-commercial customers to leverage funding and services, especially in the area of decarbonization and EV charging station siting. The RuralREN North will coordinate closely with PG&E's third-party Micro and Small Business Equity Program, which is currently operating in other regions.

Categorization by Segment

Table 39: Commercial Categorization

Sector	Program	Segment	Rationale
Commercial	SMB Incentives	Resource Acquisition	Primary focus of the program is to achieve energy and GHG reductions

Program Details

Table 40: Program Card for RRN003

RuralREN North Commercial Resource Acquisition Program	
Program ID: RRN003	
Portfolio Segment: Resource Acquisition	Implementation Party: RuralREN North
Applicable Sector: Commercial	Market Sub-Sector: Micro and Small Businesses
Sector Challenge: Energy efficiency resource acquisition programs in rural communities face the following challenges: <ul style="list-style-type: none">○ Geographic isolation: business density in rural areas is much lower than the California average.○ Lack of energy efficiency awareness○ High first-cost of energy efficiency, especially for small businesses trying to survive with wildfire impacts and record inflation.○ Low engagement by rural HTR businesses in energy efficiency programs that are perceived as more suited for urban/suburban residents.○ Low-cost effectiveness and high delivery cost of resource acquisition programs in the SMB sub-sector because of high cost to serve and lack of approved deemed measures suitable for small businesses, such as LED lighting.	

Sector Opportunity:

With relatively low awareness and participation in EE programs comes an opportunity for a locally based, regional approach to raise awareness and increase small business adoption of EE practices and measures. With customers in need of strategies for adapting to TOU rates and the market at an inflection point with regard to decarbonization strategies, the timing is ideal for a tailored resource acquisition program to drive new and deep energy savings in rural small businesses. High energy burden, extreme weather conditions, and high inflation will motivate business owners to seek out ways to reduce their operating cost and improve the safety and comfort of their facilities for customers and employees by taking advantage of low- and no-cost energy efficiency services.

Known Equity Concerns in the Selected Markets:

A large portion of RuralREN North's small businesses are in low-income communities and are hard-to-reach due to the combination of a rural location, number of employees, and/or leased spaces. Energy burdens are on average, much higher than the state average, and counterparts in urban/suburban areas. SMBs in rural areas employ a higher portion of workers than large businesses, highlighting the importance of SMBs to the economic health of rural communities.

Proposed Solutions to Equity Concerns:

RuralREN North's Commercial Resource Acquisition program will focus its efforts on achieving a high percentage of participation from targeted equity customers. Outreach and messaging strategies will drive equity customers to implement energy efficiency upgrades to their businesses using incentives and direct installation services. RuralREN North's cross-cutting Finance program will also support HTR businesses with bridge loans to supplement IOU OBF financing with no out-of-pocket cost to the business owner. We estimate that up to 75% of participating businesses will be classified as HTR, Micro, or Small.

Program Description:

RuralREN North's Commercial Resource Acquisition program is a comprehensive EE and decarbonization program offering technical services, incentives, and direct installation of select measures all aimed at reducing energy usage, on-peak load and GHG emissions in rural micro, small and medium-sized businesses. The program will be offered in RuralREN North's Sierra and North Coast regions, filling a gap in services to the most remote and sparsely populated areas of RuralREN North's service territory and those most in need of a customized local delivery offering. The program uses a comprehensive approach to increase adoption of EE, demand response, and decarbonization measures, while providing operating cost savings and added non-energy benefits of safety, resilience and occupant comfort for local businesses. While not categorized as an Equity segment program, a high proportion of the businesses served will be hard-to-reach and located in or near underserved rural communities. The program encourages use of financing to enable more costly comprehensive retrofits, including RuralREN North's cross-cutting Finance program (RRN004) which will offer bridge loans to supplement IOU On-Bill Financing programs.

Intervention Strategy:

- Energy Advisors act as the customer's single point of contact. An Energy Advisor will provide business evaluations for single measures or a comprehensive assessment, depending on the customer's needs and situation, and guide the customer through implementation options.
- Energy Reports
- Downstream rebates for a limited set of measures
- Custom incentives for popular and cost-effective LED lighting measures
- Direct installation and project management support of certain measures, with incentives high enough to cover 100% of the measure cost using trade allies who have been qualified with zero or low customer co-pay.

Program Metrics:

As a resource acquisition program with an equity emphasis, metrics include resource and non-resource measures, including:

- Equity-targeted customer participation, percentage
- Hard-to-reach customer participation
- Underserved customer participation
- TSB: \$2,113,698
- Net kWh: -433,414
- Net kW: 104
- Net Therms: 161,880
- CO₂e, tons: 721

Targets for each metric will be confirmed (or established after baseline determination) after CPUC approval of RuralREN North formation.

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

Delivery workforce will include staff of RuralREN North's Sierra and North Coast Implementation Partners, including new hires dedicated to program implementation. Local direct installation contractors and market-based trade allies will be needed to meet customer demand for measures. Availability and scale of the workforce needed for successful implementation of the program will not present a risk.

Market Actors necessary for success:

Local contractors, trade allies, wholesale suppliers, and retailers must be able to support the increase in demand for the promoted EE measures.

Solicitation Strategy:

Portions of the program may be outsourced, such as installation contractor services. Supplier diversity will be incorporated into RuralREN North's solicitation strategy.

Transition Plan:

Not applicable

Expected Program Life:

Rollout will begin in 2025 and continue through the four-year cycle and beyond. RuralREN North will implement continuous improvements and refinements in program design, delivery strategies and tactics throughout the life of the program and consider expanding geographic coverage to other RuralREN North regions to fill gaps if needed.

Short Term Plan:

Launch direct install program in mid-2025 in Humboldt County with concurrent needs assessments in all regions and begin full-scale implementation in Sierra and North Coast RuralREN North regions in 2026.

Long Term Outlook:

EE fluency and measure adoption rates of rural small businesses and energy savings in the region increase, and significant energy operating cost savings are realized, especially for equity-targeted small businesses.

Cost Effectiveness:	Budget
TRC w/o admin: 0.45	2024: \$224,350.98
TRC w/admin: 1.54	2025: \$1,661,258.24
PAC w/o admin: 0.46	2026: \$1,893,282.55
PAC w/admin: 1.56	2027: \$2,010,978.10

Anticipated directional and scale changes in budget for years 2028-2031:

Budgets are anticipated to increase slightly over the last four years of the Business Plan period.

Implementation Plan:

Plans for all RuralREN North programs will be developed before implementation begins.

Cross-cutting Sector: Codes & Standards (C&S)

The RuralREN North’s Codes and Standards program supports code enforcement agencies and better equips the building design and construction community to implement California’s ambitious Building Energy Efficiency Standards (Title 24), helping make buildings more efficient, paving the way for zero net energy building stock, and reducing energy use and greenhouse gas emissions in rural California’s most environmentally challenged regions.

C&S Goals, Objectives, and Strategies

Table 41: C&S Sector Goals, Objectives, and Strategies

Goal	Strategy	Objective
G1- Increase Code Compliance	Training for code enforcement officials	Increase the percentage of projects that comply with codes

G2- Increase understanding and support compliance of design and construction projects	Training for building design and construction professionals	Increase the percentage of design and construction projects that comply first time through without rework
G3- Provide resources to support local code authorities review and approval of building design and construction	Code Coach - technical support for code enforcement officials Shared Tracker - encourages collaboration among building departments in the region	Reduced plan check and inspection turnaround time

C&S Sector Coordination

The RuralREN North's Codes and Standards program will coordinate with the Statewide Codes and Standards program, and Statewide Residential and Non-Residential New Construction programs.

Categorization by Segment

Table 42: C&S Categorization

Sector	Program	Segment	Rationale
Codes & Standards	Codes & Standards Compliance Support	Codes & Standards	The Codes & Standards program primarily supports the building design and construction industry to comply with energy codes

Program Details

Table 43: Program Card for RRN007

RuralREN Codes and Standards Program	
Program ID: RRN007	
Portfolio Segment: Codes & Standards	Implementation Party: RuralREN North
Applicable Sector: Cross Cutting – Codes and Standards	Market Sub-Sector: Local Governments; All customer sectors/sub-sectors
Sector Challenge: <ul style="list-style-type: none"> ○ Limited staff capacity and energy codes are not always a priority in the building permitting and code compliance process. ○ Triennial Code Adoption Cycle leads to the need to inform, educate and enforce newly adopted codes and standards, on a regular basis. 	

- Building professionals in rural areas lack access to consistent and regular training. More importantly, they often are not engaged.³⁸
- Energy code compliance can be inconsistent, as code enforcement occurs at the local municipality or county level. Many rural building departments are resource constrained.
- Upcoming codes are transformational with storage and heat pumps.³⁹
- Limited HERS raters in rural areas.⁴⁰

Sector Opportunity:

- For transformative standards to be consequential, they need to be implemented and enforced properly.
- Offering regional and climate-zone specific training and information will inform and engage rural building professionals on impactful energy saving tactics.
- Codes are a cost-effective way to transform a market, but to be meaningful, they have to be implemented properly and enforced.
- Coordinate efforts regionally to engage in code cycle updates and adoption to ensure that regional characteristics are being considered in the broader adoption of codes.
- Tool libraries provide energy measurement tools and new technologies for use and introduction to local communities.

Known Equity Concerns in the Selected Markets:

In general, local governments in rural areas are hard-to-reach, and therefore not as well served by EE programs.

Proposed Solutions to Equity Concerns:

RuralREN North's mission is to equitably serve hard to reach rural customers, with goals and metrics to ensure the needed focus and dedicated resources

Program Description:

The RuralREN North Codes & Standards (C&S) program will connect rural building departments and building professionals with education and technical resources to increase comprehension and compliance in the California Building Energy Efficiency Code (Title 24) and escalate more rapid adoption of new standard technologies. The program is designed to leverage current Investor-Owned Utility (IOU) and Statewide offerings and will serve geographically rural and hard-to-reach areas that have distinct characteristics and needs. The program's goal is to provide offerings that will help those regions reduce energy usage through improved building design and construction and greater code compliance and enforcement. Through this program, RuralREN North seeks to increase access and participation among local governments and local building professionals by connecting them with targeted training and professional continuing education opportunities, personalized code coaching,

³⁸ Lui, Adeline, Energy Code Support: The Next Frontier for Residential New Construction Programs September 11, 2020,

<https://www.aesp.org/blogpost/1264671/325906/Energy-Code-Support-The-Next-Frontier-for-Residential-New-Construction-Programs>

³⁹ Leathers, Kelly. "Streamlined Permitting Needed to Scale up California's Energy Storage Capacity." Center for Sustainable Energy, Center for Sustainable Energy, Jan. 2022,

<https://energycenter.org/thought-leadership/blog/streamlined-permitting-needed-scale-californias-energy-storage-capacity>.

⁴⁰ DNV-GL, September 22, 2017, 2014-16 HVAC Permit and Code Compliance Market Assessment for the CPUC

regional tool lending libraries, best practice guides and checklists, aggregated resources and policy support.

Intervention Strategy:

- Educating building officials and local contractors of in-person and online training sessions and forums, customized training and online tools and resources to build capacity and awareness and connect building professionals to California building codes and standards.
- Connect building professionals to information, consultation, and expert advice needed to streamline and optimize permit submissions and increase code compliance.
- Engagement with local professionals involved in designing, permitting and constructing new construction, retrofits and remodels of single family and multifamily buildings including architects, engineers, contractors, field inspectors, and building plan reviewers, plus other key stakeholders such as homeowners and owner-builders.
- Leverage existing tools and resources developed by the IOUs, other RENs, CEC and the Energy Code ACE. Rural regions are too often unaware of these resources or do not have the resources to pursue and utilize them fully and in the most effective manner.
- To address this, the RuralREN North will curate and centralize these resources.
- RuralREN North will complement these tools and resources with materials that address the regional characteristics of each area.

Program Metrics:

- Number of participating jurisdictions
- Number of hard-to-reach jurisdictions
- Number of training activities (classes, webinars) held, number of market actors participants by segment (e.g. building officials, builders, architects, etc.) and the total size (number of the target audience) by sector. (M) Number of training activities
- The percentage increase in closed permits for building projects triggering energy code compliance within participating jurisdictions.
- Number of jurisdictions with staff participating in a Codes and Standards Training
- All final metrics, targets and indicators will be confirmed (or established after baseline determination) after approval of RuralREN North and with submittal of full Implementation Plan

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

The delivery workforce will include staff of RuralREN North's Implementation Partners, including new hires dedicated to program implementation, and third-party engineering consultants. Availability and scale of the workforce needed for successful implementation of the program will not present a risk.

Market Actors necessary for success:

Local architects, designers, engineering companies, builders, sub-contractors, trade allies, wholesale suppliers

Solicitation Strategy:

Implementation of portions of the program will be outsourced. Supplier diversity will be incorporated into RuralREN North's solicitation strategy.

Transition Plan:

Not applicable

Expected Program Life:

Launch of education and outreach will begin in 2025 with a full implementation in 2026 and will continue through the four-year cycle, at a scale to be determined during the first year and depending on performance of third-party programs providing similar services in other areas of RuralREN North's service area. RuralREN North will implement continuous improvements and refinements in program design, delivery strategies and tactics throughout the life of the program.

Short Term Plan

Perform a local needs assessment in 2025 while providing education and outreach and engaging with IOU and CCA C&S resources. Rollout of program in 2026.

Long Term Outlook

Rural building officials and the local building design and construction industries are complying at increasingly higher rates, helping rural communities achieve energy and GHG reduction plans. RuralREN North continues to be a vital resource for rural communities as they pursue more aggressive decarbonization and energy savings goals.

Cost Effectiveness

TRC 0.0

Budget

2024: \$22,251.82

2025: \$199,867.67

2026: \$232,980.66

2027: \$223,283.70

Anticipated directional and scale changes in budget for years 2028-2031:

Budgets are anticipated to increase slightly over the last four years of the Business Plan period.

Implementation Plan:

Plans for all RuralREN North programs will be developed before implementation begins.

Cross-cutting Sector: Finance

The RuralREN North's Finance Sector program will address first-cost and access to capital barriers that exist in rural California. A bridge loan program will offer a no-cost short-term loan to cover energy efficiency project costs during construction to "bridge" the time gap between the time of application for IOU On-Bill Financing and funding of the loan, after construction completion. This time gap can be many months, and in some cases more than a year. This type of loan allows the customer to implement energy efficiency projects quicker and eliminates the added cost, and barrier to implementation, of having to obtain a separate loan to finance construction, before the OBF loan is funded. A microloan product will fill gaps in existing financing products such as GoGreen and PACE. The target customer segments will be residential and small-to medium-sized businesses in the commercial, industrial, public and agricultural sectors. The loan amounts are expected to be below currently available financing products of \$5,000 and would carry low or zero interest and fees.

Both loan programs will be developed through a competitive solicitation for third-party design, with the goal of creating products that meet needs of the customer and complement existing offerings and avoiding conflict with the CPUC's ongoing Order Instituting Rulemaking to Investigate and Design Clean Energy Financing Options for Electricity and Natural Gas Customer R.20-08-022.

Finance Sector Goals, Objectives, and Strategies

Table 44: Finance Sector Goals, Objectives, and Strategies

Goal	Strategy	Objective
G1- Increase customer implementation of energy efficiency measures	Address first cost barrier by providing financing. Reduce hassle factor by providing Energy Advisors during implementation to help with project scoping, justification, and implementation.	RuralREN customers have a viable option to identify and finance energy efficiency upgrades even if they don't have the capital of access to affordable financing.
G2- Increase depth of energy efficiency retrofits	Use financing to sell higher cost, comprehensive upgrades with no out of pocket cost for the customer.	Customer realizes meaningful bill savings, increased property value, comfort benefits, and energy and GHG impacts of comprehensive energy efficiency upgrades.
G3- Increase participation of equity-targeted SMBs, public agencies, and residents	Promote program to equity targeted customers. Provide concierge service to equity-targeted customers to ensure appropriate scope, cost, and savings are realized.	Equity targeted participants have access to easy and affordable capital for deep energy efficiency upgrades.
G4- Increase use of IOU's On Bill Financing by rural SMBs and Public Agencies	Bridge financing makes OBF more attractive by eliminating the need for the customer to use their own capital to pay for construction before the OBF loan is funded.	Customers and projects that qualify for PG&E OBF loans use OBF as the first, best option for financing EE projects.

Finance Sector Coordination

General coordination will be required with other PAs offering financing products to avoid possible competition or confusion in the marketplace. Since the RuralREN North's bridge financing is designed to complement the IOUs' OBF offering, coordination is needed to ensure the two products work together for the customer's benefit as intended. IOUs and the RuralREN North ideally will co-market the OBF and bridge loan as a package for customers. The RuralREN North will also coordinate with, and actively participate in, the CPUC's Rulemaking 20-08-022 Order Instituting Rulemaking to Investigate and Design Clean Energy Financing Options for Electricity and Natural Gas Customers.

Coordination will be required with ESA Administrators to ensure ESA-qualified customers are provided all possible no-cost ESA services before the RuralREN North financing is offered to an ESA-qualified customer. Additional coordination may be needed between GoGreen and PACE financing, however in most cases RuralREN North microloans will be below the minimum loan amounts offered in those programs avoiding potential overlap.

Categorization by Segment

Table 45: Finance Categorization

Sector	Program	Segment	Rationale
Cross Cutting - Finance	RuralREN EE Financing Program	Equity	RuralREN North's Finance offering targets underserved & hard-to-reach customers primarily

Program Details

Table 46: Program Card for RRN004

RuralREN North Finance Equity Program	
Program ID: RRN004	
Portfolio Segment: Equity	Implementation Party: RuralREN North
Applicable Sector: Cross Cutting - Finance	Market Sub-Sector: Residential, Micro, Small, and Medium-sized Businesses, Public
<p>Sector Challenge:</p> <p>First-cost remains as one of the most common and persistent barriers to residential, small business and public sector implementation of deep, comprehensive energy efficiency and building decarbonization upgrades. Progress has been made in developing innovative financing products to address the first-cost barrier, but there are gaps that still exist, including minimum loan amount, high costs (interest rates), high minimum credit score hurdles, and sometimes onerous application processes. One of the most attractive loan programs is the OBF programs offered by all of the IOUs. Currently, these programs are only for non-residential customers, have a minimum loan amount of \$5,000, and are funded only after completion of construction, leaving the customer to cover costs during construction or pay additional costs for short term construction financing. Additionally, awareness and support for existing loan products may be lower in rural regions than in urban or suburban regions.</p> <p>Sector Opportunity:</p> <p>One opportunity is to create financing products that fill gaps, to complement the host of available financing products and also make them more effective. For the PG&E On-Bill Financing (OBF) program, a 0% interest loan paid back on the utility bill, payment to the contractor is often delayed</p>	

by long project closeout and loan processing. A short-term construction or bridge loan solves the problem of the customer having to have enough cash to pay for the construction before the OBF loan is funded. While this type of financing may be available in the market from traditional lenders and some contractors, it usually carries high interest, higher qualifying criteria, requires a down payment, and may not be applicable to energy efficiency projects. Another opportunity is micro and small loans that cover the cost of energy efficiency projects for homeowners and small businesses. Loan amounts would be less than existing financing programs such as GoGreen and PACE and would be lower cost than alternatives such as credit cards or manufacturer financing.

