

## RURAL REGIONAL ENERGY NETWORK (REN)

### Delivering Energy Efficiency Solutions to Rural and Hard-to-Reach Communities in California

#### ISSUE

California Investor Owned Utilities (IOUs) have had a difficult time providing rural and hard-to-reach areas of the state with consistent, predictable, and cost-effective energy efficiency services. **The Rural Hard to Reach Working Group (RHTR) is exploring creation of a Rural Regional Energy Network (REN) designed to serve rural and hard-to-reach (RHTR) California communities. RHTR REN services will fill service gaps while ensuring that rural California communities continue to receive EE services and the associated benefits.**

#### BACKGROUND

In 2012, the California Public Utilities Commission (CPUC) recognized the need for better access to and delivery of energy efficiency services to Californians who were not being served adequately by their local IOUs (see [D.12.11.015](#)). The Commission created a new partnership model, known as a Regional Energy Network (REN), to leverage key local government attributes, including a commitment to community, an ability to innovate and adapt, and capacity to connect programs to climate action planning at a regional level, as described in the CPUC's Decision D.12.11.015.

Three RENs are currently in operation: BayREN in the nine-County Bay Area, SoCalREN in Southern California, and Tri-County REN covering Ventura, Santa Barbara, and San Luis Obispo counties. Together they are fulfilling these CPUC directives in their jurisdictions, building a viable infrastructure with customized, flexible, and innovative programs that reflect local government values and serve local needs. The CPUC identified additional areas that could benefit from future REN development, including the largely rural Central Valley, San Joaquin Valley, and Sierra Nevada. RHTR members are exploring the creation of a REN for these and other rural regions — a so-called “*Rural REN*” — that can provide more consistent, predictable, and cost-effective energy efficiency services while encouraging greater public and private sector energy leadership and accelerating achievement of California's emission reduction and public health goals in the state's less populated communities.

#### NEED

Rural and hard-to-reach customers do not have easy access to program information or generally do not participate in energy efficiency programs due to language, income, housing type, geographic, or built space ownership (eg. split incentives) barriers. These customer groups also tend to have increased financial barriers as compared to more urban and affluent communities, making it more difficult for them to undertake equipment replacements in both commercial and residential environments. Available research and data suggest that serving rural areas has been an ongoing challenge that a Rural REN would be best equipped to address. For example:

- A September 2018 ACEEE report titled [Reaching Rural Communities with Energy Efficiency Programs](#) indicates that rural populations are more spread out and housing stock is less dense,

so utility programs serve fewer customers per mile of line and usually at greater cost than in urban areas. In addition, rural customers face barriers, including: lack of infrastructure such as broadband access that is necessary to implement advanced energy savings opportunities; reluctance to engage in unfamiliar programs; and shortage of trained, qualified, and available contractors to do agreed-upon work. Yet nationwide, rural households are shown to have a higher median energy burden than their surrounding areas, meaning they generally have greater energy efficiency needs.

- The August 2018 Better Building Summit Energy Exchange presentation on “[Energy Strategies for Rural Communities](#)” noted that rural America has a greater proportion of low-to-moderate-income families who may have problems financing energy efficiency investments, consumes energy at rates about 10% higher than urban areas, and includes agricultural businesses that consume significant amounts of energy.
- The [Targeted Process Evaluation of the Local Government Partnership Program](#), a 2016 report evaluating the utilities’ Local Government Partnership (LGP) programs, validates the RHTR Working Group’s concerns regarding service delivery challenges across multiple utilities in geographically isolated partnership areas, saying:

*[o]ur findings suggest that partnerships with low population density and far from urban centers experience marketplace barriers that make municipal retrofits challenging. These partnerships are found within PG&E, SCE, and SCG territories. Some... experienced a lack of trained local contractors available within their communities to perform energy efficiency retrofit work, difficulty attracting out-of-area contractors, and a lack of energy efficient equipment available locally for comprehensive retrofits.*

In addition to national and statewide assessments, RHTR has observed a variety of programmatic barriers at the regional and local levels, such as:

- Programs are designed to deliver cost effective savings, so by default they tend to target areas with the highest potential to meet program Total Resource Cost (TRC) requirements; these often are the more urban, affluent, and energy-dense areas, leaving out the more dispersed, lower-income rural and hard-to-reach communities.
- Custom projects often do not move forward because of: (a) industry standard practice definitions geared towards urban affluent communities; or (b) project scale that is not sufficient to advance through a statewide Custom Retrofit Incentive pathway.
- 3<sup>rd</sup> party implementers do not have a financial incentive to serve rural or hard-to-reach communities; in effect, current and projected implementation environments will continue to disincentivize service to those communities through: (a) unachievable cost effectiveness requirements, and (b) pay-for-performance contracting.
- There is great potential for a massive loss in capacity should rural implementer budgets collapse – this holds true for all local government partner implementers.