Known Equity Concerns in the Selected Markets:

A large portion of RuralREN North's homeowners, small businesses and public agencies are located in low-income communities, are hard-to-reach due to the combination of rural location, number of employees, and/or in leased spaces, and in the case of public agencies may be very small and not as well-funded as urban/suburban agencies. SMBs in rural areas employ a higher portion of local workers than large businesses, highlighting the importance of healthy SMBs to the economic health of rural communities. Credit scores may not be as high in rural areas, and rural areas are served by fewer financial institutions.

Proposed Solutions to Equity Concerns:

RuralREN North's Finance Program will focus on developing financing products that specifically address the identified equity concerns. Marketing and outreach will target equity customers. The program will establish targets that will ensure achieving a high percentage of participation from targeted equity customers.

Program Description:

The cross-cutting RuralREN North Finance Program will equitably support the residential, SMB and public sectors in the RuralREN North communities through low/no cost loans that will encourage and accelerate the implementation of energy efficiency projects. Loan products will address first-cost and access to capital barriers that exist in rural California and will span gaps in cut IOU and other statewide offerings. The Program will conduct a gap assessment to analyze residential, commercial, and public sector financing needs in the RuralREN North communities, as well as an evaluation of existing financing options. Loan types will be subject to change given results from the gap assessment, however, preliminary financing needs for the RuralREN north region include bridge and micro loans.

Bridge loans will be designed to complement and improve the effectiveness of IOU OBF. They will provide RuralREN North customers with a means of covering the cost of energy upgrade projects before other funding is received (which may include OBF, incentives/rebates, or other external loans, grants, or financing programs). In the case of OBF, bridge loans will bridge the time gap between time of approval for an IOU's OBF and the disbursement of OBF funds upon verification of the project installation by the OBF program. This gap, which can be months, or in some cases a year or more, can be a significant financial hardship for cash-strapped rural customers.

Micro loans will allow customers to implement energy efficiency and decarbonization measures with no out-of-pocket cost. These loans will fill a niche in the realm of currently available financing

products for loans for EE upgrades below current minimum loan amounts, with easy qualifying and flexible repayment terms.

Once the financing needs assessment has been completed, it will help inform program design, both of which will be outsourced to a third-party experts. Details of the program will be included in the Implementation Plan.

Intervention Strategy:

- Design and implement an EE bridge loan product.
- Design and implement an EE microloan product.
- Promote financing as a solution to overcome first-cost barriers, focusing on equity-targeted rural customers.
- Leverage RRN001 Residential Equity program marketing, education and outreach activities.
- Leverage RRN002 Residential Resource Acquisition program outreach and incentives.
- Leverage RRN003 Commercial Resource Acquisition program outreach and incentives.
- Leverage RRN005 Public program.
- Provide a loan concierge service to help customers select the best financing and incentives for their project and assist with loan and incentive applications.

Program Metrics:

- Equity-targeted customer participation, percentage
- # of loan applications submitted
- #of loans funded
- Energy savings of projects financed.
- All final metrics, targets and indicators will be confirmed (or established after baseline determination) after selection of third-party program design and implementation contractor.

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

The delivery workforce will include staff of RuralREN North's Implementation Partners, including new hires dedicated to program implementation, and third-party design and possibly implementation contractor. Local trade allies will also promote the program and assist customers in applying for financing. Availability and scale of the workforce needed for successful implementation of the program will be a risk.

Market Actors necessary for success:

Local contractors, trade allies, wholesale suppliers, and retailers must be able to support the increase in demand for the promoted EE measures. Depending on the final program design, local lenders may be needed for underwriting and loan funding.

Solicitation Strategy:

Design of all or portions of the program will be outsourced. Supplier diversity will be incorporated into RuralREN North's solicitation strategy.

Transition Plan:

Not applicable

Expected Program Life:

Program activities will begin in 2025 and continue through the four-year cycle and beyond. RuralREN North will implement continuous improvements and refinements in program design, delivery strategies and tactics throughout the life of the program.

Short Term Plan

Conduct a solicitation for third party needs assessment and program design in 2025, award contract(s), design and develop the program in mid-2025 and begin implementation in late-2025.

Long Term Outlook

Rural customers become comfortable using financing to implement energy efficiency and decarbonization measures, and adoption rates and energy savings in the region increase. Loan default rates are low and significant energy cost savings are realized, especially for equity-targeted small businesses.

Cost Effectiveness	Budget
TRC 0.0	2024: \$593,860.27
	2025: \$2,027,595.34
	2026: \$1,957,912.02
	2027: \$2,000,824.22

Anticipated directional and scale changes in budget for years 2028-2031:

Budgets are anticipated to increase slightly over the last four years of the Business Plan period.

Implementation Plan:

Plans for all RuralREN North programs will be developed before implementation begins.

Cross-cutting Sector: Workforce, Education & Training (WE&T)

The RuralREN North’s cross cutting WE&T program will provide individuals in rural hard-to-reach, underserved, and low-income communities access to career opportunities in clean energy-related markets. The program aims to enhance local knowledge and employment in energy efficiency by providing training pathways to support the regional workforce and the state’s energy efficiency goals. The program will offer customized versions of in-person and virtual training curriculum to best serve the populations in each specific region. Individuals are enrolled into the program pathway that is best suited for them, and training is delivered directly and/or in coordination with the RuralREN North’s community partners to ensure development of a well-trained and knowledgeable workforce that will support increased demand for energy-related systems and technologies in the communities they live.

WE&T Goals, Objectives, and Strategies

Table 47: WE&T Goals, Strategies, and Objectives

Goal	Strategy	Objective
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G1- Rural workers employed in rural communities to install energy efficiency measures, offered through RuralREN North, PG&E, and Programs	Contractors trained in RuralREN North workshops receive the necessary skills to complete installations of EE and electrification measures and participate in programs directly supporting Energy Efficiency.	Increased program participation by both the implementers and the end use customer. Completed energy projects RuralREN North counties increase. Benefit future generations and build community wealth through lower bills, career opportunities and clean energy investments.
G2- Training locations are geographically situated to ensure an equitable distribution of access to disinvested places.	Coordinate with local agencies to use sites for hyper-rural training locations. Continually assess related offerings by PG&E and other programs to ensure training sites exist in unserved communities.	Training sites and hands-on learning sites accessible in geographically hard to reach spaces.
G3- Program pathways are delivered in partnership with rural agencies experienced in implementing workforce programs and shared through a network of connected sites and content.	Coordinate with Community College Districts, Trustees, and College Presidents. Work with County Workforce Investment Boards, Economic Development Departments, Economic Opportunities Commissions, and local employers to actively engage in the program deployment and delivery.	RuralREN North member agencies work with trusted partners from the EE industry and community groups to adjust design and delivery.
G4- Coordinate with energy Program implementers to ensure workers meet program requirements. Support local hiring initiatives and adjust course content to meet new Federal, State, or utility requirements.	Connect workers with curriculum and technology necessary to meet regulatory requirements.	Local government supports the workforce through local hiring policies for public projects. RuralREN North trainings allow for flexible design and delivery meeting and growing need for shorter-time trainings.

WE&T Sector Coordination

The RuralREN North program will leverage and coordinate with the PG&E and statewide WE&T program to ensure they are complementary to each other, and that there is no duplication in service,

or conflict in messaging and marketing. Coordination with other PAs will also be needed to assist with placement of trained individuals in other energy efficiency programs.

Categorization by Segment

Table 48: WE&T Characterization

Sector	Program	Segment	Rationale
Workforce, Education & Training	RuralREN North Workforce Education & Training Program	Equity	Provides local workers in rural and underserved communities with skills training and certifications in climate adaptive careers.

Program Details

Table 49: Program Card for RRN006

Program RuralREN Workforce, Education and Training Equity Program	
Program ID: RRN006	
Portfolio Segment: Equity	Implementation Party: RuralREN North
Applicable Sector: Cross Cutting – Workforce, Education & Training	Market Sub-Sector: Workforce, Education & Training
Sector Challenge: <ul style="list-style-type: none"> ○ Accessibility: Hand-on practicums are necessary for a complete skill set, however, training sites are inaccessible to rural and hyper-rural locations. ○ Undersupply of trained contractors and workers: Lack of trained contractors leaves gaps in the supply pipeline for energy efficiency and clean energy projects. ○ Need soft skills training and wraparound services. ○ Lack of awareness of CA EE industry and career opportunities. ○ Rapidly changing industry, regulatory and policy impacts require just-in-time trainings and faster training modules. 	
Sector Opportunity: <ul style="list-style-type: none"> ○ Programs designed to reach workers in underserved and HTR areas. ○ Training locally and employing locally. ○ Training that can react quickly and adapt effectively to the needs of energy job markets. ○ Programs with career technical training emphasis, plus soft skills needed for business development and industry understanding. ○ Growing need for career building and upskilling of existing workers in building electrification technologies and strategies 	
Known Equity Concerns in the Selected Markets:	

The Urban Sustainability Directors Network (USDN) boils down equity into four categories, “equity in sustainability incorporates procedures, the distribution of benefits and burdens, generational impact, and structural accountability”⁴¹ The four dimensions of equity (procedural, distributional, structural, and generational) are centered around the issues that rural communities often face that prevent them from accessing and benefiting from climate adaptive career opportunities.

Proposed Solutions to Equity Concerns:

- Energy project awareness leads to an increased opportunity to train and employ a local workforce.
- Engaging directly with workers in RuralREN North communities by providing training opportunities that are accessible and convenient.
- Collaborate with local agencies to effectively educate and inform community members on the availability and benefits of climate adaptive careers.

Program Description:

The cross-cutting Workforce, Education and Training program accelerates training (upskilling of existing workers and training for new workers) and increases opportunities for employment. Seeking to address equity issues, access to, and awareness of energy related careers, the RuralREN North WE&T offering presents pathways to diffuse program benefits more equitably for rural Californians. Program pathways are targeted broadly for disadvantaged workers. The program will address skills training, trades advancement, pre-apprenticeship placement and supports building professionals, while coordinating with third-party program implementers and local employers to increase opportunities. The program will upskill trades in the regions. The RuralREN North will promote specific courses and hold seats for those in the trade ally network, allowing local contractors the ability to upskill through specific certifications and training. The program will offer customized versions of in-person and virtual training curriculum to best serve the populations in each specific region. Individuals are enrolled into the program pathway that is best suited for them, and training is delivered directly and/or in coordination with the RuralREN North’s community partners, ensuring development of a well-trained and knowledgeable workforce that reflects the communities they live in.

Intervention Strategy:

- Deliver training in partnership with local agencies through a network of connected sites and standardized content
- Create placement opportunities for program graduates through other RuralREN North programs
- Utilize remote learning platforms and incorporate in-person training

Program Metrics:

- Equity-targeted worker participation, percentage
- # of students trained
- # of pre-apprenticeship seats confirmed
- Number of participants by sector

⁴¹ Park, Angela. Urban Sustainability Directors Network, 2014, Equity in Sustainability: An Equity Scan of Local Government Sustainability Programs, https://www.usdn.org/uploads/cms/documents/usdn_equity_scan_sept_2014_final.pdf.

- Percent of participation relative to eligible target population for curriculum
- Percent of total WE&T training program participants that meet the definition of disadvantaged worker

As RuralREN North’s program activities launch, additional metrics will be identified. All final metrics, targets and indicators will be confirmed (or established after baseline determination) in the implementation plan.

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

Delivery workforce will include staff of RuralREN North’s Implementation Partners and third-party design and implementation contractors. Availability and engagement of contractors in the WE&T program will be the risk.

Market Actors necessary for success:

Employment of WE&T graduates will rely on the entire spectrum of market actors

Solicitation Strategy:

Design and implementation of all, or portions of the program may be outsourced. Supplier diversity will be incorporated into RuralREN North’s solicitation strategy.

Transition Plan:

Not applicable

Expected Program Life:

Limited program activities will begin in 2025 with implementation rollout in 2026 and continue through the four-year cycle and beyond. RuralREN North will implement continuous improvements and refinements in program design, delivery strategies and tactics throughout the life of the program.

Short Term Plan:

Perform needs assessment in 2025, while launching educational programs for upskilling contractors. Full program rollout in 2026.

Long Term Outlook:

RuralREN North’s WE&T program substantially increases the skills of the local workforce and provides pathways for employment of local workers within local communities.

Cost Effectiveness:

TRC 0.0

Budget

2024: \$69,397.98
2025: \$569,732.92
2026: \$629,399.15
2027: \$696,067.20

Anticipated directional and scale changes in budget for years 2028-2031:

Budgets are anticipated to increase slightly over the last four years of the Business Plan period.

Implementation Plan:

Plans for all RuralREN North programs will be developed before implementation begins.

Industrial Sector

The RuralREN North's portfolio does not include specific Industrial Sector programs, however Finance and Workforce, Education and Training cross-cutting programs will be marketed and available for Industrial sector businesses.

Public Sector

The RuralREN North's Public Sector program will offer a suite of services to rural governments and public agencies to identify, develop, track, and implement energy savings opportunities in their buildings and facilities on their path to meeting mandates for GHG reduction and Zero Net Energy. Energy efficiency projects developed using the RuralREN North's support services will be tracked in a pipeline queue and handed off to applicable IOU or other PA incentive programs and/or financing programs, including the RuralREN North's Bridge Loan Program. In addition to providing much needed project support services, the program will increase awareness and expertise of public agencies, increase information sharing among them, and help them demonstrate leadership in energy efficiency within their local communities. The Public Sector program will focus on agencies, schools and local governments in underserved and disadvantaged communities as well as those qualifying as geographically hard-to-reach.

Public Sector Goals, Objectives, and Strategies

Table 50: Public Sector Goals, Objectives, and Strategies

Goal	Strategy	Objective
G1- Reduce energy use & GHG emissions	Provide support to identify and implement EE project, and to incorporate EE projects into Capital Improvement Plans and Climate Actions Plans.	Rural governments and agencies implement EE and decarbonization projects.
G2- Help the public sector lead by example	Integrate renewables, EV, charging, and Demand Response recommendations in feasibility studies. Build community awareness of energy strategies.	Rural governments and agencies adopt ZNE and decarbonization in their own facilities which causes increased adoption in their communities.
G3- Support local controls & energy security	Assess DG and Microgrid feasibility. Encourage use of local workforces in project implementation.	Rural governments and agencies become more self-sufficient and energy resilient and create local jobs.

Public Sector Coordination

The RuralREN North will coordinate with PG&E’s Local Government Partnership programs, third-party programs targeting Public Sector customers, and other demand-side programs, including PG&E, CEC, CCA, and CPUC energy efficiency, Demand Response, Electrification and Market Transformation programs targeting Public commercial customers to leverage funding and services.

Categorization by Segment

Program Specific Coordination

Coordination will be needed between Local Government Partnerships and PG&E third-party contracts serving local governments and public agencies in the region.

Program Details

Table 51: Public Equity Characterization

Sector	Program	Segment	Rationale
Public categorization	Local Government and Public Agency EE Outreach and Support	Equity	RuralREN North's Public sector program targets local governments, schools and public agencies that serve underserved, rural, and hard-to-reach communities primarily

Table 52: Program Card for RRN005

RuralREN North Public Equity Program	
Program ID: RRN005	
Portfolio Segment: Equity	Implementation Party: RuralREN North
Applicable Sector: Public	Market Sub-Sector: Local Governments, Public Agencies, Special Districts, K-12 Schools
Sector Challenge: Energy efficiency public agency programs in rural communities face the following challenges: <ul style="list-style-type: none">○ Limited staff capacity to address EE opportunities.○ Due to lack of capital and limited staff, facilities and systems are usually maintained beyond normal service life.○ Public sector customers serving rural, small and underserved communities are not well served by resource acquisition programs.○ Gap in IOU non-resource market support EE programs serving the segment	

Sector Opportunity:

- Supplement public agency staff with expert consulting support.
- Provide scopes of work to replace older, inefficient equipment with more cost effective high-efficient alternatives
- High demand for an EE program focusing on equity-targeted, small rural public sector customers.
- A non-resource program can funnel energy savings opportunities to RuralREN North and other financing and resource acquisition programs.

Known Equity Concerns in the Selected Markets:

Public facilities in lower income rural regions do not have the resources to maintain and upgrade their facilities.

Proposed Solutions to Equity Concerns:

Provide increased technical assistance and services, acting on behalf of agencies as an extension of staff, in order to identify energy savings opportunities and manage implementation of upgrades and participation in EE programs. RuralREN North's Finance Program will provide no- to low-cost financing for upgrade projects. Establish targets that will ensure achieving a high percentage of participation from targeted equity public customers.

Program Description:

The RuralREN North Public Equity Program is a public agency-focused program designed to help hard-to-reach, disadvantaged, and underserved public agencies in Lake and Mendocino counties access, understand, and participate in energy efficiency by providing local expertise and knowledge of public buildings and infrastructure. The program builds on existing relationships, data, and experience to bring savings and knowledge of energy use to public sector customers.

Intervention Strategy:

- A broad assessment of the current status and needs of public customers in Lake and Mendocino counties that will inform the priority and design of additional program elements to be rolled out in the near future.
- Perform phone-based or in-person assessments of public agencies existing facilities and needs with multiple purposes:
 - Providing tailored information through Energy reports that map out action steps to implement EE measures and behaviors.
 - Connecting customers with other supporting programs, incentives and financing offered by IOU, third parties, and RuralREN North.
- Use energy meter data such as Green Button, and PG&E's Share My Data to identify usage patterns, changes, and opportunities for energy savings.
- Use Portfolio Manager for facilities requiring compliance for Benchmarking. By viewing this information across multiple agencies, we will develop scaled savings opportunities, create economies of scale for public dollars, inform future community-wide plans, and develop policies in support of energy efficiency procurement and leadership.
- Work collaboratively with local governments to create infrastructure inventories that the customer can access, while simultaneously providing information to project managers to identify

opportunities for energy equipment improvements. RuralREN North staff will augment information utilizing data gathered from multiple sources.

- Prompt jurisdictions to integrate EE into their capital improvement planning process when making decisions on building and equipment upgrades and deferred maintenance. ERR's will identify opportunities for funding and financing paths/programs and will include council-ready documents that support agency staff in moving projects from conception to completion, as well as applicable EE policies.
- Provide inside project management support to help apply for funding, write staff reports, provide presentations to elected officials, conduct outreach to contractors, support project installation efforts, and help fulfill incentive or grant reporting requirements.
- Promote financing and leverage RRN004 Finance program micro loan and OBF bridge financing as a solution to overcome first-cost barriers.

Program Metrics:

- Equity-targeted agency, school, local government customer participation, percentage
- Hard-to-reach customer participation
- Underserved customer participation
- Contacts: # of contacts made by sub-sector and type
- Number of projects initiated.
- Number of Educational Opportunities offered.
- Number Buildings Benchmarked

All final metrics, targets and indicators will be confirmed (or established after baseline determination) after approval of RuralREN North with submittal of full Implementation Plan.

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

The delivery workforce will include staff of RuralREN North's Implementation Partners, including new hires dedicated to program implementation, and third-party engineering consultants. Availability and scale of the workforce needed for successful implementation of the program will be the risk.

Market Actors necessary for success:

Local engineering companies, contractors, trade allies, wholesale suppliers, and retailers must be able to support the increase in local demand for EE services.

Solicitation Strategy:

Implementation of portions of the program may be outsourced. Supplier diversity will be incorporated into RuralREN North's solicitation strategy.

Transition Plan:

Not applicable

Expected Program Life:

Rollout will begin in 2025 with a needs assessment, full launch in 2026 and continue through the four-year cycle. RuralREN North will implement continuous improvements and refinements in program design, delivery strategies and tactics throughout the life of the program.

Short Term Plan

Begin building staff and performing needs assessments and Benchmarking in 2025. Roll out additional program offerings in 2026.

Long Term Outlook

Rural public agencies and local government customers become comfortable using RuralREN North support to implement energy efficiency and decarbonization measures, and adoption rates and energy savings in the sector increase. The program may be expanded to other RuralREN North regions depending on performance of third-party programs and LGPs providing similar services in those areas.

Cost Effectiveness

TRC 0.0

Budget

2024: \$25,376.68

2025: \$344,866.66

2026: \$413,073.62

2027: \$397,889.08

Anticipated directional and scale changes in budget for years 2028-2031:

Budgets are anticipated to increase slightly over the last four years of the Business Plan period.

Implementation Plan:

Plans for all RuralREN North programs will be developed before implementation begins.

Residential Sector

The RuralREN North is proposing two programs in the Residential Sector – a non-resource, Equity Segment program and a Resource Acquisition program. Because there is a higher percentage of customers owning and occupying detached single-family homes than attached multi-family in rural areas, both programs focus on single-family owners and tenants. In addition to being geographically hard-to-reach, a large percentage of single-family households in the RuralREN North region are also underserved. The RuralREN North’s residential programs will provide a high-level of tailored outreach and in-person services and fill a gap that has been growing over time as pressures of cost effectiveness have caused IOUs to reduce their investment in the residential segment in general, and especially in the areas of in-person services and support.

The Residential Equity Segment Program will provide outreach and energy awareness information to all residential customers, tailored to the region, climate, county or community-level demographics, housing stock, and other characteristics, with a priority to serve hard-to-reach, underserved and disadvantaged communities. A basic energy efficiency “toolkit” containing simple training materials and simple low-cost energy efficiency measures such as LED lamps and faucet aerators will be provided at no-cost to residents who register for the program. The customer will install the measures and be encouraged to request a virtual or in-home energy assessment as a follow-up. The energy assessments will provide specific, actionable recommendations for improving the home to reduce energy consumption and GHG emissions and will guide the customer toward available incentives and financing options offered by the RuralREN North or PG&E and third-party program implementers.

The Residential Resource Acquisition Segment Program will offer incentives for common home energy upgrades and GHG reducing heat pumps and induction cooktops. Energy Efficiency measures will include a variety of “whole home” items like weatherization, HVAC, and plug loads/appliances. Financing will also be promoted to qualified customers to enable implementation of energy projects with no capital outlay. RuralREN North’s proposed financing offerings are described in the cross-cutting Finance Sector discussion.

Residential Goals, Objectives, and Strategies

Table 53: Residential Sector Goals, Objectives, and Strategies

Goal	Strategy	Objective
G1- Create awareness of EE and decarbonization benefits and techniques among rural customers	Inform and educate customers about specific actionable EE and electrification opportunities via EE kits and virtual and in-home energy assessments.	Rural customers engage with and participate in RuralREN outreach and education activities.
G2- Increase participation of equity-targeted customers in EE programs	Deploy tailored marketing and outreach campaigns to equity-targeted customer groups. Use EE kits and energy coaches as an extra level of support for participation.	At least 50% of program participants are rural equity targeted customers.
G3- Drive energy savings and GHG reductions in rural residential sector	Offer incentives and/or financing for common EE and decarbonization measures. Refer customers to PG&E and CCA programs, and coordinate application process.	Energy and GHG reduction goals of RuralREN North resource programs are met, and customers participate in PG&E and CCA resource programs.
G4- Support and grow the local EE trade ally/contractor market	Offer training for contractors about available programs and promoted measures. Support rural contractors marketing and promotion through partnerships.	Trained, knowledgeable contractors actively support RuralREN North program and customer to implement EE measures/project communities.

Residential Sector Coordination

The RuralREN North’s Residential sector programs will coordinate with PG&E, CEC, CCA, and CPUC energy efficiency, Demand Response, Electrification and Market Transformation programs targeting residential customers to leverage funding and services. The RuralREN North will coordinate closely

with other residential behavioral and incentive programs. The RuralREN North will coordinate with finance and incentive program offerings to assist customers in participation and avoid duplication or conflicting messaging.

Categorization by Segment

Table 54: Residential Characterization

Sector	Program	Segment	Rationale
Residential	RuralREN North Residential Resource Acquisition Program	Resource Acquisition	The Residential Resource Acquisition Program will offer incentives and direct-install measures and claim energy savings and TSB.
Residential	RuralREN North Residential Equity Program	Equity	The Residential Equity program targets CPUC-defined Equity customers in hard-to-reach, disadvantages, and underserved categories. Fifty percent or more of the program participants will be in these equity categories.

Program Details

Table 55: Program Card for RRN002

RuralREN North Residential Resource Acquisition Program	
Program ID: RRN002	
Portfolio Segment: Resource Acquisition	Implementation Party: RuralREN North
Applicable Sector: Residential	Market Sub-Sector: Single Family Residential
Sector Challenge: Energy efficiency resource acquisition programs in rural communities face the following challenges: <ul style="list-style-type: none"> ○ Geographic isolation and distance from EE implementers ○ Lack of energy efficiency awareness ○ High first-cost of energy efficiency ○ Low engagement by rural HTR customers in energy efficiency programs that are perceived as more suited for urban/suburban residents. ○ Low cost-effectiveness of resource acquisition programs because of high cost to serve and most needed measures carry low cost-effectiveness 	
Sector Opportunity: With relatively low awareness and participation in EE programs comes an opportunity for a locally based, regional approach to raise awareness and increase customer adoption of EE practices and	

measures. With TOU rates and the market at an inflection point with regard to decarbonization strategies, the timing is ideal for a tailored resource acquisition program to drive new and deep energy savings in rural communities. High energy burden and extreme weather provide motivation for customers to pursue energy efficiency measures to reduce costs and realize comfort and reliability benefits.

Known Equity Concerns in the Selected Markets:

A large portion of RuralREN North's communities are underserved, lower income, and geographically hard-to-reach. Energy burdens are on average much higher than the state average and counterparts in urban/suburban areas. Availability of energy efficiency programs has been more limited in RuralREN North communities than throughout the state and in more urban/suburban areas.

Proposed Solutions to Equity Concerns:

RuralREN North's Residential Resource Acquisition program will focus its efforts on achieving a high percentage of participation from targeted equity customers. Outreach and messaging strategies of the Residential Equity program will drive equity customers to implement energy efficiency upgrades to their homes using incentives and direct install services.

Program Description:

RuralREN North's Residential Resource Acquisition program is a comprehensive EE and decarbonization program offering technical support, downstream rebates and customer incentives, and direct installation of select measures aimed at reducing energy usage, on-peak load and GHG emissions. The program will be offered in all RuralREN North regions. The program will begin by offering downstream rebates to customers and will work towards using a whole house approach to increase adoption of EE, demand response, and decarbonization measures, while providing added safety, resilience and occupant comfort benefits. While not categorized as an Equity segment program, the program will prioritize services for underserved, low-income, and geographically hard-to-reach customers who often face very high energy burdens in rural areas. The program complements RuralREN North's Residential Equity program (RRN001) by integrating its assessment, marketing, outreach, and education activities.

Intervention Strategy:

- Leverage RRN001 Residential Equity program assessments, marketing, education and outreach campaigns via
- Digital (email, social media), direct mail, local print, radio, and television media, community events, utilizing local elected officials, agency staff, CBOs, tailored regionally, and other Equity program services that can drive customers to the Residential Resource Acquisition program.
- Energy Advisors act as customer's single-point-of-contact. An Energy Advisor will provide home evaluations of single measures all the way up to a full home performance report, depending on the customer's needs and situation, and guide the customer through implementation options.
- Energy Project Proposals
- Deemed downstream incentives for appliances, insulation, heat pump water heaters, heat pumps, duct sealing, pipe wrap, and faucet aerators.

- Direct installation of certain measures, with incentives high enough to cover significant portions of the measure cost using trade allies who have been qualified

Program Metrics:

As a resource acquisition program with an equity emphasis, metrics and indicators include resource and non-resource measures, including:

- Equity-targeted customer participation, percentage
- Hard-to-reach customer participation
- Underserved customer participation
- Disadvantaged/Tribal community customer participation
- TSB: \$451,159.47
- Net kWh: -1,012,981
- Net kW: 48
- Net Therms: 115,599
- CO₂e, tons: 263

Targets for each metric will be confirmed (or established after baseline determination) in the implementation plan.

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

Delivery workforce will include staff of RuralREN North, including new hires dedicated to program implementation. Local direct installation contractors and market-based trade allies will be needed to meet customer demand for measures. Availability and scale of the workforce needed for successful implementation of the program will be the risk.

Market Actors necessary for success:

Local contractors, trade allies, wholesale suppliers, and retailers must be able to support the increase in demand for the promoted EE measures.

Solicitation Strategy:

Portions of the program may be outsourced, such as installation contractor services. Supplier diversity will be incorporated into RuralREN North's solicitation strategy.

Transition Plan:

Not applicable

Expected Program Life:

Rollout will begin in 2025 with downstream measures and continue with growing incentive offerings through the four-year cycle and beyond. RuralREN North will implement continuous improvements and refinements in program design, delivery strategies and tactics throughout the life of the program.

Short Term Plan

Launch program in early 2025 starting with downstream offerings. Begin pilot of whole house implementation in 2026 with rollout in other regions by 2027.

Long Term Outlook

EE adoption rates of rural customers and energy savings in the region increase and energy burden is decreased, especially for equity-targeted customers. Other RuralREN North regions implement resource acquisition programs as gaps develop, and TSB and cost-effectiveness increase over time.

Cost Effectiveness

TRC w/ admin: 0.20
 TRC w/o admin: 0.40
 PAC w/ admin: 0.23
 PAC w/o admin: 0.61

Budget

2024: \$293,093.09
2025: \$2,531,238.03
2026: \$2,748,436.33
2027: \$3,109,842.46

Anticipated directional and scale changes in budget for years 2028-2031:

Budgets are anticipated to increase slightly over the last four years of the Business Plan period.

Implementation Plan:

Plans for all RuralREN North programs will be developed before implementation begins.

Table 56: Program Card for RRN001

RuralREN North Residential Equity Program

Program ID: RRN001

Portfolio Segment:

Equity

Implementation Party:

RuralREN North

Applicable Sector:

Residential

Market Sub-Sector:

Single Family Residential (primarily)

Sector Challenge:

Energy efficiency in rural communities faces the following challenges:

- Geographic Isolation
- Lack of energy efficiency awareness in rural communities
- High first-cost of energy efficiency
- Low engagement by Rural HTR customers in energy efficiency programs that are perceived as more suited for urban/suburban residents.

Sector Opportunity:

With relatively low awareness and participation in EE programs comes an opportunity for a locally based, regional approach to raise awareness and increase customer adoption of EE practices and measures. With TOU rates in place, and the market at an inflection point with regard to decarbonization strategies, the timing is ideal for tailored education and awareness approaches to drive new and deep energy savings in rural communities. High energy burden and extreme weather provide motivation for customers to pursue energy efficiency for cost savings and increased comfort benefits.

Known Equity Concerns in the Selected Markets:

A large portion of RuralREN North's communities are underserved, lower income, and geographically hard-to-reach. Energy burdens are on average, much higher than the state average, and counterparts in urban/suburban areas.

Proposed Solutions to Equity Concerns:

RuralREN North's Residential Equity program targets equity customers first. Outreach and messaging strategies are tailored to the needs and characteristics of local communities and approaches will be customized based on predominant culture, language, employment, and housing type, to develop knowledge of basic energy and energy management principles.

Program Description:

RuralREN North's Residential Equity program connects rural residential communities to energy efficiency opportunities through targeted outreach, education and technical assistance focusing on equity-targeted hard-to-reach, underserved, and low-income customer groups, who often face very high energy burdens in rural areas. The program aids rural communities in better understanding the concepts of energy conservation, decarbonization, energy efficiency, and demand response; connects customers to the opportunities for energy savings that might exist in their homes; and guides customers to other RuralREN North programs as well as external programs and resources to support implementation of energy projects.

Intervention Strategy:

- Needs assessments: A broad assessment of the current status and needs of residential customers in the RuralREN North Region that will inform the priority and design of additional program elements to be rolled out in the near future.
- Phone-based and in-home Energy assessments with multiple purposes:
 - Providing tailored information through Energy reports that map out action steps to implement EE measures and behaviors.
 - Connecting customers with other supporting programs, incentives and financing offered by IOU, third parties, and RuralREN North.
 - Providing direct installation of simple energy saving measures.
- Marketing, Education and Outreach campaigns via digital (email, social media), direct mail, local print, radio, and television media, community events, utilizing local elected officials, agency staff, CBOs, tailored regionally.
- Energy efficiency "toolkits" provided to customers who sign up via marketing channels and at community events.

Program Metrics:

As an Equity program, quantitative metrics and indicators focus on delivery and impacts, including:

- Equity-targeted customer participation, percentage of total
- Outreach events held.
- Educational Activities
- EE Toolkits distributed.
- Energy Assessment Reports delivered
- Number of Communities/tribes reached.

Targets for each metric will be confirmed in the Implementation Plan.

As RuralREN North's program activities launch, additional metrics will be identified.

The program will also have TSB and energy savings, but they will be small and will be tracked as an indicator rather than a metric.

- TSB: \$250,686
- Net kWh savings: 7763
- Net kW savings: 1
- Net Therms savings: 42,120

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

Delivery workforce will include staff of RuralREN North’s Implementation Partners, including new hires dedicated to program implementation. The risk will be in ensuring availability of trained staff to perform the program activities.

Market Actors necessary for success:

Local contractors, trade allies, wholesale suppliers, and retailers must be able to support the increase in demand expected from the program’s ME&O efforts.

Solicitation Strategy:

Portions of the Res Equity program that may be outsourced include EE toolkits and program marketing.
RuralREN North will implement a strong supplier diversity program in its outsourcing activities.

Transition Plan:

Not applicable

Expected Program Life:

Rollout of program elements will begin in 2025 and continue through the remainder of the four-year cycle and intended to continue beyond. RuralREN North will implement continuous improvements and refinements in program design, delivery strategies and tactics throughout the life of the program.

Short Term Plan

Planning activities will begin in 2024 with the intent to begin ME&O activities and assessments in all regions in 2025. The findings of the needs assessments will inform the rollout of additional program elements.

Long Term Outlook

Customers in rural communities become increasingly aware of energy policies and strategies and continue to implement energy savings activities and adapt to changing strategies and tactics.

Cost Effectiveness

Program cycle TRC: 0.04
Program cycle PAC: 0.04
Program Cycle TRC (no admin): 5.33
Program Cycle PAC (no admin): 12.40

Proposed Annual Budgets for 2024-2027:

2024: \$271,973.38
2025: \$1,887,332.59
2026: \$1,875,112.52
2027: \$1,988,129.69

Anticipated directional and scale changes in budget for years 2028-2031:

Budgets are anticipated to increase slightly over the last four years of the Business Plan period.

Implementation Plan:

Plans for all RuralREN North programs will be developed before implementation begins.

Portfolio Management

Strategies to optimize portfolio and manage risk

Approach to use of goals and metrics for portfolio optimization

The foundation of RuralREN North's management and optimization of its portfolio is based on a comprehensive set of goals and metrics it has established and described in preceding sections of this Business Plan. The RuralREN North's approach to using these goals and metrics to optimize the portfolio will include the following principles:

Visibility and Transparency: Publish metrics and progress to goals regularly and frequently. Ensure all team members have access to reports and dashboards. Report status and forecasts to the RuralREN North's Governing Partners at regular meetings and discuss possible course corrections.

Data Analysis to Quickly Identify Trends: Use automated programs and portfolio databases to produce performance summaries. Understand what tactics and strategies are working, and where possible corrections or program design modifications are needed to improve performance.

Forecasting that Considers Market Trends: Proactively take into account changes in market conditions that may affect program performance. Examples of Market Trends could include economic trends such as inflation and unemployment.

Flexibility to Use Additional Metrics or Goals as Needed: The RuralREN North's proposed set of metrics and goals should be adequate to manage portfolio performance, but other proxies or indicators may be identified during implementation that may improve forecasting accuracy or better describe program performance.

Plan and procedures PA will follow for staying "on-target" in its ability to meet savings/TSB goals and cost-effectiveness targets

The RuralREN North will develop procedures for its management team to manage portfolio, segment, sector, and program level performance to achieve targets. Procedures will address operations, IT systems, program controls, program forms and agreements and tracking and reporting results and metrics. A customer relationship management software platform will be implemented by the lead administrator, RCEA, to manage programs. Program reports and dashboards will quickly identify metrics and indicators that are deviating from plan, and program and portfolio managers will be expected to develop a recovery or cure plan to get back on target.

Approach to risk management, such as planning for unpredictable events. Include here any lessons learned from COVID that informed the PAsT management approach.

The RuralREN North understands the importance of managing the impacts to the program portfolio brought on by unpredictable events such as a pandemic, wildfires, floods, droughts, or other natural disasters. These crisis-based events require an agile and quick response by the Portfolio Administrator, who can mitigate the impact on the program portfolio and, in some instances, create an opportunity to increase energy efficiency adoption.

RuralREN North's presence across rural Northern California and the Sierra Nevada, and its collaborative portfolio management structure, allows the RuralREN North to respond to such events in a structured, coordinated manner. The RuralREN North will mitigate its exposure to these unpredictable events by (1) conducting ongoing program performance reviews to identify needs in portfolio realignment, (2) implementing program budgets changes to address program performance, (3) resetting program operations to maintain program delivery, (4) reconfirming existing joint collaboration with other Portfolio Administrators and their Implementers to support ongoing collaboration and (5) coordinating with the CPUC on needed programmatic or policy changes.