A Rural REN is needed to bridge these gaps while identifying and deploying a suite of high-quality services as cost-effectively as possible in areas that: (a) share similar geographic/demographic characteristics; (b) share similar program design and delivery challenges; and (c) lack other regional

partnership vehicles, such as Councils of Governments, to meet local and statewide energy efficiency and emission reduction goals.

## PROGRAM

RHTR proposes a rural-focused REN to design programs that will leverage economies of scale and situational similarity to provide services that are additive, rather than duplicative or competitive, with utility programs. **By establishing such a Rural REN now, the CPUC will insulate rural ratepayers from future program contractions and other disruptions resulting from the financial liability challenges facing California's three primary IOUs.**

### *RHTR Working Group Jurisdictions*



The Rural REN will address hard-to-reach markets with a range of support, marketing, outreach, training and technical assistance services, including pilot programs to build both capacity and infrastructure development. The Rural REN will take a portfolio approach, offering a mix of flexible and innovative resource and non-resource programs customized to a community's specific needs. For example, a Rural REN will:

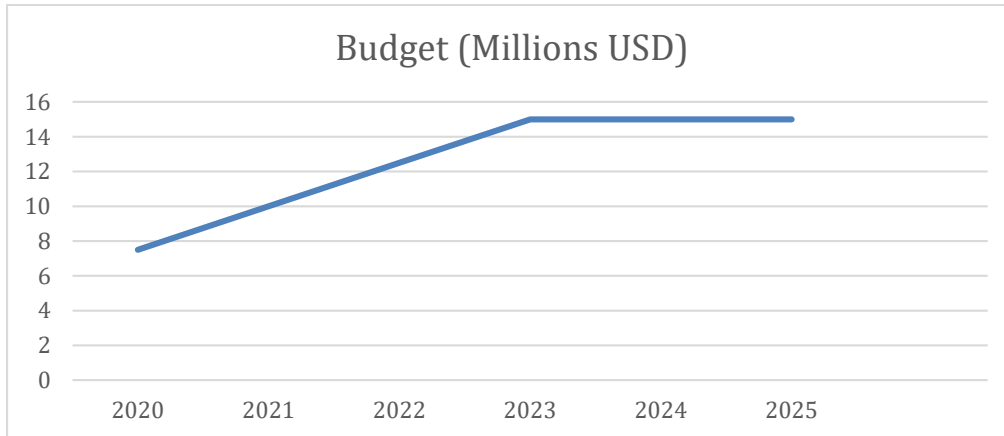
- Ensure that rural ratepayers do not get left behind as California aggressively pursues a new energy future through the next five years of the rolling portfolio.
- Accelerate achievement of statewide efficiency and emission reduction goals through use of emerging technology and commitment to transformative policies, such as zero net energy.
- Deliver rural resource-based energy services to the Residential, Commercial, Public, Industrial, and Agricultural sectors.
- Ensure more equitable service delivery through increased customer education and assistance.
- Provide resources and trainings to improve knowledge of and compliance with California's energy codes and standards.
- Offer accessible and customized workforce trainings that foster and improve home performance practices and knowledge of building science, thereby increasing energy savings and code compliance.
- Help rural leaders better understand and embrace advanced energy efficiency goals.
- Pilot new innovative program and/or delivery concepts specific to rural or hard-to-reach regions as well as geared toward scaling to areas beyond RHTR.

While the RHTR Working Group acknowledges that under a Rural REN, resource programs will not be governed by the same TRC considerations as IOU program activities, per D.12-11-015, the Rural REN will be committed to developing programs that enhance services, cost savings, and energy savings, and provide value to the CPUC, California ratepayers, and the RHTR Working Group's represented jurisdictions and stakeholders.

## BUDGET

Budgets are dynamic and largely dependent on RHTR partners' varying implementation capacities; but we believe the following figure presents a feasible ramp-up curve.

**Figure 1: Proposed Budget**



## CONCLUSION

While state regulators and utilities may theoretically offer or even encourage energy efficiency programs in rural areas, we know from experience that the higher costs associated with such programs drag down the overall cost-effectiveness of the energy efficiency portfolio at a time when there is increased demand for greater cost-effectiveness to benefit ratepayers statewide. California's rural communities may comprise only 20% of the state's population; but cover half the state's land area, making it very difficult for urban-centered utilities to deliver adequate services while meeting these cost-effectiveness mandates. A rural-focused REN will provide a more workable and effective delivery model to build a pipeline and implement projects, ensuring that all constituents and ratepayers, whether urban or rural, are receiving the promise envisioned by and the services supported by their contributions to the Public Purpose Program fund.

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