During the Covid 19 pandemic, RuralREN North members adjusted their customer relationships to create virtual engagements, allowing their energy efficiency initiatives to continue.

Approach to flexible portfolio management

The RuralREN North's approach to managing its portfolio begins with the establishment of goals and outcomes (scope), schedules, and costs. These parameters become the program management triangle used by the management team to inform their segment or sector portfolios. Tracking and reporting systems are used to gather and consolidate program results, costs and schedules which are in turn will be used to produce dashboards and reports of performance in real-time that will show performance compared to goals. Forecasts are reviewed, and if necessary, updated at least quarterly (depending on the program). When forecasts indicate changes are needed in any of the three program triangle variables, re-planning of portfolio variables at the sector, segment, and portfolio levels is triggered. Sector, segment, and portfolio management work together to consider corrective actions. Key areas of flexibility needed to ensure overall portfolio goals are achieved include:

- Scope
 - Outreach
 - Subcontracts
 - Delivery approach
 - Partners
 - Service levels
 - Measures

- Incentive levels
- Goal allocation by program/sector/segment/portfolio
- Cost (Budget)
 - Allocation to programs/sector/segment
- Time (Schedule)
 - Monthly, quarterly, or annual milestones (within overall program authorization cycle)

Planned procedures and thresholds for course correction if portfolio is off-track

Portfolio management procedures, including those addressing course corrections, are described at a high level in the section above. Detailed procedures for program management and controls, including thresholds and delegation of authority with regard to forecasting and re-planning will be contained in the operating procedures manuals for the RuralREN North. Manuals will be finalized after CPUC authorization and prior to program launch.

Third-Party Programs

As a Regional Energy Network, CPUC requirements for IOUs to utilize third parties to “design and implement” certain percentages of their portfolios do not apply to the RuralREN North. Thus, the RuralREN North is not proposing to include any CPUC defined “Third-Party Programs” in its portfolio.

Portfolio Coordination

Coordination with other PAs

Successful energy efficiency programs across overlapping regions require active and continuous cooperation among PAs, across shared customer groups and market supply chains. The RuralREN North is founded on such collaboration among its two California rural regions and proposes to extend such effective collaboration to PG&E and CCAs to ensure complementary offerings are effectively directed at rural customers located in overlapping territories. As a result of the growing importance that RENs and CCAs have in California’s energy efficiency landscape, as well as the evolution of CPUC policies recognizing the need to create unique portfolio segments for customer equity and energy efficiency market support. The RuralREN North recognizes coordination performed at a local level is vitally important to the success of energy efficiency programs. The RuralREN North is committed to coordination and effective collaboration with other PAs and implementers.

Overlapping service territory

Description of how the Portfolio Administrator’s portfolio is complementary with the portfolios of other Portfolio Administrators with overlapping service territory

The RuralREN North region has overlap with only PG&E as a PA. RCEA possesses the skill set, experience, and position to coordinate effectively with the PG&E within the overlapping geographic regions to better serve rural customers. The RuralREN North's established vision is based on the premise that we will offer complementary services and advance energy efficiency adoption by equity-qualified customer groups, including geographically hard-to-reach customers who are often underrepresented and underserved by energy efficiency programs. Our vision is to act as a catalyst to accelerate the implementation of the state's energy efficiency and climate goals in geographically hard-to-reach California. By delivering rural regional collaboration, leveraging our trusted local relationships, and promoting pragmatic responses to community needs, the RuralREN North will help deliver an equitable and clean energy future for rural California.

Coordination of other energy programs

Description of how the four-year portfolio and budget considers and coordinates with other energy programs to mitigate duplication of effort, unnecessary spending, and customer confusion or a customer participating in a suboptimal program for their needs.

The RuralREN North unifies vast rural regions throughout Northern California to enable economies of scale in program outreach and delivery to create a greater level of customer program participation. The RuralREN North's governance structure allows the RuralREN North to seamlessly coordinate with multiple program implementers. The RuralREN North will facilitate regularly scheduled (monthly, quarterly) coordination meetings with PG&E, CCAs and other implementers with the goal to eliminate customer confusion, avoid program duplication, create cost efficiencies, and help programs achieve higher levels of customer participation. As part of these program coordination meetings, the RuralREN North will facilitate the advancement of other objectives, including building and leveraging local workforces throughout rural California, especially workers located within rural communities, to help deliver programs in their own communities. RuralREN North's coordination will enable the sharing of best practices and lessons learned in program design and delivery among program implementers serving the represented rural communities.

The RuralREN North will use the annual Joint Cooperation Memorandum process to negotiate and memorialize processes and parameters of coordination with PG&E to avoid duplication of programs that address a common sector in overlapping service territories.⁴² As part of the Joint Cooperation Memorandum, the RuralREN North will: (1) summarize all the programs we intend to run and indicate which programs may overlap; (2) describe how we will work with PG&E so that customers are informed of all options and not steered simply to our own programs; and (3) describe how we work with PG&E to ensure customers are aware of the others' programs, where that administrator does not have a similar

⁴² D. 18-05-041, OP 38 "...Both utility program administrators and non-utility program administrators shall (1) summarize all the programs they intend to run and indicate which programs may overlap; (2) describe how each will work with the other so that customers are informed of all options and not steered simply to their own programs; and (3) describe how each will ensure customers are also aware of the others' programs, where that administrator does not have a similar offering. The program administrators must submit their first annual joint cooperation memos for approval via Tier 2 advice letters no later than August 1, 2018. The program administrators must include subsequent annual joint cooperation memos via Tier 2 advice letters no later than June 15, prior to submitting their annual budget advice letters"

offering. The annual Joint Cooperation Memorandum will enable the RuralREN North to coordinate all operational and marketing activities to avoid suboptimal program delivery.

Coordination with other demand-side programs

Rural customers must be enabled to pursue a clean energy future. This requires providing rural customers opportunities for equitable transition to the clean energy future envisioned by California policymakers. RuralREN North looks to empower rural customers so they can make informed energy management decisions, including the importance of adopting clean energy solutions along with energy efficiency. The RuralREN North is well-positioned to help rural communities navigate to this clean energy transition, by bridging the information and services gaps that have left so many rural customers in an economic and environmental divide.

RuralREN North will promote other demand-side programs, with an emphasis on cleaner energy solutions, to rural customers. Given the higher levels of low-income communities, the RuralREN North will actively promote the IOU's ESA and CARE offerings to residential customers. As the new market transformation efforts evolve, the RuralREN North will actively inform customers about the benefits of incentive stacking and the adoption of newer emerging technologies. The RuralREN North will coordinate with PG&E, CCAs and program implementers to advance customer awareness to increase participation in other DSM offerings.

Stakeholder engagement in the development of this application

As part of the CPUC requirements, the RuralREN North application must include a written summary of feedback received from the CAEECC meeting and other stakeholder input, along with the response or changes that were made as a result of the input on the proposed REN.⁴³ As part of the original application process, The RuralREN, a combination of RuralREN North and CCRREN organizations, presented its plan to several stakeholders including a public workshop sponsored by CAEECC. Generally, the RuralREN received a positive stakeholder response to helping rural customers gain greater access to energy efficiency programs. Stakeholders understood the need to advance the CPUC equity policies and how the RuralREN could help advance these policies in rural communities throughout California. The RuralREN North business plan is informed of this stakeholder feedback process. An itemized list of stakeholders' input and the RuralREN's response and adjustments made to its plan are shown in Appendix D (Stakeholder Input & Resolution).

⁴³D. 19-12-021, OP 2 "A proposal for a new regional energy network (REN) may be brought to the Commission at any time via a motion in the open energy efficiency rulemaking. A proposed REN is required to represent more than one local government entity and must present its business plan proposal to at least one meeting of the California Energy Efficiency Coordinating Committee (CAEECC) prior to filing it with the Commission. The REN motion to the Commission must also contain: (a) A description of its new and unique value to contribute to California's energy, climate, and/or equity goals. (b) A description of its proposed governance structure. (c) A "letter of commitment to cooperate" from each existing program administrator with whom the new REN's proposed activities will overlap. (d) A written summary of feedback received from the CAEECC meeting and any other stakeholder input, along with the response or changes that were made as a result of the input. (e) A proposed set of energy savings targets. (f) A proposed set of goals and metrics. (g) An estimate of benefits and costs according to the Total Resource Cost and Program Administrator Cost tests."

Stakeholder engagement also included a commitment to cooperate from affected Portfolio Administrators, consistent with CPUC requirements for new RENs.⁴⁴ PG&E's letter of commitment to cooperate with the new RuralREN is presented in Appendix A (Letters of Commitment to Coordinate & Support).

Evaluation, Measurement & Verification

Summary of planned EM&V studies and activities

The RuralREN North anticipates working closely with CPUC staff, IOUs and other PAs, especially other RENs, to participate and advise on development of CPUC EM&V Roadmaps and be an active participant in CPUC EM&V studies and working groups. Needs have been identified by other RENs and the RuralREN North will become a part of and contribute to REN-related studies. Planned activities for RuralREN North include supporting CPUC EM&V needs with data collection built into each of its programs, and to become active participants in the EM&V planning and implementation activities.

PA/ED Budget Allocation and Justification

RuralREN North proposes an EM&V budget for the portfolio of \$1,325,563, which is 4% of the total portfolio budget. The split of the 4% EM&V budget is 26.5% for RuralREN North, 73.5% for Energy Division. The RuralREN North plans to utilize its budget to gather and maintain data needed to support program evaluations, and as described in the preceding section.

Cost & Cost Recovery

The funding/cost recovery for the RuralREN North is described in CPUC Decision D.24-09-031.

Summary of costs at portfolio-level

Summaries of RuralREN North's proposed portfolio costs are included in this business plan and Program Portfolio (Application) Exhibit One and Two. Detailed breakdowns of costs are included in attached spreadsheets and budget narrative "Exhibit Four: EE Application tables" in accordance with CPUC Decision 21-05-031⁴⁵

⁴⁴ D. 19-12-021, OP 2.

⁴⁵ D.21-05-031, OP 5 "All current energy efficiency program administrators shall file applications on February 15, 2022, for program year 2024, and every four years after that, containing the following elements: (a) A business plan to cover an eight-year period. The business plan shall serve as a strategic plan for the energy efficiency efforts of the program administrator, and shall contain sector-level strategies, metrics, and an eight-year budget. (b) A four-year program portfolio, beginning with program year 2024. This portion of the application shall contain: detailed sector and program strategies; annual budgets, totaling to a four-year revenue requirement; cost-effectiveness showings over the four-year period; and implementation plans, or links to them, for all programs that are currently operating or planned to operate during the four-year portfolio period, with the exception of third party programs where the contract has not yet been awarded. (c) The technical inputs given in Table 2 of this decision."; Id, 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."

PA's approach to classification of which unspent funds are designated "committed" and thus not applied to reduce recovery in future years

The RuralREN North will use procedures acceptable to its Fiscal Agent and the CPUC to classify unspent funds as "committed". We anticipate we will have unspent but committed funds in the incentive programs, finance programs and in outsourced services or implementation contracts that span reporting/authorization cycles.

Exhibit Three: Appendices

- A. 2028-2031 Budget & Metrics
- B. Stakeholder Feedback
- C. Letter of Commitment to Cooperate
- D. Letters of Support
- E. CAEECC Stakeholder Presentation Slide Deck and Response to Questions

Appendix A: 2028-2031 Budget & Metrics

Table 57: 2028-2031 Budget & Metrics

Year	Segment	Requested Budget	TSB	TRC	PAC	kWh	kW	Therms (MM)
2028	Resource Acquisition	-	-	-	-	-	-	-
	Market Support	-	-	-	-	-	-	-
	Equity	\$10,945,977	\$1,555,846	0	0.24	-732,404	66	145,714
	Codes & Standards	\$235,838	-	-	-	-	-	-
	EM&V	\$417,105	-	-	-	-	-	-
	TOTAL Portfolio	\$11,598,919	\$1,555,846	0.22	0.24	-732,404	66	145,714
2029	Resource Acquisition	-	-	-	-	-	-	-
	Market Support	-	-	-	-	-	-	-
	Equity	\$11,438,152	\$2,241,166	0	0.28	-926,698	76	173,715
	Codes & Standards	\$242,913	-	-	-	-	-	-
	EM&V	\$429,618	-	-	-	-	-	-
	TOTAL Portfolio	\$12,110,683	\$2,241,166	0.26	0.28	-926,698	76	173,715
2030	Resource Acquisition	-	-	-	-	-	-	-
	Market Support	-						
	Equity	\$11,939,028	\$2,822,195	0	0.32	-1,120,962	86	201,717
	Codes & Standards	\$250,200						
	EM&V	\$442,507						
	TOTAL Portfolio	\$12,631,735	\$2,822,195	0.30	0.32	-1,120,962	86	201,717
2031	Resource Acquisition	-						
	Market Support	-						
	Equity	\$11,769,522	\$3,483,405	0	0.37	-1,315,195	96	229,735

	Codes & Standards	\$257,706						
	EM&V	\$455,782						
	TOTAL Portfolio	\$12,483,010	\$3,483,405	0.35	0.37	-1,315,195	96	229,735
4-Yr Total		\$48,824,348	\$10,102,612			-4,095,259	324	750,881

Appendix B: Stakeholder Feedback

The combined Northern and Central California Rural REN (Rural REN or RREN) held stakeholder meetings with PG&E, SCE, SCG, SoCalREN, 3CREN, and the LGSEC. RREN also presented at a CAEECC-sponsored public workshop that was open to all stakeholders. The chart represents feedback and questions from stakeholders from July 2021 to February 28, 2022.

Overall, the general feedback is favorable for forming a new REN that addresses rural populations through an innovative and equity-focused approach.

Table 58: Stakeholder Feedback

Stakeholder	Question/Feedback	Response/Changes/Considerations
California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA)	1. Asked about parameters of the residential and commercial programs. 2. Stated CAEATFA can be a good complement when, for example, a project does not meet minimum or maximum dollar requirements.	1. Included in Exhibit Two, Sector Strategy Commercial, Residential and Cross-Cutting: Finance. RuralREN notes that portions of programs will be open to competitive solicitations. 2. RuralREN agrees and looks to create complementary offerings to support existing programs offered through CAEATFA, IOUs and others.
Center for Sustainable Energy (CSE)	1. Asked whether ratepayer funds will be [used] for the entire loan pool or for credit enhancement to private funding.	1. Ratepayer funds will be used for the loan pool. Exhibit Two, Sector Strategy, Cross-Cutting: Finance.

PG&E

- | | |
|--|---|
| 1. How will the proposed Finance offering coordinate with existing offerings (OBF, CAEATFA) already available in these areas? | 1. Included in Exhibit Two, Sector Strategy, Commercial, Residential and Cross-Cutting: Finance. Noting that portions of some of these programs will be sent out for competitive solicitation to design. RuralREN looks to create complementary offerings to support existing programs offered through CAEATFA, IOUs, and others. |
| 2. How are the proposed Res programs unique from the existing ESA programs, no-cost virtual Res EE program, and PG&E proposed res equity program? | 2. RuralREN offerings should enhance and expand but never duplicate ESA programs. We intend to fill the gaps and ensure the customer is holistically served. Exhibit Two, Sector Strategy, Residential |
| 3. How is the [WE&T CEA] training proposal unique from the fully virtual learning opportunities provided by PG&E Workforce Education and Training? | 3. CEA is offered in-person, these in-person sites are connected through a network. Exhibit Two, Sector Strategy, Cross-Cutting: WE&T |
| 4. How is this distinct from Statewide WE&T that trains K-12 students about energy and green careers with an emphasis on serving DAC schools? | 4. The CEA has zero overlap with “Energy is Everything” (Statewide K-12 WE&T), as the CEA’s target audience is 22 years and over. The Climate Careers targets 15–24 age groups, and therefore does have the potential for some overlap; however, Climate Careers is not a school-based program. Climate Careers aims to serve a high percentage of Opportunity Youth. Opportunity Youth are defined as being disconnected from school and work, therefore, unable to benefit from a school-based program. |

SCG	1. General agreement for the case to serve.	1. Sector level Market Assessments included reviews of the Statewide program.
	2. Be aware of and understand new Statewide programs to avoid overlap.	2. Implementation Plans will identify potential overlap and opportunities for collaboration.
	3. Has the group considered co-funding splits, gas/electric splits?	3. Reviewed past contracts for LGPs in PGE/SCE/SCG and discussed the approach with 3CREN. Made recommendations, but understand final splits will be determined in collaboration with IOUs/ED.
SCE	1. Give consideration to co-funding splits; effort is appreciated.	1. Reviewed past contracts for LGPs in PGE/SCE/SCG and discussed the approach with 3CREN. Made recommendations, but understand final splits will be determined in collaboration with IOUs/ED.
	2. Be mindful of budget and CPUC guidance on it. [D.19-12-021, p. 41]	2. RuralREN proportionate price per person considered guidance as well as publicly available data for IOUs (2019).
	3. Stay true to the three-prong REN test.	3. See Exhibit One, Strategic Business Plan “Alignment with Legislative and CPUC Requirements and Relevant Action Plans”.
	4. Recommended WE&T CEA leverage SCE/IOU trainings to support courses.	4. WE&T program will coordinate with IOUs through IOU/3P Advisory Council, and CEA will leverage existing IOU WE&T trainings where applicable.
	5. Focus effort towards DACs and HTR.	5. 78% of the budget targets equity-focused populations; RA programs include equity metrics.
	6. Inquired about RuralREN policy change recommendations.	While RuralREN supports SCE’s request that the Commission should include public sector customers as “hard-to-reach” if they meet the geographic criteria approved in D.18-05-041, and are classified as a local government, K-12 school, community
	7. Generally supportive of the rationale.	

college, or tribal lands. However, RuralREN furthers the notion in our request that Commission revise its hard-to-reach definition to recognize any customer located in a rural area as geographical hard-to-reach.

Energy Division	1. Provide some specificity about what "unmet needs" you anticipate meeting in the Commercial and Residential sectors?	1. Even the best designed Statewide programs are not designed for the smallest and most remote homes and businesses which often fall far below minimum eligibility requirements.
	2. Describe whether installations will have a verification component?	2. installations done under the Residential and Commercial Resource Acquisition programs will have a verification component, described in detail in the Implementation Plans.

Appendix C: Letters of Commitment to Cooperate

Investor-Owned Utilities: Pacific Gas & Electric Company

REGIONAL ENERGY NETWORK
LETTER OF COMMITMENT TO COOPERATE
BETWEEN
REDWOOD COAST ENERGY AUTHORITY AND
PACIFIC GAS & ELECTRIC COMPANY

PURPOSE

Pursuant to California Public Utilities Commission ("CPUC" or "Commission") Decision D.19-12-021 ("Decision"), Ordering Paragraph (OP) 2, this Letter of Commitment to Cooperate is to make an initial clarifying statement highlighting the coordination and cooperation between Redwood Coast Energy Authority ("RCEA") as the Program Administrator of the proposed Rural Regional Energy Network ("RuralREN") and Pacific Gas and Electric Company ("PG&E"), an investor-owned utility (IOU). RuralREN and PG&E would have overlapping operation in the same geographic area RuralREN proposes to operate. The RCEA on behalf of the Association of Monterey Bay Area Governments ("AMBAG"), County of San Luis Obispo, High Sierra Energy Foundation ("HSEF"), San Joaquin Valley Clean Energy Organization ("SJVCEO"), and Sierra Business Council ("SBC") and itself in the matter of forming and administering RuralREN hereby submits this Letter of Commitment to Cooperate along with the RuralREN's energy efficiency (EE) strategic business plan and portfolio plan proposal (EE Application) to the CPUC.

Program Coordination

RuralREN has initiated efforts to coordinate its planned EE approaches and programs with PG&E. PG&E and the prospective RuralREN agree to continue to coordinate and cooperate to mitigate program conflicts should RuralREN's proposal be approved by the Commission. This includes, but is not limited to, development and execution of joint cooperation memoranda (JCMs) pursuant to D.19-12-021, OP 3.

Further, upon approval by the Commission of RuralREN's EE Application, RCEA and PG&E will work with all other program administrators with overlapping geographical jurisdictions, to negotiate in good faith and develop the JCM. RCEA and PG&E intend to finalize the REN program parameters and coordination details in the JCM for annual joint submittal to the Commission.

[Signatures on the following page]

SIGNATURE PAGE TO

**LETTER OF COMMITMENT TO COOPERATE
BETWEEN
Redwood Coast Energy Authority
AND
Pacific Gas & Electric Company**

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

RCEA

Redwood Coast Energy Authority

By: 
71854927A198432...
Matthew Marshall
Executive Director

Investor Owned Utility

Pacific Gas and Electric Company

By: 
DDBEF558EDC04BC...
David Poster
Director, Energy Efficiency

Approved to Form:

By: 
00153CADDECE419...
Nancy Diamond
General Counsel

Appendix D: Letters of Support

For the following letters of support, please [open this PDF](#) and jump to page 159.

Blue Lake Rancheria Tribe	County of Humboldt
City of Arcata	County of Lake
City of Blue Lake	County of Mariposa
City of Clearlake	County of Mendocino
City of Eureka	County of Placer
City of Ferndale	County of Yuba
City of Fort Bragg	Eureka City Schools
City of Fortuna	Humboldt County Office of Education
City of Lakeport	Lake Area Planning Council
City of Point Arena	Mendocino Council of Governments
City of Ukiah	Nevada City Rancheria Nisenan Tribe
City of Willits	Northern Humboldt Union High School District

Appendix E: Presentation to CAEECC & Stakeholders

For the following Presentation and Stakeholder Q&A, please [open this PDF](#) and jump to page 222.

Attachment B

Northern California Rural Regional Energy Network

Updated Business Plan

Exhibit 4: Application Tables 2024-2031

Appendix 1 - 2024 - 2027 Program Portfolio Budget and Targets

(a) Program ID	(b) Program Name	(c) Target Exempt	(d) Program Type	(e) Business Sector	(f) Portfolio Segment	(g) Budget	(h) TSB	(i) kWh	(j) kW	(k) Tthm	(l) Change Notes
RRN001	Residential Equity	Yes	Core PA	Residential	Equity	\$ 6,022,548	\$ 250,686	7,763	1	42,120	Program ID, Savings, and Budget change
RRN002	Residential Resource Acquisition	No	Core PA	Residential	Resource Acquisition	\$ 8,697,700	\$ 451,160	(1,012,981)	48	115,599	Program ID, Savings, and Budget change
RRN003	Commercial Resource Acquisition	No	Core PA	Commercial	Resource Acquisition	\$ 5,774,779	\$ 2,113,697	(433,414)	104	161,880	Program ID, Savings, and Budget change
RRN004	Finance Equity	Yes	Core PA	Finance	Equity	\$ 6,580,192	\$ -	-	-	-	Program ID, Savings, and Budget change
RRN005	Public Equity	Yes	Core PA	Public	Equity	\$ 1,181,206	\$ -	-	-	-	Program ID, Savings, and Budget change
RRN006	Workforce Education & Training	Yes	Core PA	Workforce Education & Training	Equity	\$ 1,904,597	\$ -	-	-	-	Program ID, Savings, and Budget change
RRN007	Codes & Standards	Yes	Core PA	Codes & Standards	Codes & Standards	\$ 678,384	\$ -	-	-	-	Program ID, Savings, and Budget change
RRN012_IDS	IDS Costs	Yes	Core PA	Commercial	Resource Acquisition	\$ 10,000	\$ -	-	-	-	Program ID and Budget change
RREN_RA_PortfolioSupport	RA Portfolio Support	Yes	Core PA	Portfolio Support	Resource Acquisition	\$ 423,616	\$ -	-	-	-	Program ID and Budget change
RREN_Equity_PortfolioSupport	Equity Portfolio Support	Yes	Core PA	Portfolio Support	Equity	\$ 460,649	\$ -	-	-	-	Program ID and Budget change
RREN_CS_PortfolioSupport	C&S Portfolio Support	Yes	Core PA	Portfolio Support	Codes & Standards	\$ 19,843	\$ -	-	-	-	Program ID and Budget change
RREN011_EMV	EM&V Costs	Yes	Core PA	Portfolio Support	EM&V	\$ 1,325,563	\$ -	-	-	-	Program ID and Budget change
Total						\$ 33,139,078	2,815,643	(1,438,632)	153	319,599	

Table 1.1 - Portfolio Budget by Sector and Segment (Cumulative for PY 2024-2027)

Line	Budget Category	Program Segment				Total
		Resource Acquisition	Market Support	Equity	Codes & Standards	
1	Residential Sector	\$8,697,700	\$0	\$6,022,548	\$0	\$14,720,249
2	Commercial Sector	\$5,784,779	\$0	\$0	\$0	\$5,784,779
3	Industrial Sector	\$0	\$0	\$0	\$0	\$0
4	Agricultural Sector	\$0	\$0	\$0	\$0	\$0
5	Public Sector	\$0	\$0	\$1,181,206	\$0	\$1,181,206
6	Cross Cutting Sector					
7	Emerging Tech	\$0	\$0	\$0	\$0	\$0
8	WE&T	\$0	\$0	\$1,964,597	\$0	\$1,964,597
9	Finance	\$0	\$0	\$6,580,192	\$0	\$6,580,192
10	Codes & Standards	\$0	\$0	\$0	\$678,384	\$678,384
11	Portfolio Support	\$423,616	\$0	\$460,649	\$19,843	\$904,108
12	OBF Loan Pool					\$0
13	Portfolio Subtotal [1]	\$14,906,096	\$0	\$16,209,192	\$698,227	\$31,813,515

[1] excludes EM&V and Portfolio Oversight

Table 1.2 - Total Cost Recovery Request, Including REN/CCA and Other Costs

Line	Program Administrator	(a) PA Programs	(b) ED Portfolio Oversight	(c) EMV PA	(d) EMV ED	(e) Unspent & Uncommitted Funds for 2024-2027 Offset	(f) Total
1	AL Author PA name - RuralREN North	\$31,813,515	\$0	\$364,530	\$961,033	\$0	\$33,139,078
2	REN/CCA 1 (as applicable) - <i>insert name here</i>		\$0	\$0	\$0	\$0	\$0
3	REN/CCA 2 (as applicable) - <i>insert name here</i>		\$0	\$0	\$0	\$0	\$0
4	REN/CCA 3 (as applicable) - <i>insert name here</i>		\$0	\$0	\$0	\$0	\$0
5	REN/CCA 4 (as applicable) - <i>insert name here</i>		\$0	\$0	\$0	\$0	\$0
6	REN/CCA 5 (as applicable) - <i>insert name here</i>		\$0	\$0	\$0	\$0	\$0
7	Total	\$31,813,515	\$0	\$364,530	\$961,033	\$0	\$33,139,078

Table 2.1 - Annual and Cumulative Total System Benefit Forecast

Line	Segment	PY 2024	PY 2025	PY 2026	PY 2027	Cumulative
1	Resource Acquisition	\$0	\$698,968	\$935,482	\$930,407	\$2,564,857
2	Market Support	\$0	\$0	\$0	\$0	\$0
3	Equity	\$0	\$64,549	\$94,067	\$92,070	\$250,686
4	Total TSB Forecast	\$0	\$763,517	\$1,029,549	\$1,022,477	\$2,815,543
5	CPUC TSB Goal					\$0
6	<i>TSB Forecast / TSB Goal</i>					

Table 2.2 - Annual and Cumulative Codes and Standards Savings Forecast

Line	Savings Unit	PY 2024	PY 2025	PY 2026	PY 2027	Cumulative
1	GWh Forecast	0	-0.362808	-0.537912	-0.537912	-1.4
2	GWh CPUC Goal [1]	0.0	0.0	0.0	0.0	0.0
3	<i>GWh Forecast/Goal</i>	-	-	-	-	-
4	MW Forecast	0	0.042	0.055	0.055	0.2
5	MW CPUC Goal [1]	0.0	0.0	0.0	0.0	0.0
6	<i>MW Forecast/Goal</i>	-	-	-	-	-
7	MMThm Forecast	0.000	0.084	0.118	0.118	0.3
8	MMThm CPUC Goal [1]	0.0	0.0	0.0	0.0	0.0
9	<i>MMThm Forecast/Goal</i>	-	-	-	-	-

1. Savings Goals as adopted in CPUC Decision 23-08-xxx

Table 2.3 - Annual and Cumulative Budget

Line	Segment	PY 2024	PY 2025	PY 2026	PY 2027	Cumulative
1	Resource Acquisition	\$548,006	\$4,324,254	\$4,786,541	\$5,247,140	\$14,905,940
2	Market Support	\$0	\$0	\$0	\$0	\$0
3	Equity	\$993,865	\$4,972,902	\$5,027,647	\$5,214,926	\$16,209,341
4	Codes and Standards	\$23,684	\$206,044	\$239,535	\$228,970	\$698,233
5	EM&V (PA and ED)	\$137,290	\$379,701	\$403,615	\$404,956	\$1,325,563
6	Total Budget w/o OBF Loan Pool	\$1,702,846	\$9,882,900	\$10,457,338	\$11,095,993	\$33,139,078
7	Market Support and Equity, percent of Total Budget w/o OBF Loan Pool					48.9%
8	OBF Loan Pool Addition	\$0	\$0	\$0	\$0	\$0
9	Budget excluding Portfolio Oversight	\$1,702,846	\$9,882,900	\$10,457,338	\$11,095,993	\$33,139,078
10	ED Portfolio Oversight	\$0	\$0	\$0	\$0	\$0
11	Total Portfolio Budget w/ ED Portfolio Oversight	\$1,702,846	\$9,882,900	\$10,457,338	\$11,095,993	\$33,139,078
12	Approved Budget Cap [1]					\$33,139,078

1. Decision 23-06-055 OP5

Table 3 - Portfolio Cost Effectiveness Ratios (PY 2024-2027)

Line			TRC ratio	PAC ratio	RIM ratio
1	Segment	Resource Acquisition	0.28	0.32	0.39
2		Market Support	0.00	0.00	0.00
3		Equity	0.02	0.02	0.02
4		Codes and Standards (C&S)	0.00	0.00	0.00
5	Portfolio	<i>Including</i> C&S	0.15	0.16	0.18
6		<i>Excluding</i> C&S	0.22	0.23	0.28

Table 4 - Portfolio Statewide and Third-party Contribution Percentage Requirements (IOU only)

Line	Budget Component	Qualifying Budget	Cumulative Total Budget w/o OBF Loan Pool	Contribution Percentage	Minimum Threshold
1	Statewide [1]	\$0	\$33,139,078	0.0%	20%
2	Third-party [2]	\$0	\$33,139,078	0.0%	60%

1 SW program definition per XYZ (+other references as needed), +minimum threshold reference to application decision.

2 Third party program definition per D.16-08-019, OP 10 (+other references as needed), +minimum threshold reference (vary by IOU)

Appendix 2 - Energy Efficiency Cap And Target Expenditure Projections (Cumulative for PY 2024-2027)

Line	Budget Category	Expenditures			Cap & Target Performance		
		(a) Non-Third Party Qualifying Costs	(b) Third Party Qualifying Costs	(c) Total Portfolio	(d) Percent of Budget ^[6]	(e) Cap Percentage	(f) Target %
1	Administrative Costs						
2	PA ^[1]	\$ 3,337,169		\$ 3,337,169	10.1%	10.0%	
3	Non-PA Third Party & Partnership ^[2]	\$ -	\$ -	\$ -	0.0%		10.0%
4	PA & Non-PA Target Exempt Programs ^[3]	\$ -	\$ -	\$ -			
5	Marketing and Outreach Costs						
6	Marketing & Outreach	\$ 1,607,740	\$ -	\$ 1,607,740	4.9%		6.0%
7	Direct Implementation Costs						
8	Incentives and Rebates	\$ 3,548,392	\$ -	\$ 3,548,392			
9	Non Incentives and Non Rebates	\$ 23,320,214	\$ -	\$ 23,320,214	70.4%		20.0%
10	Target Exempt (Non Incentives and Non Rebates)	\$ -	\$ -	\$ -			
11	EM&V Costs (PA and ED) ^[4]	\$ 1,325,563	\$ -	\$ 1,325,563	4.0%	4.0%	
11a	EM&V - PA	\$ 364,530		\$ 364,530			
11b	EM&V - ED	\$ 961,033		\$ 961,033			
12	PA Spending Budget Request (excluding OBF Loan Pool Additions and excluding ED Portfolio Oversight)	\$ 33,139,078	\$ -	\$ 33,139,078			
13	Total Third-Party Qualifying Costs ^[5]		\$ -		0.0%		60.0%
14	OBF Loan Pool Addition	\$ -		\$ -			
15	PA Spending Budget Request (excluding ED Portfolio Oversight)			\$ 33,139,078			
16	ED Portfolio Oversight	\$ -		\$ -			
17	EE-Funded IDSM ^[7]	\$ 10,000				2.5%	
18	PA Spending Budget Request			\$ 33,139,078			

[1] 10% cap requirement based on D. 09-09-047 for IOU only

[2] New Third party program definition per D.16-08-019, OP 10. For Row 3 of this table, the "Third Party & Partnership" administrative costs under the "Non-Third Party Qualifying Costs" column are costs for programs that met the old Third Party definition prior to the transition to the new third party definition.

[3] Target Exempt Programs include: Emerging Technologies, Workforce Education & Training, Strategic Energy Resources (SER) program, 3P Placeholder for Public LGPs, and Codes & Standards programs (excluding Building Codes Advocacy, Appliance Standards Advocacy and National Standards Advocacy).

[4] For IOUs, EM&V costs only includes IOU's Total EM&V budget (PA + ED) and does not include REN or CCAs EM&V budget. For RENs & CCAs, include EM&V-PA Budget and EM&V-ED = \$0. The EM&V percentage is based on PA's total portfolio budget (from line 13) RENs, and CCAs

[5] IOU's Third-Party Implementer Contracts (as defined per D.16-08-019, OP 10) includes third-party contract and incentive budgets and statewide qualifying contract and incentive budgets. Calculation of (d) Percent of Budget for Third-Party Implementer Contracts uses \$33,139,078 as its denominator.

[6] With the exception of Third Party Implementer Contracts as noted in footnote [5], calculation of (d) Percent of Budget uses \$33,139,078 as the denominator; equal to line 15 PA Budget Spending Request.

[7] D.23-06-055 OP 29: Portfolio administrators (PAs) may set aside up to 2.5 percent, or \$4 million, whichever is greater, up to a maximum of \$15 million, from within their total budgets during 2024-2027 approved in this decision to fund innovative integrated demand-side management projects, including ongoing load-shifting that is not event-based. Energy efficiency funding shall not be used for rebating capital costs of non-efficiency technologies, except as already provided for electric panel upgrades in Decisions 19 08 009 and 23-04-035.

Attachment C

Northern California Rural Regional Energy Network

True Up Advice Letter Tables

Attachment 1: Program Table

Table 1: Portfolio Budget by Sector

Table 2: Annual + Portfolio

Table 3: Cost Effectiveness

Table 4: 3P and Statewide

Attachment 2: Cap & Target

Pa Name: Northern California Rural Regional E

Budget Year: 2024-2031

Table 3.1 - PA 2024-2031 Funding Source Summary

	Spending Budget Request	Electric Procurement	% Electric	Gas	% Gas
2024	1,702,846	1,419,035	83.3%	283,812	16.7%
2025	9,882,900	8,235,727	83.3%	1,647,173	16.7%
2026	10,457,338	8,714,424	83.3%	1,742,914	16.7%
2027	11,095,993	9,246,635	83.3%	1,849,358	16.7%
2028	11,598,919	9,665,739	83.3%	1,933,180	16.7%
2029	12,110,683	10,092,208	83.3%	2,018,475	16.7%
2030	12,631,735	10,526,417	83.3%	2,105,319	16.7%
2031	12,483,010	10,402,480	83.3%	2,080,531	16.7%
Total	81,963,426	68,302,664		13,660,762	

	PA Revenue Requirement Request (Cost Recovery)	Electric Procurement	% Electric	Gas	% Gas
2024	1,702,846	1,419,035	83.3%	283,812	16.7%
2025	9,882,900	8,235,727	83.3%	1,647,173	16.7%
2026	10,457,338	8,714,424	83.3%	1,742,914	16.7%
2027	11,095,993	9,246,635	83.3%	1,849,358	16.7%
2028	11,598,919	9,665,739	83.3%	1,933,180	16.7%
2029	12,110,683	10,092,208	83.3%	2,018,475	16.7%
2030	12,631,735	10,526,417	83.3%	2,105,319	16.7%
2031	12,483,010	10,402,480	83.3%	2,080,531	16.7%
Total	81,963,426	68,302,664		13,660,762	

	PA (IOU+CCAs+RENG) Recovery Budget	Electric Procurement	% Electric	Gas	% Gas
2024	1,702,846	1,419,035	83.3%	283,812	16.7%
2025	9,882,900	8,235,727	83.3%	1,647,173	16.7%
2026	10,457,338	8,714,424	83.3%	1,742,914	16.7%
2027	11,095,993	9,246,635	83.3%	1,849,358	16.7%
2028	11,598,919	9,665,739	83.3%	1,933,180	16.7%
2029	12,110,683	10,092,208	83.3%	2,018,475	16.7%
2030	12,631,735	10,526,417	83.3%	2,105,319	16.7%
2031	12,483,010	10,402,480	83.3%	2,080,531	16.7%
Total	81,963,426	68,302,664		13,660,762	

8 Year Funding Sources - RENG/CCAs						
Year	PGB&E		SDGB&E		SCG	
	Electric \$	Gas \$	Electric \$	Gas \$	Electric \$	Gas \$
2024	1,419,035	283,812	-	-	-	-
2025	8,235,727	1,647,173	-	-	-	-
2026	8,714,424	1,742,914	-	-	-	-
2027	9,246,635	1,849,358	-	-	-	-
2028	9,665,739	1,933,180	-	-	-	-
2029	10,092,208	2,018,475	-	-	-	-
2030	10,526,417	2,105,319	-	-	-	-
2031	10,402,480	2,080,531	-	-	-	-
Total	68,302,664	13,660,762	-	-	-	-

Pa Name: Northern California Rural Regional Energy Network
Budget Year: 2024-2031

Table 3 - Budget and Cost Recovery by Funding Source

Table 3a - PA Spending Plan PA FES Program and EM&V	Source is Table 4				Source is Table 7			
	2024	2025	2026	2027	2028	2029	2030	2031
Request (Program and EM&V total)	\$ 1,702,846	\$ 9,882,900	\$10,457,138	\$11,095,903	\$ 11,598,939	\$12,110,683	\$12,631,755	\$12,483,030
PA Spending Budget Request (PA Program and EM&V) (same as row above, total for all funds)	\$ 1,702,846	\$ 9,882,900	#####	#####	\$ 11,598,939	#####	#####	#####

Table 3b - Budget by Funding Source

Portfolio Budget (Before Carryover)	2024 Budget	2024 % Allocation	2025 Budget	2025 % Allocation	2026 Budget	2026 % Allocation	2027 Budget	2027 % Allocation	2028 Budget	2028 % Allocation	2029 Budget	2029 % Allocation	2030 Budget	2030 % Allocation	2031 Budget	2031 % Allocation
Electric Procurement EE Fnd	1,439,053	84.5%	\$ 8,255,727	83.5%	\$ 9,214,431	83.3%	\$ 9,548,452	85.9%	\$ 9,665,729	83.5%	\$10,092,326	83.2%	#####	81.3%	\$10,482,480	84.0%
Gas PPP Shareback Fnd	263,812	15.5%	\$ 1,627,173	16.5%	\$ 1,242,694	10.7%	\$ 1,849,358	16.7%	\$ 1,933,180	16.7%	\$ 2,004,452	16.7%	#####	16.7%	\$ 2,000,551	16.0%
Total Funds	1,702,846		\$ 9,882,900		\$ 10,457,125		\$ 11,397,810		\$ 11,600,909		\$ 12,096,778		#####		\$ 12,483,031	

Table 3c - Revenue Requirement for Cost Recovery by Funding Source

Authorized Funding in Rates (including Unspent/Uncommitted Funds)	2024 Revenue Requirement	2024 % Allocation	2025 Revenue Requirement	2025 % Allocation	2026 Revenue Requirement	2026 % Allocation	2027 Revenue Requirement	2027 % Allocation	2028 Revenue Requirement	2028 % Allocation	2029 Revenue Requirement	2029 % Allocation	2030 Revenue Requirement	2030 % Allocation	2031 Revenue Requirement	2031 % Allocation
Electric Procurement EE Fnd	1,439,053	85%	\$ 8,255,727	83%	\$ 9,214,431	87%	\$ 9,548,452	87%	\$ 9,665,729	83%	\$10,092,326	83%	#####	83%	\$10,482,480	83%
Gas PPP Shareback Fnd	263,812	15%	\$ 1,627,173	17%	\$ 1,242,694	12%	\$ 1,849,358	17%	\$ 1,933,180	17%	\$ 2,004,452	17%	#####	17%	\$ 2,000,551	17%
Total Funds	1,702,846		\$ 9,882,900		\$ 10,457,125		\$ 11,397,810		\$ 11,600,909		\$ 12,096,778		#####		\$ 12,483,031	

Table 3d - Unspent/Uncommitted Carryover Funds (in positive \$ amounts)

Program Unspent/Uncommitted Funds	2024			2025			2026			2027			2028			2029			2030			2031		
	Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total
Pre-2020	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2020	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2021	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2022	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

EM&V Unspent/Uncommitted Funds	2024			2025			2026			2027			2028			2029			2030			2031		
	Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total
Pre-2020	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2020	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2021	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2022	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Total Unspent/Uncommitted Funds	2024			2025			2026			2027			2028			2029			2030			2031		
	Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total
Pre-2020	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2020	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2021	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2022	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Notes on Table 3d

Any actual uncommitted/unspent funds for 2031 will be made up in the IOU's respective electric and gas PPP annual rates advice letter for 2031.

Table 3e - Total Reconstructed Recovery 2024-2031 Portfolio Budgets, Demand Response & Energy Efficiency^{1,2}

	2024				2025				2026				2027				2028				2029				2030				2031			
	Demand Response		Energy Efficiency		Demand Response		Energy Efficiency		Demand Response		Energy Efficiency		Demand Response		Energy Efficiency		Demand Response		Energy Efficiency		Demand Response		Energy Efficiency		Demand Response		Energy Efficiency		Demand Response		Energy Efficiency	
Program Funds - PA ³	Electric	Gas	Electric	Gas	Electric	Gas	Electric	Gas	Electric	Gas	Electric	Gas	Electric	Gas	Electric	Gas	Electric	Gas	Electric	Gas	Electric	Gas	Electric	Gas	Electric	Gas	Electric	Gas	Electric	Gas	Electric	Gas
Program Funds - PA ³	\$ 1,368,428	\$ 260,430	\$ 1,565,056		\$ 7,939,311	\$ 1,565,056	\$ 9,504,367		\$ 8,780,079	\$ 1,625,048	\$ 10,405,127		\$ 8,900,171	\$ 1,761,862	\$ 10,662,033		\$ 9,318,032	\$ 1,880,648	\$ 11,198,680		\$ 9,724,081	\$ 1,948,473	\$ 11,672,554		\$ 10,137,482	\$ 2,016,347	\$ 12,153,829		\$ 10,543,829	\$ 2,084,121	\$ 12,627,950	
Program Funds - PA ³	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	
Program Funds - PA ³	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	
EM&V ⁴	\$ 314,418	\$ 22,382	\$ 337,299		\$ 716,412	\$ 42,264	\$ 758,676		\$ 738,345	\$ 47,720	\$ 786,065		\$ 767,863	\$ 47,494	\$ 815,357		\$ 747,947	\$ 49,518	\$ 797,465		\$ 738,014	\$ 47,088	\$ 785,102		\$ 768,755	\$ 47,720	\$ 816,475		\$ 797,817	\$ 47,967	\$ 845,784	
Total	\$ 1,682,846	\$ 282,812	\$ 1,965,658		\$ 8,655,723	\$ 1,607,320	\$ 10,263,043		\$ 9,518,424	\$ 1,672,768	\$ 11,191,192		\$ 9,668,034	\$ 1,809,356	\$ 11,477,390		\$ 10,065,979	\$ 1,930,166	\$ 12,006,145		\$ 10,462,095	\$ 1,995,561	\$ 12,457,656		\$ 10,906,237	\$ 2,064,067	\$ 12,970,324		\$ 11,341,646	\$ 2,132,088	\$ 13,473,734	

Notes:

1 Authorized budget includes reductions from past unspent funds, carryover and is consistent with

budget approved in D 20-09-047, D 21-11-015, D 22-10-046 and D 23-10-028, D 23-05-041 and D 23-

2 RNS and CCA information provided by all RNS and CCA and is consistent with their respective ABAs.

3 This represents total IOU/California EM&V.

4 Program Funds represents the total program budget, excluding EM&V.

5 Only the IOU completes this line and should be consistent Table 7.

[illegible]

Table 7.1 - PA 2024-2031 Budget Savings By Segment

[illegible]

Pa Name:	Northern California Rural Regional Energy
Budget Year:	2024-2031

Table 7.2 - PA 2024-2031 Budget Savings By Sector

	Sector	Requested Budget	TSB	TRC	PAC	kWh	kW	Therms (MM)	First Year Net Elec CO2e	First Year Net Gas CO2e	Lifecycle Net KWH	Lifecycle Net Therms (MM)	Lifecycle Net Electric CO2e	Lifecycle Net Gas CO2e	Lifecycle Net CO2e from low-GWP Measures	
2024	Residential	628,886	0	0	0	-	-	-	-	-	-	-	-	-	-	
	Commercial	224,351	0	0	0	-	-	-	-	-	-	-	-	-	-	
	Industrial	-	0	0	0	-	-	-	-	-	-	-	-	-	-	
	Agricultural	-	0	0	0	-	-	-	-	-	-	-	-	-	-	
	Emerging Tech	-	0	0	0	-	-	-	-	-	-	-	-	-	-	
	Public	25,377	0	0	0	-	-	-	-	-	-	-	-	-	-	
	WE&T	69,398	0	0	0	-	-	-	-	-	-	-	-	-	-	
	Finance	593,860	0	0	0	-	-	-	-	-	-	-	-	-	-	
	QBF Loan Pool	-	0	0	0	-	-	-	-	-	-	-	-	-	-	
	Codes & Stds	23,684	0	0	0	-	-	-	-	-	-	-	-	-	-	
EM&V	137,290															
TOTAL Portfolio	1,702,846	-	- .00	- .00	-	-	-	-	-	-	-	-	-	-	-	
2025	Residential	4,693,705	194232	0.12	0.14	(244,178)	12	40,340	(86)	214	(3,435,318)	456,892	(1,136)	2,426	-	
	Commercial	1,661,258	569285	0.18	0.18	(118,631)	30	43,746	(38)	232	(1,954,039)	487,183	(554)	2,587	-	
	Industrial	-	0	0	0	-	-	-	-	-	-	-	-	-	-	
	Agricultural	-	0	0	0	-	-	-	-	-	-	-	-	-	-	
	Emerging Tech	-	0	0	0	-	-	-	-	-	-	-	-	-	-	
	Public	344,867	0	0	0	-	-	-	-	-	-	-	-	-	-	
	WE&T	569,733	0	0	0	-	-	-	-	-	-	-	-	-	-	
	Finance	2,027,595	0	0	0	-	-	-	-	-	-	-	-	-	-	
	QBF Loan Pool	-	0	0	0	-	-	-	-	-	-	-	-	-	-	
	Codes & Stds	206,042	0	0	0	-	-	-	-	-	-	-	-	-	-	
EM&V	379,701	0	0	0	-	-	-	-	-	-	-	-	-	-		
TOTAL Portfolio	9,882,900	763,517	0.14	0.14	(362,808)	42	84,086	(125)	446	(5,389,357)	944,075	(1,690)	5,013	-		
2026	Residential	4,915,523	303085	0.17	0.19	(380,520)	18	58,690	(136)	312	(5,380,354)	656,228	(1,752)	3,485	-	
	Commercial	1,898,283	839242	0.24	0.25	(157,392)	37	59,067	(51)	314	(2,625,633)	670,943	(720)	3,563	-	
	Industrial	-	0	0	0	-	-	-	-	-	-	-	-	-	-	
	Agricultural	-	0	0	0	-	-	-	-	-	-	-	-	-	-	
	Emerging Tech	-	0	0	0	-	-	-	-	-	-	-	-	-	-	
	Public	413,074	0	0	0	-	-	-	-	-	-	-	-	-	-	
	WE&T	629,399	0	0	0	-	-	-	-	-	-	-	-	-	-	
	Finance	1,957,912	0	0	0	-	-	-	-	-	-	-	-	-	-	
	QBF Loan Pool	-	0	0	0	-	-	-	-	-	-	-	-	-	-	
	Codes & Stds	239,533	0	0	0	-	-	-	-	-	-	-	-	-	-	
EM&V	403,615	0	0	0	-	-	-	-	-	-	-	-	-	-		
TOTAL Portfolio	10,457,338	1,142,327	0.18	0.20	(537,912)	55	117,757	(187)	625	(8,005,987)	1,327,171	(2,472)	7,047	-		
2027	Residential	5,351,310	357825	0.17	0.19	(380,520)	18	58,690	(126)	312	(5,380,354)	656,228	(1,736)	3,485	-	
	Commercial	2,015,978	898141	0.24	0.24	(157,392)	37	59,067	(49)	314	(2,625,633)	670,943	(697)	3,563	-	
	Industrial	-	0	0	0	-	-	-	-	-	-	-	-	-	-	
	Agricultural	-	0	0	0	-	-	-	-	-	-	-	-	-	-	
	Emerging Tech	-	0	0	0	-	-	-	-	-	-	-	-	-	-	
	Public	397,889	0	0	0	-	-	-	-	-	-	-	-	-	-	
	WE&T	696,067	0	0	0	-	-	-	-	-	-	-	-	-	-	
	Finance	2,000,824	0	0	0	-	-	-	-	-	-	-	-	-	-	
	QBF Loan Pool	-	0	0	0	-	-	-	-	-	-	-	-	-	-	
	Codes & Stds	228,969	0	0	0	-	-	-	-	-	-	-	-	-	-	
EM&V	404,956	0	0	0	-	-	-	-	-	-	-	-	-	-		
TOTAL Portfolio	11,095,993	1,255,766	0.18	0.19	(537,912)	55	117,757	(176)	625	(8,005,987)	1,327,171	(2,433)	7,047	-		
2028	Residential	5,630,483	462808	0.19	0.19	(431,057)	21	64,907	(142)	345	-	-	-	-	-	
	Commercial	2,127,869	1205946	0.32	0.32	(301,346)	44	80,806	(95)	429	-	-	-	-	-	
	Industrial	-	0	0	0	-	-	-	-	-	-	-	-	-	-	
	Agricultural	-	0	0	0	-	-	-	-	-	-	-	-	-	-	
	Emerging Tech	-	0	0	0	-	-	-	-	-	-	-	-	-	-	
	Public	409,826	0	0	0	-	-	-	-	-	-	-	-	-	-	
WE&T	716,949	0	0	0	-	-	-	-	-	-	-	-	-	-		

[illegible]

Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year
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¹ This is the IOU's requested EE Portfolio budget. This is the budget by which the Statewide Program compliance budget requirement of 25% will be met.

Table 8 - Caps & Targets

Notes:

1. 10% cap requirement based on D. 09-09-047 is set for IOU only.

2. New Third party program definition per D.16-08-019, OP 10. For Row 3 of this table, the "Third Party & Partnership" administrative costs under the "Non-Third Party Qualifying Costs" column are costs for programs that met the old Third Party definition prior to the transition to the new third party definition.

3. Target Exempt Programs are Non-Resource Programs which include: Emerging Technologies, Workforce Education & Training, Strategic Energy Resources (SER) program, 3P Placeholder for Public LGPs, and Codes & Standards programs (excluding Building Codes Advocacy, Appliance Standards Advocacy and National Standards Advocacy).

5. Statewide ME&O budgets for October 2019 through 2021 were requested in Advice Letter [4098-G/5544-E](#) and supplements, and are pending approval. The amount in Line 7 represents the portion allocated to EE.

6. For IOUs, EM&V costs only includes IOU's Total EM&V budget (PA + ED) and does not include REN or CCAs EM&V budget. For RENs & CCAs, include EM&V-PA Budget and EM&V-ED = \$0

8. As directed in the Energy Efficiency Policy Manual Version 5 July 2013, page 92, this total includes SW ME&O and excludes REN and CCA budgets and is the denominator used to calculate the IOU PA Admin, Marketing, and Direct Implementation Non-Incentives percentages.

10. IOU PA's percentage for Third-Party Implementer Contracts uses \$X as its denominator, which is IOU PA Subtotal including EM&V, but excluding SWME&O, REN, and CCA. This is the Total in line 13 15, minus SWME&O in line 7.

11. IOU's Third-Party Implementer Contracts (as defined per D.16-08-019, OP 10) includes third-party contract and incentive budgets and statewide qualifying contract and incentive budgets.

Pa Name: Northern California Rural Regional En
Budget Year: 2024-2031
PORTFOLIO SUMMARY

	2024 EE Portfolio Expenditures				2024 EE Portfolio Budget				2025 EE Portfolio Budget				2026 EE Portfolio Budget				2027 EE Portfolio Budget				2021 EE Portfolio Savings (Expected)			2024 EE Portfolio Forecasted Savings			2025 EE Portfolio Forecasted Savings			2026 EE Portfolio Forecasted Savings			2027 EE Portfolio Forecasted Savings								
Sector	Labor	Non-Labor (excl. Incentives)	Incentives	Total	Labor	Non-Labor (excl. Incentives)	Incentives	Total	Labor	Non-Labor (excl. Incentives)	Incentives	Total	Labor	Non-Labor (excl. Incentives)	Incentives	Total	Labor	Non-Labor (excl. Incentives)	Incentives	Total	KWH	KW	METHERMS	KWH	KW	METHERMS	KWH	KW	METHERMS	KWH	KW	METHERMS	KWH	KW	METHERMS						
Residential	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 447,008	\$ -	\$ 447,008	\$ -	\$ 181,878	\$ -	\$ 181,878	\$ -	\$ 2,844,004	\$ 1,291,241	\$ 558,460	\$ 4,693,705	\$ 2,939,229	\$ 1,194,522	\$ 781,972	\$ 4,915,523	\$ 3,181,163.43	\$ 1,185,239.37	\$ 984,706.97	\$ 5,851,809.55	#####	49	157,728	-	-	-	(244,178)	12	40,340	(380,520)	18	58,690	(380,520)	18	58,690	
Commercial	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 152,634	\$ -	\$ 152,634	\$ -	\$ 71,717	\$ -	\$ 71,717	\$ -	\$ 224,351	\$ 858,140	\$ 483,167	\$ 3,195,052	\$ 1,661,258	\$ 1,009,528	\$ 409,340	\$ 481,515	\$ 1,898,283	\$ 1,143,725.94	\$ 450,455.37	\$ 421,786.79	\$ 2,015,078.11	(433,414)	104	161,890	-	-	-	(118,631)	30	43,746	(157,392)	37	59,067	(157,392)	37	59,067
Industrial	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -						
Agricultural	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -						
Public	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,830	\$ -	\$ 14,830	\$ -	\$ 10,547	\$ -	\$ 10,547	\$ -	\$ 25,377	\$ 181,350	\$ 163,516	\$ -	\$ 344,867	\$ 714,884	\$ 108,150	\$ -	\$ 413,074	\$ 241,868.94	\$ 156,020.14	\$ -	\$ 897,889.09	-	-	-	-	-	-	-	-	-						
Cross Cutting*	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 158,047	\$ -	\$ 158,047	\$ -	\$ 570,896	\$ -	\$ 570,896	\$ -	\$ 686,942	\$ 1,033,143	\$ 1,771,637	\$ -	\$ 2,803,370	\$ 1,137,035	\$ 1,639,853	\$ -	\$ 2,824,844	\$ 1,274,899.75	\$ 1,650,860.72	\$ -	\$ 2,925,860.00	-	-	-	-	-	-	-	-	-						
Total Sector Budget	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 730,518	\$ -	\$ 730,518	\$ -	\$ 835,038	\$ -	\$ 835,038	\$ -	\$ 3,545,536	\$ 4,915,238	\$ 3,709,550	\$ 878,411	\$ 9,503,200	\$ 5,349,666	\$ 3,440,570	\$ 1,263,487	\$ 10,053,723	\$ 5,841,968	\$ 3,442,575	\$ 1,406,494	\$ 10,891,036.75	#####	153	319,599	-	-	-	(362,808)	42	84,086	(537,912)	55	117,757	(537,912)	55	117,757
EM&V PA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -						
EM&V ED	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -						
QBR - Loan Pool**	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -						
PA Spending Budget Request PA Program and EM&V+ CEC AB 843	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 730,518.33	\$ -	\$ 730,518.33	\$ -	\$ 835,038.13	\$ -	\$ 835,038.13	\$ -	\$ 3,545,536.46	\$ 4,915,238.13	\$ 3,709,550.00	\$ 878,411.13	\$ 9,503,200.00	\$ 5,349,666.00	\$ 3,440,570.00	\$ 1,263,487.00	\$ 10,053,723.00	\$ 5,841,968.00	\$ 3,442,575.00	\$ 1,406,494.00	\$ 11,095,093.14	#####	###	#####	-	-	-	(362,808)	42	84,086	(537,912)	55	117,757	(537,912)	55	117,757

* Cross Cutting Sector includes Codes & Standards, Emerging Technologies, Workforce Education & Training, Finance.
** For SDC&E and SCG the loan pool is not part of the authorized EE portfolio budget and is collected and tracked through a separate balancing account.

A. - Attachment A, Question C.2

*Present a single table summarizing energy savings targets, and expenditures by sector (for the six specified sectors). This table should enable / facilitate assessment of relative contributions of the sectors to savings targets, and relative cost-effectiveness **

* - TURN and ORA invite the PAs to propose a common table format for this information. We don't have anything specific in mind

* - Additionally, include a brief description of the method used by the PA to estimate the costs presented in the C.8 Table.

Pa Name: Northern California Rural Reg
 Budget Year: 2024-2027
 PORTFOLIO STAFFING

Functional Group	2021 EE Portfolio FTE (2)	2022 EE Portfolio FTE (2)	2023 EE Portfolio FTE (2)	2024 EE Portfolio FTE (2)	2025 EE Portfolio FTE (2)	2026 EE Portfolio FTE (2)	2027 EE Portfolio FTE (2)
Policy, Strategy, and Regulatory Reporting							
Compliance				1.4	1.6	1.7	1.6
Program Management				1.2	6.8	7.6	7.2
Engineering Services				-	-	-	-
Customer Application/Rebate/Incenti ve Processing				0.6	8.4	8.8	9.6
Customer Project Inspections				0.2	1.8	1.9	2.7
Portfolio Analytics (1)				0.9	1.6	1.5	1.7
EM&V				-	-	0.1	0.1
ME&O (Local)				0.2	0.7	0.8	0.8
Account Management / Sales				-	2.0	2.0	2.0
IT				-	-	-	-
Call Center				-	-	-	-
Total	-	-	-	4.5	22.9	24.5	25.7

Notes:
 Portfolio Analytics group.
 productive labor of 1788

A. → Narrative description of in-house departments/organizations supporting the PA's EE portfolio

- → Functions conducted by each department/organization
- → Management structure and org chart
- → Staffing needs by department/organization, including current and forecast for 2018, as well as a description of what changes are expected in the near term (2019-2020) or why it's impossible to predict beyond 2018, if that's the PA's position.
- → Non-program functions currently performed by contractors (e.g. advisory consultants), as well as a description of what changes are expected in the near term (2019-2020) or why it's impossible to predict beyond 2018, if that's the PA's position.
- → Anticipated drivers of in-house cost changes by department/organization
- → Explanation of method for forecasting costs

B. → Table showing PA EE headcount by department/organization

- → TURN and ORA like this example, taken from testimony PG&E's 2017 GRC addressing its Energy Procurement department. "We would be looking for 2016 or 2017 "recorded" positions, depending on what's most appropriate for the PA, or both, if that provides the most clarity. "For forecast years, we'd want at least 2018."

Sector	Cost Element	Functional Group	2020 EE Portfolio Expenditures	2022 EE Portfolio Budget	2023EE Portfolio Budget	2024 EE Portfolio Budget	2025 EE Portfolio Budget	2026 EE Portfolio Budget	2027 EE Portfolio Budget
Residential	Labor(1)	Policy, Strategy, and Regulatory Reporting Compliance				\$ 114,667	\$ 247,566	\$ 269,954	\$ 266,263
		Program Management				\$ 133,362	\$ 891,806	\$ 845,976	\$ 895,050
		Engineering services				\$ -	\$ -	\$ -	\$ -
		Customer Application/Rebate/Incentive Processing				\$ 87,855	\$ 934,001	\$ 964,259	\$ 1,077,180
		Customer Project Inspections				\$ 33,680	\$ 185,727	\$ 207,777	\$ 244,186
		Portfolio Analytics				\$ 53,806	\$ 123,005	\$ 165,123	\$ 186,460
		ME&O (Local)				\$ 23,638	\$ 98,042	\$ 102,615	\$ 108,137
		Account Management / Sales				\$ -	\$ 363,858	\$ 383,526	\$ 404,088
		IT				\$ -	\$ -	\$ -	\$ -
		Call Center				\$ -	\$ -	\$ -	\$ -
	Labor Total		\$ -	\$ -	\$ -	\$ 447,007	\$ 2,844,004	\$ 2,939,229	\$ 3,181,363
	Non-Labor	Third-Party Implementer (as defined per D.16-08-019, OP 10)				\$ -	\$ -	\$ -	\$ -
		Local/Government Partnerships Contracts (3)				\$ -	\$ -	\$ -	\$ -
		Other Contracts				\$ -	\$ -	\$ -	\$ -
		Program Implementation				\$ 44,839	\$ 246,885	\$ 311,366	\$ 337,199
		Policy, Strategy, and Regulatory Reporting				\$ 93,348	\$ 363,987	\$ 272,202	\$ 229,165
		Program Management				\$ 16,856	\$ 208,623	\$ 179,008	\$ 173,965
		Engineering services				\$ -	\$ 300,000	\$ 260,000	\$ 300,000
		Customer Application/Rebate/Incentive Processing				\$ -	\$ -	\$ -	\$ -
		Customer Project Inspections				\$ -	\$ -	\$ -	\$ -
		Portfolio Analytics				\$ -	\$ -	\$ -	\$ -
		ME&O (Local)				\$ 26,835	\$ 171,746	\$ 171,746	\$ 144,911
		Account Management / Sales				\$ -	\$ -	\$ -	\$ -
		IT (4)				\$ -	\$ -	\$ -	\$ -
		Call Center				\$ -	\$ -	\$ -	\$ -
		Facilities				\$ -	\$ -	\$ -	\$ -
		Program Implementation) Programs				\$ -	\$ 558,460	\$ 781,972	\$ 984,707
		08-019, OP 10)				\$ -	\$ -	\$ -	\$ -
	Non-Labor Total		\$ -	\$ -	\$ -	\$ 181,879	\$ 1,849,700	\$ 1,976,294	\$ 2,169,946
Residential Total			\$ -	\$ -	\$ -	\$ 628,886	\$ 4,693,705	\$ 4,915,523	\$ 5,351,310
	Other (collected	Labor Overheads							
			\$ -			\$ -	\$ -	\$ -	\$ -

Notes:

(1) Labor costs are already loaded with (state loaders covered by EE)

(2) These costs are collected through GRC D.16-06-054

(3) LGP contracts that directly support the sector is included/not included in this item

(4) IT Costs are included in " Policy, Strategy, and Regulatory Reporting Compliance".

C. → **Table showing costs by functional area of management structure**

- ¶
- Expenses broken out into labor, non-labor O&M (with contract labor identified)¶
 - Identify any capital costs¶

B. → **Attachment A, Question C.9**

"Using a common budget template developed in consultation with interested stakeholders (hopefully agreed upon at a "meet and confer" session), display how much of each year's budget each PA anticipates spending "in-house" (e.g., for administration, non-outsourced direct implementation, other non-incentive costs, marketing), by sector and by cross-cutting program."¶

¶

- TURN and ORA invite the PAs to propose a common table format for this information. We don't have anything specific in mind.¶
- Additionally, include a brief description of the method used by the PA to estimate the costs presented in the C.9 Table.¶

Sector	Cost Element	Functional Group	2020 EE Portfolio Expenditures	2022 EE Portfolio Budget	2023 EE Portfolio Budget	2024 EE Portfolio Budget	2025 EE Portfolio Budget	2026 EE Portfolio Budget	2027 EE Portfolio Budget
Commercial	Labor(1)	Policy, Strategy, and Regulatory Reporting Compliance				\$ 21,801	\$ 44,764	\$ 47,087	\$ 49,595
		Program Management				\$ 42,393	\$ 271,316	\$ 316,264	\$ 348,045
		Engineering services				\$ -	\$ -	\$ -	\$ -
		Customer Application/Rebate/Incentive Processing				\$ 38,813	\$ 383,148	\$ 432,205	\$ 484,803
		Customer Project Inspections				\$ 15,363	\$ 66,254	\$ 95,176	\$ 131,622
		Portfolio Analytics				\$ 25,818	\$ 57,623	\$ 81,126	\$ 91,029
		ME&O (Local)				\$ 8,447	\$ 35,035	\$ 36,669	\$ 38,642
		Account Management / Sales				\$ -	\$ -	\$ -	\$ -
		IT				\$ -	\$ -	\$ -	\$ -
		Call Center				\$ -	\$ -	\$ -	\$ -
		Labor Total	\$ -	\$ -	\$ -	\$ 152,634	\$ 858,140	\$ 1,008,528	\$ 1,143,736
	Non-Labor	Third-Party Implementer (as defined per D.16-08-019, OP 10)				\$ -	\$ -	\$ -	\$ -
		Local/Government Partnerships Contracts (3)				\$ -	\$ -	\$ -	\$ -
		Other Contracts				\$ -	\$ -	\$ -	\$ -
		Program Implementation				\$ 26,248	\$ 94,277	\$ 112,732	\$ 121,212
		Policy, Strategy, and Regulatory Reporting Compliance				\$ 29,855	\$ 83,142	\$ 50,343	\$ 45,470
		Program Management				\$ 6,024	\$ 74,375	\$ 63,792	\$ 61,990
		Engineering services				\$ -	\$ 170,000	\$ 115,000	\$ 165,000
		Customer Application/Rebate/Incentive Processing				\$ -	\$ -	\$ -	\$ -
		Customer Project Inspections				\$ -	\$ -	\$ -	\$ -
		Portfolio Analytics				\$ -	\$ -	\$ -	\$ -
		ME&O (Local)				\$ 9,589	\$ 61,373	\$ 66,373	\$ 56,783
		Account Management / Sales				\$ -	\$ -	\$ -	\$ -
		IT (4)				\$ -	\$ -	\$ -	\$ -
		Call Center				\$ -	\$ -	\$ -	\$ -
		Facilities				\$ -	\$ -	\$ -	\$ -
		Implementation Programs				\$ -	\$ 319,952	\$ 481,515	\$ 421,787
		OP 10)							
		Non-Labor Total	\$ -	\$ -	\$ -	\$ 71,717	\$ 803,118	\$ 889,755	\$ 872,242
		Commercial Total (5)	\$ -	\$ -	\$ -	\$ 224,351	\$ 1,661,258	\$ 1,898,283	\$ 2,015,978
	Other (collected	Labor Overheads							
			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Notes:

(1) Labor costs are already loaded with (state loaders covered by EE)

(2) These costs are collected through GRC D.16-06-054

(3) LGP contracts that directly support the sector is included/not included in this item

(4) IT Costs are included in " Policy, Strategy, and Regulatory Reporting Compliance".

(5) Under the previous program categories the following programs were classified as Cross Cutting: 3P-IDEEA, Local-IDSM-ME&O-Local Marketing (EE), SW-IDSM-IDSM. These are included in Table 16 Cross Cutting. These three programs are now classified as Commercial with the elimination of Cross Cutting programs.

C. → Table showing costs by functional area of management structure¶

- → Expenses broken out into labor, non-labor O&M (with contract labor identified)¶
- → Identify any capital costs¶

B. → Attachment A, Question C.9¶

“Using a common budget template developed in consultation with interested stakeholders (hopefully agreed upon at a “meet and confer” session), display how much of each year’s budget each PA anticipates spending “in-house” (e.g., for administration, non-outsourced direct implementation, other non-incentive costs, marketing), by sector and by cross-cutting program.”¶

- ¶
- TURN and ORA invite the PAs to propose a common table format for this information. “We don’t have anything specific in mind.”¶
 - Additionally, include a brief description of the method used by the PA to estimate the costs presented in the C.9 Table.¶

Sector	Cost Element	Functional Group	2020 EE Portfolio Expenditures	2022 EE Portfolio Budget	2023 EE Portfolio Budget	2024 EE Portfolio Budget	2025 EE Portfolio Budget	2026 EE Portfolio Budget	2027 EE Portfolio Budget
Public Sector	Labor(1)	Policy, Strategy, and Regulatory Reporting Compliance				\$ 4,666.760	\$ 9,582.181	\$ 10,079.504	\$ 10,616.282
		Program Management				\$ 6,050.600	\$ 98,536.786	\$ 146,365.538	\$ 170,081.457
		Engineering services				\$ -	\$ -	\$ -	\$ -
		Customer Application/Rebate/Incentive Processing				\$ 487.380	\$ 45,348.500	\$ 47,447.500	\$ 49,581.500
		Customer Project Inspections				\$ -	\$ -	\$ -	\$ -
		Portfolio Analytics				\$ 1,816.788	\$ 20,383.400	\$ 3,141.759	\$ 3,317.932
		ME&O (Local)				\$ 1,808.114	\$ 7,499.605	\$ 7,849.377	\$ 8,271.770
		Account Management / Sales				\$ -	\$ -	\$ -	\$ -
		IT				\$ -	\$ -	\$ -	\$ -
		Call Center				\$ -	\$ -	\$ -	\$ -
	Labor Total		\$ -	\$ -	\$ -	\$ 14,829.642	\$ 181,350.472	\$ 214,883.678	\$ 241,868.942
	Non-Labor	Third-Party Implementer (as defined per D.16-08-019, OP 10)				\$ -	\$ -	\$ -	\$ -
		Local/Government Partnerships Contracts (3)				\$ -	\$ -	\$ -	\$ -
		Other Contracts				\$ -	\$ -	\$ -	\$ -
		Program Implementation				\$ 814.030	\$ 116,660.478	\$ 160,620.528	\$ 121,932.324
		Policy, Strategy, and Regulatory Reporting Compliance				\$ 6,390.876	\$ 17,797.469	\$ 10,776.525	\$ 9,733.394
		Program Management				\$ 1,289.409	\$ 15,920.778	\$ 13,655.423	\$ 13,269.691
		Engineering services				\$ -	\$ -	\$ -	\$ -
		Customer Application/Rebate/Incentive Processing				\$ -	\$ -	\$ -	\$ -
		Customer Project Inspections				\$ -	\$ -	\$ -	\$ -
		Portfolio Analytics				\$ -	\$ -	\$ -	\$ -
		ME&O (Local)				\$ 2,052.729	\$ 13,137.465	\$ 13,137.465	\$ 11,084.736
		Account Management / Sales				\$ -	\$ -	\$ -	\$ -
		IT (4)				\$ -	\$ -	\$ -	\$ -
		Call Center				\$ -	\$ -	\$ -	\$ -
		Facilities				\$ -	\$ -	\$ -	\$ -
		Implementation) Programs				\$ -	\$ -	\$ -	\$ -
		OP 10)				\$ -	\$ -	\$ -	\$ -
	Non-Labor Total		\$ -	\$ -	\$ -	\$ 10,547.044	\$ 163,516.190	\$ 198,189.941	\$ 156,020.144
Public Sector Total (5)			\$ -	\$ -	\$ -	\$ 25,376.686	\$ 344,866.661	\$ 413,073.619	\$ 397,889.087
	Other (collected	Labor Overheads							

Notes:

(1) Labor costs are already loaded with (state loaders covered by EE)

(2) These costs are collected through GRC D.16-06-054

(3) LGP contracts that directly support the sector is included/not included in this item

(4) IT Costs are included in " Policy, Strategy, and Regulatory Reporting Compliance".

C. → **Table showing costs by functional area of management structure**

¶

• → Expenses broken out into labor, non-labor O&M (with contract labor identified)¶

• → Identify any capital costs¶

B. → **Attachment A-Question C.9**

¶

“Using a common budget template developed in consultation with interested stakeholders (hopefully agreed upon at a “meet and confer” session), display how much of each year’s budget each PA anticipates spending “in-house” (e.g., for administration, non-outsourced direct implementation, other non-incentive costs, marketing), by sector and by cross-cutting program.”

¶

• → TURN and ORA invite the PAs to propose a common table format for this information. We don’t have anything specific in mind.¶

• → Additionally, include a brief description of the method used by the PA to estimate the costs presented in the C.9 Table.¶

Sector	Cost Element	Functional Group	2020 EE Portfolio Expenditures	2022 EE Portfolio Budget	2023 EE Portfolio Budget	2024 EE Portfolio Budget	2025 EE Portfolio Budget	2026 EE Portfolio Budget	2027 EE Portfolio Budget
Cross-Cutting	Labor(1)	Policy, Strategy, and Regulatory Reporting Compliance				\$ 27,290.692	\$ 56,282.903	\$ 59,398.711	\$ 62,193.231
		Program Management				\$ 28,228.616	\$ 359,143.000	\$ 461,562.398	\$ 437,451.109
		Engineering services				\$ -	\$ -	\$ -	\$ -
		Customer Application/Rebate/Incentive Processing				\$ 25,112.400	\$ 333,310.370	\$ 407,332.530	\$ 473,914.580
		Customer Project Inspections				\$ 10,044.960	\$ 115,945.600	\$ 131,357.120	\$ 157,589.760
		Portfolio Analytics				\$ 15,220.538	\$ 124,964.102	\$ 83,313.990	\$ 97,419.213
		ME&O (Local)				\$ 10,149.369	\$ 42,097.041	\$ 44,060.393	\$ 46,431.387
		Account Management / Sales				\$ -	\$ -	\$ -	\$ -
		IT				\$ -	\$ -	\$ -	\$ -
		Call Center				\$ -	\$ -	\$ -	\$ -
	Labor Total		\$ -	\$ -	\$ -	\$ 116,046.576	\$ 1,031,743.016	\$ 1,187,025.142	\$ 1,274,999.280
	Non-Labor	Third-Party Implementer (as defined per D.16-08-019, OP 10)				\$ -	\$ -	\$ -	\$ -
		Local/Government Partnerships Contracts (3)				\$ -	\$ -	\$ -	\$ -
		Other Contracts				\$ -	\$ -	\$ -	\$ -
		Program Implementation				\$ 516,061.920	\$ 1,505,924.819	\$ 1,426,242.639	\$ 1,457,427.789
		Policy, Strategy, and Regulatory Reporting Compliance				\$ 36,073.485	\$ 102,581.369	\$ 63,171.161	\$ 56,715.822
		Program Management				\$ 7,237.757	\$ 89,377.063	\$ 76,661.096	\$ 74,495.890
		Engineering services				\$ -	\$ -	\$ -	\$ -
		Customer Application/Rebate/Incentive Processing				\$ -	\$ -	\$ -	\$ -
		Customer Project Inspections				\$ -	\$ -	\$ -	\$ -
		Portfolio Analytics				\$ -	\$ -	\$ -	\$ -
		ME&O (Local)				\$ 11,522.449	\$ 73,743.671	\$ 73,743.671	\$ 62,221.222
		Account Management / Sales				\$ -	\$ -	\$ -	\$ -
		IT (4)				\$ -	\$ -	\$ -	\$ -
		Call Center				\$ -	\$ -	\$ -	\$ -
		Facilities				\$ -	\$ -	\$ -	\$ -
		Implementation) Programs				\$ -	\$ -	\$ -	\$ -
		OP 10)				\$ -	\$ -	\$ -	\$ -
	Non-Labor Total		\$ -	\$ -	\$ -	\$ 570,895.610	\$ 1,771,626.922	\$ 1,639,818.567	\$ 1,650,860.723
Cross-Cutting Total (5)			\$ -	\$ -	\$ -	\$ 686,942.186	\$ 2,803,369.939	\$ 2,826,843.709	\$ 2,925,860.003
	Other (collected	Labor Overheads							
			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Notes:

(1) Labor costs are already loaded with (state loaders covered by EE)

(2) These costs are collected through GRC D.16-06-054

(3) LGP contracts that directly support the sector is included/not included in this item

(4) IT Costs are included in " Policy, Strategy, and Regulatory Reporting Compliance".

(5) Under the previous program categories the following programs were classified as Cross Cutting: 3P-IDEEA, Local-IDSM-ME&O-Local Marketing (EE), SW-IDSM-IDSM. These are included in Table 16 Cross Cutting. These three programs are now classified as Commercial with the elimination of Cross Cutting programs.

C. → Table showing costs by functional area of management structure¶

- → Expenses broken out into labor, non-labor O&M (with contract labor identified)¶
- → Identify any capital costs¶

B. → Attachment A, Question C.9¶

"Using a common budget template developed in consultation with interested stakeholders (hopefully agreed upon at a "meet and confer" session), display how much of each year's budget each PA anticipates spending "in-house" (e.g., for administration, non-outsourced direct implementation, other non-incentive costs, marketing), by sector and by cross-cutting program."¶

- → TURN and ORA invite the PAs to propose a common table format for this information. We don't have anything specific in mind.¶
- → Additionally, include a brief description of the method used by the PA to estimate the costs presented in the C.9 Table.¶

[illegible]

[illegible]

THE SET OF METRICS AND INDICATORS ARE BASED ON RECOMMENDATIONS BY CAREC WORKING GROUPS. THIS MET NOT BE APPROVED BY THE CFC. FINAL REPORT CAN BE FOUND AT: https://www.greengrid.org/included/segment_metrics.html

Index #	PA	Segment	Metric/Indicator	Metric/Indicator Description	Units/Metric	Indicator	2024 Expected Results	2024 Actual Results	Target 2024	Target 2025	Target 2026	Target 2027	Measurement	Key Definition	Notes
100-1	Northern California Rural Regional Energy Network	Workforce Education and Training (WET)	Metric	WET-1: Number of collaborations by Business Plan sector to identify develop or share training materials or resources.	Count		NA	NA	750	750	750	750			
100-2	Northern California Rural Regional Energy Network	Workforce Education and Training (WET)	Metric	WET-2: Number of participants by sector.	Count		NA	NA	750	750	750	750			
100-3	Northern California Rural Regional Energy Network	Workforce Education and Training (WET)	Metric	WET-3: Percent of participants relative to eligible target population by sector.	Percentage		NA	NA	750	750	750	750			
100-4	Northern California Rural Regional Energy Network	Workforce Education and Training (WET)	Metric	WET-4: Percent of total WET/EET program across participants that meet the definition of disadvantaged worker.	Percentage		NA	NA	750	750	750	750			
100-5	Northern California Rural Regional Energy Network	Workforce Education and Training (WET)	Metric	WET-5: Percent of incentive dollars spent on contracts with a demonstrated commitment to provide career pathways to disadvantaged workers.	Percentage		NA	NA	750	750	750	750			
100-6	Northern California Rural Regional Energy Network	Workforce Education and Training (WET)	Metric	WET-6: Number Career & Workforce Readiness (CWR) participants who have been employed for 12 months after completing the training.	Count		NA	NA	750	750	750	750			
110-1	Northern California Rural Regional Energy Network	Emerging Technologies (ET)	Metric	ETP-1: Prior Year: # of new resources added to the portfolio that were previously ETP technologies.	Count		NA	NA	750	750	750	750			Target 750 after award of contracts to program implementers.
110-2	Northern California Rural Regional Energy Network	Emerging Technologies (ET)	Metric	ETP-2: Prior Year: # of new resources added to the portfolio that were previously ETP technologies.	Count of Projects		NA	NA	750	750	750	750			Target 750 after award of contracts to program implementers.
110-3	Northern California Rural Regional Energy Network	Emerging Technologies (ET)	Metric	ETP-3: Prior Year: % of new resources added to the portfolio that were previously ETP technologies.	Count of Projects		NA	NA	750	750	750	750			Target 750 after award of contracts to program implementers.
110-4	Northern California Rural Regional Energy Network	Emerging Technologies (ET)	Metric	ETP-4: Prior Year: # of new codes and standards that were previously ETP technologies.	Count of Events		NA	NA	750	750	750	750			Target 750 after award of contracts to program implementers.
110-5	Northern California Rural Regional Energy Network	Emerging Technologies (ET)	Metric	ETP-5: Savings of resources currently in the portfolio that were supported by ETP, added since 2020. In wire with gross and net for all resources, with an end where available.	Count of ETPs		NA	NA	750	750	750	750			Target 750 after award of contracts to program implementers.
110-6	Northern California Rural Regional Energy Network	Emerging Technologies (ET)	Metric	ETP-6: Savings of resources currently in the portfolio that were supported by ETP, added since 2020. In wire with gross and net for all resources, with an end where available.	Count of ETPs		NA	NA	750	750	750	750			Target 750 after award of contracts to program implementers.
110-7	Northern California Rural Regional Energy Network	Emerging Technologies (ET)	Metric	ETP-7: Savings of resources currently in the portfolio that were supported by ETP, added since 2020. In wire with gross and net for all resources, with an end where available.	Count of ETPs		NA	NA	750	750	750	750			Target 750 after award of contracts to program implementers.
110-8	Northern California Rural Regional Energy Network	Emerging Technologies (ET)	Metric	ETP-8: Number and % increase/decrease of inquiries and/or requests for information on EE products and services through relevant MS activities.	Count of New Measures		NA	NA	750	750	750	750			
120-1	Northern California Rural Regional Energy Network	Market Support	Metric	MS-1: % of market actors knowledgeable of energy efficient products and/or services that can be supplied to customers (knowledge).	Percent		NA	NA	750	750	750	750			
120-2	Northern California Rural Regional Energy Network	Market Support	Metric	MS-2: % of market actors that are interested in receiving energy efficient products and/or services to customers (interest).	Percent		NA	NA	750	750	750	750			
120-3	Northern California Rural Regional Energy Network	Market Support	Metric	MS-3: % of market actors that have supplied energy efficient products and/or services to customers (behavior).	Percent		NA	NA	750	750	750	750			
120-4	Northern California Rural Regional Energy Network	Market Support	Metric	MS-4: % of market actors that have supplied energy efficient products and/or services to customers (behavior).	Percent		NA	NA	750	750	750	750			
120-5	Northern California Rural Regional Energy Network	Market Support	Metric	MS-5: % of market actors that have supplied energy efficient products and/or services to customers (behavior).	Percent		NA	NA	750	750	750	750			
120-6	Northern California Rural Regional Energy Network	Market Support	Metric	MS-6: % of market actors that have supplied energy efficient products and/or services to customers (behavior).	Percent		NA	NA	750	750	750	750			
120-7	Northern California Rural Regional Energy Network	Market Support	Metric	MS-7: % of market actors that have supplied energy efficient products and/or services to customers (behavior).	Percent		NA	NA	750	750	750	750			
120-8	Northern California Rural Regional Energy Network	Market Support	Metric	MS-8: % of market actors that have supplied energy efficient products and/or services to customers (behavior).	Percent		NA	NA	750	750	750	750			
120-9	Northern California Rural Regional Energy Network	Market Support	Metric	MS-9: % of market actors that have supplied energy efficient products and/or services to customers (behavior).	Percent		NA	NA	750	750	750	750			
120-10	Northern California Rural Regional Energy Network	Market Support	Metric	MS-10: % of market actors that have supplied energy efficient products and/or services to customers (behavior).	Percent		NA	NA	750	750	750	750			
120-11	Northern California Rural Regional Energy Network	Market Support	Metric	MS-11: % of market actors that have supplied energy efficient products and/or services to customers (behavior).	Percent		NA	NA	750	750	750	750			
120-12	Northern California Rural Regional Energy Network	Market Support	Metric	MS-12: % of market actors that have supplied energy efficient products and/or services to customers (behavior).	Percent		NA	NA	750	750	750	750			
120-13	Northern California Rural Regional Energy Network	Market Support	Metric	MS-13: % of market actors that have supplied energy efficient products and/or services to customers (behavior).	Percent		NA	NA	750	750	750	750			
120-14	Northern California Rural Regional Energy Network	Market Support	Metric	MS-14: % of market actors that have supplied energy efficient products and/or services to customers (behavior).	Percent		NA	NA	750	750	750	750			
120-15	Northern California Rural Regional Energy Network	Market Support	Metric	MS-15: % of market actors that have supplied energy efficient products and/or services to customers (behavior).	Percent		NA	NA	750	750	750	750			
120-16	Northern California Rural Regional Energy Network	Market Support	Metric	MS-16: % of market actors that have supplied energy efficient products and/or services to customers (behavior).	Percent		NA	NA	750	750	750	750			
120-17	Northern California Rural Regional Energy Network	Market Support	Metric	MS-17: Number of EE customers/market actors reached through partner networks and sector communications channels.	Count of project ideas by national data.		NA	NA	750	750	750	750			
120-18	Northern California Rural Regional Energy Network	Market Support	Metric	MS-18: Assessed value of the partnership by partners.	Count of project ideas by national data.		NA	NA	750	750	750	750			
120-19	Northern California Rural Regional Energy Network	Market Support	Metric	MS-19: % of actions that have taken action to increase energy efficiency.	Count of project ideas by national data.		NA	NA	750	750	750	750			
120-20	Northern California Rural Regional Energy Network	Market Support	Metric	MS-20: Number and % increase/decrease of customers requesting information, education, or outreach on EE projects, products, and services through relevant MS programs.	Count of project ideas by national data.		NA	NA	750	750	750	750			
120-21	Northern California Rural Regional Energy Network	Market Support	Indicator	MS-21: Number of actions by host and customer.	Count of project ideas by national data.		NA	NA	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator			
120-22	Northern California Rural Regional Energy Network	Market Support	Indicator	MS-22: Net/total value of non-renewable in-kind funds/contributions utilized via participation.	Count of project ideas by national data.		NA	NA	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator			
120-23	Northern California Rural Regional Energy Network	Market Support	Metric	MS-23: Number of new validated technology opportunities to C&I?	Count of project ideas by national data.		NA	NA	750	750	750	750			
120-24	Northern California Rural Regional Energy Network	Market Support	Metric	MS-24: Number of market support projects (outside of ETP) that validate the technical performance, market and market barrier knowledge, and/or effective capacity requirements of an energy efficient technology.	Count of project ideas by national data.		NA	NA	750	750	750	750			
120-25	Northern California Rural Regional Energy Network	Market Support	Metric	MS-25: Cost effectiveness of a technology prior to market support programs relative to cost effectiveness of a technology after intervention in the market support program (change in cost effectiveness).	Count of project ideas by national data.		NA	NA	750	750	750	750			
120-26	Northern California Rural Regional Energy Network	Market Support	Metric	MS-26: Percent market penetration of emerging/under-utilized or existing EE products or services.	Percent		NA	NA	750	750	750	750			
120-27	Northern California Rural Regional Energy Network	Market Support	Metric	MS-27: Percent market penetration of emerging/under-utilized or existing EE products or services.	Percent		NA	NA	750	750	750	750			
120-28	Northern California Rural Regional Energy Network	Market Support	Metric	MS-28: Percent market penetration of emerging/under-utilized or existing EE products or services.	Percent		NA	NA	750	750	750	750			
120-29	Northern California Rural Regional Energy Network	Market Support	Metric	MS-29: Assessed confidence level in performance verification by product, service, and across the relevant assessment.	Percent		NA	NA	750	750	750	750			
120-30	Northern California Rural Regional Energy Network	Market Support	Indicator	MS-30: Number of providers for performance verification services.	Count		NA	NA	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator			
120-31	Northern California Rural Regional Energy Network	Market Support	Metric	MS-31: Participant data, e.g., credit score, census tract income, California/Scores of areas served, etc. data.	Mix		NA	NA	750	750	750	750			
120-32	Northern California Rural Regional Energy Network	Market Support	Metric	MS-32: % of customer sample aware of EE products/services (awareness).	Percent		NA	NA	750	750	750	750			
120-33	Northern California Rural Regional Energy Network	Market Support	Metric	MS-33: Comparisons between market rate capital vs. capital accessed via EE programs, e.g., interest rate, monthly payment.	Mix		NA	NA	750	750	750	750			
120-34	Northern California Rural Regional Energy Network	Market Support	Indicator	MS-34: Total projects completed/assessments finalized and dollar value of completed contracts?	Count		NA	NA	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator			
120-35	Northern California Rural Regional Energy Network	Market Support	Metric	MS-35: Ratio of resources/funds allocated to achieve capital increased?	Ratio		NA	NA	750	750	750	750			
120-36	Northern California Rural Regional Energy Network	Market Support	Indicator	MS-36: Differential of cost delivered from customers (e.g., difference between comparable market rate products and program products).	Dollars		NA	NA	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator			
120-37	Northern California Rural Regional Energy Network	Market Support	Indicator	MS-37: % of market participants knowledgeable about capital access opportunities for investments in energy efficient projects, products, and/or services (knowledge).	Percent		NA	NA	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator			
120-38	Northern California Rural Regional Energy Network	Market Support	Indicator	MS-38: % of market participants knowledgeable about capital access opportunities for investments in energy efficient projects, products, and/or services (knowledge).	Percent		NA	NA	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator			
120-39	Northern California Rural Regional Energy Network	Market Support	Indicator	MS-39: % of market participants knowledgeable about capital access opportunities for investments in energy efficient projects, products, and/or services (knowledge).	Percent		NA	NA	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator			
120-40	Northern California Rural Regional Energy Network	Market Support	Indicator	MS-40: % of market participants knowledgeable about capital access opportunities for investments in energy efficient projects, products, and/or services (knowledge).	Percent		NA	NA	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator			
120-41	Northern California Rural Regional Energy Network	Market Support	Indicator	MS-41: % of market participants knowledgeable about capital access opportunities for investments in energy efficient projects, products, and/or services (knowledge).	Percent		NA	NA	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator			
120-42	Northern California Rural Regional Energy Network	Market Support	Indicator	MS-42: % of market participants knowledgeable about capital access opportunities for investments in energy efficient projects, products, and/or services (knowledge).	Percent		NA	NA	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator			
120-43	Northern California Rural Regional Energy Network	Market Support	Indicator	MS-43: % of market participants knowledgeable about capital access opportunities for investments in energy efficient projects, products, and/or services (knowledge).	Percent		NA	NA	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator			
120-44	Northern California Rural Regional Energy Network	Market Support	Indicator	MS-44: % of market participants knowledgeable about capital access opportunities for investments in energy efficient projects, products, and/or services (knowledge).	Percent		NA	NA	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator			
120-45	Northern California Rural Regional Energy Network	Market Support	Indicator	MS-45: % of market participants knowledgeable about capital access opportunities for investments in energy efficient projects, products, and/or services (knowledge).	Percent		NA	NA	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator			
120-46	Northern California Rural Regional Energy Network	Market Support	Indicator	MS-46: % of market participants knowledgeable about capital access opportunities for investments in energy efficient projects, products, and/or services (knowledge).	Percent		NA	NA	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator			
120-47	Northern California Rural Regional Energy Network	Market Support	Indicator	MS-47: % of market participants knowledgeable about capital access opportunities for investments in energy efficient projects, products, and/or services (knowledge).	Percent		NA	NA	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator			
120-48	Northern California Rural Regional Energy Network	Market Support	Indicator	MS-48: % of market participants knowledgeable about capital access opportunities for investments in energy efficient projects, products, and/or services (knowledge).	Percent		NA	NA	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator			
120-49	Northern California Rural Regional Energy Network	Market Support	Indicator	MS-49: % of market participants knowledgeable about capital access opportunities for investments in energy efficient projects, products, and/or services (knowledge).	Percent		NA	NA	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator			
120-50	Northern California Rural Regional Energy Network	Market Support	Indicator	MS-50: % of market participants knowledgeable about capital access opportunities for investments in energy efficient projects, products, and/or services (knowledge).	Percent		NA	NA	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator			

Attachment D

Northern California Rural Regional Energy Network

Cost Effectiveness Test

CEDARS CET Run Receipt

CEDARS CET_UI Run Receipt

Submitted: 19:33:42 on 04 Dec 2024

By: Patricia Terry

-Job ID: 94455
-Filename: RRN2527_Portfolio_v1.zip
-CET version: 24.1
-Market Effects: 0%
-Avoided Cost Version: 2024
-First Year: 2025

* Run Summary *

- TRC: 0.15
- PAC: 0.16
- TRC (no admin): 0.7
- PAC (no admin): 0.96
- RIM: 0.18
- Budget: \$33,001,787.54
- TotalSystemBenefit: \$2,815,543.20
- ElecBen: \$565,822.63
- GasBen: \$5,083,341.58
- WaterEnergyBen: \$249.62
- OtherBen: \$0.00
- TRCCost: \$37,512,381.55
- PACCost: \$35,365,076.98
- ElecSupplyCost: \$1,752,902.53
- GasSupplyCost: \$0.00
- WaterEnergyCost: \$0.00
- OtherCost: \$1,080,968.10